

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: June 29, 2005
SURVEY CREW: Ben Walczak, Scott Young
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.2 km²
USGS MAPS: Trask, Dovre Peak
ECOREGION: Coast Range Volcanics

GENERAL DESCRIPTION:

The Steampot Creek habitat survey extended 609 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.1 (range: 1.3-4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 4.0 percent. Rapids (56%) and scour pools (28%) dominated stream habitat. Gravel (32%), sand (27%) and cobble (25%) dominated stream substrate. Wood volume was low at 18.7 m³/100m.

COMMENTS:

There were two potential barriers to upstream fish migration in the surveyed length. One was a 1.5 m step over log at unit 26 (341 m) while the second was a 1.7 m bedrock step at unit 31 (416 m).

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	3.1	VWI Range:	1.3 - 4

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	609	2,520	0
Secondary Channel	54	108	2
Off-Channel Units	20	27	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 4.0	Width: 7.2	8.8 (7.8 - 10)	12.7 (9.8 - 14.9)
Depth: 0.31	Height: 0.5	0.9 (0.8 - 1)	1.1 (1 - 1.2)

W:D ratio: 15.8
 Stream Flow Type: MF
 Average Unit Gradient: 4.0%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.2
 Habitat Units/100m (total channel length): 6.6
 Habitat Units/100m (primary channel length): 7.4

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: 88%
Undercut Banks:	6%	Range: 78 - 92

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	149	24.5
Volume (m ³):	114	18.7
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

STEAMPOT CREEK PRE-TX (1-NC, 237)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

6/29/2005

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	25	5.0	0.20	125	0	0	11	39	44	0	6
POOL-BACKWATER	2	5	1.5	0.35	8	0	13	68	11	8	0	0
POOL-LATERAL SCOUR	10	138	4.2	0.63	585	4	4	47	24	17	2	6
POOL-PLUNGE	3	17	7.2	0.60	122	0	7	65	14	7	0	8
POOL-TRENCH	1	10	3.0	0.60	31	0	0	5	11	11	0	74
PUDDLED UNIT	2	37	1.6	0.20	65	0	5	21	54	21	0	0
RAPID/BOULDERS	19	387	3.8	0.16	1,492	50	1	15	39	40	2	4
RIFFLE	3	59	3.2	0.18	198	4	0	22	54	20	2	2
STEP/BEDROCK	3	3	4.8	0.10	18	0	0	0	0	0	0	100
STEP/LOG	1	2	8.0	0.10	12	0	0	11	78	11	0	0
Total:	45	682	4.0	0.31	2,655	58	Avg: 3	27	32	25	2	12

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	5	1.5	0.35	8	0.30%	0	0.0	
Scour Pools	14	165	4.8	0.62	737	27.77%	4	0.5	
Glides	0	0			0	0.00%	0	0.0	
Riffles	3	59	3.2	0.18	198	7.46%	4	2.0	
Rapids	19	387	3.8	0.16	1,492	56.19%	50	3.4	
Cascades	1	25	5.0	0.20	125	4.71%	0	0.0	
Step/Falls	4	5	5.6	0.10	30	1.13%	0	0.0	
Dry	2	37	1.6	0.20	65	2.44%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	16	23.4	26.3
Pools >=1m deep:	1	1.5	1.6
Complex pools (LWD pieces>=3):	4	5.9	6.6
Pool frequency (channel widths/pool):	6.0		
Residual pool depth (avg):	0.51		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

STEAMPOT CREEK PRE-TX
GCG: 1-NC SITE ID: 237

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

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 2 transects

Total hardwoods/1000	549
Total conifers/1000 ft	0
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	1.5	0.0	2.0	0.0	2.0	0.0	5.5
15-30cm	0.0	0.5	0.0	0.0	0.0	1.0	0.0	1.5
30-50cm	0.0	0.0	0.0	1.0	0.0	1.0	0.0	2.0
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	2.0	0.0	3.0	0.0	4.0	0.0	3.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	70		68		64	
Shrub cover	29		43		46	
Grass/forb cover	66		58		54	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	25		25		50	
High terrace	50		50		50	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	25		0		0	
Roadbed/Railroad	0		25		0	
Riprap	0		0		0	
Surface slope (%)	18		15		31	

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

2 transects

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

Total hardwoods/1000	549
Total conifers/1000 ft	0
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	5.5
15-30cm	0.0	1.5
30-50cm	0.0	2.0
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

