

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

STREAM: Preacher Creek (MC-375)
BASIN: Alsea River
SURVEY TYPE: Pre-Tx
DATE: January 23, 2007
SURVEY CREW: Matthew Strickland, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 14.5 km²
USGS MAPS: Digger Mountain
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Preacher Creek habitat survey extended 3,016 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 15.4 (range: 8-20). Land use for the reach was young timber (3-15 cm dbh) and second growth timber (15-30 cm dbh). The average unit gradient was 0.8 percent. Scour pools (63%) and riffles (27%) dominated stream habitat. Gravel (52%) and sand (32%) dominated stream substrate. Wood volume was very low at 7.0 m³/100m.

COMMENTS:

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

10 debris jams were recorded. Elk and mink tracks, a Coho salmon carcass, Coho salmon fry, Rough-skinned newts, and Cutthroat trout were observed during the survey.

REACH 1

T15S-R09W-S12SE

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	15.4	VWI Range:	8 - 20

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	3,016	22,617	0
Secondary Channel	199	749	1
Off-Channel Units	192	395	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 6.3	Width: 8.3	12.5 (7 - 20.1)	16.0 (7.5 - 25.5)
Depth: 0.60	Height: 0.5	1.1 (1 - 1.1)	1.3 (1.2 - 1.4)

W:D ratio: 15.7
 Stream Flow Type: MF
 Average Unit Gradient: 0.8%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.5
 Habitat Units/100m (total channel length): 6.0
 Habitat Units/100m (primary channel length): 6.8

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	223	7.4
Volume (m ³):	210	7.0
Key pieces (>=12m x 0.60m):	9	0.3

OREGON DEPT OF FISH AND WILDLIFE

PREACHER CREEK PRE-TX (2-MC, 375)

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

1/23/2007

REACH 1		T15S-R09W-S12SE					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
DRY UNIT	1	8	1.5	0.00	12	0	0	10	80	10	0	0
POOL-BACKWATER	9	78	2.6	0.63	203	0	15	69	16	1	0	0
POOL-BEAVER DAM	2	134	7.5	0.95	1,255	0	20	70	5	5	0	0
POOL-ISOLATED	8	52	2.4	0.46	124	0	17	56	25	2	0	0
POOL-LATERAL SCOUR	95	1,813	7.9	0.96	14,718	0	6	41	44	7	1	2
POOL-PLUNGE	1	13	10.9	1.40	140	0	5	43	33	5	0	14
POOL-STRAIGHT SCOUR	1	14	1.6	0.55	22	0	14	76	10	0	0	0
RIFFLE	53	1,164	5.5	0.25	6,503	0	1	15	71	12	0	0
STEP/BEAVER DAM	3	3	3.8	0.05	11	0	19	73	4	0	0	4
STEP/BEDROCK	1	2	5.0	0.10	10	0	0	5	5	0	0	90
STEP/COBBLE	29	126	5.7	0.16	760	0	0	9	78	13	0	0
STEP/LOG	1	1	2.0	0.20	2	0	0	70	30	0	0	0
Total:	204	3,408	6.3	0.60	23,761	0	Avg: 5	32	52	8	0	2

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	19	264	3.0	0.59	1,582	6.66%	0	0.0	
Scour Pools	97	1,840	7.8	0.96	14,880	62.62%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	53	1,164	5.5	0.25	6,503	27.37%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	34	132	5.4	0.15	783	3.29%	0	0.0	
Dry	1	8	1.5	0.00	12	0.05%	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:	116	34.0	38.5
Pools >=1m deep:	43	12.6	14.3
Complex pools (LWD pieces>=3):	27	7.9	9.0
Pool frequency (channel widths/pool):	3.5		
Residual pool depth (avg):	0.74		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: **2-MC** SITE ID: **375** **PREACHER CREEK PRE-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	LP	00	14.6	/CS, BV	RIPRAP AT BC
6	LP	00	86.3	DJ	
7	LP	00	121.9	WL	TRACKS
12	LP	00	183.7	WL	ELK TRACK
14	LP	01	232.1	BV, DJ	
16	RI	00	266.8	/SS	
18	LP	00	295.1	BV	
20	BW	10	307.9	SS/	
22	LP	00	337.1	BV	
24	LP	00	351.2	BV	
31	IP	10	431.5	WL	RSN (2)
32	LP	00	444.5	BV, WL	ELK TRACK
36	LP	00	504.7	WL	ELK AND MINK TRACKS
46	SD	02	679.4	BD	
47	BP	02	679.4	BV	
48	SD	02	679.4	BD	
49	LP	00	713.4	BV	
50	SD	00	714.9	BD	
51	BP	01	831.9	BV	
54	LP	01	846.9	TJ/	
55	RI	11	846.9		ACW=3.2

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: **2-MC** SITE ID: **375** **PREACHER CREEK PRE-TX**

