

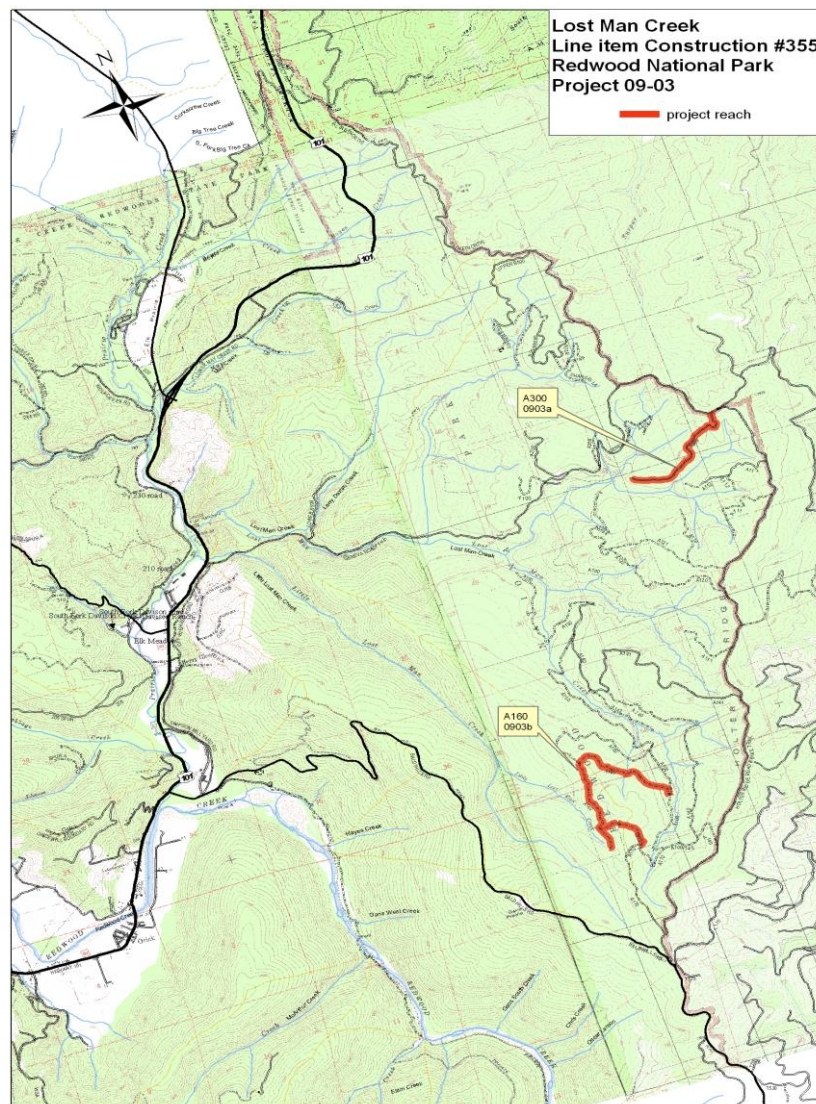
Summary Report

Watershed Restoration Project 09-03:

A300 – 0903a
A160 – 0903b

INTRODUCTION

Project 0903 was comprised of two separate road segments within the Lost Man Project Area (LMPA). Task Order 8485090005 was issued under Contract Number C8482060008 to include the remaining portions of both the A300 and A160 roads. The A300 picked up where previous road removal work had been suspended following the 2000 work season during the 1997 storm damage project. The A160 work treated almost two miles of main haul road and re-grading of a ridge skid road used for access that was retained for fire access.



Red lines represent the two road segments removed in project 0903

A total of 49,785 cubic yards of road fill were relocated during this project. Table1 provides a breakdown of total project volumes and costs based on the various treatment prescriptions. Watershed level data is provided in the annual program table in the proceeding 2009 overview section. Individual breakdown for each road in the 0903 project are shown in following tables 1a and 1b.

