



## **2014 Whites Wildfire Report Klamath National Forest**

The 33,753 acre Whites Fire on the Wild and Scenic North Fork Salmon River was started by a lightning storm on July 29 2014. By July 31<sup>st</sup> the Whites Fire had reached 1,000 acres. By August 1, at least 26 lightning caused fire were started on the Klamath National Forest. Due to the numerous fires burning in Southern Oregon and Northern California no outside resources were available to make an initial attempt at controlling the Whites Fire.

The Whites Fire burned within a significant portion of the North Fork Salmon River, the Russian Wilderness and portions of the Ducks Lake Botanical Area and Sugar Creek Research Natural Area. Just a few days after the fire started the Pacific Crest Trail was closed.

### **Significant Fire Weather and Events**

By August 6 the Whites Fire had reached 6,256 acres. Numerous firefighting crews and local residents were providing structural defense to a private property, known as the Rainbow Mine and multiple loads of fire retardant were dropped on the eastern portion of the property. Winds continued to push the fire east towards the Russian Wilderness were rocky slopes slowed fire activity. All trails, including the Pacific Crest Trail, within the vicinity were closed.

On August 7 the fire made significant advances when the inversion layer lifted and the fire spread by nearly 1,000 acres. A Forest Order had been put in place for the Whites Fire area. The area spanned from Etna Summit southeast to Carters Meadow, then west to the Whites Gulch area, and then northeast back to Etna Summit. Roads, trails (including the Pacific Coast Trail between Etna Summit and Carter Meadow Summit) and the general forest area were closed to public use.

On August 8 the fire had reached 7,809 acres. There were at least 1,573 personnel, 21 crews, 81 engines, 21 dozers, and 13 helicopters working on the fire. By August 9 the fire had reached 8,300 acres.

By the evening of August 10th the fire spread over 3,000 acres reaching, 12,044 acres. Extreme wind drove major runs north into Music Creek, Highland Creek, and into the headwaters of Cow Creek. Driven by southeast winds of up to 25 mph, the fire made two-mile runs with spot fires occurring as far as one mile ahead of the flaming front. The

fire moved west through White's Gulch and into Applesauce and Hickey Gulches and south into the East Fork of Whites Gulch and Sixmile Creek. The fire then ran across Sawyers Bar Road and spotted into North Russian Creek and the North Fork Salmon River drainages.

Burn out operations were in place earlier in the day along the Deacon Lee Trail and were ignited to keep the fire from making a run up and over the ridge into the South Fork of the Salmon River. A hard closure for Sawyers Bar Road from Etna Summit to Whites Gulch was put in place. Structure defense continued for the historic mining district and the Rainbow Mine. Structure defense was also added at Idlewild, Robinson Flat and Whites Gulch.

On August 11th, the fire blew up, covering over 8,000 acres. It was well established on the north side of the North Fork Salmon River and made a run up Robinson Gulch from the bottom of the drainage. The fire then burned into the top of Rattlesnake Gulch and to the top of Tanners Peak. The fire crossed North Russian Creek and headed towards Snoozer Ridge and to the northwest toward Mule Bridge Campground and up the North Fork Salmon River drainage toward Etna Summit. The southwest flank burned intensely near Whites Gulch and Grasshopper Ridge. On the east flank the fire burned in the headwaters of French Creek within the Russian Wilderness.

Weather on August 11<sup>th</sup>, brought extreme 30 mph wind events, which created a huge 23,000 foot tall pyrocumulonimous cloud to develop. The storm created a streak of lightning causing over 20 fires to the north starting the Happy Camp Complex fire and the Man Fire in the Marble Mountains Wilderness.

Crews back burned through the night along the ridge between White's Gulch and Shadow Creek and west towards Eddy Gulch Lookout. The containment line down the east side of Eddy Gulch was abandoned and a new fireline beginning from Eddy Gulch Lookout along the ridge to Black Bear Summit and down the ridge between Eddy Gulch and Jessups Gulch was being created.

