

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

STREAM: Peterson Creek (NC-54)
BASIN: Miami River
SURVEY TYPE: Pre-Tx
DATE: February 16, 2000
SURVEY CREW: Andrew Gross, Joe Zuccarello
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.9 km²
USGS MAPS: Garibaldi
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Peterson Creek habitat survey extended 671 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9.2 (range: 6.0 – 10.0). Land use for the reach was second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 0.7 percent. Scour pools (56%) and riffles (32%) dominated stream habitat. Gravel (60%) dominated stream substrate. Wood volume was low at 7.4 m³/100m.

COMMENTS:

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

REACH 1

T1N-R10W-2NW

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 9.3		VWI Range: 6 - 10	

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	671	3,389	0
Secondary	93	200	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.4	Width	6.4	10.5	13.4
Depth	0.52	Height	0.4	0.8	1.2
		W:D ratio	15.4	Entrenchment	1.7

Stream Flow Type: MF Water temp (C): 8.0 - 8.0
 Avg. Unit Gradient: 0.7% Habitat Units/100m: 10.1

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	59	8.8
Volume (m ³):	50	7.4
Key pieces (>=10m x 0.60m):	2	0.3

OREGON DEPARTMENT OF FISH AND WILDLIFE

PETERSON CREEK PRE-TX (NC-54)

HABITAT INVENTORY

Report Date: 11/12/03

Survey Date:

2/16/00

REACH 1		T1N-R10W-2NW					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	12	2.3	0.40	28	0	20	20	60	0	0	0	0
GLIDE	1	16	7.0	0.25	109	0	5	5	90	0	0	0	0
POOL-ALCOVE	1	2	1.4	0.20	2	0	100	0	0	0	0	0	0
POOL-BACKWATER	6	31	3.2	0.52	100	0	79	15	6	0	0	0	0
POOL-ISOLATED	1	2	0.9	0.10	2	0	20	80	0	0	0	0	0
POOL-LATERAL SCOUR	27	294	5.4	0.89	1,569	0	10	32	57	1	0	0	0
POOL-PLUNGE	1	7	6.1	0.90	40	0	5	20	75	0	0	0	0
POOL-STRAIGHT SCOUR	2	42	9.5	1.05	402	0	10	53	38	0	0	0	0
RAPID/BOULDERS	3	34	1.8	0.18	63	0	8	23	68	0	0	0	0
RIFFLE	16	277	3.6	0.18	1,058	0	4	10	82	4	0	0	0
RIFFLE W/ POCKETS	1	24	3.7	0.25	88	0	5	10	85	0	0	0	0
STEP/COBBLE	5	20	5.8	0.08	115	0	3	7	90	0	0	0	0
STEP/LOG	2	3	2.4	0.10	12	0	13	40	48	0	0	0	0
STEP/STRUCTURE	1	1	1.4	0.25	1	0	20	20	60	0	0	0	0
Total:	68	765	4.4	0.52	3,589	0	Avg 16	23	60	1	0	0	0

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	8	35	2.7	0.43	104	2.90%	0	0.0	
Scour Pools	30	343	5.7	0.90	2,011	56.04%	0	0.0	
Glides	1	16	7.0	0.25	109	3.02%	0	0.0	
Riffles	17	301	3.6	0.18	1,147	31.95%	0	0.0	
Rapids	3	34	1.8	0.18	63	1.74%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	8	23	4.4	0.11	128	3.55%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	12	2.3	0.40	28	0.79%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	38	56.6
Pools >=1m deep:	11	16.4
Complex pools (LWD pieces>=3):	3	4.5
Pool frequency (channel widths/pool):	3.2	
Residual pool depth (avg):	0.60	

STREAM SUMMARY

PETERSON CREEK PRE-TX (NC-54)

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	
68	765	4.4	0.52	3,589	16	23	60	1	0	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	104	2.90%
Scour Pools	2,011	56.04%
Glides	109	3.02%
Riffles	1,147	31.95%
Rapids	63	1.74%
Cascades	0	0.00%
Step/Falls	128	3.55%
Dry	0	0.00%
Culverts	28	0.79%

Comment Summary

Restoration Monitoring Sites 2003

MONITORING AREA: 1-NC SITE ID: 54 PETERSON CREEK PRE-TX (NC-54)

