

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

STREAM: Steer Creek Reach 1 (MC-349)
BASIN: Siletz River
SURVEY TYPE: Pre-Tx
DATE: July 18, 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 2,084 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 8.8 (range: 1.0-20.0). Land use for the reach was large (30-50 cm dbh) trees and agriculture. The average unit gradient was 0.9 percent. Scour pools (81%) dominated stream habitat. Gravel (42%) and sand (35%) dominated stream substrate. Wood volume was very low at 2.7 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-S09SW

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	8.8	VWI Range:	1 - 20

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 Channel	2,084	14,130	0
Secondary Channel	18	23	0
Off-Channel Units	66	72	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 8
Width: 5.6	Width: 8.5	12.2 (8 - 19.8)	15.0 (10.5 - 20.5)
Depth: 0.39	Height: 0.4	0.7 (0.5 - 0.8)	1.4 (0.9 - 2)

W:D ratio: 24.8
 Stream Flow Type: LF
 Average Unit Gradient: 0.9%
 Water temperature (°C): 13.5 - 13.5

Entrenchment (ACW:FPW ratio): 1.4
 Habitat Units/100m (total channel length): 3.8
 Habitat Units/100m (primary channel length): 3.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	AG
Riparian Vegetation:	C30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 68%
Undercut Banks:	3%	Range: 28 - 89

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	90	4.3
Volume (m ³):	56	2.7
Key pieces (>=12m x 0.60m):	1	0.0

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

7/18/2006

REACH 1		T10S-R08W-S09SW					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-ISOLATED	1	6	3.0	0.42	18	0	10	70	15	5	0	0
POOL-LATERAL SCOUR	41	1,591	7.0	0.67	11,564	43	6	56	18	3	2	15
RAPID/BEDROCK	1	11	5.5	0.11	61	0	0	5	5	0	0	90
RIFFLE	25	462	4.2	0.10	2,163	10	1	16	69	9	1	4
STEP/BEDROCK	1	3	8.2	0.10	23	0	0	0	5	0	0	95
STEP/COBBLE	13	96	4.0	0.12	396	0	0	6	73	15	1	5
Total:	82	2,168	5.6	0.39	14,225	53	Avg: 4	35	42	7	2	12

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	1	6	3.0	0.42	18	0.13%	0	0.0	
Scour Pools	41	1,591	7.0	0.67	11,564	81.30%	43	0.4	
Glides	0	0			0	0.00%	0	0.0	
Riffles	25	462	4.2	0.10	2,163	15.21%	10	0.5	
Rapids	1	11	5.5	0.11	61	0.43%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	14	99	4.3	0.12	419	2.94%	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:	42	19.4	20.2
Pools >=1m deep:	4	1.8	1.9
Complex pools (LWD pieces>=3):	12	5.5	5.8
Pool frequency (channel widths/pool):	6.1		
Residual pool depth (avg):	0.56		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

STEER CREEK REACH 1 PRE-TX
GCG: 2-MC SITE ID: 349

Survey Date 7/18/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 7 transects

Total hardwoods/1000	819
Total conifers/1000 ft	732
Total conifers >20" dbh/1000 ft	61
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	3.1	0.0	0.7	0.4	0.9	0.4	4.7
15-30cm	0.0	2.0	1.0	2.6	2.7	2.0	3.7	6.6
30-50cm	0.1	0.6	2.1	0.3	4.6	0.9	6.9	1.7
50-90cm	0.1	0.1	0.4	0.3	0.4	0.0	1.0	0.4
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	5.9	3.6	3.9	8.1	3.7	4.0	4.5

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	61		71		80	
Shrub cover	53		48		30	
Grass/forb cover	43		38		38	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	21		29		29	
High terrace	64		71		71	
Low terrace	7		0		0	
Floodplain	7		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	33		13		10	

