

Best Management Practices Implementation Monitoring Trip Report
Skipping Cow Timber Sale Roads Contract, Zarembo Island, Wrangell Ranger District
Road 52033 (4.22 miles of new construction, MP 0.595 to 4.379)
Road 6594 (1.39 miles of new construction, MP 6.36 to 7.759)
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Project Background

The Skipping Cow Timber Sale Record of Decision was signed May 30th, 2000. The primary roads for this project were constructed under contract number AG-109-C-05-0017. The contract was completed during the spring and summer of 2006. Bill Messmer (WRD, retired) was the Engineering Representative for the Forest Service. Ron Schmohl was the primary inspector. The road contract included the extension of the 6594 road up and unnamed ridge and construction of the 52033 road and associated spurs atop Nesbitt Ridge. The contract required “lineal grading” specifications however, the amount of grubbing and earthwork was very similar to what we would expect to see from a completely specified contract.

Monitoring Process

The group assembled at the Roosevelt Harbor Camp and reviewed the BMP rating process. The Record of Decision, Road Contract and road cards had been reviewed, and inconsistencies noted. The change analysis was complete, and the documentation of decisions regarding BMP implementation was good.

Due to time constraints and the lengths of these road segments (the 52033 segment is 4.22 miles of new construction, the 6594 segment is 1.4 miles of new construction) only portions of the roads were walked, and only Class III streams were measured for incision depth and stream width. Field review involved slowly driving the road segments and then walking portions of the segments. BMP monitoring forms were completed only after the team had walked representative portions of the road.

Monitoring Results

Road 52033 is located atop Nesbitt Ridge and accesses the upper portion of timber stands. The route crosses many wetland areas and 3 of the four rock pits necessary to construct the road are located in wetlands. The BMP monitoring team rated most BMPs as fully implemented on this road. Wetland protection measures BMP 12.5 was rated a ‘4’ due to one rock pit that was overshot in a wetland. The overshot rock buried about 30 feet of a small intermittent non-stream. Overall the road prism looked good and road drainage was mostly good. Cross drains were absent in three areas. In these areas water was flowing through the shot rock fill. The week preceding the day of investigation was very rainy. The COR added about 25% more cross drains than shown in the contract. BMP 14.5 was rated a 4.5 on this road segment because the COR and Contractor mutually agreed to waive the erosion control plan. The COR and Contractor determined that the contract provided sufficient erosion control specification and that an erosion

control plan would not be needed. The BMP team discussed the benefits of an erosion control plan and decided that an erosion control plan could have provided guidance for timing of pioneer road construction. Pioneering of the 52033 road occurred when up to two feet of snow was present. The depth of snow and visibility of clearing limit flagging may have indirectly resulted in the equipment operation outside the clearing limits for approximately 150 feet. The area outside the clearing limits was a wetland with less than 20 inches of organic soil and it was rutted by the equipment. All other BMPs were fully implemented on the 52033 road segment. One area of steep sideslopes was noted and excavations controlled in that area. The installation of a gate at the start of the road was completed in a timely manner.

Road 6594 gains the top of an unnamed ridge to access timber on the far side. The route crosses wetlands on the wide, relatively flat ridge. Similar to the 52033 road the ER and Contractor mutually agreed to waive the Erosion control plan. BMPs 12.8/12.9 were rated a '4' because there were some oil stains in the rock pit and there were several trash items (drill rod, cardboard boxes and blasting wire) left around the pit. BMP 14.7/14.12 were rated a 3 because several logs from the right of way clearing were stacked in a Class 3 stream and the logs were holding back some sediment. The logs will be removed as part of the timber sale. BMP 14.8-Control of rock pit sediment was rated a 2.5. Intermittent non-streams in a non-forested wetland frame two sides of the rock pit. A pit plan was in place, but the pit was overshot burying about 130 feet of one stream. The channel was reshaped and an 18 inch CMP placed where the road crosses this stream. A small amount of overburden from the pit was placed in the second stream causing some ponding of water. Two other attempts to find suitable rock pit sites on this road segment left bare eroding soils on steep slopes adjacent to the road.

On the 52033 road 4 Class 3 streams were measured to determine if they met the criteria for Class 3 streams. On the 6594 Road 5 Class III streams were measured. All streams measured met the criteria for Class III streams. (Table 1)

Table 1. Mileposts and physical measurements for Class III streams on the 52033 road and the 6594 road segments

52033 Road	Channel type	Crossing structure (inches)	Incision Depth (feet)	Bankfull Channel Width (feet)
MP 4.40	HC5	48" CMP	15	6
MP 1.014	HC5	Log Stringer	10	8
MP 0.801	HC5	Log Stringer	31	8
MP 0.746	HC5	48" CMP	17	4.5
6594 Road				
MP 6.433	HC5	48" CMP	8	6.5
MP 6.516	HC5	Log Stringer	21	9
MP 6.656	HC5	36" CMP	25	8
MP 7.432	HC5	36" CMP	20	7
MP 7.503	HC5	48" CMP	16	7

