

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

STREAM: Elk Creek (MS-292)
BASIN: Coquille River
SURVEY TYPE: Reference
DATE: February 9, 2005
SURVEY CREW: Neil Jensen, Jennifer Schmitt
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 542 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9.7 (range: 4.5-20.0). Land use for the reach was timber harvest and second growth (15-30 cm dbh) trees. The average unit gradient was 0.7 percent. Scour pools (69%) and dammed pools (20%) dominated stream habitat. Bedrock (38%) and gravel (31%) dominated stream substrate. Wood volume was very low at 5.3 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-S27NE

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	9.7	VWI Range:	4.5 - 20

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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 Channel	542	3,671	0
Secondary Channel	0	0	0
Off-Channel Units	19	22	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 6.4	Width: 11.8	14.9 (12.5 - 16.4)	17.2 (13.9 - 20.8)
Depth: 0.58	Height: 0.5	1.1 (0.9 - 1.2)	2.3 (1.3 - 3.3)

W:D ratio: 22.2

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: MF

Habitat Units/100m (total channel length): 3.9

Average Unit Gradient: 0.7%

Habitat Units/100m (primary channel length): 4.1

Water temperature (°C): 4.0 - 4.0

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):	54	10.0
Volume (m ³):	29	5.3
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

ELK CREEK REFERENCE (3-MS, 292)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

2/9/2005

REACH 1		T28S-R11W-S27NE					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	3	30	3.7	0.12	111	0	2	0	5	2	0	91
POOL-DAMMED	3	121	6.2	0.90	725	0	8	46	28	0	3	15
POOL-LATERAL SCOUR	7	360	7.6	1.24	2,556	0	7	24	35	1	1	32
RIFFLE	2	33	6.2	0.27	194	0	3	8	41	0	3	46
STEP/BEDROCK	2	2	7.9	0.05	17	0	0	0	0	0	0	100
STEP/COBBLE	2	12	6.0	0.13	69	0	4	2	89	5	0	0
STEP/STRUCTURE	3	4	5.7	0.08	22	0	0	2	26	0	72	0
Total:	22	562	6.4	0.58	3,693	0	Avg: 4	15	31	1	11	38

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	121	6.2	0.90	725	19.62%	0	0.0
Scour Pools	7	360	7.6	1.24	2,556	69.21%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	2	33	6.2	0.27	194	5.25%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	3	30	3.7	0.12	111	2.99%	0	0.0
Step/Falls	7	18	6.4	0.08	108	2.93%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

