

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

STREAM: Papoose Creek (S-275)
BASIN: Euchre River
SURVEY TYPE: Pre-Tx
DATE: June 27, 2005
SURVEY CREW: Justin Gerding, Greg Ryder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 1.0 km²
USGS MAPS: Brushy Bald Mountain
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Papoose Creek habitat survey extended 566 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 18.0 (range: 14.0-24.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 3.3 percent. Riffles (75%) and scour pools (21%) dominated stream habitat. Gravel (50%) and sand (23%) dominated stream substrate. Wood volume was very low at 4.8 m³/100m.

COMMENTS:

There were three potential barriers to upstream fish migration in the surveyed length. The first was 0.7 m step and culvert at the beginning of the survey, while the second and third were 0.65 and 1.2 m steps over logs at unit 16 and 19.

REACH 1

T35S-R14W-S21SW

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	18.0	VWI Range:	14 - 24

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	566	751	0
Secondary Channel	30	9	0
Off-Channel Units	31	23	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 1.4	Width: 1.5	2.1 (1.7 - 2.5)	3.4 (2.2 - 4.6)
Depth: 0.23	Height: 0.3	0.6 (0.5 - 0.6)	1.3 (0.6 - 2.1)

W:D ratio: 5.3
 Stream Flow Type: LF
 Average Unit Gradient: 3.3%
 Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 7.3
 Habitat Units/100m (primary channel length): 8.1

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 83%
Undercut Banks:	18%	Range: 31 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	63	11.1
Volume (m ³):	27	4.8
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

PAPOOSE CREEK PRE-TX (5-SC, 275)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

6/27/2005

REACH 1		T35S-R14W-S21SW					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/BOULDERS	1	8	0.7	0.20	6	0	5	25	55	10	0	5
CULVERT CROSSING	1	48	0.5	0.10	24	0	10	20	30	10	30	0
POOL-LATERAL SCOUR	9	71	1.7	0.43	121	0	20	33	38	6	1	2
POOL-PLUNGE	5	14	2.8	0.58	41	0	16	25	47	11	2	0
RIFFLE	24	483	1.2	0.14	588	4	10	21	54	10	3	2
STEP/COBBLE	1	1	1.3	0.10	2	0	0	5	85	10	0	0
STEP/LOG	4	1	1.0	0.08	1	0	13	21	60	6	0	0
STEP/STRUCTURE	1	0	0.5	0.10	0	0	10	19	29	14	29	0
Total:	46	627	1.4	0.23	782	4	Avg: 13	23	50	9	3	2

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	0	0			0	0.00%	0	0.0	
Scour Pools	14	85	2.1	0.48	162	20.65%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	24	483	1.2	0.14	588	75.19%	4	0.7	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	8	0.7	0.20	6	0.74%	0	0.0	
Step/Falls	6	2	1.0	0.08	3	0.36%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	48	0.5	0.10	24	3.06%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	14	22.3	24.7
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	8.0	8.8
Pool frequency (channel widths/pool):	29.1		
Residual pool depth (avg):	0.41		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

PAPOOSE CREEK PRE-TX
GCG: 5-SC SITE ID: 275

Survey Date 6/27/2005

RIPARIAN ZONE

Report Date: 4/26/2006

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	406
Total conifers/1000 ft	102
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	0.3	2.7	0.0	1.3	0.0	0.0	0.3	4.0
15-30cm	0.3	1.0	0.0	1.0	0.3	0.3	0.7	2.3
30-50cm	0.3	0.3	0.3	0.0	0.0	0.0	0.7	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	1.0	4.0	0.3	2.3	0.3	0.3	0.6	2.2

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	88	42	23
Shrub cover	48	28	30
Grass/forb cover	38	35	48

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	50	33	67
High terrace	50	17	17
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	50	17
Riprap	0	0	0
Surface slope (%)	58	17	59

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	406
Total conifers/1000 ft	102
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	4.0
15-30cm	0.7	2.3
30-50cm	0.7	0.3
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

