

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

STREAM: Lane Creek (U-41)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: June 30, 2000
SURVEY CREW: Jim Lee, John Blanchard
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.6 km²
USGS MAPS: Canyonville, Nickel Mtn
ECOREGION: Coast Range Umpqua Valleys

GENERAL DESCRIPTION:

The Lane Creek habitat survey extended 510 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 6.0 (range: 5.0 – 7.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.4 percent. Riffles (65%) and scour pools (35%) dominated stream habitat. Gravel (36%) and cobble (31%) dominated stream substrate. Wood volume was very low at 3.8 m³/100m.

COMMENTS:

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

REACH SUMMARY

REACH 1

T30S-R6W-S51NW

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	100
Moderate V-shape	0	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 6.0 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	510	874	0
Secondary	7	4	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	1.7	Width	4.0	6.1	9.6
Depth	0.28	Height	0.5	1.0	1.4
		W:D ratio	8.6	Entrenchment	1.5

Stream Flow Type: MF Water Temp: 16.0-16.0°C
 Avg. Unit Gradient: 2.4% Habitat Units/100m: 7.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	46%	Reach avg: 50%
Undercut Banks	11%	Range: 29- 64

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	49	9.6
Volume (m ³)	19	3.8
Key pieces ($\geq 10m \times 0.6m$)	0	0.0

HABITAT UNIT SUMMARY

REACH 1 T30S-R6W-S51NW 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
DRY UNITS	1	7	0.5	0.00	4	0	10	10	30	50	0	0
POOL-LATERAL SCOUR	17	154	2.0	0.51	305	1	13	34	38	15	0	0
RIFFLE	9	128	1.7	0.08	200	10	3	16	38	41	1	0
RIFFLE W/ POCKETS	12	228	1.6	0.15	369	0	5	17	33	42	2	0
STEP/LOG	1	1	1.0	0.05	1	0	0	0	33	67	0	0
Total:	40	517	1.7	0.28	878	11	Avg: 8	23	36	31	1	0

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	17	154	2.0	0.51	305	34.76	1	0.3
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	21	356	1.6	0.12	569	64.79	10	1.8
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	1	1	1.0	0.05	1	0.06	0	0.0
Dry	1	7	0.5	0.00	4	0.40	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	17	32.9
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	2	3.9
Pool Frequency (channel widths/pool):	7.6	
Residual pool depth (avg)	0.46m	

STREAM SUMMARY

LANE 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	
40	517	1.7	0.28	878	8	23	36	31	1	0	11

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	305	34.8
Backwater Pools	0	0.0
Glide	0	0.0
Riffle	569	64.8
Rapid	0	0.0
Cascade	0	0.0
Step	1	0.1
Dry	4	0.4

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	813
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	0
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	0.3	3.7	0.0	1.0	0.3	1.0	0.7	5.7
15-30cm	0.0	1.7	0.0	2.7	1.3	1.0	1.3	5.3
30-50cm	0.0	1.0	0.0	0.7	0.0	0.3	0.0	2.0
50-90cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.3	6.7	0.0	4.3	1.7	2.3	0.7	4.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	57		28		32	
Shrub cover	40		24		23	
Grass/forb cover	34		51		59	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
Hillslope	17		100		100	
High terrace	83		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	20		22		18	

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	813
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zones 1-3	
	Conifer	Hardwood
3-15cm	0.7	5.7
15-30cm	1.3	5.3
30-50cm	0.0	2.0
50-90cm	0.0	0.3
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

