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# Wallow Fire

## Fuel Treatment Effectiveness

### On the Fort Apache Indian Reservation



*Fireline personnel work the edge of a low-intensity surface fire south of Reservation Lake.*

**December • 2011**

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*"Had treatments [on the Fort Apache Indian Reservation] not been done, there was no good geographic feature to tie into the Black River."*

**Dugger Hughes**, Incident Commander,  
Southwest Area Incident Management Team

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[Cover Photo by Manny Martinez, Southwest Area Incident Management Team.]

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# I Wallow Fire Chronology on the Fort Apache Indian Reservation

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## **Pre-Fire Conditions in Arizona**

The area around the 2011 Wallow Fire had experienced a very dry winter, spring and early summer. Two weather stations near the fire's point of origin had received very minimal moisture from January 1 to the fire start date, May 29.

The Alpine Remote Automated Weather Stations (RAWS) had recorded ¼ inch of precipitation for the time period. The Stray Horse RAWS had received 1.01 inches during the same timeframe.

With the “La Nina” weather pattern set up strong over the southern tier of the United States, moisture had been all but nonexistent. Prior to the Wallow Fire's ignition, strong winds associated with frontal passages were normal events.

## **Chronology**

### **Sunday, May 29, 2011**

At approximately 2 p.m., a new fire start is called in to dispatch by the Maverick Fire Lookout on the Fort Apache Indian Reservation. The start is located on the Apache-Sitgreaves National Forest, near the southeast corner of the 2009 Reno Fire scar. This new start—the Wallow Fire—is estimated at 200 acres. It is believed to be human-caused.

### **Monday, May 30**

The Reno Fire Lookout on the Apache-Sitgreaves National Forest is evacuated due to fire



behavior. Spotting up to one mile is reported. A regional Type 2 Incident Management Team is assigned to the Wallow Fire, which is now estimated at 1,450 acres.

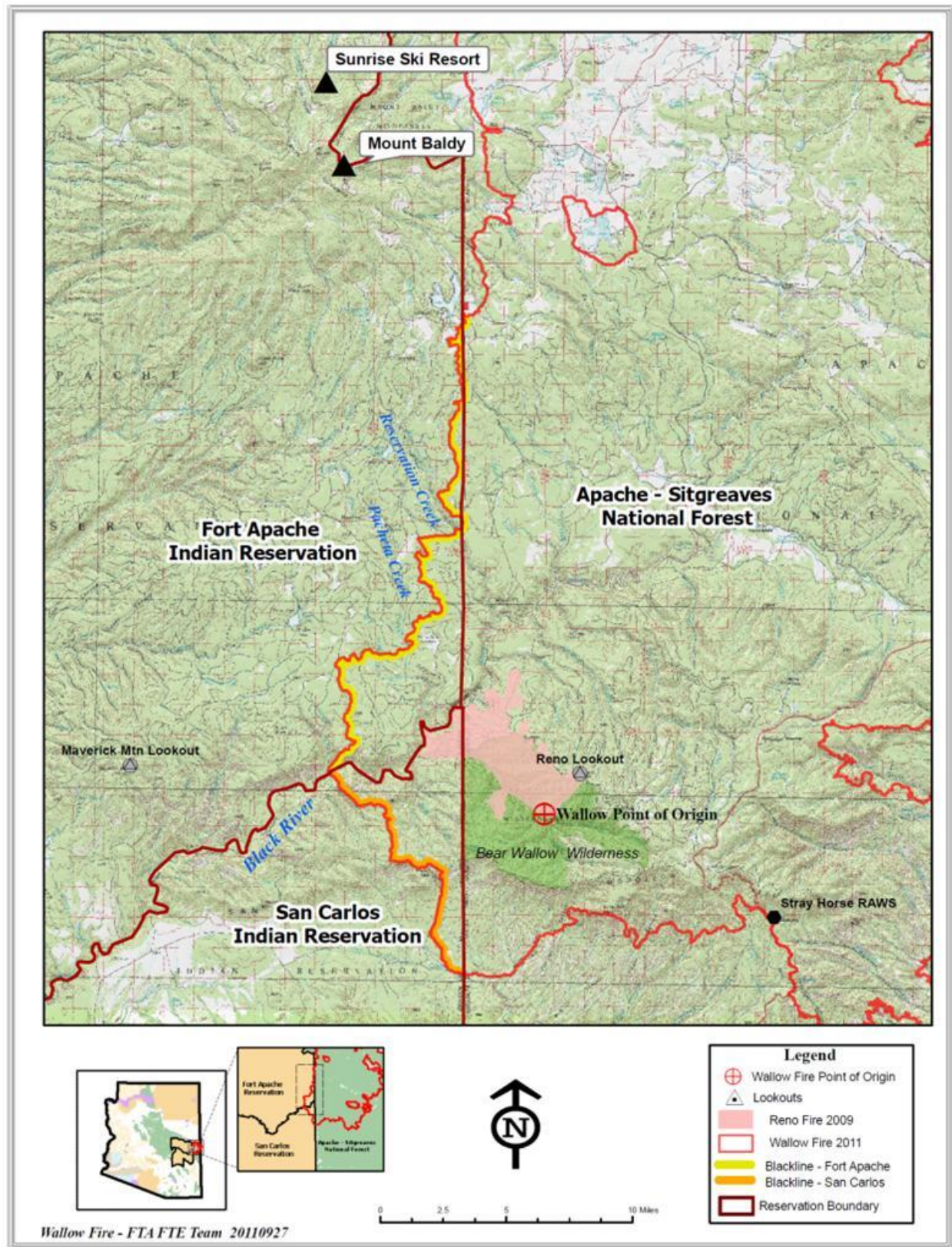
### **Wednesday through Friday, June 1-3**