Summary

- The Contractor and COR had a good working relationship and this relationship fostered the implementation BMPs, particularly with additional cross drain installations and taking corrective actions on the overshot rock pit on the 6594 road.
- BMPS were successfully implemented in most cases.
- Rock pit developments and rock pit overshoots led to less than full implementation ratings for some BMPs. Corrective actions were taken in both instances.
- This lineal grading contract did not result in less grubbing and sub-grade preparation as some thought it would.
- Grubbing seemed excessive along the road segments. The shallow soils and topography dictated that a certain amount of earthwork work was necessary to create a level sub-grade. Shallow soils (less than 20 inches thick over bedrock, necessitated reaching further to scrape soil from the rock to build the sub-grade. Some IDT members felt that under lineal grading more fill rock would have been used (overlay construction) with less earthwork and sub-grade construction. Both road segments cross large areas of wetlands. EO 11990 and subsequent regulations require that impacts to wetlands are minimized to the extent practicable. The cost of using additional rock to accomplish overlay road construction in these sloping wetland areas needs to be considered against the additional wetland impacts associated with grubbing a wide corridor to create a level sub-grade.
- A question arose regarding the need to grass seed exposed organic soils. Some thought the soils would erode similar to a mineral soil. Others thought the organic soil materials would be stable and that a seed bank existed within the organic soil that would allow it to naturally revegetate. Also, the erosion risk at this site was not worth the potential risk of introduced weed species in the grass seed.
- The need for an erosion control plan was brought into question in light of the numerous contract specifications requiring implementation of BMPs. In the case of the 52033 road, the erosion control plan could have helped specify the timing of pioneer road construction.
- All streams designated as Class III streams met the physical criteria for Class III streams outlined in the Tongass Plan Implementation Team Clarification for distinguishing between Class III and Class IV streams.

Figure 1. Skipping Cow Orthophoto of Class I and II streams, roads, and existing units

