

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: July 13, 2004
SURVEY CREW: Scott Young, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.2 km²
USGS MAPS: Trask
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Steampot Creek habitat survey extended 411 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.3 (range: 2.0-2.5). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 3.8 percent. Rapids (51%) and scour pools (31%) dominated stream habitat. Gravel (51%) and cobble (21%) dominated stream substrate. Wood volume was very high at 70.6 m³/100m.

COMMENTS:

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

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	2.3	VWI Range:	2 - 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	411	1,261	0
Secondary	14	10	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 3.2	Width: 5.3	7.6 (5 - 9.1)	7.6 (7 - 8.2)
Depth: 0.33	Height: 0.5	0.9 (0.9 - 1)	1.2 (1 - 1.3)

W:D ratio: 11.3

Stream Flow Type: MF

Average Unit Gradient: 3.8%

Water temperature (°C): 11.0 - 11.0

Entrenchment (ACW:FPW ratio): 1.5

Habitat Units/100m (total channel length): 8.0

Habitat Units/100m (primary channel length): 8.3

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 90%
Undercut Banks:	4%	Range: 56 - 97

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	142	34.5
Volume (m ³):	290	70.6
Key pieces (>=12m x 0.60m):	4	1.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

STEAMPOT CREEK REFERENCE (N-238)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/13/2004

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	0.5	0.05	5	0	5	5	0	0	0	90	
CASCADE/BOULDERS	2	24	2.8	0.08	57	0	3	5	45	23	3	23	
POOL-ISOLATED	1	1	0.5	0.20	0	0	20	20	60	0	0	0	
POOL-LATERAL SCOUR	8	75	3.6	0.68	258	5	7	11	50	15	3	14	
POOL-PLUNGE	4	27	5.0	0.79	134	2	6	15	50	19	1	9	
PUDDLED UNIT	1	3	1.5	0.05	5	0	10	20	70	0	0	0	
RAPID/BOULDERS	11	230	2.7	0.13	643	32	1	7	51	33	5	4	
RIFFLE	3	41	1.9	0.13	82	0	3	7	68	15	0	7	
STEP/BEDROCK	1	5	6.0	0.05	28	0	0	0	10	10	0	80	
STEP/COBBLE	1	7	6.5	0.05	46	0	0	5	45	50	0	0	
STEP/LOG	1	3	5.0	0.05	14	0	0	5	80	15	0	0	
Total:	34	425	3.2	0.33	1,272	39	Avg: 4	9	51	21	3	13	

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	1	1	0.5	0.20	0	0.02%	0	0.0
Scour Pools	12	102	4.1	0.72	392	30.83%	7	1.8
Glides	0	0			0	0.00%	0	0.0
Riffles	3	41	1.9	0.13	82	6.41%	0	0.0
Rapids	11	230	2.7	0.13	643	50.54%	32	5.0
Cascades	3	34	2.0	0.07	62	4.87%	0	0.0
Step/Falls	3	15	5.8	0.05	88	6.95%	0	0.0
Dry	1	3	1.5	0.05	5	0.39%	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:	13	30.6	31.6
Pools >=1m deep:	2	4.7	4.9
Complex pools (LWD pieces>=3):	7	16.5	17.0
Pool frequency (channel widths/pool):	6.2		
Residual pool depth (avg):	0.66		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	305
Total conifers/1000 ft	386
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-30cm	0.0	2.7	1.7	0.3	1.3	0.0	3.0	3.0
30-50cm	0.7	1.7	1.0	0.3	1.7	0.0	3.3	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	0.7	4.3	2.7	0.7	3.0	0.0	2.1	1.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	73		65		73	
Shrub cover	13		22		19	
Grass/forb cover	78		78		79	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		100		100	
High terrace	17		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	50		0		0	
Riprap	0		0		0	
Surface slope (%)	18		58		63	

