

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

STREAM: SLIDE CREEK
 GCG: 4-UMP
 SITE ID: 186
 BASIN: S. UMPQUA
 TREATMENT DATE: 2003
 SURVEY DATE: 4/22/2009
 SURVEY CREW: David Jones / Ryan Emig
 USGS MAPS: DODSON BUTTE
 ECOREGION: Inland Siskiyou
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T28S-R4W-S35NW

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Second growth timber (15-30 cm dbh)
 Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh
 Primary channel length (meters) and area (m²): 561 : 2,173
 Secondary channel length (meters) and area (m²) 84 : 128
 VWI average: 12.0 VWI Range: 5.5 - 20 Average Gradient: 1.3%
 Pieces LWD per 100m: 16.7 Wood Volume (m³) per 100m: 18.1
 Percent pools: 57% Complex pools (LWD pieces>=3): 11 Pools >=1m deep:3
 Percent substrate (avg):

	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	4	38	52	1	0	5
Pool units	5	50	40	2	0	3
Fast water units	1	20	73	1	0	5

SURVEY COMMENTS:

The Slide Creek habitat survey is a post-treatment, long term monitoring site. The crew noted habitat structures throughout. They also noted observing juvenile coho salmon and winter steelhead redds throughout the survey. Lamprey and cutthroat trout were noted during the survey. Evidence of wildlife included a garter snake and tree frog. There were no potential barriers to upstream fish migration observed within the survey reach. A previous post-treatment habitat survey was conducted during the winter of 2004. Comparisons were made among key coho salmon habitat attributes: total secondary channel length, pieces of LWD per 100 m, wood volume per 100 m, percent pools, and complex pools. All key habitat attributes increased.

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T28S-R4W-S35NW

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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	12.0	VWI Range:	5.5 - 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	561	2,173	0
Secondary	84	128	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 3.1	Width: 5.2	10.2 (8.4 - 11.8)	13.2 (10 - 14.6)
Depth: 0.39	Height: 0.4	0.7 (0.7 - 0.8)	1.5 (1.05 - 1.95)

W:D ratio: 14.6

Stream Flow Type: LF

Average Unit Gradient: 1.3%

Water temperature (°C): 12.0 - 12.0

Entrenchment (ACW:FPW ratio): 2.1

Habitat Units/100m (total channel length): 8.8

Habitat Units/100m (primary channel length): 10.2

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	94	16.7
Volume (m ³):	102	18.1
Key pieces (>=12m x 0.60m):	2	0.4

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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
DRY UNIT	1	1	3.3	0.00	2	0	0	80	20	0	0	0
POOL-BACKWATER	2	12	2.3	0.50	27	0	23	78	0	0	0	0
POOL-ISOLATED	1	2	1.6	0.15	4	0	10	45	45	0	0	0
POOL-LATERAL SCOUR	24	303	3.7	0.63	1,238	0	5	49	41	2	0	2
POOL-PLUNGE	1	10	7.0	0.90	70	0	0	70	15	0	0	15
PUDDLED UNIT	1	10	0.7	0.10	7	0	5	60	35	0	0	0
RAPID/BEDROCK	1	36	4.5	0.15	162	0	0	20	20	0	0	60
RIFFLE	23	264	2.4	0.18	758	0	1	20	76	1	0	2
STEP/BEDROCK	1	4	5.5	0.10	22	0	0	0	0	0	0	100
STEP/COBBLE	1	4	3.0	0.20	11	0	5	85	0	10	0	0
STEP/LOG	1	1	3.0	0.10	2	0	0	20	80	0	0	0
Total:	57	645	3.1	0.39	2,301	0	Avg: 4	38	52	1	0	5

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	3	14	2.0	0.38	31	1.34%	0	0.0
Scour Pools	25	313	3.9	0.64	1,308	56.83%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	23	264	2.4	0.18	758	32.92%	0	0.0
Rapids	1	36	4.5	0.15	162	7.04%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	8	3.8	0.13	34	1.48%	0	0.0
Dry	2	11	2.0	0.05	9	0.39%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

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POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	28	43.4	49.9
Pools >=1m deep:	3	4.6	5.3
Complex pools (LWD pieces>=3):	11	17.0	19.6
Pool frequency (channel widths/pool):	4.4		
Residual pool depth (avg):	0.49		

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 4/22/2009

COMMENT SUMMARY

MONITORING AREA: 4-UMP SITE ID: 186 STREAM: SLIDE CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	PP	00	10	WL	LAMPREY, CUTTHROAT TROUT, COHO FRY
1	3	RR	01	50	HS,DJ	
1	4	LP	01	69	HS,DJ	
1	7	LP	01	76.5	HS	
1	9	RI	01	104.5	HS	
1	10	BW	10	104.5		COHO FRY
1	11	LP	01	121	DJ	COHO FRY
1	12	LP	02	121		COHO FRY
1	14	RI	00	145		VWI=22
1	15	LP	00	156	HS	
1	19	LP	01	192.2	HS	COHO SMOLT AND FRY
1	22	LP	00	222.2		COHO FRY
1	23	RI	00	227.2		REDD
1	24	LP	00	247.2	HS	COHO FRY
1	25	LP	00	258.2	HS	COHO FRY
1	26	RI	01	276.2		VWI=29
1	27	BW	10	276.2		COHO FRY
1	29	LP	01	291.2		COHO FRY AND SMOLT
1	32	LP	00	323.2	HS	COHO FRY AND SMOLTS
1	33	RI	00	330.2	HS	
1	34	LP	00	346.2	HS,DJ	COHO FRY AND SMOLTS
1	35	RI	01	383.2	HS	
1	40	DU	02	390.2		DRY STEP OVER LOG
1	41	LP	02	390.2		COHO FRY
1	44	LP	00	413.7	AM,HS,DJ	BV, COHO FRY/SMOLTS, 6" CUTTHROAT, TREEFROG

COMMENT SUMMARY

MONITORING AREA: 4-UMP SITE ID: 186 STREAM: SLIDE CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	46	LP	00	433.7		MULTIPLE REDDS
1	48	LP	00	475.7	HS	
1	49	RI	00	483.7	AM	PACIFIC TREEFROG
1	50	LP	00	496.7		COHO FRY
1	51	SL	00	497.2	WL	GARTER SNAKE
1	55	LP	00	528.2		COHO FRY
1	56	LP	00	545.2	HS,DJ	COHO FRY AND SMOLTS
1	57	RI	00	561.2		COHO FRY

Slide Creek (UMP-186) 2009 Winter Habitat Survey Photographs



Unit 1 - Start of Slide Creek survey downstream from bedrock step.



Upstream view of placed large wood habitat structure.



Upstream view of Slide Creek reach.



Cascades Frog observed within survey reach.



View of pool and substrate near the end of the survey.



Upstream view at the end of Slide Creek survey.