

ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT

STREAM: Wood Creek (U-65)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: July 6, 2000
SURVEY CREW: Jim Lee, John Blanchard
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.4 km²
USGS MAPS: McCullough Creek
ECOREGION: Coast Range Klamath Siskiyou

GENERAL DESCRIPTION:

The Wood Creek habitat survey extended 483 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 5.6 (range: 5.0 – 7.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 5.2 percent. Riffles (53%) and rapids (34%) dominated stream habitat. Cobble (39%) and gravel (22%) dominated stream substrate. Wood volume was low at 14.6 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

REACH SUMMARY

REACH 1

T32SS-R6W-S9SE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	0	Constraining Terraces	0
Moderate V-shape	0	Multiple Terraces	100
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 5.6 range: 5.0-7.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	100	Braided Channel	0
Alt. Terrace/Hill	0		
Landuse	0		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m²)</u>	<u>Dry Units</u>
Primary	483	1,132	0
Secondary	23	27	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.4	Width	3.7	6.3	8.7
Depth	0.28	Height	0.5	1.0	1.2
		W:D ratio	7.9	Entrenchment	1.7

Stream Flow Type: MF Water Temp: 11.0-11.0°C
 Avg. Unit Gradient: 5.2% Habitat Units/100m: 6.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	13%	Reach avg: 62%
Undercut Banks	19%	Range: 33-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	92	19.1
Volume (m ³)	70	14.6
Key pieces (≥10m x 0.6m)	1	0.2

HABITAT UNIT SUMMARY

REACH 1 T32SS-R6W-S9SE REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbbl	Bldr	Bdrk
CASCADE/BOULDERS	1	5	0.5	0.20	3	3	10	20	30	30	10	0
CULVERT CROSSING	1	10	1.0	0.10	10	0	0	0	0	0	0	0
POOL-LATERAL SCOUR	5	28	2.9	0.52	73	14	7	18	26	42	7	0
POOL-PLUNGE	2	9	3.7	0.80	34	4	14	9	14	42	21	0
POOL-STRAIGHT SCOUR	2	7	3.2	0.65	22	7	5	15	25	25	22	10
RAPID/BOULDERS	8	158	2.5	0.20	397	53	4	12	26	35	24	0
RIFPLE	3	45	1.5	0.10	68	6	3	13	26	45	13	0
RIFPLE W/ POCKETS	11	244	2.3	0.18	551	47	1	10	21	49	19	0
STEP/LOG	1	0	3.3	0.05	1	0	0	8	17	50	25	0
STEP/STRUCTURE	1	0	1.0	0.10	0	0	0	0	0	0	0	0
Total:	35	506	2.4	0.28	1,159	134	Avg: 4	12	22	39	17	1

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	0	0	-	-	0	0.00	0	0.0
Scour Pools	9	44	3.2	0.61	128	11.03	25	19.6
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	14	289	2.2	0.16	620	53.47	53	8.6
Rapids	8	158	2.5	0.20	397	34.28	53	13.3
Cascades	1	5	0.5	0.20	3	0.23	3	111.1
Step/Falls	2	1	2.2	0.08	2	0.13	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	9	17.8
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces≥3):	1	2.0
Pool Frequency (channel widths/pool):	15.0	
Residual pool depth (avg)	0.50m	

STREAM SUMMARY

WOOD CREEK

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area					Total Large Boulder	
					S/O	Sand	Grvl	Cbbl	Bldr		Bdrk
35	506	2.4	0.28	1,159	4	12	22	39	17	1	134

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	128	11.0
Backwater Pools	0	0.0
Glide	0	0.0
Riffle	620	53.5
Rapid	397	34.3
Cascade	3	0.2
Step	2	0.1
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) (3 transects)

Total hardwoods/1000 ft	1,382
Total conifers/1000 ft	914
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	7.3	1.7	5.0	3.7	2.0	5.3	14.3
15-30cm	0.7	3.7	1.7	2.7	3.3	0.7	5.7	7.0
30-50cm	0.0	1.0	1.3	0.3	2.3	0.0	3.7	1.3
50-90cm	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	1.0	12.0	4.7	8.0	9.3	2.7	5.0	7.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	66		53		48	
Shrub cover	54		45		48	
Grass/forb cover	29		26		18	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	17		17		67
High terrace	67		50		0	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		33		33	
Riprap	0		0		0	
Surface slope (%)	5		6		12	

Summary of Riparian Zone (0-30m) for all reaches (3 transects)

Summary of riparian zone (0-100ft) extrapolated to 1,000 feet along stream

Total hardwoods/1000 ft	1,382
Total conifers/1000 ft	914
Total conifers >20" dbh/1000 ft	20

Average number of trees in a 5-meter wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	5.3	14.3
15-30cm	5.7	7.0
30-50cm	3.7	1.3
50-90cm	0.3	0.0
>90cm	0.0	0.0

