

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

STREAM: SWAMP CREEK
 GCG: 3-MS
 SITE ID: 457
 BASIN: COQUILLE
 TREATMENT DATE: 2012
 SURVEY DATE: 8/22/2011
 SURVEY CREW: Eric Bailey and Sara DeRischebourg
 USGS MAPS: REMOTE
 ECOREGION: Mid-Coastal Sedimentary
 REPORT PREPARED BY: Lora Tennant

REACH: 1 LOCATION: T28S-R10W-S32NE

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Timber harvest - not yet replanted.

Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh

Primary channel length (meters) and area (m²): 1,477 : 5,750

Secondary channel length (meters) and area (m²) 30 : 26

VWI average: 10.6 VWI Range: 6 - 15 Average Gradient: 0.5%

Pieces LWD per 100m: Wood Volume (m³) per 100m:

Percent pools: 91% Complex pools (LWD pieces>=3): 0 Pools >=1m deep:14

<u>Percent substrate (avg):</u>	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	10	61	29	1	0	0
Pool units	9	74	16	0	0	0
Fast water units	1	39	57	2	0	0

SURVEY COMMENTS:

This is a pre-treatment (wood) restoration survey. The crew observed rough-skinned newts, beaver activity, elk tracks, and wildlife trails. There was also a lot of salmonberry in the riparian.

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

**SWAMP CREEK
GCG: 3-MS SITE ID: 457**

Survey Date: 8/22/2011

Report Date: 8/3/2012

T28S-R10W-S32NE

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	10.6	VWI Range:	6 - 15

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	1,477	5,750	0
Secondary	30	26	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 8	<u>First Terrace</u> n = 8
Width: 3.3	Width: 6.5	10.9 (6.1 - 30.8)	17.0 (8.6 - 36)
Depth: 0.41	Height: 0.6	1.3 (1 - 1.5)	2.1 (1.65 - 2.35)

W:D ratio: 10.3

Stream Flow Type: LF

Average Unit Gradient: 0.5%

Water temperature (°C): 14.0 - 15.0

Entrenchment (ACW:FPW ratio): 1.6

Habitat Units/100m (total channel length): 5.6

Habitat Units/100m (primary channel length): 5.7

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	17%	Reach avg: 73%
Undercut Banks:	15%	Range: 43 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	224	15.2
Volume (m ³):	267	18.1
Key pieces (>=12m x 0.60m):	10	0.7

Survey Date: 8/23/2011

Report Date: 6/8/2012

T28S-R10W-S32NE

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-BACKWATER	6	13	1.5	0.35	20	0	15	77	8	1	0	0
POOL-BEAVER DAM	16	713	4.0	1.00	2,916	0	12	72	16	0	0	0
POOL-DAMMED	5	193	4.3	0.88	1,003	0	9	84	6	1	0	0
POOL-ISOLATED	1	4	0.6	0.10	3	0	0	19	76	5	0	0
POOL-LATERAL SCOUR	14	362	4.0	0.63	1,363	13	7	73	19	1	0	0
RAPID/BOULDERS	1	8	2.0	0.10	15	0	0	78	22	0	0	0
RIFFLE	12	111	1.6	0.09	190	1	1	36	62	1	0	0
RIFFLE W/ POCKETS	6	71	1.5	0.08	126	13	3	38	54	4	1	0
STEP/BEAVER DAM	16	22	3.9	0.06	90	0	19	49	31	0	0	0
STEP/COBBLE	1	1	4.0	0.05	4	0	0	10	90	0	0	0
STEP/LOG	3	3	4.5	0.06	15	0	16	84	0	0	0	0
STEP/STRUCTURE	3	6	6.0	0.10	33	0	0	69	31	0	0	0
Total:	84	1,507	3.3	0.41	5,776	27	Avg: 10	61	29	1	0	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	28	923	3.4	0.81	3,941	68.23%	0	0.0
Scour Pools	14	362	4.0	0.63	1,363	23.59%	13	1.0
Glides	0	0			0	0.00%	0	0.0
Riffles	18	182	1.6	0.09	316	5.47%	14	4.4
Rapids	1	8	2.0	0.10	15	0.26%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	23	33	4.3	0.06	141	2.45%	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

SWAMP CREEK
GCG: 3-MS SITE ID: 457

Survey Date: 8/22/2011

Report Date: 6/8/2012

T28S-R10W-S32NE

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	42	27.9	28.4
Pools >=1m deep:	14	9.3	9.5
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	5.5		
Residual pool depth (avg):	0.74		

