

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

STREAM: Crab Creek (MC-20)
BASIN: Alsea River
SURVEY TYPE: Post-Tx
DATE: July 2, 2003
SURVEY CREW: Carmen Vandyke, Brock Jonasson
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 15.4 km²
USGS MAPS: Five Rivers
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Crab Creek habitat survey extended 630 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 6.8 (range: 2.0-12.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.7 percent. Scour pools (74%) and riffles (20%) dominated stream habitat. Gravel (34%) and sand (23%) dominated stream substrate. Wood volume was low at 18.9 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.

OREGON DEPARTMENT OF FISH AND WILDLIFE

CRAB CREEK POST-TX (MC-20)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/2/03

REACH 1

T15S-R10W-S12SE

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	1	8	0.3	0.05	2	0	90	5	5	0	0	0
GLIDE	2	40	5.7	0.10	221	1	8	13	45	15	5	15
POOL-BACKWATER	1	3	3.0	0.30	8	0	30	60	10	0	0	0
POOL-LATERAL SCOUR	13	322	7.6	0.60	2,442	0	22	27	25	3	4	19
POOL-STRAIGHT SCOUR	2	94	7.2	0.70	671	0	30	35	15	5	0	15
RIFFLE	12	168	4.8	0.11	855	2	10	20	48	17	2	3
STEP/BEDROCK	1	4	3.2	0.10	11	0	5	5	0	0	0	90
STEP/COBBLE	1	4	2.5	0.05	9	0	0	0	70	30	0	0
Total:	33	641	5.8	0.34	4,219	3	Avg 18	23	34	9	3	13

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	1	3	3.0	0.30	8	0.20%	0	0.0
Scour Pools	15	416	7.6	0.62	3,112	73.76%	0	0.0
Glides	2	40	5.7	0.10	221	5.24%	1	0.5
Riffles	12	168	4.8	0.11	855	20.26%	2	0.2
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	8	0.3	0.05	2	0.06%	0	0.0
Step/Falls	2	7	2.9	0.08	20	0.47%	0	0.0
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:	16	25.0
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	8	12.5
Pool frequency (channel widths/pool):	4.7	
Residual pool depth (avg):	0.53	

STREAM SUMMARY

CRAB CREEK POST-TX (MC-20)

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	
33	641	5.8	0.34	4,219	18	23	34	9	3	13	3

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	8	0.20%
Scour Pools	3,112	73.76%
Glides	221	5.24%
Riffles	855	20.26%
Rapids	0	0.00%
Cascades	2	0.06%
Step/Falls	20	0.47%
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	1077
Total conifers/1000 ft	81
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	0.0	1.0	0.0	1.3	0.0	1.7	0.0	4.0
15-30cm	0.0	2.3	0.0	1.0	0.7	2.7	0.7	6.0
30-50cm	0.0	1.0	0.3	2.0	0.3	3.7	0.7	6.7
50-90cm	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
>90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
Total/100m2	0.0	5.0	0.3	4.3	1.0	8.3	0.4	5.9

Canopy closure and ground cover

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Canopy closure	77	75	81
Shrub cover	20	39	43
Grass/forb cover	70	59	56

Predominant landform in each zone

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Hillslope	50	67	83
High terrace	33	33	17
Low terrace	0	0	0
Floodplain	17	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
Riprap	0	0	0
Surface slope (%)	23	47	49

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	1077
Total conifers/1000 ft	81
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>	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	4.0
15-30cm	0.7	6.0
30-50cm	0.7	6.7
50-90cm	0.0	0.3
>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		
7	RT	2	HS	80	95	70	30	Conifer							
								Hardwood			3				
7	RT	3	HS	85	90	80	20	Conifer							
								Hardwood		1	1				
7	RT	1	HT	2	60	60	40	Conifer							
								Hardwood	1						
7	LF	3	HS	40	90	60	40	Conifer			2	1			
								Hardwood				4			
7	LF	2	HS	45	95	70	30	Conifer				1			
								Hardwood				1			
7	LF	1	HS	40	90	10	90	Conifer							
								Hardwood	2	2	1				
13	LF	2	HT	1	70	5	95	Conifer							
								Hardwood			2				
13	RT	3	HS	75	95	70	30	Conifer							
								Hardwood		2	1				
13	RT	2	HS	85	95	50	50	Conifer							
								Hardwood							
13	LF	1	HT	1	95	5	95	Conifer							
								Hardwood		4				1	
13	LF	3	HS	30	95	30	70	Conifer			2	4	1		
								Hardwood			1	2			
13	RT	1	HS	80	95	30	20	Conifer							
								Hardwood		1	2				
18	RT	1	HS	10	90	10	80	Conifer							
								Hardwood						1	
18	RT	3	HS	60	95	15	80	Conifer							
								Hardwood	5	2	1				
18	LF	1	FP	2	30	5	95	Conifer							
								Hardwood							
18	LF	3	HT	1	20	5	95	Conifer							
								Hardwood		1					
18	RT	2	HS	70	95	40	50	Conifer							
								Hardwood	4	3					
18	LF	2	HT	0	0	0	100	Conifer							
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **2-MC** SITE ID: **20** CRAB CREEK POST-TX (MC-20)

