

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

STREAM: Jackson Creek (N-313)
BASIN: Pacific Ocean
SURVEY TYPE: Pre-Tx
DATE: June 30, 2005
SURVEY CREW: Ben Walczak, Scott Young
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 4.4 km²
USGS MAPS: Sand Lake
ECOREGION: Coast Range Coastal Lowlands

GENERAL DESCRIPTION:

The Jackson Creek habitat survey extended 539 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.0 (range: 2.0-5.0). Land use for the reach was mature (50-90 cm dbh) trees. The average unit gradient was 3.4 percent. Rapids (71%) dominated stream habitat. Gravel (35%) and cobble (34%) dominated stream substrate. Wood volume was very low at 6.5 m³/100m.

COMMENTS:

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

REACH 1

T02S-R10W-S31NW

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	4.0	VWI Range:	2 - 5

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	539	2,036	0
Secondary Channel	168	271	1
Off-Channel Units	1	1	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 3.1	Width: 8.2	10.3 (7.8 - 12.1)	14.1 (13.5 - 14.7)
Depth: 0.22	Height: 0.5	1.0 (0.9 - 1.3)	1.9 (1.8 - 2)

W:D ratio: 15.8
 Stream Flow Type: MF
 Average Unit Gradient: 3.4%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 5.8
 Habitat Units/100m (primary channel length): 7.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	
Riparian Vegetation:	C30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	7%	Reach avg: 75%
Undercut Banks:	4%	Range: 67 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	74	13.7
Volume (m ³):	35	6.5
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

JACKSON CREEK PRE-TX (1-NC, 313)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

6/30/2005

REACH 1		T02S-R10W-S31NW					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
CULVERT CROSSING	1	6	0.3	0.15	2	0	0	12	41	47	0	0
DRY CHANNEL	1	9	1.0	0.10	9	0	0	20	40	40	0	0
POOL-BACKWATER	1	1	1.0	0.40	1	0	32	32	11	5	0	21
POOL-BEAVER DAM	1	34	4.3	0.40	145	0	44	44	11	0	0	0
POOL-LATERAL SCOUR	6	60	3.3	0.52	193	2	15	21	36	23	1	4
POOL-PLUNGE	2	20	5.0	0.45	109	0	11	37	29	24	0	0
RAPID/BOULDERS	19	456	3.6	0.14	1,637	16	1	7	43	45	2	2
RIFFLE	6	117	2.0	0.16	201	2	22	27	25	23	2	2
STEP/BEAVER DAM	1	1	3.0	0.10	2	0	44	44	11	0	0	0
STEP/COBBLE	1	1	3.0	0.10	2	0	0	0	30	70	0	0
STEP/STRUCTURE	2	3	3.5	0.10	10	0	11	22	36	31	0	0
Total:	41	707	3.1	0.22	2,309	20	Avg: 10	17	35	34	1	2

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	2	35	2.6	0.40	146	6.30%	0	0.0	
Scour Pools	8	80	3.7	0.50	301	13.05%	2	0.7	
Glides	0	0			0	0.00%	0	0.0	
Riffles	6	117	2.0	0.16	201	8.72%	2	1.0	
Rapids	19	456	3.6	0.14	1,637	70.90%	16	1.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	4	3.3	0.10	13	0.54%	0	0.0	
Dry	1	9	1.0	0.10	9	0.41%	0	0.0	
Culverts	1	6	0.3	0.15	2	0.07%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	10	14.1	18.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	3	4.2	5.6
Pool frequency (channel widths/pool):	8.7		
Residual pool depth (avg):	0.40		

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**JACKSON CREEK PRE-TX
GCG: 1-NC SITE ID: 313**

**Survey Date 6/30/2005
Report Date: 4/27/2006**

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	0
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	20

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	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
15-30cm	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.0
30-50cm	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.0
50-90cm	0.3	0.0	0.7	0.0	0.7	0.0	1.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Total/100m2	2.0	0.0	0.7	0.0	1.0	0.0	1.2	0.0

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	36	43	43
Shrub cover	67	73	85
Grass/forb cover	18	17	15

Predominant landform in each zone

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

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	0
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	122
Total conifers >35" dbh/1000 ft	20

