

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

STREAM: Seelander Creek (MS-217)
BASIN: Coos Bay
SURVEY TYPE: Pre-Tx
DATE: June 30, 2003
SURVEY CREW: Lisa Biggs, Chelsey Girt
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 5.0 km²
USGS MAPS: Coos Bay
ECOREGION: Coast Range Sitka Spruce

GENERAL DESCRIPTION:

The Seelander Creek habitat survey extended 513 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 17.0 (range: 10.0-20.0). Land use for the reach was second growth (15-30 cm dbh) trees and light grazing. The average unit gradient was 1.5 percent. Riffles (60%) and scour pools (35%) dominated stream habitat. Gravel (42%), sand (33%) and fines (24%) dominated stream substrate. Wood volume was low at 9.7 m³/100m.

COMMENTS:

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

REACH 1

T26S-R12W-S28SE

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	17.0	VWI Range:	10 - 20

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	513	967	0
Secondary	23	21	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	1.9	Width	3.0	5.2	8.8
Depth	0.25	Height	0.3	0.7	1.0
		W:D ratio	9.6	Entrenchment	1.8

Stream Flow Type: MF Water temp (C): 13.0 - 13.0
 Avg. Unit Gradient: 1.5% Habitat Units/100m: 10.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LG
Riparian Vegetation:	M15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	4%	Reach avg: 71%
Undercut Banks:	12%	Range: 33 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	76	14.8
Volume (m ³):	50	9.7
Key pieces (>=10m x 0.60m):	1	0.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

SEELANDER CREEK PRE-TX (MS-217)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/30/03

REACH 1		T26S-R12W-S28SE					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	1	2	1.9	0.18	4	0	60	40	0	0	0	0	0
POOL-DAMMED	2	16	1.6	0.49	26	0	35	47	18	0	0	0	0
POOL-ISOLATED	1	1	1.5	0.30	2	0	60	40	0	0	0	0	0
POOL-LATERAL SCOUR	16	115	2.1	0.43	248	0	29	39	32	0	0	0	0
POOL-STRAIGHT SCOUR	6	37	2.5	0.41	93	0	29	47	25	0	0	0	0
RIFFLE	23	318	1.7	0.13	529	0	16	28	55	1	0	0	0
RIFFLE W/ POCKETS	2	33	2.3	0.18	64	0	25	45	30	0	0	0	0
STEP/COBBLE	5	12	1.8	0.05	21	0	5	19	76	0	0	0	0
STEP/LOG	2	2	0.4	0.01	1	0	74	12	12	3	0	0	0
Total:	58	536	1.9	0.25	988	0	Avg 24	33	42	0	0	0	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		23
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	4	20	1.7	0.36	32	3.23%	0	0.0	
Scour Pools	22	151	2.2	0.42	341	34.53%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	25	351	1.7	0.13	593	60.07%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	7	14	1.4	0.04	22	2.18%	0	0.0	
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:	26	48.5
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	7	13.1
Pool frequency (channel widths/pool):	6.9	
Residual pool depth (avg):	0.36	

STREAM SUMMARY

SEELANDER CREEK PRE-TX (MS-217)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
58	536	1.9	0.25	988	24	33	42	0	0	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	32	3.23%
Scour Pools	341	34.53%
Glides	0	0.00%
Riffles	593	60.07%
Rapids	0	0.00%
Cascades	0	0.00%
Step/Falls	22	2.18%
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	528
Total conifers/1000 ft	467
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		Zone 2		Zone 3		Zones 1-3	
	0-10 meters		10 - 20 meters		20 - 30 meters		0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	1.0	1.0	1.0	1.7	1.7	2.7	3.7
15-30cm	0.3	1.3	2.3	1.3	2.3	0.7	5.0	3.3
30-50cm	0.0	1.0	0.0	0.3	0.0	0.0	0.0	1.3
50-90cm	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	3.3	3.3	2.7	4.0	2.7	2.6	2.9

Canopy closure and ground cover

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	57		67		70	
Shrub cover	43		36		31	
Grass/forb cover	49		44		38	