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

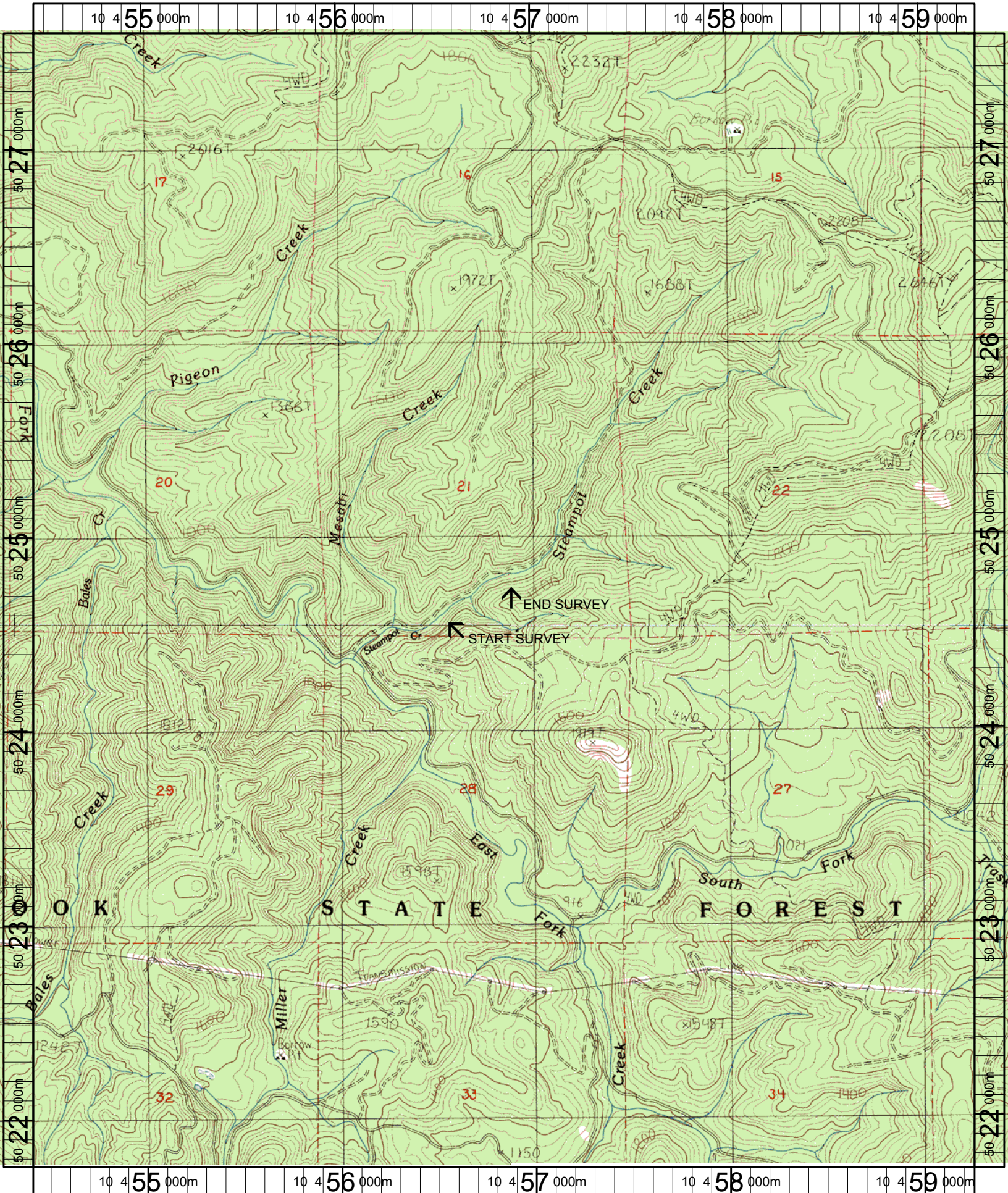
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
7	RT	2	HS	70	20	70	30	Conifer							
								Hardwood							
7	LF	1	RB	0	70	15	65	Conifer				2			
								Hardwood		2					
7	LF	2	HS	70	60	20	80	Conifer		1	1				
								Hardwood							
7	LF	3	HS	70	70	20	80	Conifer				1			
								Hardwood							
7	RT	1	HS	55	60	20	80	Conifer							10T 0456605
								Hardwood							5024685 3D
7	RT	3	HS	70	50	50	50	Conifer							
								Hardwood							
17	RT	1	HS	55	85	20	80	Conifer							
								Hardwood				2			
17	RT	3	HS	55	85	10	90	Conifer				2			
								Hardwood							
17	LF	1	RB	0	60	5	80	Conifer							10T 0456684
								Hardwood		1	2				5024720
17	LF	3	HS	65	70	10	80	Conifer		3					
								Hardwood							
17	RT	2	HS	55	85	10	90	Conifer				1			
								Hardwood							
17	LF	2	HS	65	55	10	90	Conifer		4					
								Hardwood							
28	LF	2	HS	25	85	5	95	Conifer							
								Hardwood		1	1				
28	LF	1	RB	0	80	10	70	Conifer							10T 0456774
								Hardwood							5024800 2D
28	RT	1	HT	0	85	10	90	Conifer							
								Hardwood		5	1				
28	RT	3	HS	65	85	20	80	Conifer				2			
								Hardwood							
28	RT	2	HS	65	85	15	85	Conifer				1			
								Hardwood							
28	LF	3	HS	50	80	5	95	Conifer		1					
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2002

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	6.4		NO COVERAGE	TEMP=11 DEG
2	RB	00	32.4		TEMP=11 DEG C AT 12:15	
5	SR	00	62.6		H=1.0	
6	LP	00	72.9			DISCARDED CULVERT ON RI
7	RB	00	94.9			RIP T 1
11	CB	00	128.3	PN, DJ		BEDROCK, LOGS
13	LP	01	145.1	/TJ		
16	LP	00	169.6			FRY
17	RI	01	194.6			RIP T 2
20	RB	00	238.8	/LS		
21	CB	00	255.7	DJ		
23	SC	00	270.6		H=1.2	
25	SL	00	281.4		H=.5	
28	RB	01	320.7	SS/		RIP T 3
33	RB	00	388.4			NICE 3.0 X.5X.45 POCKET AT
34	RB	00	411.3			END



Name: TRASK
 Date: 11/1/2004
 Scale: 1 inch equals 2000 feet

Location: 10 456846 E 5024667 N
 Caption: STEAMPOT CREEK REFERENCE SITE - TRASK BASIN