

**ODFW AQUATIC INVENTORY PROJECT
RESTORATION MONITORING
STREAM HABITAT REPORT**

STREAM: CANYON CREEK
 GCG: 7-L
 SITE ID: 12
 BASIN: MOLALLA
 TREATMENT DATE: 2000
 SURVEY DATE: 2/23/2012
 SURVEY CREW: Eric Bailey, Kim Beedle, Lora Tennant
 USGS MAPS: ELWOOD
 ECOREGION: Western Cascades Lowlands and Valleys
 REPORT PREPARED BY: Lora Tennant

REACH: 1 LOCATION: T05S-R03E-S24NE

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Mature timber (50-90 cm dbh)
 Dominant riparian vegetation: Mixed conifer/deciduous: size class 30-50cm dbh
 Primary channel length (meters) and area (m²): 490 : 2,642
 Secondary channel length (meters) and area (m²): 29 : 31
 VWI average: 9.2 VWI Range: 6 - 10 Average Gradient: 3.9%
 Pieces LWD per 100m: 14.3 Wood Volume (m³) per 100m: 21.3
 Percent pools: 13% Complex pools (LWD pieces>=3): 1 Pools >=1m deep: 0
Percent substrate (avg): Silt / organics Sand Gravel Cobble Boulder Bedrock
 All units 0 3 17 24 52 3
 Pool units 0 3 19 21 46 11
 Fast water units 0 2 17 21 60 1

SURVEY COMMENTS:

This is a post-restoration habitat survey. Numerous log habitat structures were noted throughout the survey. This reach of stream is very high gradient site (i.e., >3% slope) -- habitat structures create plunge pools; however, there is sparse good quality spawning/rearing habitat. There were very few pools observed.

Survey Date: 2/23/2012

Report Date: 11/13/2012

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	9.2	VWI Range:	6 - 10

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	490	2,642	0
Secondary	29	31	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.3	Width: 6.7	9.1 (5.5 - 11.9)	10.8 (6.2 - 14)
Depth: 0.47	Height: 0.7	1.5 (1.2 - 1.8)	1.7 (1.4 - 2)

W:D ratio: 8.9

Stream Flow Type: MF

Average Unit Gradient: 3.9%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 7.5

Habitat Units/100m (primary channel length): 8.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	YT
Riparian Vegetation:	M30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 88%
Undercut Banks:	0%	Range: 72 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	70	14.3
Volume (m ³):	105	21.3
Key pieces (>=12m x 0.60m):	6	1.2

HABITAT INVENTORY

GCG: 7-L

SITE ID: 12

Survey Date: 2/23/2012

Report Date: 11/13/2012

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	5	63	4.5	0.48	321	42	0	2	21	17	60	0
POOL-LATERAL SCOUR	5	41	6.2	0.66	267	8	0	3	23	19	37	18
POOL-PLUNGE	3	10	7.2	0.80	74	10	0	3	13	23	60	0
RAPID/BOULDERS	20	395	4.8	0.44	1,990	111	0	2	15	21	60	2
STEP/COBBLE	1	7	0.6	0.10	4	0	10	40	50	0	0	0
STEP/LOG	5	2	7.2	0.26	17	0	0	1	12	53	34	0
Total:	39	519	5.3	0.47	2,673	171	Avg: 0	3	17	24	52	3

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	8	52	6.6	0.71	341	12.75%	18	5.3
Glides	0	0			0	0.00%	0	0.0
Riffles	0	0			0	0.00%	0	0.0
Rapids	20	395	4.8	0.44	1,990	74.45%	111	5.6
Cascades	5	63	4.5	0.48	321	12.00%	42	13.1
Step/Falls	6	9	6.1	0.23	21	0.79%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

GCG: 7-L CANYON CREEK
SITE ID: 12

Survey Date: 2/23/2012

Report Date: 11/13/2012

T05S-R03E-S24NE

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	8	15.4	16.3
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	1	1.9	2.0
Pool frequency (channel widths/pool):	9.8		
Residual pool depth (avg):	0.39		

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**CANYON CREEK
GCG: 7-L SITE ID: 12**