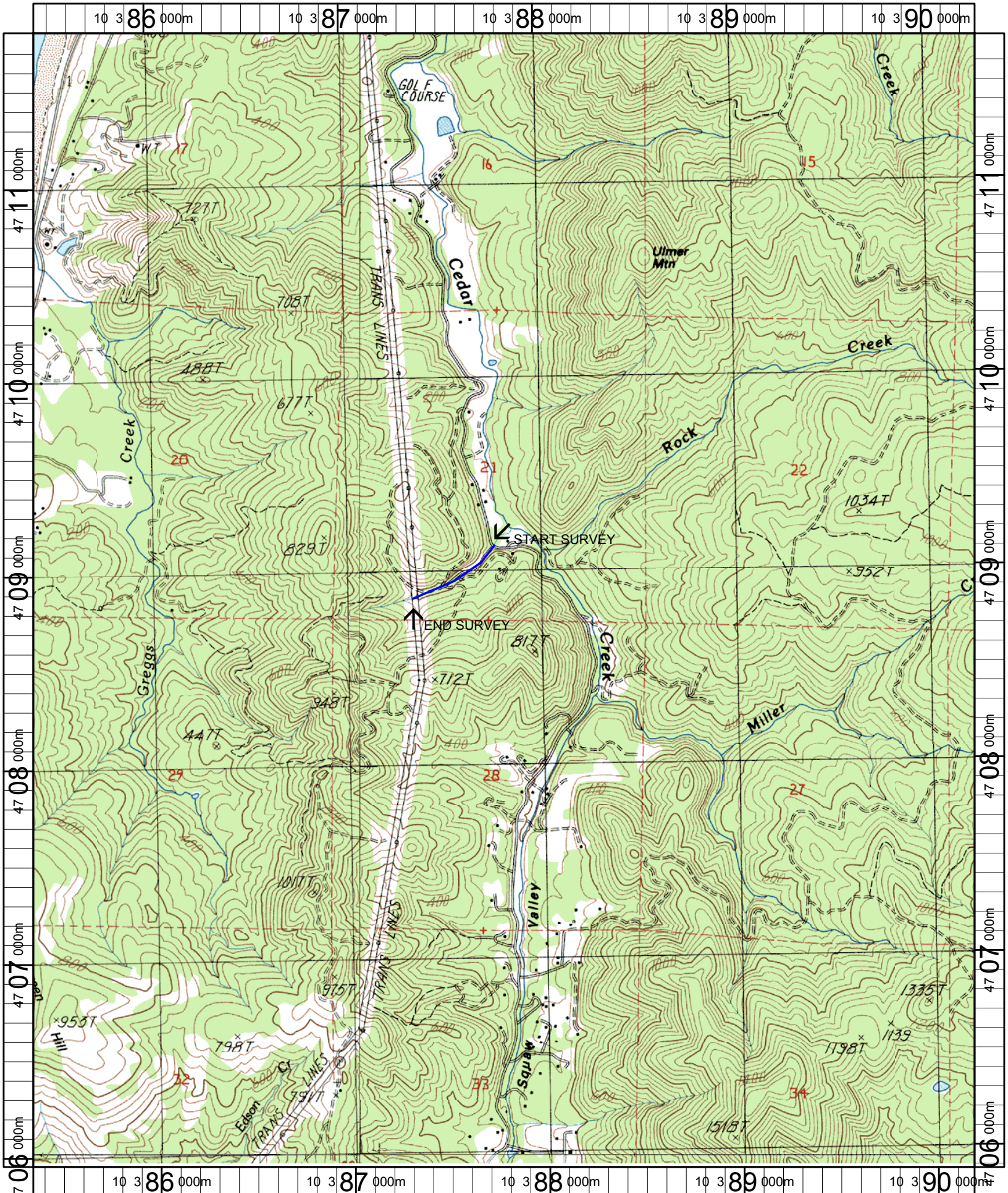
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
22	LF	1	HS	130	100	30	30	Conifer							40 PER BAREGROUN
								Hardwood		2					D. ALDER
22	RT	3	RB	0	20	20	20	Conifer							GRAVEL
								Hardwood							LOGGING
22	RT	2	HT	0	80	30	70	Conifer							ROAD
								Hardwood	4	1					ALDER
22	RT	1	HT	0	80	50	50	Conifer							OLD CAR,
								Hardwood	5						ALDER
22	LF	2	HS	50	20	40	40	Conifer				1			HEMLOCK,
								Hardwood							CLEARCUT
22	LF	3	HS	60	0	50	50	Conifer							CLEARCUT
								Hardwood							
36	RT	3	HS	70	60	20	80	Conifer			1				DOUG FIR
								Hardwood							
36	RT	1	HT	0	80	60	20	Conifer							ELDERBERRY
								Hardwood	2						
36	RT	2	HS	50	60	40	40	Conifer							ALDER
								Hardwood		1					
36	LF	3	HS	160	0	20	40	Conifer							
								Hardwood							
36	LF	1	HS	80	80	80	20	Conifer							ALDER
								Hardwood			1				
36	LF	2	RB	0	20	10	10	Conifer							
								Hardwood							
43	RT	2	RB	0	60	30	30	Conifer							
								Hardwood		1					
43	RT	1	HT	0	90	30	70	Conifer							ELDERBERRY
								Hardwood	1						
43	RT	3	HT	0	60	40	30	Conifer							
								Hardwood		1					
43	LF	3	HS	65	0	30	70	Conifer							CLEARCUT
								Hardwood							
43	LF	1	HS	135	100	40	40	Conifer	1	1	1				CEDAR,
								Hardwood		1					DOUG FIR,
43	LF	2	RB	0	10	20	20	Conifer							ALDER
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **5-SC** SITE ID: **275** PAPOOSE CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	PP	01	4.1	UD		2" BLACK PIPE, PUMP
2	SS	01	4.15	PA	H = .7 M	ALSO PA ON U 3
3	CC	01	52.05	CS/CS, CC		CULV DIAM = .9 M, UNDER H
4	RI	02	52.05			SIDE CHNL IS ARTIFICIAL
5	RI	00	68.85	SS/SS, FC		
6	LP	00	72.75	WL		SALAMANDER
8	LP	00	92.85			TROUT
11	SL	00	97.85		H = .35 M	
14	CB	00	131.95	DJ		CASCADE OVER LOGS
16	SL	00	134.65	PN, DJ	H = 1.2 M	H = 1.2 M
19	SL	00	149.35	PN	H = .65 M	
21	LP	00	169.95	DJ		
27	LP	01	268.15	TJ/		
28	RI	11	268.15			TRIB GOES INTO CLEARCUT
32	RI	00	356.25			TROUT
39	SL	00	437.95		H = .25 M	
41	RI	00	485.65	SS/		
43	RI	00	524.35	WL		RED LEGGED FROG
44	RI	00	549.05			TROUT FRY



Name: BRUSHY BALD MT
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 387808 E 4708844 N
 Caption: PAPOOSE CREEK RESTORATION SITE - EUCHRE CREEK BASIN