

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

STREAM: Clabber Creek Phase 2 (U-77)
BASIN: Smith River
SURVEY TYPE: Post-Tx
DATE: July 8, 2003
SURVEY CREW: Alex Higgins, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.1 km²
USGS MAPS: Gunter
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Clabber Creek Phase 2 habitat survey extended 517 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.5 (range: 2.5-13.0). Land use for the reach was second growth (15-30 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 2.4 percent. Riffles (38%) and scour pools (32%) dominated stream habitat. Gravel (38%) and sand (30%) dominated stream substrate. Wood volume was moderate at 20.9 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH 1

T21S-R07W-S06NW

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	5.5	VWI Range:	2.5 - 13

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	517	1,319	0
Secondary	29	26	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.7	Width	5.1	6.6	7.7
Depth	0.21	Height	0.4	0.8	1.5
		W:D ratio	12.3	Entrenchment	1.3

Stream Flow Type: MF Water temp (C): 13.0 - 13.0
 Avg. Unit Gradient: 2.4% Habitat Units/100m: 6.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	MT
Riparian Vegetation:	M30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 59%
Undercut Banks:	11%	Range: 47 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	107	20.7
Volume (m ³):	108	20.9
Key pieces (>=10m x 0.60m):	5	1.0

OREGON DEPARTMENT OF FISH AND WILDLIFE CLABBER CREEK PHASE 2 POST-TX (U-77)
HABITAT INVENTORY Report Date: 12/17/03 Survey Date: 7/8/03

REACH 1		T21S-R07W-S06NW					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	
CULVERT CROSSING	2	33	1.6	0.15	51	0	0	44	44	11	0	0	
GLIDE	2	14	3.3	0.23	41	2	0	35	28	21	16	0	
POOL-LATERAL SCOUR	11	113	3.9	0.43	403	2	0	54	35	8	1	1	
POOL-PLUNGE	1	7	3.2	0.60	24	0	0	19	38	0	5	38	
RAPID/BOULDERS	3	94	2.9	0.13	288	8	0	8	17	30	45	0	
RIFFLE	10	198	1.7	0.08	363	2	0	20	45	29	6	0	
RIFFLE W/ POCKETS	3	74	2.0	0.13	147	0	0	17	47	37	0	0	
STEP/BOULDERS	2	3	1.9	0.01	5	2	0	0	15	25	60	0	
STEP/COBBLE	2	8	1.9	0.06	15	0	0	15	60	25	0	0	
STEP/LOG	1	2	3.8	0.05	9	0	0	45	45	10	0	0	
Total:	37	546	2.7	0.21	1,345	16	Avg	0	30	38	20	10	1

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	12	120	3.9	0.45	427	31.72%	2	0.5
Glides	2	14	3.3	0.23	41	3.06%	2	4.9
Riffles	13	272	1.8	0.09	510	37.89%	2	0.4
Rapids	3	94	2.9	0.13	288	21.42%	8	2.8
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	5	13	2.3	0.04	28	2.11%	2	7.0
Dry	0	0			0	0.00%	0	0.0
Culverts	2	33	1.6	0.15	51	3.80%	0	0.0

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	12	22.0
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	8	14.7
Pool frequency (channel widths/pool):	8.9	
Residual pool depth (avg):	0.39	

STREAM SUMMARY

CLABBER CREEK PHASE 2 POST-TX (U-77)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
37	546	2.7	0.21	1,345	0	30	38	20	10	1	16

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	427	31.72%
Glides	41	3.06%
Riffles	510	37.89%
Rapids	288	21.42%
Cascades	0	0.00%
Step/Falls	28	2.11%
Dry	0	0.00%
Culverts	51	3.80%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	569
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	0.7	0.0	1.7	0.7	0.7	0.7	3.0
15-30cm	0.0	2.0	1.3	1.0	0.7	1.3	2.0	4.3
30-50cm	0.0	1.0	0.7	0.7	0.3	0.3	1.0	2.0
50-90cm	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	3.7	2.3	3.3	1.7	2.3	1.3	3.1

Canopy closure and ground cover

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Canopy closure	73	71	75
Shrub cover	33	15	3
Grass/forb cover	50	67	48

Predominant landform in each zone

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Hillslope	67	83	67
High terrace	33	17	0
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	33
Riprap	0	0	0
Surface slope (%)	18	25	23

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	569
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

<u>Diameter class (cm)</u>	<u>Zones 1-3</u>	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.7	3.0
15-30cm	2.0	4.3
30-50cm	1.0	2.0
50-90cm	0.3	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