TABLE 1 WATERSHED RESTORATION COSTS SUMMARY FOR UNIT 0903: REMOVAL OF THE REMAINING PORTIONS OF THE A300 AND A160				
TREATMENT	QUANTITY yd ³ s	# of JOBS	TOTAL COSTS	AVERAGE UNIT COSTS
CONTRACT COSTS - HEAVY EQUIPMENT				
STREAM CROSSINGS	6731	3	\$41,059.10	\$6.10
EXPORT OUTSLOPING	16122	8	\$114,041.28	\$5.50
OUTSLOPE	26132	14	\$105,930.64	\$4.05
MISC. BID ITEMS		4	\$118,628.05	n/a
<i>TOTAL:</i>	48,985		\$352,624.99	\$7.20

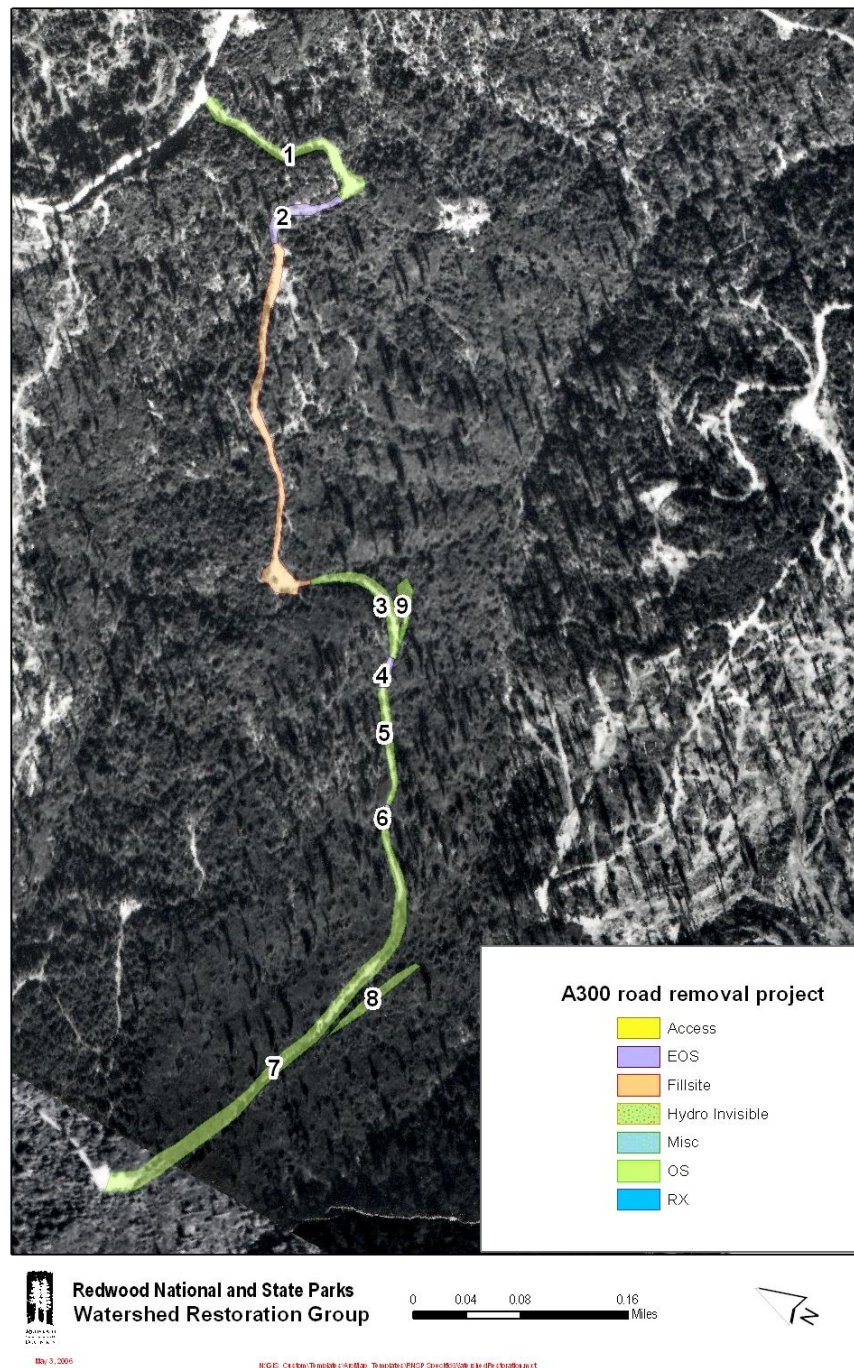
WORK SCHEDULE AND HEAVY EQUIPMENT OPERATIONS

Project 0903 was contracted to Ford Logging of McKinleyville, CA. Work initiated on June 23 and was completed on October 7. Work on the A300 began with one dozer and one excavator. The A300 was completed on July 20. Both machines moved to the A160 and picked up where the Yurok tribe left on in 2008.