Summary of Riparian Zone (0-30m) for all reaches

7 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	819
Total conifers/1000 ft	732
Total conifers >20" dbh/1000 ft	61
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	0.4	4.7
15-30cm	3.7	6.6
30-50cm	6.9	1.7
50-90cm	1.0	0.4
>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		
11	RT	2	HT	3.5	85	45	45	Conifer			3				
								Hardwood		1					
11	RT	1	HT	25	70	80	10	Conifer							
								Hardwood		3					
11	RT	3	HT	3	90	35	5	Conifer		2	4			TRANS, 60% OPEN	
								Hardwood							
11	LF	3	HT	5	90	40	5	Conifer		1	3			55% OPEN	
								Hardwood							
11	LF	2	HT	15	40	100	0	Conifer						NO TREES	
								Hardwood							
11	LF	1	HT	19	5	100	0	Conifer						3D-0445997-4951105	
								Hardwood	2						
23	LF	3	HT	23	75	90	5	Conifer							
								Hardwood	2	9	2				
23	RT	1	HT	25	90	5	80	Conifer						NO TREES	
								Hardwood							
23	RT	2	HT	15	90	50	40	Conifer							
								Hardwood				2			
23	RT	3	HT	5	95	5	25	Conifer		2	3			70% OPEN	
								Hardwood	1	2	1				
23	LF	2	HT	12	60	100	0	Conifer							
								Hardwood		2	1				
23	LF	1	FP	7	0	5	95	Conifer						2D-0446164-4951241, NO TREES	
								Hardwood						2D-0446296-4951147, NO TREES	
30	LF	1	HT	17	30	65	30	Conifer							
								Hardwood							
30	LF	2	HT	2	55	50	45	Conifer				1			
								Hardwood							
30	LF	3	HT	11	70	20	75	Conifer			1	1			
								Hardwood							
30	RT	1	HT	31	90	20	70	Conifer							
								Hardwood	7	1					
30	RT	2	HT	16	50	15	80	Conifer				1			
								Hardwood							
30	RT	3	HT	1.5	20	20	70	Conifer						TELEPHONE POLE, NO TREES	
								Hardwood							

37	LF	2	HT	5	40	80	20	Conifer	2	2	1		
								Hardwood					
37	RT	3	HS	7	90	0	30	Conifer	1	5	1	60% OPEN	
								Hardwood					
37	RT	2	HS	10	85	10	30	Conifer	1	2		60% OPEN	
								Hardwood					
37	LF	3	HT	5	70	10	80	Conifer	2	3			
								Hardwood					
37	LF	1	HT	22	10	95	5	Conifer				2D-0446508-4951095, NO TREES	
								Hardwood					
37	RT	1	HS	70	85	35	65	Conifer		1	1		
								Hardwood					
51	LF	1	HT	50	75	30	65	Conifer					
								Hardwood	3	3	1		
51	LF	2	HT	1	70	10	80	Conifer		1	1		
								Hardwood		2			
51	LF	3	HT	5	90	5	60	Conifer	3	5	1		
								Hardwood			1		
51	RT	1	HS	50	80	45	50	Conifer				2D-0446709-4951170	
								Hardwood		2	1		
51	RT	2	HS	26	80	15	70	Conifer					
								Hardwood	4	5	1		
51	RT	3	HS	8	85	5	60	Conifer		1	5	35% OPEN	
								Hardwood					
60	RT	2	HS	55	90	100	0	Conifer					
								Hardwood		1			
60	LF	1	HT	3	70	90	10	Conifer				3D-0446941-4951251	
								Hardwood	2	3			
60	RT	3	HS	50	85	90	10	Conifer					
								Hardwood		2	2		
60	LF	2	HT	5	75	80	20	Conifer					
								Hardwood	1	2			
60	RT	1	LT	15	60	50	50	Conifer					
								Hardwood	2				
60	LF	3	HT	7	75	85	15	Conifer					
								Hardwood	3	1			
75	LF	1	HT	21	95	85	15	Conifer					
								Hardwood	2	3	1		
75	LF	2	HT	7	90	5	15	Conifer		2	5	1	READY TO BE LOGGED
								Hardwood					
75	LF	3	HT	10	90	0	15	Conifer		2	4	2	ORANGE FLAGGING
								Hardwood					
75	RT	1	HS	105	90	35	60	Conifer					3D-0447193-4951286
								Hardwood	4	1			
75	RT	2	HS	7	90	10	80	Conifer		1	1		
								Hardwood		5			