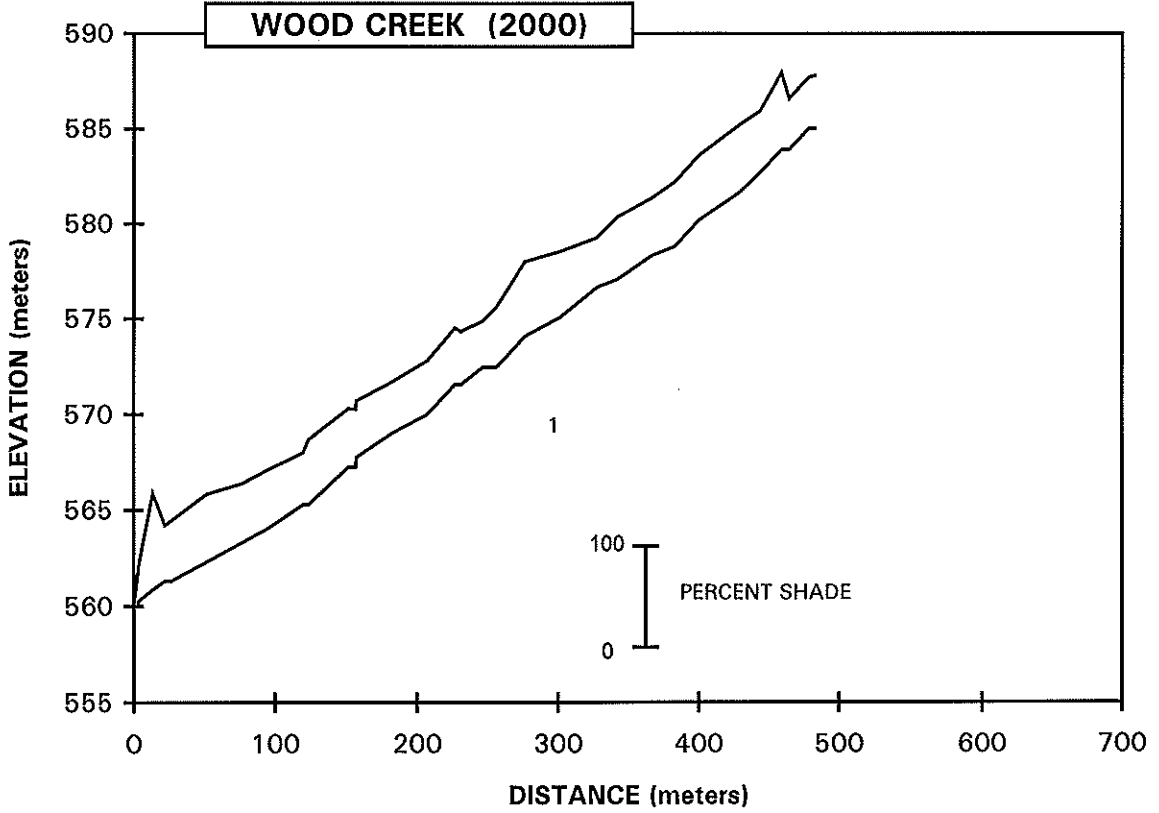
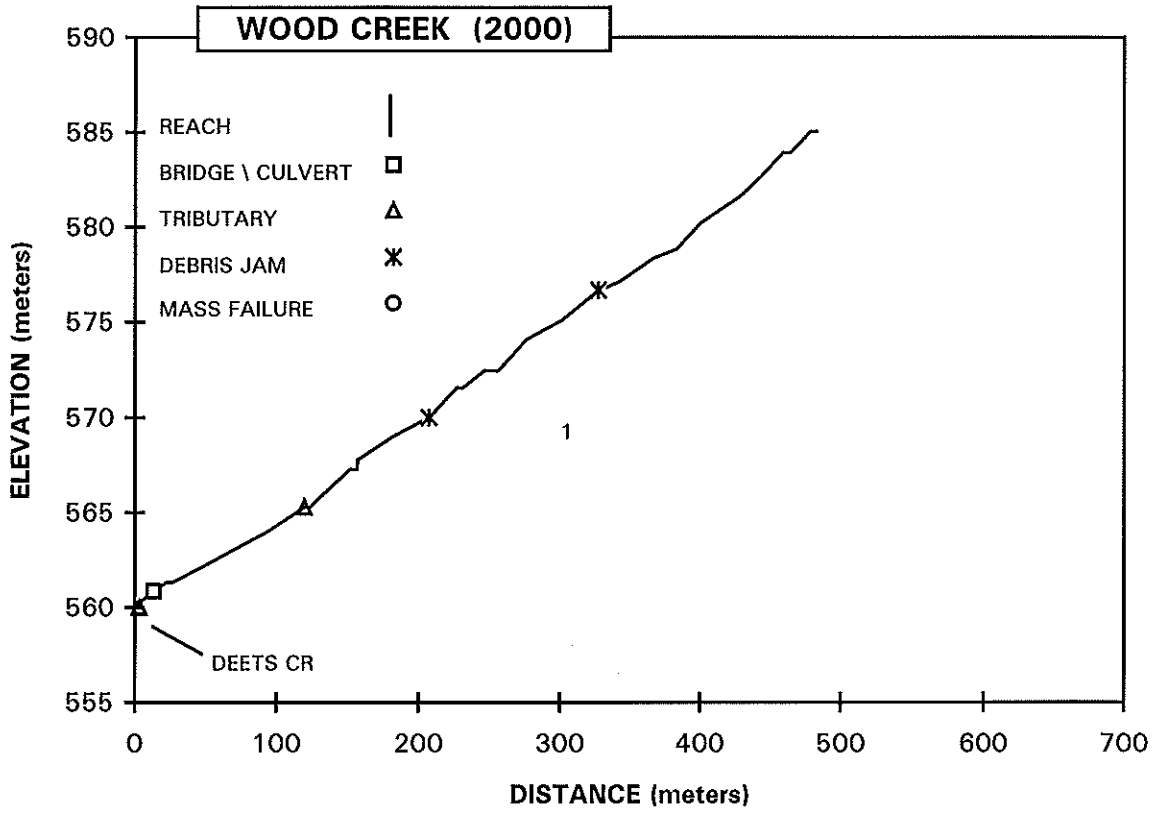
RIPARIAN ZONE VEGETATION

