

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

STREAM: Pea Creek (S-145)
BASIN: Euchre Creek
SURVEY TYPE: Post-Tx
DATE: June 25, 2003
SURVEY CREW: Pat Burns, Lucas Lawrence
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.7 km²
USGS MAPS: Brushy Bald Mtn.
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Pea Creek habitat survey extended 495 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 44.0 (range: 20.0-50.0). Land use for the reach was agriculture and grazing exclosure. The average unit gradient was 2.4 percent. Riffles (53%) and scour pools (33%) dominated stream habitat. Gravel (53%) and sand (31%) dominated stream substrate. Wood volume was low at 10.1 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.

OREGON DEPARTMENT OF FISH AND WILDLIFE

PEA CREEK POST-TX (S-145)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/25/03

REACH 1		T35S-R14W-S09NE					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	
CULVERT CROSSING	1	17	2.1	0.10	35	0	0	5	95	0	0	0	
POOL-ISOLATED	1	2	0.8	0.10	1	0	30	61	0	9	0	0	
POOL-LATERAL SCOUR	10	53	1.5	0.31	80	2	10	32	46	5	0	6	
POOL-PLUNGE	1	4	2.3	0.50	9	0	0	27	45	27	0	0	
POOL-STRAIGHT SCOUR	12	95	1.8	0.35	151	8	7	48	36	9	0	0	
PUDDLED UNIT	1	13	1.0	0.20	13	0	0	18	55	27	0	0	
RAPID/BOULDERS	5	36	1.3	0.11	47	2	0	14	64	22	0	0	
RIFFLE	20	282	1.3	0.10	381	4	5	26	62	6	0	1	
STEP/COBBLE	3	5	1.2	0.05	6	0	2	23	63	12	0	0	
STEP/LOG	1	1	0.5	0.10	1	0	0	30	60	10	0	0	
Total:	55	507	1.5	0.20	724	16	Avg 6	31	53	9	0	1	

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		12
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	1	2	0.8	0.10	1	0.19%	0	0.0	
Scour Pools	23	151	1.7	0.34	240	33.17%	10	4.2	
Glides	0	0			0	0.00%	0	0.0	
Riffles	20	282	1.3	0.10	381	52.60%	4	1.0	
Rapids	5	36	1.3	0.11	47	6.52%	2	4.2	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	6	1.0	0.06	6	0.85%	0	0.0	
Dry	1	13	1.0	0.20	13	1.80%	0	0.0	
Culverts	1	17	2.1	0.10	35	4.87%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	24	47.3
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	1	2.0
Pool frequency (channel widths/pool):	4.5	
Residual pool depth (avg):	0.27	

STREAM SUMMARY

PEA CREEK POST-TX (S-145)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
55	507	1.5	0.20	724	6	31	53	9	0	1	16

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	1	0.19%
Scour Pools	240	33.17%
Glides	0	0.00%
Riffles	381	52.60%
Rapids	47	6.52%
Cascades	0	0.00%
Step/Falls	6	0.85%
Dry	13	1.80%
Culverts	35	4.87%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	427
Total conifers/1000 ft	81
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	1.3	5.7	0.0	0.0	0.0	0.0	1.3	5.7
15-30cm	0.0	1.3	0.0	0.0	0.0	0.0	0.0	1.3
30-50cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	1.3	7.0	0.0	0.0	0.0	0.0	0.4	2.3

Canopy closure and ground cover

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Canopy closure	36	0	0
Shrub cover	38	0	0
Grass/forb cover	48	75	100

Predominant landform in each zone

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Hillslope	0	0	0
High terrace	0	100	100
Low terrace	17	0	0
Floodplain	83	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
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	427
Total conifers/1000 ft	81
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 class (cm)</u>	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	1.3	5.7
15-30cm	0.0	1.3
30-50cm	0.0	0.0
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		
16	LF	1	FP	0	60	40	30	Conifer							
								Hardwood	1	1					
16	LF	2	HT	0	0	0	100	Conifer							
								Hardwood							
16	LF	3	HT	0	0	0	100	Conifer							
								Hardwood							
16	RT	1	FP	0	70	70	30	Conifer	1						
								Hardwood							
16	RT	2	HT	0	0	0	60	Conifer							
								Hardwood							
16	RT	3	HT	0	0	0	100	Conifer							
								Hardwood							
26	RT	3	HT	0	0	0	100	Conifer							
								Hardwood							
26	LF	2	HT	0	0	0	100	Conifer							
								Hardwood							
26	LF	3	HT	0	0	0	100	Conifer							
								Hardwood							
26	RT	1	FP	0	40	30	40	Conifer							
								Hardwood	14	3					
26	RT	2	HT	0	0	0	50	Conifer							
								Hardwood							
26	LF	1	LT	0	30	10	85	Conifer	2						
								Hardwood							
43	RT	2	HT	0	0	0	40	Conifer							
								Hardwood							
43	LF	1	FP	0	15	10	75	Conifer	1						RED WOOD,
								Hardwood	2						WILLOW
43	RT	3	HT	0	0	0	100	Conifer							
								Hardwood							
43	RT	1	FP	0	0	70	30	Conifer							
								Hardwood							
43	LF	3	HT	0	0	0	100	Conifer							
								Hardwood							
43	LF	2	HT	0	0	0	100	Conifer							
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 5-SC SITE ID: 145 PEA CREEK POST-TX (S-145)