Survey Date 8/22/2011

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Report Date: 6/8/2012

Summary of Riparian Zone (0-30m) 6 transects

Total hardwoods/1000	681
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 f	41
Total conifers >35" dbh/1000 f	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	0.7	0.5	1.0	0.0	2.5	0.5	4.2
15-30cm	0.0	0.3	0.3	0.8	0.0	0.7	0.3	1.8
30-50cm	0.0	1.2	0.3	0.5	0.2	1.2	0.5	2.8
50-90cm	0.2	1.0	0.3	0.7	0.2	0.5	0.7	2.2
>90cm	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
Total/100m2	0.2	3.3	1.5	3.0	0.3	4.8	0.7	3.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	61		60		55	
Shrub cover	76		77		60	
Grass/forb cover	19		23		26	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		17		17	
High terrace	83		83		67	
Low terrace	8		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	8		0		17	
Riprap	0		0		0	
Surface slope (%)	4		11		14	

Summary of Riparian Zone (0-30m) for all reaches

6 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	681
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 f	41
Total conifers >35" dbh/1000 f	0

Average number of trees in a 5-m wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u> <u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.5	4.2
15-30cm	0.3	1.8
30-50cm	0.5	2.8
50-90cm	0.7	2.2
>90cm	0.0	0.2

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		
10	LF	1	HT	0	80	90	10	Conifer					TRANSITION		
								Hardwood							
10	LF	2	HT	0	80	95	5	Conifer					TRANSITION		
								Hardwood							
10	LF	3	HS	39	90	50	50	Conifer							
								Hardwood							
10	RT	1	HT	0	50	10	90	Conifer					TRANSITION		
								Hardwood					1		
10	RT	2	HT	0	40	80	20	Conifer							
								Hardwood							
10	RT	3	HT	0	30	95	5	Conifer					TRANSITION		
								Hardwood							
24	LF	1	HT	0	30	95	5	Conifer					TRANSITION		
								Hardwood							
24	LF	2	HT	0	40	80	20	Conifer							
								Hardwood							
24	LF	3	HT	0	30	95	5	Conifer							
								Hardwood							
24	RT	1	LT	0	60	95	5	Conifer					TRANSITION		
								Hardwood							
24	RT	2	HT	0	75	50	50	Conifer					TRANSITION		
								Hardwood							
24	RT	3	HT	0	95	40	60	Conifer					TRANSITION		
								Hardwood							
38	LF	1	RB	43	45	30	10	Conifer					60% RB		
								Hardwood							
38	LF	2	HS	80	45	60	40	Conifer							
								Hardwood							
38	LF	3	HS	80	70	60	40	Conifer							
								Hardwood							
38	RT	1	HT	0	40	95	5	Conifer					TRANSITION		
								Hardwood							
38	RT	2	HT	0	65	90	10	Conifer							
								Hardwood							
38	RT	3	HT	0	60	40	50	Conifer					10% BARE		
								Hardwood							
48	LF	1	HT	0	90	30	70	Conifer							
								Hardwood							
48	LF	2	HS	54	90	5	95	Conifer							
								Hardwood							

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	
48	LF	3	RB	43	80	5	25	Conifer					1	70% RB
								Hardwood			1		1	
48	RT	1	HT	0	70	95	5	Conifer						
								Hardwood			1		1	
48	RT	2	HT	0	50	90	10	Conifer						
								Hardwood					2	
48	RT	3	HT	0	20	50	50	Conifer						
								Hardwood	1					
61	LF	1	HT	0	80	95	5	Conifer					1	TRANSITION
								Hardwood						
61	LF	2	HT	0	40	95	5	Conifer						
								Hardwood						
61	LF	3	HT	0	30	95	5	Conifer						BEND IN CREEK
								Hardwood					1	
61	RT	1	HT	0	70	90	10	Conifer						TRANSITION
								Hardwood					1	
61	RT	2	HT	0	50	90	10	Conifer		1	1			
								Hardwood						
61	RT	3	HT	0	80	95	5	Conifer						
								Hardwood					1	
82	LF	1	HT	0	40	95	5	Conifer						TRANSITION
								Hardwood	4					
82	LF	2	HT	0	70	95	5	Conifer						
								Hardwood		2	2			
82	LF	3	RB	0	25	10	5	Conifer						85% RB
								Hardwood	7					
82	RT	1	HT	0	75	90	10	Conifer						TRANSITION
								Hardwood		2	1			
82	RT	2	HT	0	75	90	10	Conifer						
								Hardwood		1				
82	RT	3	HT	0	45	90	10	Conifer						
								Hardwood	3	1				