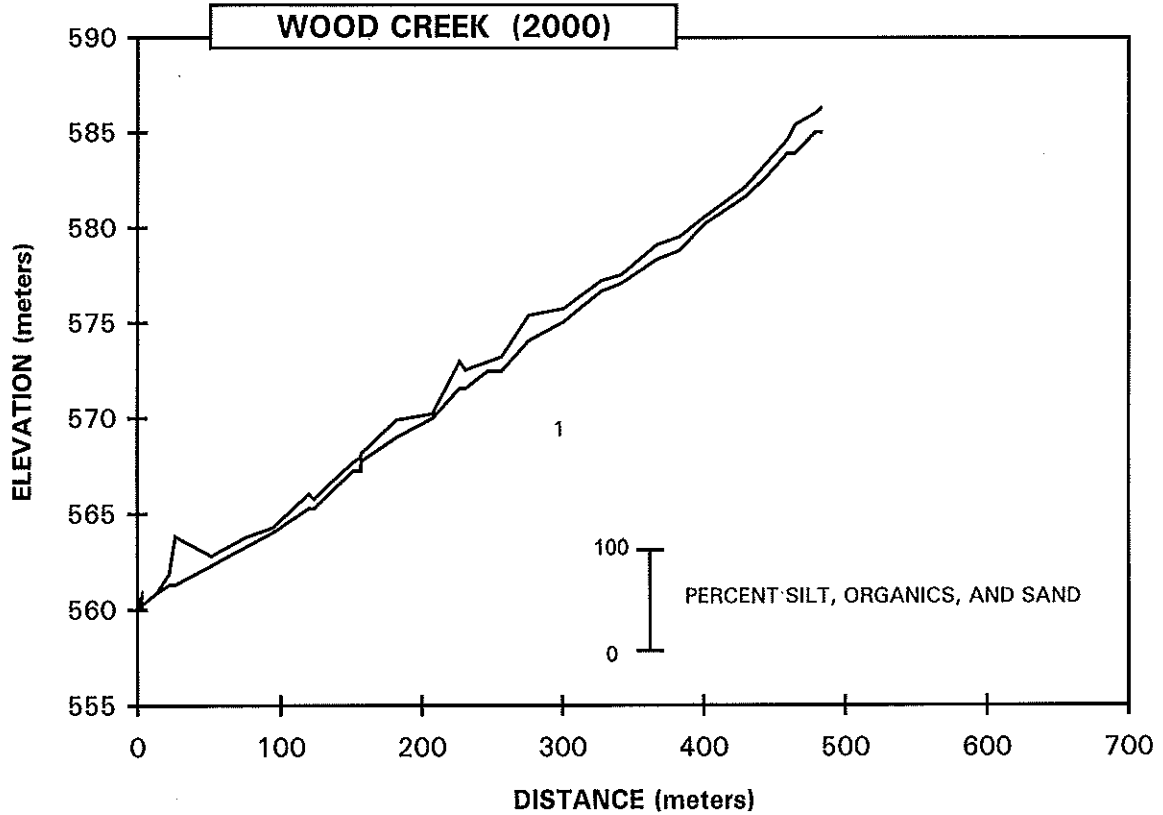
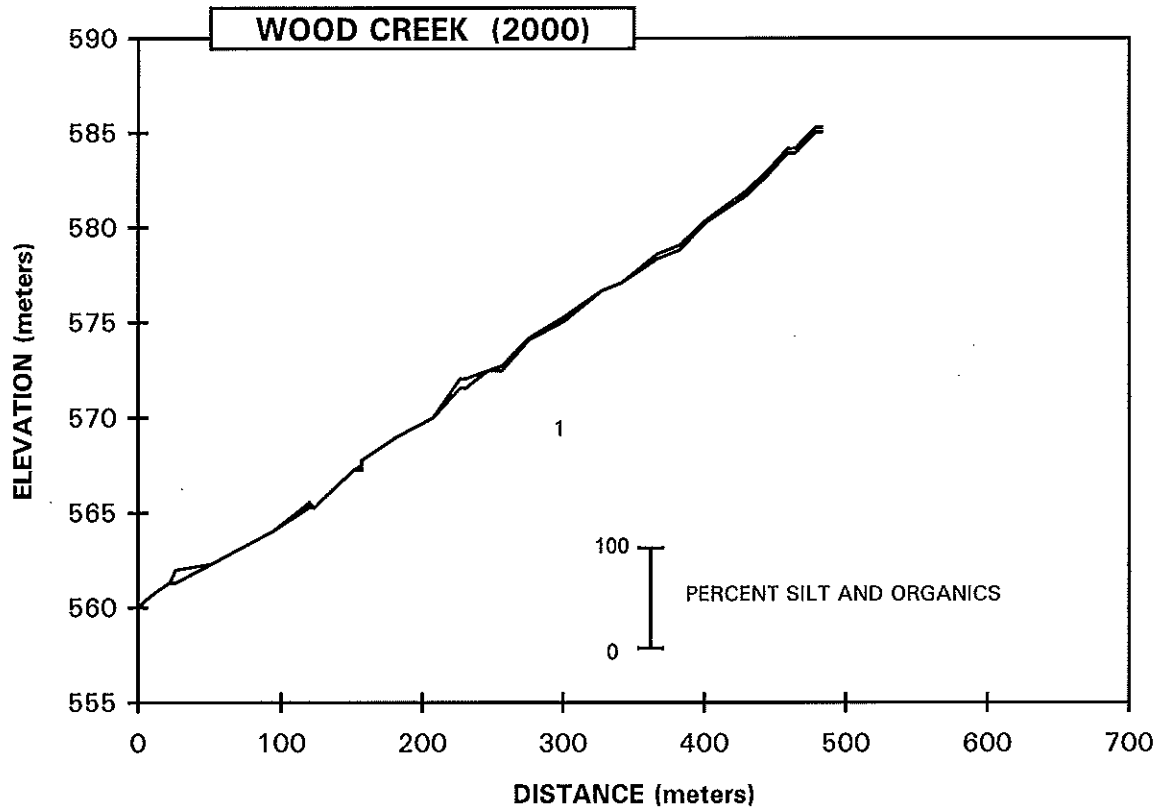
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