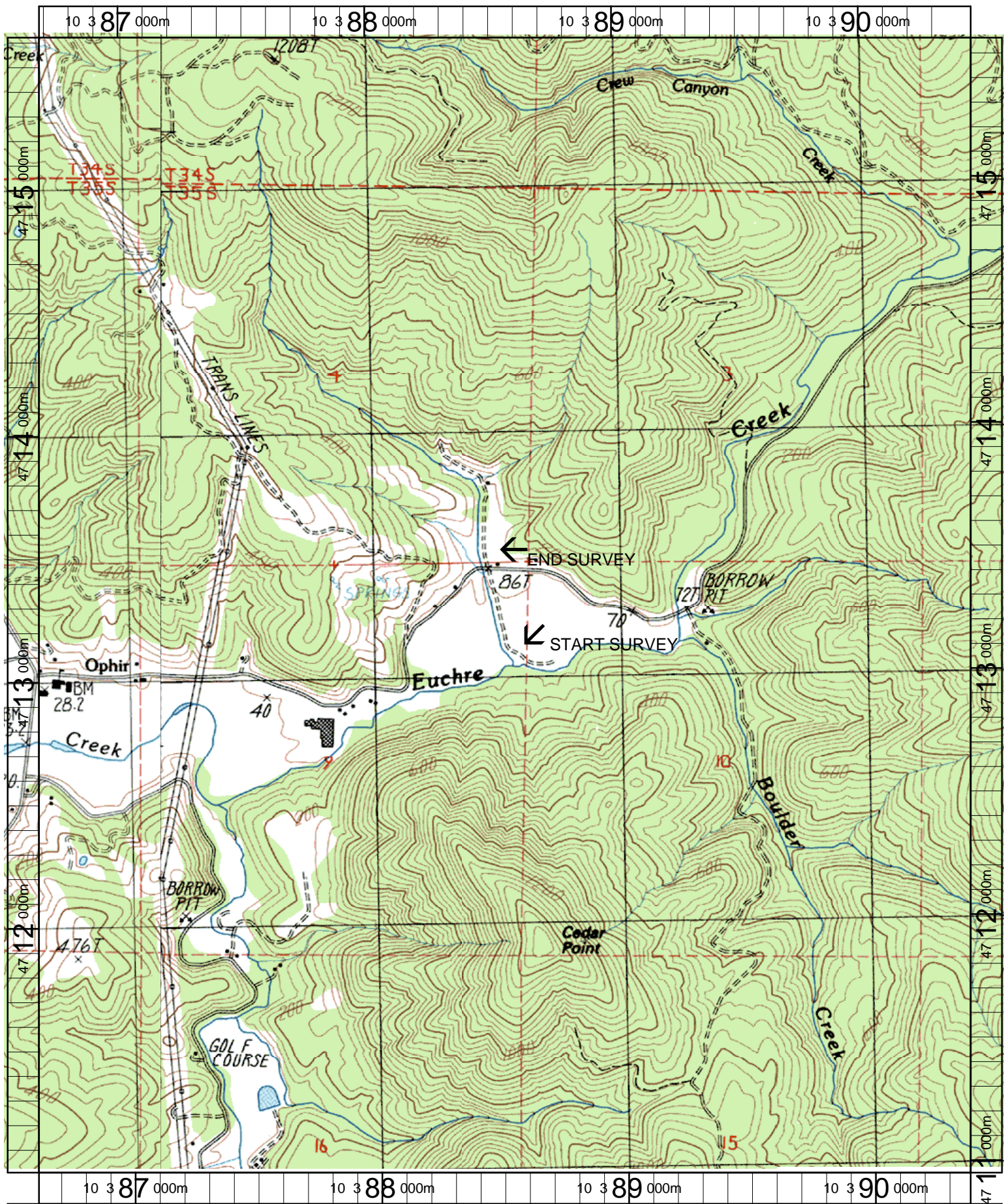
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	9.7		11 DEG C @ 9:10	
2	LP	00	14.5	CS		RR BOULDERS
3	RB	00	22.5			BLACK BERRIES
4	SP	00	26.5		LENGTH ESTIMATED	
5	RI	00	51.5		EST L X W (BLK BERRY T	
9	LP	00	84.2			BDRK = HARDPAN
10	RI	00	88.7			BDRK = HARDPAN
12	RI	00	106.4	CE		H=.8 D=.5
18	SP	00	180.5			HEAVY VEG
20	PP	00	185.5		BROKEN BY SM SL < 0.3	
21	RI	00	198.9	BC/ CE		NOT ON MAP
30	LP	00	240.8	HS		
31	RI	01	258.4		12.5 DEG C @ 12:35	12.5 DEG C @ 12:35
35	LP	00	273.5	HS		
38	RI	00	301.6			BANK COVERED VEG
41	SP	00	349.5	HS		
43	SP	00	377.8	HS		LWD
44	RI	00	386.2	/SS		
45	LP	00	390	HS		
46	RI	01	399	TJ/		
47	RI	11	399		TRIB ACW=2.5	

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 5-SC SITE ID: 145 PEA CREEK POST-TX (S-145)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
49	CC	00	443.4	CC	NO STEP. HXW= 1.4X2.1	COR. STEEL



Name: BRUSHY BALD MT
 Date: 3/21/2003
 Scale: 1 inch equals 1666 feet

Location: 10 388528 E 4713289 N
 Caption: PEA CREEK RESTORATION SITE - EUCHRE BASIN