Predominant landform in each zone

	Zone 1		Zone 2		Zone 3	
	0-10 meters		10 - 20 meters		20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		50		50	
High terrace	83		50		50	
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 (%)	4		12		15	

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	528
Total conifers/1000 ft	467
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	2.7	3.7
15-30cm	5.0	3.3
30-50cm	0.0	1.3
50-90cm	0.0	0.3
>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	
13	LF	1	HS	25	75	50	30	Conifer						CASCARA
								Hardwood	1	1				
13	LF	2	HS	20	100	50	30	Conifer						ALDER
								Hardwood	3	1				
13	LF	3	HS	20	100	30	30	Conifer						MYRTLE
								Hardwood	5	1				
13	RT	1	HT	0	60	10	75	Conifer			1			DOUG FIR
								Hardwood						
13	RT	2	HT	0	80	10	25	Conifer	2	3				DOUG FIR
								Hardwood						
13	RT	3	HT	0	100	0	10	Conifer	2	4				DOUG FIR
								Hardwood						
23	RT	3	HT	0	60	10	70	Conifer		2				
								Hardwood						
23	LF	2	HS	30	20	80	20	Conifer						
								Hardwood						
23	LF	3	HS	30	30	70	20	Conifer						
								Hardwood						
23	RT	1	HT	0	10	90	10	Conifer						
								Hardwood						
23	RT	2	HT	0	70	5	60	Conifer		3				
								Hardwood						
23	LF	1	HT	0	40	70	20	Conifer						ALDER
								Hardwood		2				
39	LF	2	HS	20	95	10	90	Conifer						ALDER, ELDERBERRY
								Hardwood		3	1			
39	LF	3	HS	40	95	25	65	Conifer						ALDER, BLM
								Hardwood		1		1		
39	RT	1	HT	0	80	25	75	Conifer						ELDERBERRY
								Hardwood	1					
39	RT	2	HT	0	35	60	40	Conifer	1	1				D. FIR
								Hardwood						
39	RT	3	HT	0	35	50	30	Conifer	3	1				D. FIR
								Hardwood						
39	LF	1	HT	0	75	15	85	Conifer						ALDER, ELDERBERRY
								Hardwood	1	1	3			

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **3-MS** SITE ID: **217** **SEELANDER CREEK PRE-TX (MS-21)**

<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	6.2			RED LEGGED FROG
2	RI	11	6.2	TJ/	BROOK LAMPREY SPAW	ACW=1.3
4	LP	00	13.8		BROOK LAMPREY SPAW	BROOK LAMPREY, COWS
5	RI	00	18.6			SALMONIDS THROUGHOUT
6	SP	00	24.8	LS		
7	RI	00	45.8			COW TRAIL & TRAMPLING
8	RP	00	53.8	WL		DEER
9	SL	00	55.5	DJ	H=0.55M	
10	DP	00	65.1			COHO FRY
11	RI	00	90.1			COHO FRY
12	RI	00	105.1	WL		DEER
13	RP	00	130.1	WL	RIPARIAN 1 TAKEN	DEER COHO FRY
14	RI	00	159.3		BROOK LAMPREY	SALMONID FRY, BROOK LA
15	SP	00	164.6			SALMONIDS
16	RI	00	189.6	LA,WL		SALMONIDS, DEER
17	RI	00	205.6	LA		BROOK LAMPREY REDDS
18	SP	01	212.1			SALMONID FRY
19	IP	10	212.1			SALMONID FRY
20	SC	00	214.3			SALMONID FRY
21	LP	00	223.4	BV, DJ		SALMONID FRY
22	RI	00	229.9			SALMONID FRY

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **3-MS** SITE ID: **217** **SEELANDER CREEK PRE-TX (MS-21)**

