

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: June 23, 2003
SURVEY CREW: Lisa Biggs, Chelsey Girt
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 495 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.2 (range: 1.0-6.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.9 percent. Rapids (57%) and riffles (30%) dominated stream habitat. There was no dominant stream substrate. Wood volume was low at 16.1 m³/100m.

COMMENTS:

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

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 2.2		VWI Range: 1 - 6	

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	495	806	0
Secondary	0		0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	1.9	Width	3.2	4.1	5.1
Depth	0.17	Height	0.3	0.6	1.0
		W:D ratio	11.4	Entrenchment	1.4

Stream Flow Type: MF Water temp (C): 1.1 - 1.1
 Avg. Unit Gradient: 3.9% Habitat Units/100m: 8.1

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 91%
Undercut Banks:	3%	Range: 67 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	103	20.8
Volume (m ³):	80	16.1
Key pieces (>=10m x 0.60m):	4	0.8

OREGON DEPARTMENT OF FISH AND WILDLIFE

WALKER CREEK PRE-TX (MS-212)

HABITAT INVENTORY

Report Date: 12/18/03

Survey Date:

6/23/03

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
POOL-LATERAL SCOUR	4	23	1.8	0.41	40	4	38	24	18	10	3	6
POOL-PLUNGE	1	3	2.8	0.48	8	0	19	19	13	6	0	44
POOL-STRAIGHT SCOUR	4	17	2.4	0.43	40	3	45	32	8	3	8	4
RAPID/BOULDERS	14	293	1.6	0.10	460	103	9	14	30	36	9	2
RIFFLE	11	144	1.6	0.10	226	10	18	19	31	19	2	12
RIFFLE W/ POCKETS	1	8	1.7	0.15	14	0	27	40	13	20	0	0
STEP/BOULDERS	2	6	2.2	0.10	13	4	16	5	3	13	26	37
STEP/LOG	3	2	4.1	0.00	5	0	43	31	24	2	0	0
Total:	40	495	1.9	0.17	806	124	Avg 22	20	24	20	6	8

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	0	0			0	0.00%	0	0.0
Scour Pools	9	42	2.2	0.42	88	10.90%	7	8.0
Glides	0	0			0	0.00%	0	0.0
Riffles	12	152	1.6	0.10	240	29.81%	10	4.2
Rapids	14	293	1.6	0.10	460	57.10%	103	22.4
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	5	8	3.3	0.04	18	2.19%	4	22.7
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:	9	18.2
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	1	2.0
Pool frequency (channel widths/pool):	17.3	
Residual pool depth (avg):	0.35	

STREAM SUMMARY

WALKER CREEK PRE-TX (MS-212)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
40	495	1.9	0.17	806	22	20	24	20	6	8	124

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	88	10.90%
Glides	0	0.00%
Riffles	240	29.81%
Rapids	460	57.10%
Cascades	0	0.00%
Step/Falls	18	2.19%
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	1585
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	2.0	1.0	5.7	2.0	5.3	3.0	13.0
15-30cm	0.0	1.3	0.0	2.3	1.3	1.7	1.3	5.3
30-50cm	0.0	1.3	0.7	2.3	0.0	3.0	0.7	6.7
50-90cm	0.0	0.0	0.3	0.7	0.0	0.3	0.3	1.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	4.7	2.0	11.0	3.3	10.3	1.8	8.7

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	86		85		88	
Shrub cover	42		32		26	
Grass/forb cover	33		51		54	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	100		100		100	
High terrace	0		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	54		43		28	

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	1585
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	0

