

Appendix F

Soil and Water Best Management practices

1. In any year, no more than 10% of public land in any 6th level Hydrologic Unit Code (HUC) watershed will be treated (combination of mechanical and prescribed fire). BLM and Forest Service will coordinate annually to determine treatment thresholds. **Table 2** depicts the 6th level HUC watershed delineations for the project area (p. 39).
2. In any year, no more than 5% of public land in any 6th level HUC watershed would be treated with prescribed burning. Over any 5 consecutive year period, no more than 15% of public land in any 6th level HUC watershed would be treated with prescribed burning. Natural fires (wildfires and Fire-Use Fires) will be allowed exceed the percentages listed above. Further prescribed burning will not occur within a particular year if natural fires exceed the percentages listed above.
3. All prescribed burns will have a no-burn buffer zone of no less than 50' from minor drainage channels (defined as an active channel measuring greater than 2' wide and 0.25' deep, but less than a major drainage channel, and intermittently flowing) and 150' from major drainage channels (defined as an active channel measuring 5' or greater wide and 0.5' deep, or any perennial flowing channel). No ignition will occur within the buffer zones and control of the burn in these areas will be done as needed.
4. To minimize soil hydrophobicity, burning should only be conducted when soils are moist at a depth a 6" (soil should form a cohesive ball when squeezed by hand). Being that hydrophobic soil conditions are most prone to form on coarse textured, sandy soils, and on pinon – juniper sites, fire intensity should be prescribed as low as possible where these sites occur.
5. Dozed fire lines should be constructed as much as possible on the topographic contour, and should minimize the disturbance to the mineral soil surface.
6. Prescribed fire will not be conducted on shallow soils, less than an average of 12" deep throughout the area, or in areas that receive less than 12" of average annual precipitation, as there is a poor potential for vegetation establishment, and a high potential for weed invasion.

7. Spring burning will be postponed until a subsequent year, when the accumulated water year precipitation (October of the previous year to the burn date) is less than 75% of the most recent 20-year average for this period.
8. Prescribed burns will not be planned on slopes steeper than 35% unless there is at least 20% plant area basal cover of fire resistant grasses and forbs. Highly erodible soils should not be burned on slopes greater than 20% (see Table 13 in the BLM, Montrose District, Rangeland Treatment handbook for these conditions specific to soil series).
9. Soils with sand or loamy sand surface textures are most prone to wind erosion and should only be burned with low intensity or, in a mosaic at moderate intensity if located on topographic high surfaces with high wind potential (see Table 13 in the BLM, Montrose District, Rangeland Treatment handbook for these conditions specific to soil series).
10. Mechanical treatments would only be conducted on frozen or dry soil surface conditions, when rutting from tires or tracks are less than 3" deep.
11. Roller chopping of pinyon-juniper sites on slopes greater than 5% will be generally done so trees are felled along the land slope contour. This would maximize the effectiveness of large woody litter for acting as a runoff and soil erosion barrier. However, occasionally some roller chopping may occur perpendicular to the slope so that the "cleat" marks from the roller chopping traveling parallel to the slope do not accidentally align and create a man made rill that will increase erosion.
12. Avoid treating shallow and/or rocky soils where successful revegetation or regeneration is unlikely.