

Soil and Water Question 2a Appendix

Best Management Practices Implementation and Effectiveness Monitoring Sitka Ranger District Road Storage Trip Report - Eagle Creek Road September 12, 2012

Summarized by Ashley Hom

The interdisciplinary trip was conducted on Kruzof Island on the Sitka Ranger District in September 2012. The intent of the Best Management Practices (BMP) review was primarily to provide quality control to the BMP implementation and effectiveness monitoring effort on the Forest. Participants on the trip included: Marty Becker (FS Watershed Program Coordinator), Vaughn Hazel (FS Civil Engineering Technician), Ashley Hom (FS Hydrologist), Cindy Hartmann (NOAA Fish Biologist) and Rob Miller (FS Fisheries Biologist).

Background

Road storage projects were randomly selected for monitoring by Carol Seitz Warmuth, Tongass National Forest Monitoring Coordinator. The team monitored Eagle Creek Road 7595 with a stream crossing at 1.093. Road storage began June 2012 and finished August 2012. The road was stored as an OHV trail. Heavy equipment was used to store the road from Mile Post (MP) 0.000 to 6.100. A large bridge has been removed at MP 1.093 and it was not possible to cross the creek at the time of the visit. The road from MP 6.100 to 8.208 (end of road) was stored with blasting practices; this section of the road was not evaluated. Figure 1 displays the road we monitored.

These projects were authorized by the Decision Notice (DN) for the Environmental Assessment (EA) and Revised EA for the Sitka Access and Travel Management (ATM) signed November 2007. According to the EA, a stored road is defined as,

“[A] road that has been put into a self-maintaining status and is closed to standard passenger and high-clearance vehicle traffic by a combination of physical blockage at the entrance, bypassing or removal of drainage structures along the road to restore natural drainage patterns, and/or adding water bars as needed to control runoff, re-vegetating the roadway in places to stabilize the surface. Stored roads are monitored for resource protection to ensure availability when needed in the future. (These roads are designated as Maintenance Level (ML)-1 based on FSH 7709.58-92-1.)¹

The DN (page 9) states that “stream crossing structures would be removed on closed or decommissioned roads, reducing their potential for failure during storms. This action would also remove structures that interfere with natural fish movement patterns.”

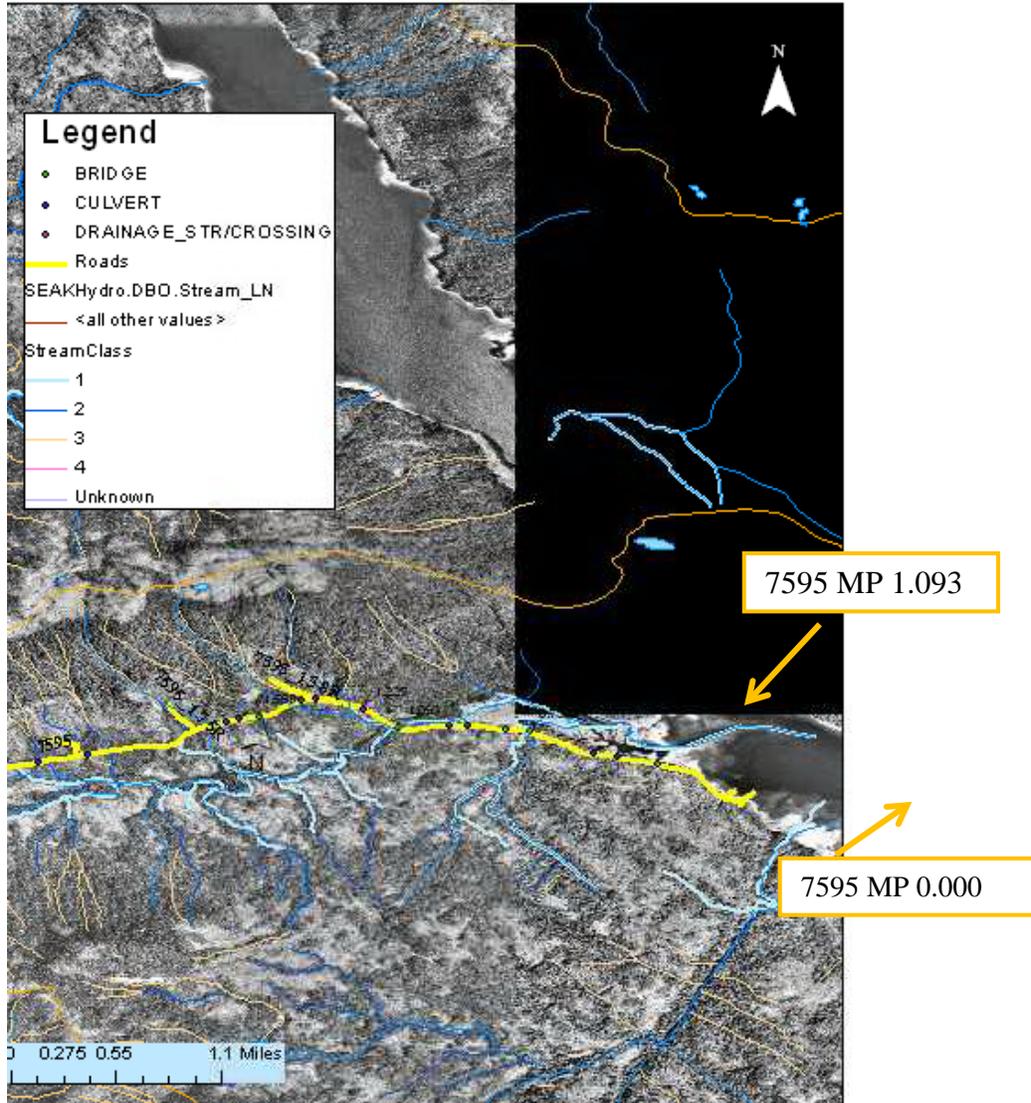
¹ From EA at page vii. FSH 7709.58-92-1 was withdrawn in 2009 and replaced with FSH 7709.59 Ch 62.32, which defines Maintenance Level 1 roads as follows: “These are roads that have been placed in storage between intermittent uses. The period of storage must exceed 1 year. Basic custodial maintenance is performed to prevent damage to adjacent resources and to perpetuate the road for future resource management needs. Emphasis is normally given to maintaining drainage facilities and runoff patterns. ... Appropriate traffic management strategies are “prohibit” and “eliminate” all traffic. .. they are closed to vehicular traffic but may be available and suitable for non-motorized uses.”