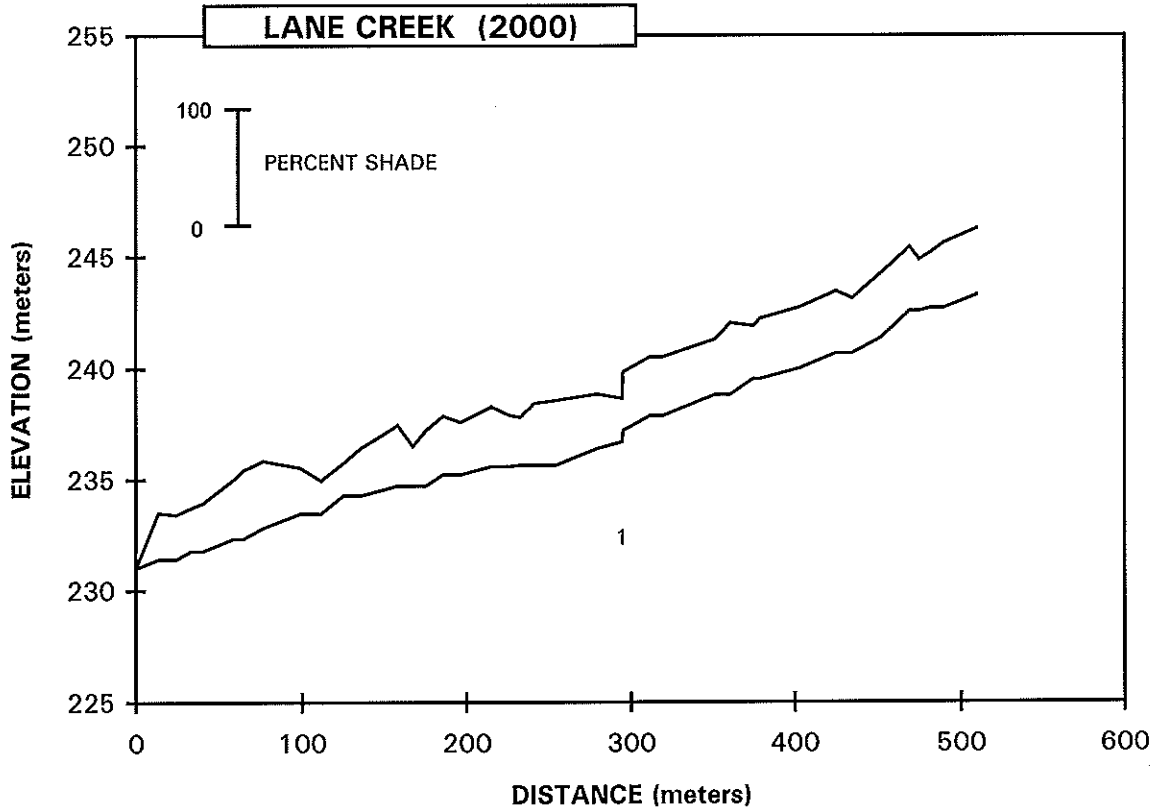
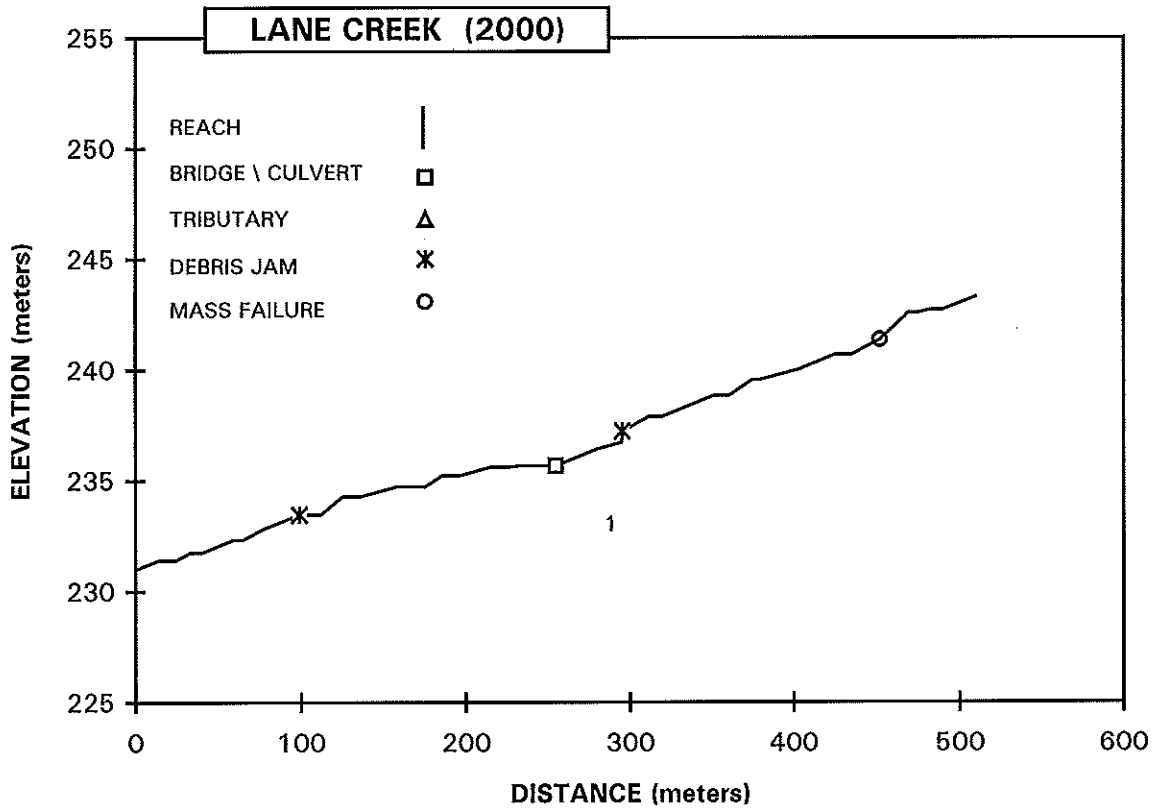
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