

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

STREAM: Steampot Creek (N-238)
BASIN: Trask River
SURVEY TYPE: Reference
DATE: June 29, 2005
SURVEY CREW: Ben Walczak, Scott Young
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.2 km²
USGS MAPS: Trask
ECOREGION: Coast Range Volcanics

GENERAL DESCRIPTION:

The Steampot Creek habitat survey extended 437 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.4 (range: 1.5-3.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.4 percent. Rapids (61%) and scour pools (30%) dominated stream habitat. Sand (34%), gravel (27%) and cobble (24%) dominated stream substrate. Wood volume was moderate at 28.7 m³/100m.

COMMENTS:

There was one potential barrier to upstream fish migration in the surveyed length. This was a 1.1 m step over log at unit 10 (132 m).

REACH 1

T02S-R07W-S21SW

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	2.4	VWI Range:	1.5 - 3

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 Channel	437	1,893	0
Secondary Channel	32	16	2
Off-Channel Units	12	12	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 4.2	Width: 6.4	8.6 (6.3 - 12.3)	9.7 (7.9 - 11.4)
Depth: 0.35	Height: 0.4	0.7 (0.6 - 0.8)	1.0 (0.8 - 1.2)

W:D ratio: 18.4
 Stream Flow Type: MF
 Average Unit Gradient: 3.4%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 7.9
 Habitat Units/100m (primary channel length): 8.7

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 89%
Undercut Banks:	4%	Range: 81 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	103	23.6
Volume (m ³):	125	28.7
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPT OF FISH AND WILDLIFE

STEAMPOT CREEK REFERENCE (1-NC, 238)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

6/29/2005

REACH 1		T02S-R07W-S21SW					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/BEDROCK	1	10	1.0	0.10	10	0	0	0	0	0	0	100
POOL-ISOLATED	2	2	1.0	0.28	2	0	55	40	5	0	0	0
POOL-LATERAL SCOUR	10	101	4.3	0.66	429	2	5	58	17	13	1	6
POOL-PLUNGE	3	27	5.6	0.77	154	0	10	67	12	5	0	5
PUDDLED UNIT	2	32	0.5	0.20	16	0	18	64	10	8	0	0
RAPID/BOULDERS	14	283	4.2	0.17	1,169	3	0	10	42	44	1	3
RIFFLE	1	11	4.3	0.10	48	0	0	10	45	35	0	10
STEP/BEDROCK	1	5	6.0	0.10	32	0	0	0	0	0	0	100
STEP/COBBLE	1	2	5.0	0.10	8	0	0	0	40	60	0	0
STEP/LOG	3	7	7.2	0.20	52	0	0	49	39	7	0	5
Total:	38	480	4.2	0.35	1,921	5	Avg: 6	34	27	24	1	9

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	2	2	1.0	0.28	2	0.10%	0	0.0	
Scour Pools	13	128	4.6	0.68	583	30.35%	2	0.3	
Glides	0	0			0	0.00%	0	0.0	
Riffles	1	11	4.3	0.10	48	2.52%	0	0.0	
Rapids	14	283	4.2	0.17	1,169	60.89%	3	0.3	
Cascades	1	10	1.0	0.10	10	0.52%	0	0.0	
Step/Falls	5	14	6.5	0.16	92	4.79%	0	0.0	
Dry	2	32	0.5	0.20	16	0.82%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	15	31.2	34.3
Pools >=1m deep:	2	4.2	4.6
Complex pools (LWD pieces>=3):	8	16.7	18.3
Pool frequency (channel widths/pool):	5.0		
Residual pool depth (avg):	0.58		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

STEAMPOT CREEK REFERENCE
GCG: 1-NC SITE ID: 238

Survey Date 6/29/2005
Report Date: 4/26/2006

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	224
Total conifers/1000 ft	142
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	1.3	0.0	0.3	0.0	0.0	0.0	1.7
15-30cm	0.3	0.7	0.0	0.7	1.0	0.3	1.3	1.7
30-50cm	0.0	0.3	0.3	0.0	0.7	0.0	1.0	0.3
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	0.3	2.3	0.3	1.0	1.7	0.3	0.8	1.2

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	72	66	63
Shrub cover	37	32	27
Grass/forb cover	63	68	73

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	83	50	100
High terrace	0	0	0
Low terrace	17	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	50	0
Riprap	0	0	0
Surface slope (%)	43	31	80

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

3 transects

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

Total hardwoods/1000	224
Total conifers/1000 ft	142
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	1.7
15-30cm	1.3	1.7
30-50cm	1.0	0.3
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

