

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

STREAM: Beaver Creek Lower (L-202)
BASIN: Sandy River
SURVEY TYPE: Pre-Tx
DATE: February 20, 2007
SURVEY CREW: Brian Bangs, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 32.8 km²
USGS MAPS: Camas
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Beaver Creek habitat survey extended 468 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was urban and greenway. The average unit gradient was almost 0.0 percent. Scour pools (92%) dominated stream habitat. Sand (54%) and silt (38%) dominated stream substrate. Wood volume was low at 14.6 m³/100m.

COMMENTS:

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

REACH 1

T01N-R03E-S25SW

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	20.0	VWI Range:	20 - 20

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 Channel	468	4,230	0
Secondary Channel	0	0	0
Off-Channel Units	48	41	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.7	Width: 11.4	19.6 (16.5 - 24)	28.1 (20 - 34)
Depth: 1.44	Height: 1.2	2.5 (2 - 2.8)	3.5 (3.4 - 3.8)

W:D ratio: 9.4
 Stream Flow Type: HF
 Average Unit Gradient: 0.0%
 Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.7
 Habitat Units/100m (total channel length): 1.9
 Habitat Units/100m (primary channel length): 2.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	UR	GN
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):	83	17.7
Volume (m ³):	68	14.6
Key pieces (>=12m x 0.60m):	2	0.4

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

2/20/2007

REACH 1		T01N-R03E-S25SW					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	2	16	0.4	0.13	6	0	42	53	5	0	0	0
POOL-LATERAL SCOUR	6	446	7.8	2.17	3,949	0	35	55	8	0	2	0
RIFFLE	2	54	4.5	0.58	317	0	44	51	5	0	0	0
Total:	10	516	5.7	1.44	4,272	0	Avg: 38	54	7	0	1	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	0	0			0	0.00%	0	0.0	
Scour Pools	6	446	7.8	2.17	3,949	92.45%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	2	54	4.5	0.58	317	7.41%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	2	16	0.4	0.13	6	0.14%	0	0.0	
Step/Falls	0	0			0	0.00%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

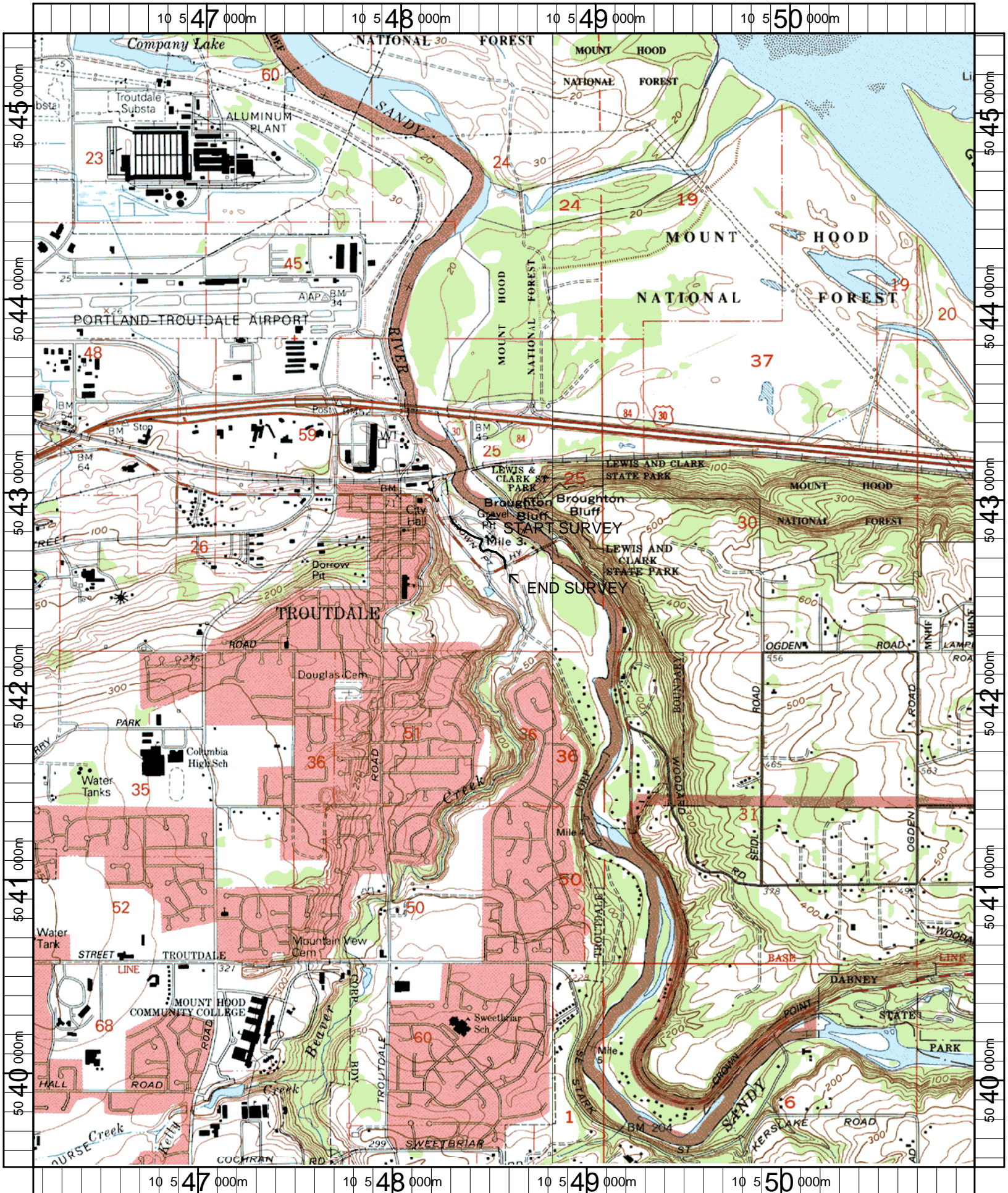
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	6	11.6	12.8
Pools >=1m deep:	6	11.6	12.8
Complex pools (LWD pieces>=3):	5	9.7	10.7
Pool frequency (channel widths/pool):	7.5		
Residual pool depth (avg):	1.26		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 7-L SITE ID: 202 BEAVER CREEK LOWER PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	LP	01	162	/TJ,BV,/TJ	
2	RI	11	162	BV	ACW=0.8, T=8.0, TRIB1
3	CB	11	162	BV	
4	LP	11	162	BV	ACW=3.5, T=8.5, TRIB2
5	CB	11	162	CE, BV	
6	LP	00	246	/SS, BV	
7	LP	00	358	BV, SS/	
8	RI	00	394.4	BV, SS/	
9	LP	00	432.4	BV, CS/	RIPRAP & TERRACED GRASS & LOGS
10	LP	00	468.4	BC, CS/CS	OLD & NEW BRIDGE, RIPRAP & LOG



Name: WASHOUGAL
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0548550 E 5042464 N
 Caption: BEAVER CREEK LOWER RESTORATION SITE - SANDY RIVER BASIN