

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

STREAM: Steer Creek Reach 2 (MC-354)
BASIN: Siletz River
SURVEY TYPE: Pre-Tx
DATE: August 2, 2006
SURVEY CREW: Lanoah Babcock, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 23.2 km²
USGS MAPS: Nortons
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Steer Creek habitat survey extended 1,533 meters. The channel was primarily constrained by terraces in a broad valley floor. The average valley width index was 8.5 (range: 4.5-13.5). Land use for the reach was young (3-15 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 1.8 percent. Scour pools (47%) and riffles (35%) dominated stream habitat. Gravel (32%) and sand (25%) dominated stream substrate. Wood volume was very low at 5.7 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

T10S-R08W-S03SW

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	8.5	VWI Range:	4.5 - 13.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	49%	Braided Channel	0%
Alt. Terrace/Hill	51%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	1,533	8,771	0
Secondary Channel	0	0	0
Off-Channel Units	58	62	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 5.1	Width: 9.6	11.5 (7.7 - 16)	18.6 (10 - 27)
Depth: 0.31	Height: 0.4	0.7 (0.6 - 0.9)	1.2 (0.8 - 1.5)

W:D ratio: 26.9

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: LF

Habitat Units/100m (total channel length): 5.5

Average Unit Gradient: 1.8%

Habitat Units/100m (primary channel length): 5.7

Water temperature (°C): 11.0 - 11.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 71%
Undercut Banks:	3%	Range: 33 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	142	9.3
Volume (m ³):	87	5.7
Key pieces (>=12m x 0.60m):	2	0.1

OREGON DEPT OF FISH AND WILDLIFE

STEER CREEK REACH 2 PRE-TX (2-MC, 354)

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

8/2/2006

REACH 1		T10S-R08W-S03SW					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
GLIDE	1	14	5.3	0.13	74	0	5	43	48	5	0	0
POOL-BEAVER DAM	1	54	12.4	0.70	670	1	0	45	15	5	5	30
POOL-DAMMED	1	10	7.0	0.55	70	0	5	45	25	5	0	20
POOL-ISOLATED	1	6	2.4	0.25	15	0	10	85	5	0	0	0
POOL-LATERAL SCOUR	36	694	5.8	0.54	4,142	29	3	42	16	7	2	30
RAPID/BEDROCK	6	71	3.6	0.12	308	4	0	3	9	7	3	78
RAPID/BOULDERS	2	43	3.5	0.13	240	26	0	37	18	23	17	6
RIFFLE	26	621	4.4	0.13	2,950	40	0	10	54	28	4	4
RIFFLE W/ POCKETS	1	31	5.2	0.18	161	1	0	25	50	20	5	0
STEP/BEAVER DAM	1	1	9.7	0.08	11	0	0	30	60	10	0	0
STEP/COBBLE	12	46	4.8	0.12	192	2	0	5	45	45	1	4
Total:	88	1,591	5.1	0.31	8,833	103	Avg: 2	25	32	19	3	20

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	70	7.3	0.50	754	8.54%	1	0.1	
Scour Pools	36	694	5.8	0.54	4,142	46.90%	29	0.7	
Glides	1	14	5.3	0.13	74	0.84%	0	0.0	
Riffles	27	652	4.5	0.13	3,111	35.22%	41	1.3	
Rapids	8	114	3.6	0.12	548	6.21%	30	5.5	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	13	47	5.2	0.11	203	2.30%	2	1.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	39	24.5	25.4
Pools >=1m deep:	1	0.6	0.7
Complex pools (LWD pieces>=3):	10	6.3	6.5
Pool frequency (channel widths/pool):	4.2		
Residual pool depth (avg):	0.43		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

STEER CREEK REACH 2 PRE-TX
GCG: 2-MC SITE ID: 354

Survey Date 8/2/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	1057
Total conifers/1000 ft	284
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	0.0	4.0	1.0	2.7	0.0	2.3	1.0	9.0
15-30cm	0.0	2.7	0.0	0.7	1.7	1.0	1.7	4.3
30-50cm	0.3	2.3	0.3	0.7	0.7	0.0	1.3	3.0
50-90cm	0.0	1.0	0.7	0.0	0.0	0.0	0.7	1.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	10.0	2.0	4.0	2.3	3.3	1.6	5.8

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	74		58		46	
Shrub cover	51		72		64	
Grass/forb cover	48		28		28	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		33		17	
High terrace	33		50		67	
Low terrace	67		17		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 (%)	16		19		18	

