

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

STREAM: NORTH FORK COQUILLE RIVER  
 GCG: 3-MS  
 SITE ID: 448  
 BASIN: COQUILLE  
 TREATMENT DATE: 2011  
 SURVEY DATE: 8/24/2011  
 SURVEY CREW: Eric Bailey and Sara DeRischebourg  
 USGS MAPS: DANIELS CREEK  
 ECOREGION: Mid-Coastal Sedimentary  
 REPORT PREPARED BY: Lora Tennant

REACH: 1 LOCATION: T26S-R11W-S21NW

**SURVEY DESCRIPTION:**

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Rural residential

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

Primary channel length (meters) and area (m<sup>2</sup>): 1,686 : 24,247

Secondary channel length (meters) and area (m<sup>2</sup>): 168 : 206

VWI average: 4.8 VWI Range: 4 - 5 Average Gradient: 0.9%

Pieces LWD per 100m: 7.1 Wood Volume (m<sup>3</sup>) per 100m: 4.9

Percent pools: 75% Complex pools (LWD pieces>=3): 11 Pools >=1m deep: 4

<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	6	5	14	12	17	46
Pool units	6	7	11	11	8	56
Fast water units	1	3	12	11	19	54

**SURVEY COMMENTS:**

This is a pre/post-treatment (boulders) restoration survey. The crew observed juvenile salmonids, salamanders, and beaver activity. Numerous newly placed boulder habitat structures were documented.

Survey Date: 8/24/2011

Report Date: 6/8/2012

T26S-R11W-S21NW

REACH 1

**Valley and Channel Summary**

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	8%
Moderate V-shape	0%	Multiple Terraces	92%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	4.8	VWI Range:	4 - 5

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m <sup>2</sup> )	Dry Units
Primary	1,686	24,247	0
Secondary	168	206	1

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 7	First Terrace <i>n</i> = 7
Width: 12.2	Width: 19.3	23.4 ( 19.5 - 27.4 )	26.7 ( 23.2 - 31.3 )
Depth: 0.38	Height: 0.7	1.3 ( 1 - 1.7 )	2.1 ( 1.4 - 2.55 )

W:D ratio: 31.0

Stream Flow Type: LF

Average Unit Gradient: 0.9%

Water temperature (°C): 17.0 - 19.0

Entrenchment (ACW:FPW ratio): 1.2

Habitat Units/100m (total channel length): 3.3

Habitat Units/100m (primary channel length): 3.7

**Riparian, Bank, and Wood Summary**

	Primary	Secondary
Land Use:	RR	ST
Riparian Vegetation:	D30	G

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	11%	Reach avg: 60%
Undercut Banks:	2%	Range: 39 - 94

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	119	7.1
Volume (m <sup>3</sup> ):	83	4.9
Key pieces (>=12m x 0.60m):	2	0.1

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

**NORTH FORK COQUILLE RIVER**  
**GCG: 3-MS SITE ID: 448**

**Survey Date: 8/24/2011**

**Report Date: 6/8/2012**

**T26S-R11W-S21NW**

**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
CASCADE/BOULDERS	1	8	0.6	0.05	5	46	0	0	15	30	55	0
POOL-BACKWATER	2	28	2.4	0.15	64	0	66	2	2	0	0	30
POOL-DAMMED	7	460	16.9	0.80	8,038	148	7	8	19	20	5	41
POOL-ISOLATED	3	17	1.6	0.07	28	1	23	14	60	3	0	0
POOL-LATERAL SCOUR	12	519	12.0	0.57	6,739	538	5	7	8	10	10	60
POOL-STRAIGHT SCOUR	6	273	14.3	0.74	3,594	139	5	7	9	3	9	67
PUDDLED UNIT	1	80	0.7	0.30	56	0	0	0	82	18	0	0
RAPID/BEDROCK	9	199	11.2	0.22	2,538	114	1	2	6	6	6	79
RAPID/BOULDERS	8	210	11.5	0.26	2,564	350	1	2	10	17	31	40
RIFFLE	1	9	1.5	0.05	13	0	0	17	83	0	0	0
STEP/BEDROCK	4	25	14.3	0.16	336	25	0	3	5	7	5	79
STEP/STRUCTURE	8	27	18.7	0.14	481	894	0	2	5	23	62	9
<b>Total:</b>	<b>62</b>	<b>1,854</b>	<b>12.2</b>	<b>0.38</b>	<b>24,453</b>	<b>2,255</b>	<b>Avg: 6</b>	<b>5</b>	<b>14</b>	<b>12</b>	<b>17</b>	<b>46</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	12	505	10.7	0.51	8,129	33.24%	149	1.8
Scour Pools	18	792	12.8	0.63	10,333	42.25%	677	6.6
Glides	0	0			0	0.00%	0	0.0
Riffles	1	9	1.5	0.05	13	0.05%	0	0.0
Rapids	17	409	11.3	0.24	5,101	20.86%	464	9.1
Cascades	1	8	0.6	0.05	5	0.02%	46	958.3
Step/Falls	12	52	17.2	0.15	816	3.34%	919	112.6
Dry	1	80	0.7	0.30	56	0.23%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