Treatment of the remaining portion of the A300 required the relocation of 17658 yd³s of road fill. This portion of the project took 12 working days with two pieces of equipment. The contractor used a Komatsu D155 dozer and a Komatsu PC 400 excavator to accomplish the work.

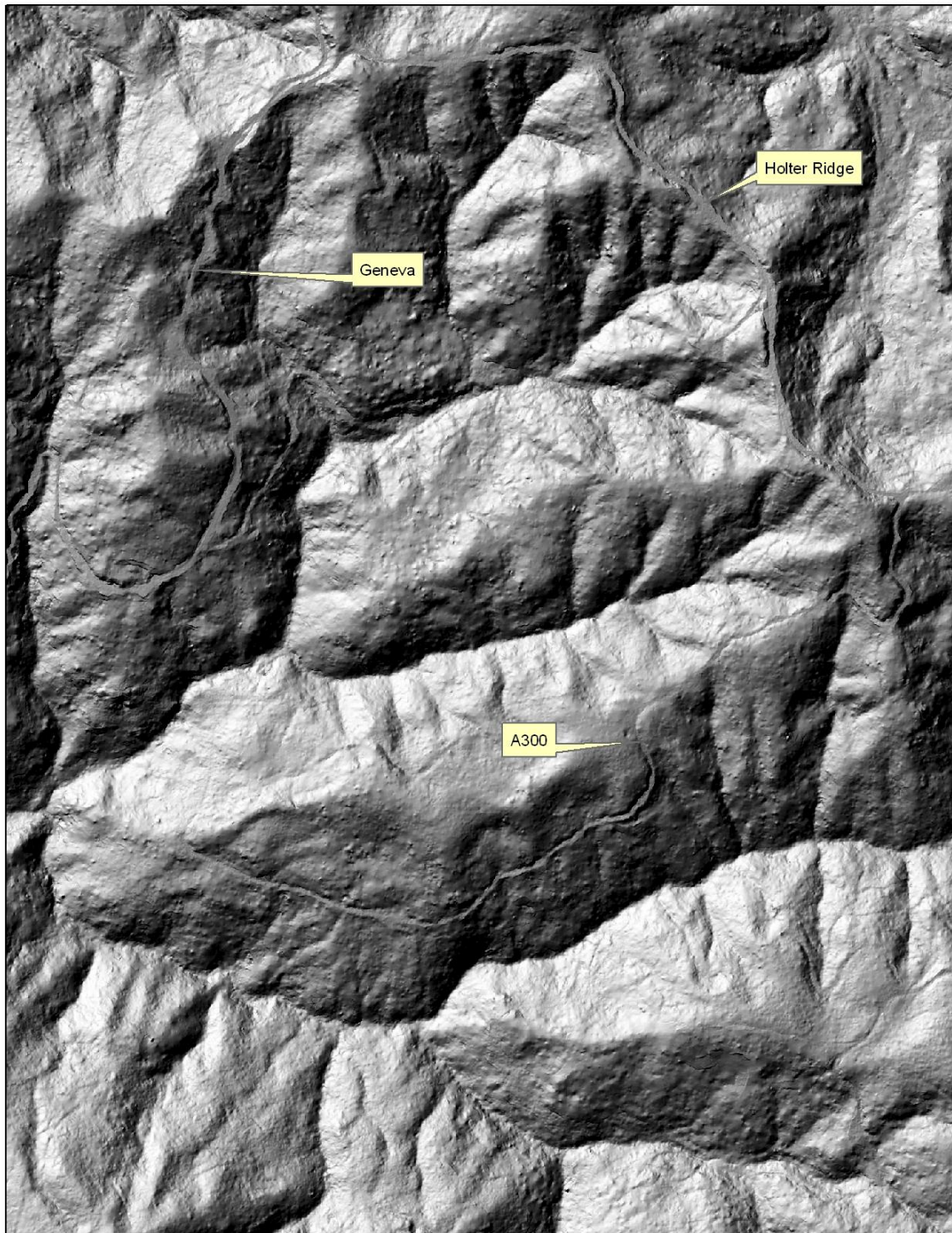
The A160 work was done under the Limited Operating Period (LOP) for marbled murrelet protection. Work began on July 20th, and was suspended on August 5 due to proximity of Old Growth Habitat. Road removal work was re-initiated on September 18 with additional equipment. On the first phase of the A160, the contractor used the same equipment as the A300. For the final phase of the A160, they brought an additional dozer (D6R) and another excavator (Komatsu PC350). The added equipment was in put due to the requirement to finish this segment of road by October 15, 2009.