During these three days, the Wallow Fire exhibits extreme fire behavior with long range spotting and grows to 98,000 acres. A national Type 1 Incident Management Team is assigned.

*Harold Quintero (left) and Robert Nix of the Fort Apache Agency Forest Development Crew burn out the line north of the Black River in an area that had been previously treated with prescribed fire.*  
Photo by Jere McLemore, Bureau of Indian Affairs.



# Fuel Treatment Effectiveness on the Wallow Fire on the Fort Apache Indian Reservation





*The Wallow Fire on May 31 as seen from the historic Pair O Dice Ranch on the Fort Apache Indian Reservation. Photo by Lucky Holden, Bureau of Indian Affairs.*

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#### **Saturday, June 4**

The Wallow Fire moves around the south side of the 2009 Reno Fire scar and enters the San Carlos Indian Reservation.

#### **The Burnout Strategy**

#### **Monday, June 6**

The Wallow Fire, now 233,552 acres, reaches the Fort Apache Indian Reservation boundary just north of the Reno Fire scar. The Incident Management Team is searching for an area to implement an indirect strategy to the south and west of the fire—an area that can be safely burned out ahead of the arrival of the wildfire. Two more Type 1 Incident Management Teams and an Area Command Team are ordered.

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*"These larger, landscape-scale treatments outside the WUI [Wildland Urban Interface] make a difference in being able to control the fire."*

**Dugger Hughes**, Incident Commander  
Southwest Area Incident Management Team

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## Tuesday, June 7

The Wallow Fire gains 77,770 acres in one day, generating significant heat as it runs up the canyons on the fire's west side. A task force of local resources (the Fort Apache Interagency Hotshot Crew, two Fort Apache Type 2 handcrews, two dozers and two engines) begins burnout operations between Pacheta and Reservation creeks. The burnout follows reservation roads and landscape-level prescribed fire treatment units.

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*"We looked at the fuels treatments we'd done over the years to see where they could tie-in to help stop the fire."*

**Harrison Francis,**  
Bureau of Indian Affairs Fuels Specialist,  
Fort Apache Agency

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A separate taskforce of resources on the San Carlos Indian Reservation, including the Geronimo and Tahoe hotshots crews, is tasked with building and burning out a fire line from the Apache-Sitgreaves National Forest boundary to the Black River, to tie into the Fort Apache line.

Predicted fire behavior in the afternoon: *Red Flag Warning. Flame lengths in excess of 200 feet are possible when torching and crowning occur; spotting distances may be more than one mile; the probability of an ember being able to ignite a new spot fire is 100 percent.*

Forty-five miles of line needs to be burned out—approximately 30 miles on the Fort Apache Indian Reservation and about 15 miles on the San Carlos section. The two lines will tie-in at the Black River Canyon, the boundary between the two reservations.