Survey Date 2/23/2012

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

Report Date: 11/13/2012

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

Total hardwoods/1000 ft	488
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	20
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	1.3	0.0	1.3	0.0	0.7	0.0	3.3
15-30cm	0.0	1.3	0.3	0.7	0.0	0.0	0.3	2.0
30-50cm	0.0	1.3	0.0	0.3	0.7	0.3	0.7	2.0
50-90cm	0.0	0.7	0.0	0.0	0.3	0.0	0.3	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.0	4.7	0.3	2.3	1.0	1.0	0.4	2.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	46		63		67	
Shrub cover	62		67		61	
Grass/forb cover	28		23		26	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		0		33	
High terrace	83		100		67	
Low terrace	0		0		0	
Floodplain	17		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		9	

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 ft	488
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	20
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	0.0	3.3
15-30cm	0.3	2.0
30-50cm	0.7	2.0
50-90cm	0.3	0.7
>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		
8	LF	1	HT	0	40	10	80	Conifer							10% DUFF
								Hardwood		4					
8	LF	2	HT	0	90	50	40	Conifer							10% DUFF
								Hardwood	1						
8	LF	3	HT	0	95	60	30	Conifer				1			10% DUFF
								Hardwood	1						
8	RT	1	FP	0	40	80	5	Conifer							15% DUFF
								Hardwood	1						
8	RT	2	HT	0	85	90	5	Conifer							5% DUFF
								Hardwood	2			1			
8	RT	3	HT	0	85	75	10	Conifer					1		15% DUFF
								Hardwood	1						
20	LF	1	HT	0	80	40	50	Conifer							10% DUFF
								Hardwood	2			1	1		
20	LF	2	HT	0	60	30	50	Conifer							OLD ROAD 20 PERCENT
								Hardwood							
20	LF	3	HS	31	70	30	40	Conifer							30% DUFF
								Hardwood				1			
20	RT	1	HT	0	35	80	10	Conifer							10%T DUFF
								Hardwood	1			2	1		
20	RT	2	HT	0	25	90	5	Conifer			1				5% DUFF
								Hardwood		1					
20	RT	3	HT	0	20	80	10	Conifer							10% DUFF
								Hardwood							
33	LF	1	HT	0	40	80	10	Conifer							10% DUFF
								Hardwood				1			
33	LF	2	HT	0	60	60	20	Conifer							20% DUFF
								Hardwood							
33	LF	3	HS	20	70	50	40	Conifer							10% DUFF
								Hardwood							
33	RT	1	HT	0	40	80	10	Conifer							10% DUFF
								Hardwood							
33	RT	2	HT	0	60	80	15	Conifer							5% DUFF
								Hardwood	1	1					
33	RT	3	HT	0	60	70	25	Conifer					1		5% DUFF
								Hardwood							

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 2/23/2012

COMMENT SUMMARY

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

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RB	01	20	/TJ	TEMP 6 CT/CT D15/S MT/LT ACW 2
1	5	RB	00	92	SS/	
1	8	RB	00	133	/SS	CT/CT M30/S MT/LT, 0548983 4997186
1	12	SC	02	157		HT=0.5
1	13	RB	00	163.5	HS	LOG
1	15	RB	00	188.5	SS/	
1	16	RB	00	206.5	HS	LOG
1	17	CB	00	210.8	HS	LOG
1	18	RB	00	220.8	SS/	
1	19	SL	00	221.3		HT=0.4

COMMENT SUMMARY

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

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	20	CB	00	234.3		CT/CT D30/S MT/YT
1	22	SL	00	238	HS	HT=0.6 WOOD
1	23	RB	00	267.5	SS/	
1	24	RB	00	288.5	HS	WOOD
1	26	RB	00	333.5	HS, DJ	
1	27	PP	00	336.7		HS CONTINUED
1	28	SL	00	337.15		HT=0.5
1	29	LP	01	345.35	/TJ	
1	30	CB	11	345.35		TEMP 8, 0549130/4997029, ACW 1.1
1	32	SL	00	367.85	HS	HT=0.8

COMMENT SUMMARY

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

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	33	RB	00	390.85		CT/CT M30/G LT/YT, 0549198 4997035
1	34	LP	00	401.85	HS	
1	35	SL	00	402.25		HT=0.5
1	39	RB	00	490.15		CA/CT C0/G YT/MT, 0549304 4997029

L-12 Canyon Creek (Molalla Basin) - 2012 Winter Restoration Survey



Start of survey looking upstream.



End of survey looking downstream.



End of survey with surveyor.