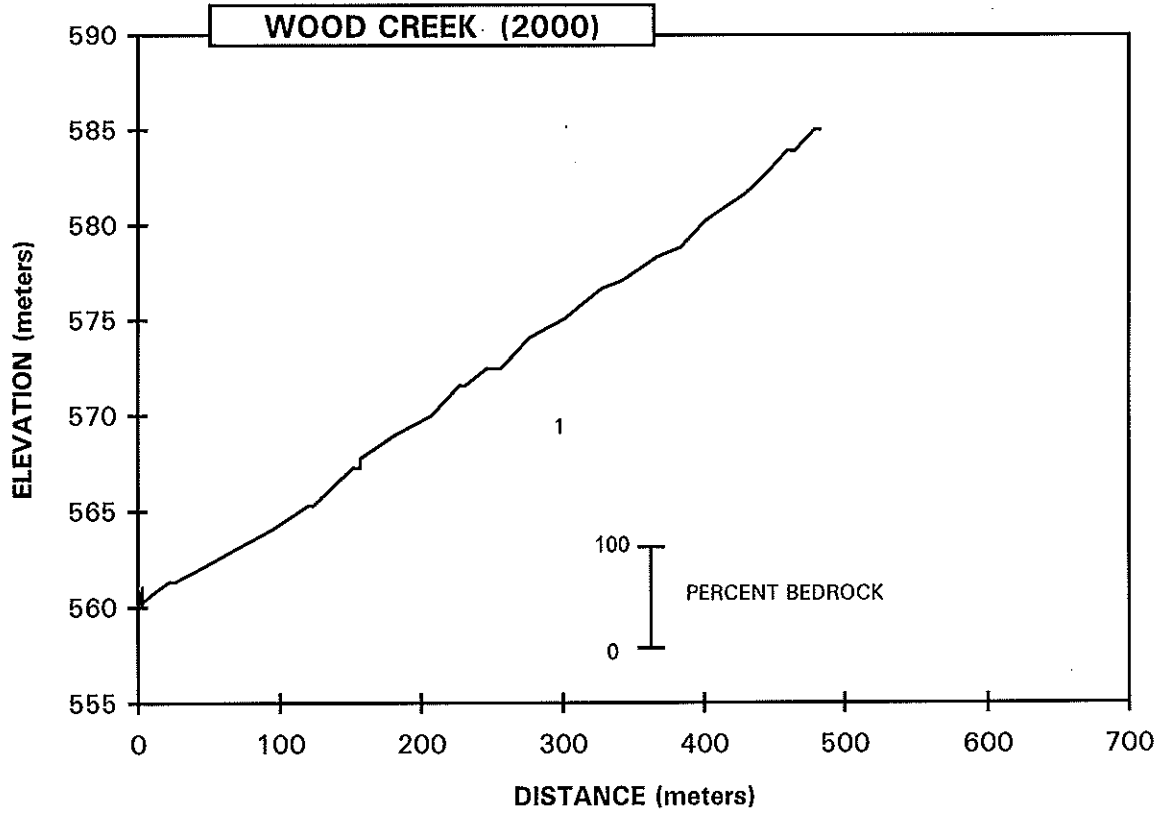
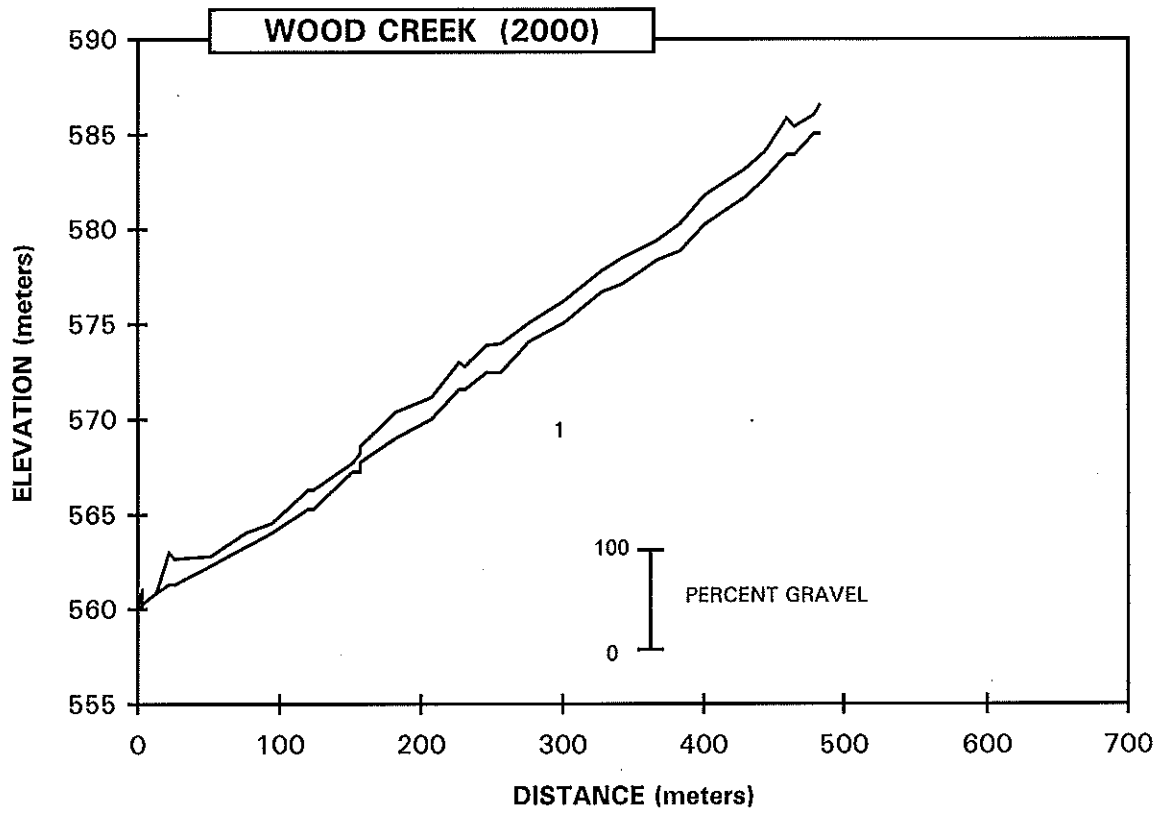
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