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	1057
Total conifers/1000 ft	284
Total conifers >20" dbh/1000 ft	41
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	1.0	9.0
15-30cm	1.7	4.3
30-50cm	1.3	3.0
50-90cm	0.7	1.0
>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		
12	LF	1	LT	5	70	20	80	Conifer							NO TREES
								Hardwood							
12	LF	2	HT	13	60	60	40	Conifer							
								Hardwood		1	2				
12	LF	3	HT	15	45	70	30	Conifer		4					
								Hardwood							
12	RT	1	HT	25	65	90	10	Conifer							
								Hardwood	2	7	7				
12	RT	2	HT	5	0	100	0	Conifer	3						
								Hardwood							
12	RT	3	HT	8	10	100	0	Conifer		1					
								Hardwood							
39	LF	1	LT	15	80	40	60	Conifer							
								Hardwood	2						
39	RT	3	RB	42	40	50	10	Conifer							
								Hardwood	2						
39	RT	2	HS	60	80	80	20	Conifer							NO TREES
								Hardwood							
39	RT	1	LT	30	85	60	40	Conifer							TRANS
								Hardwood	1	1					
39	LF	2	LT	5	70	95	5	Conifer					1		
								Hardwood							
39	LF	3	HT	18	60	85	15	Conifer							
								Hardwood	3						
71	RT	2	HS	23	75	25	70	Conifer			1	1			
								Hardwood		1					
71	LF	1	HT	18	75	55	45	Conifer							
								Hardwood	6			1			
71	LF	2	HT	7	65	70	30	Conifer							
								Hardwood	8						
71	LF	3	HT	9	55	70	30	Conifer							
								Hardwood	2	1					
71	RT	1	LT	3	70	40	55	Conifer				1			
								Hardwood	1				2		
71	RT	3	HS	17	65	10	85	Conifer				2			
								Hardwood		2					

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **354** STEER CREEK REACH 2 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SD	01	1.1	/TJ, BD	/TJ	START SIGN /ALDER
2	RB	11	1.1		SIGN ON /ALDER	
3	BP	00	55.1	SS,HS,BV	HS	PN, ORANGE/BLUE FLAG
4	SC	00	58.5		/SS	
5	LP	00	83.5	BV		
6	SC	00	88.5	BV		
7	DP	00	98.5	BV, HS		BV DAM/GRAVEL BAR
8	GL	00	112.5	BV		HS SIGN ALDER LEFT
9	RI	00	146.5	BV		
10	LP	00	166.5	HS,WL,BV	HS	HS SIGN ALDER LEFT, CO
12	LP	00	239.5	CC	CC=ROCK BOTTOM	5% METAL CC, SPAWN/RE
13	RI	00	260.9	BV		
14	LP	00	284.9	BV		TROUT, COHO
15	RI	00	302.9	BV		
16	LP	00	326.9	BV,HS	HS	TROUT, COHO
17	SC	00	332.5	WL		
18	LP	00	342.9	BV, WL		COHO, RED-LEGGED FRO
19	RI	01	403.5	BV,WL,TJ/	TJ/, END OF 2MC 152	2-MC 152 END SIGN ALDE
20	RI	11	403.5			TRIB LEFT
21	LP	00	422.5			COHO, TROUT
22	RI	00	443.5	BV		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **354** STEER CREEK REACH 2 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
23	LP	00	468.5	WL, BV		COHO, TROUT
24	SC	00	473.5	BV		
25	LP	00	513.5	BV		COHO, TROUT
26	RR	00	522.7	BV		
27	LP	00	541	BV		COHO
28	SC	00	547.5	BV		PINK FLAG
29	LP	00	569.5	BV		COHO, TROUT
30	RI	00	601.5	BV		
31	LP	00	638.5	BV, WL		COHO, TROUT, BV TRAILS
32	RI	00	650.5			ORANGE FLAGS
33	LP	00	671.1	BV		
34	RR	01	690.5			ORANGE & PINK FLAGS
37	LP	00	716	BV		COHO
39	LP	00	737.3			COHO
40	RI	00	757.3	BV	RIPARIAN #2	PINK FLAGS
41	LP	00	776.3	BV		TEMP=11.5C
42	RI	00	796.3	BV	T=11.5C	
43	LP	00	804.3	BV		
44	SC	00	806.5			PINK FLAG
45	LP	00	823.5	BV		
46	RI	00	859	BV		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **354** STEER CREEK REACH 2 PRE-TX