By the evening of August 11, the Whites Fire totaled 13,861 acres. At that time the Whites fire had .9 miles of contained line, and 7.1 miles of completed line. The amount of line projected to complete 24.25 miles.

On August 12 the fire had reached 20,782 acres and two out buildings on the Rainbow Mine property burned. All dozers began work on the "big box" approach from Eddy Gulch to Black Bear summit all the way to Blue Ridge and down the top of Jessups Ridge.

On August 16 the Whites Fire grew 2,326 acres including swaths of high to moderate severity fire and crown fire runs in the area of Eddy Gulch Road and Sawyers Bar Road as it consumed unburned fuels within the containment lines. The fire spread west from Little Rattlesnake Gulch but was held east of Rattlesnake Gulch. Firefighters worked to contain several spot fires that started south of the main fire in the upper Shadow Creek area, south of Road 39 and east of the Eddy Gulch Lookout.

Crews also worked through the night to hold the fire within containment lines on the southern edge. Firefighters conducted strategic firing operations to bring the fire to the dozer line in this area, creating intense heat. Crews constructed direct line where the fire entered the Russian Wilderness to the east. Indirect dozer lines continued to be constructed from Eddy Gulch Lookout to Black Bear Summit, then to the intersection of Eddy Gulch Road and Sawyers Bar Road. Burnout operations also continued for two days along Snoozer Ridge.

There were 92 lightning strikes throughout the region the evening of Aug 17th and the morning of August 18<sup>th</sup>, with 1/3 inches of rain reported. The Whites Fire was at 29,717 acres. Crews were conducting burnout operations on the line along the ridge and the 39 road to keep out ahead of the fire. They were working from the leading edge of the fire at the top of Whites/Shadow Creek to bring it along the line to Eddy Gulch Lookout. From there they tied into the fireline down the ridge to Uncle Sam Mine (the Whites/Eddy Gulch divide) with burnouts around the Uncle Sam Mine. The Whites Gulch fireline was still holding, other than the spot that jumped the line at the very top of Shadow Creek.

By August 22<sup>nd</sup> the fire had reached 32,141 acres with generally moderate fire behavior and growth to the north around Mule Bridge and into the Marble Mountain Wilderness. The fire continued to back slowly through Rattlesnake Gulch.

Fireline construction continued along the western and northwestern perimeters. Crews continued to work on reinforcing containment lines on the southern edge of the fire. Firefighters began constructing direct line north of the Sawyers Bar Road but soon stopped due to roll out of burning material. Crews continued with tactical burning in the area of Mule Bridge Road and in the same area a small finger of fire was established in the Marble Mountain Wilderness. Fireline construction resumed in Sawyers Bar where crews built direct line on the ridge west of Rattlesnake Gulch. Handline construction from Etna Summit to Razor Ridge was also ongoing. South and southeast parts of the fire were in the mop up and fire suppression repair phases.

On Aug 23<sup>rd</sup> the fire was at 33,048 acres. Hotshot crews constructed fireline north from Sawyers Bar to Rattlesnake Gulch. Fire behavior increased along Snoozer Ridge and in the Mule Bridge drainage, with lower relative humidity and stronger winds. The smoke inversion lifted facilitating a busy day of air support. Helicopters made several bucket drops of water and retardant on the eastern flank of the fire. Handline construction from Etna Summit to Razor Ridge continued. On the east side of the fire, containment was achieved from the area of Twin Lakes to Little Duck Lake.

On August 25<sup>th</sup> the Whites Fire continued to show movement on the west side of Snoozer Ridge into the upper North Fork Salmon River which had grown 429 acres from the day before where it moved down towards the upper North Fork across from Mule Bridge. Air resources were able to support suppression efforts as clear skies allowed continued use of aerial suppression. Tactical firing operations were used to strengthen the completed line above Mule Bridge to Snoozer Ridge. There were 16 Type 1 Crews, 24 Type 2 Crews, 51 Type 3 engines, 5 Dozers, 37 Water Tenders and 12 Helicopters working on the fire.