The EA contains a list of mitigation measures (page 2-37), including BMPs, which would be common to all alternatives:

- Provide site-specific stream protection prescriptions consistent with objectives identified under BMPs 12.6 and 12.6a. Objectives may include the following: 1) maintain the natural flow regime; 2) provide for unobstructed passage of storm-flows; 3) restore the natural course of any stream that has been diverted as soon as practicable; 4) maintain natural channel integrity to protect aquatic habitat and other beneficial use; and 5) prevent adverse changes to the natural stream temperature regime.
- Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.
- Minimize the erosive effects of concentrated water flows from transportation facilities and the resulting degradation of water quality through proper design and construction of drainage control systems.
- Minimize the impact on water quality, stream courses, and fisheries resources from the installation of bridges, culverts, and other stream crossings.
- Maintain all roads in a manner that provides for soil and water resource protection by minimizing rutting, road prism failures, sidecasting, and blockage of drainage facilities.
- Protect surface and subsurface soil and water resources from harmful nutrients, bacteria, and chemicals through proper disposal of solid waste and use of alternative construction materials.
- Conduct instream operations within fish timing windows.
- Reseed or replant disturbed areas along roadsides with native species following ground-disturbing activities.

The EA does not establish priorities for storage on a road-by-road basis, but does include factors to be considered (page A-1), including presence of fish streams and culverts that block fish passage. Both of the monitored roads crossed fish streams.

Figure 1. Location of Road Storage BMP Monitoring Trip, 2012



Monitoring Results

The crossing in picture 1 is a class I fish stream. This OHV crossing meets the 3:1 slope requirements for the road surface. The disturbed road surface leading into and away from the stream was not seeded since the contract provided for seeding of disturbed soils. The contract was seeded according to the guidelines of the contract in Section C, in Supplemental Specs as well as both new typical referred to as a document in Title 16 and the old Typical which was part of contract that did not go to the State for concurrence.



Picture 1. MP 0.353 bridge removed OHV crossing.



Picture 2. A removed LSB or 24" CMP across a class I fish stream.

The MP was not recorded at the time; the location is thought to be at either MP 0.735 or 0.904 (picture 2). The road is pulled back to the specifications of 3:1 slope. The cut slope is shaped at a shallower slope.



Picture 3. Bridge removal at MP 1.093, class I fish stream.

The OHV crossing is downstream of picture 3. The crossing meets the Forest Service standards for bridge removal. The issue here is that the bridge had collapsed and had created a large (8ft) pool that was excellent fish habitat, not a fish barrier. The contracting officer's representative (COR) was following the contract, which included removing the bridge as did the Title 16. However, fish biologist on the Forest had suggested leaving the logs and only pulling out bridge fill/shot rock material. The recommendations of Forest Service specialists were not included in the Title 16 package and contract. If the logs were left in the stream, they may have improved the fish habitat.

Apparently, there was no complete Title 16 Concurrence package including the contract package sent to the State even though it was completed in timely manner. A revised typical for OHV crossings was given to the state in the concurrence package but not to the COR.

The Concurrence was given to the COR by the district biologist very shortly after receipt. Unfortunately, the COR spent several days tracking down the document referenced in Title 16 for OHV crossings. This document was a revised OHV typical which was immediately included in the contract through a contract modification and implemented in the field. The typical required seeding and fertilizer of disturbed areas under specification 625, which requires seeding ground when conditions are conducive to growth and friable soils are noted.

Adaptive management actions needed

Implement erosion control seeding as standard procedure for all ground-disturbing projects. It is the most cost-effective erosion control practice available, especially for projects like road storage where only spot-seeding is necessary. These recommendations/guidelines are not reflected in the Forest Service engineering typicals used for road storage 2012. The wording in the typical suggests that only native soils should be seeded, when ideally, all disturbed soils (including the road surface) should be seeded. We suggest following up to evaluate natural revegetation, and spot seeding as necessary in 2013.

The Title 16 Concurrence should be requested and received prior to contract development so any specific requirements are included in the contract. Title 16 concurrence should be forwarded to the engineer developing the contract and the COR immediately upon receipt from ADF&G. This would insure that the COR has the best available information when directing and inspecting work on road storage projects.