

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

STREAM: Edson Creek Lower (S-135)
BASIN: Rogue River
SURVEY TYPE: Post-Tx
DATE: June 25, 2003
SURVEY CREW: Lucas Lawrence, Nate Davis
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 10.2 km²
USGS MAPS: Gold Beach
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Edson Creek habitat survey extended 491 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 young (3-15 cm dbh) trees. The average unit gradient was 0.6 percent. Scour pools (77%) and riffles (18%) dominated stream habitat. Gravel (61%) and sand (20%) dominated stream substrate. Wood volume was moderate at 20.9 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.

REACH 1

T36S-R14W-S08NW

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 20.0		VWI Range: 20 - 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	491	1,371	0
Secondary	34	30	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	2.3	Width	4.7	6.9	8.0
Depth	0.37	Height	0.7	1.4	1.8
		W:D ratio	6.9	Entrenchment	1.4

Stream Flow Type: MF Water temp (C): 14.6 - 14.6
 Avg. Unit Gradient: 0.6% Habitat Units/100m: 8.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	
Riparian Vegetation:	S	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	8%	Reach avg: 54%
Undercut Banks:	4%	Range: 17 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	47	9.6
Volume (m ³):	102	20.9
Key pieces (>=10m x 0.60m):	4	0.8

OREGON DEPARTMENT OF FISH AND WILDLIFE

EDSON CREEK LOWER POST-TX (S-135)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/25/03

REACH 1

T36S-R14W-S08NW

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	1	7	0.4	0.15	3	0	0	0	11	11	0	78
CULVERT CROSSING	1	13	0.2	0.10	3	0	0	11	67	22	0	0
GLIDE	1	11	2.2	0.12	23	0	0	30	70	0	0	0
POOL-ALCOVE	1	5	1.5	0.20	7	0	30	70	0	0	0	0
POOL-BACKWATER	2	6	2.8	0.43	16	0	6	20	58	0	0	17
POOL-LATERAL SCOUR	16	324	3.5	0.73	1,052	21	9	23	52	5	1	11
POOL-STRAIGHT SCOUR	2	17	1.6	0.35	32	5	5	16	68	0	11	0
RIFFLE	12	126	1.6	0.12	232	0	1	19	74	6	0	1
RIFFLE W/ POCKETS	1	7	2.9	0.25	19	0	0	20	40	40	0	0
STEP/COBBLE	4	10	1.3	0.08	13	0	0	6	90	4	0	0
STEP/LOG	1	2	2.2	0.10	3	0	22	56	22	0	0	0
STEP/STRUCTURE	1	0	0.1	0.10	0	0	0	0	100	0	0	0
Total:	43	525	2.3	0.37	1,402	26	Avg 5	20	61	6	1	7

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	10	2.4	0.35	22	1.60%	0	0.0
Scour Pools	18	340	3.2	0.69	1,083	77.29%	26	2.4
Glides	1	11	2.2	0.12	23	1.65%	0	0.0
Riffles	13	133	1.7	0.13	252	17.96%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	7	0.4	0.15	3	0.19%	0	0.0
Step/Falls	6	12	1.3	0.08	16	1.13%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	1	13	0.2	0.10	3	0.18%	0	0.0

POOL SUMMARY

	Total	# / Km
All Pools:	21	40.0
Pools >=1m deep:	3	5.7
Complex pools (LWD pieces>=3):	6	11.4
Pool frequency (channel widths/pool):	5.3	
Residual pool depth (avg):	0.60	

STREAM SUMMARY

EDSON CREEK LOWER POST-TX (S-135)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
43	525	2.3	0.37	1,402	5	20	61	6	1	7	26

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	22	1.60%
Scour Pools	1,083	77.29%
Glides	23	1.65%
Riffles	252	17.96%
Rapids	0	0.00%
Cascades	3	0.19%
Step/Falls	16	1.13%
Dry	0	0.00%
Culverts	3	0.18%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	224
Total conifers/1000 ft	142
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	0.0	0.0	1.0	0.0	0.3	0.0	1.3
15-30cm	0.0	0.3	0.0	1.0	1.0	0.7	1.0	2.0
30-50cm	0.0	0.0	0.0	0.3	1.3	0.0	1.3	0.3
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	0.3	0.0	2.3	2.3	1.0	0.8	1.2

