

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: July 8, 2004
SURVEY CREW: Erin Richmond, Carmen Vandyke, Jeff Snyder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 32.8 km²
USGS MAPS: Camas
ECOREGION: Willamette Valley Plains

GENERAL DESCRIPTION:

The Beaver Creek habitat survey extended 458 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 rural residential. The average unit gradient was 0.5 percent. Scour pools (85%) dominated stream habitat. Sand (51%) and gravel (37%) dominated stream substrate. Wood volume was low at 12.8 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	0%
Moderate V-shape	0%	Multiple Terraces	100%
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	458	1,877	0
Secondary	10	4	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.3	Width: 8.9	10.6 (6.2 - 14.4)	11.8 (6.7 - 16.3)
Depth: 0.42	Height: 0.7	1.4 (1 - 1.7)	2.3 (1.9 - 2.8)

W:D ratio: 14.2

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: LF

Habitat Units/100m (total channel length): 5.1

Average Unit Gradient: 0.5%

Habitat Units/100m (primary channel length): 5.2

Water temperature (°C): 16.0 - 16.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	UR	RR
Riparian Vegetation:	S	D15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 46%
Undercut Banks:	2%	Range: 28 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	46	10.0
Volume (m ³):	59	12.8
Key pieces (>=12m x 0.60m):	6	1.3

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	10	0.4	0.10	4	0	70	25	5	0	0	0	0
GLIDE	1	9	3.8	0.25	35	0	5	65	30	0	0	0	0
POOL-LATERAL SCOUR	12	348	4.6	0.70	1,605	7	10	67	23	0	0	0	0
RIFFLE	9	101	2.2	0.14	237	15	1	34	63	2	1	0	0
Total:	24	468	3.3	0.42	1,881	22	Avg: 11	51	37	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	0	0			0	0.00%	0	0.0	
Scour Pools	12	348	4.6	0.70	1,605	85.30%	7	0.4	
Glides	1	9	3.8	0.25	35	1.88%	0	0.0	
Riffles	9	101	2.2	0.14	237	12.61%	15	6.3	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	2	10	0.4	0.10	4	0.21%	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:	12	25.6	26.2
Pools >=1m deep:	1	2.1	2.2
Complex pools (LWD pieces>=3):	3	6.4	6.5
Pool frequency (channel widths/pool):	4.4		
Residual pool depth (avg):	0.57		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	142
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	0.0	0.0	1.7	1.0	0.0	0.0	1.7	1.0
15-30cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
30-50cm	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0
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	0.0	0.0	1.7	2.3	0.0	0.0	0.6	0.8

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	15		20		0	
Shrub cover	60		63		17	
Grass/forb cover	15		13		32	

