

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

STREAM: Canyon Creek (L-12)
BASIN: Molalla River
SURVEY TYPE: Post-Tx
DATE: July 16, 2007
SURVEY CREW: Paul Dunnette, April Lewis
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 11.3 km²
USGS MAPS: Colton
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Canyon Creek habitat survey extended 520 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 13.6 (range: 10.0-20.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 4.5 percent. Rapids (92%) dominated stream habitat. Cobble (41%) and gravel (31%) dominated stream substrate. Wood volume was low at 12.6 m³/100m.

COMMENTS:

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

REACH 1

T05S-R03E-S24NE

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	13.6	VWI Range:	10 - 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	520	2,028	0
Secondary Channel	18	14	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.9	Width: 5.2	8.0 (6 - 9.3)	10.6 (8.5 - 12)
Depth: 0.21	Height: 0.4	0.8 (0.6 - 1)	1.2 (0.9 - 1.5)

W:D ratio: 13.3
 Stream Flow Type: MF
 Average Unit Gradient: 4.5%
 Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.6
 Habitat Units/100m (total channel length): 5.0
 Habitat Units/100m (primary channel length): 5.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	7%	Reach avg: 61%
Undercut Banks:	9%	Range: 44 - 89

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	83	16.0
Volume (m ³):	65	12.6
Key pieces (>=12m x 0.60m):	1	0.2

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

7/16/2007

REACH 1		T05S-R03E-S24NE					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	1	25	3.8	0.25	95	51	0	10	30	30	30	0
POOL-PLUNGE	2	11	3.9	0.70	45	6	0	21	18	26	36	0
RAPID/BOULDERS	21	483	3.9	0.19	1,883	724	0	9	31	44	16	0
RIFFLE	1	18	0.8	0.02	14	7	0	16	42	42	0	0
STEP/LOG	2	1	5.5	0.02	4	2	0	16	35	32	17	0
Total:	27	538	3.9	0.21	2,042	790	Avg: 0	11	31	41	17	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	2	11	3.9	0.70	45	2.22%	6	13.2	
Glides	0	0			0	0.00%	0	0.0	
Riffles	1	18	0.8	0.02	14	0.71%	7	48.6	
Rapids	21	483	3.9	0.19	1,883	92.21%	724	38.4	
Cascades	1	25	3.8	0.25	95	4.65%	51	53.7	
Step/Falls	2	1	5.5	0.02	4	0.21%	2	47.6	
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:	2	3.7	3.8
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	51.5		
Residual pool depth (avg):	0.55		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

CANYON CREEK POST-TX
GCG: 7-L SITE ID: 12

Survey Date 7/16/2007

RIPARIAN ZONE

Report Date: 11/7/2007

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	1910
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	7.0	0.3	7.7	0.0	4.3	0.3	19.0
15-30cm	0.0	2.0	0.0	0.3	0.0	3.7	0.0	6.0
30-50cm	0.3	3.7	0.0	1.3	0.0	1.3	0.3	6.3
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	0.3	12.7	0.3	9.3	0.0	9.3	0.2	10.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	38		55		48	
Shrub cover	72		61		63	
Grass/forb cover	28		39		37	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		0		50	
High terrace	100		100		50	
Low terrace	0		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 (%)	0		0		5	

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	1910
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	0.3	19.0
15-30cm	0.0	6.0
30-50cm	0.3	6.3
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

