

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

STREAM: Camp Creek (MC-11)  
BASIN: Siuslaw River  
SURVEY TYPE: Post-Tx  
DATE: March 8, 2006  
SURVEY CREW: Paul Jacobsen, Brian Bangs  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 6.8 km<sup>2</sup>  
USGS MAPS: High Point  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Camp Creek habitat survey extended 549 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9.4 (range: 6.0-15.0). Land use for the reach was young (3-15 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.8 percent. Scour pools (51%) and riffles (31%) dominated stream habitat. Sand (32%) and gravel (27%) dominated stream substrate. Wood volume was high at 34.3 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures during the survey.

Stream            Camp Creek (MC-11)  
 Basin             Siuslaw River  
 Treatment        Large Wood

	ODFW Benchmark		Pre 3/1/00	Post 3/8/01	Post 3/8/06		
Habitat Variable	Desirable	Undesirable					
% Pool Area	>35%	<10%	38.5	<b>62.0</b>	<b>56.3</b>		
Number of Pools			19	<b>27</b>	<b>25</b>		
Deep Pools/km (>1.0 m)			1.7	1.8	<b>3.4</b>		
% Off-Channel			3.2	1.9	2.3		
LWD – Pieces/100m	>20	<10	15.3	<b>20.9</b>	<b>27.7</b>		
LWD – Volume/100m	>30	<20	6.2	<b>30.9</b>	<b>34.3</b>		
LWD – Key Pieces/100m	>3	<1	0	0	<b>0.9</b>		
Large Wood Jams/km			5.7	<b>12.7</b>	<b>21.9</b>		
% Riffle Fines	<10	>20	11	14	<b>36</b>		
% Riffle Gravel	>35	<15	41	42	<b>28</b>		
% Bedrock			4	27	<b>38</b>		

**Bold** is noticeable change

Comments: Since the treatment was large wood assembled in complex jams, it is no surprise that there was an increase in those variables. What is important is that the large wood is being retained in the treated reach and is accumulating additional wood pieces and in more jams. Pool area, number of pools, and deep pools have all increased as compared to pre-treatment conditions. Riffle fines have increased, gravel decreased, and bedrock increased during that same period, although the change in gravel is small enough that it may be surveyor bias rather than real change.

REACH 1

T19S-R07W-S25SW

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	9.4	VWI Range:	6 - 15

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	549	2,121	0
Secondary Channel	6	13	0
Off-Channel Units	29	38	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.5	Width: 6.9	12.2 ( 6.5 - 18.9 )	17.0 ( 8.4 - 26.6 )
Depth: 0.35	Height: 0.6	1.2 ( 1.1 - 1.3 )	1.4 ( 1.2 - 1.5 )

W:D ratio: 11.6  
 Stream Flow Type: LF  
 Average Unit Gradient: 1.8%  
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.8  
 Habitat Units/100m (total channel length): 8.6  
 Habitat Units/100m (primary channel length): 9.1

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	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:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	152	27.7
Volume (m <sup>3</sup> ):	189	34.3
Key pieces (>=12m x 0.60m):	5	0.9

OREGON DEPT OF FISH AND WILDLIFE

CAMP CREEK POST-TX (2-MC, 11)

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

3/8/2006

REACH 1		T19S-R07W-S25SW					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/BOULDERS	1	5	0.5	0.05	2	0	10	10	10	10	0	60
POOL-BACKWATER	1	4	2.0	0.40	7	0	10	50	10	0	0	30
POOL-DAMMED	2	30	3.0	0.70	97	0	15	68	18	0	0	0
POOL-ISOLATED	1	3	1.2	0.55	3	0	50	50	0	0	0	0
POOL-LATERAL SCOUR	21	284	3.9	0.58	1,116	0	9	38	19	5	2	25
RAPID/BEDROCK	1	16	4.6	0.15	71	0	5	10	40	5	5	35
RAPID/BOULDERS	1	11	1.8	0.15	19	0	5	10	64	1	1	20
RIFFLE	10	182	3.3	0.14	671	0	4	32	28	9	1	26
STEP/BEDROCK	1	5	3.6	0.05	19	0	0	0	0	0	0	100
STEP/COBBLE	9	44	3.7	0.13	161	0	1	10	56	19	6	9
STEP/LOG	2	2	3.2	0.05	4	0	20	65	15	0	0	0
<b>Total:</b>	50	584	3.5	0.35	2,171	0	<b>Avg:</b> 8	32	27	8	2	22

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	4	36	2.3	0.59	107	4.91%	0	0.0	
Scour Pools	21	284	3.9	0.58	1,116	51.39%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	182	3.3	0.14	671	30.92%	0	0.0	
Rapids	2	26	3.2	0.15	91	4.17%	0	0.0	
Cascades	1	5	0.5	0.05	2	0.10%	0	0.0	
Step/Falls	12	51	3.6	0.11	185	8.51%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	25	42.8	45.5
Pools >=1m deep:	2	3.4	3.6
Complex pools (LWD pieces>=3):	12	20.6	21.8
Pool frequency (channel widths/pool):	3.4		
Residual pool depth (avg):	0.46		

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC**      SITE ID: **11**      **CAMP CREEK POST-TX**

