
Unclassified Roads Resource Report

Unclassified roads are defined in Forest Service Manual 7700 as “Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization (36 CFR 212.1).”

The Civilian Conservation Corps constructed roads in the project area in the 1930s. Since then the primary reason for expanding the road system was for timber harvest access. The project area contains some roads that met the definition of unclassified roads prior to the fire. Other roads exposed by the fire may now meet the definition of unclassified roads. The other roads are often ones that were decommissioned in the past by log or earth barriers, camouflaging the entrance with slash, vegetative regrowth along and on the road surface, cross ditching, and other methods. In some cases, the fire consumed barriers and camouflage made of organic material and the vegetative regrowth that was along and on the road surface. In other situations inorganic barriers and cross drains were breached or skirted prior to the fire, during fire suppression, and during post fire activities. Many of the previously decommissioned roads may now function more like unclassified roads than decommissioned roads.

The mileage of unclassified roads in the project area and inside the Forest boundary was estimated by comparing the Fremont Transportation System Update 99 GIS corporate layer (TSU 99) with the Primary Base Series maps (PBS) maps. The comparison revealed 59.25 miles of unclassified road. Field observations and interpretation of post fire aerial photographs in conjunction with logging systems planning added an additional 9.43 miles of unclassified road not on either mapping system. The total was 68.68 miles for an unclassified road density of 0.93 miles per square mile.

Many of the unclassified roads are planned for use in the various action alternatives. Unless determined to be needed for long-term resource management through the Roads Analysis process, the unclassified roads used for salvage logging would be treated as temporary roads. The Timber Sale Contract contains clause B 6.62 – Temporary Roads. The clause states, “As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Purchaser shall employ such measures as outsloping, drainage dips and water-spreading ditches. After a Temporary Road has served Purchaser’s purpose, Purchaser shall give notice to Forest Service and shall remove bridges and culverts, eliminate ditches, outslope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions and build cross ditches and water bars as staked or otherwise marked on the ground by Forest Service. Where bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.”

The amount of unclassified road proposed for use as temporary road and closure following salvage logging, by alternative, is listed on Table 2. Also included on Table 2 is the unclassified road density following decommissioning of unclassified roads that are treated as temporary roads in the Timber Sale Contract. Alternatives C and G accomplish the greatest amount of unclassified road closure following harvest. Alternative A does not accomplish any unclassified road closure.

Table 2. Unclassified Roads to Temporary or Classified Roads.

Alternative	Unclassified to Temporary (Miles)	Unclassified Road Density Following Harvest (Miles per Square Mile)
A	0.00	$0.93 - 0.00 = 0.93$
C	21.4	$0.93 - 0.29 = 0.64$
D	5.7	$0.93 - 0.08 = 0.85$
E	15.8	$0.93 - 0.22 = 0.71$
G	21.4	$0.93 - 0.29 = 0.64$
H	19.7	$0.93 - 0.27 = 0.66$

Fire rehabilitation in the fall of 2002 closed some of the unclassified roads used for fire suppression activities. If reforestation or thinning activities in stands not affected by salvage logging units open currently closed roads, money will be budgeted to reclose the road. However, if the road is currently open, reforestation or timber stand improvement money will not be spent to close the road. Road maintenance or other funds such as watershed restoration dollars may be needed in the future to decommission the remaining unclassified roads.

The TSU 99 GIS layer includes some of the roads that are on private land. Field observations and air photo interpretation indicate other roads are on private land. Some of the additional roads were evident and were in use prior to the fires in

2002 and others were revealed as a result of the fires. During fire suppression, post fire rehabilitation, and fire salvage operations many of the roads not on the TSU 99 layer were utilized once again.

The roads on the TSU 99 layer appear to be similar to roads on Forest Service System lands that meet the Forest Service definition of a classified road. The other roads on private land appear to meet the definition of an unclassified road. Approximately 149.5 miles of classified roads are on industrial private land and approximately 8.6 miles of classified road are on non-industrial private land in the fire areas that are within the Forest boundary. The density is approximately 3.9 miles per square mile on industrial private land and 3.0 miles per square mile on non-industrial private land.

To estimate the density of unclassified road on private land, photo interpretation was used to identify roads not on the TSU 99 GIS layer. A 12% sample of private forestland (both industrial and non industrial) was identified on air photos taken in September 2002. Roads that appeared to be available for vehicle use were traced on to photo overlays. The overlays were compared to the TSU 99 roads and roads not on TSU 99 maps were measured using a map wheel. The sample revealed an estimated average density of 2.04 miles of unclassified road per square mile of private land. Industrial forestland averaged 2.3 miles per square mile and non industrial forestland averaged 0.7 miles per square mile. The difference in road density is correlated to the intensity of timber management conducted in the past on the two types of ownership.

Because of the density of existing roads on industrial forestland, few, if any, additional roads will be constructed for timber salvage and planting operations. On non-industrial forestland some new temporary road construction may be necessary for efficient salvage operations. The roads are generally minimal impact, native surface roads that are closed to control access following completion of logging operations. Some of the non-industrial forestland owners use fences and locked gates to control access to their land. In the future, roads that are not physically blocked will close naturally as small fire killed trees fall onto the road and brush and trees encroach onto the roadbed. Small diameter trees killed by the fire will fall onto the roads within 5 years. Roads not continuously used or are maintained for use will return to their pre fire brushy condition in less than 10 years.

This Toolbox Fire Recovery Project specialist report was prepared during March, April and May of 2003. It will be used, along with specialist reports from multiple resource areas, to prepare a Draft Environmental Impact Statement (DEIS) for the Toolbox Fire Recovery project. This specialist report will become a part of the planning record for the project, filed under:

“Toolbx/ Planning Record/ E_Specialists_reports_data_inventory_and_collection”

This report will be filed both in the ‘hard-copy’ planning record binders, on file at the Silver Lake Ranger District, and on the Fremont National Forest “K-Drive”. In the interest of planning process efficiency, particularly in light of time and budget constraints, editing that occurs to the content of this report during the preparation of the DEIS will be reflected in the DEIS and will not necessarily be entered back into the content of this report. To insure the accuracy of such edits, I will review the content of both the DEIS and the (Final) FEIS and certify that their content is consistent with the analytical conclusions in this report. If during DEIS or FEIS editing, substantially different conclusions or interpretations are reached or substantial additional analysis is prepared from that displayed in this report, an addendum to this report will be prepared.

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