FEMO report for the General Fire:
August 7th through August 9th

The General Fire was reported around noon on July 31st burning near the south side of the Blue Ridge Reservoir. An assessment was completed on the 5th, and the decision was made to manage the fire primarily for resource objectives. At that time, the total fire area was mapped at about 15 acres. This report summarizes the fire effects observed on the General Fire on August 7th, 8th, and 9th.

General Fire Resource Objectives

Primary resource objectives applicable to this fire are listed and evaluated below.

1. *Coordinate with district to identify and determine appropriate tactics to mitigate negative impacts or improve potential enhancements from the fire and/or suppression activities.*

This objective is being met. The biggest concern to the ecosystems potentially impacted by the fire would come from the first and second order effects resulting from high severity fire. Strategy and tactics being used to mitigate this include using backing fire on steep slopes whenever possible in order to 'lead' the fire in a way that allows it to burn, while minimizing the potential for uphill runs and active crown fire. This strategy has been highly successful thus far.

The majority of the management unit is bounded and broken up by drainages/water, and existing roads, and the only ground disturbance associated with line construction has been a short handline from the end of the 09606Y road down to the reservoir (Figure 1).

Figure 1. Handline on the northeast corner of the fire.

2. *Minimize impacts from fire and suppression activities within spotted owl PACs and northern goshawk PFAs (i.e. track number of drops of water and retardant in and around PAC's and numbers of large trees and snags removed, minimize equipment use in PACs, etc.). If burnout must occur within PAC's and PFAs, consult with resource advisor.*

This objective is being met. There are a number of PACs affected by the General Fire management, and ignitions have been a fundamental tactic to get the fire to produce fire effects most beneficial to the area. The objective in the IAP is "Maintain fire behavior defined as low to moderate intensity surface spread, with minimal canopy loss (less than 10%). This is absolutely being met. In some areas, small (less than 0.1 acre) pockets of doghair, and an occasional single tree have torched, but the total is far less than 10%, and the effects will be much healthier surviving trees (Figure 2, Figure 3). Additionally, if the dense, doghair thickets, or even some of the more mature dense pine burned under drier, windier conditions (which occur every spring), it is highly likely there would be extensive high severity effects.

Figure 2. Small area of doghair that was scorched and torched off the 719G road.

Figure 3. Low severity fire effects in Bear Canyon which are typical of fire effects in forested areas of the General Fire.

3. *When possible/feasible, use tactics that limit the loss of snags, such as minimizing the removal of interior snags if they do not pose a safety issue to firefighters or public.*
This objective is being met. Snags were lined where it was practical. The only snags that were cut were those that threatened public safety (along roads or the shore), or burning snags that threatened the line.

4. *Utilize suppression techniques that minimize the potential for increased movement of sediments into tributaries of Blue Ridge Reservoir to reduce impacts to federally listed and sensitive aquatic species, including Little Colorado spinedace, roundtail chub, bluehead sucker and flannelmouth.*
This objective is being met. The General Fire is burning in such a way that there are few areas where the mineral soil is exposed. In pine litter fire effects are burning across more than 90% of the area, but it's only burning to the mineral soil where there are woody fuels. These fuels have a longer residence time, and reduce all litter under and adjacent to it to white ash, however these areas are not large or contiguous (Figure 4).

Figure 4. This is typical of the effects in the ponderosa pine where Litter and some coarse woody debris still cover most of the surface.

Three transects were installed to document surface fuel consumption (Figure 5). Fuel consumption on the three transects was highest in 10 hour fuels (76%), and lowest in 100 hour fuels (50%). The greatest variability seemed to be in the 1000 hour fuels, which ranged from almost untouched (surrounded by black), to completely consumed. This difference can be attributed mostly to degree of decay. While this sample is relatively small, it is an indication of consumption trends. No fuel category was completely consumed, though there was a lot of variability across the fire.

