

Buckeye Reservoir Prescribed Fire

Moab-Monticello Ranger District of the Manti-La Sal National Forest

Project Description:

The Buckeye Reservoir prescribed fire is located in Montrose County, Colorado, 10 miles northeast of La Sal, Utah. The project consists of 780 acres located around the Buckeye Reservoir recreation area. The primary objectives of this burn are to reduce the wildland fire hazards and improve the overall health and vigor of the forest, thus reducing the potential for negative effects from future wildland fire on both the agency and adjacent lands.

Map 1: Buckeye Prescribed fire planning map



Narrative:

Test fire results were within the low prescription and the effects matched the objectives of the burn. Ignitions into unit 3 began from the test fire at the northwestern end of the unit and moved generally southeasterly through the western portion of that unit. This pattern was repeated on the eastern portion through to the road junction to the group site.

A second firing group moved to unit 7B and began lighting on a similar cardinal path.

Observed fire behavior (unit 3):

Through the first portion of unit 3 the flame lengths, rate of spread, and distance of spread into the grasses away from the ponderosa pine stand remained consistent and low intensity.

As the firing crew moved southeast along the eastern portion of the unit they encountered the remnant piles which had not consumed or in some cases had not ignited during winter pile burning in 2012. This may have been due to large amounts of dirt mixed with the woody material. They also encountered several large dbh snags and towards the southern end of the unit, two aging logging piles. Snags and cat-faced live trees were prepped prior to ignition to prevent them from catching on fire. Additionally, igniters customized their firing patterns to minimize fire intensity and residence time around the bases of the large trees. During firing of similar fuels, fire spread did not reach either the piles or snags. As the operation continued south, the winds picked up significantly and became erratic. This created a change in fire spread characteristics. The on-scene crew did not attempt to dig line in front of these head fires and instead focused on spot detection and working to protect campground fence poles along road 378 due to safety concerns. Under these conditions a few dirty remnant machine piles and the two log piles ignited and were generally fully consumed. Away from these heavy concentrations of hazard fuels the fire spread continued to die out as fine fuels diminished.

Fire behavior remained within the low or desired prescribed ranges throughout the implementation. Problem fire behavior was only expressed with the late day wind changes in combination with the increased fuel loading.

No torching or crowning was witnessed and no evidence of this was seen in the following day after ignitions. Limb scorch did occur in a few areas but an ocular survey showed only a few trees to have sustained near to 50% scorch. No bole damage was seen although crews did spend time to extinguish several burning cat-faced ponderosa pine.

Three spot fires were detected and suppressed; one 10x20 feet and two 2x2 feet.

Two known snags were consumed while many others remain intact with no fire damage.

Credits:

Interagency support from the BLM (Moab) and NPS (Mesa Verde) provided the personnel required to implement this burn. Both agencies sent highly skilled firefighters and their home units covered all their costs. We are very grateful.

Photo 1: Test Fire



Photo 2: Test fire area 30 minutes after ignition



Photo 3: Firing operations east of campground



Photo 4: Interior ignitions on unit 3 (courtesy Jason Kirks)



Photo 5: Interior Ignitions



Photo 6: Results of interior ignitions next to campground



Photo 7: Log pile consumed and minimal impact to canopy



Photo 8: Fire damaged post and char on pine



Photo 9: Ignitions on Unit 7B



Photo 10: Two days following ignition



Photo 11: Two days following ignition



Photo 12: Two days following ignition





Buckeye RX Unit Log

4/11/14

0930- All resources on scene, burn fully staffed for "desired" conditions
0945- Briefing
1030- Test fire on Unit 3, successful
1100- 7B firing operations start
1130- WX obs 59°, 28% rh, 60% probability of ignition unshaded
1200- Firing operations continue on units 3 and 7B
1230- Wx obs 62°, 28% rh, winds 0-3SE, 70% prob. of ignition
1300- Slight increase of wind speed
1310- Two small spot fires in 7B, both caught, firing operations continue
1330- Wx obs 65°, 21% rh, winds 3-5, gusts to 8 SSE, 70% prob. of ignition
1400- Firing operations continue in both units, fire behavior increasing slightly, firing personnel are readjusting firing patterns successfully.
1430-WX obs 67°, 14% rh, winds 4-6, gusts to 10 S, 90% prob. of ignition
1445- E694 departs 7B to top off with water from E451 at unit 3
1450- Update in to MIFC
1500- 10' by 20' spot in unit 6 from unit 3, contained quickly
 Firing operations are completed in unit 3, starting to shift personnel to Unit 7B
1504- E694 moving from unit 3 to unit 7B, bring two additional folks to help complete 7B
1520- All other resources from unit 3 except for Lanoue and Norton (who remain with E451 to monitor unit 3) are moving to aid with ignitions on 7B
1530- WX obs 64°, 20% rh, winds 2-4, gust 6 S, 70% prob. of ignition
1545- Fire behavior diminishing, reached a good open area, ceased ignition
1545-1615- Ensuring edge is out and fire will not move beyond where it was ignited
1620- Resources headed down to unit 3 for AAR
1700- AAR complete, BLM resources, Moab MLF resources, and E694 depart
1715- Final patrol of both units
1830- Monticello MLF resources depart, return to Monticello

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0800- Resources depart Monticello
1000- On scene- all lines are secure, no further fire spread or slopovers
1030- Mop up starts, edges of units 3 and 7B secured better
1240- Light precipitation on the unit, some lightning in the area
1300- Wind gusts increase slightly, mop up/patrol continues
1430- No spots or slopovers detected
1800- All resources depart for Monticello

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0700- Resources depart for Buckeye RX
0900- On scene- area is receiving significant moisture; many small duffers interior have been extinguished
0900-1200 Mop up continues on Unit 3
1230- Patrol of unit 7B, very minimal fire behavior, area has 3" of snow cover and more falling
1445- The majority of mop up complete, resources return to Monticello