## Wednesday, June 8

The crews and equipment are moving quickly with the burnout operation. With few heavy fuels on the ground, the drip torch bearers can keep up a fast pace with little worry of getting more fire on the ground than they can handle. At their backs are more treated lands that make accessing and extinguishing the few spot fires that get over the road relatively easy suppression work.

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*"The treatments removed most of the heavies [large downed logs]. If the heavies had still been there, we would've had to do the burnouts more slowly—it probably would've taken us over a week to get it done."*

**Brian Quintero,** Assistant Superintendent,  
Fort Apache Hotshots

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## Thursday, June 9

The Wallow Fire burns past the 2009 Reno Fire scar, gaining speed toward the fire crews as it encounters unburned fuels. The crew leaders burning out line near Reservation Creek describe hearing the Wallow Fire sounding like a freight train approaching. Burnout operations pick up speed—the time available to tie into the Pacheta Creek line and then down to the San Carlos line is running out. The crew leaders need to decide: *Keep going, and trust that the fuels treatments and their burnout operations are going to be effective in bringing the fire to the ground? Or, leave now, with the gap unclosed?*



***Burnout operation on 40K Road near the Tonto Unit.***  
**Photo by Jere McLemore, Bureau of Indian Affairs.**

The Division Supervisor decides to stay and complete the line. His observations of the fuel treatments and the results of the burnout operation indicate to him that it's safe to keep the fire crews on the line.

### **Friday, June 10**

Burning operation continues. Burning will be more difficult in the last section—a pending timber sale unit on the plateau in this section has not been prescribed burned since the 1990s.

Fuel loads are higher, and more underbrush and logs will be on the ground for the

burners to negotiate.

In addition, structure protection assessments and preparation for Sunrise Ski Resort begin. Without successful management intervention, the Wallow Fire is predicted to reach the ski area before the end of the next day.

### **Saturday, June 11**

The task force on the division located on the San Carlos Reservation ties their burnout into the Black River by 5 p.m. The Fort Apache resources tie-in by the end of the shift, closing the gap. Now, will this line hold? There's another "Red Flag" critical fire weather day predicted for tomorrow—with wind gusts forecasted up to 35 mph, and relative humidity as low as 5 percent.

### **Sunday, June 12**

The Wallow Fire crosses the Black River Canyon and races uphill. It reaches the untreated timber sale unit on the plateau and burns across this geographic feature to the burned-out fireline. The fire severity is higher on the plateau than other areas of the burnout operation, but the fireline holds—even through wind gusts in excess of 30 mph.

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*"There is no doubt in my mind, that if the fire had come up Reservation Creek and Pacheta Creek, it would have gone to the top of Mount Baldy... It would've increased the acreage and the cost of the Wallow Fire by about 25 percent."*

**Dugger Hughes**, Incident Commander  
Southwest Area Incident Management Team

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### Monday, June 13

As the completed burnout lines are widened in the more vulnerable areas of the fire's perimeter, the Wallow Fire gains minimum acreage on the reservations.

This will be the last day that the Wallow Fire grows in size on reservation lands.

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*"Those drainages act like 'fusee lines' to the top of [Mount] Baldy."*

**Robert LaCapa**, Forest Manager,  
Bureau of Indian Affairs,  
Fort Apache Agency

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### For the Next Three Weeks

Now at 452,155 acres in total size, the Wallow Fire will continue to burn on lands located east of the reservations for another three weeks. The fire will gain 86,000 more acres as it heads farther north in Arizona and spreads into the state of New Mexico.

On Friday, July 8, it reaches its final size of 538,049 acres—at an estimated cost of \$109 million.

The Wallow Fire burned a total of 835 square miles in Arizona and 23 square miles in western New Mexico. The blaze destroys 32 residences, as well as 36 outbuildings. None were located on either of the reservations.





***Under-burned ponderosa pine forest on the Fort Apache Indian Reservation.***

**Photo by Chris Holbeck's Burned Area Emergency Response (BAER) Team.**

## II Values at Risk – What's at Stake on the Reservations?

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“Community” and “culture” define the tribal people’s intrinsic values—including those ideas, entities, and places that create traditions and cultural heritage.

