

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

STREAM: South Fork Crabtree Creek (W101)  
BASIN: South Santiam River  
SURVEY TYPE: Post-Tx  
DATE: February 5, 2002  
SURVEY CREW: Loren Stucker, Russ Macal  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 43.6 km<sup>2</sup>  
USGS MAPS: Keel Mountain  
ECOREGION: Cascades Western Central

**GENERAL DESCRIPTION:**

The South Fork Crabtree Creek habitat survey extended 513 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.5 (range: 1.2 – 1.9). Land uses for the reach were second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 4.3 percent. Rapids (39%) and cascades (34%) dominated stream habitat. Boulders (34%) and cobble (24%) dominated stream substrate. Wood volume was moderate at 21.2 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

T11S-R12E-S29SE

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	1.5	VWI Range:	1.2 - 1.9

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	513	3,862	0
Secondary	89	191	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 7.0	Width: 11.4	16.0 ( 12 - 20.3 )	( - )
Depth: 0.50	Height: 0.7	1.4 ( 1.2 - 1.8 )	( - )

W:D ratio: 16.7  
Stream Flow Type: MF  
Average Unit Gradient: 4.3%  
Water temperature (°C): 4.0 - 4.0

Entrenchment (ACW:FPW ratio): 1.5  
Habitat Units/100m (total channel length): 5.1  
Habitat Units/100m (primary channel length): 6.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D15	P

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):	65	12.7
Volume (m <sup>3</sup> ):	109	21.1
Key pieces (>=12m x 0.60m):	6	1.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

SF CRABTREE CR POST-TX (W101)

HABITAT INVENTORY

Report Date: 11/15/2013

Survey Date:

2/5/2002

REACH		T11S-R12E-S29SE					REACH						
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	
CASCADE/BEDROCK	1	24	8.5	0.15	202	0	0	0	0	0	5	95	
CASCADE/BOULDERS	6	166	7.4	0.38	1,191	0	0	2	18	28	50	3	
POOL-LATERAL SCOUR	1	12	6.8	1.00	82	0	0	5	15	30	40	10	
POOL-PLUNGE	3	26	8.6	1.30	227	0	0	3	17	35	20	25	
POOL-STRAIGHT SCOUR	5	56	6.2	0.87	362	0	1	7	24	20	25	23	
RAPID/BOULDERS	8	263	6.1	0.26	1,576	0	1	8	32	29	31	0	
RIFFLE	2	30	7.5	0.33	230	0	0	5	21	34	34	5	
RIFFLE W/ POCKETS	1	16	6.5	0.40	104	0	0	0	10	20	60	10	
STEP/BEDROCK	2	7	7.7	0.10	50	0	0	0	0	0	3	98	
STEP/BOULDERS	2	4	7.9	0.25	29	0	0	0	3	10	73	15	
<b>Total:</b>	<b>31</b>	<b>603</b>	<b>7.0</b>	<b>0.50</b>	<b>4,053</b>	<b>0</b>	<b>Avg: 0</b>	<b>4</b>	<b>20</b>	<b>24</b>	<b>34</b>	<b>18</b>	

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	0	0			0	0.00%	0	0.0
Scour Pools	9	94	7.1	1.03	670	16.54%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	3	46	7.1	0.35	334	8.24%	0	0.0
Rapids	8	263	6.1	0.26	1,576	38.89%	0	0.0
Cascades	7	189	7.6	0.34	1,393	34.38%	0	0.0
Step/Falls	4	11	7.8	0.18	79	1.95%	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:	9	14.9	17.5
Pools >=1m deep:	5	8.3	9.7
Complex pools (LWD pieces>=3):	2	3.3	3.9
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.74		

# Comment Summary

## Oregon Plan Monitoring Sites 2002

MONITORING AREA: 8-W SITE ID: 101 SF CRABTREE CR POST-TX (W101)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	CB	00	31		T = 4 @ 10:40
2	SP	00	45.6	HS	WOOD
6	RI	00	112.7	HS	WOOD
10	RB	01	157.8		97% OF THE FLOW
13	RB	02	172		3% OF FLOW, FUTURE HS SITE
15	CB	01	234.7		90% OF FLOW
16	RB	02	234.7		7% OF FLOW
19	SP	00	246.4		FUTURE HS SITE
28	CB	00	412.7		GORGE AREA