

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

STREAM: Steampot Creek (N-237)
BASIN: Trask River
SURVEY TYPE: Pre-Tx
DATE: July 13, 2004
SURVEY CREW: Scott Young, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.2 km²
USGS MAPS: Dovre Peak
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Steampot Creek habitat survey extended 595 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.7 (range: 2.0-5.0). Land use for the reach was large (30-50 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 4.1 percent. Rapids (43%), dry channel (18%) and scour pools (17%) dominated stream habitat. Gravel (37%) and cobble (23%) dominated stream substrate. Wood volume was very high at 51.9 m³/100m.

COMMENTS:

There was one potential barrier to upstream fish migration in the surveyed length. This was a 1.4 m high step over bedrock at unit 30 (414 m).

The crew noted one long debris jam 75% of the way through the survey.

REACH 1

T02S-R07W-S28NW

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.7	VWI Range:	2 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	595	2,021	0
Secondary	127	467	5

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 2
Width: 3.8	Width: 4.9	6.9 (5 - 8.3)	10.0 (7 - 13)
Depth: 0.23	Height: 0.5	1.0 (1 - 1)	1.3 (1.2 - 1.3)

W:D ratio: 9.8
Stream Flow Type: MF
Average Unit Gradient: 4.1%
Water temperature (°C): 11.0 - 11.0

Entrenchment (ACW:FPW ratio): 1.4
Habitat Units/100m (total channel length): 6.1
Habitat Units/100m (primary channel length): 7.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	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:	5%	Reach avg: 90%
Undercut Banks:	5%	Range: 72 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	133	22.4
Volume (m ³):	309	51.9
Key pieces (>=12m x 0.60m):	12	2.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

STEAMPOT CREEK PRE-TX (N-237)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/13/2004

REACH 1		T02S-R07W-S28NW					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	Cbl	Bldr	Bdrk	
CASCADE/BOULDERS	1	21	6.0	0.10	127	0	5	5	50	20	0	20	
DRY CHANNEL	1	9	5.0	0.01	45	0	10	10	70	10	0	0	
POOL-LATERAL SCOUR	6	86	3.5	0.57	330	7	8	13	40	23	3	13	
POOL-PLUNGE	4	26	4.5	0.65	96	4	9	18	31	5	5	33	
PUDDLED UNIT	4	98	4.0	0.05	402	0	9	9	61	16	0	5	
RAPID/BOULDERS	18	396	2.8	0.15	1,076	73	3	8	33	33	14	9	
RIFFLE	4	65	4.3	0.18	299	14	5	11	54	18	8	5	
STEP/BEDROCK	3	4	4.5	0.07	21	0	0	2	0	0	0	98	
STEP/BOULDERS	2	14	5.5	0.13	81	19	0	8	15	30	48	0	
STEP/LOG	1	1	9.1	0.05	12	0	10	20	50	20	0	0	
Total:	44	722	3.8	0.23	2,488	117	Avg: 5	10	37	23	9	17	

HABITAT SUMMARY								
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m ²)	Percent	Number	(# / 100m ²)
Dammed & BW Pools	0	0			0	0.00%	0	0.0
Scour Pools	10	112	3.9	0.60	425	17.09%	11	2.6
Glides	0	0			0	0.00%	0	0.0
Riffles	4	65	4.3	0.18	299	12.00%	14	4.7
Rapids	18	396	2.8	0.15	1,076	43.24%	73	6.8
Cascades	1	21	6.0	0.10	127	5.11%	0	0.0
Step/Falls	6	20	5.6	0.08	114	4.59%	19	16.6
Dry	5	107	4.2	0.04	447	17.97%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	10	13.9	16.8
Pools >=1m deep:	1	1.4	1.7
Complex pools (LWD pieces>=3):	3	4.2	5.0
Pool frequency (channel widths/pool):	14.7		
Residual pool depth (avg):	0.54		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	447
Total conifers/1000 ft	203
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	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
15-30cm	0.0	1.3	1.0	0.3	0.7	0.0	1.7	1.7
30-50cm	0.0	3.7	1.0	0.0	0.7	1.3	1.7	5.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	5.7	2.0	0.3	1.3	1.3	1.1	2.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	82		78		79	
Shrub cover	19		15		12	
Grass/forb cover	73		72		88	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	50		67		83	
High terrace	17		0		17	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		17		0	
Roadbed/Railroad	17		17		0	
Riprap	0		0		0	
Surface slope (%)	19		30		41	

