

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

STREAM: Jack Creek (S-188)  
BASIN: Chetco River  
SURVEY TYPE: Post-Tx  
DATE: February 23, 2004  
SURVEY CREW: Michael Scheu, Jeremiah Bernier  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 22.9 km<sup>2</sup>  
USGS MAPS: Mt. Emily  
ECOREGION: Coast Range California Extension

**GENERAL DESCRIPTION:**

The Jack Creek habitat survey extended 523 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.9 (range: 2.5-9.0). Land use for the reach was greenway and second growth (15-30 cm dbh) trees. The average unit gradient was 0.6 percent. Scour pools (65%) dominated stream habitat. Gravel (66%) and sand (18%) dominated stream substrate. Wood volume was low at 10.9 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.

REACH 1

T40S-R13W-S02NW

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	5.9	VWI Range:	2.5 - 9

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	523	4,843	0
Secondary	135	261	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 7.8	Width: 19.0	28.1 ( 11 - 48 )	26.5 ( 14 - 33.5 )
Depth: 0.71	Height: 0.8	1.6 ( 1.4 - 1.6 )	2.4 ( 1.8 - 3.5 )

W:D ratio: 24.4  
Stream Flow Type: MF  
Average Unit Gradient: 0.6%  
Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 1.5  
Habitat Units/100m (total channel length): 4.6  
Habitat Units/100m (primary channel length): 5.7

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	ST
Riparian Vegetation:	D15	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):	66	12.6
Volume (m <sup>3</sup> ):	57	10.9
Key pieces (>=12m x 0.60m):	6	1.1

**OREGON DEPARTMENT OF FISH AND WILDLIFE**

**JACK CREEK POST-TX (S-188)**

**HABITAT INVENTORY**

Report Date: 6/16/2004

Survey Date:

2/23/2004

**REACH 1**

**T40S-R13W-S02NW**

**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	7	0.7	0.10	5	0	0	25	75	0	0	0
POOL-BACKWATER	1	4	1.8	0.35	8	0	20	30	50	0	0	0
POOL-DAMMED	1	16	9.0	1.60	146	0	0	80	20	0	0	0
POOL-LATERAL SCOUR	11	380	8.4	1.21	3,010	0	6	21	64	1	8	0
POOL-PLUNGE	1	26	13.0	1.50	332	0	0	70	20	0	0	10
PUDDLED UNIT	1	37	1.3	0.40	48	0	70	30	0	0	0	0
RIFFLE	5	104	8.2	0.33	834	0	0	12	87	1	0	0
STEP/COBBLE	7	70	9.6	0.24	697	0	0	1	96	0	3	0
STEP/STRUCTURE	2	15	3.2	0.25	26	0	0	0	0	0	0	100
<b>Total:</b>	<b>30</b>	<b>658</b>	<b>7.8</b>	<b>0.71</b>	<b>5,104</b>	<b>0</b>	<b>Avg: 5</b>	<b>18</b>	<b>66</b>	<b>0</b>	<b>3</b>	<b>7</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	2	20	5.4	0.98	153	3.00%	0	0.0
Scour Pools	12	405	8.8	1.24	3,342	65.47%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	5	104	8.2	0.33	834	16.33%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	7	0.7	0.10	5	0.10%	0	0.0
Step/Falls	9	85	8.2	0.24	722	14.15%	0	0.0
Dry	1	37	1.3	0.40	48	0.94%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

**POOL SUMMARY**

	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	14	21.3	26.7
Pools >=1m deep:	11	16.7	21.0
Complex pools (LWD pieces>=3):	4	6.1	7.6
Pool frequency (channel widths/pool):	2.5		
Residual pool depth (avg):	0.86		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