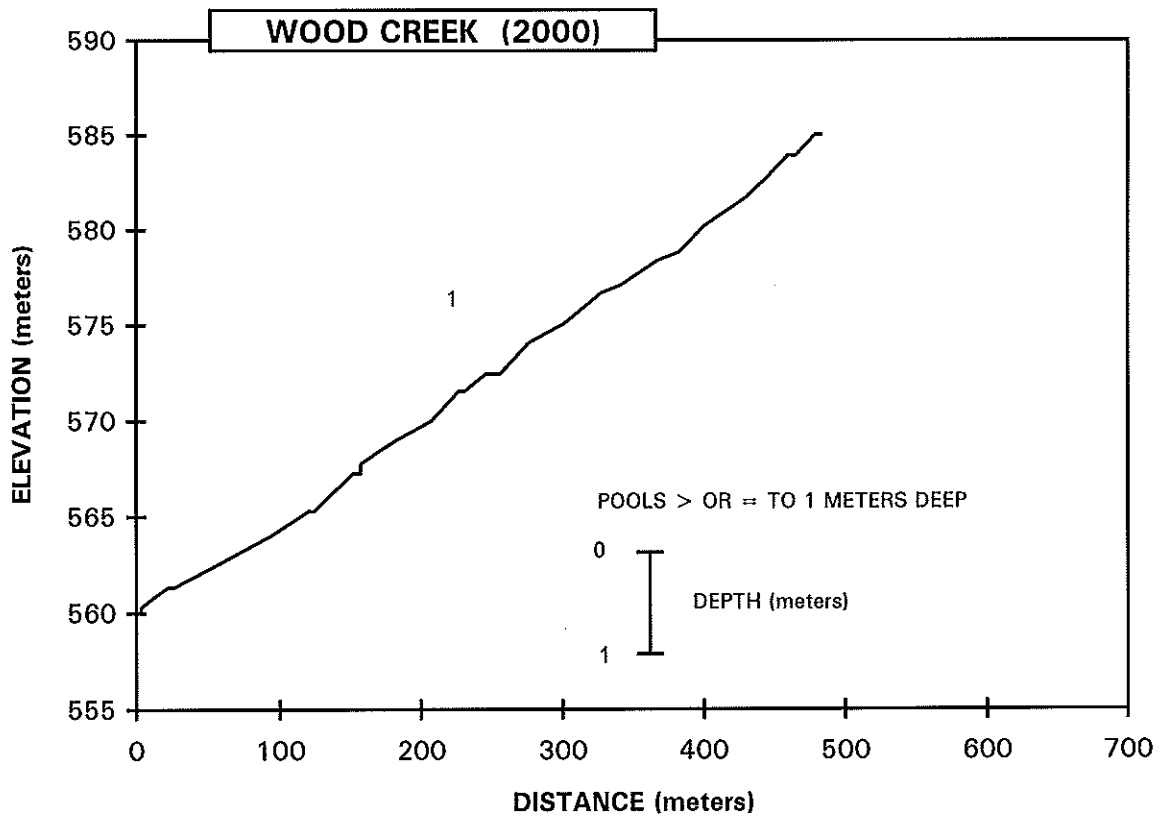
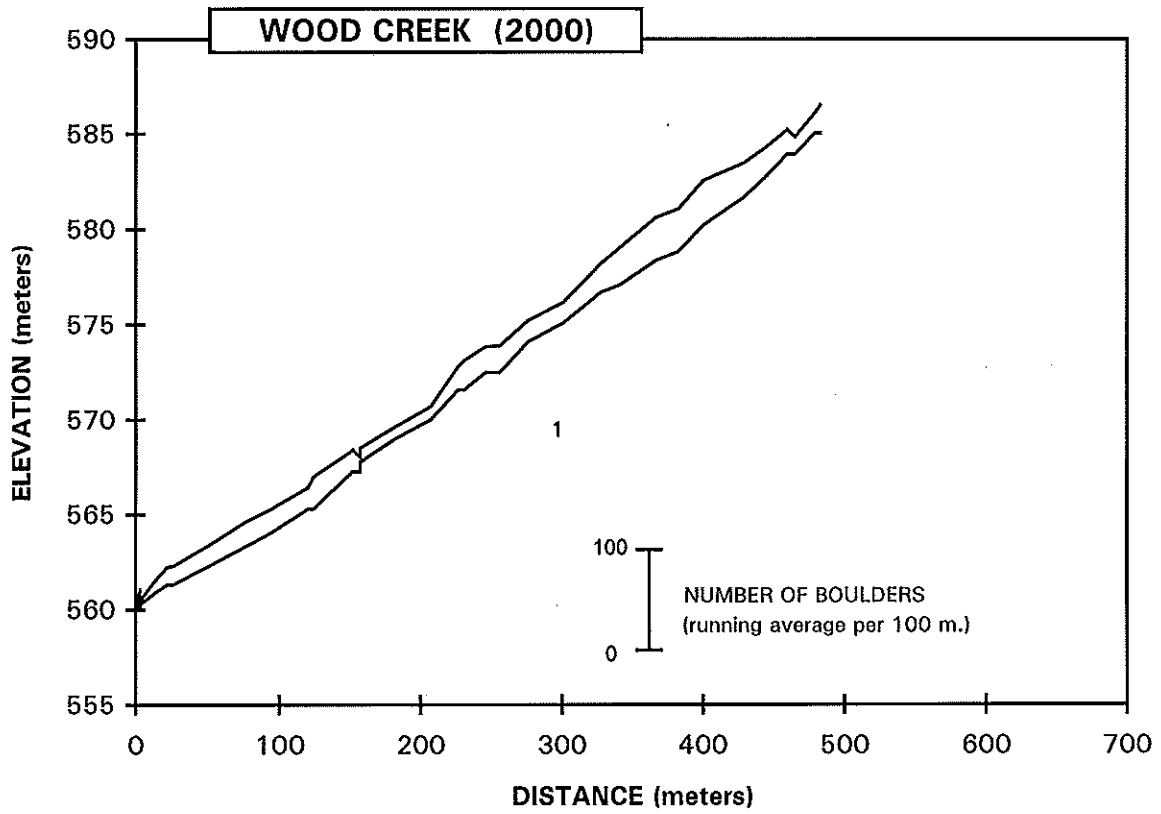
VEGETATION DETAIL