75 RT 3 HS 5 90 10 70 **Conifer** 2 3
Hardwood

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **349** STEER CREEK REACH 1 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	10		CT,MT,G,M15,AG,LG	START SIGN ALDER LT, T
2	LP	00	52.3			COHO, TROUT
3	RI	00	66.9	WL		/DEER TRAIL
4	LP	00	84	BV		
6	LP	00	123	FC		METAL COW FENCE FULL
8	LP	00	157			COHO
9	LP	00	184	BV		COWS
10	RI	00	210		RSN	
11	LP	00	259	WL, BV	RSN	/DEER TRAIL, COHO
12	LP	00	292.4	WL, BV	RIPARIAN #1	DEER, RACCOON, COHO, C
13	RR	00	303.4		CT,MT,LT,C30,S,AG	
14	LP	00	319.4			PINK FLAG
16	LP	00	377			COHO, COWS, TROUT
18	LP	00	417.5			COWS
20	LP	00	451.5	WL		RSN,COWS,PINK FLAG,C
21	RI	00	482.5	WL, BV		/GAME TRAIL
22	LP	00	508.5	BV		COHO, COWS
23	RI	01	521.5	TJ/	TJ/, RIPARIAN #2, CT,MT,C30	PINK FLAG
24	RI	11	521.5		T=15.5C AT 12:00	JUVENILE FISH (1)
25	LP	00	579.5	WL		RSN,DEER,COWS,RACOO
26	RI	01	601.5	WL,TJ/	TJ/	GAME TRAIL

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **349** STEER CREEK REACH 1 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
27	RI	11	601.5		T=13.0C	T=13.0C
28	LP	00	697.5	BV	HARDWOODS BOTH SIDES 3	COHO, COWS
29	LP	00	743			COHO
30	SC	00	747.2		RIPARIAN #3	COWS
31	LP	00	782.6	WL		DEER TRACK, COWS
33	LP	00	845.6			COHO
35	LP	00	919	WL		DEER TRACK, COHO
36	RI	00	943		CA,CT,C30,S,ST,AG	GRAVEL BAR
37	LP	00	1051	WL	RIPARIAN #4	COHO, RSN 30+, GAME TR
39	LP	00	1078.8	BV		CABLE DEBRIS, COWS
41	LP	01	1134.8	WL, /TJ	/TJ	RACON, DEER, COHO, C
42	RI	11	1134.8		T=12.5C	T=12.5C
44	LP	00	1159.5	WL		BURN DEBRIS/
45	LP	01	1177.5	BV		
47	RI	00	1190.5			COWS
48	LP	00	1222.5	WL, BV		DEER TRAIL, PLACED BO
49	RI	00	1241	WL		RSN
50	LP	00	1291	WL		DEER TRACK, COHO
51	LP	00	1322	BV	CA,MV,C30,S,ST,AG, RIPARI	COHO
52	RI	00	1341			GRAVEL BAR
53	LP	00	1386.5	BV		COHO, PINK FLAG "LWD#6

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **349** STEER CREEK REACH 1 PRE-TX