A300, 0903A
June 23 to July 20



The lower portion of the A300 was removed during the 1997 Storm Damage Project in the 2000 season work season. The remaining upper portion of almost one mile was constructed mid-slope, running up to a short reach along a ridge with the final 900 feet on a steep headwater slope. The resource threat from this

segment of road consisted of low to moderate sediment production into the middle fork of Lost Man Creek. Several small, high potential fill failures existed, but of relatively small volume. Work began on June 23rd and was completed on July 20th.



This 2004 Lidar image shows the A300 road in the same area as the previous work plan image.

Prescriptions and Treatments

The general layout of the remaining A300 was standard outsloping with three small swales. Two spur roads that ran a few hundred feet each were included in the removal treatment.

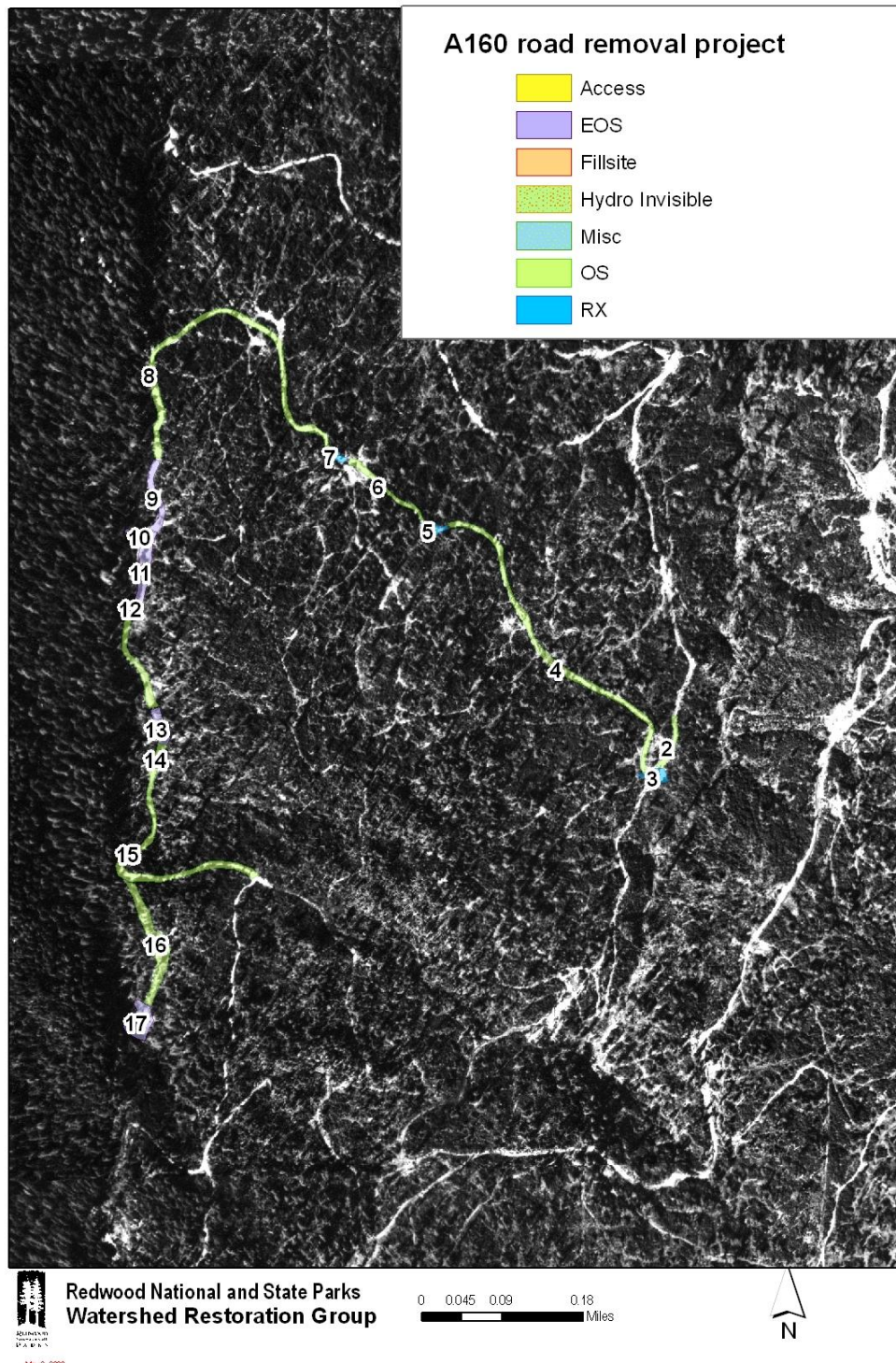
TABLE 1a WATERSHED RESTORATION COSTS SUMMARY FOR UNIT 0903a: REMOVAL OF UPPER A300 ROAD				
TREATMENT	QUANTITY	# of JOBS	TOTAL COSTS	AVERAGE UNIT COSTS
CONTRACT COSTS - HEAVY EQUIPMENT				
STREAM CROSSINGS	0	0	0	0
EXPORT OUTSLOPING	4584	3	\$26,403.40	\$5.75
OUTSLOPE	13074	6	\$53,437.48	\$4.08
MISC. BID ITEMS		1	\$66,005.00	n/a
<i>TOTAL:</i>	17658		\$145,845.88	\$8.26

