

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

STREAM: Walker Creek (MS-212)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: February 25, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.1 km²
USGS MAPS: Coquille
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Walker Creek habitat survey extended 468 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.5 (range: 1.1-2.0). Land use for the reach was second growth (15-30 cm dbh) trees and rural residential. The average unit gradient was 4.6 percent. Rapids (54%) and riffles (17%) dominated stream habitat. Gravel (41%) and sand (30%) dominated stream substrate. Wood volume was low at 10.9 m³/100m.

COMMENTS:

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

The crew noted several landslides during the survey.

REACH 1

T28S-R12W-S08NE

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.5	VWI Range:	1.1 - 2

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
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	468	1,011	0
Secondary	11	6	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 2.2	Width: 3.2	4.8 (4.2 - 5.7)	(-)
Depth: 0.31	Height: 0.5	1.0 (1 - 1)	(-)

W:D ratio: 6.5 Entrenchment (ACW:FPW ratio): 1.5
 Stream Flow Type: HF Habitat Units/100m (total channel length): 10.5
 Average Unit Gradient: 4.6% Habitat Units/100m (primary channel length): 10.7
 Water temperature (°C): 9.0 - 9.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	RR
Riparian Vegetation:	M30	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):	101	21.6
Volume (m ³):	51	10.9
Key pieces (>=12m x 0.60m):	2	0.4

OREGON DEPARTMENT OF FISH AND WILDLIFE

WALKER CREEK PRE-TX (MS-212)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/25/2004

REACH 1

T28S-R12W-S08NE

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
CASCADE/BOULDERS	6	42	1.6	0.12	89	0	0	9	37	49	5	0
POOL-DAMMED	4	21	2.1	0.31	40	0	0	63	28	0	9	0
POOL-LATERAL SCOUR	8	44	2.0	0.48	84	0	0	47	43	7	3	1
POOL-PLUNGE	5	21	2.8	0.62	54	0	0	41	28	14	17	0
RAPID/BOULDERS	14	255	2.2	0.18	553	0	0	19	40	26	15	0
RIFFLE	5	85	2.1	0.45	174	0	0	26	58	16	0	0
STEP/COBBLE	1	4	2.0	0.20	8	0	0	30	70	0	0	0
STEP/LOG	7	6	2.8	0.21	16	0	0	26	46	13	16	0
Total:	50	478	2.2	0.31	1,017	0	Avg: 0	30	41	19	10	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	4	21	2.1	0.31	40	3.89%	0	0.0
Scour Pools	13	65	2.3	0.53	138	13.60%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	5	85	2.1	0.45	174	17.10%	0	0.0
Rapids	14	255	2.2	0.18	553	54.34%	0	0.0
Cascades	6	42	1.6	0.12	89	8.74%	0	0.0
Step/Falls	8	10	2.7	0.21	24	2.34%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	17	35.5	36.4
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	1	2.1	2.1
Pool frequency (channel widths/pool):	8.7		
Residual pool depth (avg):	0.30		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **212** WALKER CREEK PRE-TX (MS-212)