According to Ramon Riley, cultural resource advisor to the White Mountain Apache Tribe, during the Wallow Fire, the values at risk included not only “life and property” but also holy areas, and areas of cultural significance. The tribes concerns also included ensuring that habitat for wildlife as well as native plants for medicine within the Mount Baldy Wilderness Area were not negatively impacted.

Such areas are not defined in terms of market value, but rather are intrinsic and essential to a culture and a way of living. On these Indian lands, such “resources” are equally valued as property and infrastructure. For in tribal communities, residents are not set apart or adjacent to the natural and cultural resources that comprise their reservation landscapes—they live among these resources. These resource values are a part of their legacy to be left to their children as part of their heritage—their economic and cultural survival depend on them.

Many values important to the tribes were threatened by the Wallow Fire. A few of these values will be explained here as examples of the complex relationships between the tribes, the values and resources on the reservations, and the impact of wildfires.

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*These resource values are a part of their legacy to be left to their children as part of their heritage—their economic and cultural survival depend on them.*

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### **Commercial Timber**

The White Mountain Apache Tribe is highly dependent on its timber resource as a source of employment, income, and subsistence. The tribe's forest products sector continues to be the largest source of employment on the reservation.

Stumpage, which is 29 percent of the gross revenue from lumber sales, is an important contributor of revenue toward tribal programs. Individual income and profits from tribal enterprises are important contributors to the tribe's local economy.

In addition, the timber cutting permit system provides individual income by allowing tribal members to obtain miscellaneous forest products—such as posts, poles, Christmas trees, and firewood—either for personal use or for sale.

Thus, the majority of individuals living or working on the Fort Apache Indian Reservation are dependent on some facet of forest resources.

### **Wildlife Habitat**

The Fort Apache Indian Reservation is abundant with wildlife. Approximately 70 species of mammals, more than 30 species of reptiles, and more than 200 species of birds are known to reside here.

Fire can have both positive and negative effects on wildlife habitat. It can be intentionally used to improve habitat and it can be a force of nature requiring suppression to protect wildlife habitat. Two of the greatest concerns for wildlife during the Wallow Fire were the big game hunting ranges and the habitat of Federally-listed Threatened and Endangered Species on the reservations.

#### **Elk Habitat**

The Fort Apache Indian Reservation is world-renowned as premier hunting grounds for record-class trophy elk. In addition to the substantial revenue generated by selling hunting permits, the hunts provide employment to tribal members as guides. This activity brings increased tourism revenue to the regional economy. Hunting is a crucial piece of the tribal landscape—both historically and economically—with many tribal members relying on the employment, recreational, and subsistence opportunities provided by the tribal hunting programs.

#### **Threatened and Endangered Species**

Three Federally-listed species occur on the reservation: the Mexican Spotted Owl, the Mexican grey wolf, and the Apache trout. The native range of the Apache trout is exclusively within the White Mountains of Arizona. Approximately 50 percent of this species' historic range is on the Fort Apache Indian Reservation. The Mexican Spotted Owl uses the reservations' steep, rocky canyons and uneven-aged forests as their preferred nesting and

foraging grounds. Therefore, the responsible management of timber forests and fire are critical to preserving their habitat. In the 1990s, Mexican grey wolves were reintroduced just east of the reservations. Today, they are often observed on the reservations.

### **Mount Baldy and Sunrise Ski Area**

Mount Baldy (*Dzil Ligai* in the Apache language), rising to 11,420 feet, is the highest peak on the 1.6 million-acre Fort Apache Indian Reservation, home of the White Mountain Apache Tribe. The mountain is located within a Wilderness Management Emphasis Area (MEA) on the reservation.

Mount Baldy, first set aside as a primitive area in 1970, is comprised of approximately 9,848 acres of spruce-fir forest surrounding its eastern boundary of the Fort Apache Indian Reservation.

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"The tribal leaders asked the Zone Incident Commander Dugger Hughes to protect their land from the Wallow Fire so that their children and grandchildren could experience the full beauty of the White Mountain Apache homeland as they did."

***Navajo Times Newspaper***, June 16, 2011

"Praying for Dzil Ligai – Largest Fire in Arizona History Threatens White Mountain Apache Homelands" by **Marley Shebala**.