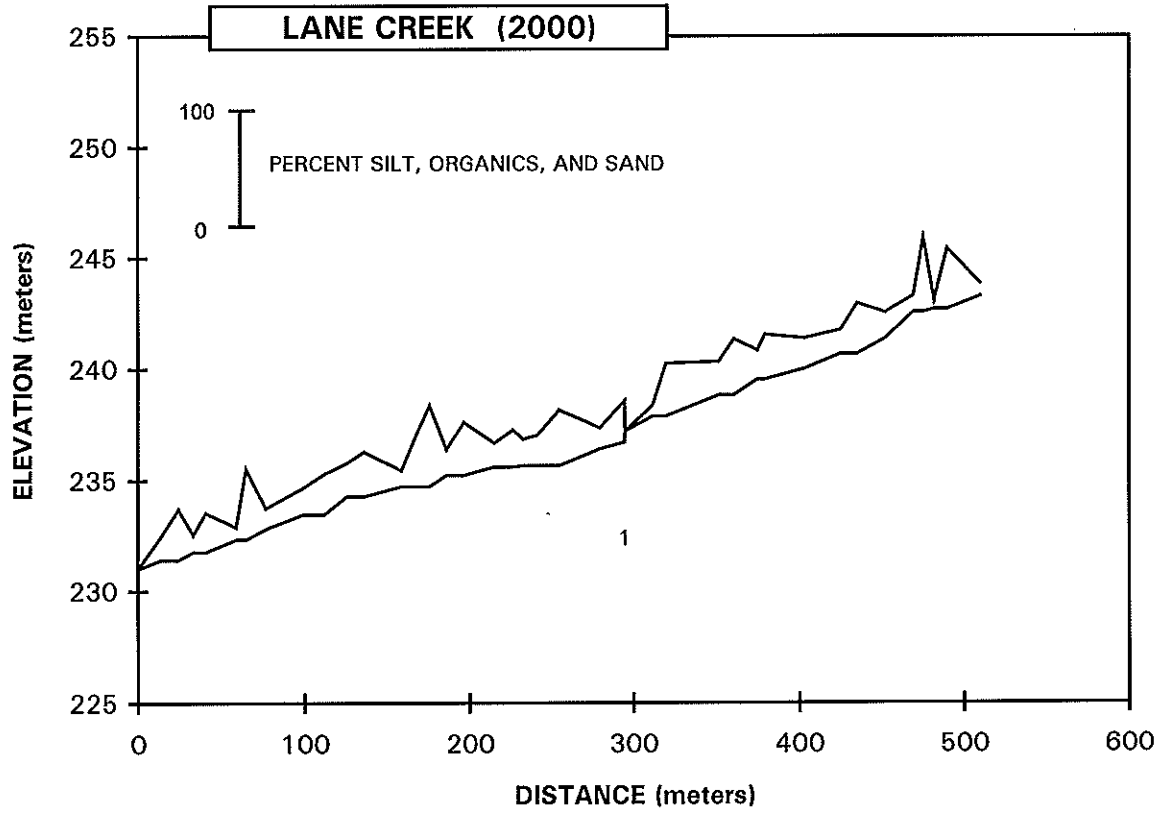
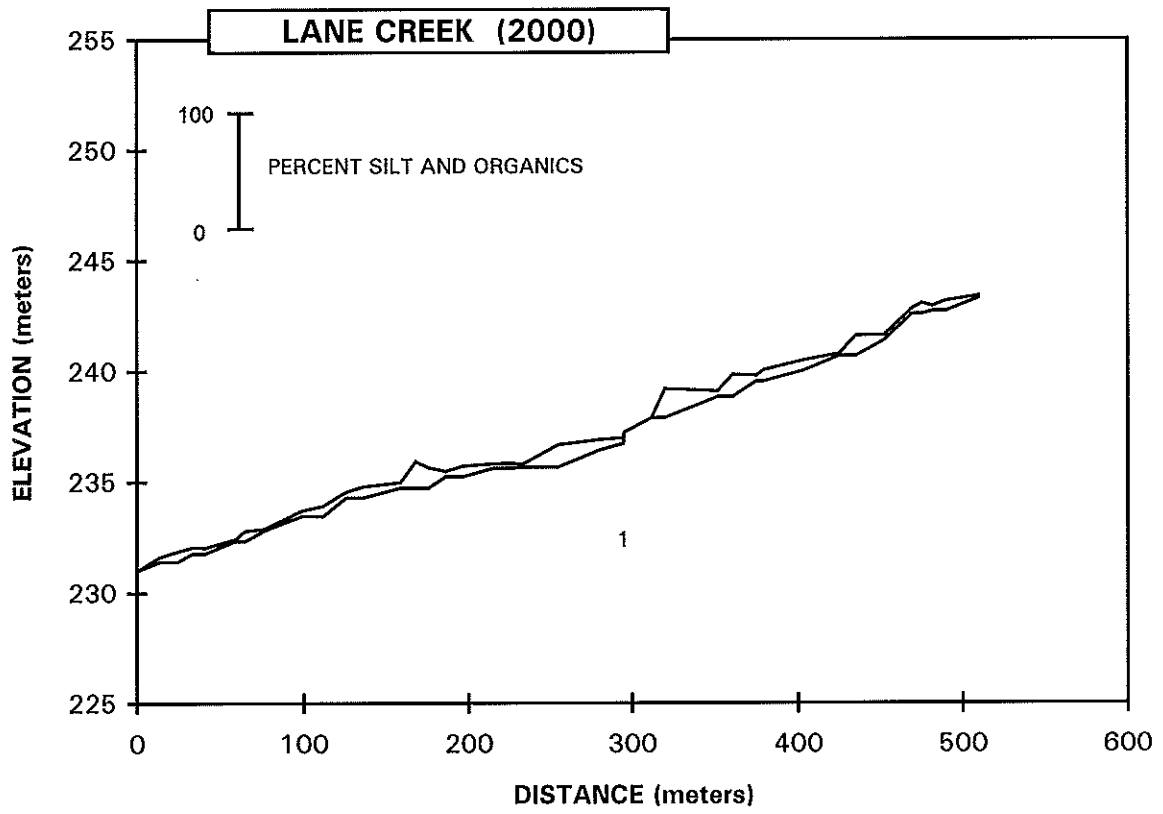
VEGETATION DETAIL