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 8/22/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	LP	00	45	AM, BV	
1	2	SD	00	47.5	WL, BV, BD	AM-RSN/ H=.3
1	3	BP	01	154.5	WL, BV, TJ/	
1	4	RP	11	154.5		
1	5	SL	00	155.3	DJ, BV	
1	6	DP	00	162.3	BV	
1	7	RB	00	169.8	WL, BV	
1	8	LP	01	201.8	BV, AM, WL	
1	10	RI	00	207.8	WL, BV	
1	11	LP	01	223.8	WL, BV	
1	12	BW	10	223.8	BV, HS	
1	13	SD	00	225.7	BV, BD	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	14	BP	00	235.7	WL, BV	
1	15	SD	00	236.7	BV, BD	
1	16	BP	00	287.7	WL, SS, BV	
1	17	SD	00	289.7	WL, BV, BD	
1	18	BP	00	303.7	WL, BV	
1	19	SD	00	305.9	WL, BV, BD	
1	20	BP	00	320.9	WL, BV	
1	21	SD	00	321.8	BV, BD	
1	22	BP	00	354.8	WL, BV	
1	23	SS	00	356.3	HSBV	
1	24	DP	01	469.3	HS BV	
1	25	BW	10	469.3	WL HS BV	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	26	SL	00	469.8	BV	
1	27	DP	01	510.8	/TJ WL BV	
1	28	RI	11	510.8	BV HS WL	
1	29	RI	00	522.8	BV HS WL	
1	30	LP	00	610.8	BV AM HS	
1	31	RI	00	617	WL	
1	32	LP	00	640	AM BV HS	
1	33	RI	00	646.5	BV	
1	34	LP	00	674.5	BV	
1	35	SS	00	678.5	HS BV	
1	36	RI	00	683.7	HS	
1	37	SD	00	685.1	BV, BD	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	38	BP	00	713.1	BV	
1	40	LP	00	742.1	WL HS BV	
1	41	RI	00	752.1	BV	
1	42	SD	00	753.1	BV, BD	
1	43	BP	00	758.4	WL, BV	
1	44	SD	00	759.1	BV, BD	
1	45	BP	01	873.1	WL, AM, BV	
1	46	BW	10	873.1	WL BV	
1	47	RI	00	878.2	WL BV	
1	48	LP	00	893.2	WL HS BV	
1	49	RI	00	905.2	BV	
1	50	SD	00	907.1	WL, BV, BD	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	51	BP	01	995.1	HS, BV, TJ	
1	52	RP	11	995.1	WL BV	
1	53	RI	00	1012.1	WL BV	
1	55	SD	00	1026.6	BV, BD	
1	56	BP	00	1052.6	BV, AM	
1	57	RP	00	1062.1	BV	
1	58	SD	00	1063.6	BV, BD	
1	59	BP	00	1135.6	BV, WL	
1	60	SD	00	1136.6	BV, BD	
1	61	BP	00	1156.6	BV	
1	62	SC	00	1157.6	BV	
1	63	LP	00	1185.1	WL BV	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	64	RI	00	1201.1	WL BV	
1	65	LP	00	1205.1	WL BV	
1	66	SL	00	1207.1	BV	
1	67	DP	00	1223.7	BV	
1	68	RP	00	1253.7	BV	
1	69	LP	01	1284	BV	
1	70	BW	10	1284	BV AM	
1	71	IP	10	1284	HS	
1	72	SS	00	1284.6	HS	
1	73	DP	00	1299.6	WL BV	
1	74	SD	00	1300.6	BV, BD	
1	75	BP	00	1333.1	WL, BV	

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 457 STREAM: SWAMP CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	76	SD	00	1334.1	BV, BD	
1	77	BP	01	1411.6	BV, AM,HS	
1	78	BW	10	1411.6	WL	
1	79	SD	00	1412.4	BV, BD	
1	80	BP	00	1431.8	BV	
1	81	RP	00	1445.4	BV	
1	82	LP	00	1454.4	WL BV	
1	83	RP	00	1464.4	WL HS BV	
1	84	LP	00	1477	BV	