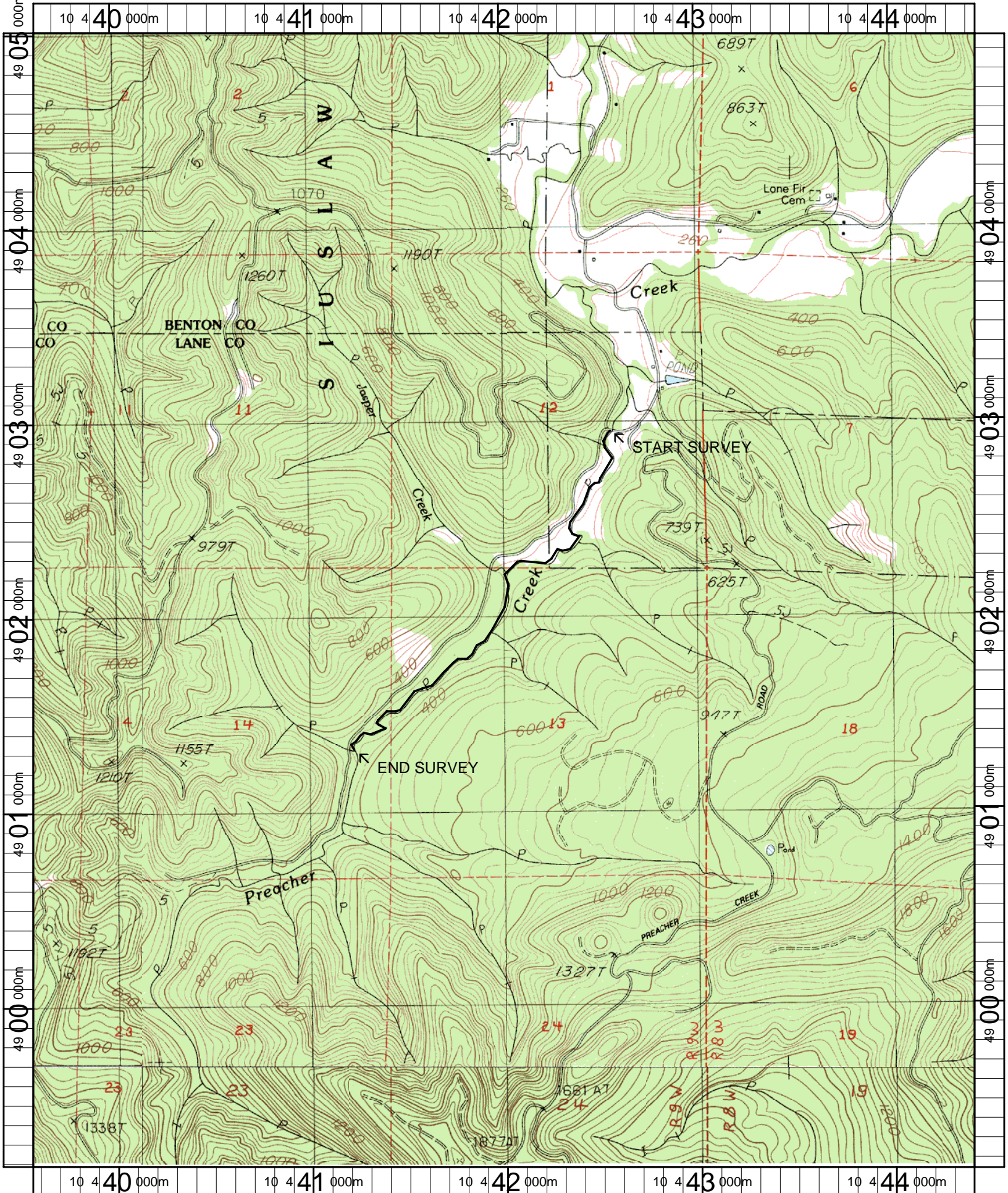
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
65	LP	00	974.6	BV	
67	SC	00	995.5	DJ	
85	RI	00	1232.5	WL	DEER (DOE)
86	LP	00	1251.8		COHO FRY
88	LP	01	1312.2	HS, /TJ	STREAM ENHANCEMENT PROJ LOGS
89	RI	11	1312.2		ACW=3.4
91	RI	00	1332.3		END SPAWN SURVEY
92	LP	00	1364.3	HS	
102	LP	02	1492.9	WL	RSN, COHO FRY
105	SL	00	1506.7	HS, DJ	
106	LP	00	1519.5	WL	ELK TRACKS
108	LP	00	1555.1	DJ	
109	RI	01	1581.6		GRAVEL BAR
110	IP	10	1581.6		COHO FRY
111	LP	00	1619.9	DJ, WL, BV	ELK TRACKS
122	LP	01	1838.6	/SS	
126	LP	01	1882.4	TJ/	
127	RI	11	1882.4	DJ	ACW=3.3, T=7.0
133	LP	00	1944.4	DJ	
137	LP	00	1991.5	DJ	
141	LP	00	2072.7	DJ	

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 2-MC SITE ID: 375 PREACHER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
160	LP	00	2366.4	HS	CUTTHROAT
180	RI	00	2645.8	WL	
181	LP	00	2669.5	BV, WL	
186	LP	01	2784.9	/TJ	
187	RI	11	2784.9		ACW=3.1
195	RI	00	2893.6	WL	ELK TRACKS
202	LP	00	2984.3		DEAD COHO - FRESH.
203	RI	01	3016.3	/TJ	
204	RI	11	3016.3		ACW=3.5 TEMP=7.0



Name: DIGGER MT (OR)
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0442004 E 4902080 N
 Caption: PREACHER CREEK RESTORATION SITE - ALSEA BASIN