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	18	33	44
Shrub cover	59	56	42
Grass/forb cover	36	26	23

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	0	0
High terrace	100	100	67
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	33
Riprap	0	0	0
Surface slope (%)	0	0	0

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	224
Total conifers/1000 ft	142
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</u> <u>class (cm)</u>	<u>Zones 1-3</u> <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.0	1.3
15-30cm	1.0	2.0
30-50cm	1.3	0.3
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

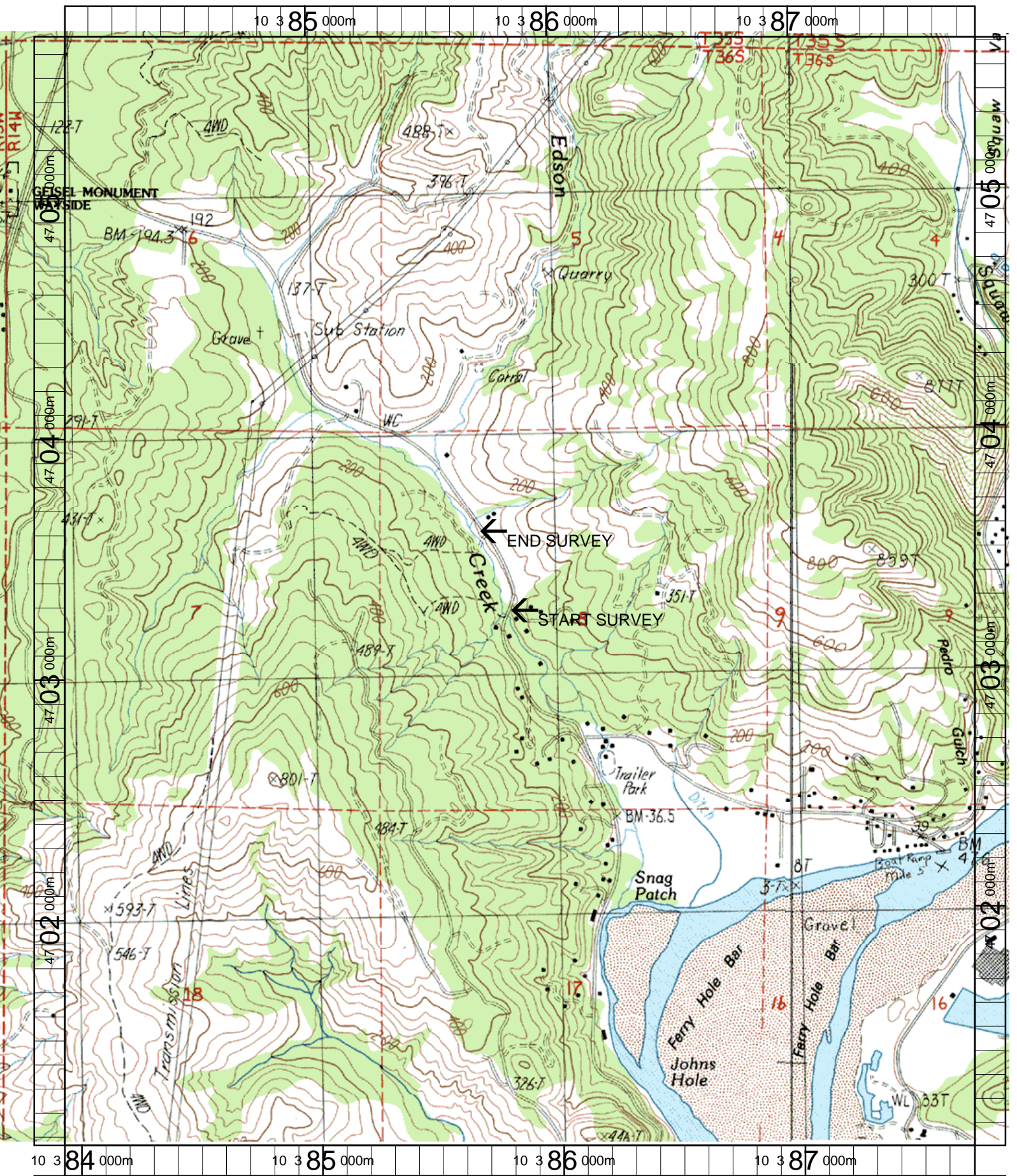
Unit	Side	Zone	Surface	Slope	Cover (percent)			Diameter class (cm)					Notes		
					Canopy	Shrub	Grass	3-15	15-30	30-50	50-90	>90			
10	RT	3	RB	0	0	0	50	Conifer							
								Hardwood							
10	LF	1	HT	0	0	100	0	Conifer							
								Hardwood							
10	LF	2	HT	0	0	100	0	Conifer							DEAD CANOPY
								Hardwood							
10	LF	3	HT	0	50	90	0	Conifer							
								Hardwood							
10	RT	2	HT	0	0	5	95	Conifer							
								Hardwood							
10	RT	1	HT	0	30	0	100	Conifer							
								Hardwood							
21	RT	3	RB	0	20	20	30	Conifer							
								Hardwood							
21	LF	2	HT	0	40	80	10	Conifer							
								Hardwood							
21	LF	3	HT	0	40	60	15	Conifer							
								Hardwood	1						
21	RT	1	HT	0	60	60	20	Conifer							
								Hardwood							
