

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

STREAM: School Line Creek (MS-283)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: July 14, 2005
SURVEY CREW: Eric Himmelreich, Pat Burns
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.5 km²
USGS MAPS: Dement Creek
ECOREGION: Southern Oregon Coastal Mountains

GENERAL DESCRIPTION:

The School Line Creek habitat survey extended 443 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.6 (range: 1.0-4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.3 percent. Scour pools (44%) and rapids (27%) dominated stream habitat. Bedrock (42%) dominated stream substrate. Wood volume was moderate at 22.3 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH 1

T30S-R13W-S25NE

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.6	VWI Range:	1 - 4

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 Channel	443	1,322	0
Secondary Channel	0	0	0
Off-Channel Units	17	59	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 2.5	Width: 4.3	6.0 (4.3 - 8.6)	11.0 (11 - 11)
Depth: 0.44	Height: 0.5	1.0 (0.8 - 1.1)	1.2 (1.2 - 1.2)

W:D ratio: 8.8 Entrenchment (ACW:FPW ratio): 1.4
 Stream Flow Type: MF Habitat Units/100m (total channel length): 10.0
 Average Unit Gradient: 3.3% Habitat Units/100m (primary channel length): 10.4
 Water temperature (°C): 14.5 - 14.5

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 88%
Undercut Banks:	2%	Range: 47 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	63	14.2
Volume (m ³):	99	22.3
Key pieces (>=12m x 0.60m):	5	1.1

OREGON DEPT OF FISH AND WILDLIFE

SCHOOL LINE CREEK PRE-TX (3-MS, 283)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

7/14/2005

REACH 1		T30S-R13W-S25NE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number	Total	Avg	Avg	Total	Large	Substrate					
	Units	Length	Width	Depth	Area	Boulders	Percent Wetted Area					
		(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	2	20	1.6	0.23	39	3	5	5	8	10	15	57
CASCADE/BOULDERS	1	9	1.4	0.15	13	13	0	5	19	29	29	19
POOL-BACKWATER	2	17	3.3	0.55	59	1	11	57	11	16	6	0
POOL-LATERAL SCOUR	3	44	3.6	0.53	163	16	3	12	20	25	15	26
POOL-PLUNGE	5	22	3.3	0.62	74	15	5	10	9	11	24	40
POOL-STRAIGHT SCOUR	5	51	3.3	0.71	179	7	6	30	13	10	13	27
POOL-TRENCH	4	38	4.4	1.81	194	4	5	11	10	10	16	49
RAPID/BEDROCK	3	37	1.6	0.15	62	11	2	10	10	9	11	59
RAPID/BOULDERS	6	101	2.7	0.13	312	63	0	6	23	32	27	12
RIFFLE	4	108	2.5	0.14	266	8	6	24	38	16	8	7
STEP/BEDROCK	10	12	0.9	0.11	19	2	0	0	1	1	5	94
STEP/LOG	1	0	0.3	0.05	0	0	11	56	22	11	0	0
Total:	46	460	2.5	0.44	1,381	143	Avg: 3	14	14	13	14	42

HABITAT SUMMARY									
Habitat Group	Number	Total	Avg	Avg	Wetted Area		Large Boulders		
	Units	Length	Width	Depth	(m ²)	Percent	Number	(# / 100m ²)	
		(m)	(m)	(m)					
Dammed & BW Pools	2	17	3.3	0.55	59	4.26%	1	1.7	
Scour Pools	17	155	3.6	0.91	611	44.22%	42	6.9	
Glides	0	0			0	0.00%	0	0.0	
Riffles	4	108	2.5	0.14	266	19.27%	8	3.0	
Rapids	9	139	2.3	0.14	374	27.09%	74	19.8	
Cascades	3	29	1.5	0.20	52	3.77%	16	30.7	
Step/Falls	11	12	0.9	0.10	19	1.38%	2	10.5	
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:	19	41.3	42.9
Pools >=1m deep:	5	10.9	11.3
Complex pools (LWD pieces>=3):	2	4.3	4.5
Pool frequency (channel widths/pool):	5.6		
Residual pool depth (avg):	0.81		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

