ODFW AQUATIC INVENTORY PROJECT

OREGON PLAN FOR SALMON & WATERSHEDS

STREAM RESTORATION HABITAT REPORT

STREAM:	Steer Creek (MC-152)
BASIN:	Siletz River
SURVEY TYPE:	Post-Tx
DATE:	February 7, 2006
SURVEY CREW:	Brian Cannon, Jon Nott, Paul Jacobsen
REPORT PREPARED BY:	Paul Jacobsen
BASIN AREA:	23.2 km^3
USGS MAPS:	Nortons
ECOREGION:	Coast Range Sedimentary

GENERAL DESCRIPTION:

The Steer Creek habitat survey extended 497 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 7.4 (range: 2.0-20.0). Land use for the reach was young (3-15 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.0 percent. Riffles (59%) and scour pools (34%) dominated stream habitat. Gravel (42%) and cobble (27%) dominated stream substrate. Wood volume was low at 13.7 m^3/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

Stream Steer Creek (MC-152)

Basin Siletz River

Treatment Large Wood

	ODFW Benchmark		Pre 3/10/98	Post 1/25/99	Post 2/7/06		
Habitat Variable	**Desirable**	**Undesirable**					
% Pool Area	>35%	<10%	41.0	**65.7**	36.2		
Number of Pools			7	**12**	**10**		
Deep Pools/km (>1.0 m)			5.6	5.7	**7.4**		
% Off-Channel			0.9	**2.1**	**2.3**		
LWD – Pieces/100m	>20	<10	4.1	**11.8**	**13.9**		
LWD – Volume/100m	>30	<20	1.4	**9.7**	**13.7**		
LWD – Key Pieces/100m	>3	<1	0	**0.4**	**0.6**		
Large Wood Jams/km			0	**6.0**	**6.0**		
% Riffle Fines	<10	>20	14	51	4		
% Riffle Gravel	>35	<15	43	29	47		
% Bedrock			20	11	20		

Bold is noticeable change

Comments: Since the treatment was large wood assembled in complex jams, it is no surprise that there was an increase in those variables. Large wood pieces, volume, and key pieces have continued to accumulate since the treatment was applied. Pool area is close to pre-treatment conditions, but there are more pools and more deep pools. Off-channel habitat is also greater.

OREGON DEPT OF FISH AND WILDLIFE **STEER CREEK POST-TX (2-MC, 152)**

HABITAT INVENTORY Report Date: 12/6/2006 Survey Date: 2/7/2006

REACH 1 **T10S-R08W-S03SW** **REACH 1**

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%

Valley Width Index 7.4 VWI Range: 2 - 20

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary Channel	497	3,161	0
Secondary Channel	0	0	0
Off-Channel Units	41	76	0

Channel Dimensions (m)

Wetted	Active	Floodprone *n* = 5	First Terrace *n* = 2
Width: 5.2	Width: 9.3	18.0 (10.3 - 31)	19.2 (12.3 - 26)
Depth: 0.53	Height: 0.6	1.1 (0.9 - 1.5)	1.6 (1.5 - 1.75)

W:D ratio: 17.6
Entrenchment (ACW:FPW ratio): 2.0
Stream Flow Type: MF
Habitat Units/100m (total channel length): 4.6
Average Unit Gradient: 1.0%
Habitat Units/100m (primary channel length): 5.0
Water temperature (°C): 9.0 - 9.0

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	YT	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

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

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	69	13.9
Volume (m^3):	68	13.7
Key pieces (>=12m x 0.60m):	3	0.6

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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
CASCADE/BOULDERS	2	14	0.4	0.05	6	0		3	10	48	25	0	15
GLIDE	1	21	6.5	0.30	134	0		0	0	15	25	0	60
POOL-BACKWATER	2	15	4.3	0.70	64	0		3	28	50	13	0	8
POOL-LATERAL SCOUR	7	140	6.8	0.91	951	0		0	15	39	23	1	23
POOL-STRAIGHT SCOUR	1	35	4.5	1.30	158	0		0	10	40	30	5	15
RIFFLE	11	312	5.7	0.34	1,925	0		0	4	47	35	0	13
STEP/BOULDERS	1	2	0.4	0.05	1	0		5	5	0	0	0	90
Total:	25	538	5.2	0.53	3,238	0	**Avg:**	1	10	42	27	0	20

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m^2)	Percent	Large Boulders Number	(# / $100m^2$)
Dammed & BW Pools	2	15	4.3	0.70	64	1.98%	0	0.0
Scour Pools	8	175	6.5	0.96	1,109	34.24%	0	0.0
Glides	1	21	6.5	0.30	134	4.14%	0	0.0
Riffles	11	312	5.7	0.34	1,925	59.45%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	2	14	0.4	0.05	6	0.17%	0	0.0
Step/Falls	1	2	0.4	0.05	1	0.02%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

