

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

STREAM: Stouts Creek (U-185)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: July 1, 2004
SURVEY CREW: Sierra Koch, Valerie Montague
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 58.7 km²
USGS MAPS: Milo
ECOREGION: Coast Range Klamath Siskiyou

GENERAL DESCRIPTION:

The Stouts Creek habitat survey extended 568 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 9.6 (range: 6.0-12.0). Land use for the reach was young (3-15 cm dbh) trees and forest fire. The average unit gradient was 2.3 percent. Riffles (41%) and scour pools (40%) dominated stream habitat. Sand (37%) and gravel (28%) dominated stream substrate. Wood volume was moderate at 27.3 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

T22S-R09W-S04NE

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	9.6	VWI Range:	6 - 12

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	568	2,548	0
Secondary	33	41	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 4.1	Width: 5.7	7.3 (5.2 - 10.1)	10.8 (10.1 - 12)
Depth: 0.31	Height: 0.4	0.8 (0.64 - 1)	1.4 (0.95 - 1.7)

W:D ratio: 14.2
 Stream Flow Type: MF
 Average Unit Gradient: 2.3%
 Water temperature (°C): 16.0 - 16.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 6.7
 Habitat Units/100m (primary channel length): 7.0

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 76%
Undercut Banks:	5%	Range: 11 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	92	16.2
Volume (m ³):	155	27.3
Key pieces (>=12m x 0.60m):	3	0.5

OREGON DEPARTMENT OF FISH AND WILDLIFE

STOUTS CREEK POST-TX (U-185)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/1/2004

REACH 1		T22S-R09W-S04NE					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	3	15	1.8	0.17	25	0	7	80	13	0	0	0
POOL-DAMMED	1	18	4.0	0.40	71	22	5	25	25	20	5	20
POOL-LATERAL SCOUR	10	146	5.2	0.63	772	55	7	47	20	12	9	5
POOL-STRAIGHT SCOUR	4	56	4.3	0.41	259	42	0	34	30	23	11	3
PUDDLED UNIT	1	6	0.7	0.10	4	0	25	50	25	0	0	0
RAPID/BOULDERS	4	89	3.9	0.20	345	92	1	24	28	25	21	1
RIFFLE	6	97	3.7	0.18	341	58	2	35	41	16	7	0
RIFFLE W/ POCKETS	8	162	4.6	0.18	723	155	0	24	34	28	11	3
STEP/COBBLE	2	12	3.5	0.13	44	7	0	5	20	56	19	0
STEP/LOG	1	1	5.0	0.01	5	4	0	40	30	30	0	0
Total:	40	601	4.1	0.31	2,589	435	Avg: 3	37	28	20	10	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	4	33	2.3	0.23	96	3.70%	22	22.9	
Scour Pools	14	202	4.9	0.57	1,031	39.83%	97	9.4	
Glides	0	0			0	0.00%	0	0.0	
Riffles	14	259	4.2	0.18	1,064	41.10%	213	20.0	
Rapids	4	89	3.9	0.20	345	13.31%	92	26.7	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	3	13	4.0	0.09	49	1.90%	11	22.4	
Dry	1	6	0.7	0.10	4	0.16%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	Total	# / Km	# / Km
All Pools:	18	29.9	31.7
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	10	16.6	17.6
Pool frequency (channel widths/pool):	5.9		
Residual pool depth (avg):	0.42		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

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

Total hardwoods/1000	2418
Total conifers/1000 ft	772
Total conifers >20" dbh/1000 ft	41
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	2.3	15.3	3.0	11.0	4.7	11.3	10.0	37.7
15-30cm	0.0	1.7	0.7	0.0	0.7	0.3	1.3	2.0
30-50cm	0.0	0.0	0.3	0.0	0.3	0.0	0.7	0.0
50-90cm	0.0	0.0	0.3	0.0	0.3	0.0	0.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	2.3	17.0	4.3	11.0	6.0	11.7	4.2	13.2