Road fill excavations produced no surprises during this portion of the project. Some work item volumes varied within normal ranges. The miscellaneous work included end hauling and addressing some drainage issues with access roads. There is also an immeasurable safety benefit regarding the removal of the A300. During reconnaissance of the A300 following the 1997 storm, one of the inventory volunteers took a nasty spill while traveling down the upper portion of the road. Then again in the early 2000's while preparing for the Line Item Construction package #355, one of the park project geologists had a similar experience. Not too long after that, a pair of rehab technicians got hopelessly stuck in a rut on that same portion of road.

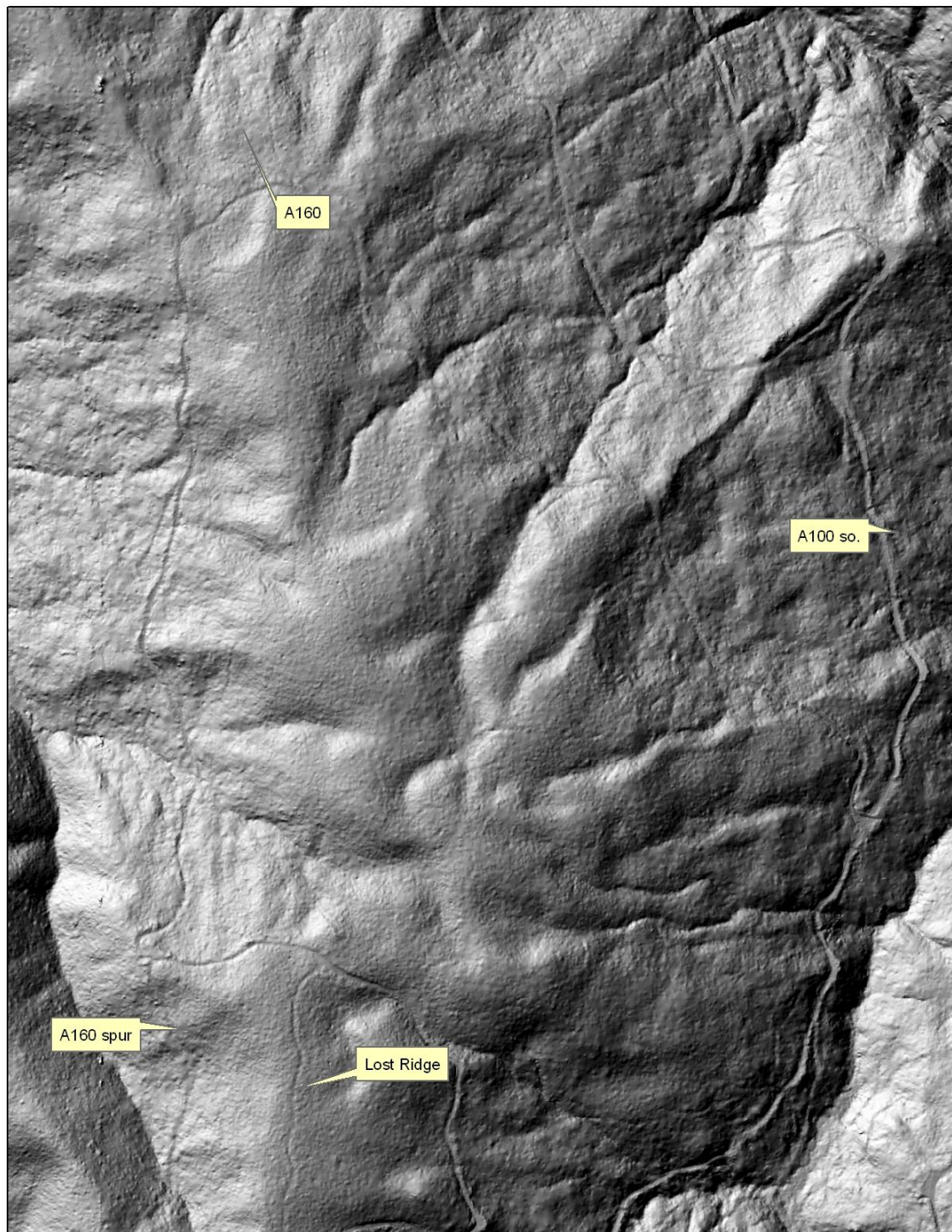


Image shows upper headwater swales following landform restoration. Photo was taken from Holter Ridge Road, looking down the previous A300 road alignment.

A160
July 20 to October 7



The A160 portion of project 0903 treated the remaining segment of the road where work had been suspended in 2008. This reach of road consisted of moderate to minor outsloping treatment to address perched fill and re-establish hydrologic connectivity above the south fork and Little Lost Man.



This 2004 Lidar image covers the same area as the previous image, showing the road bench and associated channel and hill slope features.

Prescriptions and Treatments

The A160 portion of this project consisted of 9000 feet of mid-slope haul road. The A160 ran from the ridge dividing Little Lost Man Creek and the South Fork down to the A100. There were three small stream crossings and five small swales. The remaining portions of the road prism were moderate to low resource threat outsloping prescriptions.