**MONITORING AREA: 5-SC      SITE ID: 188      JACK CREEK POST-TX (S-188)**

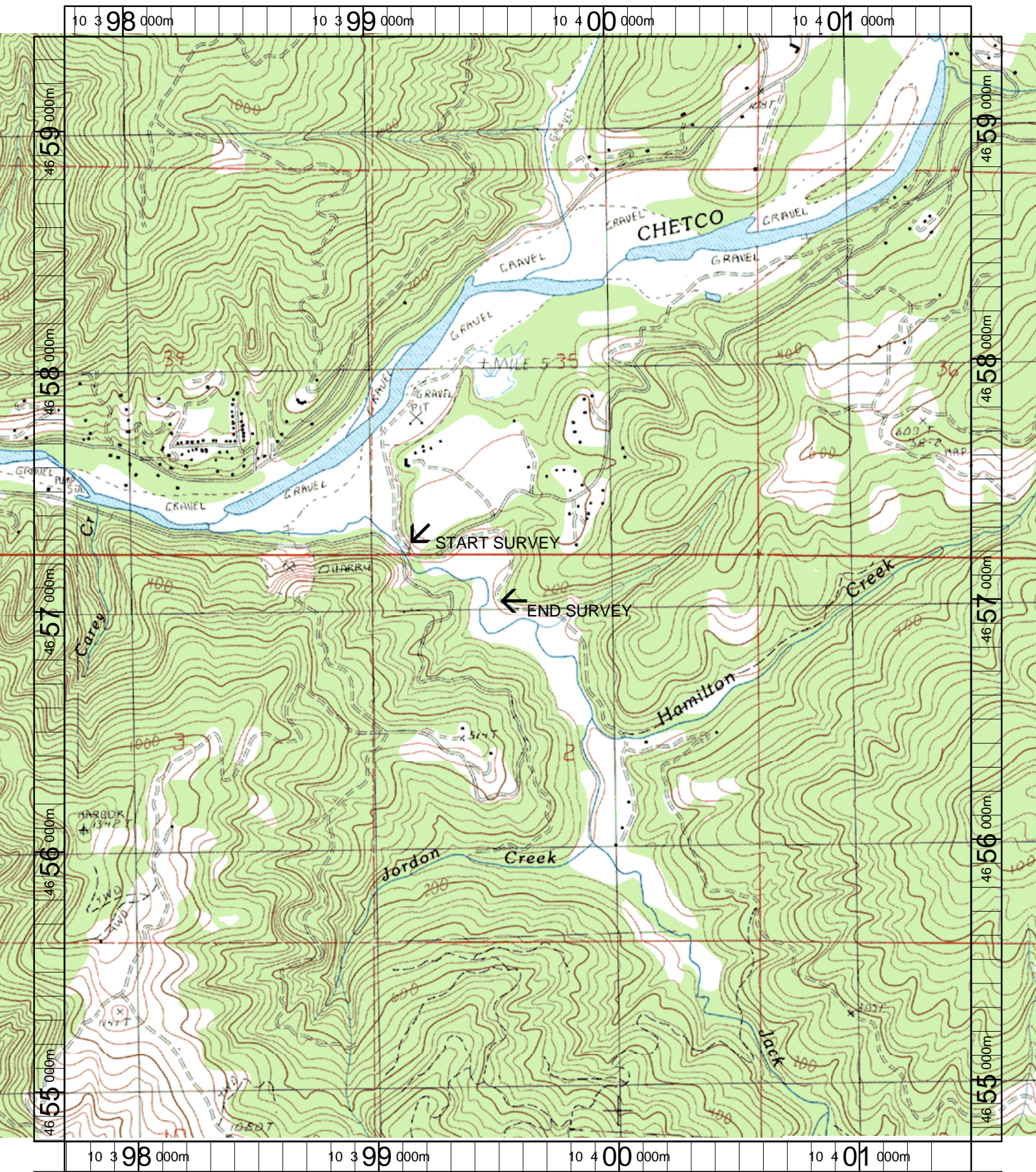
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	RI	00	9.5		STEELHEAD; SPAWNING	
3	SC	00	41.3	HS	SG=4	
4	LP	01	62.6	/TJ	NOT ON MAP	
5	CB	11	62.6		T=10 C; ACW=1.5	
6	BW	10	62.6	HS		
7	SC	00	69.4		SG=6	
8	LP	00	81.4	HS	7 LOGS	
9	SC	00	99.6		SG=8	
10	PP	00	125.1		BEDROCK-CONCRETE	
11	SS	01	126.8		H=1.1; BEDROCK-CONCR	
12	SS	02	126.8		FISH LADDER; BEDROCK-	
13	DP	00	143	CS1		
14	RI	01	168		STEELHEAD	
16	LP	01	225.1	HS	STEELHEAD	
17	RI	01	254.6	HS	SG=10	
18	LP	02	254.6	BV		
19	PD	02	254.6	BV		
20	LP	00	296	F, C ,BC	CS/CS; GOLF CART BRID	
22	LP	00	331.4	HS	2 CAB. RT WADS, 1 LOG,	
23	LP	00	406.4	HS, BV	REDD, 3 LOGS, BOULDER	
25	LP	00	432.9	HS	5 BOULDERS, 2 LOGS	

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 5-SC      SITE ID: 188      JACK CREEK POST-TX (S-188)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
26	RI	00	452.9	HS	2 CAB. RT WADS, 1 LOG,	
27	LP	00	488.9	CS/	3 STEELHEAD	
28	SC	00	497.4	HS	5 BOULDERS	
30	SC	00	523.4	2 REDDS		



Name: MT EMILY  
 Date: 6/11/2003  
 Scale: 1 inch equals 1666 feet

Location: 10 399607 E 4657072 N  
 Caption: JACK CREEK RESTORATION SITE - CHETCO BASIN