

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: March 14, 2005
SURVEY CREW: Jennifer Schmitt, Neil Jensen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 22.9 km²
USGS MAPS: Mount Emily
ECOREGION: Coast Range California Extension

GENERAL DESCRIPTION:

The Jack Creek habitat survey extended 471 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.7 (range: 1.1-15.0). Land use for the reach was greenway and mining. The average unit gradient was 1.2 percent. Scour pools (47%) and riffles (38%) dominated stream habitat. Gravel (71%) dominated stream substrate. Wood volume was low at 12.4 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

T40S-R13W-S35SW

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	7.7	VWI Range:	1.1 - 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	471	2,775	0
Secondary Channel	0	0	0
Off-Channel Units	7	26	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 5.6	Width: 12.9	14.3 (10.1 - 22.2)	16.8 (12.3 - 23.5)
Depth: 0.60	Height: 0.6	1.1 (1.1 - 1.18)	1.3 (1.2 - 1.4)

W:D ratio: 23.0
 Stream Flow Type: LF
 Average Unit Gradient: 1.2%
 Water temperature (°C): 9.5 - 9.5

Entrenchment (ACW:FPW ratio): 1.1
 Habitat Units/100m (total channel length): 4.5
 Habitat Units/100m (primary channel length): 5.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	MI
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):	70	14.9
Volume (m ³):	58	12.4
Key pieces (>=12m x 0.60m):	4	0.8

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/14/2005

REACH 1		T40S-R13W-S35SW					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
POOL-BACKWATER	1	7	3.7	0.80	26	0	15	40	45	0	0	0
POOL-LATERAL SCOUR	10	248	6.1	1.14	1,567	0	9	35	51	1	5	0
RAPID/BOULDERS	2	65	6.0	0.15	385	0	3	7	90	0	0	0
RIFFLE	9	213	5.4	0.21	1,208	0	3	8	88	0	2	0
RIFFLE W/ POCKETS	1	13	5.6	0.30	70	0	5	15	75	0	5	0
STEP/COBBLE	2	17	4.6	0.15	76	0	2	7	91	0	0	0
Total:	25	561	5.6	0.60	3,332	0	Avg: 6	20	71	0	3	0

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	1	7	3.7	0.80	26	0.77%	0	0.0	
Scour Pools	10	248	6.1	1.14	1,567	47.04%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	226	5.4	0.22	1,278	38.35%	0	0.0	
Rapids	2	65	6.0	0.15	385	11.56%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	2	17	4.6	0.15	76	2.28%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