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
8	RT	3	HS	65	75	5	95	Conifer		1	1			
								Hardwood						
8	LF	1	LT	0	75	20	80	Conifer						10T 0450123 5024449
								Hardwood	2		4			
8	LF	2	RB	0	60	10	60	Conifer						ACCESS/ ATV RD
								Hardwood						
8	LF	3	HS	30	70	15	85	Conifer						
								Hardwood			1			
8	RT	2	HS	30	75	10	90	Conifer				2		
								Hardwood						
8	RT	1	HS	15	75	15	85	Conifer						
								Hardwood		1	2			
20	RT	3	HS	50	75	5	95	Conifer				1		
								Hardwood						
20	RT	2	HS	50	75	5	95	Conifer			1	1		
								Hardwood						
20	RT	1	HS	50	85	10	90	Conifer						
								Hardwood		1				
20	LF	3	HT	0	85	15	85	Conifer						
								Hardwood			3			
20	LF	2	TC	0	85	5	45	Conifer						MENSABI CR
								Hardwood		1				
20	LF	1	HT	0	85	10	90	Conifer						10T 0563363 5024517 3D
								Hardwood			3			
28	LF	3	HS	50	85	20	80	Conifer		1				
								Hardwood						
28	RT	3	HS	50	85	10	90	Conifer						
								Hardwood						
28	LF	1	RB	0	85	40	10	Conifer						10T 0456565 5024532
								Hardwood						
28	RT	1	HS	50	85	20	80	Conifer						
								Hardwood		2	2			
28	LF	2	HS	50	85	50	50	Conifer			1			
								Hardwood						
28	RT	2	HS	50	85	10	90	Conifer			1			
								Hardwood						

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 237 STEAMPOT CREEK PRE-TX (N-237)