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	3.0	13.0
15-30cm	1.3	5.3
30-50cm	0.7	6.7
50-90cm	0.3	1.0
>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	3	HS	15	90	80	10	Conifer	3						DOUG FIR, 3M ROADBED ALDER
								Hardwood	9	1					
16	RT	3	HS	10	95	5	75	Conifer							BLM, MYRTLE, VINE MAPLE
								Hardwood	6		1				
16	RT	2	HS	45	95	10	70	Conifer							MYRTLE, VINE MAPLE
								Hardwood	3	1	7	1			
16	LF	2	HS	38	80	40	50	Conifer							ALDER, VINE MAPLE
								Hardwood	12	5					
16	RT	1	HS	55	85	50	30	Conifer							
								Hardwood							
16	LF	1	HS	50	85	30	20	Conifer							VINE MAPLE, ALDER
								Hardwood	4						
26	LF	2	HS	42	75	20	50	Conifer							BLM
								Hardwood				1			
26	RT	2	HS	37	85	0	70	Conifer							VINE MAPLE, MYRTLE
								Hardwood	1	1					
26	RT	1	HS	39	85	20	50	Conifer							MYRTLE, ALDER
								Hardwood		3	1				
26	LF	3	HS	10	80	0	80	Conifer							3M GRVL RD, BLM, ALDR, MYRTLE
								Hardwood		4	2				
26	RT	3	HS	23	80	0	70	Conifer							BLM
								Hardwood			4				
26	LF	1	HS	65	75	40	40	Conifer							BLM
								Hardwood			3				
33	LF	3	HS	50	85	30	50	Conifer	3	4					MYRTLE
								Hardwood							
33	RT	3	HS	60	95	40	40	Conifer							MYRTLE, ALDER, VINE MAPLE
								Hardwood	1		2	1			
33	RT	1	HS	35	95	50	40	Conifer							ELDERBERRY, BLM
								Hardwood	1	1					
33	LF	2	HS	55	80	50	55	Conifer	3		2	1			MYRTLE
								Hardwood							
33	LF	1	HS	80	90	60	20	Conifer							BLM
								Hardwood	1						
33	RT	2	HS	40	95	70	10	Conifer							VINE MAPLE
								Hardwood	1						