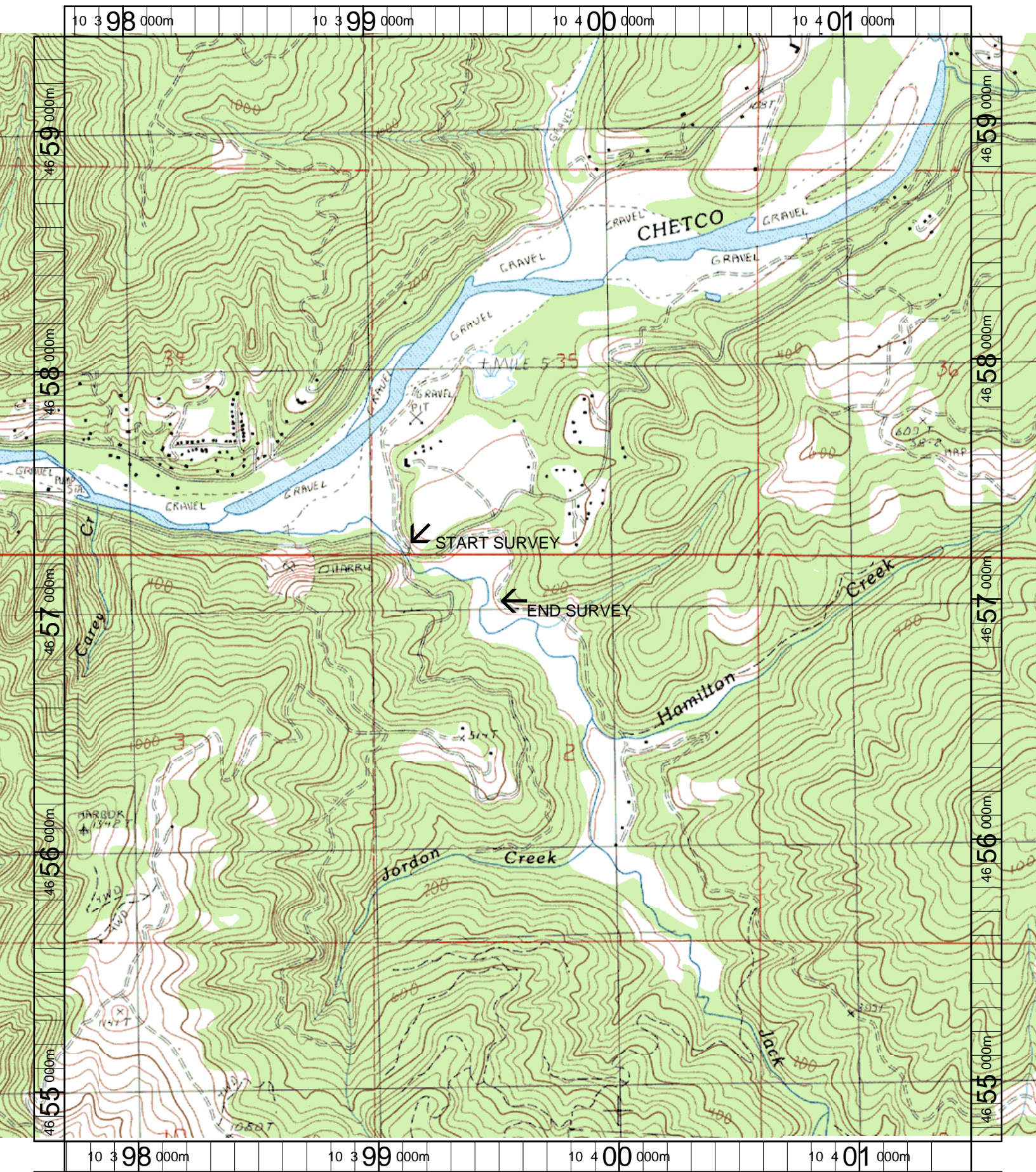
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	11	19.6	23.4
Pools >=1m deep:	8	14.3	17.0
Complex pools (LWD pieces>=3):	8	14.3	17.0
Pool frequency (channel widths/pool):	4.0		
Residual pool depth (avg):	0.87		

Comment Summary

Restoration Monitoring Sites 2005

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI			WL BC	CHMV SD3 MIST S. BANK CHETCO R	
2	LP			HS	PLACED WOOD	
4	LP			/CE		
5	RI	01	23.8	WL HS	REDDS PLACED WOOD	
7	RB	00	62	WL	REDDS	
8	LP	00	84	WL	CTCT D3G MIST REDDS DEER TRACK	
9	RI	00	108.8	WL SS/	DEER TRACKS REDDS	
10	RI	00	132.8	WL	REDDS DEER TRACKS	
11	LP	00	149.5	HS	PLACED WOOD CABLES	
12	RP	00	162	HS	WOOD W CABLES	
13	RI	00	199.7	HS	CTCT D15S GNMI REDD	
14	LP	00	231.2	HS WL BC	FOOTBRIDGE REDDS PLACED WOOD	
16	LP	00	287.7	HS WL	ADULT STEELHEAD, PLACED WOOD	
17	LP	00	309		CTCT D15S GNST	
18	RI	00	330.3	WL	REDD PLACED WOOD BOULDERS	
19	RB	00	356.7	HS WL	PLACED WOOD BOULDERS W CABLES	
20	LP	00	376.3	HS	REDDS PLACED WOOD BOULDERS	
21	RI	00	397	HS WL	REDDS PLACED WOOD BOULDERS	
22	LP	00	434.9	WL	REDDS	
25	SC	00	470.9		CTCT D30G GNST	



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