

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

STREAM: Beaver Creek Upper (L-205)  
BASIN: Sandy River  
SURVEY TYPE: Pre-Tx  
DATE: January 28, 2004  
SURVEY CREW: Jim Andrews, April Waters  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 32.8 km<sup>2</sup>  
USGS MAPS: Camas  
ECOREGION: Willamette Valley Plains

**GENERAL DESCRIPTION:**

The Beaver Creek habitat survey extended 473 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 17.0 (range: 10.0-20.0). Land use for the reach was urban and rural residential. The average unit gradient was 0.5 percent. Scour pools (67%) dominated stream habitat. Sand (49%) and gravel (25%) dominated stream substrate. Wood volume was very low at 5.1 m<sup>3</sup>/100m.

**COMMENTS:**

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

The crew noted several habitat structures during the survey.

REACH 1

T01N-R03E-S25SW

REACH 1

**Valley and Channel Summary**

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	17.0	VWI Range:	10 - 20

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	473	3,961	0
Secondary	16	82	0

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 5	First Terrace <i>n</i> = 5
Width: 8.2	Width: 12.5	21.8 ( 12.5 - 37.4 )	28.2 ( 16.4 - 42 )
Depth: 1.26	Height: 1.3	2.6 ( 2.4 - 3 )	4.4 ( 2.9 - 6.4 )

W:D ratio: 9.4	Entrenchment (ACW:FPW ratio): 1.8
Stream Flow Type: MF	Water temp (°C): 7.0 - 7.0
Avg. Unit Gradient: 0.5%	Habitat Units/100m: 3.3

**Riparian, Bank, and Wood Summary**

	Primary	Secondary
Land Use:	UR	RR
Riparian Vegetation:	S	D15

Bank Condition and Shade

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

Large Wood Debris

	Total	Total / 100m
All pieces (>=3m x 0.15m):	32	6.8
Volume (m <sup>3</sup> ):	24	5.1
Key pieces (>=10m x 0.60m):	0	0.0

**OREGON DEPARTMENT OF FISH AND WILDLIFE**

**BEAVER CREEK UPPER PRE-TX (L-205)**

**HABITAT INVENTORY**

Report Date: 6/16/2004

Survey Date:

1/28/2004

**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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
POOL-BACKWATER	1	16	5.1	0.90	82	0	25	60	15	0	0	0
POOL-DAMMED	1	50	7.8	1.00	390	0	10	50	40	0	0	0
POOL-LATERAL SCOUR	7	270	9.6	1.71	2,438	0	18	53	24	0	4	0
POOL-STRAIGHT SCOUR	1	22	11.8	1.20	264	0	5	30	50	0	15	0
RAPID/BOULDERS	1	15	6.2	0.80	95	0	0	0	10	25	65	0
RIFFLE	5	115	6.7	0.86	773	0	18	55	23	0	4	0
<b>Total:</b>	16	489	8.2	1.26	4,042	0	<b>Avg:</b> 16	49	25	2	8	0

**HABITAT SUMMARY**

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	2	66	6.5	0.95	472	11.67%	0	0.0
Scour Pools	8	293	9.9	1.65	2,702	66.85%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	5	115	6.7	0.86	773	19.12%	0	0.0
Rapids	1	15	6.2	0.80	95	2.36%	0	0.0
Cascades	0	0			0	0.00%	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>	<u># / Km</u>	
All Pools:	10	20.4	16
Pools >=1m deep:	9	18.4	
Complex pools (LWD pieces>=3):	3	6.1	
Pool frequency (channel widths/pool):	3.9		
Residual pool depth (avg):	0.87		

**STREAM SUMMARY**

**BEAVER CREEK UPPER PRE-TX (L-205)**

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
16	489	8.2	1.26	4,042	16	49	25	2	8	0	

