

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

STREAM: Steampot Creek (N-237)  
BASIN: Trask River  
SURVEY TYPE: Post-Tx  
DATE: July 11, 2006  
SURVEY CREW: Gordon Rose, Ben Walczak, Dave Stewart  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 6.2 km<sup>2</sup>  
USGS MAPS: Dovre Peak, Trask  
ECOREGION: Coast Range Volcanic

**GENERAL DESCRIPTION:**

The Steampot Creek habitat survey extended 626 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.6 (range: 1.5-3.0). Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 3.1 percent. Riffles (28%), scour pools (25%) and rapids (23%) dominated stream habitat. Gravel (37%) and cobble (25%) dominated stream substrate. Wood volume was very high at 55.3 m<sup>3</sup>/100m.

**COMMENTS:**

There was one potential barrier to upstream fish migration in the surveyed length. This was a high gradient cascade at unit 37 (429 m).

The crew noted several habitat structures during the survey.

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	2.6	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	626	2,978	0
Secondary Channel	161	482	4
Off-Channel Units	23	85	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 4	<u>First Terrace</u> n = 2
Width: 4.8	Width: 8.1	10.4 ( 9.5 - 11.3 )	12.4 ( 11.9 - 12.8 )
Depth: 0.27	Height: 0.5	1.0 ( 0.9 - 1 )	1.2 ( 1.2 - 1.2 )

W:D ratio: 17.0

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 7.0

Average Unit Gradient: 3.1%

Habitat Units/100m (primary channel length): 9.1

Water temperature (°C): -

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	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:	7%	Reach avg: 89%
Undercut Banks:	5%	Range: 89 - 89

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	240	38.4
Volume (m <sup>3</sup> ):	346	55.3
Key pieces (>=12m x 0.60m):	23	3.7

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

7/11/2006

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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	1	20	8.0	0.25	160	0	0	0	10	10	5	75
DRY CHANNEL	3	74	3.0	0.00	222	0	13	20	37	30	0	0
POOL-ISOLATED	1	3	1.5	0.60	5	0	30	30	30	10	0	0
POOL-LATERAL SCOUR	15	162	4.6	0.47	734	21	6	10	54	18	7	5
POOL-PLUNGE	4	22	6.4	0.63	126	12	4	8	46	11	14	18
POOL-STRAIGHT SCOUR	1	11	3.5	0.60	37	3	0	5	25	10	10	50
PUDDLED UNIT	1	43	4.0	0.05	172	0	0	10	45	45	0	0
RAPID/BOULDERS	12	221	3.8	0.15	812	117	0	3	19	44	23	10
RIFFLE	10	219	4.6	0.17	997	90	1	8	44	28	14	6
STEP/BEDROCK	3	10	5.7	0.12	55	8	0	0	0	7	17	77
STEP/BOULDERS	2	8	5.5	0.10	46	23	0	0	18	18	60	5
STEP/COBBLE	2	13	10.3	0.10	135	18	0	5	35	35	18	8
STEP/LOG	2	6	7.5	0.08	46	0	5	10	70	10	5	0
<b>Total:</b>	<b>57</b>	<b>810</b>	<b>4.8</b>	<b>0.27</b>	<b>3,545</b>	<b>292</b>	<b>Avg: 3</b>	<b>8</b>	<b>37</b>	<b>25</b>	<b>14</b>	<b>13</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	1	3	1.5	0.60	5	0.13%	0	0.0	
Scour Pools	20	194	4.9	0.51	896	25.28%	36	4.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	219	4.6	0.17	997	28.11%	90	9.0	
Rapids	12	221	3.8	0.15	812	22.90%	117	14.4	
Cascades	1	20	8.0	0.25	160	4.51%	0	0.0	
Step/Falls	9	37	7.1	0.10	282	7.96%	49	17.4	
Dry	4	117	3.3	0.01	394	11.12%	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:	21	25.9	33.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	8	9.9	12.8
Pool frequency (channel widths/pool):	4.8		
Residual pool depth (avg):	0.39		

