

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

STREAM: Jack Creek (S-188)  
BASIN: Chetco River  
SURVEY TYPE: Pre-Tx  
DATE: July 8, 2003  
SURVEY CREW: Lucas Lawrence, Pat Burns  
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 525 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 16.0 (range: 10.0-20.0). Land use for the reach was golf course and second growth (15-30 cm dbh) trees. The average unit gradient was 0.8 percent. Scour pools (60%) dominated stream habitat. Gravel (60%) dominated stream substrate. Wood volume was very low at 4.9 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

T41S-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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	16.0	VWI Range: 10 - 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	525	3,634	0
Secondary	40	80	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.7	Width	12.2	20.9	20.3
Depth	0.55	Height	0.6	1.2	2.0
W:D ratio		21.6	Entrenchment		1.8

Stream Flow Type: MF      Water temp (C): 13.5 - 13.5  
 Avg. Unit Gradient: 0.8%      Habitat Units/100m: 5.7

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	GN	ST
Riparian Vegetation:	S	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 75%
Undercut Banks:	6%	Range: 19 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	58	11.0
Volume (m <sup>3</sup> ):	26	4.9
King pieces (>=10m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

JACK CREEK PRE-TX (S-188)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/8/03

REACH 1		T41S-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
GLIDE	3	75	6.0	0.40	444	27	3	7	75	8	7	0
POOL-ALCOVE	1	11	1.9	0.35	21	0	65	30	5	0	0	0
POOL-BACKWATER	4	15	2.3	0.45	35	16	32	25	18	2	23	0
POOL-DAMMED	1	30	9.1	1.80	274	8	30	40	20	0	10	0
POOL-LATERAL SCOUR	6	171	7.0	1.00	1,175	76	6	12	63	9	10	0
POOL-STRAIGHT SCOUR	5	131	7.6	0.96	1,064	55	11	13	56	9	9	1
RIFFLE	7	110	4.4	0.17	540	60	1	5	81	7	7	0
STEP/COBBLE	4	17	4.4	0.08	74	0	0	3	91	6	0	0
STEP/STRUCTURE	1	6	13.8	0.00	88	0	0	0	0	0	0	100
<b>Total:</b>	<b>32</b>	<b>565</b>	<b>5.7</b>	<b>0.55</b>	<b>3,714</b>	<b>242</b>	<b>Avg 10</b>	<b>12</b>	<b>60</b>	<b>6</b>	<b>9</b>	<b>3</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		40
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	6	56	3.4	0.66	330	8.89%	24	7.3	
Scour Pools	11	301	7.3	0.98	2,239	60.28%	131	5.9	
Glides	3	75	6.0	0.40	444	11.94%	27	6.1	
Riffles	7	110	4.4	0.17	540	14.54%	60	11.1	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	5	23	6.3	0.06	162	4.36%	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>	<u># / Km</u>
All Pools:	17	30.1
Pools >=1m deep:	7	12.4
Complex pools (LWD pieces>=3):	8	14.2
Pool frequency (channel widths/pool):	2.7	
Residual pool depth (avg):	0.84	

**STREAM SUMMARY**

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

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate						Large Boulders (>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
32	565	5.7	0.55	3,714	10	12	60	6	9	3	242

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	330	8.89%
Scour Pools	2,239	60.28%
Glides	444	11.94%
Riffles	540	14.54%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	162	4.36%
Dry	0	0.00%
Culverts	0	0.00%

**RIPARIAN ZONE VEGETATION SUMMARY**

**REACH 1** **REACH 1**

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

Total hardwoods/1000	1016
Total conifers/1000 ft	0
Total conifers >20" dbh/1000 ft	0
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	5.3	0.0	5.0	0.0	2.0	0.0	12.3
15-30cm	0.0	2.3	0.0	1.3	0.0	0.0	0.0	3.7
30-50cm	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.7
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	8.0	0.0	6.7	0.0	2.0	0.0	5.6

**Canopy closure and ground cover**

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	58	38	33
Shrub cover	49	25	28
Grass/forb cover	37	53	45

**Predominant landform in each zone**

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	17	17
High terrace	33	67	50
Low terrace	50	17	17
Floodplain	17	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	17
Riprap	0	0	0
Surface slope (%)	3	14	7

**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	1016
Total conifers/1000 ft	0
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

**Average number of trees in a 5-m wide band**

<u>Diameter class (cm)</u>	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	12.3
15-30cm	0.0	3.7
30-50cm	0.0	0.7
50-90cm	0.0	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		
16	LF	2	HS	75	5	15	25	Conifer							
								Hardwood	2						
16	LF	3	RB	0	10	10	10	Conifer							
								Hardwood	1						
16	RT	1	LT	0	30	90	0	Conifer							BLACK BERRIES
								Hardwood							
16	RT	2	LT	0	30	60	10	Conifer							
								Hardwood	2						
16	RT	3	LT	0	80	50	10	Conifer							
								Hardwood	5						
16	LF	1	FP	0	5	10	75	Conifer							
								Hardwood							
20	LF	1	HT	0	90	70	5	Conifer							
								Hardwood	9	6					
20	RT	1	HT	0	90	10	80	Conifer							
								Hardwood	1	1	1				
20	RT	3	HS	40	90	10	50	Conifer							
								Hardwood							
20	RT	2	HT	10	90	5	60	Conifer							
								Hardwood	1	1	1				
20	LF	2	HT	0	80	70	20	Conifer							
								Hardwood	10	3					
20	LF	3	HT	0	0	100	0	Conifer							BLACK BERRIES
								Hardwood							
23	RT	2	HT	0	20	0	100	Conifer							HOLE 5 PAR 4
								Hardwood							
23	RT	3	HT	0	20	0	100	Conifer							
								Hardwood							
23	LF	1	LT	10	90	80	10	Conifer							
								Hardwood	3						
23	LF	2	HT	0	0	0	100	Conifer							GOLF COURSE
								Hardwood							
23	LF	3	HT	0	0	0	100	Conifer							GOLF COURSE
								Hardwood							
23	RT	1	LT	10	40	35	50	Conifer							
								Hardwood	3						

