

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: June 25, 2003
SURVEY CREW: James Andrews, Jeff Snyder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 32.8 km²
USGS MAPS: Camas
ECOREGION: Willamette Valley Plains

GENERAL DESCRIPTION:

The Beaver Creek Lower habitat survey extended 515 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. The average unit gradient was 0.4 percent. Scour pools (83%) dominated stream habitat. Sand (29%) and gravel (26%) dominated stream substrate. Wood volume was low at 15.3 m³/100m.

COMMENTS:

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

REACH 1

T01N-R03R-S25SE

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	515	2,247	0
Secondary	3	1	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.7	Width	9.4	21.2	32.5
Depth	0.48	Height	1.4	2.8	4.8
		W:D ratio	6.9	Entrenchment	2.2

Stream Flow Type: MF Water temp (C): 15.0 - 15.0
 Avg. Unit Gradient: 0.4% Habitat Units/100m: 5.4

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	6%	Reach avg: 54%
Undercut Banks:		Range: 19 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	41	8.0
Volume (m ³):	79	15.3
Key pieces (>=10m x 0.60m):	4	0.8

OREGON DEPARTMENT OF FISH AND WILDLIFE

BEAVER CREEK LOWER PRE-TX (L-202)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/25/03

REACH 1		T01N-R03R-S25SE					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	
POOL-LATERAL SCOUR	14	386	5.0	0.78	1,855	11	23	42	23	12	1	0	
RIFFLE	10	127	2.9	0.24	388	14	4	23	34	39	1	0	
STEP/BEDROCK	2	3	0.4	0.01	1	0	5	5	40	0	0	50	
STEP/BOULDERS	1	1	2.6	0.10	1	10	0	0	0	0	100	0	
STEP/STRUCTURE	1	1	2.1	0.15	3	9	0	0	0	0	100	0	
Total:	28	517	3.7	0.48	2,249	44	Avg 13	29	26	20	8	4	

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		3
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	14	386	5.0	0.78	1,855	82.52%	11	0.6	
Glides	0	0			0	0.00%	0	0.0	
Riffles	10	127	2.9	0.24	388	17.25%	14	3.6	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	5	1.4	0.07	5	0.24%	19	355.5	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY		
	Total	# / Km
All Pools:	14	27.1
Pools >=1m deep:	3	5.8
Complex pools (LWD pieces>=3):	5	9.7
Pool frequency (channel widths/pool):	3.9	
Residual pool depth (avg):	0.64	

STREAM SUMMARY

BEAVER CREEK LOWER PRE-TX (L-202)

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	
28	517	3.7	0.48	2,249	13	29	26	20	8	4	44

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	1,855	82.52%
Glides	0	0.00%
Riffles	388	17.25%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	5	0.24%
Dry	0	0.00%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1 **REACH 1**

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

Total hardwoods/1000	305
Total conifers/1000 ft	41
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	0.0	0.0	0.7	0.0	0.7	0.0
15-30cm	0.0	1.0	0.0	1.0	0.0	0.7	0.0	2.7
30-50cm	0.0	0.3	0.0	1.7	0.0	0.3	0.0	2.3
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	1.3	0.0	2.7	0.7	1.0	0.2	1.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	34		41		28	
Shrub cover	77		69		43	
Grass/forb cover	23		31		58	

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	17		100		100	
Low terrace	83		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	4		4		2	

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	305
Total conifers/1000 ft	41
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