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This area is designated as a Tribal Wilderness primarily because it encompasses the summit of Mount Baldy, which is sacred to the Apache People. There are no roads throughout the entire area. Management direction here is similar to Federal wilderness status lands. The overall objective for this wilderness MEA is to maintain natural characteristics and to protect the cultural significance of the mountain to the Apache people.



***Aerial view of the Sunrise Ski Resort.***

**Photo by Kim Kelly.**

According to Ramon Riley, cultural resource advisor to the White Mountain Apache Tribe, this area is considered a holy place. It is a landscape that Tribal elders did not want the Wallow Fire to reach.

Another concern in this area is the high infrastructure values associated with the Sunrise Ski Area, located on the north side of Mount Baldy. Wildfires in this area have the potential for significant impacts and may be an immediate threat to life and property due to the proximity of timber stands and fuels around the ski area. This wildland interface infrastructure includes: a hotel, six ski lodges, a general store, administrative facilities, and employee housing.

The Sunrise Ski Resort is wholly owned and operated by the White Mountain Apache Tribe. The facility generates between \$6-8 million dollars in revenue each year—approximately one-third of the tribe's annual income.



### III The Fires That Came Before – A Legacy of Fuels Treatments

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The area of the Wallow Fire that impacted the Fort Apache Indian Reservation has a decades-long legacy of logging and prescribed burning. This legacy started in 1948 when Harold Weaver came to Phoenix as a Regional Forester for the Bureau of Indian Affairs (BIA).

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*"The forests on the reservation have been well-taken care of in order to protect the commercial timber. All the folks responsible should be patted on the back for the work they've done over the years."*

**Dugger Hughes,** Incident Commander  
Southwest Area Incident Management Team

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Weaver, a strong proponent for prescribed fire, started a very active program on the reservation. In 1950, he implemented a controlled burning program on the Fort Apache Indian Reservation, burning more than 50,000 acres of ponderosa pine. During the next two years, wildfires were reduced by more than 90 percent on this previously burned acreage, a rate less than one-ninth that on lands that had *not* been burned.

Weaver's program demonstrated that, in certain circumstances, planned fire could be used to mitigate the effects of wildfire in ponderosa pine forests.

From 1950 to 1970, more than 300,000 acres were burned on the Fort Apache Indian Reservation, primarily for hazardous fuel reduction. In 1971, a lightning storm ignited 80 separate fires which joined to become the Carrizo Fire. This 60,000 acre fire, the largest timber fire to burn in Arizona at the time, prompted an aggressive program to treat 111,000 acres with prescribed burning in 1975 alone.

This effective prescribed fire program has carried on through subsequent decades on the Fort Apache Indian Reservation lands. During the 1980s, 347,778 acres were burned. During the 1990s, 197,257 acres were treated with prescribed fire.

#### **Maverick Fuel Treatments Help Control the Wallow Fire Spread**

In more recent years, the Maverick Fuel Treatments of 2003-2009—located on the east boundary of the Fort Apache Indian Reservation—proved particularly effective in controlling the spread of the 2011 Wallow Fire.

The Maverick prescribed fire treatments, covering a total of 13,378 acres, were implemented to:

- Improve firefighter safety,
- Reduce the danger of fuel accumulations,
- Minimize damage caused by future wildfires,
- Enhance wildlife habitat, and
- Maintain forest aesthetics.

**Fort Apache  
Prescribed Fire  
Prevents the Reno Fire  
from Burning onto  
Reservation Lands**

The Reno Fire was started by lightning on Sept. 7, 2009, in the Bear Wallow Wilderness, located approximately 25 miles southwest of Alpine, Ariz. (This ignition location is almost exactly where the Wallow Fire ignites two years later.)



***The 2009 prescribed fire operation implemented at night in the Maverick Treatment Area.***

**Photo by Fort Apache Agency.**

The U.S. Forest Service, after evaluating the potential impacts of the Reno Fire, decided to manage this incident for resource

objectives, including the reduction of fuels to reduce future fire intensities.

The Reno Fire burned for several weeks with largely low-intensity fire.