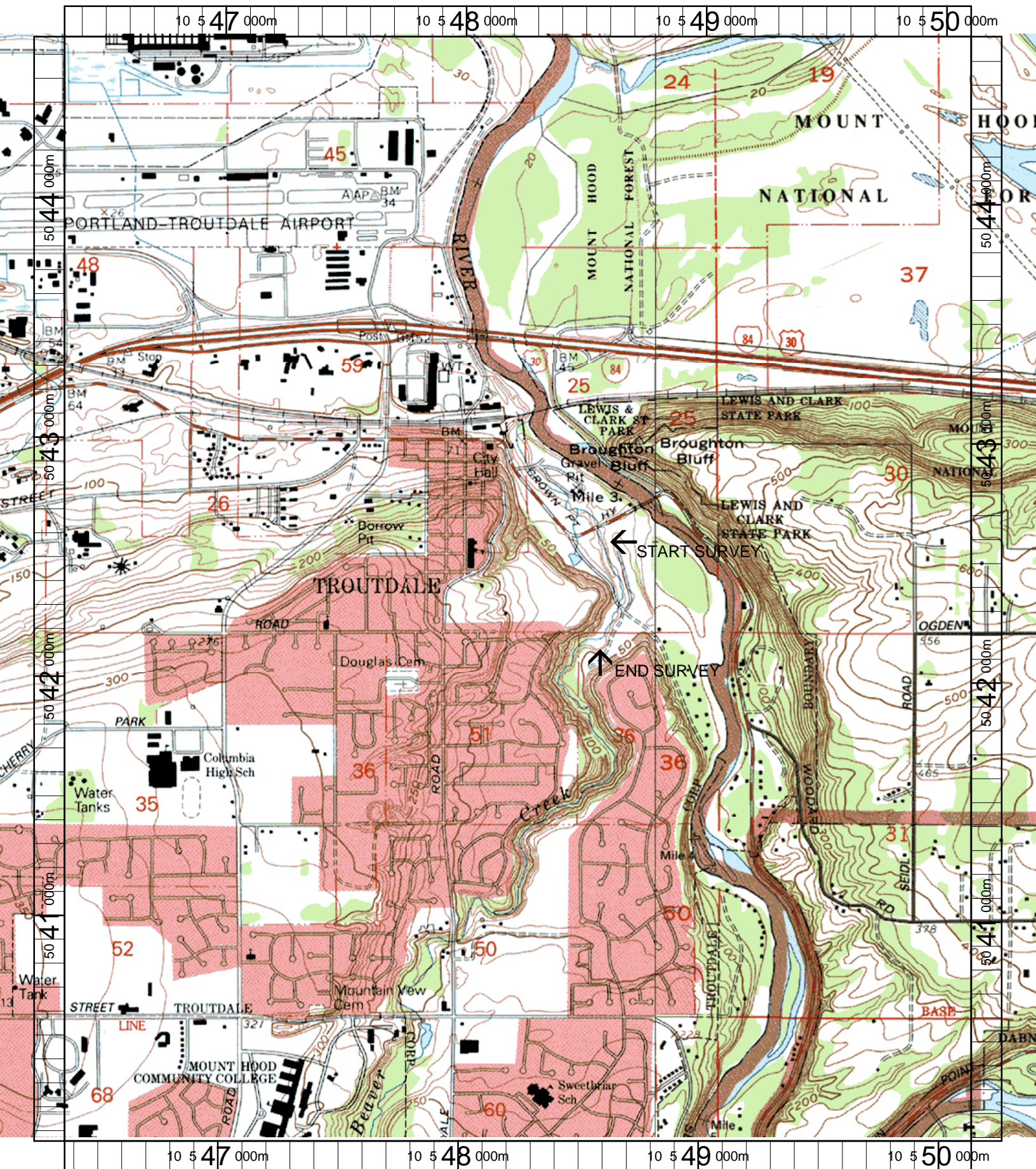
Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	472	11.67%
Scour Pools	2,702	66.85%
Glides	0	0.00%
Riffles	773	19.12%
Rapids	95	2.36%
Cascades	0	0.00%
Step/Falls	0	0.00%
Dry	0	0.00%
Culverts	0	0.00%

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 7-L      SITE ID: 205      BEAVER CREEK UPPER PRE-TX (L-2)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	42	BV, HS		
3	RI	00	84.4	BV		
5	LP	00	145.4	BV		
6	RI	00	164.9	HS	BLDRS	
7	LP	00	192.7	HS	BLDRS	
8	SP	00	215.1	HS	LOGS+BLDRS	
9	LP	00	242.5	HS	LOGS+BLDRS	
10	RI	01	270.7		DEEP, NARROW SLOT	
11	BW	10	270.7	BV		
13	RB	00	308.1	BC, CS		
14	DP	00	358.1	LA/,SS		
16	LP	00	473.1	CS	EOS, T=7C	



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

Location: 10 548227 E 5042384 N  
 Caption: BEAVER CREEK UPPER RESTORATION SITE - SANDY RIVER BASIN