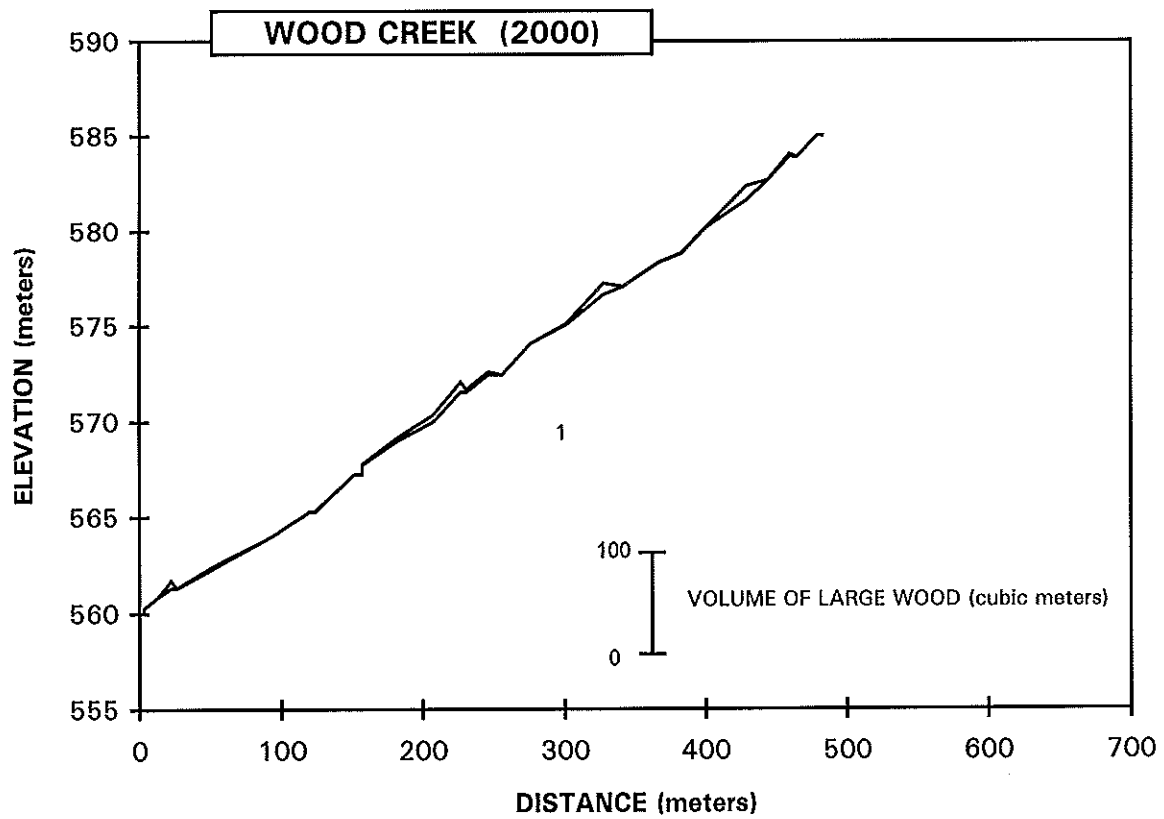
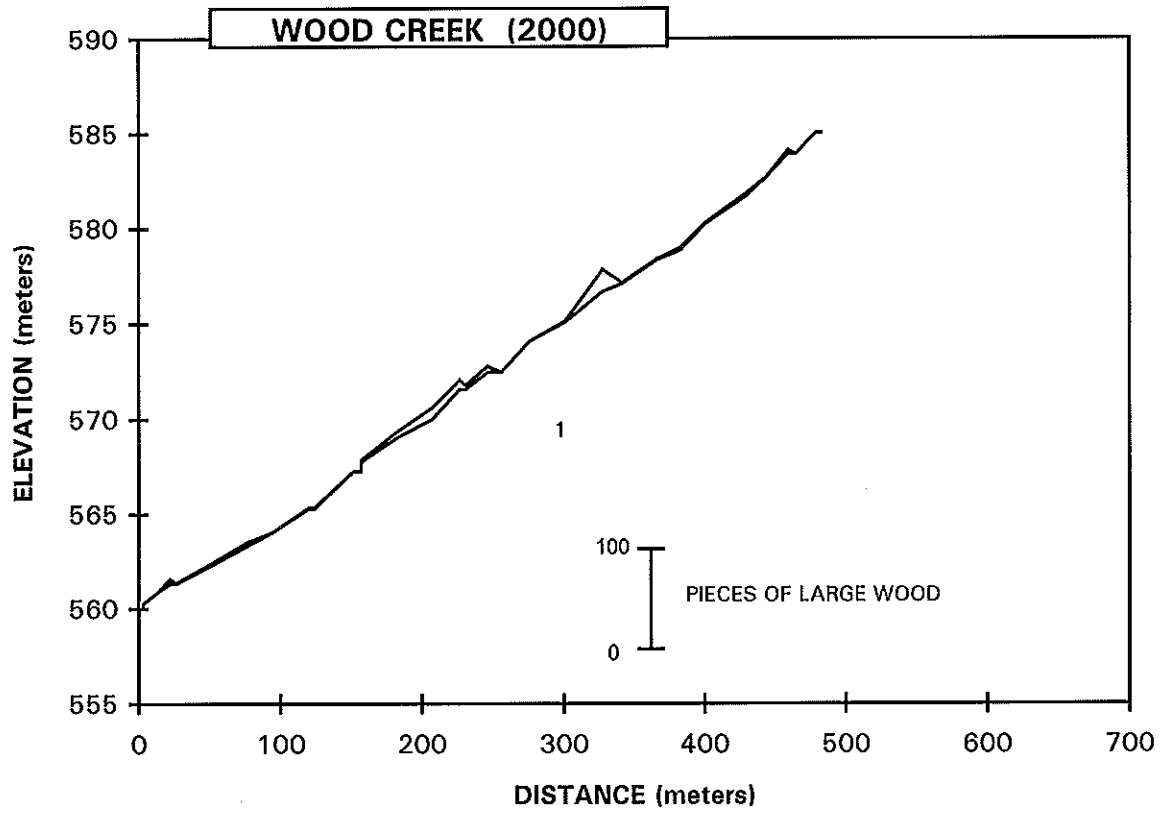
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
13	LF	1	HT	0.0	70	50	20	Conifer	0	1	0	1	0	BEGINING OF #13-LG
								Hardwood	1	0	0	0	0	
13	LF	2	RB	2.0	60	60	20	Conifer	0	0	1	0	0	
								Hardwood	1	0	0	0	0	
13	LF	3	RB	2.0	30	60	30	Conifer	3	1	3	0	0	
								Hardwood	0	0	0	0	0	
13	RT	1	HS	14.0	60	30	55	Conifer	0	0	0	0	0	
								Hardwood	2	3	1	0	0	
13	RT	2	HS	15.0	30	40	50	Conifer	0	0	0	0	0	
								Hardwood	6	1	1	0	0	
13	RT	3	RB	3.0	10	15	20	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
21	LF	1	HT	3.0	75	25	50	Conifer	0	0	0	0	0	
								Hardwood	12	4	1	0	0	
21	LF	2	HT	7.0	80	15	30	Conifer	2	1	1	0	0	
								Hardwood	1	4	0	0	0	
21	LF	3	HS	10.0	70	60	15	Conifer	3	3	0	0	0	
								Hardwood	1	2	0	0	0	
21	RT	1	LT	3.0	75	70	20	Conifer	0	0	0	0	0	
								Hardwood	3	1	0	0	0	
21	RT	2	RB	2.0	60	40	30	Conifer	0	1	0	0	0	
								Hardwood	1	2	0	0	0	
21	RT	3	HS	20.0	70	60	15	Conifer	2	3	1	0	0	
								Hardwood	0	0	0	0	0	
28	LF	1	HT	4.0	40	80	10	Conifer	0	1	0	0	0	
								Hardwood	1	1	1	0	0	
28	LF	2	HT	3.0	40	85	5	Conifer	0	0	0	0	0	
								Hardwood	5	1	0	0	0	1M D.FIR DOWNED, V.
28	LF	3	HS	22.0	30	90	5	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	ESTIMATED
28	RT	1	HT	5.0	75	70	20	Conifer	0	0	0	0	0	
								Hardwood	3	2	0	0	0	
28	RT	2	HT	5.0	50	30	20	Conifer	3	3	2	0	0	
								Hardwood	1	0	0	0	0	
28	RT	3	HS	13.0	80	5	25	Conifer	3	2	3	0	0	
								Hardwood	3	0	0	0	0	