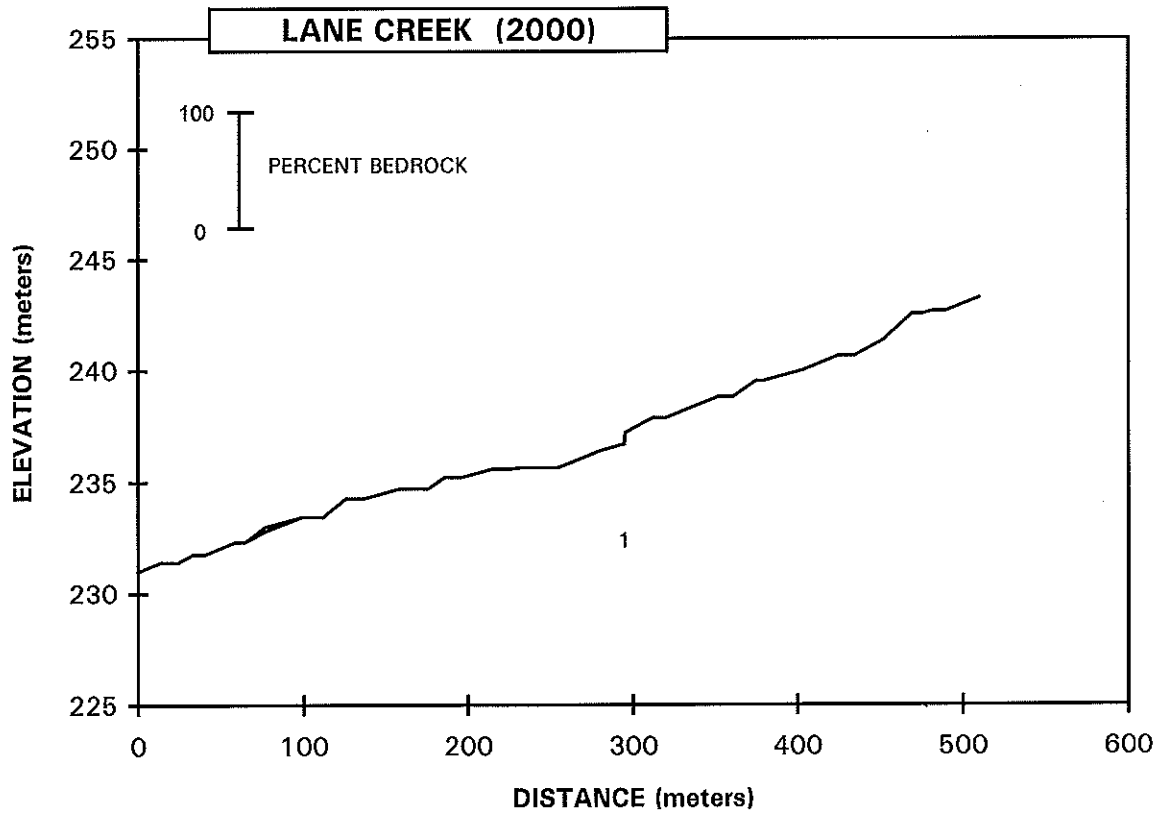
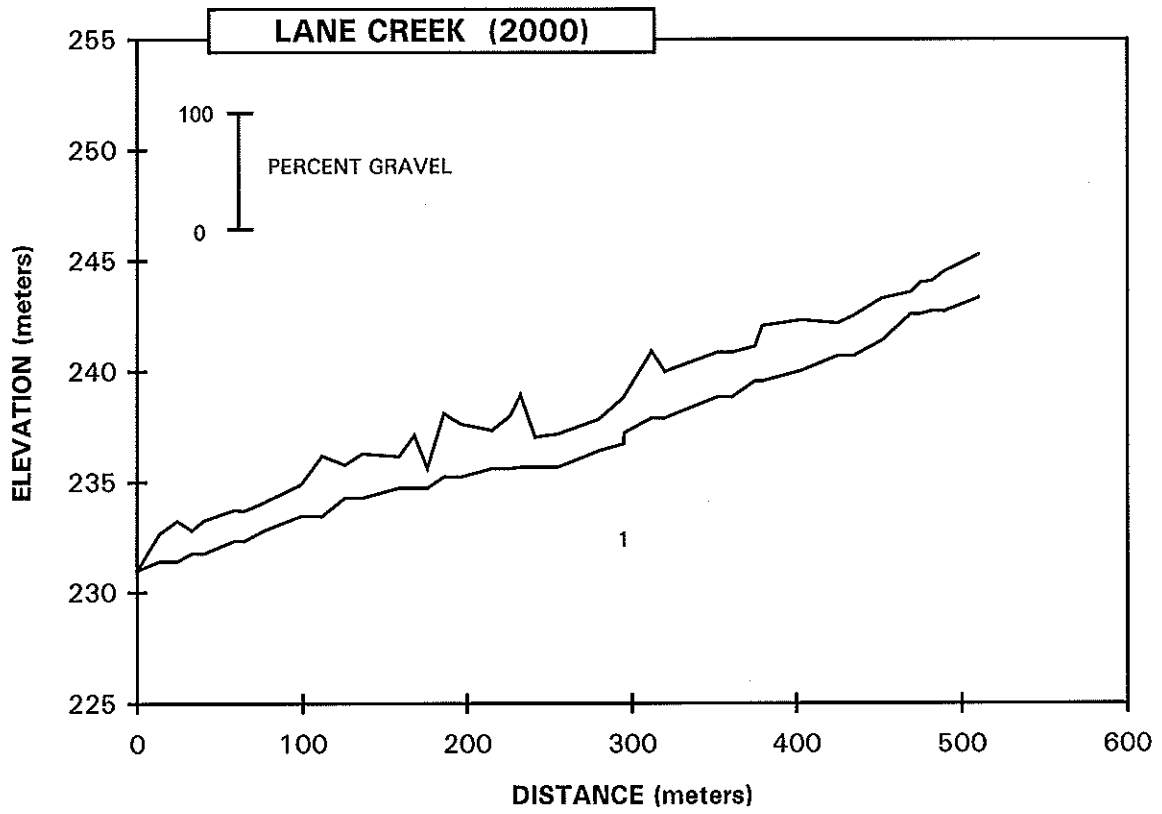
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
10	LF	1	HS	28.0	50	50	30	Conifer	1	0	0	0	0	
								Hardwood	2	0	0	0	0	
10	LF	2	HS	35.0	55	20	50	Conifer	0	0	0	0	0	
								Hardwood	1	2	0	0	0	FIR SNAG 100' TALL
10	LF	3	HS	27.0	70	5	50	Conifer	1	4	0	0	0	
								Hardwood	2	0	0	0	0	D.FIR SNAGS
10	RT	1	HT	8.0	30	25	60	Conifer	0	0	0	0	0	
								Hardwood	1	1	0	0	0	
10	RT	2	HS	7.0	0	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	ROAD, NO TREES
10	RT	3	HS	7.0	0	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
23	LF	1	HT	5.0	75	70	10	Conifer	0	0	0	0	0	
								Hardwood	1	3	1	1	0	
23	LF	2	HS	25.0	20	50	50	Conifer	0	0	0	0	0	
								Hardwood	2	1	0	0	0	
23	LF	3	HS	31.0	65	80	15	Conifer	0	0	0	0	0	
								Hardwood	1	1	0	0	0	
23	RT	1	HT	5.0	50	20	50	Conifer	0	0	0	0	0	
								Hardwood	3	0	2	0	0	
23	RT	2	HS	5.0	10	5	40	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	ROAD
23	RT	3	HS	10.0	0	0	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	FIELD
30	LF	1	HT	65.0	55	45	25	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
30	LF	2	HS	53.0	60	70	15	Conifer	0	0	0	0	0	
								Hardwood	0	3	2	0	0	
30	LF	3	HS	23.0	55	45	25	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	0	0	
30	RT	1	HT	7.0	80	30	30	Conifer	0	0	0	0	0	
								Hardwood	4	1	0	0	0	
30	RT	2	HS	8.0	25	0	50	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
30	RT	3	HS	8.0	0	10	85	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	

