

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

STREAM: Jack Creek (SC-36)
BASIN: Chetco River
SURVEY TYPE: Post-Tx
DATE: February 13, 2001
SURVEY CREW: Andy Solcz, Peter Bower
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 12.2 km²
USGS MAPS: Mt Emily
ECOREGION: Coast Range California Extension

GENERAL DESCRIPTION:

The Jack Creek habitat survey extended 1,120 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 3.2 (range: 2.5 – 5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.9 percent. Riffles (74%) and scour pools (25%) dominated stream habitat. Gravel (58%) and cobble (21%) dominated stream substrate. Wood volume was high at 33.1 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 SUMMARY

REACH 1

T41S-R13W-S11NE

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 avg: ~~2.7~~ 3.2 range: ~~0.3~~ 2.5-5.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	100
Bedrock	0	Multiple Channel	0
Terrace	0	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	1,120	6,442	0
Secondary	24	34	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.4	Width	9.8	20.3	11.8
Depth	0.58	Height	0.8	1.5	1.1
		W:D ratio	13.0	Entrenchment	2.1

Stream Flow Type: MF Water Temp: 6.0-6.0°C
 Avg. Unit Gradient: 0.9% Habitat Units/100m: 3.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	C15	D15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	85	7.6
Volume (m ³)	371	33.1
Key pieces (≥10m x 0.6m)	56	5.0

HABITAT UNIT SUMMARY

REACH 1 T41S-R13W-S11NE 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	Cbbl	Bldr	Bdrk
CASCADE/BEDROCK	1	10	0.9	0.15	9	0	0	0	30	10	0	60
CASCADE/BOULDERS	1	8	0.9	0.15	7	0	10	0	20	40	0	30
POOL-BACKWATER	2	15	2.6	0.50	37	0	3	5	65	13	15	0
POOL-LATERAL SCOUR	11	179	6.4	1.14	1,154	0	13	12	55	19	0	0
POOL-STRAIGHT SCOUR	5	70	6.6	1.10	481	0	22	22	41	15	0	0
RIFFLE	18	649	5.5	0.25	3,666	0	5	3	67	25	0	0
RIFFLE W/ POCKETS	5	212	5.0	0.28	1,122	0	10	10	57	23	0	0
Total:	43	1,143	5.4	0.58	6,476	0	Avg:10	8	58	21	1	2

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	2	15	2.6	0.50	37	0.57	0	0.0
Scour Pools	16	249	6.5	1.13	1,635	25.25	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	23	861	5.4	0.25	4,788	73.93	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	2	18	0.9	0.15	16	0.25	0	0.0
Step/Falls	0	0	-	-	0	0.00	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

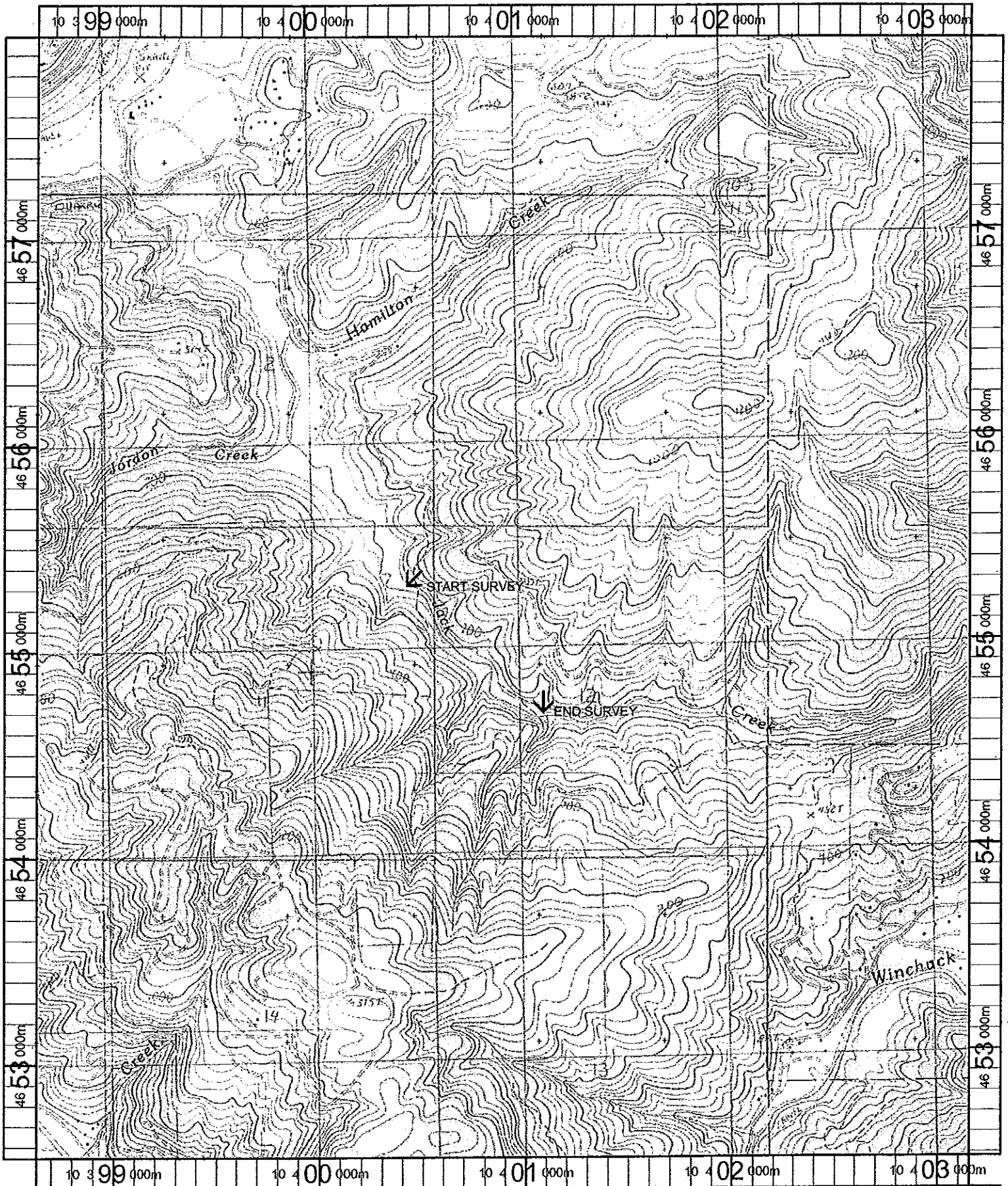
All Pools	<u>Total</u>	<u>#/Km</u>
	18	15.7
Pools ≥1m deep:	10	8.7
Complex pools (LWD pieces ≥3):	7	6.1
Pool Frequency (channel widths/pool):	6.5	
Residual pool depth (avg)	0.77m	

STREAM SUMMARY

JACK CREEK POST-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
43	1,143	5.4	0.58	6,476	10	8	58	21	1	2	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	1,635	25.2
Backwater Pools	37	0.6
Glide	0	0.0
Riffle	4,788	73.9
Rapid	0	0.0
Cascade	16	0.3
Step	0	0.0
Dry	0	0.0



Name: MT EMILY
 Date: 11/8/100
 Scale: 1 inch equals 2000 feet

Location: 10 400829 E 4655220 N
 Caption: JACK CREEK RESTORATION SITE - CHETCO BASIN