OREGON DEPARTMENT OF FISH AND WILDLIFE  
HABITAT INVENTORY

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

Survey Date 7/11/2006

RIPARIAN ZONE

Report Date: 3/5/2007

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	183
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	20
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	1.0	0.0	1.0
15-30cm	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.3
30-50cm	0.3	1.3	1.3	0.0	1.7	0.0	3.3	1.3
50-90cm	0.0	0.3	0.0	0.0	0.3	0.0	0.3	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	1.7	1.7	0.0	2.0	1.3	1.3	1.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	76		68		70	
Shrub cover	61		51		49	
Grass/forb cover	33		37		38	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		83		100	
High terrace	50		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		17		0	
Roadbed/Railroad	17		0		0	
Riprap	0		0		0	
Surface slope (%)	21		43		47	

**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	183
Total conifers/1000 ft	244
Total conifers >20" dbh/1000 ft	20
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	1.0
15-30cm	0.3	0.3
30-50cm	3.3	1.3
50-90cm	0.3	0.3
>90cm	0.0	0.0

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**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		
10	LF	1	HT	0	90	60	40	Conifer							UTM 0456150-5024451-3D
								Hardwood			3	1			
10	RT	3	HS	35	90	10	80	Conifer			2				
								Hardwood							
10	RT	2	HS	25	80	40	60	Conifer			1				
								Hardwood							
10	RT	1	HT	0	80	60	40	Conifer			1				
								Hardwood							
10	LF	3	HS	25	60	30	20	Conifer							ROAD
								Hardwood							
10	LF	2	HS	25	60	30	20	Conifer							ROAD
								Hardwood							
25	RT	2	HS	65	60	30	50	Conifer				1			
								Hardwood							
25	LF	3	HS	14	70	5	90	Conifer							
								Hardwood	3	1					
25	LF	2	TC	0	70	5	90	Conifer							
								Hardwood							
25	LF	1	HT	0	80	5	75	Conifer							UTM 0456264-5024528-2D
								Hardwood			1				
25	RT	3	HS	65	60	50	40	Conifer				2			
								Hardwood							
25	RT	1	HS	60	60	40	40	Conifer							
								Hardwood							
45	RT	3	HS	65	50	100	0	Conifer				1			
								Hardwood							
45	RT	2	HS	65	45	100	0	Conifer							
								Hardwood							
45	RT	1	HS	65	75	100	0	Conifer							
								Hardwood							
45	LF	3	HS	75	90	100	0	Conifer					1		
								Hardwood							
45	LF	2	HS	75	90	100	0	Conifer			1	2			
								Hardwood							
45	LF	1	RB	0	70	100	0	Conifer							UTM 0456468-5024562-2D
								Hardwood							

# Comment Summary

## Restoration Monitoring Sites 2006

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	RI	00	32.5	CS/CS, BC	E. FK. BRIDGE	
6	LP	01	92.5	DJ		
7	RB	02	92.5	DJ		
8	SC	00	99.5	RF	H=0.65M	ATV TRAIL
10	RI	00	134.5		RIPARIAN #1	
14	SR	00	186.5		H=0.25M	
16	SR	00	201		H=0.45M	
17	LP	00	212.5	HS		
18	RB	00	221.5	HS		
21	RB	02	256.5	TJ/		
24	SL	00	264.5	DJ	H=0.45M	
25	LP	00	278.5	HS	FISH HABITAT SITE #3	
28	SB	00	325		H=0.60M	
30	SL	00	332	DJ	H=0.70M	
32	LP	00	372.5	HS		
35	SR	00	405.5		H=0.40M	
36	PP	00	408.5	HS		BOULDERS
37	CR	00	428.5	PN		
39	LP	01	450.5			TROUT FRY
45	RB	01	528		RIPARIAN #3	
51	RI	00	555	HS		

