

## Nickowitz BAER Roads Report

Generally speaking fire activity and consequent effects should be fairly minor in respect to roads and the need for BAER mitigation work. Some anticipated affects have already been mitigated by post suppression activities in the form of blading and shaping roads, installing rolling dips, cleaning ditches and culverts. The road system in the fire perimeter also has very few structures and is primarily out-sloped roads with few to any drainage structures with the exception of 12N11. The following are a list of items that should be considered for BAER roads mitigation activity:

1. Description: Road 13N01 at Mile Post 28.9 (near 13N01E) there is a down drain in what appears to be in a moderate burn severity area that caused the down drain on a culvert to unravel (spiral culvert that came apart). Recommend repair with new down drain and energy dissipater at end. Consequences of not doing the repair are increased sedimentation, and erosion of the fill slope that would jeopardize the road structure.

Cost: \$REDACTED; could be done next spring in maintenance contract or this fall in some kind of procurement.

2. Description: Road 12N11 has numerous culverts that should be monitored for plugging and sizing in anticipation of increased surface flows and increase of woody debris delivery. They have all had their inlet basins cleaned and enlarged through post fire suppression repair.

Cost: Monitor next spring as gates will be closed in the raining season (also in the snow line). 1 day to monitor; \$REDACTED. Any repair or maintenance costs unknown at this time.

3. Description: 13N01 at Mile Post 29.2 (near drop point 20 and where the old 12N10 intersection was) the fill and subgrade is failing. This is in area of what appears to be a moderate burn severity and I am concerned the effects of the fire will further de-stabilize the subgrade resulting in increased settlement and pavement separation resulting in unsafe driving conditions. The repair would be a reinforced digout of the road structure. This could be monitored.

Costs: \$REDACTED to repair. Recommend monitor at this time.

Costs already incurred during assessment: \$REDACTED.

Additional costs anticipated: REDACTED.

Report prepared by Kurt Werner

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