

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

STREAM: Stouts Creek (U-185)  
BASIN: South Umpqua River  
SURVEY TYPE: Pre-Tx  
DATE: June 25, 2003  
SURVEY CREW: Pete Baki, Scott Kirby  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 58.7 km<sup>2</sup>  
USGS MAPS: Milo  
ECOREGION: Coast Range Klamath Siskiyou

**GENERAL DESCRIPTION:**

The Stouts Creek habitat survey extended 541 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.1 (range: 4.0-7.0). Land use for the reach was young (3-15 cm dbh) trees and forest fire. The average unit gradient was 1.8 percent. Rapids (39%), riffles (25%) and scour pools (24%) dominated stream habitat. Gravel (26%), cobble (25%) and sand (22%) dominated stream substrate. Wood volume was very low at 7.2 m<sup>3</sup>/100m.

**COMMENTS:**

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

REACH 1

T31S-R03W-S04SE

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 5.1		VWI Range: 4 - 7	

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	541	2,223	0
Secondary	34	25	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.8	Width	7.8	15.5	19.1
Depth	0.28	Height	0.6	1.3	1.7
W:D ratio		13.1	Entrenchment		1.9

Stream Flow Type:	LF	Water temp (C):	12.0 - 12.0
Avg. Unit Gradient:	1.8%	Habitat Units/100m:	6.3

**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:	10%	Reach avg: 91%
Undercut Banks:	7%	Range: 58 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	40	7.4
Volume (m <sup>3</sup> ):	39	7.2
Key pieces (>=10m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

STOUTS CREEK PRE-TX (U-185)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/25/03

REACH 1		T31S-R03W-S04SE					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	3	0.4	0.01	1	0	10	10	70	10	0	0	
GLIDE	3	57	4.4	0.32	265	23	5	37	30	20	8	0	
POOL-LATERAL SCOUR	6	86	4.3	0.67	376	25	2	52	23	14	5	4	
POOL-STRAIGHT SCOUR	2	32	5.2	0.78	164	14	2	46	22	20	10	0	
RAPID/BEDROCK	1	10	0.3	0.01	3	0	0	5	25	0	0	70	
RAPID/BOULDERS	12	233	3.9	0.18	879	295	0	12	24	31	29	3	
RIFFLE	9	153	3.9	0.17	556	129	5	22	28	27	13	5	
STEP/BOULDERS	1	0	2.0	0.01	1	6	0	0	20	30	50	0	
STEP/COBBLE	1	2	2.0	0.02	4	2	0	0	0	60	40	0	
<b>Total:</b>	<b>36</b>	<b>575</b>	<b>3.8</b>	<b>0.28</b>	<b>2,248</b>	<b>494</b>	<b>Avg 3</b>	<b>24</b>	<b>26</b>	<b>25</b>	<b>17</b>	<b>5</b>	

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		34
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	8	118	4.5	0.70	540	24.01%	39	7.2	
Glides	3	57	4.4	0.32	265	11.81%	23	8.7	
Riffles	9	153	3.9	0.17	556	24.72%	129	23.2	
Rapids	13	243	3.6	0.16	882	39.21%	295	33.5	
Cascades	1	3	0.4	0.01	1	0.04%	0	0.0	
Step/Falls	2	2	2.0	0.02	5	0.20%	8	173.9	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	8	13.9
Pools >=1m deep:	1	1.7
Complex pools (LWD pieces>=3):	1	1.7
Pool frequency (channel widths/pool):	9.2	
Residual pool depth (avg):	0.57	

**STREAM SUMMARY**

**STOUTS CREEK PRE-TX (U-185)**

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
36	575	3.8	0.28	2,248	3	24	26	25	17	5	494

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	540	24.01%
Glides	265	11.81%
Riffles	556	24.72%
Rapids	882	39.21%
Cascades	1	0.04%
Step/Falls	5	0.20%
Dry	0	0.00%
Culverts	0	0.00%