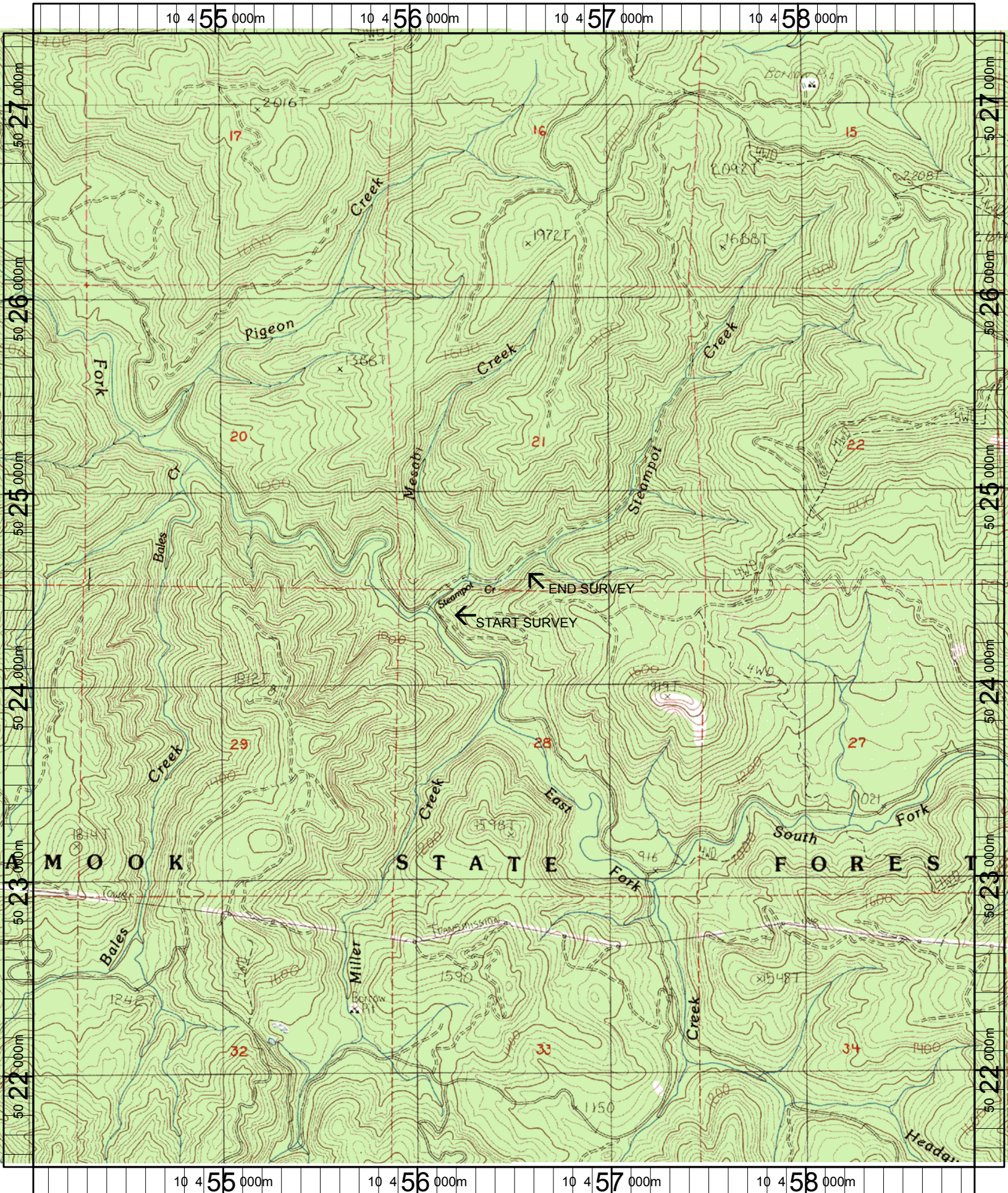
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	SB	00	5.5		10T 0456043 5024384 3D	SALMON SPAWNING SURVE
2	RI	00	24.5	CS/CS, BC	TEMP= 11 DEG C HT=.7	E FK TRASK ROAD
3	RB	00	41.6	RF		ATV CROSSING
6	RB	00	101.6	DJ		
8	RB	00	138.8			RIP T 1
9	RB	00	163.4	SS/		
12	SR	00	194.9		H=.34	
14	SR	00	202.9		H=.3	
16	LP	00	235.9			OLD REDD
17	RB	01	258.9	TJ/		MESASHI CR
18	RB	11	258.9			HAB SITE 2
20	RB	00	290.9			RIP T 2
23	SB	00	334.6		H=0.8	
25	SL	00	340.6	DJ	HT=.8	
26	RI	00	358.6			REDD
28	RB	00	407.6			RIP T 3
30	SR	00	413.6	PN	H=1.4	
31	CB	01	434.8	DJ		FLOW THROUGH WOOD IN
32	RB	01	459.8	DJ	THROUGH DEBRIS JAM	
33	RB	01	483	DJ		NICE POCKETS W/ IN DEBRI
34	PD	02	483	DJ		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 237 STEAMPOT CREEK PRE-TX (N-237)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
35	PD	02	483	DJ		
36	PD	02	483	DJ		
37	DC	03	483	DJ		
38	RI	00	492.4			NUMEROUS OTHER UNDEFI
44	RB	00	595	SS/		END



Name: DOVRE PEAK
 Date: 6/14/2004
 Scale: 1 inch equals 2000 feet

Location: 10 456461 E 5024435 N
 Caption: STEAMPOT CREEK RESTORATION SITE - TRASK BASIN