By August 28 the 33,680 acre fire was considered 85% contained. The mandatory evacuation order for residents of Sawyers Bar and Eddy Gulch had been changed to an advisory and the North Fork Salmon River Road from Sawyers Bar to Etna reopened.

By September 2 the Whites Fire was declared 98% contained.

### **Fire Severity and Mosaic**

Despite two days of extreme wind events the Whites Fire burned within the range of historic natural variability. Soil severity was reported at 22,091 acres of very low-to-low, 10,007 acres of moderate and 1,637 acres of high severity.

### **Fire Suppression Impacts**

#### **Fireline Creation**

There were at least 28 miles of dozer lines and 25 miles of hand lines constructed during the fire. The hand lines are generally less invasive and for the Whites Fire were mostly constructed in the Russian Wilderness Area. The dozer lines scrape and kill all vegetation in a wide swath, exposing bare earth, fragmenting habitat and creating erosion. The vegetation is dealt with in a number of ways either by side cast, larger cut trees being stack by roadsides and/or vegetation in the form of highly flammable slash is then spread out over the bare earth.

While the lines closest to and adjacent to the fire on the southwest corner seemed to be effective at holding fire growth, it was the “big box” approach that created extreme damage to these watersheds. After the wind events on August 10<sup>th</sup> and 11<sup>th</sup> where the fire ran thousands of acres in a few days and easily ran across the North Fork Salmon River and Road, fire fighters and land managers began construction of this “big box”. This extended dozer line barreled over a dozen miles from Eddy Gulch Lookout west towards Black Bear Summit, extending north down the ridge and continues west to Blue Ridge Lookout and down the top of Jessups Ridge.

The dozer line down Jessups Ridge is duplicative in nature. It bisects road the 40N46 Road at least seven times and dozers also ripped through an adjacent unauthorized road from the 40N46 Road to the 39N65 Road. Conveniently, the Klamath National Forest is planning a large-scale timber sale, the Jess project, in the area of Jessups Gulch just south of the Blue Ridge Lookout and Black Bear Summit and can now more easily reach timber sale units with large equipment.

### **Northern Spotted Owls**

The Whites Fire area contained a vast amount of Critical Habitat for Northern spotted owls (NSO) and at least a dozen of NSO nest sites, known as Activity Centers. It is currently unknown how much habitat was affected or how many Activity Centers were

affected by fire and fire suppression efforts. However, we do know that core areas within home ranges surrounding nest sites were decimated with dozer lines. The US Forest Service has of yet to detail the overall effects of fire or their consultation results with the US Fish and Wildlife Service.

### **Wilderness Impacts**

The 12,000 acre Russian Wilderness is part of the largest nearly roadless complex in northwestern California. The Russian Wilderness spans the major ridge dividing the Scott and Salmon River drainages. It contains 22 lakes, most set in glacial bowls surrounded by granite peaks. This area is of national botanical significance because of the great diversity of trees and other plant species. Elevations range from 4,800 feet to Russian Peak's 8,200 feet. An extensive trail system, including 18.5 miles (29.8 km) of the Pacific Crest Trail (PCT), accesses the many high mountain lakes.

It appears that nearly six miles of hand lines were constructed in the wilderness as well as multiple retardant drops by Paynes Lake south to Horse Range Lakes within botanical areas described below. Further there is a very high risk of spreading noxious weeds into the wilderness area.

The Whites Fire burned a very small portion in the area north of Russian Peak. This area includes the Sugar Creek Research Natural Area and the Duck Lake Botanical Area, which contain the greatest diversity of cone-bearing trees on the planet, where 18 species are found within one square mile. This includes the only known population of subalpine fir (*Abies lasiocarpa*) in the state, and one of two known populations of Engleman spruce (*Picea engelmannii*) in California. The area also supports several populations of Brewer's spruce (*Picea breweriana*) which is endemic to the Klamath Mountains, and stands of both whitebark pine (*Pinus albicaulis*) and foxtail pine (*Pinus balfouriana*).

