

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

STREAM: Wapiti Creek (MS-208)
BASIN: North Fork Coquille River
SURVEY TYPE: Pre-Tx
DATE: July 2, 2003
SURVEY CREW: Lisa Biggs, Chelsey Girt
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 42.0 km²
USGS MAPS: Daniels Creek
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Wapiti Creek habitat survey extended 512 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was second growth (15-30 cm dbh) trees and timber harvest. The average unit gradient was 5.3 percent. Cascades (38%) and rapids (34%) dominated stream habitat. Cobble (33%) and boulders (28%) dominated stream substrate. Wood volume was moderate at 20.8 m³/100m.

COMMENTS:

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

OREGON DEPARTMENT OF FISH AND WILDLIFE

WAPITI CREEK PRE-TX (MS-208)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/2/03

REACH 1		T26S-R11W-S21SW					REACH 1						
Habitat Type	Number Units	Total Length (m)	HABITAT DETAIL				Substrate						
			Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Large Boulders (#>0.5m)	Percent Wetted Area						
			S/O	Snd	Grvl	Cbl	Bldr	Bdrk					
CASCADE/BOULDERS	10	193	1.3	0.12	249	262	6	10	9	35	37	3	
CULVERT CROSSING	2	21	0.8	0.08	19	0	14	21	23	28	14	0	
DRY UNIT	1	5	0.5	0.00	3	0	0	0	14	71	14	0	
POOL-ALCOVE	1	7	0.3	0.06	2	0	25	67	8	0	0	0	
POOL-BEAVER DAM	1	2	0.5	0.21	1	4	20	25	5	25	25	0	
POOL-ISOLATED	1	2	0.9	0.12	2	4	10	20	33	3	34	0	
POOL-LATERAL SCOUR	2	8	0.8	0.34	6	1	26	15	21	21	18	0	
POOL-PLUNGE	3	9	2.5	0.52	20	14	8	10	8	41	33	0	
POOL-STRAIGHT SCOUR	8	27	2.6	0.69	67	22	17	13	8	21	25	16	
PUDDLED UNIT	1	13	0.5	0.10	7	0	6	11	33	50	0	0	
RAPID/BEDROCK	1	7	0.8	0.05	6	0	0	5	21	32	0	42	
RAPID/BOULDERS	13	193	1.0	0.13	218	63	8	8	14	50	17	2	
RIFFLE	5	69	0.9	0.05	50	24	23	11	8	42	17	0	
STEP/BOULDERS	6	3	0.3	0.03	1	20	3	5	5	8	61	17	
STEP/LOG	5	2	0.4	0.01	1	4	2	13	13	30	42	0	
STEP/STRUCTURE	1	15	0.5	0.00	8	0	6	56	28	11	0	0	
Total:	61	575	1.1	0.19	657	418	Avg 10	12	12	33	28	5	

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	3	11	0.6	0.13	5	0.70%	8	173.5	
Scour Pools	13	43	2.3	0.59	93	14.22%	37	39.6	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	69	0.9	0.05	50	7.59%	24	48.1	
Rapids	14	201	1.0	0.13	224	34.10%	63	28.1	
Cascades	10	193	1.3	0.12	249	37.81%	262	105.4	
Step/Falls	12	19	0.3	0.02	9	1.33%	24	275.3	
Dry	2	19	0.5	0.05	9	1.41%	0	0.0	
Culverts	2	21	0.8	0.08	19	2.84%	0	0.0	

POOL SUMMARY

Total # / Km

All Pools:	16	27.8
Pools >=1m deep:	1	1.7
Complex pools (LWD pieces>=3):	1	1.7
Pool frequency (channel widths/pool):	9.9	
Residual pool depth (avg):	0.55	

STREAM SUMMARY

WAPITI CREEK PRE-TX (MS-208)

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	
61	575	1.1	0.19	657	10	12	12	33	28	5	418

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	5	0.70%
Scour Pools	93	14.22%
Glides	0	0.00%
Riffles	50	7.59%
Rapids	224	34.10%
Cascades	249	37.81%
Step/Falls	9	1.33%
Dry	9	1.41%
Culverts	19	2.84%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1	REACH 1
Summary of Riparian Zone (0-30m) 3 transects	
Total hardwoods/1000	711
Total conifers/1000 ft	752
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	1.0	1.7	3.7	3.3	2.7	2.3	7.3	7.3
15-30cm	0.7	0.3	2.0	0.0	2.0	0.0	4.7	0.3
30-50cm	0.3	1.0	0.0	0.3	0.0	0.7	0.3	2.0
50-90cm	0.0	1.0	0.0	0.0	0.0	0.3	0.0	1.3
>90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
Total/100m2	2.0	4.7	5.7	3.7	4.7	3.3	4.1	3.9

Canopy closure and ground cover

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Canopy closure	60	68	67
Shrub cover	28	28	43
Grass/forb cover	24	15	23

Predominant landform in each zone

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Hillslope	17	33	67
High terrace	83	67	33
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 (%)	1	7	22