**RIPARIAN ZONE VEGETATION SUMMARY**

**REACH 1** **REACH 1**

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

Total hardwoods/1000	691
Total conifers/1000 ft	792
Total conifers >20" dbh/1000 ft	0
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	1.0	2.3	1.7	1.7	3.0	4.7	5.7	8.7
15-30cm	1.0	1.3	3.3	0.0	2.0	0.7	6.3	2.0
30-50cm	0.0	0.7	0.3	0.0	0.7	0.0	1.0	0.7
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	2.0	4.3	5.3	1.7	5.7	5.3	4.3	3.8

**Canopy closure and ground cover**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	54		46		53	
Shrub cover	71		52		63	
Grass/forb cover	18		38		27	

**Predominant landform in each zone**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		33		67	
High terrace	83		67		33	
Low terrace	0		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 (%)	13		14		28	

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	691
Total conifers/1000 ft	792
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	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	5.7	8.7
15-30cm	6.3	2.0
30-50cm	1.0	0.7
50-90cm	0.0	0.0
>90cm	0.0	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		
10	LF	1	HT	0	45	30	0	Conifer	3	2					
								Hardwood			2				
10	LF	3	HS	25	30	70	30	Conifer	3						ESTIMATED
								Hardwood	2						
10	RT	1	HT	0	45	100	0	Conifer							
								Hardwood	3	1					
10	RT	2	HT	0	50	100	0	Conifer		1					ESTIMATED
								Hardwood	4						
10	RT	3	HT	0	40	95	5	Conifer			2				ESTIMATED
								Hardwood	7						
10	LF	2	HS	25	30	50	50	Conifer	2						ESTIMATED
								Hardwood	1						
16	LF	3	HS	50	70	30	30	Conifer	3	2					ESTIMATED
								Hardwood							
16	LF	2	HT	0	70	50	10	Conifer	1	4					ESTIMATED
								Hardwood							
16	RT	1	HT	0	95	100	0	Conifer							
								Hardwood							
16	RT	2	HT	0	30	30	70	Conifer			1				
								Hardwood							
16	RT	3	HS	30	80	90	10	Conifer	1						ESTIMATED
								Hardwood	3	2					
16	LF	1	HT	0	70	100	0	Conifer			1				
								Hardwood	1	1					
24	RT	2	HT	0	80	70	5	Conifer			2	1			
								Hardwood							
24	LF	1	HS	75	0	5	95	Conifer							
								Hardwood							
24	LF	2	HS	60	15	10	90	Conifer	2	2					
								Hardwood							
24	LF	3	HS	60	15	20	80	Conifer	2						
								Hardwood	1						
24	RT	1	HT	0	70	90	10	Conifer							
								Hardwood	3	2					
24	RT	3	HT	0	80	70	5	Conifer			2	2			
								Hardwood	1						