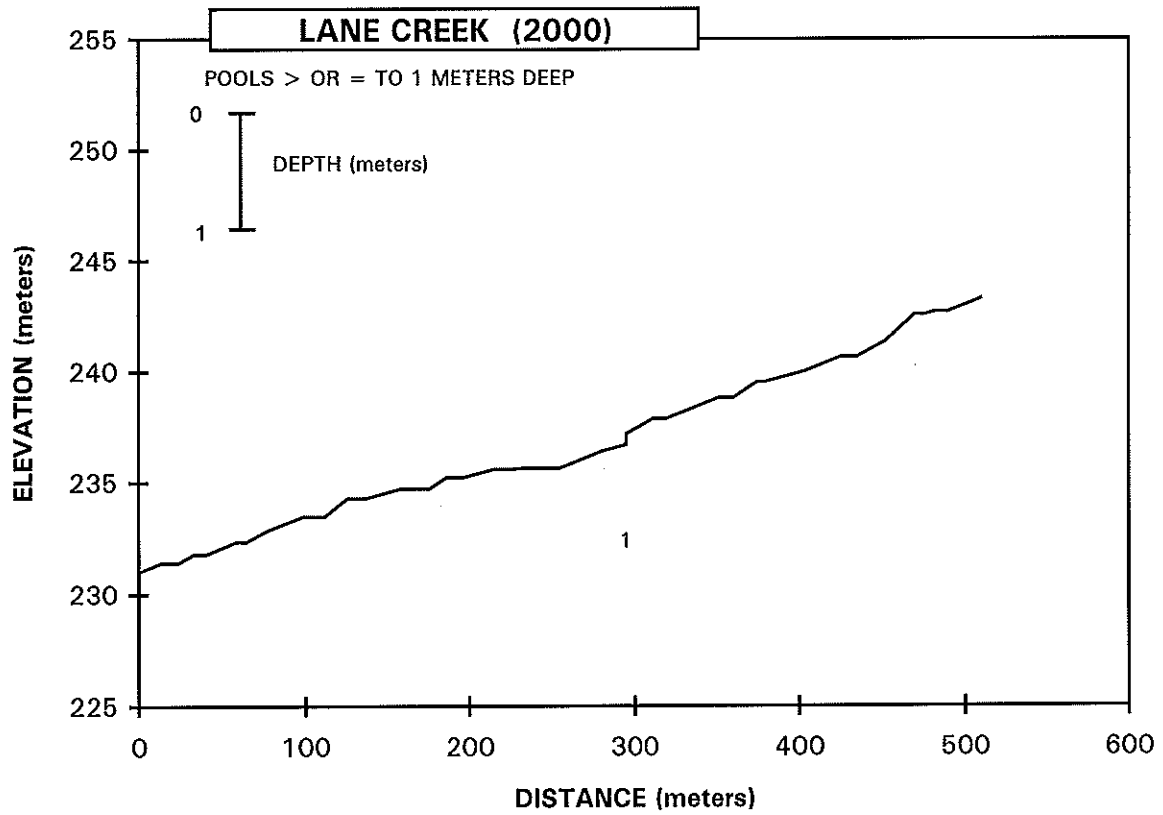
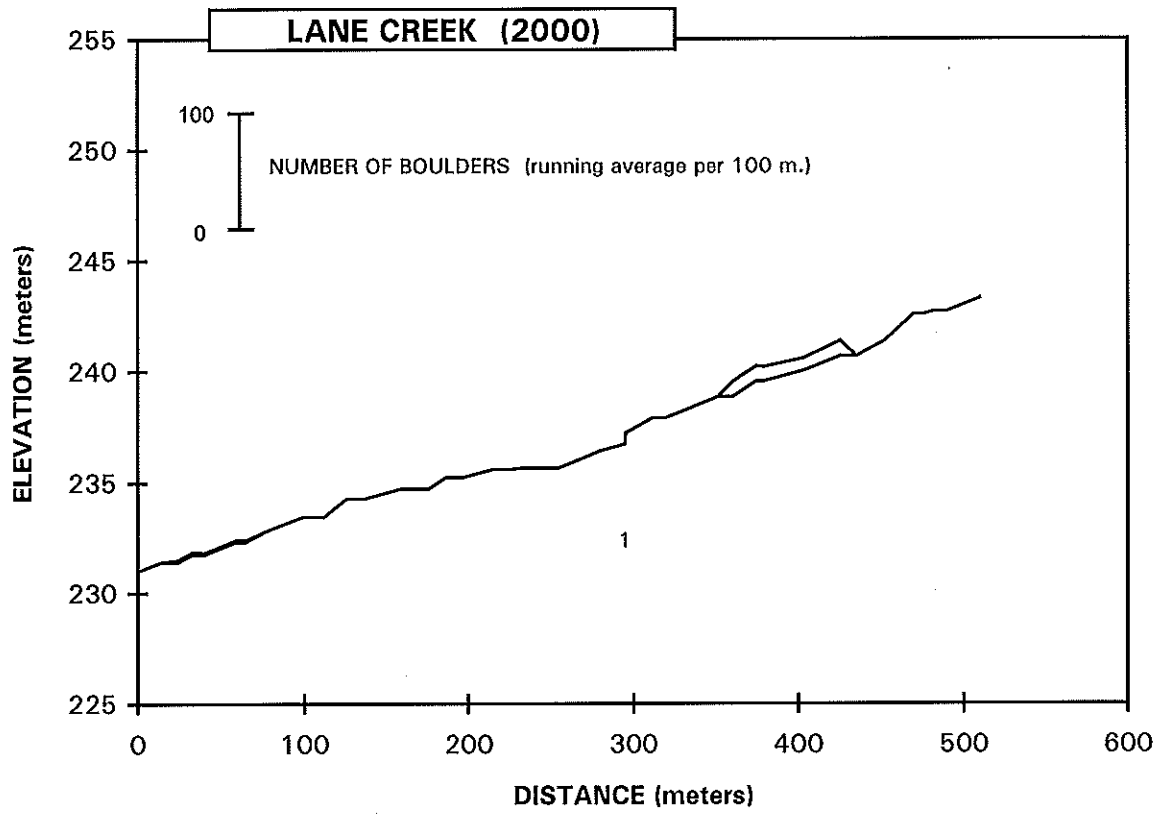
LANE CREEK