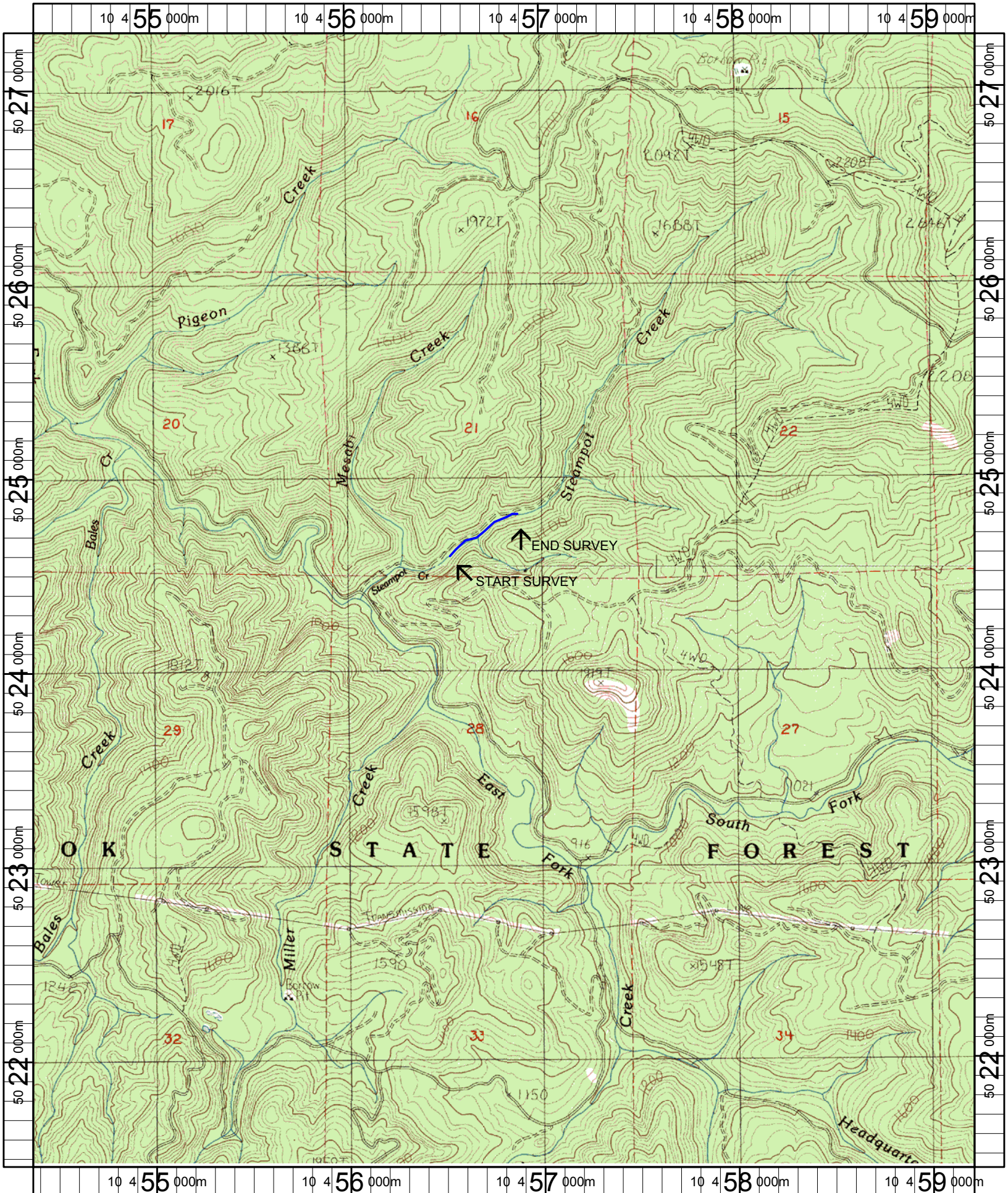
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
8	LF	1	HS	80	70	60	40	Conifer		1					POOR GPS COVERAGE
								Hardwood	2						
8	RT	3	HS	80	40	70	30	Conifer							
								Hardwood							
8	RT	2	HS	70	55	60	40	Conifer							
								Hardwood	1						
8	RT	1	HS	70	75	60	40	Conifer							
								Hardwood	2						
8	LF	2	RB	0	60	30	70	Conifer							
								Hardwood							
8	LF	3	HS	65	60	40	60	Conifer		2					
								Hardwood	1						
18	RT	1	HS	70	65	20	80	Conifer							
								Hardwood							
18	RT	2	HS	80	70	10	90	Conifer			1				
								Hardwood							
18	RT	3	HS	80	70	10	90	Conifer							
								Hardwood							
18	LF	1	LT	0	70	20	80	Conifer							2D 0456681/50247 96
								Hardwood		1					
18	LF	2	RB	0	60	30	70	Conifer							
								Hardwood							
18	LF	3	HS	95	55	10	90	Conifer		1					
								Hardwood							
33	LF	1	HS	25	80	30	70	Conifer							POOR GPS COVERAGE
								Hardwood	2						
33	LF	2	RB	0	75	20	80	Conifer							
								Hardwood	2						
33	LF	3	HS	85	80	10	90	Conifer			1				
								Hardwood							
33	RT	1	HS	15	70	30	70	Conifer							
								Hardwood							
33	RT	2	HS	35	75	40	60	Conifer							
								Hardwood							
33	RT	3	HS	75	70	20	80	Conifer			1				
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 1-NC SITE ID: 238 STEAMPOT CREEK REFERENCE

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	25		POOR GPS AT START	
4	SR	00	61.1		H=0.65M	
5	LP	00	72.6			OLD CULVERT IN CREEK
8	RB	00	120.9		RIPARIAN 1, POOR GPS	
9	PP	00	129.8	DJ, PN		
10	SL	00	132.3		H=1.1M	
13	CR	11	152.1		ACW 1.5M	
18	IP	10	224.5		RIPARIAN 2	
21	PP	00	245.1			UNDERCUT CREATED BY LO
22	SL	00	248.1		H=0.9M	
26	SL	00	276.95		H=0.4M	
28	SC	00	287.75		H=0.25M	
32	RB	01	347.25	SS/		
33	PD	02	347.25		RIPARIAN 3, POOR GPS	
34	LP	00	358.15		PHOTO 6	
38	RB	00	436.75		POOR GPS	END SURVEY



Name: DOVRE PEAK
 Date: 6/9/2005
 Scale: 1 inch equals 2000 feet

Location: 10 456805 E 5024365 N
 Caption: STEAMPOT CREEK REFERENCE RESTORATION SITE - TRASK BASIN