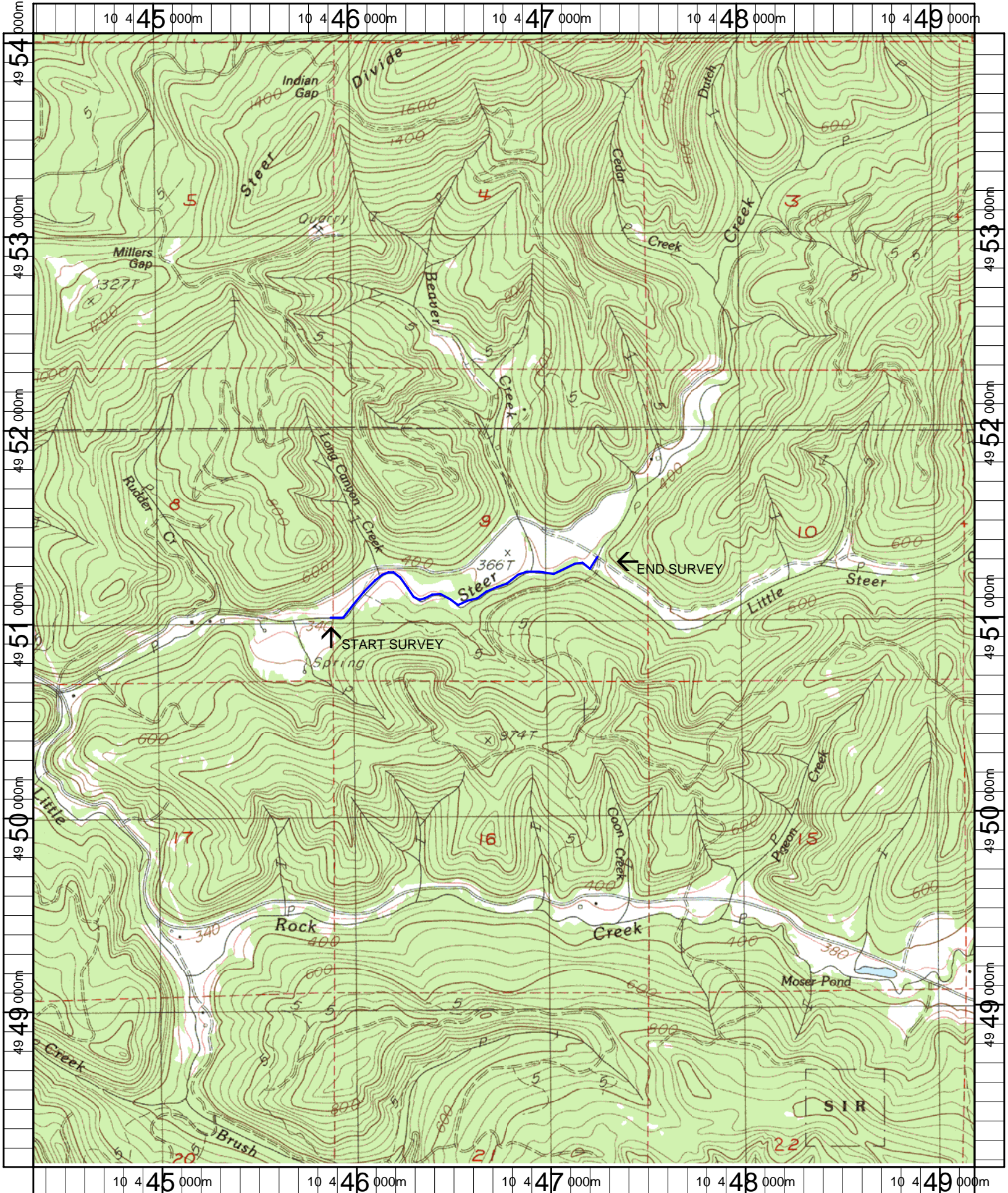
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
55	LP	00	1502.5	BV, WL		COHO, DEER TRACK
57	LP	01	1550.9	WL, BV		GAME TRAIL
58	IP	10	1550.9	WL		RSN
59	LP	00	1583.9	BV		COHO, PINK FLAG "#7"
60	SC	00	1591.9	WL	PG SALAMANDER, RIP#6	KINGFISHER, DEER, R. HUM
61	LP	01	1615.9	TJ/	T=14.0C, TJ/	T=14.0C
62	RI	11	1615.9	BV	BEAVER CREEK, T=12.5C	BEAVER CREEK TRIB
64	LP	00	1654.5	BV, WL		COHO, CRAYFISH, TROUT
65	RI	00	1675.5	BV		
66	LP	00	1697.5			COHO
68	LP	00	1768.2	WL		RSN(10+), COHO, MUSSEL,
70	LP	00	1795	WL		RSN, COHO, COWS
71	SC	00	1805	BV	HILLSLOPE/, /HIGH TERRAC	
72	LP	00	1893	WL		RSN, COHO, CT, P.FLAG "
74	LP	00	1926.6		/SS	
75	SC	00	1930.6	BV	CA, CT, C30, S, LT, AG	
76	LP	00	1948.6			COHO
77	RI	00	1960.9	BV		
78	LP	01	1994.9	BV, /TJ	/TJ	P, FLAG "SITE#11", COHO, S
79	RI	11	1994.9		LITTLE STEER CREEK	LITTLE STEER CREEK
80	LP	00	2010.9	BV		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 2-MC SITE ID: 349 STEER CREEK REACH 1 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>
81	RI	00	2045.9	WL		COHO, TROUT, GRAVEL B
82	LP	00	2084.3	BC	BC, SALMON SPAWNING SI	END SIGN ON BRIDGE



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

Location: 10 446780 E 4951108 N
 Caption: STEER CREEK REACH 1 RESTORATION SITE - SILETZ BASIN