

**Operation and Maintenance Plan  
For  
Gilpin-Clear Creek Home and Landowners Association Inc., Private Road Easement  
(No Reconstruction)**

This Operation and Maintenance Plan identifies requirements of the Holder to complete for the upkeep and maintenance of the road authorized by this easement, located on National Forest System lands.

The Holder and the Forest Service will review the requirements of this Plan periodically, and it will be modified as necessary to reflect current conditions.

The maintenance work to be performed shall include work necessary to keep road drainage functional, correction of safety problems, and maintenance of the road prism to provide passage of high clearance vehicles, as a minimum.

**Out Slope Roads –**

1. Maintain rolling dips and outlet ditches.
2. Drainage dip maintenance consists of cleaning existing dips on native surface roads.
3. Drainage dips shall be shaped to a depth and width to provide drainage and in reasonable conformity to the original lines, grades, and cross-section, unless otherwise designated on the ground. Handwork may be necessary to obtain a smooth surface and uniform cross section. Leadoff ditches shall be cleaned for a distance of ten (10) feet from the drainage dip. Material removed, if suitable, may be blended into existing native road surface or shoulders. Outlet ditches will be provided if necessary to insure drainage.

**In Slope Roads with Ditches -**

1. This work shall consist of cleaning culverts, drainage dips and related items such as catch basins, outlet ditches, lead off ditches, trash racks, drop inlets, head walls, aprons, and existing riprap.
2. Drainage structures and related items shall be cleared of all foreign material and all vegetative growth that interferes with the flow pattern. Grass shall be left in place provided drainage is not obstructed.
3. Culverts which have silted into a depth of  $\frac{1}{4}$  of their opening height or more shall have their inlet and outlets cleaned as well as three (3) feet of the upper and lower ends of the inside cleaned out to expose the full diameter of the culvert.
4. Catch basins shall be cleared of material to the bottom of the invert of the culvert and at least eighteen (18) inches horizontally towards the back slope or the width of the basin; whichever is greater.
5. The back slope shall be cleaned of loose material for a distance of thirty-six (36) inches as measured from the bottom of the ditch up the back slope and for a width of thirty-six (36) inches as measured horizontally on the back slope.
6. Inlet channel transition for the ditch line to the catch basin shall be cleaned at a distance of ten (10) feet. Material removed, if suitable, may be blended into existing native road surfaces

or shoulders. On aggregate surfaced roads, care must be taken to assure the material is not mixed into the existing aggregate. Unsuitable material shall be disposed of by side casting. Side casting into streams, lakes or watercourses will not be permitted.

7. Ditches shall be cleaned to conform to previous line, grade, and cross section. Cleaning is not required on ditches that provide drainage and are free of debris larger than three (3) inches in diameter and one (1) foot in length.

All Roads -

1. Brush, trees, and limbs from clearing shall be scattered outside the roadway and drainage ways. Concentrations of slash and debris greater than twelve (12) inches above the ground will not be permitted.
2. Sloughs, slides, and slumps of less than 2 cubic yards shall be repaired and stabilized. Side casting into streams, lakes or watercourse will not be permitted. Repair of larger sloughs, slides, and slumps shall require prior approval of the authorized officer.
3. Ruts and washouts that prevent normal road surface runoff and have a potential to further damage the road or adjacent resource shall be repaired. Materials for filling the ruts shall be generated from the roadway or, if necessary, from approved aggregate sources. Material shall be placed in layers and compacted by operating equipment over the full width of each layer.

4. Maximum drainage structure spacing:

Road Grade %	Maximum Drainage Spacing (Feet)
1-3	600'
4-6	300'
7-9	200'
10-12	100'

5. Drainage outlets protection: Drainage outlets shall be provided with sediment traps, vegetated filter strips, rock stabilizers, or other features to trap sediment, disperse water, and minimize erosion.
6. Maintenance work shall be done promptly to insure safe, efficient transportation and to protect roads, streams, and adjacent lands from damage.
7. No changes to, or widening of, the running surface or the cleared width will be made unless the authorized officer approves the work.
8. Except for snowplowing, all maintenance activities will be limited to periods without snow, runoff, or saturated soils. Limit equipment operations in wet soils to minimize puddling, rutting, and gullyng.
9. All seed and mulch used will be certified weed free. Any maintenance or repair activities requiring the use of seed shall require an approved seed mix by the authorized officer.
10. Noxious weeds - Commensurate with the anticipated risk of invasion of noxious weeds, ground disturbing activities shall include a pre and one or more post maintenance surveys to document pre-existing infestations and to evaluate the effects of maintenance activities on noxious weeds. Design maintenance activities so work will not take place in weed infested areas during the time when the weeds are capable of being spread by the maintenance

activities. When conducting road maintenance where shoulders and ditches are covered by desirable vegetation, consider leaving the vegetation in place rather than blading it off, if this will not create a safety hazard.

11. Holder will prevent hazardous materials, including petroleum-based products, from reaching any stream or other waters. Holder will not store hazardous materials on National Forest System lands.

Stream Crossings –

1. Install stream crossings to pass normal flood flows and remain stable for 100-year floods.
2. Design and install stream crossings to maintain natural stream gradient and permit fish passage.
3. Stabilize fill material with rock, vegetation or other material to prevent erosion.

Snow Removal -

1. During snow removal operations, banks shall not be undercut nor shall gravel or other road surface material be bladed off the roadway surface.
2. Removal of snow, ice, and debris from ditches and culverts so system will function efficiently at all times.
3. Snow berms shall not be left on the road surface. Berms left on the shoulder of the road shall be removed and/or drainage holes opened.
4. Holder's damage from, or as a result of, snow removal shall be restored in a timely manner.

Gate and Road Sign Installation -

1. Must be approved prior to installation.
2. Shall be installed by Holder, according to Forest Service gate and sign specifications.

D. W. K.      12/15/03      James S. Bedwell      1-26-04  
Name of Holder      Date      Forest Supervisor      Date