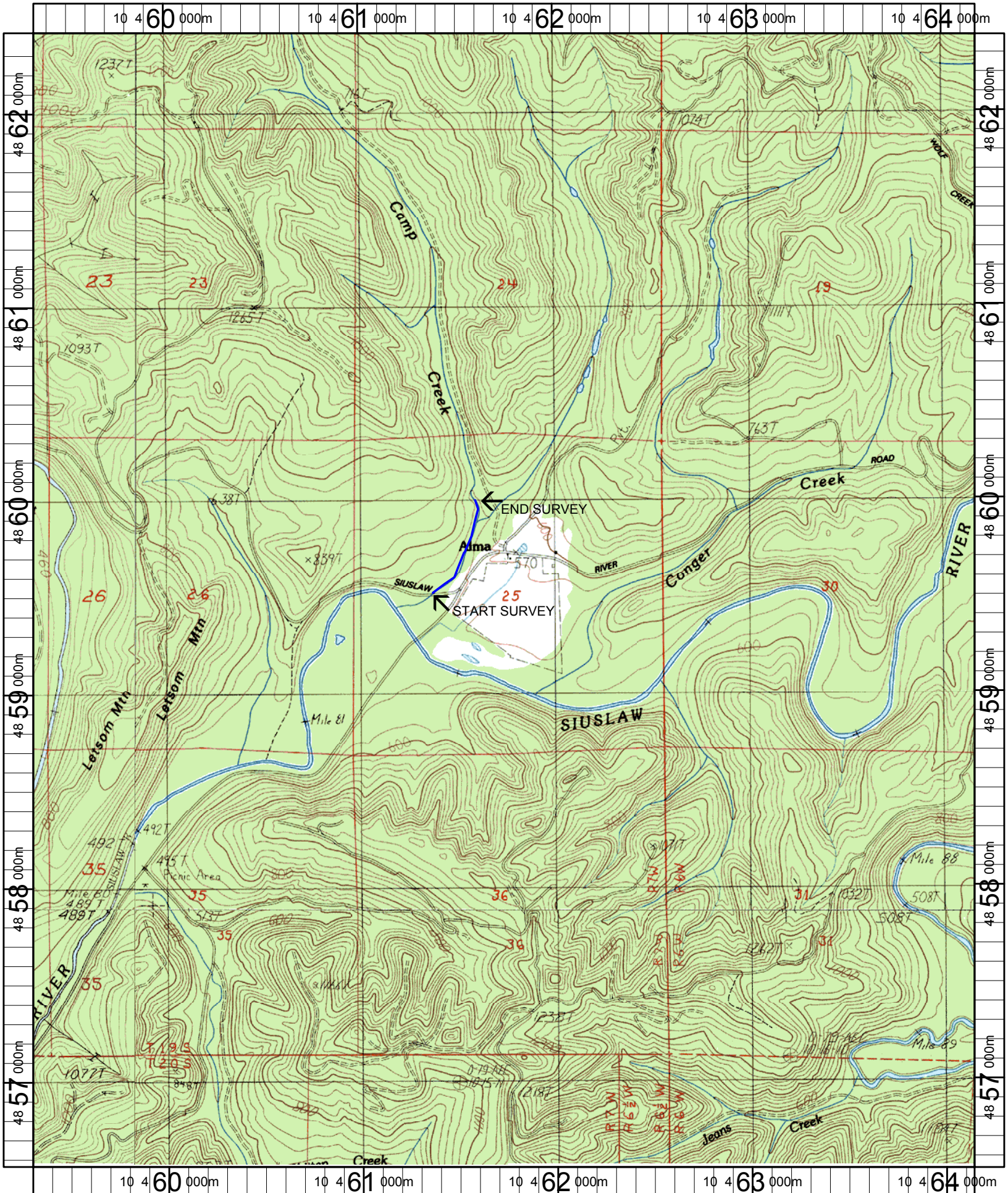
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
3	LP	01	19.3	TJ/		
8	SC	00	65.1	HS		
9	LP	01	97.5	BV	TROUT FRY	
11	RR	00	113	HS, BV		
14	LP	00	140.6	HS, BV		
16	LP	00	170	BV		
17	SC	00	173.6	BV		
18	LP	00	184.2	BV		
19	RI	00	204.4	BV		
20	LP	01	216.4	BV, TJ/		
22	LP	01	223.6	BV		
23	LP	02	223.6	BV		
24	LP	00	228.6	HS		
25	SC	00	230.6	BV	H = .15	
26	LP	00	252	HS		
27	RI	00	282.3	HS x 2		
30	RI	01	340.5	HS		
32	RI	00	362.8	BV		
34	LP	00	397.4	BV	SALMONID CARCASS	
37	SL	00	415.9	HS, DJ	H = 0.6	
40	LP	01	459.7	HS, TJ/	SPAWNING SURVEY SIGN	

# Comment Summary

## Restoration Monitoring Sites 2006

MONITORING AREA: 2-MC      SITE ID: 11      CAMP 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>
43	SL	00	467.8	DJ	H = 0.7	



Name: HIGH POINT  
 Date: 1/23/2006  
 Scale: 1 inch equals 2000 feet

Location: 10 461737 E 4859478 N  
 Caption: CAMP CREEK RESTORATION SITE - SIUSLAW BASIN