Average number of trees in a 5-m wide band

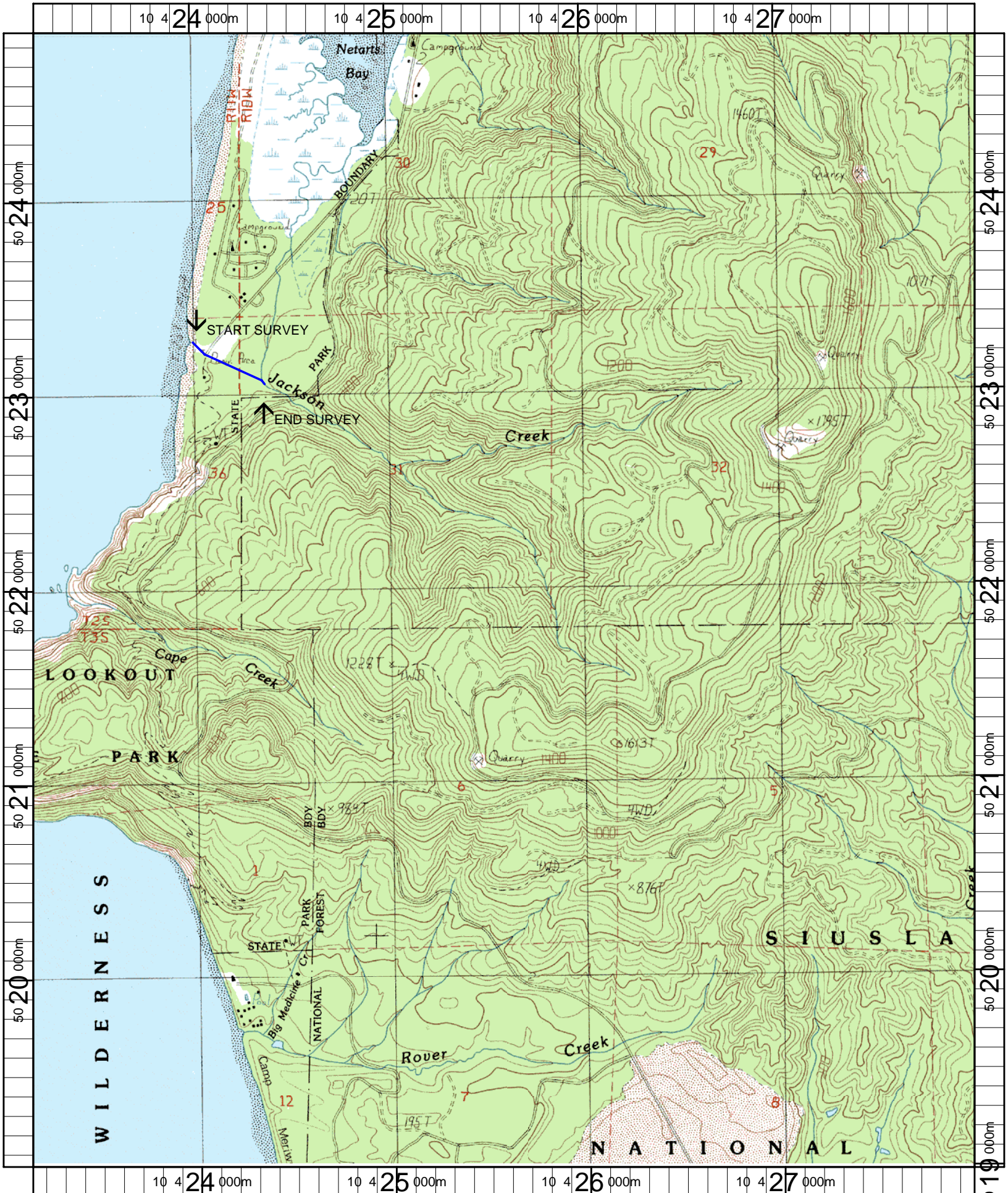
Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	0.0
15-30cm	0.7	0.0
30-50cm	0.7	0.0
50-90cm	1.7	0.0
>90cm	0.3	0.0

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 1-NC SITE ID: 313 JACKSON CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
4	RB	00	78.3	BC		
6	SS	00	86.3		H:0.55M	
7	RB	00	116.3	SS/ RF		
8	LP	00	123.9		RIP T #1, 0424065, 502309	
10	LP	00	149.7	BC		
11	RB	01	174.7			HARDPAN CLAY
17	PP	00	240.6		RIP T#2, 0424127, 502295	
18	SC	00	241.1		H:0.3M	
21	RB	00	291.1			HARDPAN CLAY
22	RB	01	316.1	/TJ		
24	RB	01	362.8			HARDPAN CLAY
27	SD	02	387.8	BV, BD	H:0.5	
28	BP	02	387.8	BV		
29	RI	02	387.8	/SS		
30	SS	02	387.8			100% CONCRETE
31	LP	02	387.8	EX		
32	CC	02	387.8	CC		
33	RB	00	397.8		RIP T #3 0424250, 502294	
38	RB	01	488.6			HARDPAN CLAY
41	RB	00	538.6		0424410, 5023035	END SURVEY



Name: SAND LAKE
 Date: 5/2/2006
 Scale: 1 inch equals 2000 feet

Location: 10 425585 E 5021931 N
 Caption: JACKSON CREEK RESTORATION SITE - OCEAN BASIN