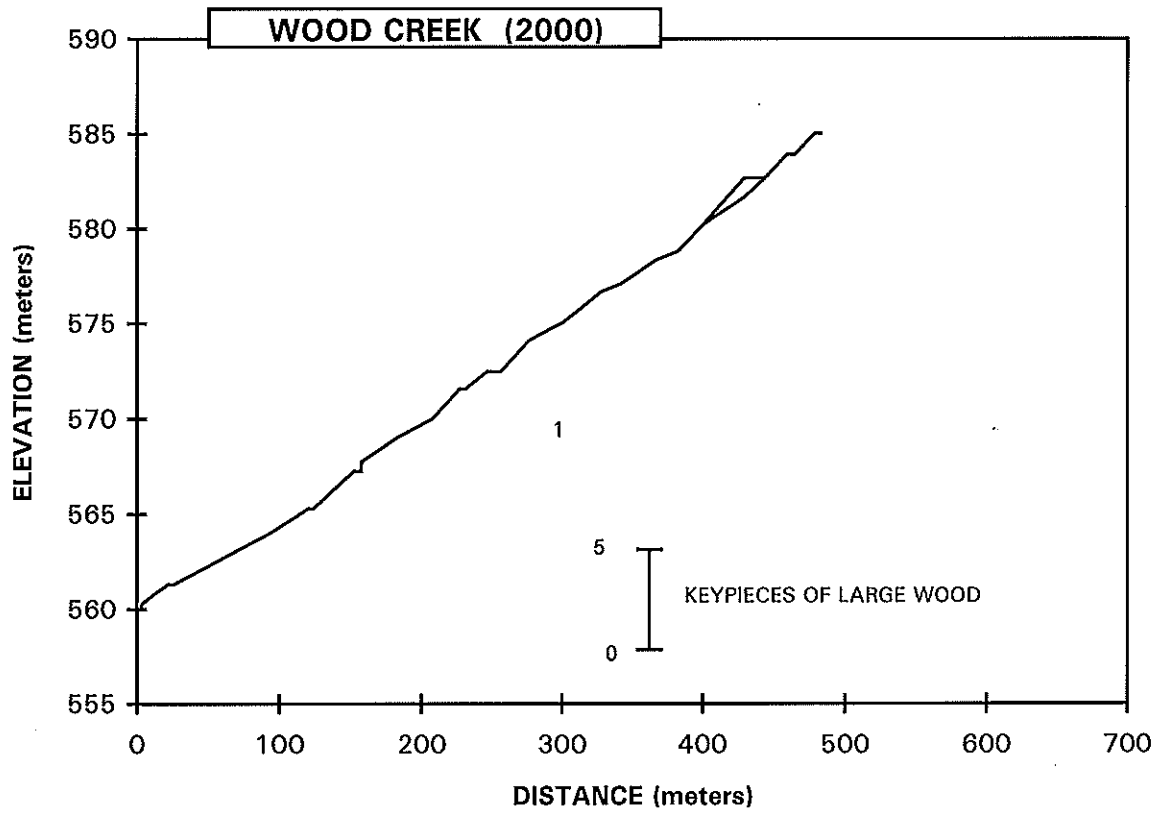




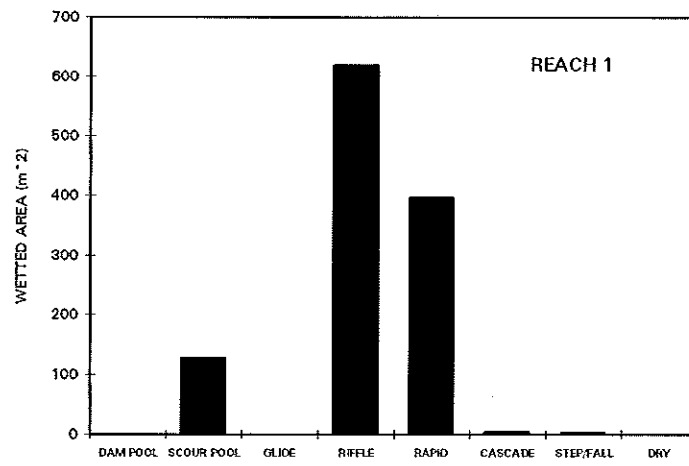






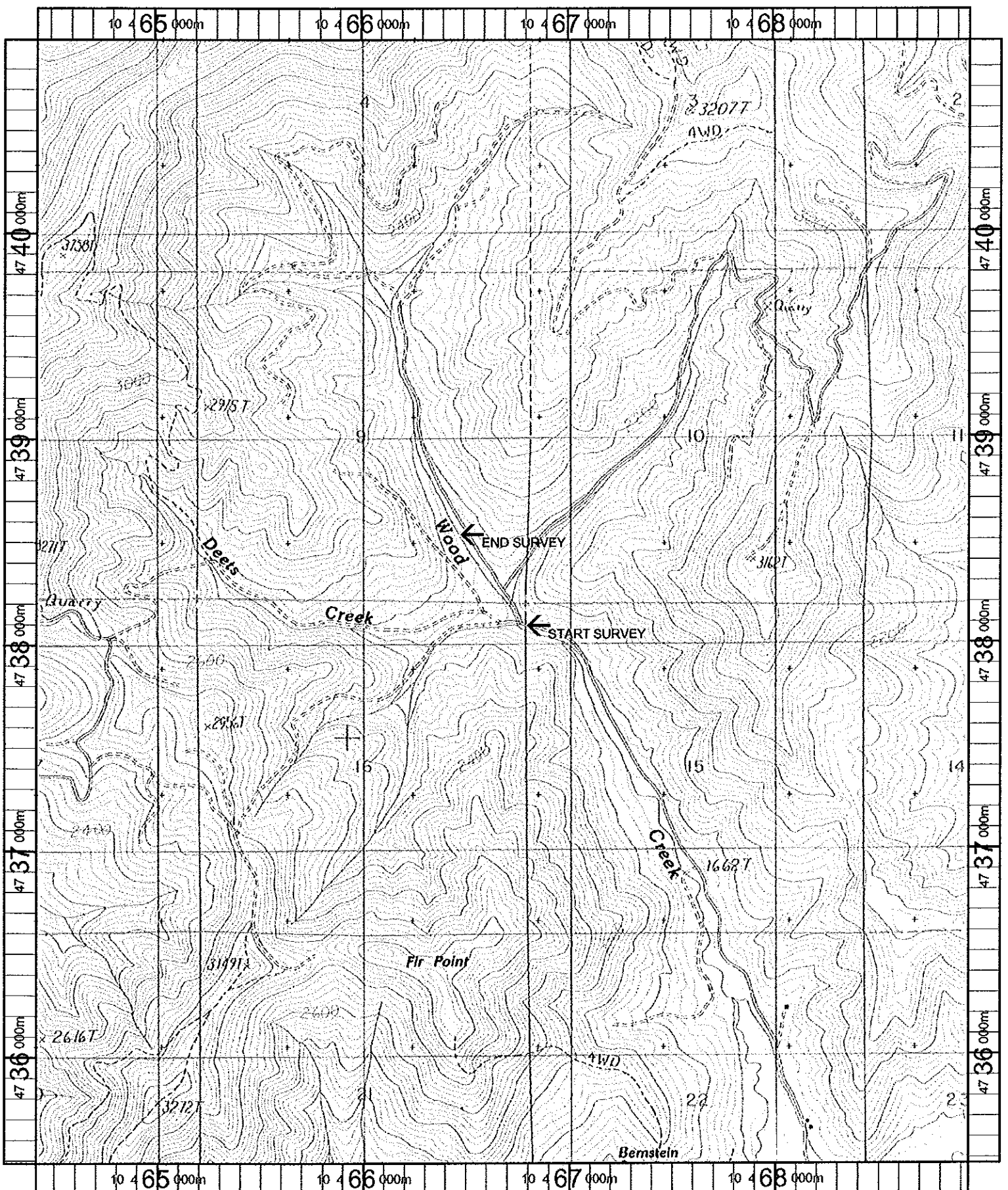


WOOD CREEK: HABITAT DISTRIBUTION



WOODS CREEK (2000)

REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	1	SP	00	3	TJ/	START JUST ABOVE TRIB JNX	BEGIN @ TJ-DEETS CR JNX
1	2	SS	00	3		H = .26M	
1	3	CC	00	13	CC		1.75*1.3 GALVAN, RD 32-6-16
1	4	RP	00	22			REMAINS OF WASHED OUT BRIDGE
1	6	RP	00	52			1ST MATRIX
1	7	RP	00	77		ROADS ON BOTH SIDES	FRY
1	9	RP	01	120		/TJ	T = 11C
1	10	CB	11		/TJ	TRIB	UNNAMED TRIB-T = 11C
1	11	PP	11		CE/PN	TRIB-CULVERT	FISH PASSAGE BLOCK, FRY IN TRI
1	12	LP	00	124		H = 1.0 OF CE	T = 11C
1	13	RB	00	152		RIP	BLUE-DOTTED FLAG, 2ND MATRIX
1	15	SL	00	157		H = .5	ORANGE MARKER TAPE SITE #2
1	16	RP	00	182			FRY
1	17	RP	00	207	DJ		
1	18	RB	00	227			LOGGING CABLE IN STREAM
1	19	LP	00	231			ORANGE FLAG READS SITE #3, CF
1	21	LP	00	256		RIP	RIP 2
1	23	RP	00	301			ORANGE FLAG = SITE #5
1	24	RP	01	327	DJ		PRIMARY CHNL OFF MULTI CHNL
1	25	RI	02		DJ		02 CHNL
1	26	RI	00	342			01 CHNL
1	27	RP	00	367		SS/	
1	28	RI	00	383		RIP	
1	29	RB	00	400			T = 11C
1	32	RB	00	459			ORANGE FLAG = SITE #8
1	33	LP	00	465			FRY
1	34	RB	00	479			FRY
1	35	SP	00	483		END @ SURVEY SIGN /ALDER	FRY, EOS, YELLOW MARKER



Name: MC CULLOUGH CREEK
 Date: 11/7/100
 Scale: 1 inch equals 2000 feet

Location: 10 466584 E 4738191 N
 Caption: WOOD CREEK RESTORATION SITE - UMPQUA BASIN