

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

STREAM: Elk Creek (MS-291)
BASIN: Coquille River
SURVEY TYPE: Post-Tx
DATE: February 9, 2005
SURVEY CREW: Jennifer Schmitt, Neil Jensen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 39.0 km²
USGS MAPS: Remote
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Elk Creek habitat survey extended 743 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 8.6 (range: 1.2-12.0). Land use for the reach was timber harvest and second growth (15-30 cm dbh) trees. The average unit gradient was 0.6 percent. Scour pools (45%) and beaver pools (39%) dominated stream habitat. Bedrock (47%) and sand (23%) dominated stream substrate. Wood volume was high at 42.3 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.

REACH 1

T28S-R11W-S27SW

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	8.6	VWI Range:	1.2 - 12

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	743	5,299	0
Secondary Channel	0	0	0
Off-Channel Units	4	2	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 5
Width: 5.9	Width: 11.8	15.8 (13.4 - 19.5)	19.8 (16.1 - 26.8)
Depth: 0.46	Height: 0.5	1.0 (0.8 - 1.2)	4.0 (3 - 5.3)

W:D ratio: 25.3
 Stream Flow Type: MF
 Average Unit Gradient: 0.6%
 Water temperature (°C): 4.0 - 4.0
 Entrenchment (ACW:FPW ratio): 1.4
 Habitat Units/100m (total channel length): 3.2
 Habitat Units/100m (primary channel length): 3.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	ST
Riparian Vegetation:	D30	G

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):	234	31.5
Volume (m ³):	315	42.3
Key pieces (>=12m x 0.60m):	27	3.6

OREGON DEPT OF FISH AND WILDLIFE

ELK CREEK POST-TX (3-MS, 291)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/9/2005

REACH 1		T28S-R11W-S27SW					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/BEDROCK	2	25	3.3	0.29	126	0	2	0	0	0	0	98
POOL-BEAVER DAM	1	171	7.9	0.85	1,351	0	10	75	15	0	0	0
POOL-DAMMED	3	97	6.8	0.80	708	0	10	68	7	0	5	12
POOL-LATERAL SCOUR	6	310	7.0	0.79	2,337	0	7	26	11	0	1	55
POOL-STRAIGHT SCOUR	1	15	4.0	0.60	61	0	5	37	42	0	0	16
RIFFLE	5	109	5.9	0.23	609	0	3	6	22	1	2	66
STEP/BEAVER DAM	1	1	7.5	0.04	7	0	3	10	20	0	61	5
STEP/BEDROCK	1	10	5.9	0.10	56	0	2	5	0	0	5	88
STEP/COBBLE	1	7	4.3	0.31	29	0	5	5	84	0	0	5
STEP/STRUCTURE	3	3	4.7	0.08	15	0	2	9	3	0	43	43
Total:	24	747	5.9	0.46	5,300	0	Avg: 5	23	15	0	9	47

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	268	7.1	0.81	2,059	38.85%	0	0.0	
Scour Pools	7	326	6.6	0.76	2,399	45.26%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	109	5.9	0.23	609	11.50%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	2	25	3.3	0.29	126	2.38%	0	0.0	
Step/Falls	6	20	5.3	0.12	107	2.02%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