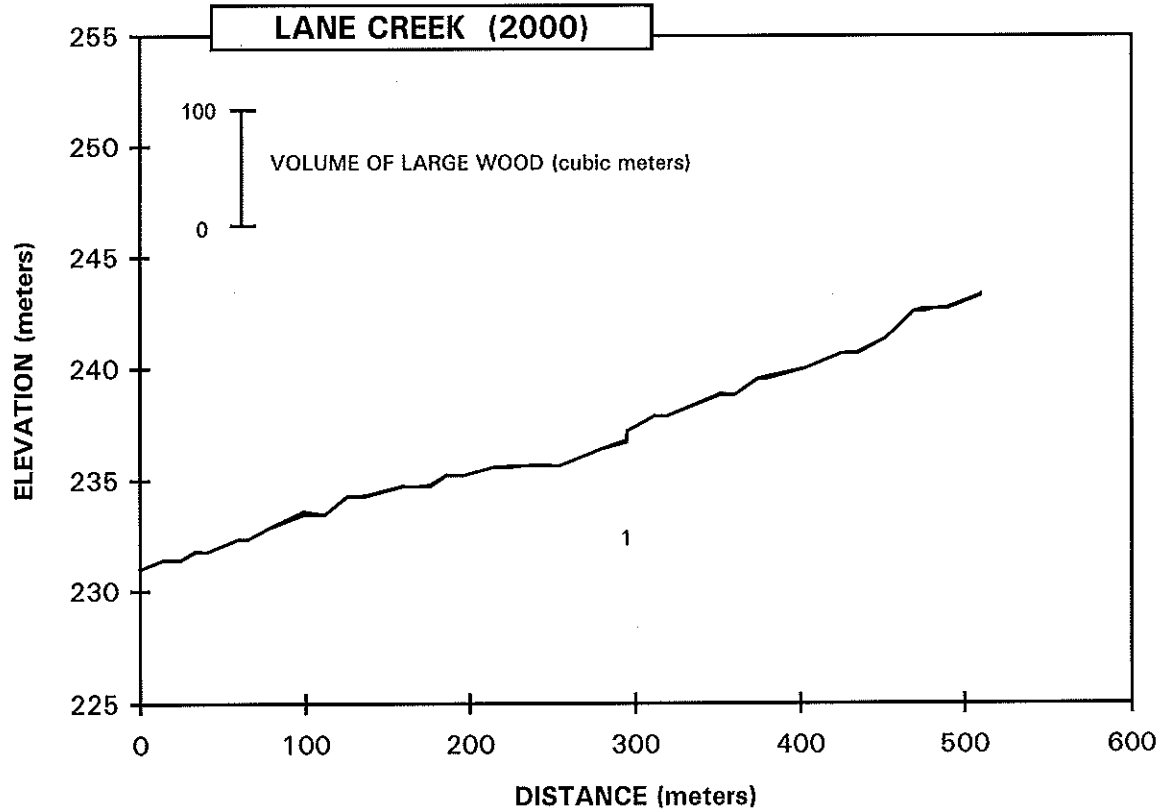
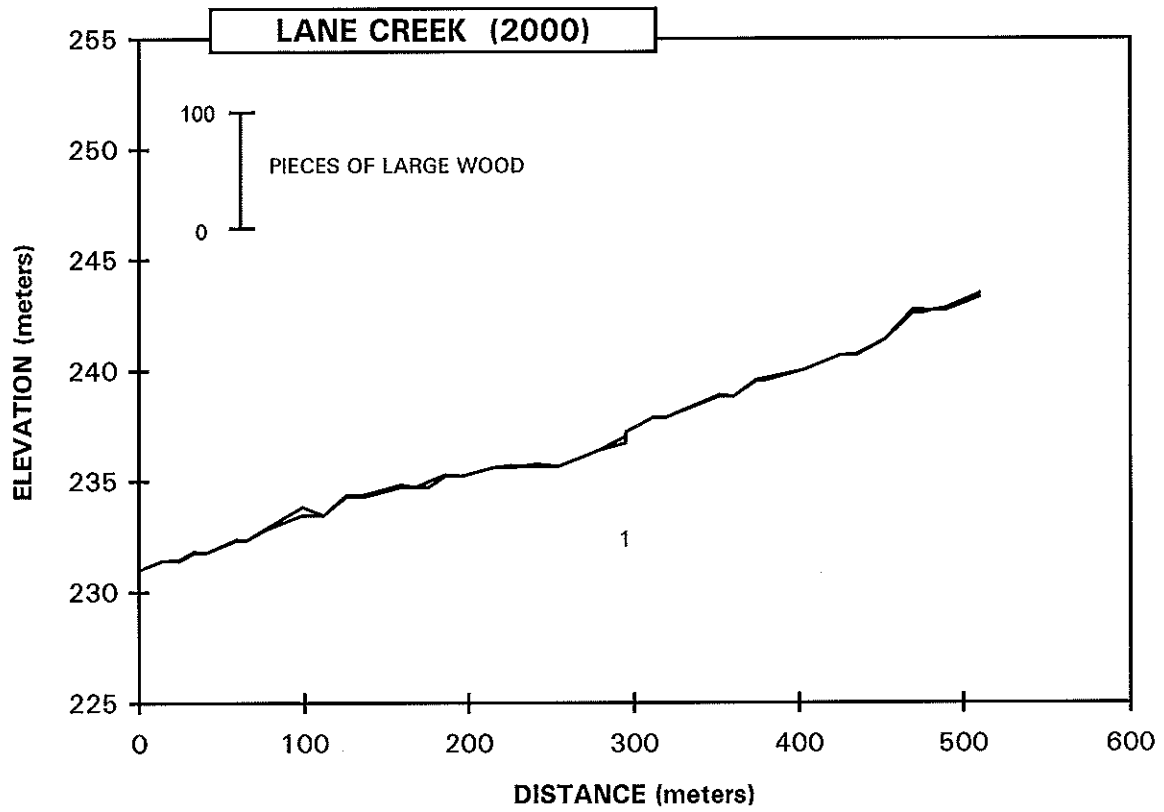
REACH	UNIT#	TYPE	CHAN	DIST.(m)	COMMENTS	NOTE_ESTIMATOR	NOTE_NUMERATOR
1	1	RI	00	14		BEGIN ABOVE CULVERT	START SURVEY @ RD XING
1	2	LP	00	25		/SIGN, D15-DEAD OAK	3 FRY 5CM
1	3	RI	00	33			T=16C
1	4	LP	00	41			FRY
1	6	LP	00	65			FRY, FLAGGING ORG PHOTO
1	8	RP	00	99	DJ		
1	9	LP	00	112			FRY, TROUT
1	10	RP	00	126		RIP	FRY, RIP
1	11	LP	00	136			FRY
1	12	RP	00	159			FRY
1	13	LP	00	168			FRY
1	14	LP	00	176			FRY
1	16	LP	00	197			FRY
1	18	LP	00	226			SNAKE
1	20	LP	00	241			FRY
1	21	LP	01	255	/CE	RIP	NO DROP .4*6, SLOPE=8%
1	22	DU	11			DRY TRIB FROM MAIN RD DITCH	RIP, ORANGE PHOTO FLAG
1	23	RP	00	280			FRY
1	24	RI	00	295			FRY
1	25	SL	00	295	DJ		FRY
1	26	RI	00	312			FRY
1	27	LP	00	320			ORANGE PHOTO MARK
1	30	RP	00	375			ORANGE PHOTO MARK
1	31	LP	00	379		RIP	RIP
1	32	RP	00	403			FRY
1	34	LP	00	435			FRY
1	35	RP	00	452	EA/		FRY
1	37	LP	00	475			2M ABOVE STREAM
1	38	RI	00	482			ORANGE/YELLOW FLAG
1	40	RI	00	510		/SIGN ON MAPLE	ORNAGE/YELLOW FLAG, EOS