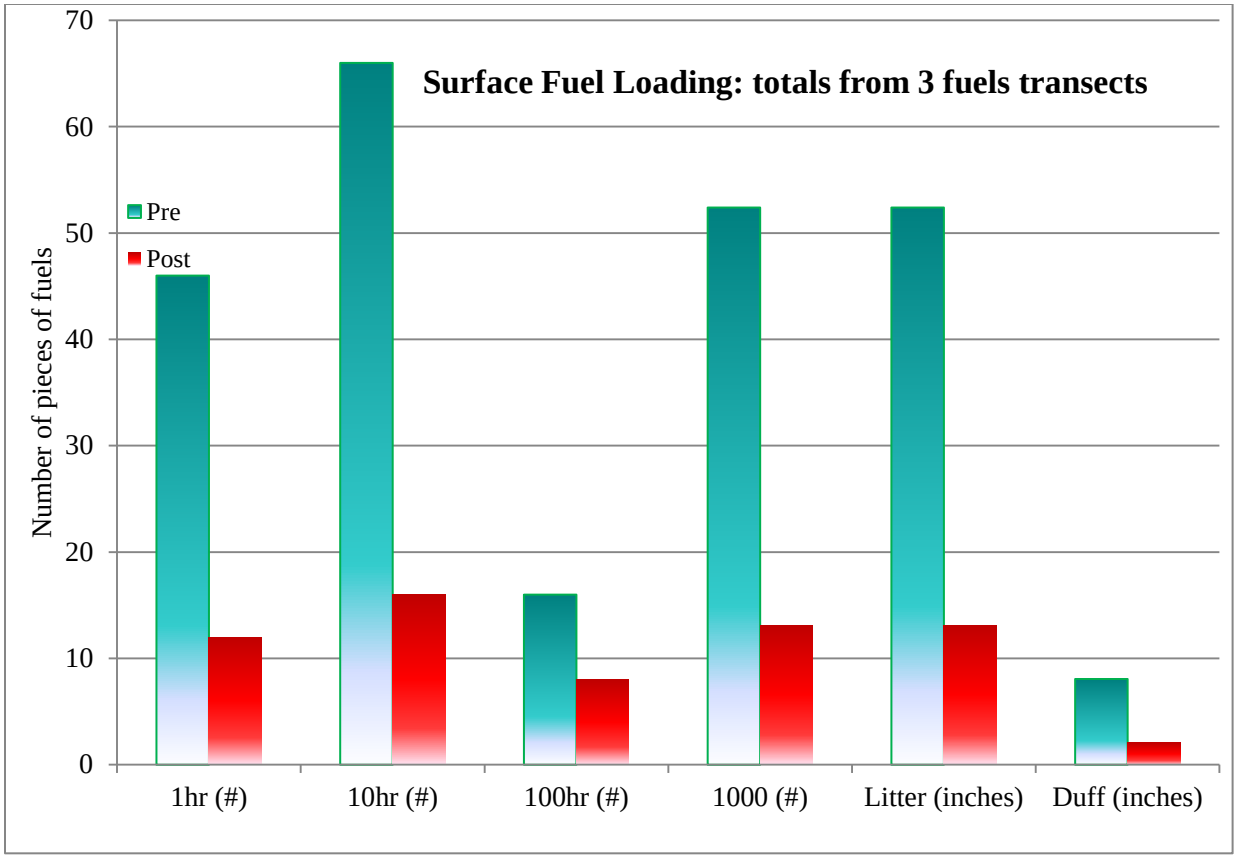

Figure 5. Surface fuel loading consumption averaged over three transects. 1 hr, 10 hr, and 100 hr fuels were counted as individual pieces of fuel. The diameters of 1000 hour fuels were added up for total inches. Litter and duff were measured by depth (inches).

Fire Progression and weather

When the General Fire started, it had rained hard, and it didn't spread fast. Table 2 shows steady growth, amplified by management ignitions. There has been a trace of rain daily on the fire, and humidity recovery at night has been excellent. The result is moderate fire behavior that is manageable and beneficial. The soil is dry across most of the area, aiding the drying out of surface litter each day so the fire will carry well by late morning, regardless of overnight humidity.

Table 1. Fire perimeters are estimates based on end of the daily burning period. The perimeters below were determined by the use of GPS data and hand drawn maps.

Date (time)	Fire size (acres)	Change since last (acres)
August 4th	15	n/a
August 5th	75	60
August 6th	150	90
August 7th	300	150
August 8th	600	300
August 9th	850	250

By August 9th, there had been storms on all sides of the General Fire, but nothing more than a trace of rain each day on the fire itself. August 9th was the driest day since the fire started, and it was burning hotter. Around 1530, there was a short rain shower that increased humidity and moderated fire behavior just a bit. As of 1700 on August 9th, 850 is a rough estimate of the total acreage, based on three areas of ignitions where fire was backing down into canyons (FIGURE 7).