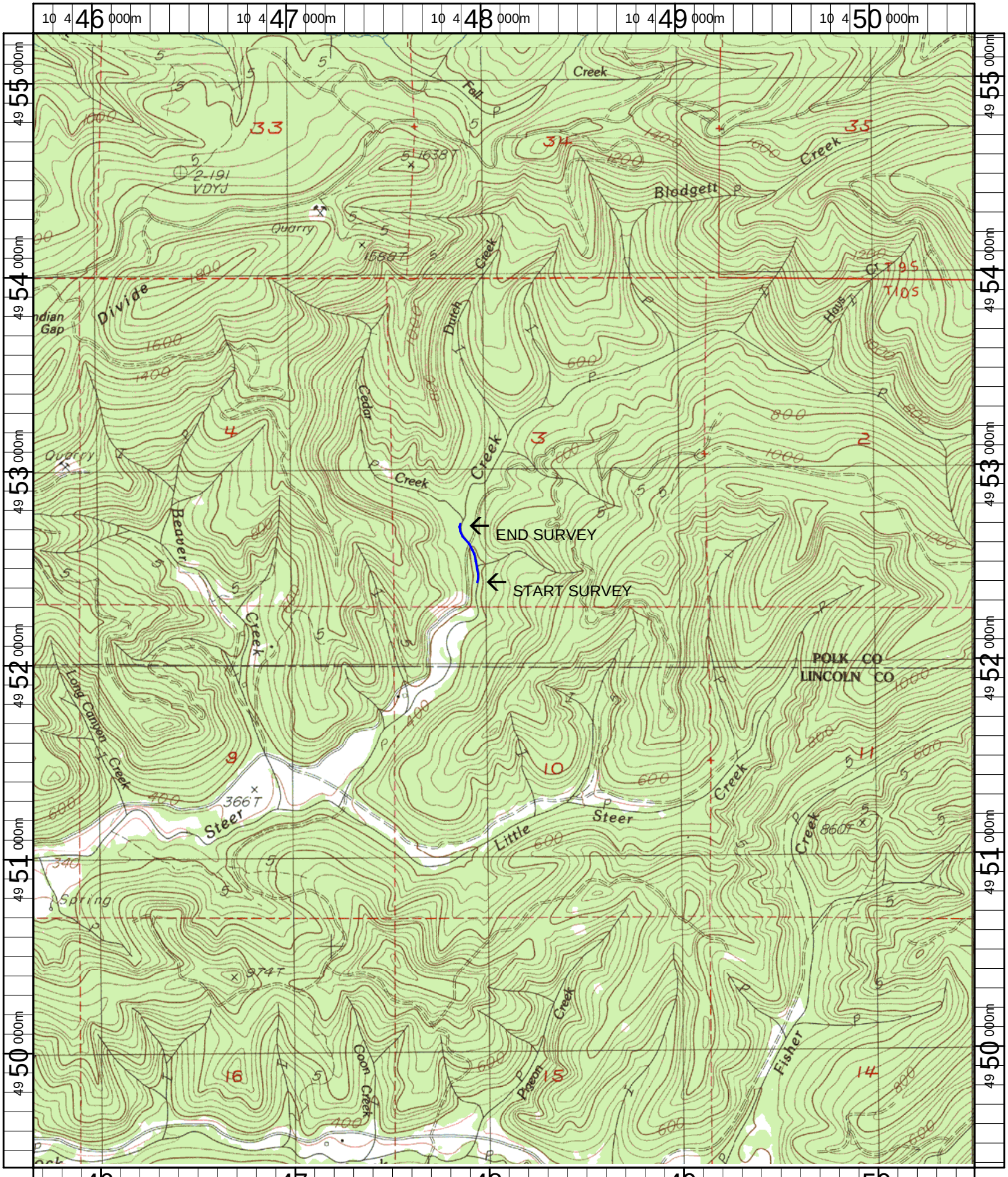
POOL SUMMARY

	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	10	18.6	20.1
Pools >=1m deep:	4	7.4	8.0
Complex pools (LWD pieces>=3):	4	7.4	8.0
Pool frequency (channel widths/pool):	5.8		
Residual pool depth (avg):	0.60		

Comment Summary
Restoration Monitoring Sites 2006

MONITORING AREA: 2-MC SITE ID: 152 STEER CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	GL	00	48.4	/SS		
3	LP	01	76.4	/TJ	T = 9.0	
4	SB	11	76.4		H = 0.8	
6	LP	01	110.4	HS, /TJ		
8	RI	01	131	/TJ		
11	RI	01	199.5	SS/		
14	LP	00	243.8	HS		
15	RI	00	278.8		REDDS BELOW CULVERT	
16	SP	00	313.8	CC, CS/CS	CULV DIA IS 3.5 M, OPEN BOTTM	
17	RI	00	338.9		T = 7.5	
18	LP	00	371.2	SS/		
20	LP	01	404.3	HS, DJ,TJ/		



Name: NORTONS
Date: 2/15/2007
Scale: 1 inch equals 2000 feet

Location: 10 0448096 E 4952318 N
Caption: STEER CREEK RESTORATION SITE - SILETZ BASIN