

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 29, 2004
SURVEY CREW: Peter Baki, Jeremiah Bernier
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 527 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 8.2 (range: 2.0-14.7). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (42%) and rapids (26%) dominated stream habitat. Bedrock (46%) and gravel (22%) dominated stream substrate. Wood volume was low at 11.3 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	8.2	VWI Range:	2 - 14.7

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	527	2,703	0
Secondary	10	8	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.6	Width: 5.9	7.4 (5.5 - 9.6)	8.0 (5.7 - 11.2)
Depth: 0.30	Height: 0.4	0.8 (0.7 - 1)	1.2 (1 - 1.4)

W:D ratio: 14.3

Stream Flow Type: MF

Average Unit Gradient: 1.3%

Water temperature (°C): 14.5 - 14.5

Entrenchment (ACW:FPW ratio): 1.3

Habitat Units/100m (total channel length): 6.0

Habitat Units/100m (primary channel length): 6.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	M15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	7%	Reach avg: 78%
Undercut Banks:	4%	Range: 53 - 92

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	58	11.0
Volume (m ³):	59	11.3
Key pieces (>=12m x 0.60m):	3	0.6

OREGON DEPARTMENT OF FISH AND WILDLIFE

EAMES CREEK PRE-TX (MC-177)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

6/29/2004

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
POOL-DAMMED	4	88	5.6	0.49	534	0	15	44	3	3	3	34
POOL-LATERAL SCOUR	9	197	5.1	0.47	1,024	8	1	23	21	12	6	37
POOL-PLUNGE	2	22	5.5	0.73	120	0	0	10	5	5	0	80
RAPID/BEDROCK	5	132	4.9	0.10	621	0	0	0	7	1	0	92
RAPID/BOULDERS	2	23	3.4	0.10	88	6	0	0	65	25	10	0
RIFFLE	2	55	4.7	0.18	263	2	3	40	13	3	3	40
STEP/BEDROCK	1	3	5.2	0.10	18	0	0	0	0	0	0	100
STEP/COBBLE	4	16	2.6	0.11	39	0	0	0	63	38	0	0
STEP/LOG	3	1	3.3	0.07	5	0	0	17	17	0	0	67
Total:	32	537	4.6	0.30	2,711	16	Avg: 2	16	22	11	3	46

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	88	5.6	0.49	534	19.68%	0	0.0
Scour Pools	11	219	5.2	0.52	1,145	42.23%	8	0.7
Glides	0	0			0	0.00%	0	0.0
Riffles	2	55	4.7	0.18	263	9.70%	2	0.8
Rapids	7	155	4.5	0.10	709	26.14%	6	0.8
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	8	21	3.2	0.09	61	2.26%	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:	15	27.9	28.4
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	9.3	9.5
Pool frequency (channel widths/pool):	6.1		
Residual pool depth (avg):	0.42		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	589
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	41
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	1.7	0.0	2.3	0.3	1.0	0.3	5.0
15-30cm	0.0	2.3	0.7	0.7	0.7	0.7	1.3	3.7
30-50cm	0.0	0.3	1.0	0.3	0.3	0.3	1.3	1.0
50-90cm	0.0	0.0	0.7	0.0	0.0	0.0	0.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	4.3	2.3	3.3	1.3	2.0	1.2	3.2

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	71		59		39	
Shrub cover	75		63		58	
Grass/forb cover	18		21		25	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		50		50	
High terrace	83		33		33	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		17		17	
Riprap	0		0		0	
Surface slope (%)	4		8		8	