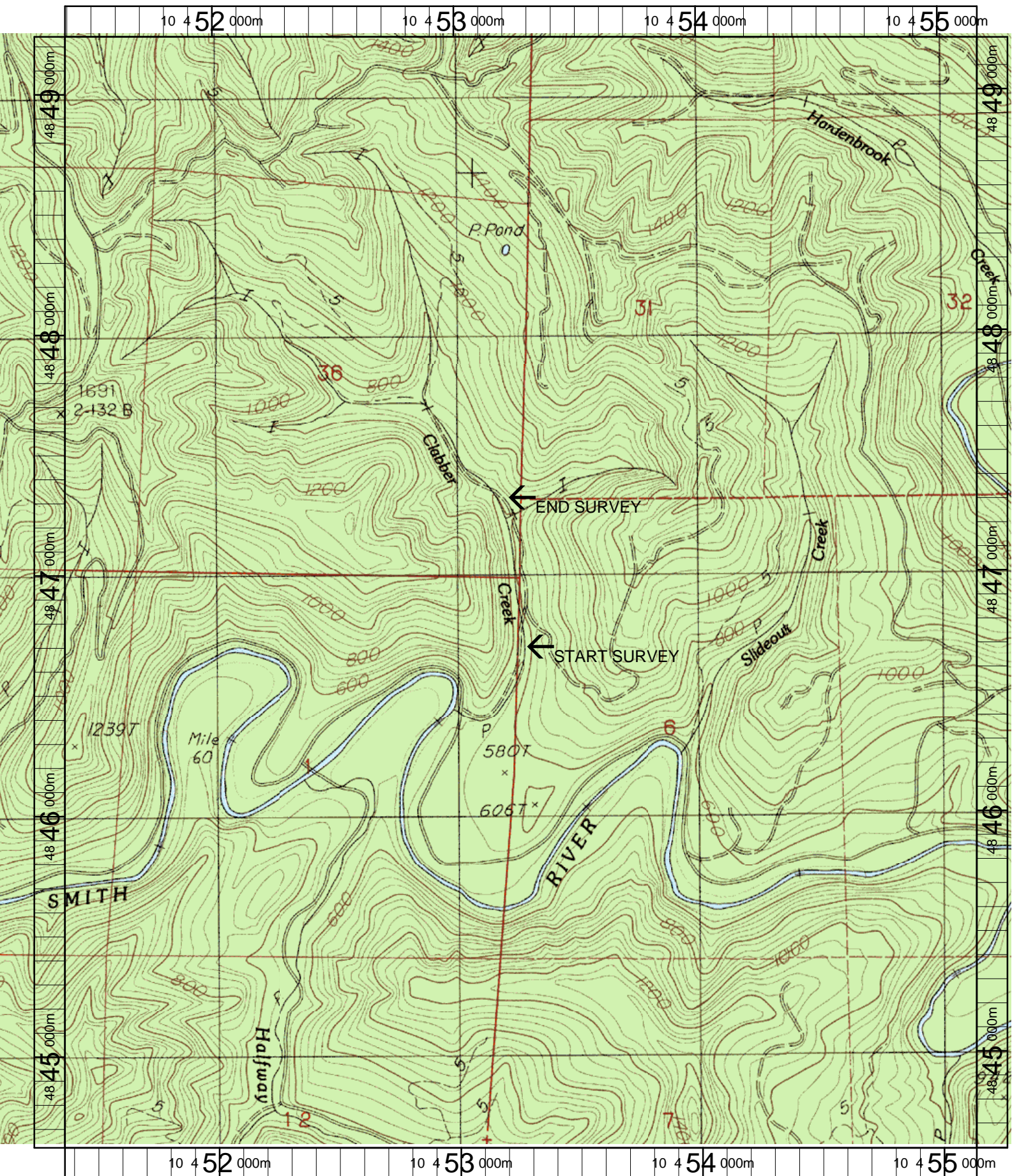
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LF	1	HS	25	70	20	60	Conifer							
								Hardwood			1				
10	RT	2	HS	30	70	0	60	Conifer		1			1		
								Hardwood	3						
10	RT	3	HS	35	80	0	60	Conifer	1	1					
								Hardwood		1	1				
10	LF	2	HS	30	70	10	70	Conifer							
								Hardwood		1					
10	RT	1	HT	0	75	30	60	Conifer							
								Hardwood		2	1				
10	LF	3	HS	35	80	0	40	Conifer							
								Hardwood							
16	RT	3	RB	0	75	5	10	Conifer	1	1	1				
								Hardwood							
16	LF	1	HS	35	80	30	60	Conifer							
								Hardwood				1			
16	LF	2	HS	35	75	0	85	Conifer		2					
								Hardwood							
16	LF	3	HS	40	80	10	65	Conifer							ESTIMATED (STEEP)
								Hardwood		1					
16	RT	1	HS	30	65	20	30	Conifer							
								Hardwood		1					
16	RT	2	HS	30	70	5	85	Conifer			1	1			
								Hardwood	1			1			
28	RT	3	RB	0	50	0	30	Conifer							
								Hardwood							
28	RT	2	HT	0	60	70	20	Conifer							
								Hardwood		2	1				
28	RT	1	HT	0	65	80	10	Conifer							
								Hardwood							
28	LF	3	HS	30	85	5	80	Conifer							
								Hardwood	2	2					
28	LF	1	HS	20	85	15	80	Conifer							
								Hardwood	2	3					
28	LF	2	HS	24	80	5	80	Conifer				1			
								Hardwood	1						

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **4-UMP** SITE ID: **77** **CLABBER CREEK PHASE 2 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>
1	RI	01	7.1	CC		
2	CC	01	23.6	CC		1.8 x 1.5 NO DROP
3	CC	02	23.6	CC		1.3x1.1 NO DROP
6	RI	00	56.8	HS		
7	LP	00	63.8	HS, DJ		
10	RI	00	155		ORANGE-SNORKLEPOOL	
14	SB	00	211.8		H=.45	
15	RI	00	238.7	HS		BLUEWHITE
16	RB	00	273.2			FLAG-RIP 2 UNIT 21
18	SB	00	279.4		H=.3	
19	LP	00	285.6	HS		
22	LP	00	329.2	HS		
25	RI	00	369.6	HS		FLAG-RIP 3 UNIT 33 7/12/01
28	LP	00	393.4	HS		
30	LP	00	417.6	HS		
32	LP	00	446.2			SPAWNING SURVEY SIGN-E
33	RP	01	468.1	/TJ		
34	RI	11	468.1		ACW=1.5	NO NAME ON TOPO
37	RB	00	517	HS /LA,LI		



Name: GUNTER
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 453258 E 4846923 N
 Caption: CLABBER CREEK PHASE 2 RESTORATION SITE - SMITH BASIN