



2012 Whitewater Baldy Fire Gila National Forest

The Whitewater Baldy Fire Complex (WWB) started as two separate lightning strike fires near Mogollon Baldy and in the headwaters of Whitewater Creek in the Gila Wilderness east of Glenwood, NM. The two fires joined in extreme fire behavior on 23 May 2012. The fire severely burned a large tract of land across the Gila National Forest and the Gila Wilderness, including the headwaters of Whitewater Creek, Mineral Creek, and Gilita Creek that drain directly into the communities of Glenwood, Alma, and Willow Creek respectively. The fire burned more than a dozen residences in the Willow Creek area, caused the evacuation of several small towns, and forced the closure of the Gila Cliffdwellings and the Catwalk Recreation Area above Glenwood, New Mexico. Rain showers in mid-July helped firefighters reach 95% containment by 23 July.

The WWB fire started in the high elevation forest of the Mogollon range. Historically these high elevation mixed-conifer and aspen forests had a stand-replacing fire regime. Therefore it is not surprising that, as the WWB was pushed by strong winds, it created large



Aerial view of the Whitewater Baldy Fire. Photo by Kari Greer.

2012 Whitewater Baldy Fire Complex At-A-Glance

Dates: 16 May to 23 July 2012

Cause: Lightning

Size: 297,845 acres total

Location: Catron County, East of Glenwood, NM; Gila National Forest and private

Vegetation types: Mixed Conifer, Ponderosa Pine, Pinyon/Juniper and Grassland with heavy concentrations of down and dead fuels.

Burn Severity	Acres	% of Area
High	38,570 acres	13.0%
Moderate	37,832 acres	12.7%
Low	221,272 acres	74.3%

high-severity patches. However, as the fire backed down the mountain, it created a more natural mosaic of burn severities and smaller patches of high severity. As the WWB Fire spread into the lower pine forest it burned up to, around and through a number of recent burn scars. Since the 1970s, the Gila National Forest has had one of the most active fire management programs in the nation. Since 1985, the Forest has burned an average of 50,000 acres per year. One of the first burn scars the WWB encountered was the 2002 Cub Fire, where fire severity decreased from high to low and moderate. As the WWB fire spread northeast, it reached the boundary of the more recent 2006 Bear Fire, however the lack of fine fuels stopped the WWB and forced it to go around the 2006 fire perimeter. A similar pattern occurred when the WWB fire reached the 2011 Jack's Fire Complex and was forced around the perimeter of these managed fires. Similarly, spread of the WWB was halted to the southeast by the 2011 Miller Fire and to the north by the Eckleberger prescribed fire. Although the WWB was the largest fire in New Mexico history it was actually restricted by a landscape structure of past fires.

Because many of the areas within the Gila Wilderness were never harvested, they represent one of the last remaining reference sites both in terms of forest structure and functioning fire regimes for ponderosa pine in the Southwest.

POINTS OF INTEREST

Fire Operations

The Baldy Fire was burning in some of the most remote, steep and rugged country in the Gila Wilderness, in an area that has seen wildfire frequently. The decision was made to allow the fire to burn to areas where containment efforts would be successful. When the Whitewater Fire was reported, Initial Attack Fire Crews from the Glenwood RD and the Silver City Interagency Hotshot Crew attempted to build fireline to control the fire but were unsuccessful because of the steep terrain and lack of adequate safety zones. On 17 May the New Mexico Type 2 Incident Management Team (IMT) began managing the Whitewater Fire. On 23 May, when the two fires joined, winds gusted as high as 51 miles per hour. On 26 May the Gila NF ordered a Southwest Type 1 IMT to manage the Fire Complex. Existing roads, trails, natural features and fire scars from 2011 fires were used to eventually contain the fire.

Fire Effects

The dominant fire regime in high elevation mixed conifer aspen historically included stand replacing fires. Some of the high severity patches in the WWB fire, however, were as large as 5,000 acres (2,000 ha); larger than the historical estimate. One potential reason for this apparent increase in high severity patch size likely relates to fire exclusion and increased density in the drier mixed conifer forests. However, it is important to note that many of the larger patches in the central and northwest part of the WWB Fire were associated with strong wind events and much of the southwest portion of the fire experienced a more natural fire mosaic with smaller high severity patches. Once the WWB Fire reached the lower elevation pine country it became more of a maintenance burn due to



Aerial view. Photo courtesy of Kari Greer.

2012 Whitewater Baldy Fire Resources

Peak Total Personnel: 1,257

Resources: 27 Crews; 64 Engines; 28 Water Tenders; 7 Dozers

Air Support: 10 Helicopters; 170,785 Total Gallons of Water; 86,860 Total Gallons of Retardant

Suppression Cost Total: \$23 million (as of 19 June 2012)

the frequency with which fire has affected the area. The WWB Fire should therefore help maintain the open nature of pine forest and increase their resilience for stand replacing fires and other disturbances. Together the Miller and WWB fires treated more than 330,000 acres of mainly ponderosa pine and mixed-conifer forests with moderate to low severity fire.

Wildlife

Gila NF estimates that 15 of the 101 Mexican spotted owl PACs that occur within the burn perimeter were compromised in terms of supporting successfully breeding Mexican spotted owls in the future. Forest monitoring suggests that the owls do not usually abandon a PAC that has been altered by severe fire but rather shift their nest location to nearby areas. Forty-two Narrowheaded Garter Snakes were moved to mitigate negative effects from an increase in flow and debris. A number of Gila trout were translocated to either hatcheries or other streams.

BAER Efforts

Multiple rehabilitation strategies were undertaken to mitigate the very high potential for excessive erosion and loss of water control, including:

- NRCS purchased ALERT stations for flood warnings for communities.
- Levy stabilization and channel clearing activities in Whitewater Creek and Mineral Creek.
- Hazard tree removal along 18 miles of Forest system roads.
- Removal of hazardous bridges, landings, and railings.
- Aerial seeding on 26,200 acres (547,105 pounds of seed was applied); Gila National Forest is proposing to seed an additional 8,850 acres of high to moderate burn severity acres.
- Aerial straw mulching on 14,204 acres.
- Work on 45 miles of Forest Roads.