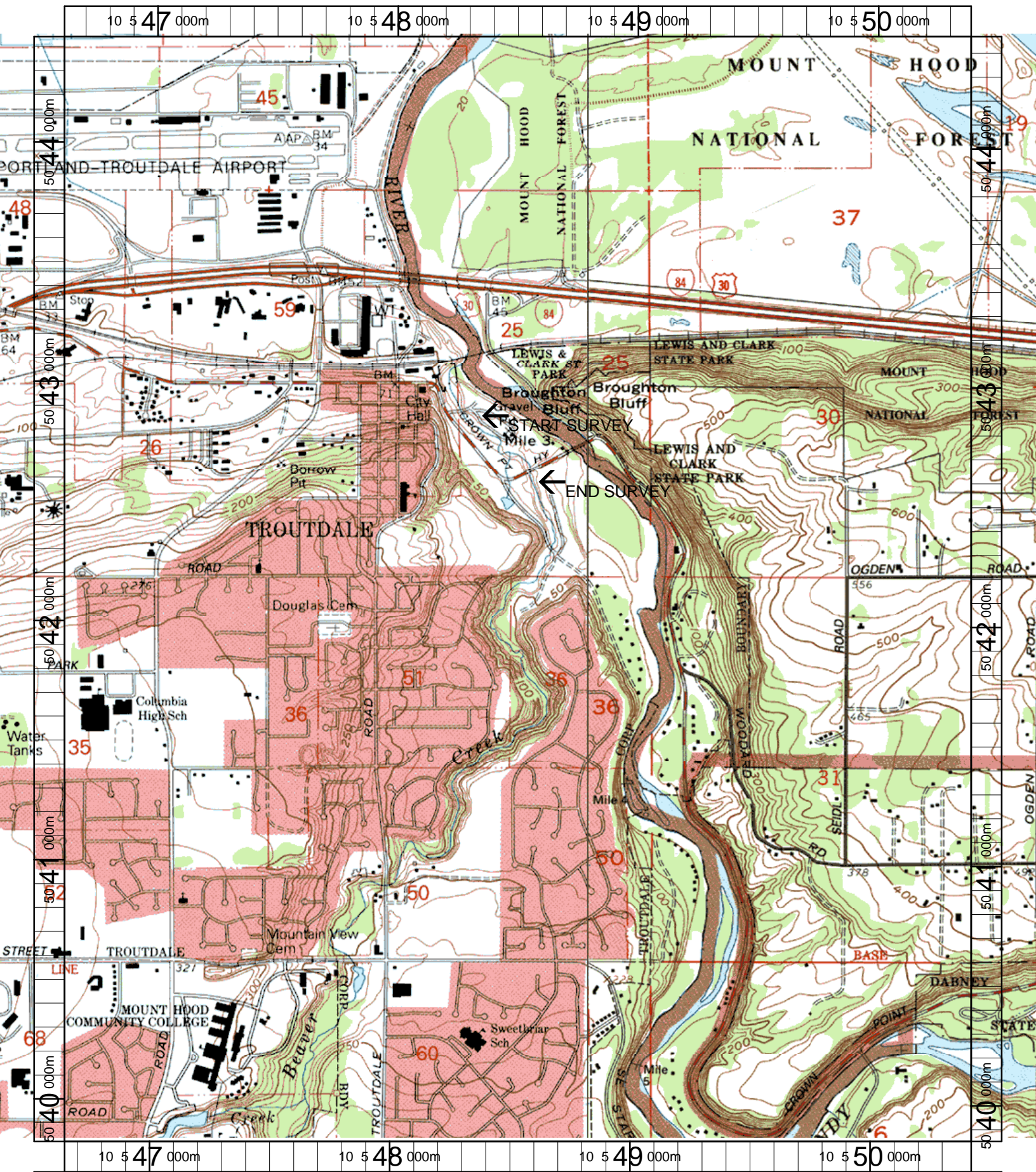
Diameter class (cm)	Zones 1-3 <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.7	0.0
15-30cm	0.0	2.7
30-50cm	0.0	2.3
50-90cm	0.0	0.0
>90cm	0.0	0.0

Comment Summary

Oregon Plan Monitoring Sites 2003

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	25.1	BC-RV	VERY WIDE VALLEY T=15	BEGN CLSE TO MARKER UP
2	SR	11	25.1		H=.9M	PHOTO #0005 @ 1025 HRS
3	RI	00	47.3			TEMP @ 13 DEG C
4	LP	00	88.4			SMALL FISH
5	RI	00	106.4			SMALL FISH
6	LP	01	146.8		/TJ 12 DEG C	SMALL FISH
7	SR	11	146.8		H=.85 METRICS FOR U6	BDRK=HARDPAN TEMP @ 12
9	LP	00	193			SILT /0 .3 DEEP
13	LP	00	266.4	DJ		FISH
21	LP	00	411.4	DJ		BIG JAM, LARGE DJ PHOTO
23	RI	00	441.1	BC	BC	HWY BRIDGE
24	SS	00	442.5	SS	H=.15	
25	LP	00	467.2	FISH		
26	SB	00	467.7		H=.05	
27	LP	00	507.6			FISH



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