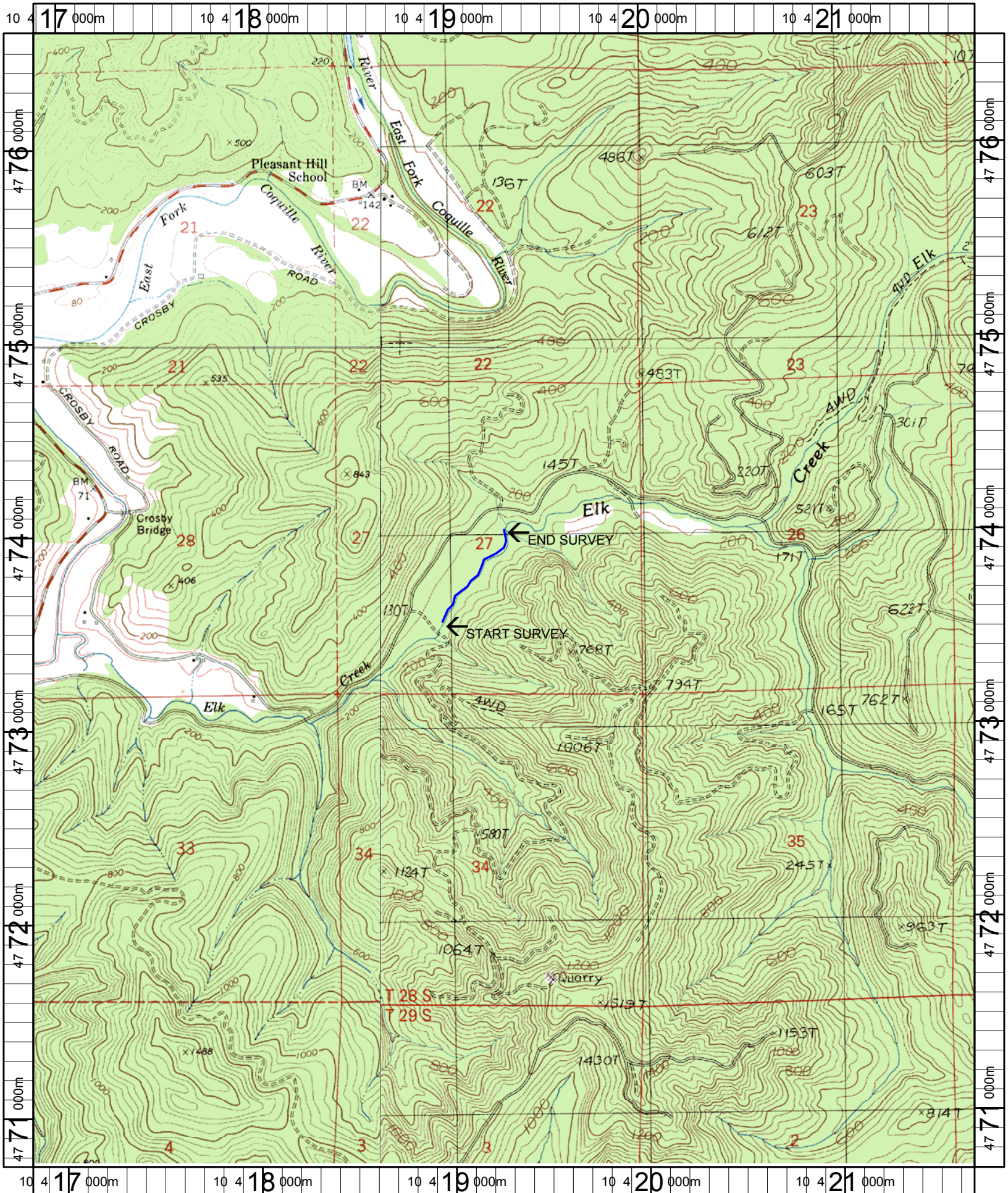
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	11	14.7	14.8
Pools >=1m deep:	1	1.3	1.3
Complex pools (LWD pieces>=3):	7	9.4	9.4
Pool frequency (channel widths/pool):	5.7		
Residual pool depth (avg):	0.66		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **291** ELK CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
4	LP	00	43.4	WL	WILDLIFE TRAILS	
5	RI	00	67.5	HS	PLACED BOULDERS AND WOOD	
6	SS	00	68.8	HS	H = .35	
7	DP	00	121.6	HS, WL, DJ	BV, SALMONID FRY	
8	SS	00	122.4	HS, DJ	H = 0.2	
9	DP	00	150.3	HS, /SS,DJ		
10	RI	00	192.1	HS, DJ		
11	LP	00	208.6	BV, HS,/EA	WL = WILDLIFE TRAIL	
12	SS	00	209.7	HS	H = 0.26, PLACED BOULDERS	
13	DP	00	226.1	HS, SS/	PLACED BOULDERS AND WOOD	
15	LP	00	282.4	DJ, HS, WL	LA/, REDDS, PLACED WOOD	
17	LP	01	373	BV, HS, DJ	WL, /TJ, BV TRACK, PLACED WOOD	
18	CR	11	373		TRIB, ACW = .7	
19	SR	00	382.5	HS, DJ,LA/	PLACD BOULDERS AND WOOD	
20	SD	00	383.45	BV, BD, HS	H = .3, PLACED BOULDERS	
21	BP	00	554.45	HS, DJ, BV	/SS, STLHD, DEER, BV TRACKS	
22	SP	00	569.75	BV		
24	LP	00	743.05	DJ, HS, WL	BV, /SS, PLACED WOOD, WL TRAIL	



Name: DORA
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 419276 E 4773652 N
 Caption: ELK CREEK RESTORATION SITE - COQUILLE BASIN