

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

STREAM: Eames Creek (MC-177)
BASIN: Siuslaw River
SURVEY TYPE: Pre-Tx
DATE: June 25, 2003
SURVEY CREW: Jeremiah Bernier, Alex Higgins
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 15.7 km²
USGS MAPS: High Point
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Eames Creek habitat survey extended 515 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 10.6 (range: 10.0-13.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.2 percent. Scour pools (33%), riffles (23%) and slackwater pools (23%) dominated stream habitat. Bedrock (52%) dominated stream substrate. Wood volume was low at 8.4 m³/100m.

COMMENTS:

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

REACH 1

T19S-R06W-S07NE

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	10.6	VWI Range:	10 - 13

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	515	2,858	0
Secondary	11	10	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	5.4	Width	6.9	10.1	12.2
Depth	0.28	Height	0.5	1.1	1.4
		W:D ratio	12.9	Entrenchment	1.5

Stream Flow Type:	MF	Water temp (C):	10.5 - 10.5
Avg. Unit Gradient:	1.2%	Habitat Units/100m:	6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 92%
Undercut Banks:	34%	Range: 58 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	58	11.3
Volume (m ³):	43	8.4
Key pieces (>=10m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

EAMES CREEK PRE-TX (MC-177)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/25/03

REACH 1

T19S-R06W-S07NE

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	
GLIDE	4	74	5.6	0.20	423	1	4	5	4	0	0	87	
POOL-DAMMED	4	106	5.9	0.49	664	0	18	41	5	0	0	37	
POOL-ISOLATED	1	3	1.7	0.30	5	0	80	20	0	0	0	0	
POOL-LATERAL SCOUR	7	136	4.9	0.51	672	10	10	29	16	2	3	41	
POOL-PLUNGE	2	11	9.8	0.65	108	0	0	5	18	0	0	78	
POOL-STRAIGHT SCOUR	1	24	6.7	0.50	159	0	5	19	10	0	0	67	
RAPID/BOULDERS	2	21	2.6	0.09	67	8	0	15	35	35	15	0	
RIFFLE	7	132	4.9	0.12	672	0	4	11	10	6	0	69	
STEP/BEDROCK	2	5	7.6	0.05	35	0	0	0	0	0	0	100	
STEP/COBBLE	3	13	5.5	0.07	59	0	3	20	47	28	0	2	
STEP/LOG	2	1	4.4	0.03	3	0	0	16	22	0	0	63	
Total:	35	525	5.4	0.28	2,868	19	Avg	8	18	15	6	1	52

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	5	109	5.0	0.45	669	23.33%	0	0.0
Scour Pools	10	171	6.1	0.54	940	32.76%	10	1.1
Glides	4	74	5.6	0.20	423	14.76%	1	0.2
Riffles	7	132	4.9	0.12	672	23.43%	0	0.0
Rapids	2	21	2.6	0.09	67	2.35%	8	11.9
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	7	18	5.8	0.05	97	3.38%	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:	15	28.6
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	6	11.4
Pool frequency (channel widths/pool):	5.0	
Residual pool depth (avg):	0.43	

STREAM SUMMARY

EAMES CREEK PRE-TX (MC-177)

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	
35	525	5.4	0.28	2,868	8	18	15	6	1	52	19

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	669	23.33%
Scour Pools	940	32.76%
Glides	423	14.76%
Riffles	672	23.43%
Rapids	67	2.35%
Cascades	0	0.00%
Step/Falls	97	3.38%
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	1280
Total conifers/1000 ft	366
Total conifers >20" dbh/1000 ft	61
Total conifers >35" dbh/1000 ft	20

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	2.3	5.3	0.3	3.3	1.0	5.7	3.7	14.3
15-30cm	0.0	1.7	0.3	1.7	0.0	1.3	0.3	4.7
30-50cm	0.3	1.3	0.7	0.7	0.0	0.0	1.0	2.0
50-90cm	0.3	0.0	0.3	0.0	0.0	0.0	0.7	0.0
>90cm	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Total/100m2	3.3	8.3	1.7	5.7	1.0	7.0	2.0	7.0

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	86		84		45	
Shrub cover	41		47		55	
Grass/forb cover	26		40		30	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		50		33	
High terrace	67		50		33	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		33	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	19		8		6	

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	1280
Total conifers/1000 ft	366
Total conifers >20" dbh/1000 ft	61
Total conifers >35" dbh/1000 ft	20

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	3.7	14.3
15-30cm	0.3	4.7
30-50cm	1.0	2.0
50-90cm	0.7	0.0
>90cm	0.3	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