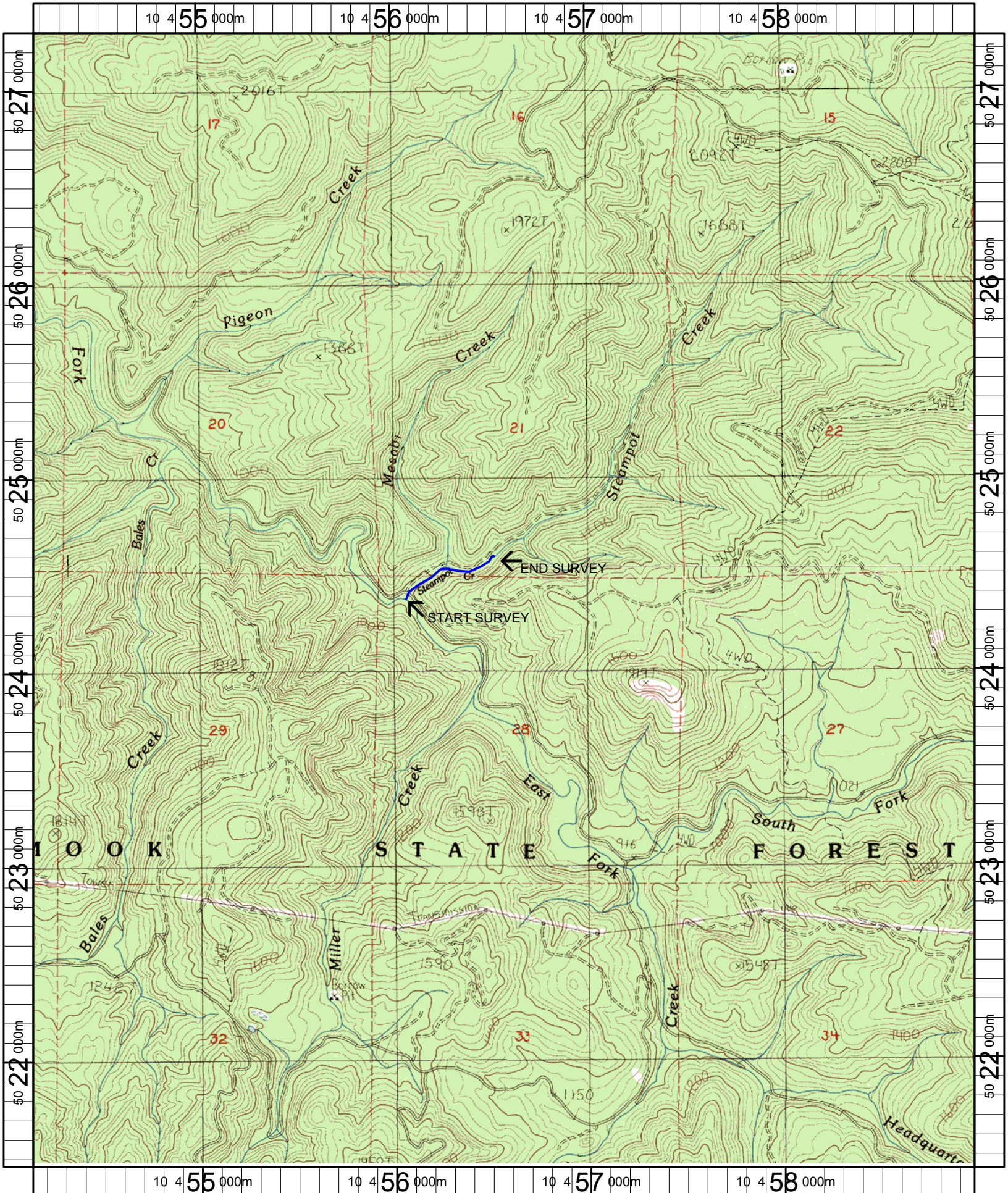
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
7	LF	3	HS	65	60	35	65	Conifer							
								Hardwood		1	1				
7	LF	2	RB	0	60	35	65	Conifer							
								Hardwood	3						
7	RT	1	HT	0	70	50	50	Conifer							
								Hardwood							
7	RT	2	HT	0	70	60	40	Conifer							
								Hardwood				1			
7	RT	3	HT	0	60	60	40	Conifer							
								Hardwood	1	1					
7	LF	1	HT	0	70	35	65	Conifer							2D
								Hardwood	3						0456196/50244
															55
19	LF	2	HT	0	75	65	35	Conifer							
								Hardwood							
19	LF	3	HT	0	75	60	40	Conifer							
								Hardwood				1			
19	RT	1	HS	70	70	10	90	Conifer							
								Hardwood		1					
19	RT	3	HS	60	60	30	70	Conifer							
								Hardwood	3						
19	RT	2	HS	60	65	10	90	Conifer							
								Hardwood	1			1			
19	LF	1	SC	0	70	20	60	Conifer							
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	24.3		START AT CONFLUENCE	
2	LP	00	43.1	BC	FORK TRASK RIVER	
6	LP	00	110	RF		
7	RB	00	135		RIPARIAN 1	
11	SR	00	180.7		H=0.3M	
13	SR	00	191.6		H=0.25M	
16	LP	00	228.9			UNDERCUT UNDER LOG
17	RB	01	252.6	TJ/		
18	RB	11	252.6		ACW 3M, MESABI CREEK	
19	LP	01	265.9		RIPARIAN 2	
26	SL	00	340.7	DJ, PN	H=1.5M	
30	PP	00	414.1		RIPARIAN 3	
31	SR	00	415.85	PN	H=1.7M	
34	RB	01	465.85	DJ		SUBTERRANEAN FLOWS IN
35	RB	01	480.15	DJ		
45	LP	00	608.55			END SURVEY



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

Location: 10 456569 E 5024367 N
 Caption: STEAMPOT CREEK RESTORATION SITE - TRASK BASIN