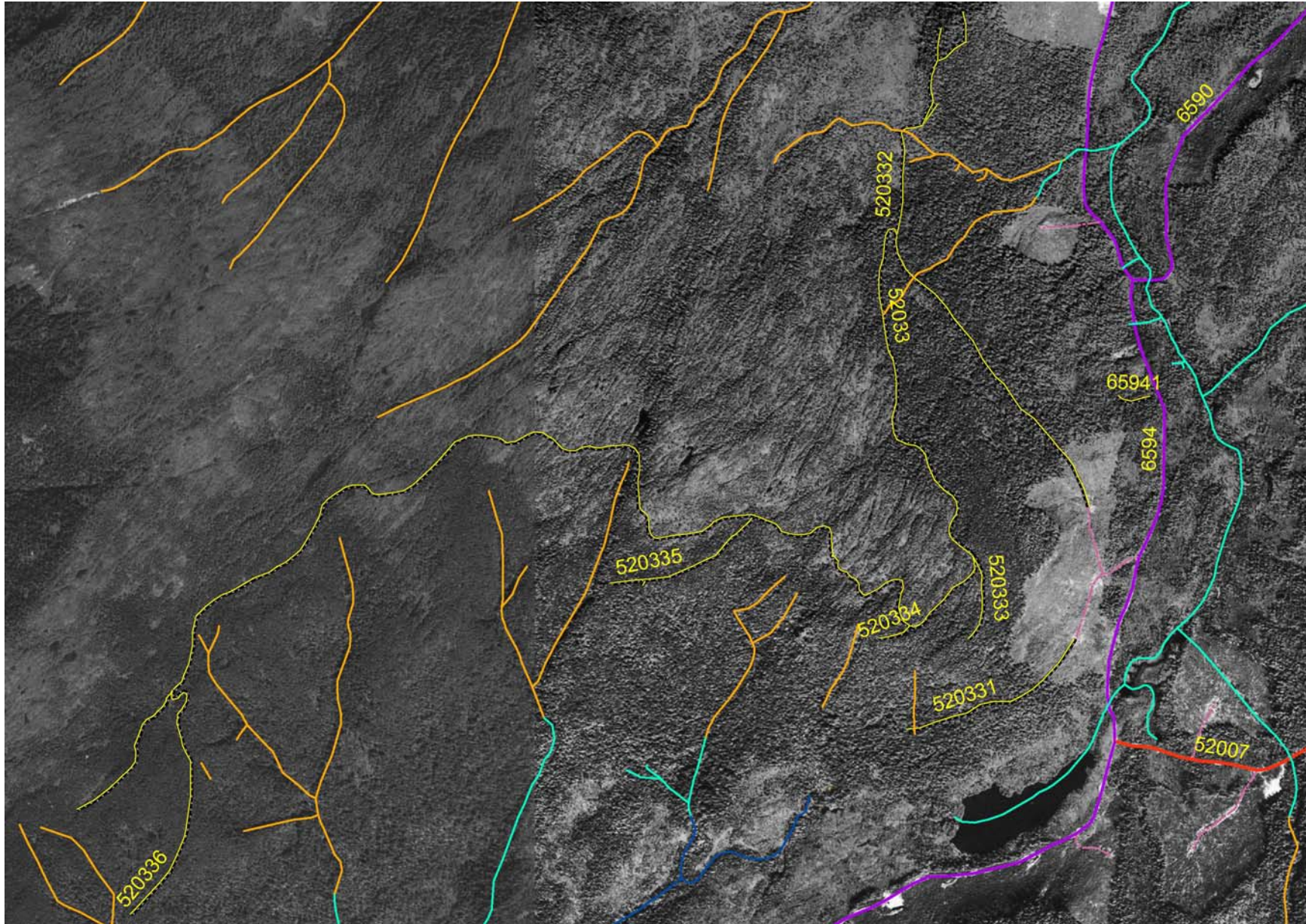


Figure 2. Skipping Cow Orthophoto of Class I and II streams, roads, and existing units

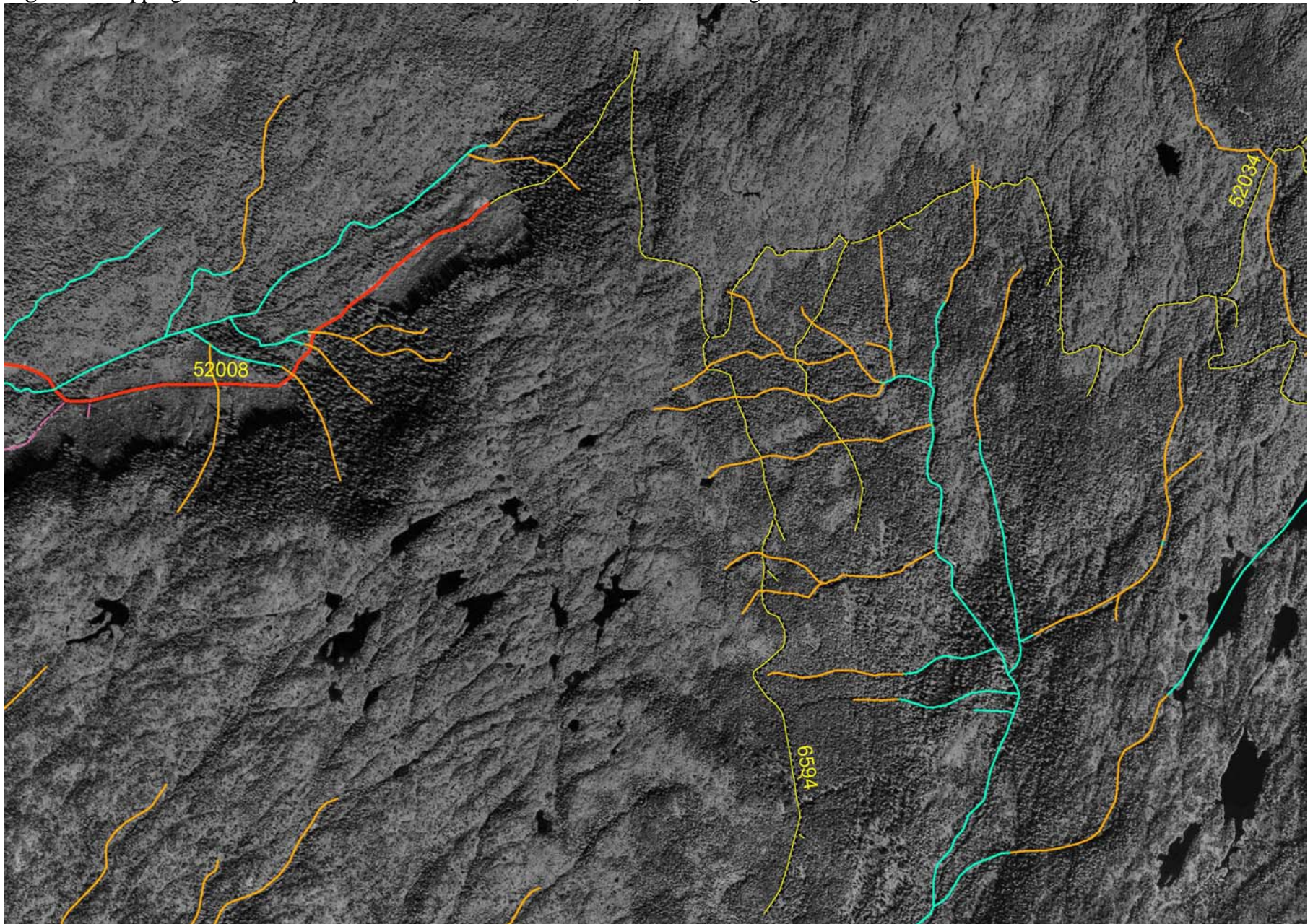


Figure 3. Skipping Cow 3-D representation of Class I and II streams and roads