In October, the Reno Fire started to move toward the San Carlos and Fort Apache reservations. The

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*The Fort Apache Agency continued implementing this landscape-level prescribed fire, blocking the Reno Fire and safeguarding an impending timber sale.*

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San Carlos Indian Reservation made the decision to continue monitoring the fire for its effects on the reduction of downed fuels.

The Fort Apache Agency, conducting fall burning at the time, determined that their planned Maverick Treatment Area prescribed fire—immediately adjacent—

would provide essential protection and meet land management objectives.

The Fort Apache Agency continued implementing this landscape-level prescribed fire, blocking the Reno Fire and safeguarding an impending timber sale.

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## IV The Aftermath: Post-Fire Effects and Burned Area Emergency Rehabilitation

The area within the Wallow Fire perimeter is approximately 538,049 acres. Most of the burned area—representing 515,928 acres—is located on the Apache-Sitgreaves National Forest lands. However, the Wallow Fire extended onto approximately 12,959 acres of White Mountain Apache Tribal lands and approximately 9,162 acres of San Carlos Apache Tribal lands.

### Post-fire Effects/Burned Area Emergency Response (BAER) Team Findings

*“Vegetation on reservation land was lightly impacted by the Wallow Fire. Fire behavior on Fort Apache and San Carlos Indian Reservations consisted of low-intensity, understory burn with less than 10 percent mature tree mortality. Active forest management limited the acres classified as high and moderate soil burn severity to less than 10 percent on San Carlos Indian Reservation, and less than 3 percent on Fort Apache Indian Reservation.”*

**2011 Wallow Fire Burned Area Emergency Stabilization Plan,  
San Carlos Apache Tribe, White Mountain Apache Tribe,  
Bureau of Indian Affairs, Pinetop, Arizona, July 2011**

### Vegetation and Forest Mortality

The majority of the Wallow Fire acreage on the Fort Apache and San Carlos Indian reservations was low-intensity, understory burn with minimal mature tree mortality. Active forest management practices, within the burned area resulted in a limited number of acres classified as high and moderate soil burn severity.

### Soil Burn Severity Acreages on Fort Apache Indian Reservation

Soil Burn Severity (Acres)				
	Unburned	Low	Moderate	High
Wallow Fire (total)	86,088	258,264	107,610	86,088
Fort Apache	3,446	9,100	400	13