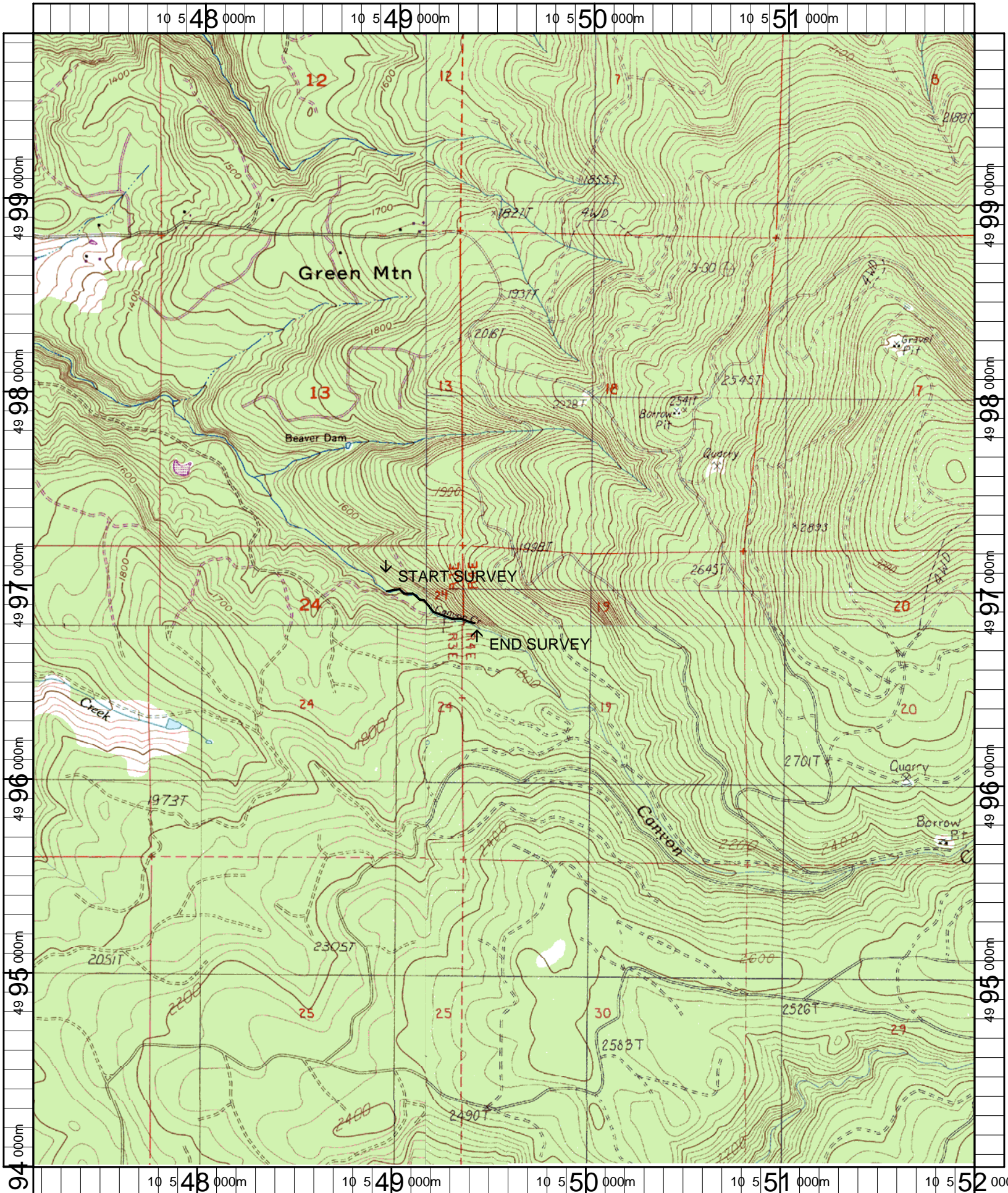
Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
5	LT	1	HT	0	45	70	30	Conifer				1		
								Hardwood	3					
5	LT	2	HT	0	35	80	20	Conifer						
								Hardwood	10					
5	LT	3	HS	0	55	80	20	Conifer						BOGGY. RECENTLY DUG
								Hardwood	2	1	2			
5	RT	1	HT	0	35	70	30	Conifer						
								Hardwood	8	1	1			
5	RT	2	HT	0	60	40	60	Conifer						
								Hardwood	7					
5	RT	3	HT	0	50	60	40	Conifer						DEER TRAIL
								Hardwood	3	3				
13	LT	1	HT	0	40	80	20	Conifer						
								Hardwood	3		7			
13	LT	2	HT	0	55	45	55	Conifer						TRAIL CROSSING. 2ND
								Hardwood			2			
13	LT	3	HS	0	65	20	80	Conifer						
								Hardwood	1	2	2			
13	RT	1	HT	0	30	80	20	Conifer						
								Hardwood	2		1			
13	RT	2	HT	0	85	80	20	Conifer						TRIB?
								Hardwood	6		2			
13	RT	3	HT	0	35	90	10	Conifer						OLD ROADBED JUST HUMMINGBIRD!
								Hardwood	2	1				
21	LT	1	HT	0	45	50	50	Conifer						
								Hardwood	4	5				
21	LT	2	HT	0	65	30	70	Conifer	1					
								Hardwood						
21	LT	3	HT	0	75	40	60	Conifer						
								Hardwood	2	2				
21	RT	1	HT	0	35	80	20	Conifer						
								Hardwood	1		2			
21	RT	2	HT	0	30	90	10	Conifer						BOGGY
								Hardwood		1				
21	RT	3	HS	30	10	90	10	Conifer						LOGGED HS
								Hardwood	3	2				

COMMENT SUMMARY

MONITORING AREA: 7-L SITE ID: 12 STREAM: CANYON CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
17	RB	00	280.55	RF	ROAD FORD
18	RB	00	305.55	SS	SPRING ENTERING CHANNEL. SHORT, SMALL.



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

Location: 10 054955 E 4996942 N
 Caption: CANYON CREEK RESTORATION SITE - CLACKAMAS BASIN