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

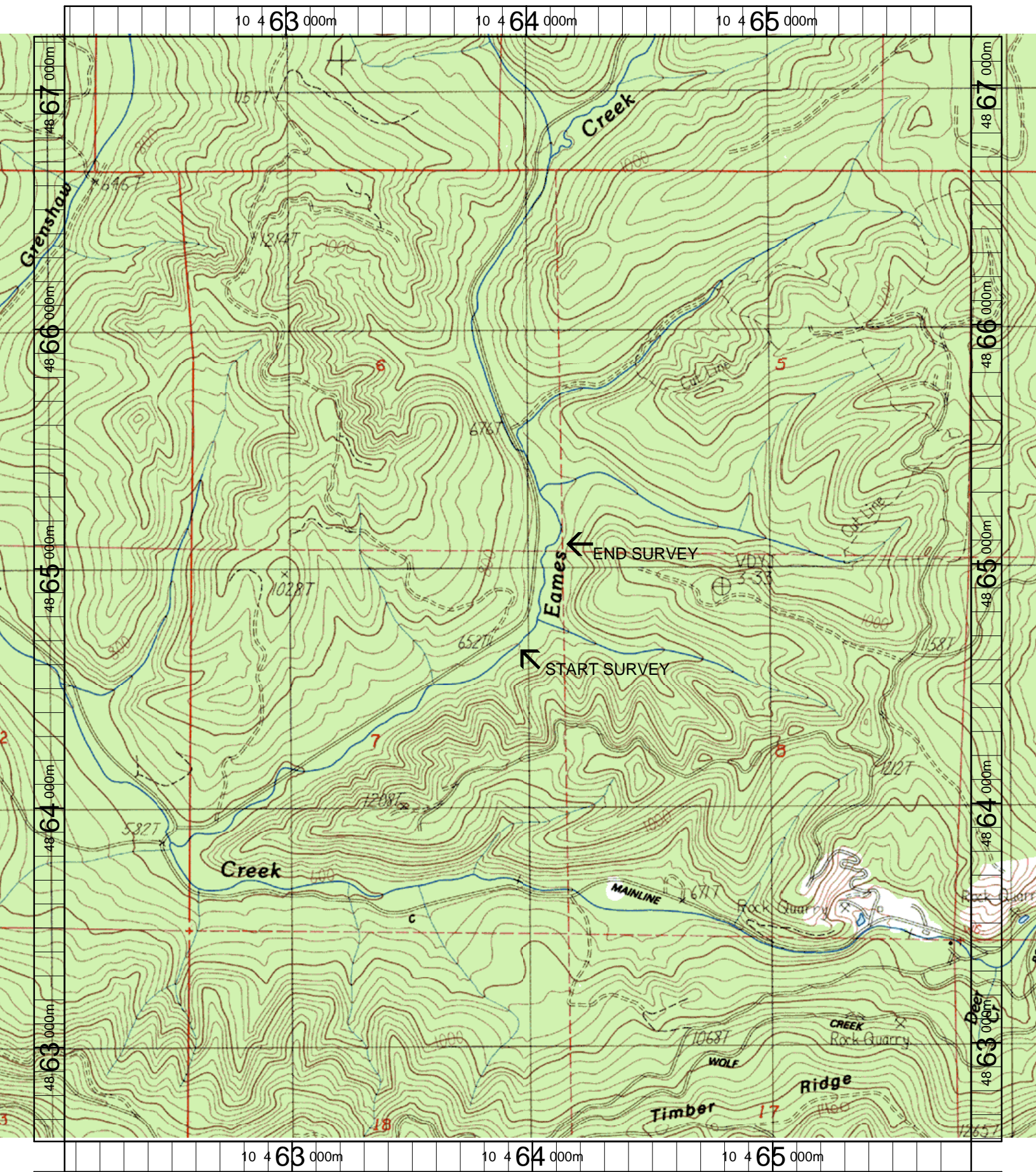
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	RT	2	HS	25	70	80	20	Conifer							
								Hardwood	1		1				
10	RT	3	HS	25	80	80	20	Conifer							
								Hardwood		1	1				
10	LF	3	HS	10	8	50	50	Conifer	1	2					
								Hardwood							
10	LF	2	HS	10	80	60	40	Conifer		1		1			
								Hardwood	1						
10	RT	1	HT	0	70	90	10	Conifer							
								Hardwood	1	4					
10	LF	1	HT	0	75	80	20	Conifer							
								Hardwood			1				
15	RT	2	HS	10	80	80	20	Conifer		1					
								Hardwood		1					
15	RT	1	HT	0	100	100	0	Conifer							
								Hardwood		1					
15	LF	3	RB	0	0	0	10	Conifer							
								Hardwood							
15	LF	2	RB	0	20	5	5	Conifer							
								Hardwood	3						
15	LF	1	HS	25	75	10	60	Conifer							
								Hardwood		2					
15	RT	3	HS	10	80	80	20	Conifer				1			
								Hardwood	1						
23	RT	2	HT	0	65	70	20	Conifer							
								Hardwood	2	1					
23	LF	1	HT	0	30	100	0	Conifer							
								Hardwood	1						
23	RT	1	HT	0	75	70	20	Conifer							
								Hardwood	3						
23	RT	3	HT	0	65	70	20	Conifer							
								Hardwood	2	1					
23	LF	3	HT	0	0	70	30	Conifer							
								Hardwood							OXBOW-CREEK CHANNEL
23	LF	2	HT	0	40	80	20	Conifer			3	1			
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2002

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	PP	00	14.4		PHOTO 6 START	T=14 DEG C AT 13:30
7	SL	00	97.6		H=.3M	
8	DP	01	119	/TJ		BLUE LINE NO NAME SG=4
9	RB	11	119		ACW=2.1	T=13 DEG C AT 13:45
10	RR	00	170.5			RIP 1
18	SL	00	272.75		H=0.05	
20	DP	00	334.35			COHO FRY
32	LP	00	527.35			END SIGN RIGHT



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