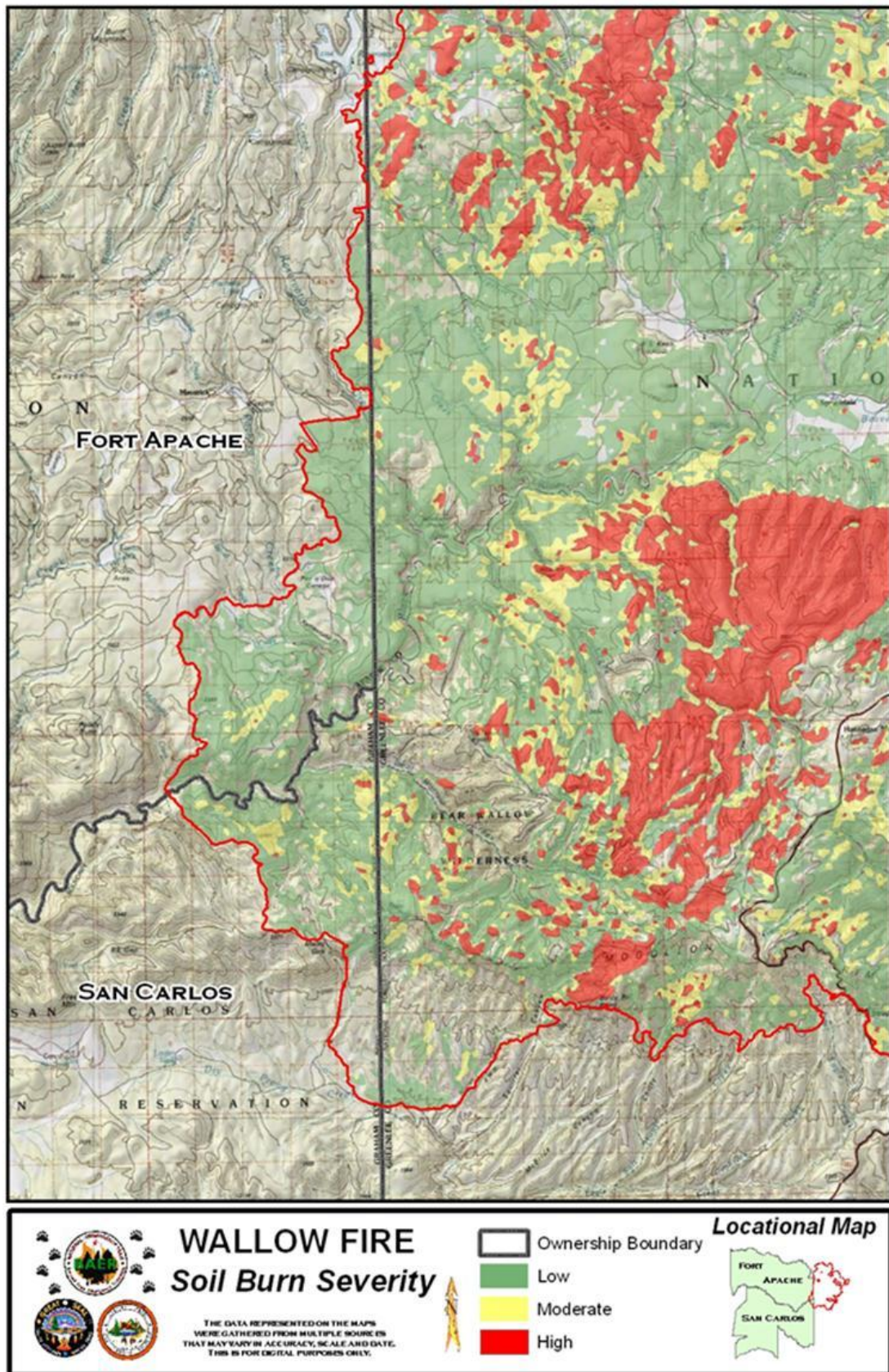
Understory grasses and forbs—observed while conducting the field reconnaissance—had already started to re-sprout. Fire in the cienegas (seasonally wet meadows) only burned the tops of the grasses and left the roots intact. Most tribal, agency, and BAER personnel agree that the burned area on the two reservations will have few, if any, lasting negative impacts.

The degree of fire-related mature tree mortality was determined by aerial survey on June 22, 2011, and on the ground by BAER foresters and Fort Apache Agency Forestry staff on June 22-23.

Forest mortality fell into two categories: 1) 100 percent mortality, and 2) Less than 10 percent mortality of the mature trees.

Active forest management appeared to limit mortality on the reservation lands. Less than seven percent of the total area burned on the Fort Apache Reservation experienced the higher level (100 percent) of mature tree mortality.







## Commercial Timber

The Wallow Fire burned predominately on commercial forest lands on the reservation.

Much of the area impacted by the Wallow Fire on the Fort Apache Indian Reservation occurred within the Maverick and Tonto Forest Management Units. The Wallow Fire burned a total of approximately 13,000 acres on the Fort Apache Indian Reservation. The observed fire behavior and post-fire effects on the timbered areas were primarily low-intensity under-burning—with limited areas of mosaic burn patterns affecting the canopy.

Jere McLemore, Timber Sale Forester for the Fort Apache Agency, assessed the effect of the Wallow Fire and the burnout operation on the forested areas of the reservation impacted by the fire. His conclusions:

- Forest thinning was highly effective in reducing fire intensity.
- Prescribed fire use was highly effective in reducing fire intensity.
- Timber harvest and fuels management were effective in reducing fire intensity by reducing heavy fuels. *(Continued on next page)*



***Approximately two months after the Wallow Fire—in August 2011—at the end of the monsoon season, the treated forest in the Maverick Fuel Treatment area exhibits a rapid return to a green understory and little evidence of mature tree mortality. Photo by Kim Kelly.***



- The combination of forest thinning and prescribed fire use was most effective in reducing fire intensity. These sites exhibit under-burning fire effects.
- Single-method treatments (mechanical thinning or prescribed burning) were beneficial, but not as effective as combined treatments. These sites exhibit fire effects ranging from under-burning to mosaic burn patterns.
- Due to the low-intensity burning, the timbered areas will require little or no emergency stabilization, rehabilitation, or reforestation treatments.