NORTH FORK COQUILLE RIVER  
GCG: 3-MS SITE ID: 448

---

Survey Date: 8/24/2011

Report Date: 6/8/2012

T26S-R11W-S21NW

REACH 1

---

**POOL SUMMARY**

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	30	16.2	17.8
Pools >=1m deep:	4	2.2	2.4
Complex pools (LWD pieces>=3):	11	5.9	6.5
Pool frequency (channel widths/pool):	3.2		
Residual pool depth (avg):	0.54		

Survey Date 8/24/2011

Report Date: 6/8/2012

**RIPARIAN ZONE  
VEGETATION SUMMARY**

REACH 1

**Summary of Riparian Zone (0-30m) 5 transects**

Total hardwoods/1000	744
Total conifers/1000 ft	256
Total conifers >20" dbh/1000 f	0
Total conifers >35" dbh/1000 f	0

**Average number of trees in a 5-meter wide band**

Diameter class (cm)	Zone 1 <u>0-10 meters</u>		Zone 2 <u>10 - 20 meters</u>		Zone 3 <u>20 - 30 meters</u>		Zones 1-3 <u>0-30 meters</u>	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	0.6	0.4	0.2	1.0	1.4	1.4	2.2
15-30cm	0.0	2.2	1.4	0.8	0.8	1.0	2.2	4.0
30-50cm	0.0	2.8	0.4	1.4	0.2	1.0	0.6	5.2
50-90cm	0.0	0.2	0.0	0.0	0.0	0.4	0.0	0.6
>90cm	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Total/100m2	0.0	5.8	2.2	2.4	2.0	4.0	1.4	4.1

**Canopy closure and ground cover**

	Zone 1 <u>0-10 meters</u>		Zone 2 <u>10 - 20 meters</u>		Zone 3 <u>20 - 30 meters</u>	
	(%)		(%)		(%)	
Canopy closure	59		59		63	
Shrub cover	21		28		39	
Grass/forb cover	77		67		59	

**Predominant landform in each zone**

	Zone 1 <u>0-10 meters</u>		Zone 2 <u>10 - 20 meters</u>		Zone 3 <u>20 - 30 meters</u>	
	(%)		(%)		(%)	
Hillslope	30		30		30	
High terrace	60		70		70	
Low terrace	10		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 (%)	67		80		74	