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	711
Total conifers/1000 ft	752
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>	<u>Zones 1-3</u>	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	7.3	7.3
15-30cm	4.7	0.3
30-50cm	0.3	2.0
50-90cm	0.0	1.3
>90cm	0.0	0.7

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		
14	RT	3	HT	0	0	0	0	Conifer							OFF RD PARKING
								Hardwood							
14	RT	2	HT	0	20	0	5	Conifer							LG MAN- MADE
								Hardwood			1				GRV /DIRT ALDER
14	RT	1	HT	0	50	5	10	Conifer							
								Hardwood			2	1			
14	LF	3	HS	10	95	20	30	Conifer	5	2					DOUG FIR, ALDER
								Hardwood	3						
14	LF	2	HT	0	85	40	20	Conifer	4	1					DOUG FIR, ALDER
								Hardwood	3						
14	LF	1	HT	2	30	20	30	Conifer							ROCK/ WOOD DEBRIS ON I F BANK
								Hardwood							BLM
29	LF	1	HT	0	70	15	35	Conifer	1	2					
								Hardwood						1	
29	RT	3	HT	0	85	20	40	Conifer		3					DOUG FIR, CASCARA
								Hardwood	1						
29	RT	2	HT	0	85	30	40	Conifer	1	4					DOUG FIR, CHERRY
								Hardwood	2						
29	RT	1	HT	0	60	40	20	Conifer	2						DOUG FIR, ALDER,
								Hardwood	1			1			MAPI F PORT
29	LF	3	HS	35	85	70	20	Conifer	2	1					ORFORD CEDAR
								Hardwood	2						DOUG FIR, BLM, ALDER
29	LF	2	HS	35	95	10	10	Conifer	6	1					
								Hardwood	2						
37	RT	2	HT	0	30	5	5	Conifer							ALDER
								Hardwood	1						
37	RT	1	HT	0	85	10	35	Conifer							ALDER, MAPLE
								Hardwood	4	1	1	1	1		
37	LF	3	HS	40	70	80	15	Conifer	1						DOUG FIR, ALDER,
								Hardwood	1			1			FI DFRBFERRY VINE MAPLE
37	LF	2	HS	5	95	85	10	Conifer							
								Hardwood	2						
37	LF	1	HS	5	65	75	15	Conifer				1			
								Hardwood							
37	RT	3	HS	45	65	65	30	Conifer							ALDER
								Hardwood			2				

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **3-MS** SITE ID: **208** WAPITI CREEK PRE-TX (MS-208)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
2	SP	00	11.8			SALMONID FRY
3	RB	00	18.3	HS		LOG WEIR, UNCABLED .6M I
4	SS	00	33.3		H=1.55M	H=1.55
5	PD	00	46.5			SALMONID FRY, 8 TAGGED
8	LP	00	59.8			BOULDER 3 X 1.5M- SALMON
9	RB	00	84.8			COHO FRY GALORE
10	RB	00	97.8			COHO FRY, TROUT FRY
11	SP	00	102.2			COHO FRY
12	CC	00	114.2	CC	H=1.0 NO DROP	NO DROP 1.4 X 1.0 LOTS OF
14	CB	00	146.7		RIP #1	SALMONIDS/COHO FRY
15	RI	00	155.9	DJ ON SIDE		COHO FRY
18	SB	00	173.21	/SS	H=0.3M	
20	SP	00	188.31	DJ/		COHO/ SALMONID FRY
21	PP	00	192.21	SS/		
22	SB	00	192.71		H=0.5M	H=.5
23	RB	00	208.31			FRY
24	SP	00	211.51			MANY LG COHO FRY 9 CM
25	SL	00	211.91		H=0.3M	H=.3
27	CB	01	256.41	DJ, PN		SALMONID FRY EVERYWHE
28	BP	10	256.41	BV		SALMONID FRY
29	CB	00	281.41		RIP#2	COHO FRY

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **3-MS** SITE ID: **208** WAPITI CREEK PRE-TX (MS-208)