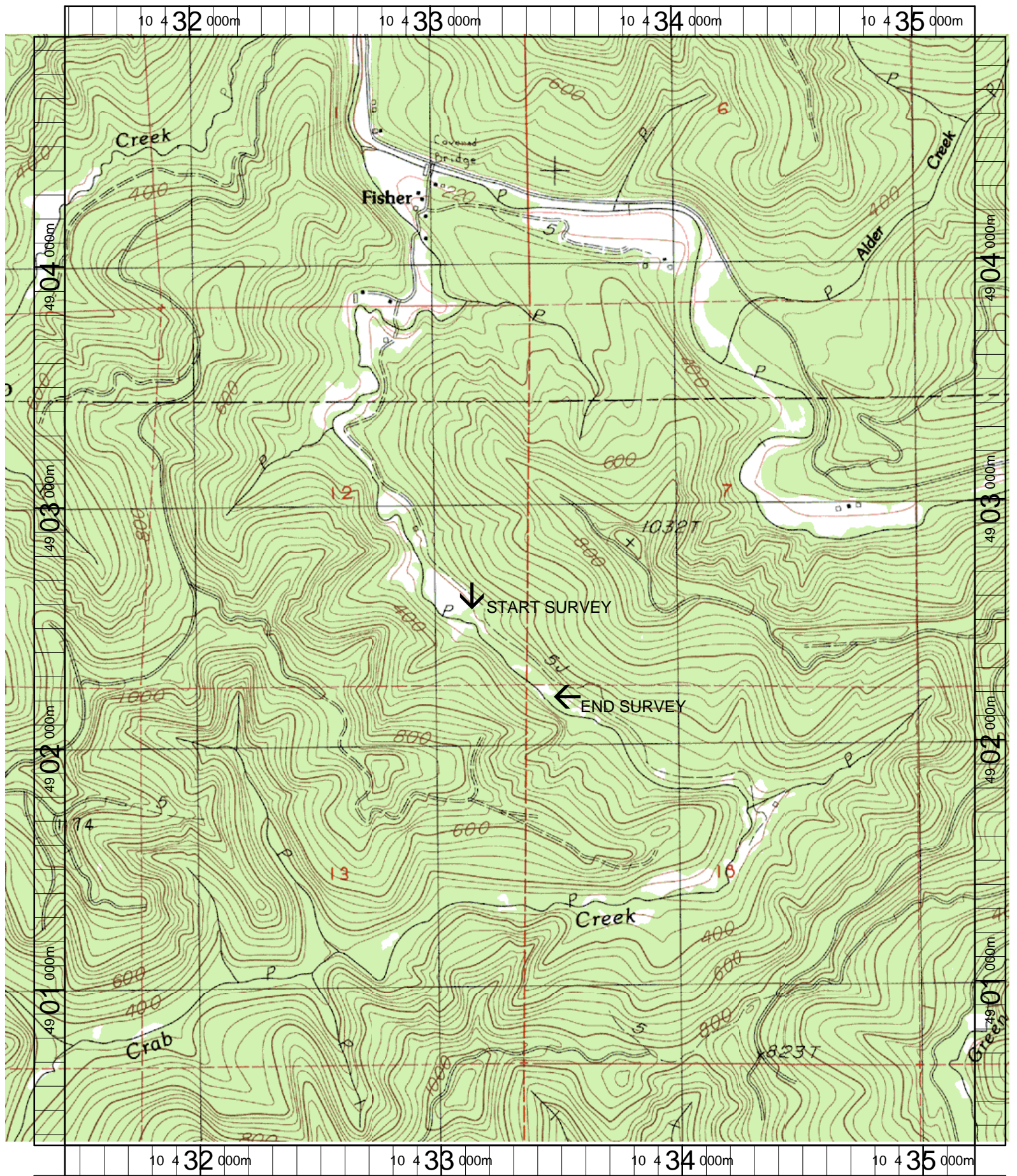
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	9.9		ALTERD BY /TJ	START
2	LP	00	43.1	HS, DJ		
3	RI	00	56.2	DJ		
4	SP	01	101.8	TJ, WL		KINGFISHER
7	GL	00	133.5		VW=16	
10	LP	00	158	DJ		
12	SP	00	226.1	WL	LOTS OF DACE	FISH
13	RI	00	251.5		VW=40	
14	RI	00	266.3	BV		
15	LP	00	316.7	BV		.8M UNDERCUT
16	LP	00	347.3		2M TAILOUT	
17	LP	00	365.8	WL	1M TAILOUT	NEWT, CRAWDAD, MUSSEL
18	RI	00	381.3		VW=55	
20	SC	00	398.9		H=.2	
21	LP	00	423.2	WL		NEWTS
22	RI	00	439.4	HS, DJ	4 X 2 POOL OFF SIDE	
23	LP	00	467.3	WL		NEWT
24	SR	00	470.8		H=.2	
25	LP	00	487.4	WL		NEWT, CRAWDAD
26	RI	00	496.6	BV		
27	LP	00	513.5	BV		

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 2-MC SITE ID: 20 CRAB CREEK POST-TX (MC-20)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
28	LP	00	544.4	BV	TAILOUT	2.1M UNDERCUT, MOST WO
30	LP	00	571.3	WL		FISH 2M UNDERCUT
31	GL	00	590			.4M POCKET
33	LP	00	630.1		VW=60	END



Name: FIVE RIVERS
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 433345 E 4902640 N
 Caption: CRAB CREEK RESTORATION SITE - ALSEA BASIN