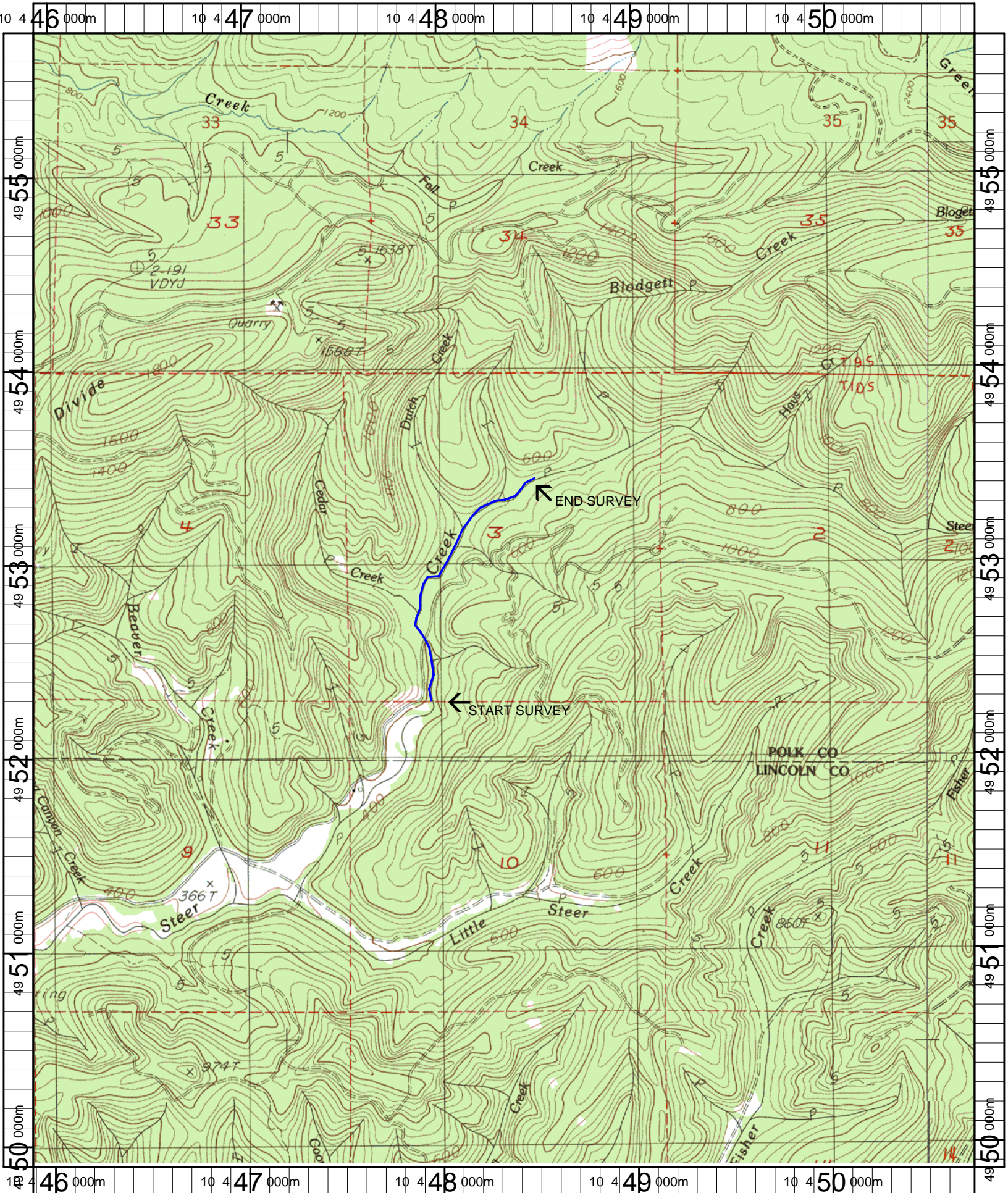
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
47	LP	00	907	WL		COHO, TROUT, DEER, ELK
49	LP	00	947	BV		
50	RB	00	983	BV	CA,CT,D30	
51	LP	01	993.4	/TJ, BV	/TJ, PINK FLAG	PINK FLAG
52	RI	11	993.4		T=12.0C, UNNAMED TRIB ON	TRIB ON MAP, T=12.0C
53	RI	00	1002.4	BV		
55	RR	00	1025.4	BV		
56	LP	00	1038.4	BV		PINK FLAG, COHO
57	RI	00	1057		PINK FLAGGING	
58	LP	00	1070	BV, WL		COHO
61	RR	00	1099	BV		
62	RI	00	1126	BV, SS/	SS/	
63	LP	00	1149			COHO
64	SC	00	1150.6			PINK FLAG
65	LP	00	1163.6	BV, WL		PINK FLAG
67	RI	00	1183.6	BV		
68	LP	00	1196.6			COHO
70	LP	00	1219.6	BV, WL		PINK FLAG, COHO, TROUT,
71	RI	00	1238.6	BV	RIPARIAN #3	
72	LP	01	1264.6	BV, TJ/WL	TJ/	COHO, ELK
73	RR	11	1264.6	WL	D15/30, VINE MAPLE 3-15	TRIB LEFT ON MAP

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **354** STEER CREEK REACH 2 PRE-TX

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
74	RI	00	1329.6	WL		COUGAR TRACK
75	LP	00	1336	WL		
78	RI	00	1400	WL, /SS		
80	RP	01	1450.4	TJ/	TJ/	2 POCKET MAX DEPTH=.4
81	RI	11	1450.4		UNNAMED	TRIB LEFT ON MAP
82	LP	00	1461.4	WL		PINK FLAG
83	SC	00	1465	WL		ELK
88	RI	00	1532.9		END SIGN /ALDER90	END SIGN 90+ALDER RT



Name: NORTONS
 Date: 6/5/2006
 Scale: 1 inch equals 2000 feet

Location: 10 448328 E 4952805 N
 Caption: STEER CREEK REACH 2 RESTORATION SITE - SILETZ BASIN