21	RT	2	HT	0	30	70	10	Conifer							
								Hardwood	2						
21	LF	1	HT	0	0	80	10	Conifer							
								Hardwood							
34	RT	3	HT	0	85	40	20	Conifer	0	3	3	0			
								Hardwood							
34	LF	2	HT	0	85	20	20	Conifer							
								Hardwood	1	2	1				
34	LF	3	HT	0	70	40	20	Conifer			1				
								Hardwood		2					
34	RT	1	HT	0	15	20	80	Conifer							
								Hardwood		1					
34	RT	2	HT	0	45	60	20	Conifer							
								Hardwood		1					
34	LF	1	HT	0	0	95	5	Conifer							
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **5-SC** SITE ID: **135** **EDSON CREEK LOWER POST-TX (S-**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	01	28.4	BC,TJ/	TEMP= 14 DEG C 10:30	
2	CR	11	28.4		ACW=1.5	BEDROCK= HARDPAN
4	RP	00	35.1	BV		
5	LP	00	45.4	PGS/DJ		BRCK= HARDPAN
6	RI	00	54.3			BRCK= HARDPAN
11	LP	00	143.1			BDRK= HARDPAN
14	SL	00	174.6	BV		
15	LP	00	194.3	BV		
16	RI	00	203.7	BV		
18	RI	00	223.6			15 DEG C @ 13:00
19	LP	01	246.5			BDRK= HARDPAN
24	LP	00	278	HS		
26	LP	00	291	HS		BDRK= HARDPAN
28	BW	10	312.3	HS		BDRK= HARDPAN
29	LP	00	343.1	HS		BDRK= HARDPAN
33	LP	00	380	HS		
35	LP	00	412.7			BDRK= HARDPAN
37	LP	00	444	WL		BDRK= HARDPAN
39	LP	01	490.8	/LE,WL	/TJ	16 DEG C 13:00
42	SS	11	490.8		H=.15	H=0.15
43	CC	11	490.8	CC	H=.15 D=1.5, ROUND	



Name: GOLD BEACH
 Date: 3/21/2003
 Scale: 1 inch equals 1666 feet

Location: 10 385849 E 4703343 N
 Caption: EDSON CREEK LOWER RESTORATION SITE - ROGUE BASIN