To maintain the effectiveness of these fuels treatments, Fort Apache Agency Timber Sale Forester McLemore emphasized that prescribed fire and pre-commercial thinning need to reoccur on a regular schedule.

McLemore cautioned that the recent closure of local sawmills will reduce the amount of commercial timber harvested in the future—making fuels treatments even more critical to maintaining safe and healthy forest communities.



***After the Wallow Fire entered this area, this untreated timber sale had a higher level of mortality than the other areas on the Fort Apache Indian Reservation. However, the extent of the stand-replacing fire here was limited to scattered small patches.***

August 2011 (Post Wallow Fire) Photo by Kim Kelly.



### **Apache Trout**

The Soldier Spring population of Apache trout occupies Fort Apache Indian Reservation lands within the Wallow Fire's eastern perimeter. The vast majority of the Soldier Spring drainage was burned at low severity, with three small patches (totaling approximately 40 acres) of moderate severity.

Fire behavior on the reservation lands within the Soldier Spring drainage appears to have been moderated by pre-fire fuels management and burn-out operations conducted on the Wallow Fire's eleventh day along the Y40 Road.



***Apache trout.***

Photo by Chris Holbeck's BAER Team.

An unburned vegetation strip remains around the spring and downstream on both sides of the channel to the reservation boundary. The Wallow Fire and suppression operations do not appear to have affected the Apache trout population.

### **Mexican Grey Wolf**

During the course of the Wallow Fire suppression efforts, several wolves were observed by suppression resources along the fire's western perimeter. Fire suppression did not result in changes to the habitat suitability for wolves and did not change the long-term potential for human interaction from existing levels.

### **Mexican Spotted Owl**

A total of 2 Mexican Spotted Owl Protected Activity Centers (PAC) have been identified on San Carlos Apache Tribal lands within the Wallow Fire perimeter. None of the Mexican Spotted Owl PACs on White Mountain Apache Tribal lands were within the Wallow Fire perimeter.

### **Elk Habitat**

Most wildlife species benefit from low-intensity fire. The vegetation has responded vigorously, allowing the herbivores to start to recover from the drought. This will help the herds for several years with better calf and fawn viability, the potential for a better survival rate, and enhanced antler production. Thus, these conditions will improve the tribe's big game hunting enterprise.

### **Mount Baldy and Sunrise Ski Area**

The Wallow Fire was successfully stopped near the base of Mount Baldy, nearly four miles from the Sunrise Ski Resort.

The flanks of Dził Ligai and the powder dreams of Arizona skiers live on . . .

## V Conclusion

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### A. Fuel treatments on the Fort Apache Indian Reservation:

#### 1. Increased Firefighter Safety

- ❖ Fuel treatments allowed firefighters on the ground to implement their suppression strategy safely and quickly enough to be effective.

#### 2. Enhanced Management Options

- ❖ Fuel treatments provided fire managers a successful option in halting the spread of the Wallow Fire to the west.

#### 3. Substantially Reduced Suppression Cost and Fire Size

- ❖ Fuel treatments significantly reduced Wallow Fire costs for suppression and post-fire rehabilitation.
- ❖ Fuel treatments provided the “Best Safe Shot” of reducing fire size.

#### 4. Minimized Negative Effects on Resources

- ❖ Fuel treatments ensured that the Wallow Fire’s negative effects on resources and values stayed at minimal levels.

### B. Future Considerations

- ❖ Large, landscape-level treatment areas are a mosaic of many smaller treatments completed over many years. This is not an overnight solution.
- ❖ Fuel treatments outside of the Wildland Urban Interface [WUI] are critical strategic components to manage fire and protect areas within the WUI.
- ❖ It will be challenging to continue these treatment practices in the future due to: reduced timber harvesting, increased concern over smoke impacts, and funding emphasis on treating WUI-adjacent lands.
- ❖ Fuel treatments vary greatly across landscapes, requiring site-specific temporal and spatial implementation.
- ❖ In managing fire across a landscape, the real story is never about a single fire.

## VI Review Team Members

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Some of the information and photos in this report originally appeared in the *2011 Wallow Fire Burned Area Emergency Stabilization Plan* written by Chris Holbeck's Interagency Burned Area Emergency Response Team.

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