Conclusions/Recommendations

Once the General Fire is out, a RAVG assessment will be able to produce maps and data that will help inform a more site specific discussion on the effects of the General Fire, including the mosaic of severity at all scales.

The combination of fuel conditions and weather have put the General Fire in a 'sweet spot' for producing desirable fire effects in an area that can be difficult to burn safely and with the desired effects.

From an Ecological perspective, the General Fire (at least through the 9th), was a success and met all resource objectives. Since the fire was reported, about 60 individuals have been assigned to the fire at one time or another, and there have been no injuries.

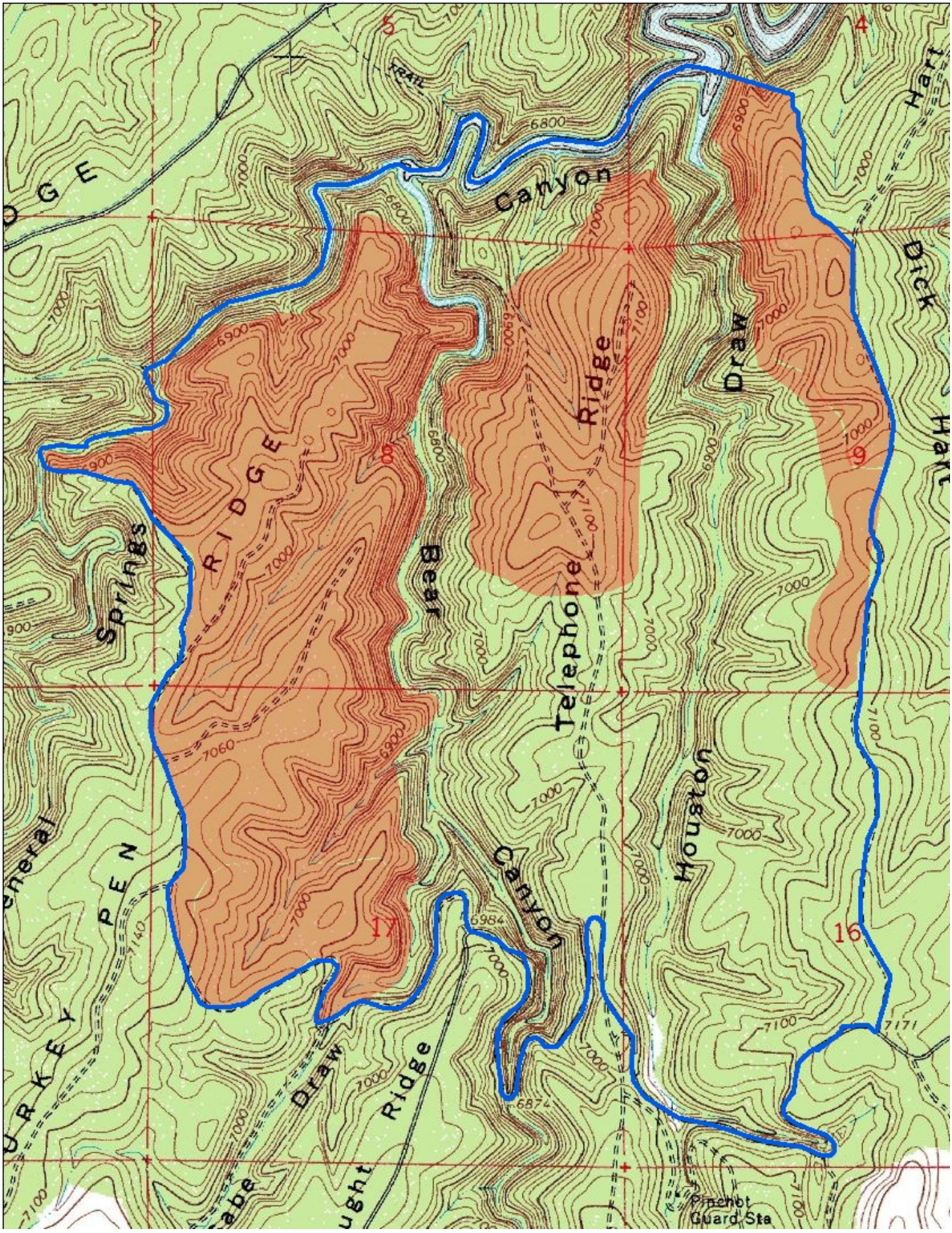

Figure 6. Estimated fire perimeter as of August 9th.