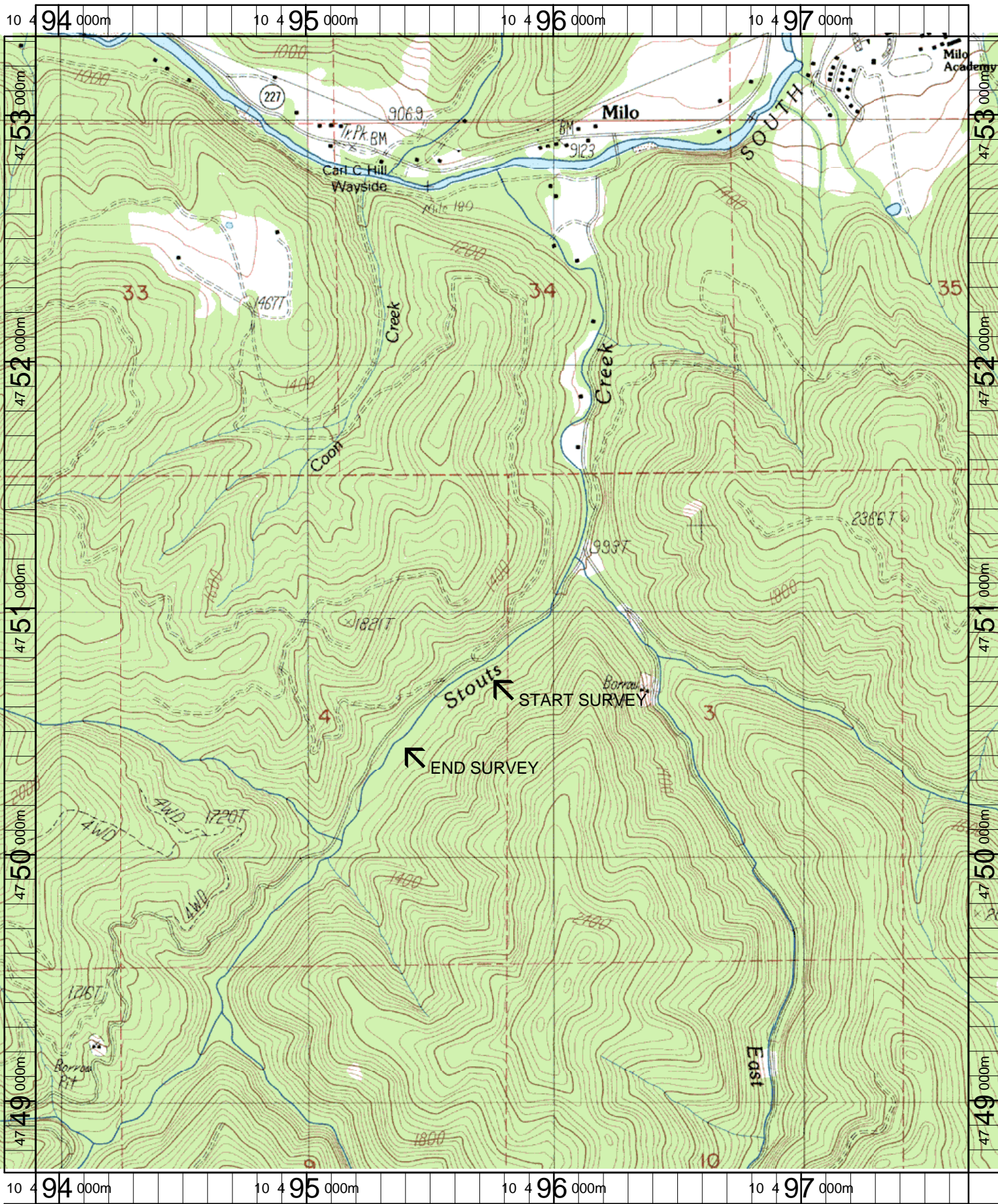
# Comment Summary

## Oregon Plan Monitoring Sites 2003

MONITORING AREA: **4-UMP**    SITE ID: **185**    **STOUTS CREEK PRE-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	01	16.4	/TJ	/TJ	
10	RI	00	135.4		TW ESTIMATED	
11	RB	00	163			PINK FLAG-SITE 5
12	GL	00	189			PINK FLAG-SITE 6
14	SP	00	222.1	DJ	PHOTO 0003; FLAG-SNOR	
15	SB	00	222.4		H=.3M	
18	RI	00	269.2			PINK FLAG-SITE 7
22	RB	00	347.8			PINK FLAG-SITE 8
24	LP	00	388.9		TW ESTIMATED	
28	RI	00	465.9			PINK FLAG-SITE 10
30	SC	01	483		H=.4M	
31	RI	02	483	DJ, WL		ELK TRAIL
32	LP	00	502.5			PINK FLAG-SITE 11
33	RB	01	521.2		/TJ	
36	RI	00	540.9		FW ESTIMATED- LT W/BL	END SURVEY AT SIGN; PINK





Name: MILO  
 Date: 6/11/2003  
 Scale: 1 inch equals 1666 feet

Location: 10 495788 E 4751018 N  
 Caption: STOUTS CREEK RESTORATION SITE - SOUTH UMPQUA BASIN