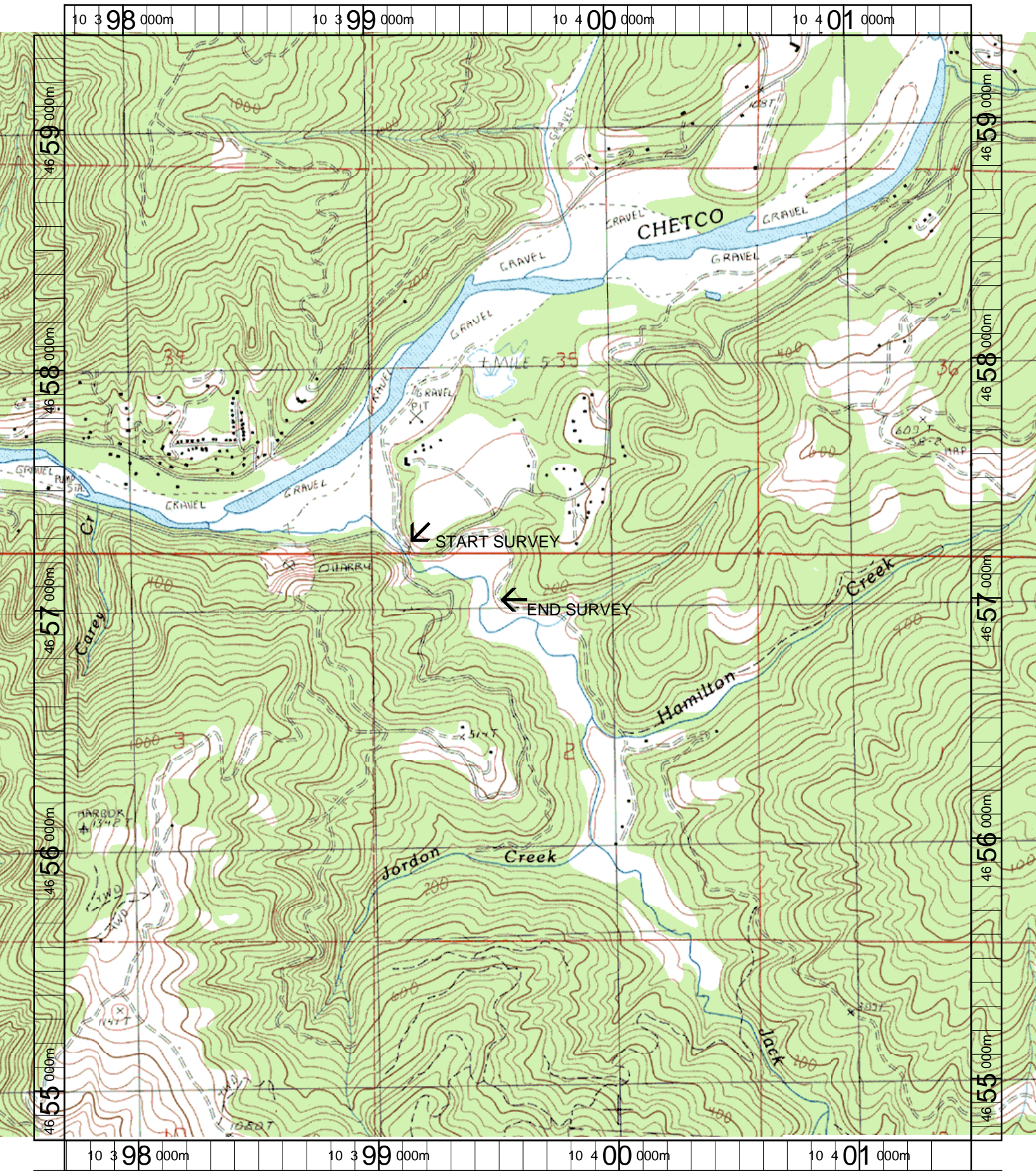
# Comment Summary

## Oregon Plan Monitoring Sites 2003

MONITORING AREA: **5-SC**      SITE ID: **188**      **JACK CREEK PRE-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	LP	00	22.5		13.5 DEG C 09:38	TEMP= 13.5 DEG C @9:45
2	RI	00	30.5	HS		CABLED ROOTWAD/ BOULD
3	SP	00	53.6	HS		CABLED LOGS
4	RI	00	62.4	/CE		DROP= 185M, 1M DIAMETER
12	SP	00	127.65	HS, BV		CABLED BOULDERS (MID AN
13	SS	00	134.05		H= 1.3/ FISH LADDER	CONCRETE DAM (FISH LADD
14	DP	01	164.15	BV		
16	GL	00	189.15	BV		
17	SP	01	238.65	HS		CABLED ROOTWADS & BOU
20	LP	00	309.15	FC, CS		/BOULDER RIP-RAP
27	SP	00	436.05	HS		CABLED ROOTWADS (MID &
29	LP	00	493.95	CS		BOULDER RIP RAP/
31	LP	00	520.85			T=15 DEG C @ 1400
32	SC	00	525.25		END OF SURVEY	END SURVEY





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