SCHOOL LINE CREEK PRE-TX
GCG: 3-MS SITE ID: 283

Survey Date 7/14/2005

RIPARIAN ZONE

Report Date: 4/26/2006

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	508
Total conifers/1000 ft	163
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	20

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	2.0	0.0	1.0	0.0	2.7	0.0	5.7
15-30cm	0.0	0.7	0.3	0.3	1.7	0.7	2.0	1.7
30-50cm	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.3
50-90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
>90cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
Total/100m2	0.0	3.3	0.7	1.3	2.0	3.7	0.9	2.8

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	52	42	43
Shrub cover	30	26	22
Grass/forb cover	37	52	47

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	100	67	83
High terrace	0	0	0
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	33	17
Riprap	0	0	0
Surface slope (%)	74	24	24

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	508
Total conifers/1000 ft	163
Total conifers >20" dbh/1000 ft	20
Total conifers >35" dbh/1000 ft	20

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	5.7
15-30cm	2.0	1.7
30-50cm	0.3	0.3
50-90cm	0.0	0.7
>90cm	0.3	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		
13	RT	3	HS	40	80	30	40	Conifer		2					
								Hardwood	3	2					
13	LF	1	HS	100	90	5	30	Conifer							
								Hardwood				2			
13	LF	2	RB	0	20	5	10	Conifer							GRAVEL ROAD
								Hardwood							
13	LF	3	HS	30	40	20	30	Conifer		2					
								Hardwood	3						
13	RT	1	HS	100	90	5	30	Conifer							THIS RIP ESTIMATED
								Hardwood							
13	RT	2	HS	60	90	30	50	Conifer		1	1				
								Hardwood	3						
35	LF	2	HS	30	30	60	30	Conifer							
								Hardwood		1					
35	LF	3	HS	20	50	40	40	Conifer							
								Hardwood	2						
35	RT	1	HS	70	30	30	50	Conifer							
								Hardwood	4						
35	RT	2	RB	0	0	10	80	Conifer							GRASS SURFACE
								Hardwood							
35	RT	3	RB	0	0	10	20	Conifer							GRAVEL SURFACE
								Hardwood							
35	LF	1	HS	100	20	60	20	Conifer							
								Hardwood							
42	RT	1	HS	30	40	50	30	Conifer							
								Hardwood	2						
42	RT	2	HS	10	20	20	80	Conifer							
								Hardwood							
42	LF	3	HS	45	90	20	70	Conifer		1				1	
								Hardwood			1				
42	LF	2	HS	45	90	30	60	Conifer							
								Hardwood							
42	LF	1	HS	45	40	30	60	Conifer							0402957, 4754528
								Hardwood	2						
42	RT	3	HS	10	0	10	80	Conifer							
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **283** SCHOOL LINE CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	15.3			T = 14.5 C AT 0920
2	LP	00	33.1			JV COHO THROUGHOUT SU
3	RB	00	43.8			TROUT THROUGHOUT SURV
5	SR	00	47.3		H = .25 M	
9	SR	00	95		H = .25 M	
13	RB	00	125.1	SS/		
15	CB	00	144.9			PACIFIC GIANT SALAMANDE
17	SR	00	149.6		H = .35 M	
19	SR	00	160.9		H = .8 M	
21	SR	00	168.9		H = .7 M	
23	SR	00	184.8		H = .75 M	
26	SR	00	213.3		H = .25 M	
27	TP	00	221.1	BC	BRIDGE CROSSING	
28	SR	00	221.8		H = .9 M	
30	SL	00	226.6		H = .5 M	
33	SR	00	237.6		H = .9 M	
35	RR	00	257.3		0403022, 4754638	
36	RB	00	269.3	SS/		
37	RI	00	284.7	SS/		
38	RB	00	309.5	SS/		
39	RI	01	344.7	DJ, HS	SS/	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 3-MS SITE ID: 283 SCHOOL LINE CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
41	RI	00	375.5	HS, HS, HS		
42	RR	00	391.9	HS, DJ		
43	RI	01	418.3	HS, DJ		
45	SP	00	433.5	HS		
46	RR	00	442.5	HS	END SURVEY	