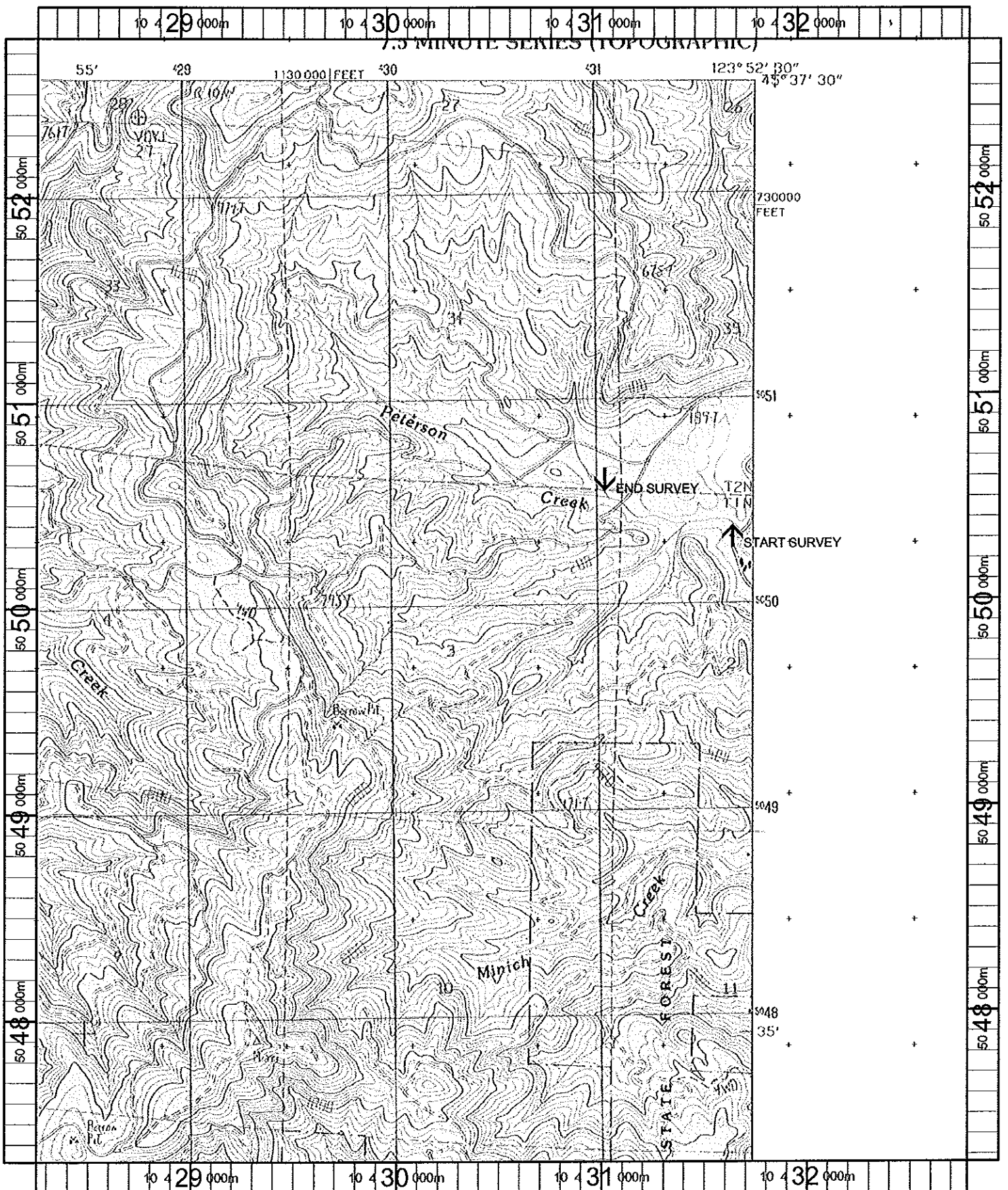
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	0.7			VWI=6, STRT SIGN ON AL
7	LP	00	54.5			ODFW- 8/99 FLAG UNIT 8
8	SC	00	59			ODFW - 8/99 FLAG UNIT #
10	IP	10	66.7			CT/MT
11	LP	00	85.1			D15-30, VWI= 10+
12	RI	00	97.4			GRASS SHRUB 50/50
14	SC	00	111.9			T= 8.0°C
17	RI	00	155			REDD??
18	GL	00	170.5			FLAG ODFW 8/99 UNIT #1
19	LP	01	195.1	TJ/		ODFW 8/99 FLAG UNIT #1
20	RB	11	195.1			T= 8.0°C
21	RI	01	219.3	TJ/		
22	RI	11	219.3			T= 8.0°C
24	LP	00	231.9			VWI= 10+
26	RI	00	269.7	RF		POWERLINES ABOVE
27	LP	00	282.6	BV		OLD BEAVER ACTIVITY
36	SL	01	338.6			H= 0.15
37	RP	01	362.5	BV		
41	LP	00	376.4	/SS		VWI= 10+
54	LP	00	511.8			CULVERT PICTURE #21
57	SL	00	557.8			H= 0.2

Comment Summary

Restoration Monitoring Sites 2003

MONITORING AREA: 1-NC SITE ID: 54 PETERSON CREEK PRE-TX (NC-54)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
58	SP	00	579		METAL , ROAD BLOWN	
59	CC	00	591.3		H=1.8	
60	SS	00	591.8	RR	END OF CULVERT,H=0.5,	
61	RB	00	604	/SS		
64	LP	00	633.4		REDD	
65	RI	01	660.7		VWI=10+	
67	LP	01	671.3	/TJ	END OF SURVEY	
68	RI	11	671.3		T= 8.5°C	



Name: GARIBALDI
 Date: 10/16/100
 Scale: 1 inch equals 2000 feet

Location: 10 430443 E 5050002 N
 Caption: PETERSON CREEK RESTORATION SITE - MIAMI BASIN