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	35		42		28	
Shrub cover	48		48		38	
Grass/forb cover	43		35		30	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		33		33	
High terrace	100		67		50	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		17	
Riprap	0		0		0	
Surface slope (%)	1		13		49	

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	RT	3	RB	0	10	10	20	Conifer							8M RD 2 HS
								Hardwood							
9	LF	1	HT	1	25	75	25	Conifer							8M HT 7M TREES
								Hardwood	13						
9	LF	2	HT	0	25	80	20	Conifer							TREES ARE 5M
								Hardwood	11						
9	LF	3	HT	1	15	90	10	Conifer	4						
								Hardwood	12						
9	RT	1	HT	1	70	20	50	Conifer	1						BURNT LOG
								Hardwood	8						
9	RT	2	HS	65	40	40	60	Conifer	4						BURNT STUMPS
								Hardwood	2						
17	RT	1	HT	1	10	50	50	Conifer	3						
								Hardwood	4						
17	RT	2	HT	11	70	30	10	Conifer	4						DIRT STICKS 6M HS/ T
								Hardwood	5						
17	LF	3	HT	1	5	50	50	Conifer	2	2					
								Hardwood	3						
17	LF	2	HT	1	10	50	50	Conifer			1				TREES 40 M
								Hardwood	7						
17	LF	1	HT	1	40	30	70	Conifer	2						
								Hardwood	13	1					
17	RT	3	HS	1	70	30		Conifer	6						DIRT 70% NEEDLES, LEAVES
								Hardwood	14	1					6M HT, 40 DEAD BB/40 REEDS
27	RT	3	HT	1	55	10	10	Conifer	2		1	1			6M HT, 40 DEAD BB/40 REEDS
								Hardwood	5						
27	RT	2	HT	1	60	40	20	Conifer		1		1			REEDS
								Hardwood	4						
27	RT	1	HT	1	45	50	20	Conifer							REEDS, DEAD BUSH
								Hardwood	4	2					
27	LF	3	HS	290	10	40	60	Conifer							
								Hardwood							
27	LF	1	HT	-1	20	60	40	Conifer	1						
								Hardwood	4	2					
27	LF	2	HS	1	45	50	50	Conifer	1		1				5M HT 5M HS
								Hardwood	4						

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 4-UMP SITE ID: 185 STOUTS CREEK POST-TX (U-185)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	00	13.3	HS	COHO FRY - 5	FRY=COHO 7 CM
5	LP	00	50.4	BV, WL, HS	COHO FRY	NB- 10 CM FISH TRAIL
6	LP	00	72.6			1.5M RI AT PTC
7	RB	00	86.2	HS	NUMEROUS COHO FRY	
8	LP	00	101.5	WL, HS	NO TREES RIGHT BANK	TRAIL 7CM COHO
9	RI	00	131.4			RIP 1 0495576 4750706
11	LP	00	183.9	HS		DEAD RAT 14IN SNAKE AG
13	SP	00	220.8	DJ, WL, HS	SNORKEL POOL	SALAMANDER, SNORKEL P
14	RI	00	231.3		GRAVEL BAR MID STREA	
15	RI	00	243.1			NB
16	SL	00	244.1	DJ	H=.2	.2H, DEBRIS IS HIGHER
17	DP	00	261.8			NB
23	LP	00	360.2	DJ, HS		SCOUR INFLUENCED BY WO
24	RI	01	386.9	WL, HS		15 CM SALAMANDER, PHOT
25	BW	10	386.9	DJ, HS		
26	LP	00	405.2			LWD INFLUENDED SCOUR,
27	RP	00	432.8	WL		TRAIL
28	LP	00	438.8	WL	SNORKEL POOL	NB
29	RB	00	465	WL		15 INCH SNAKE
30	RB	01	489.9			NB
31	BW	10	489.9	WL		TRAIL

Comment Summary

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32	SP	01	505.3	WL		TRAIL
36	BW	10	513.8	HS		
37	LP	00	532.1	HS		LWD INFLUENCED SCOUR
38	RP	00	551.2	DJ		
39	LP	00	562.3	HS		
40	RI	00	568.4	DJ		END