**Summary of Riparian Zone (0-30m) for all reaches****5 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	744
Total conifers/1000 ft	256
Total conifers >20" dbh/1000 f	0
Total conifers >35" dbh/1000 f	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	1.4	2.2
15-30cm	2.2	4.0
30-50cm	0.6	5.2
50-90cm	0.0	0.6
>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		
9	LF	1	HS	36	70	5	95	Conifer							
								Hardwood		3	3				
9	LF	2	HS	75	70	15	85	Conifer		2	2				
								Hardwood			3				
9	LF	3	HS	75	80	60	40	Conifer				1			
								Hardwood							
9	RT	1	LT		85	50	50	Conifer							LT
								Hardwood	1		2	1			TRANSITION
9	RT	2	HT		85	10	30	Conifer		4					TO HT
								Hardwood							60% BARE
9	RT	3	HT		80	10	30	Conifer	5	4					GROUND
								Hardwood							60% OPEN
16	LF	1	HT		20	20	80	Conifer							
								Hardwood							
16	LF	2	HT		70	30	70	Conifer							
								Hardwood							
16	LF	3	HT		70	5	95	Conifer							
								Hardwood		4	2				
16	RT	1	HT		30	20	80	Conifer							
								Hardwood			2				
16	RT	2	HT		10	10	90	Conifer							
								Hardwood							
16	RT	3	HT				100	Conifer							
								Hardwood							
29	LF	1	HT		80	10	90	Conifer							
								Hardwood		5	3				
29	LF	2	HT		85	30	70	Conifer	1	1					
								Hardwood	1						
29	LF	3	HT		70	80	20	Conifer							
								Hardwood	7						
29	RT	1	HS	80	75	50	50	Conifer							
								Hardwood			2				
29	RT	2	HS	80	70	60	40	Conifer							
								Hardwood		4					
29	RT	3	HS	80		5	95	Conifer							RB CUTS
								Hardwood							ACROSS
43	LF	1	HT		50	20	80	Conifer							ZONE
								Hardwood		1					
43	LF	2	HT		70	10	90	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		
43	LF	3	HT	55	80	20	80	Conifer							
								Hardwood			1	2	1		
43	RT	1	HT		60	10	90	Conifer							
								Hardwood							
43	RT	2	HT		25	10	90	Conifer	1						
								Hardwood							
43	RT	3	HT			5	95	Conifer							
								Hardwood							
55	LF	1	HS	85	85	5	95	Conifer							
								Hardwood	2	2	2				
55	LF	2	HS	85	70	20	80	Conifer							
								Hardwood			2				
55	LF	3	HS	85	20	80	20	Conifer							
								Hardwood							
55	RT	1	HT		30	20	60	Conifer							20% BARE GROUND
								Hardwood							
55	RT	2	HT		30	80	20	Conifer							TRANSITION
								Hardwood			2				
55	RT	3	HT		40	90	10	Conifer							
								Hardwood		1	2				



OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

OREGON PLAN MONITORING SITE  
SURVEY DATE: 8/24/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 448 STREAM: NORTH FORK COQUILLE RIVER

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RB	00	17		041793/4795413
1	2	LP	00	73		
1	3	RR	00	101	/SS	
1	4	LP	00	128	/SS	
1	6	SP	01	186.6	/TJ	
1	7	RI	11	186.6		TJ TEMP=13C; ACW=1.1M
1	8	RR	00	225.6	/SS	
1	9	SP	00	272.6	/SS	RIP 1 AT TOP OF UNIT
1	10	RR	01	315.6	/SS, /TJ	SALMON SPAWNING SIGN
1	11	RR	11	315.6	HS	TJ TEMP=14C; ACW=3.5M
1	12	SP	00	346.6	AM	
1	14	SP	00	394.6	HS	

OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

OREGON PLAN MONITORING SITE  
SURVEY DATE: 8/24/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 448 STREAM: NORTH FORK COQUILLE RIVER

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	15	SS	00	396.6	HS	1.2M STEP
1	16	DP	00	506.6		RIP 2
1	20	SP	01	667.6	TJ/	
1	21	RB	11	667.6		TJ ACW=2.8M
1	25	BW	10	754.6		
1	28	RB	00	805.1	BV	
1	29	LP	01	865.1		RIP 3-BOTTOM OF UNIT
1	32	SS	00	880.1		
1	34	SS	00	898.1	HS	H=1.2M
1	35	DP	00	959.1		
1	38	SS	00	975.7	HS	H=1.1M
1	43	SP	00	1136.7		RIP 4-TOP OF UNIT

OREGON DEPT OF FISH AND WILDLIFE  
HABITAT INVENTORY

OREGON PLAN MONITORING SITE  
SURVEY DATE: 8/24/2011

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 448 STREAM: NORTH FORK COQUILLE RIVER

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	45	LP	01	1248.7		
1	46	RB	01	1292.7		
1	47	PD	02	1292.7	AM, BV	ACW=3.5M
1	48	LP	00	1359.7	WL, BV	
1	50	LP	01	1405.7	TJ/	
1	51	CB	11	1405.7		T=12C; ACW=4.1M
1	52	RR	00	1429.7		CABLE IN STREAM
1	53	LP	00	1441.7		HS-NEW RESTORATION WORK
1	54	SS	00	1446.7	HS	GRAVEL AND ALDER
1	55	LP	00	1470.7		GRAVEL AND ALDER BOTTOM OF UNIT
1	56	SS	00	1473.7	HS	GRAVEL AND ALDER
1	58	SS	00	1582.7	HS	

**COMMENT SUMMARY**

MONITORING AREA: 3-MS SITE ID: 448 STREAM: NORTH FORK COQUILLE RIVER

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	59	DP	01	1682.7		ODFW SALMON SPAWNING SIGN
1	62	SS	00	1685.7	HS	EOS: KINGFISHER