

APPENDIX A

FIELD SEDIMENT SOURCE SURVEYS

Yaak River TMDL Planning Area

Appendix A provides examples of the Field Sediment Source Survey data sheets. Field Sediment Source Surveys were conducted by the Yaak Headwaters Restoration Partnership in the Seventeenmile Creek, Lap Creek, and South Fork Yaak River Watersheds during the summers of 2004, 2005, and 2006.

SEDIMENT SOURCE SURVEY - STREAM MAPPING AND SUMMARY

Watershed 17 MILE CREEK (MAIN) Tributary No. 136
 Surveyors LAWSON OWEN

Date 9/13/05

Fill out this form for each tributary. Use USGS green topographic maps to record the following information.

1. Measure bankfull width on lowest reach (above influence of confluence or any depositional area). Mark on map where measured. BFW = _____'
2. Delineate and number tributaries that are not on stream layer. Survey streams to uppermost road crossing unless scour channel ends.
3. Summarize stream channel conditions. At a minimum note: overall channel stability, riparian condition, permanent fish barriers, location of fish seen in small streams (mark location on map).

BELOW 5341 - CREEK CHANNEL IS SMALL DRY AND GROWN OVER IN SPOTS MAKING IT VAGUE AS IT RUNS THRU TOP OF OLD CUT. 1/4 MILE DOWN WATER SURFACES AND CHANNEL BECOMES DISTINCT. LARGE DARK MOSSY ROCK WITH BRIGHT GRAVEL DEPOSITS. LARGE WOODY DEBRIS FORMING LARGE TRAPS FULL OF GRAVEL CORBEL AND WOOD. SMALL STRETCH OF BED ROCK AND BOULDER IS VERY STABLE WITH SMALL FALLS THAT MAY CONSTITUTE FISH BARRIERS(?) JUST ABOVE 5344 LARGE GRAVEL BARS BECOME VERY COMMON.
5344 - CMP (36") HAS BEEN OVERTOPPED IN PAST AND IS TO FORM LONG DITCHES AND FILL SLOPE EROSION CONTRIBUTE MODERATE SEDIMENT

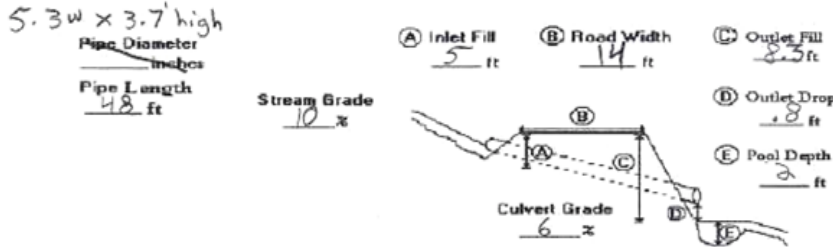
Below Rd 4681E Channel becomes more unstable as it runs through another clearcut. Moderate bank erosion. Rocks tumbled & bright. Many rock & gravel bars. Several large sed. traps formed by large woody debris. Traps & sed. deposits full of gravel sand & silt. As channel moves out of cut & into forest it stabilizes somewhat. Bank erosion is less severe. Large sed. traps full to bursting w/ rock gravel & sand. Many small pools below traps. An excessive amount of gravel & sand is deposited along banks in numerous spots. Slope above banks is fairly flat, lots of small vegetation under trees. (Fern moss some devil's club)

6/23/2005

ROAD / STREAM CROSSING INVENTORY

MAP SITE NO. 336 ROAD NO. 600
 W. RSHED 17 Mile Main TRIB NO. 136
 SURVEYORS Owen / Oakland DATE 9-8-05

Structure: Round CMP Squash CMP Arch Pipe Concrete Box Wood Culvert Buried Logs Bridge Ford None



±43'
0596130
5380855
 Scour channel above culvert? (Y/N) (Y)
 If yes, average bankfull channel width in riffle section above influence of culvert: 17 ft
 Is there flow at the culvert now? (Y/N) (Y) Streamflow: 100 gpm MEASURED or ESTIMATED
 If no, is there evidence of flow from the culvert? (Y/N) (Y)

Can you see through culvert? (Y/N) (Y) If no, apparent cause: SAG BLOCKED
 Is inlet obstructed? (Y/N) (N)
 If yes, cause(s) are: DENTED FILLED W/SEDIMENT BLOCKAGE AT INLET
 _____ % opening obstructed Estimate maximum depth of sediment in the culvert: _____ in
 Is culvert aligned with channel? (Y/N) (Y)
 Scouring around inlet of culvert? (Y/N) (Y) very well armoured!
 Evidence of culvert being overtopped? (Y/N) (N) Describe: _____

Is outlet obstructed? (Y/N) (N) If yes, cause(s) are: DENTED FILLED W/SEDIMENT BLOCKAGE AT OUTLET
 _____ % Obstructed
 Scour hole at outlet? (Y/N) (Y) Dimensions of scour hole: (Max. Width X Length) 9 x 6 ft
 Is scour hole undercutting fillslope? (Y/N) (N)
 Does channel appear to be disturbed for more than 100 feet downstream of scour hole? (Y/N) (N)

Ditch draining into stream? NO ONE SIDE TWO SIDES
 Ditch length draining to stream: Left _____ ft Right 95 ft
 Is there water currently flowing in the ditch? (Y/N) (N)
 Evidence of sediment being carried by ditch? (Y/N) (N) well filtered
 Source(s): DITCH SCOUR CUTSLOPE SLUMPING CUTSLOPE RILLING
 ROADWAY RILLING WHEEL TRACK RUTTING OTHER: _____

Does water run off of road surface at stream crossing? (Y/N) (N) Cause? _____
 If yes, is there rilling on road surface? (Y/N) (N) Fillslope rilling or slumping? (Y/N) (N) Shoulder cracking? (Y/N) (N)

Is sediment delivered to stream at this crossing? (Y/N) (N) Quantity? MINOR MODERATE SUBSTANTIAL
 High Priority Maintenance Needs: None. Healed.

INCLUDE SKETCHES AND COMMENTS ON BACK OF SHEET.

Photo Roll Number: _____ Photo Numbers _____ 6/23/05

INSTREAM SEDIMENT SOURCES*

Watershed 17 M MAIN Tributary Number 136 (Start a new page for each tributary.)
 Surveyors LAWSON
 Date 6/30/2006 JANSEN

Map Site No.	UTM GPS Coordinates	Source Type	Source Condition	Sediment (Minor, Moderate, Substantial)	Site Description and Comments (attach sketches of complex sites)
58	± 24' 0587444 5391716	HILLSLOPE FAILURE	EPISODIC	MINOR TO MODERATE	SLOPE SLUMPING. 65' LONG X 35' H X 30' DEEP. SILT & ROCK WASHING INTO STREAM AT HIGH WATER AND DURING HEAVY RAINS. BOTTOM & TOP ALONG BUT MID SLOPE UNSTABLE & ACTIVE
59	ACROSS FROM 58 & DOWNSTREAM 150'	BANK EROSION	EPISODIC	MINOR	BANK EROSION. 50' x 12' H x 7' DEEP. SILT & ROCK FALLING INTO STREAM. ROCK PILES & VEG. AT BOTTOM BUT TOP ACTIVE DURING HEAVY RAINS & POSSIBLY STILL ACTIVE DURING PEAK FLOODS

Fill out Road/Stream Crossing Inventory sheet for road crossings.

Source Type: Bank erosion, Channel scour, Road failure, Hillslope failure, Hillslope erosion, Skid road crossing
 Source Condition: Chronic (annual), Episodic (storms and floods), Healed (old site)