Predominant landform in each zone

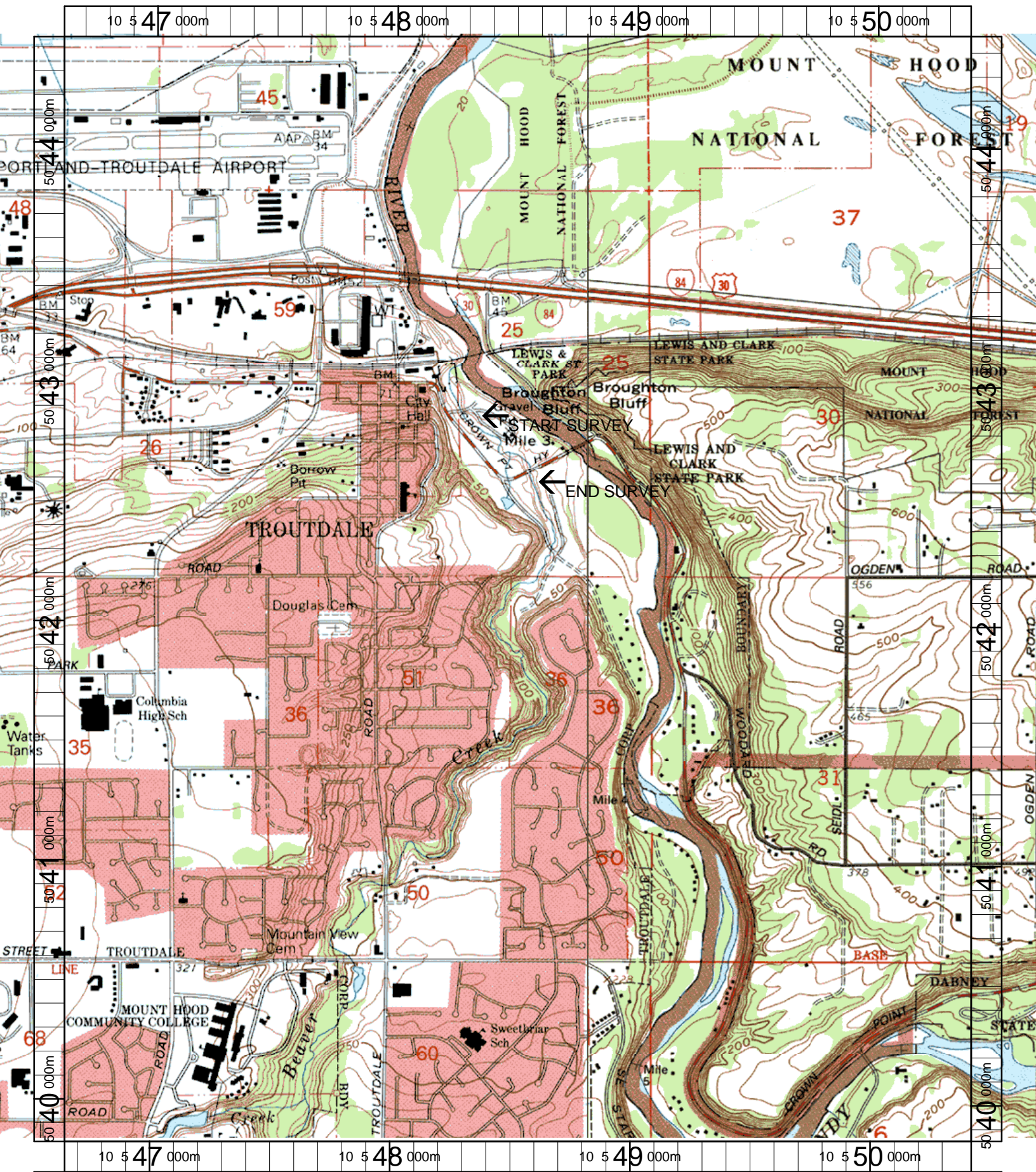
	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		0		0	
High terrace	50		100		0	
Low terrace	0		0		0	
Floodplain	50		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		100	
Riprap	0		0		0	
Surface slope (%)	5		4		5	

Comment Summary

Oregon Plan Monitoring Sites 2002

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	01	32.2	/TJ CS/	BC X 2	T - 16 DEG C - 11:30, ASPHA
2	CB	11	32.2			WOODY DEBRIS IN CASCAD
3	LP	00	55.3	WL		TRACKS
5	LP	00	78.3		RV PARK	
6	LP	00	111.1		RV PARK	
7	RI	00	123		RV PARK	RIP 1
8	LP	01	158.7	WL /TJ	RV PARK	RACCOON TRACKS
9	CB	11	158.7		RV PARK	
10	GL	00	168		RV PARK	
11	RI	00	179.5		RV PARK	TIRE
12	LP	00	215.4	UD/	RV PARK	TIRE, IRRIGATION HOSE
14	LP	00	247.9		STRAWBERRY FLAT BAS	
15	RI	00	257.9		BRAIDED	RIP 2, BRAIDED CHANNEL
16	LP	00	285.1	WL, HS, DJ	BRAIDED	RACCOON, SNAILS
17	RI	00	293.1		BRAIDED	FISH
18	LP	00	322.4	/CS	BRAIDED	ASPHALT CHUNKS
19	RI	00	337.3		BRAIDED	
20	LP	00	387.8	CS	BRAIDED	FISH
23	LP	00	439.9	DJ		
24	RI	00	458.3	BC	BC END	END SURVEY SIGN ALDER R



Name: CAMAS
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 548511 E 5042149 N
 Caption: BEAVER CREEK LOWER RESTORATION SITE - SANDY RIVER BASIN