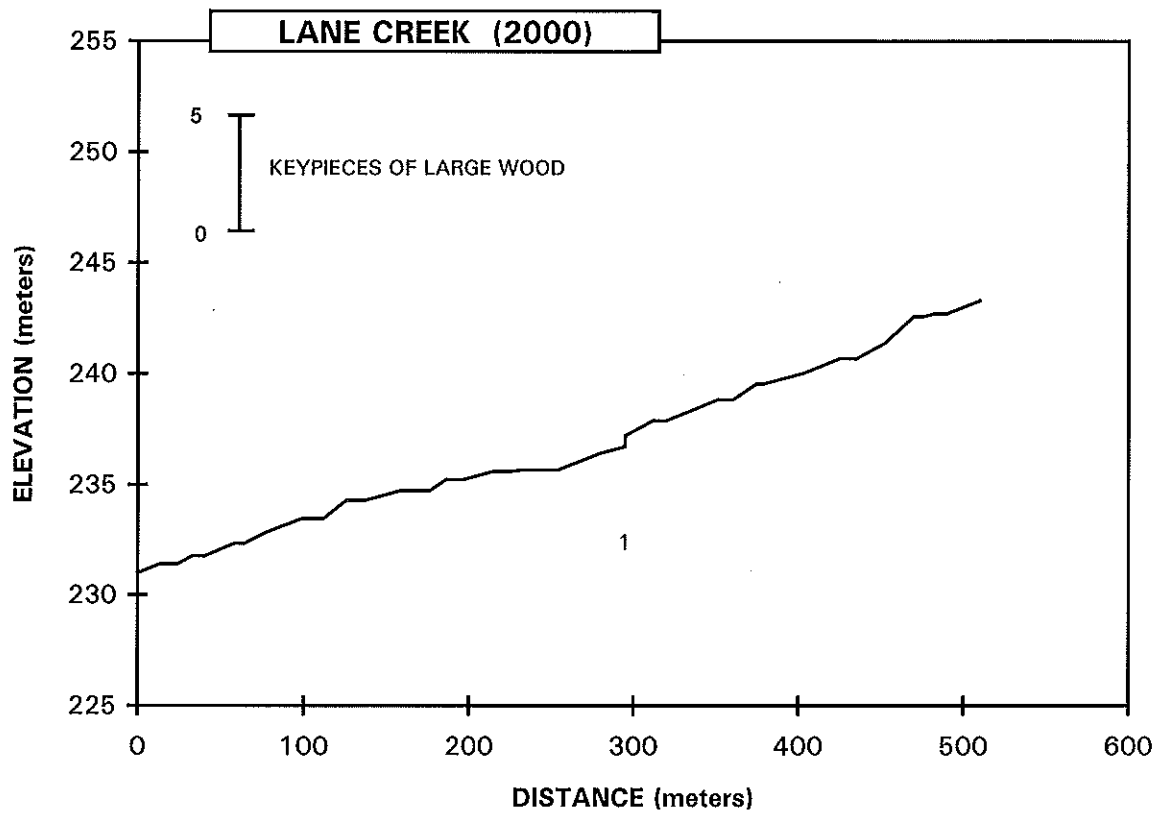




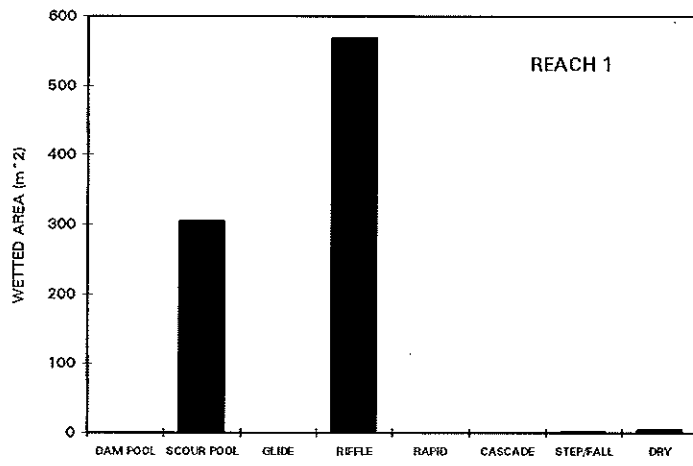


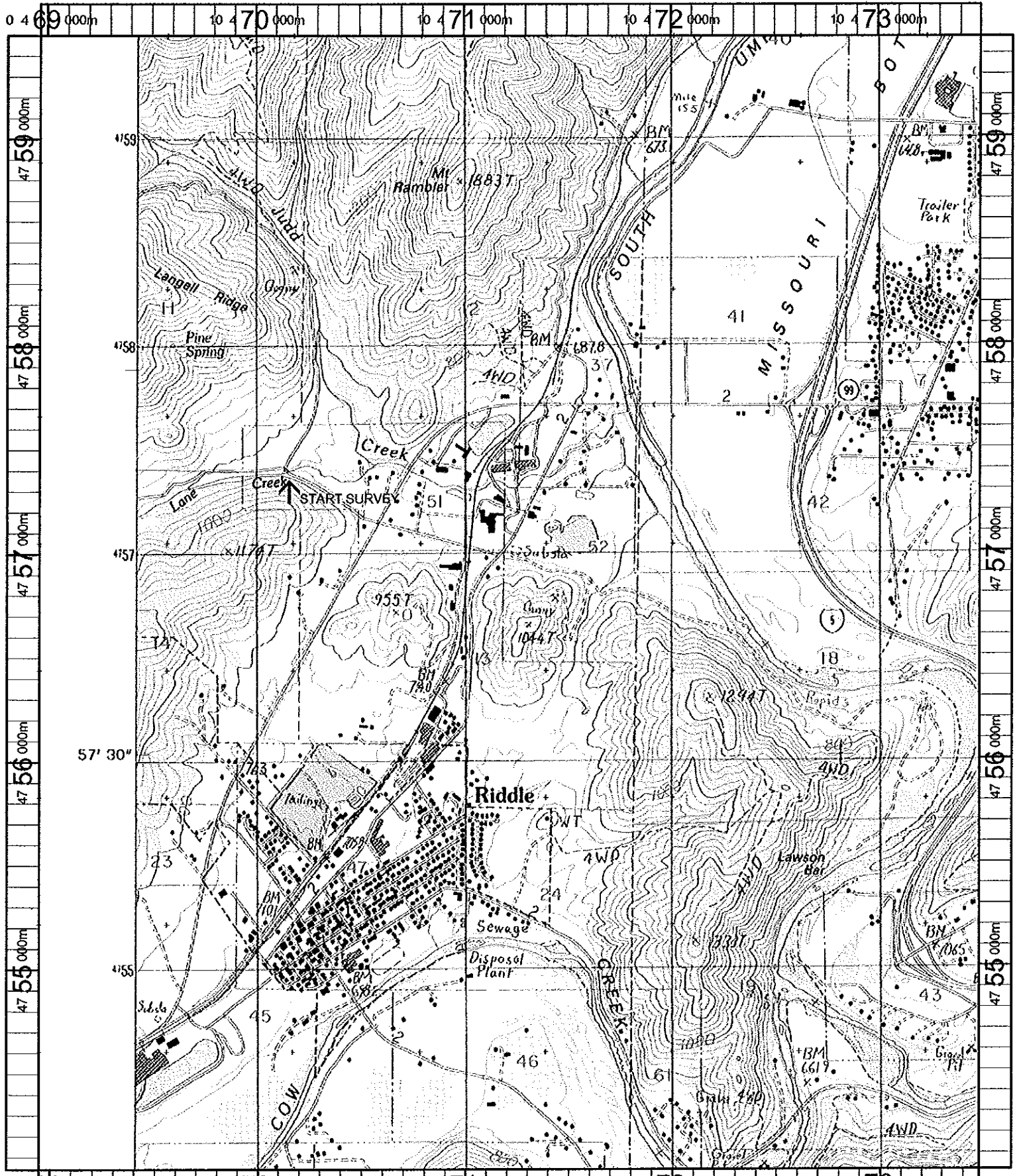






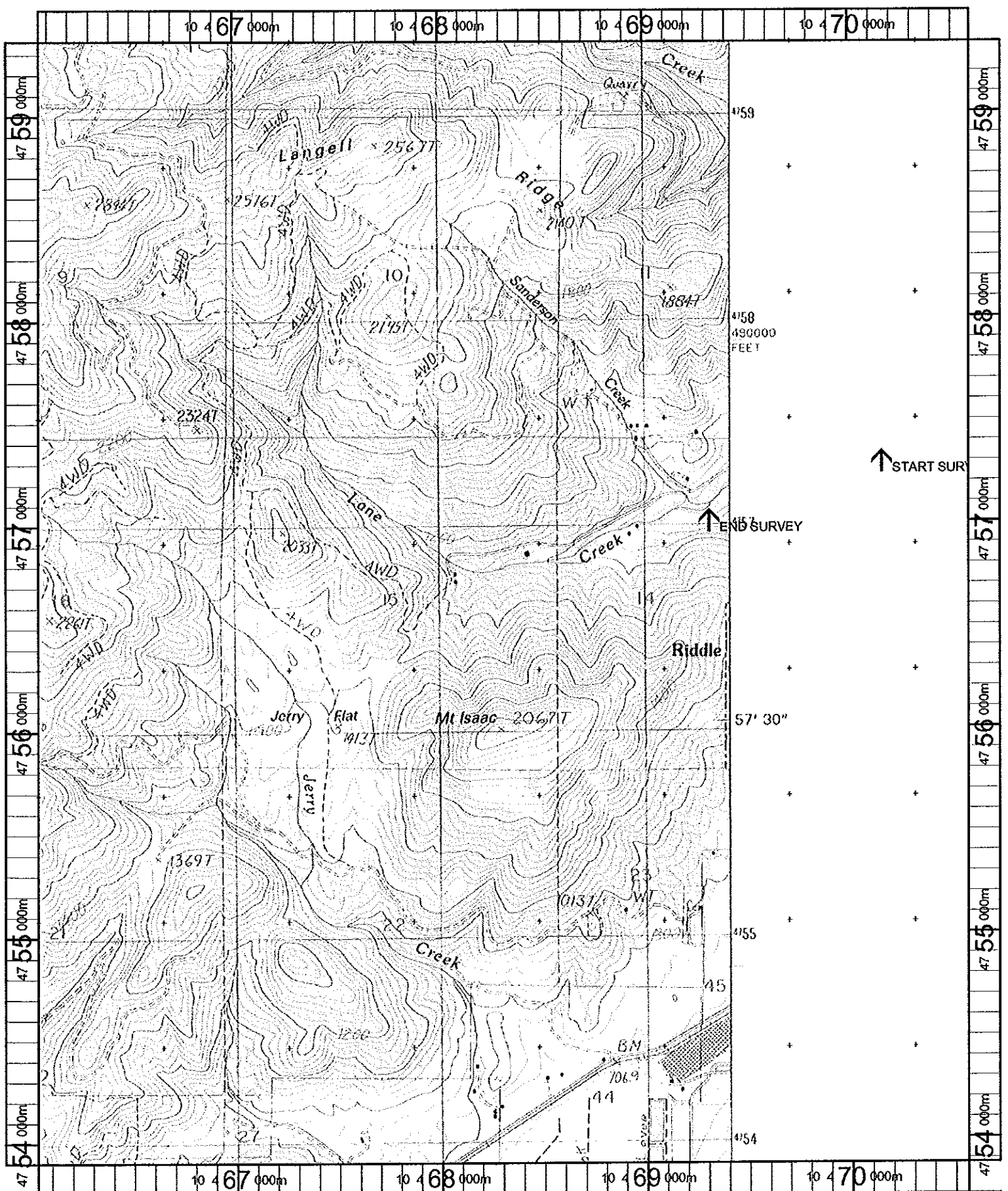
LANE CREEK: HABITAT DISTRIBUTION





Name: CANYONVILLE
 Date: 11/7/100
 Scale: 1 Inch equals 2000 feet

Location: 10 471122 E 4756745 N
 Caption: LANE CREEK RESTORATION SITE - SOUTH UMPQUA BASIN



Name: NICKEL MT
 Date: 11/7/100
 Scale: 1 inch equals 2000 feet

Location: 10 468211 E 4756605 N
 Caption: LANE CREEK RESTORATION SITE - SOUTH UMPQUA BASIN