Comment Summary

Oregon Plan Monitoring Sites 2003

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

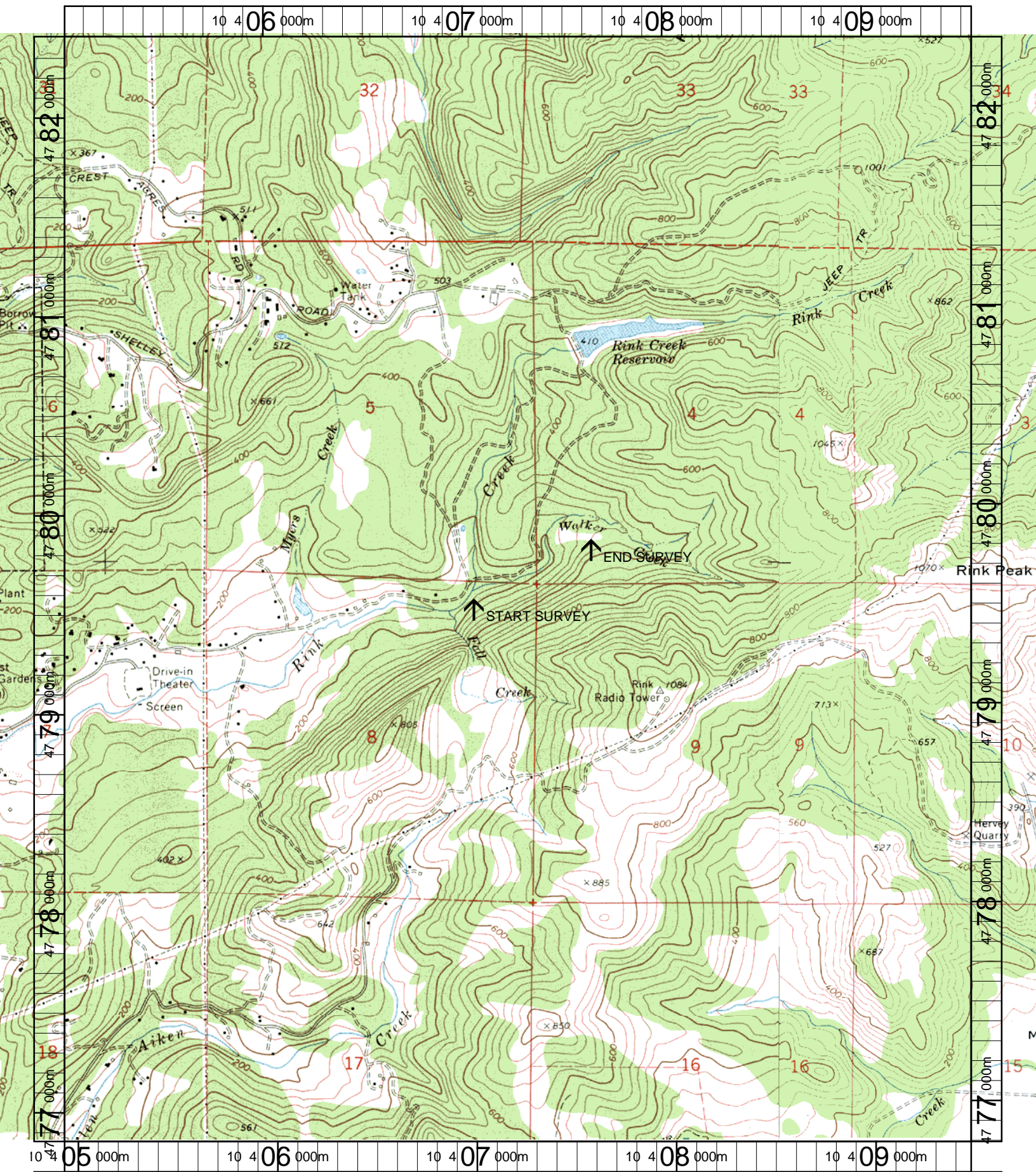
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
3	SP	00	22.5	WL		DEER, RACCOON, SALMONI
4	SB	00	24.2		SALMONIDS	
5	RI	00	35.2	WL	SALMONIDS	SALMONID FRY NON COHO,
7	LP	00	51.2			SALMONID FRY NON COHO
8	RI	00	62.2			SALMONID FRY NON COHO
10	RP	00	81	WL	NON- COHO SALMONIDS	RACCOON, SALMONID FRY
11	RB	00	109.5	WL		RACCOON, BANANA SLUG,
12	SP	00	112.6			SALMONID FRY
13	SL	00	114.1	WL, DJ, RN	H=1.5M	RACCOON
14	RI	00	123.3	WL		DEER, RACCOON, COYOTE
15	LP	00	126.6	WL	RIPARIAN SURVEY TAKE	DEER
16	RI	00	129.4	WL		DEER
17	LP	00	134.4	WL		BOBCAT, DEER
18	RI	00	153.2	DJ		SALMONID FRY
19	RB	00	178.2			SALMONID FRY
20	RB	00	191.2			SALMONID FRY
22	PP	00	217.9	WL		RACCOON, BANANA SLUG
23	SL	00	218.1	DJ	H=1.0M	
25	LP	00	237.3	ES/		SALMONID FINGERLINGS, F
26	RB	00	260.1		RIPARIN SURVEY #2	SALMONID FRY
28	SB	00	268.8		H=0.5M	

Comment Summary

Oregon Plan Monitoring Sites 2003

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
30	RI	00	316.4	DJ, WL, PN	SS ENTERING ON RT SID	DEER, LOG JAM XL
32	SP	00	345.4	/ES, WL		BOBCAT
33	RB	00	370.4	EI/ WL	RIPARIAN SURVEY #3	RACCOON, BOBCAT, TROUT
34	RB	00	395.4	WL, DJ		DEER, RR RAIL STREAM SID
35	RB	00	420.4	/SS	/SS	
36	RB	00	442.6	/ES /SS		
37	SL	00	442.9		H=.5M	
38	RI	00	452.4	WL		DEER
39	RB	00	477.4			DRY SS ON L BANK TRIB
40	RB	00	495.4	EI/		



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