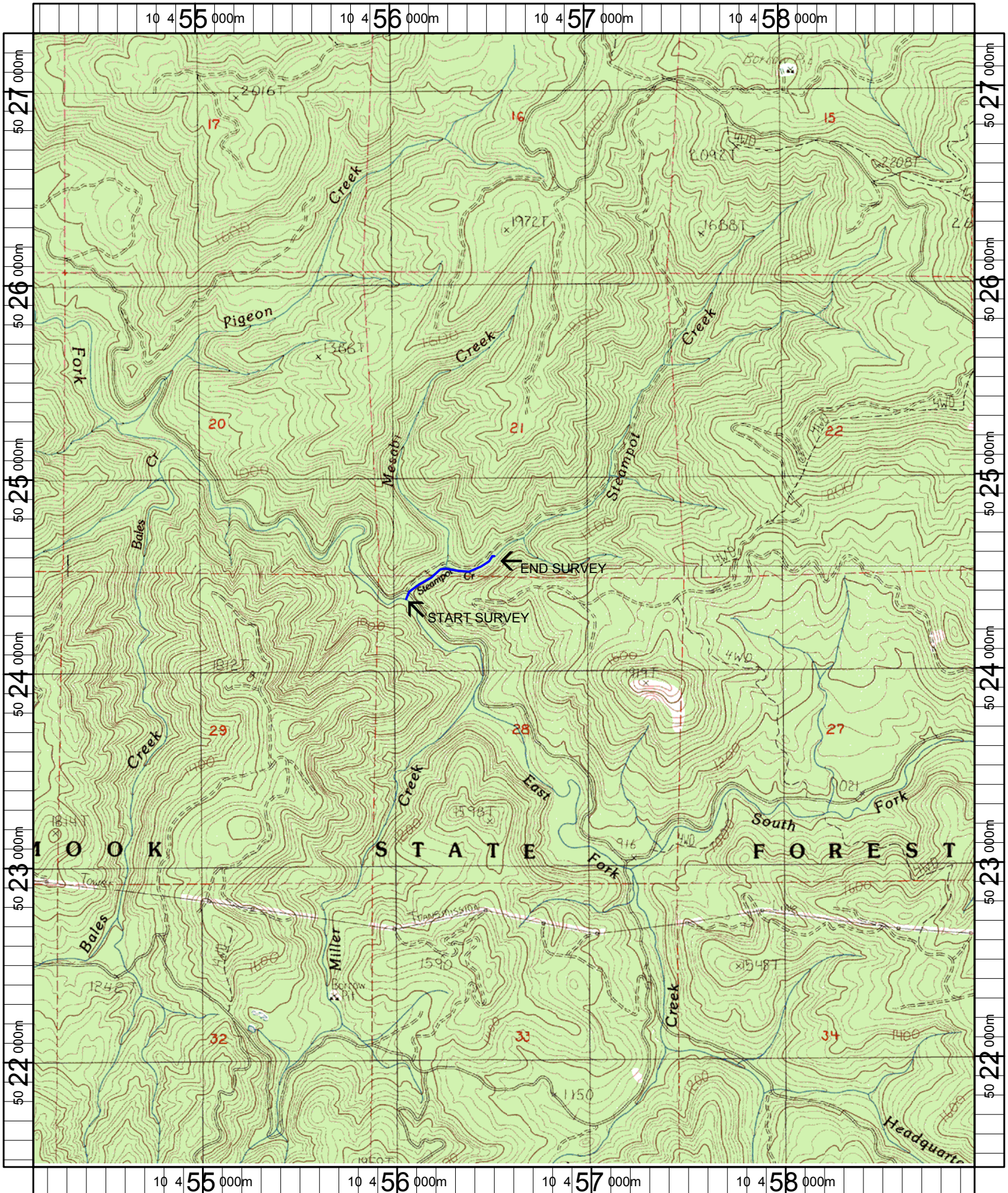
# Comment Summary

## Restoration Monitoring Sites 2006

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

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
52	LP	00	570.5			TROUT FRY
53	SC	00	576.5		H=0.30M	
56	LP	00	623.5	SS/		
57	SB	00	625.5		H=0.30M	





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