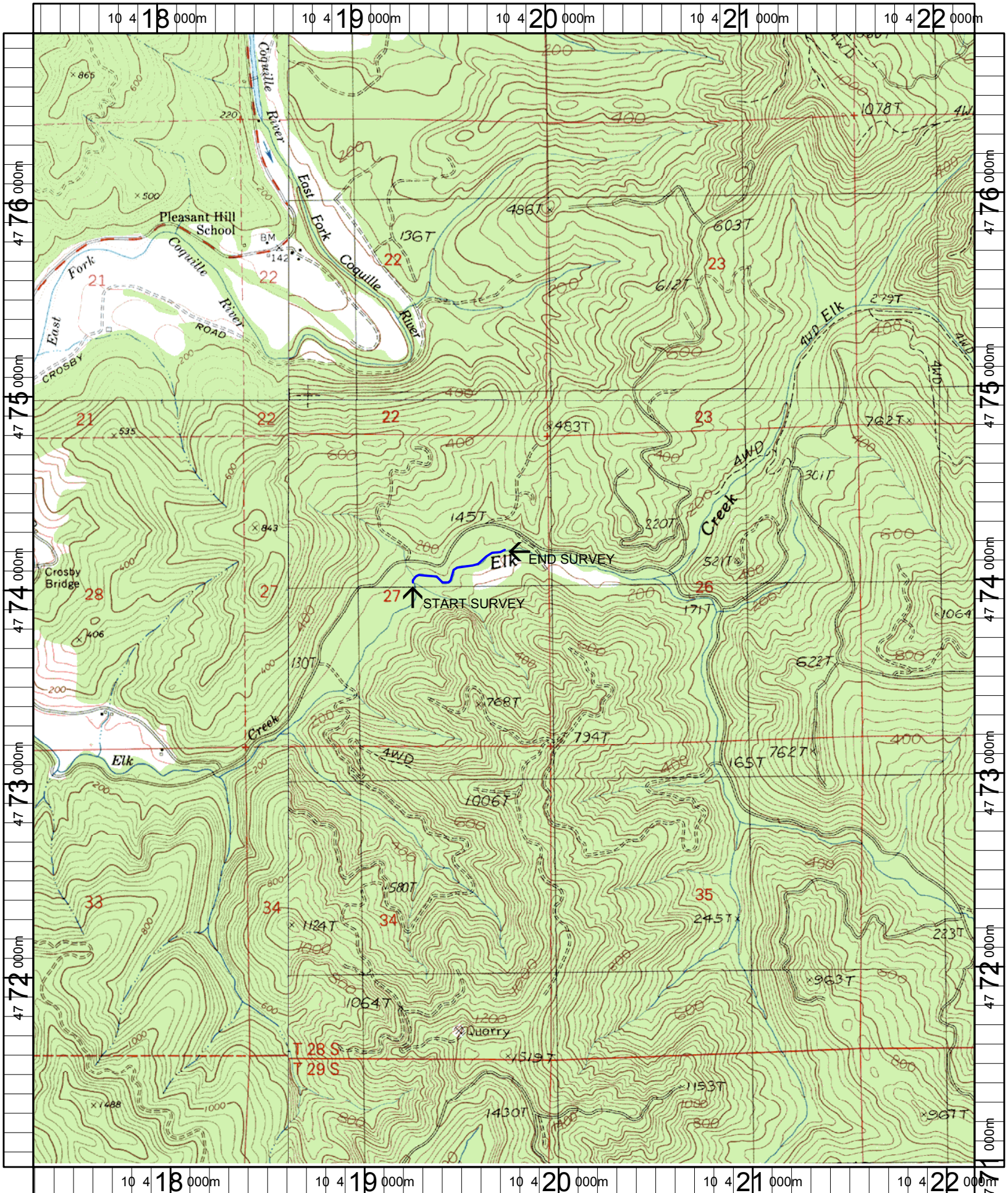
POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	10	17.8	18.4
Pools >=1m deep:	6	10.7	11.1
Complex pools (LWD pieces>=3):	5	8.9	9.2
Pool frequency (channel widths/pool):	4.8		
Residual pool depth (avg):	1.05		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **292** ELK CREEK REFERENCE

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	LP	01	50.2	TJ/		
3	CR	11	50.2		ACW=.72 ACH=.2	
4	SR	00	50.86		H=.75	
7	SR	00	85.18		H=.28	
8	LP	00	172.18		BROKEN ROCK WEIR IN POOL	
9	SS	00	173.98		H=0.32, PLACED BOULDER	
10	DP	01	234.28	HS, /SS	CT CT D50 D30 ST TH PLACED B'S	
12	SS	00	235.18	HS	H = .39, PLACED BOULDERS	
15	LP	00	313.98	SS/, WL	REDD	
16	RI	00	335.38	SS/LA, WL	REDDS	
17	LP	00	347.08	SS/, WL	REDDS	
18	SS	00	348.18	HS	H = .27, PLACED BOULDERS	
19	DP	00	385.18	EA/, HS	PLACED BOULDERS, SMALL WEIR	
20	LP	00	489.38	WL, HS, DJ	SS/SS, PLACED BLDRS, CARCASS	
22	LP	00	542.28	WL, SS/	REDDS, ELK TRACKS, WL TRAIL	



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

Location: 10 419752 E 4773921 N
 Caption: ELK CREEK REFERENCE SITE - COQUILLE BASIN