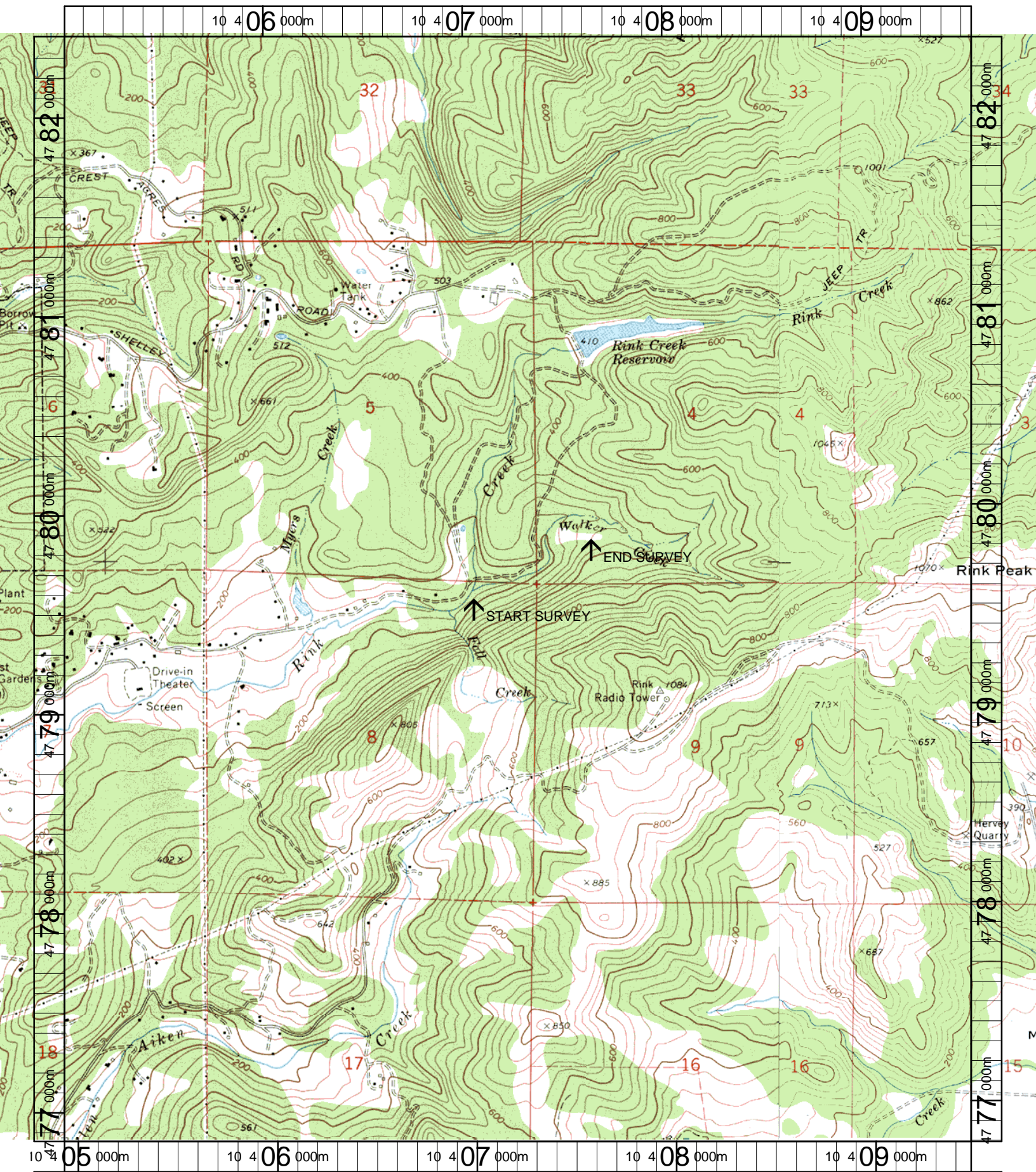
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	17.3		T=9 C	
5	RB	00	67.4		SITE 3-4 LOGS	
9	SL	00	109.4		H=0.8	
10	RI	00	134.4	LA/	SITE 4-4 LOGS	
11	RB	00	156.3	/LS		
12	SL	00	156.6	/LS	H=0.4	
13	RI	00	167.5	/LS		
18	SL	00	214.5	LI/	H=0.0	
20	LP	00	232.7	LI/		
21	RB	00	255	LI/		
24	SL	00	273		H=0.4	
25	DP	00	279.4	LI/		
28	SL	00	291.7	PN	H=1.8	
29	RI	01	314.1	/TJ	NOT ON MAP	
30	CB	11	314.1		T=90 C, ACW=2.2	
36	CB	00	364.6	LS/		
40	CB	11	409.7		T=9, ACW=1.4	
41	RB	00	440.7	/SS		
43	SL	00	443.1		H=0.4	
45	RB	00	461.9	/SS		
47	SL	00	467.6		H=0.6	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 212 WALKER CREEK PRE-TX (MS-212)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
50	CB	11	467.6		T=8, ACW=0.7	



Name: COQUILLE
 Date: 12/17/2003
 Scale: 1 inch equals 2000 feet

Location: 10 407237 E 4779605 N
 Caption: WALKER CREEK RESTORATION SITE - COQUILLE BASIN