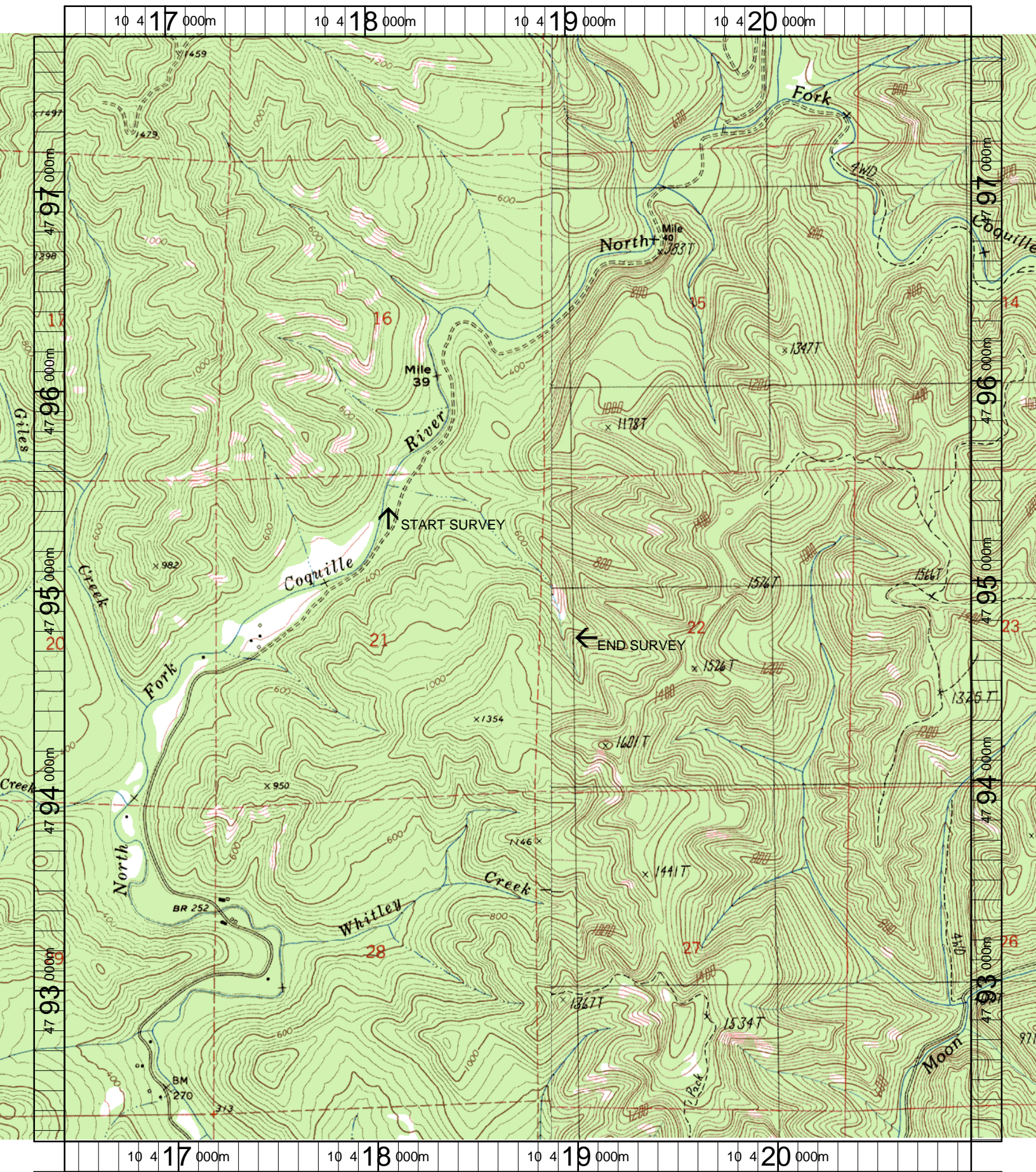
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
30	CB	00	306.41			LOTS OF COHO FRY, GOOD
31	CB	00	335.21			LOTS OF COHO FRY
33	IP	10	337.41			LG BROWN FROG
34	SB	00	337.51	DJ	H=1.0M	
35	RB	01	366.21	WL SS/		DEER, COHO FRY
36	RI	11	366.21	TJ		END OF TRIB IS SS@ 25M
37	CB	00	370.51		RIP#3	
38	SB	00	370.81		H=0.5M	
39	CB	00	376.01			COHO FRY
40	SL	00	376.21		H=0.55M	H=.55
43	SB	00	382.21		H=0.6M	
44	RB	00	388.21	DJ		XL DJ
45	SL	00	388.41		3=H=0.45	
46	CB	00	401.61	WL		COHO FRY, FOX
47	PP	00	404.01			COHO FRY GALORE
48	SL	00	404.61		H=0.5M	MOSTLY WOOD
49	RB	01	428.91			COHO FRY GALORE
50	LP	11	428.91	TJ		MANY COHO FRY
51	RB	11	428.91	TRIB	TEMP= 15 DEG C@ 15:50	NO FISH, LOTS OF SIT
52	SL	00	429.01	DJ	H=.45M	
53	CB	00	457.51	DJ		

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 3-MS SITE ID: 208 WAPITI CREEK PRE-TX (MS-208)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
54	DU	00	462.81	DJ	DJ	
55	RI	00	480.61	/SS		END OF 500M
56	SP	00	485.31			XL COHO FRY- 10 CM
58	SP	00	491.01	/SS		~5 XL COHO FRY- 10 CM
59	SB	00	491.81		H=0.6M	
60	CC	00	501.11	CC	CULVERT= 0.6 X 0.5M	DAMAGED
61	RB	00	512.41			PGS,TAILED FROG, 2 TADPO



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

Location: 10 418727 E 4794988 N
 Caption: WAPITI CREEK RESTORATION SITE - NORTH FORK
 COQUILLE BASIN