This conifer diversity is matched by incredible diversity among their smaller kin: nearly 400 species of plants were identified in the Sugar Creek drainage alone. Watersheds of similar size elsewhere usually do not contain even half as many species. Other rare and unique species include angelica, clustered lady's slipper, Howell's draba, timber blue grass, Engelmann's lomatium, peregrine falcon, coho and chinook salmon, wolverine, northern spotted owl, goshawk, bald eagle, Roosevelt elk, marten, and fisher.

### **Noxious Weeds**

Dozer lines are known vectors of noxious weed spread. Spotted knapweed has already been detected on fire lines to the west of the fire area on Jessups Ridge. Further noxious weed surveys will be conducted in 2015 and the Klamath National Forest has received \$50,000 to complete surveys and treat known sites. There is a very high risk of noxious weed spreading into the Russian Wilderness Area. Weed infestations on private lands may spread onto the national forest land.

## **Cost of Suppression**

The cost of suppression efforts reached \$48.2 million as of September 8 2014.

## **Backburning**

On Wednesday August 6 fire fighters began helicopter ignition operations on 1,400 acres on the south side of the fire due east of the Eddy Gulch lookout. This was expected to continue for four days, until August 9<sup>th</sup>.

On August 10<sup>th</sup> and 11<sup>th</sup> extreme increased fire behavior winds making a significant increase of the fire footprint, in particular the run up to Tanners Peak.

Back burning was used extensively on the south and southwest portion of the fire area as well as around private properties and Mule Bridge.

## **Retardant**

Approximately 60,000 gallons of a new retardant called Firewall II was being tested on the Whites and July Complex Fires. It is a gel that bonds at the molecular level with water. Produced by No Char and distributed by Eco Fire Solutions. The gel sticks to vegetation and is thicker and lasts longer than other retardants. Firewall II is said to be more of a direct suppressant and is dropped like water directly onto fire area. More research is being conducted to find out what other retardants were used and what quantity.

At least three local resident water sources were contaminated.

Long swaths of ridgetops spanning Etna Summit and down the PCT, Paynes Lake south to Horse Range Lakes, Tanners Peak, Snoozer Ridge, Rattlesnake Gulch, Rainbow Mine/Highland, the ridgeline of the Russians, and Eddy Gulch Lookout area had a large amount of retardant applied.

## **Road Use**

The North Fork Salmon River road systems have seen extensive use in 2013 and 2014, not only from extreme fire suppression efforts but also throughout the wet weather season from 2013 post-fire logging operations. Roads are the leading source of sediment in waterways. The Klamath National Forest spent over \$413,000 on roads from monies received from Burned Area Emergency funding from the 2013 fire season and \$362,704 on roads after the 2014 fire season in the North Fork Salmon River watershed.

## **Fisheries**

The Salmon River is a stronghold for the last remaining run of wild spring Chinook salmon. The entire Salmon River watershed is one of the best remaining habitats for

threatened Coho salmon as well as Pacific lamprey, Klamath River lamprey, steelhead and even hosts green sturgeon.

The Whites Fire and fire suppression activities affected Coho Critical Habitat, including North Fork Salmon River, Whites Gulch, South Russian Creek, Cow Creek and Sawmill Gulch. The probability of loss and damage to Coho habitat is likely and the magnitude of consequences is high for multiple tributaries.

### **Future Impacts of Proposed and Recent Actions**

The cumulative impacts of the 2014 Whites and 2013 Salmon Complex Fires, fire suppression activities, Eddy Gulch timber sale, post-fire projects such as Salmon Salvage and the proposed Westside Fire Recovery Project and Jess timber sale have the potential to severely effect the wildlife, fisheries and forests of Wild and Scenic North Fork Salmon River for centuries.

**Klamath Forest Alliance**  
**PO BOX 21**  
**Orleans, CA 95556**  
**[www.klamathforestalliance.org](http://www.klamathforestalliance.org)**



Written and composed by Kimberly Baker for the Klamath Forest Alliance.