A skid road along the ridge had been opened in the 2007 season for access to downstream work sites. This access road was regarded to promote natural drainage patterns and left in place for future fire and forest restoration needs.

TABLE 1b WATERSHED RESTORATION COSTS SUMMARY FOR UNIT 0903b: REMOVAL OF THE A160				
TREATMENT	QUANTITY	# of JOBS	TOTAL COSTS	AVERAGE UNIT COSTS
CONTRACT COSTS - HEAVY EQUIPMENT				
STREAM CROSSINGS	6731	3	\$41,059.10	\$6.10
EXPORT OUTSLOPING	11538	5	\$60,603.80	\$5.25
OUTSLOPE	13058	8	\$52,493.16	\$4.02
MISC. BID ITEMS		2	\$26,500	n/a
<i>TOTAL:</i>	31,327		\$180,656.06	\$5.77



This photo was taken looking south along the A160 from the junction with the A150 and what is now called Lost Ridge Road.

The portion of the A160 from the junction of the A150 to the junction of the A170 was logged out prior to road removal. As part of the forest restoration project going on in the area, 'right of way' trees were logged and removed. All limbs and tops were left for use as mulch on the finished slopes. The photo of the A160 shows more than enough mulch to meet the guidelines for the area.

Project Synopsis

The overall season on project 09-03 operated with in normal variance for estimated volumes and costs of the prescribed work items. The access road, now called "Lost Ridge Road", was not fully recognized in the project planning. As the road was prepared for use during the 2009 season, drainage issues were identified that warranted additional effort to insure proper road surface configuration. Slash and debris was removed from the edge of the road allowing all berms and through-cuts to be eliminated.

The overall planning for the road removal portion of the Lost Man Creek restoration anticipated eliminating 85% of the human induced potential sediment. The road segments treated by this project represent the last few percentage values, likely addressing 80% to 83% of that targeted volume.