

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

STREAM: Bays Creek (N3)
BASIN: Nestucca River
SURVEY TYPE: Pre-Tx
DATE: January 24, 2002
SURVEY CREW: Rachel Werner, Sean Allen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 10.1 km²
USGS MAPS: Blaine
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Bays Creek habitat survey extended 475 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.3 (range: 1.0-4.0). Land uses for the reach were second growth (15-30 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 2.8 percent. Rapids (48%) and scour pools (39%) dominated stream habitat. Bedrock (27%), cobble (22%) and gravel (21%) dominated stream substrate. Wood volume was low at 2.0 m³/100m.

COMMENTS:

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

REACH

T3S-R9W-S24SE

REACH

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.3	VWI Range:	1 - 4

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	475	3,717	0
Secondary	14	20	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 7.4	Width: 9.9	19.5 (6.5 - 26)	21.9 (7.5 - 27)
Depth: 0.73	Height: 0.6	1.3 (1.2 - 1.4)	1.6 (1.3 - 2.2)

W:D ratio: 15.9
 Stream Flow Type: MF
 Average Unit Gradient: 2.8%
 Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.9
 Habitat Units/100m (total channel length): 4.7
 Habitat Units/100m (primary channel length): 4.8

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 primary channel</u>
All pieces (>=3m x 0.15m):	27	5.7
Volume (m ³):	9	2.0
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

BAYS CREEK PRE-TX (N-3)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

1/24/2002

REACH		T3S-R9W-S24SE					REACH					
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/BEDROCK	1	18	8.5	0.65	149	0	0	5	10	10	15	60
POOL-ISOLATED	1	6	2.2	0.40	13	0	20	70	10	0	0	0
POOL-LATERAL SCOUR	5	104	9.3	1.16	982	0	0	17	28	19	10	26
POOL-STRAIGHT SCOUR	4	59	8.0	1.03	487	0	0	16	21	26	18	19
RAPID/BEDROCK	4	136	7.3	0.63	1,003	0	0	3	6	6	16	69
RAPID/BOULDERS	4	114	7.4	0.51	782	0	0	8	20	35	24	14
RIFFLE	2	37	6.8	0.38	257	0	0	5	50	30	15	0
STEP/BOULDERS	2	16	4.2	0.30	65	0	0	5	20	35	30	10
Total:	23	489	7.4	0.73	3,738	0	Avg: 1	12	21	22	17	27

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	1	6	2.2	0.40	13	0.35%	0	0.0
Scour Pools	9	163	8.7	1.10	1,468	39.29%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	2	37	6.8	0.38	257	6.87%	0	0.0
Rapids	8	249	7.4	0.57	1,785	47.77%	0	0.0
Cascades	1	18	8.5	0.65	149	3.98%	0	0.0
Step/Falls	2	16	4.2	0.30	65	1.74%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	10	20.5	21.1
Pools >=1m deep:	8	16.4	16.9
Complex pools (LWD pieces>=3):	2	4.1	4.2
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.63		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 1-NC SITE ID: 3 BAYS CREEK PRE-TX (N-3)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
2	SP	00	40.5	SS/	
6	SP	00	138.8	/SS	
9	RB	01	219.9	TJ/	
12	SB	00	240.1		H = .7
18	SP	00	358.7	/SS	
23	RI	00	474.5		STOP AT TJ BELOW BRIDGE