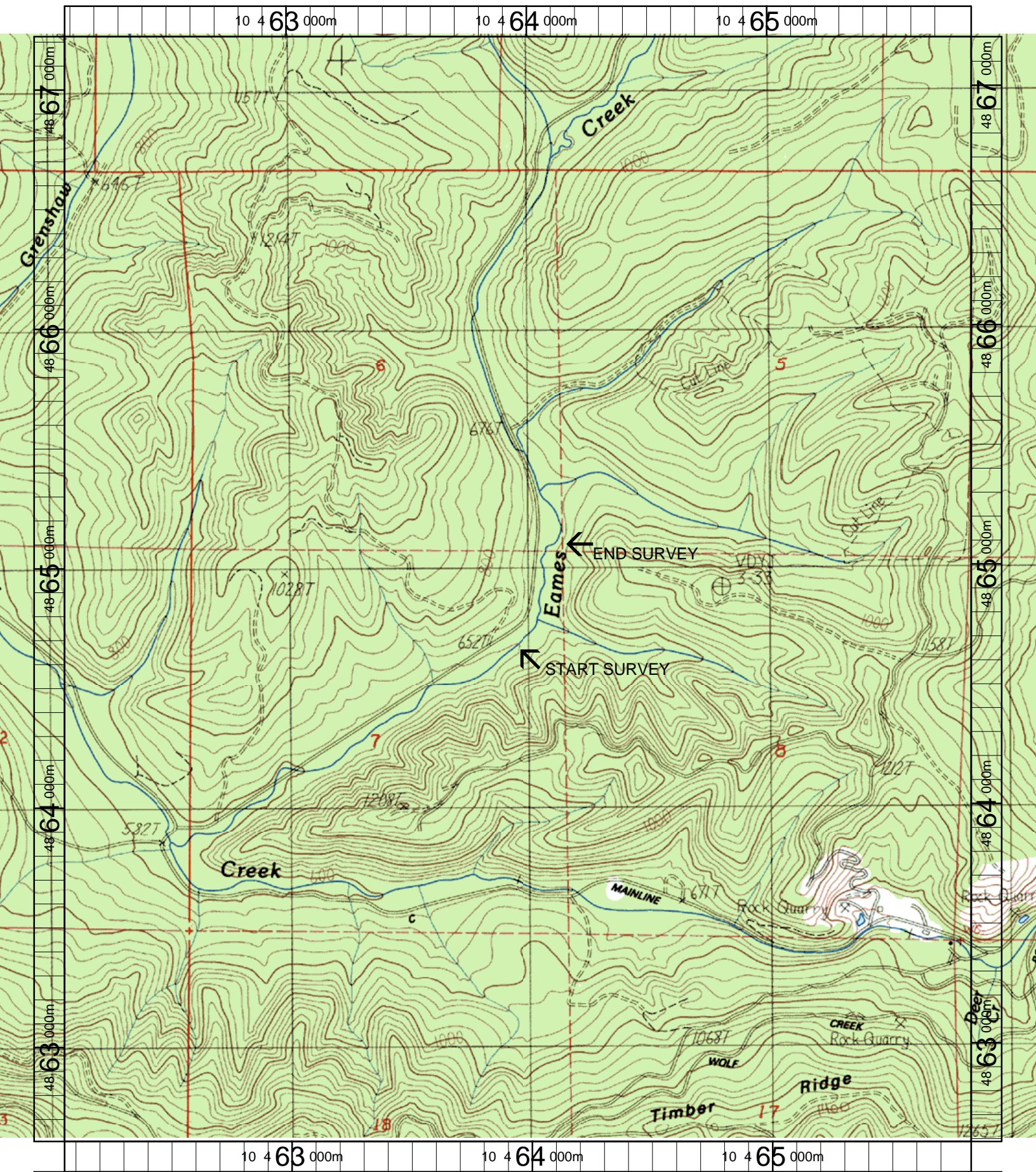
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
11	LF	1	HT	0	75	60	40	Conifer	5		1				PHOTO 0008- LEFT SIDE CREEK
								Hardwood							
11	LF	2	HT	0	75	35	65	Conifer							
								Hardwood							
11	LF	3	HT	0	90	30	70	Conifer							
								Hardwood	9	4					
11	RT	1	HT	0	95	60	20	Conifer							
								Hardwood	3	2					
11	RT	2	HS	15	85	40	40	Conifer							
								Hardwood							
11	RT	3	SC	0	60	70	30	Conifer							
								Hardwood							
21	LF	1	HT	0	85	0	0	Conifer							VINE MAPLE, 3 AI DER-PHOT
								Hardwood	7		3				
21	RT	3	HS	2	35	65	35	Conifer	2						
								Hardwood	5						
21	RT	2	HS	2	90	30	30	Conifer				1			40% DIRT
								Hardwood	3	2	1				
21	RT	1	HS	55	90	30	30	Conifer	1				1	1	40% DIRT
								Hardwood		3	1				
21	LF	2	HT	0	90	85	25	Conifer							
								Hardwood	3						
21	LF	3	HT	0	30	80	20	Conifer							
								Hardwood	1						
28	RT	3	HS	35	5	55	20	Conifer	1						
								Hardwood	2						
28	LF	1	HT	0	85	25	50	Conifer							PHOTO 0010 RIGHT
								Hardwood	6						
28	LF	2	HT	0	90	15	75	Conifer			1				
								Hardwood	4	3	1				
28	LF	3	SC	0	50	30	5	Conifer							PRIMARY CHANNEL LOOPS BACK
								Hardwood							
28	RT	1	HS	60	85	70	15	Conifer	1						
								Hardwood							
28	RT	2	HS	30	75	75	5	Conifer	1		1	1			
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **2-MC** SITE ID: **177** **EAMES CREEK PRE-TX (MC-177)**

<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	GL	00	10.2		T= 10.5	
2	PP	00	15.4			PINK FLAG 9-4-97FISH HAB 3
3	SR	00	19.4		H= .6	
5	SR	00	25.8		H= .25	PINK FLAG HABITAT 4
8	GL	00	94.7			ORANGEFLAG (1786 4)
9	SL	00	94.9		H= .2	
10	DP	01	115.9	/TJ		NO NAME ON TOPO
11	RB	11	115.9		ACW=2; T=10.5	
19	SL	00	240		H= .5	
20	DP	00	263.7		SALMONID FRY	
21	RI	00	279.1			RIP 2 PICTURE 1009
24	DP	00	359.7			FLAG 6
28	LP	00	409.1			HILLSLOPE APPROACH ON
30	GL	00	449.6		10-15 COHO FRY	
31	LP	00	478		COHO FRY	
35	LP	00	514.5			END YELLOW SIGN ON RIGH



Name: HIGH POINT
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 463947 E 4864909 N
 Caption: EAMES CREEK RESTORATION SITE - SIUSLAW BASIN