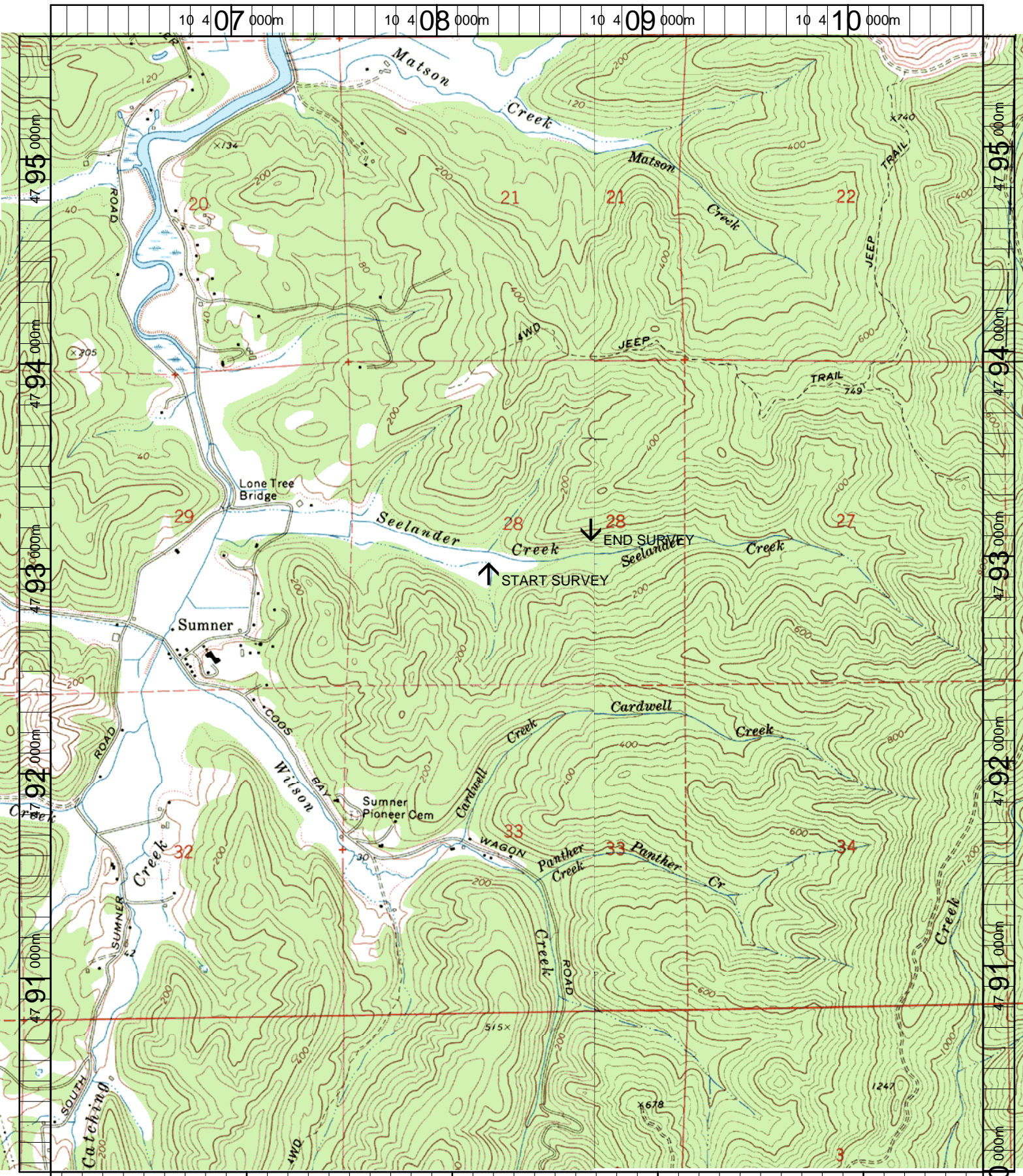
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
23	LP	00	235.6		RIPARIAN 2 TAKEN	SALMONID FRY
24	RI	00	246.6			SALMONID FRY
25	SP	00	252.1			SALMONID FRY
26	RI	00	258.7		BROOK LAMPREY	BROOK LAMPREYS & REDD
27	LP	00	268.1			OLD CAN
28	RI	00	284			SALMONID FRY
31	LP	00	300.5			BROOK LAMPREY, COHO
33	LP	00	309.8	DJ		COHO & 6" SMOLT (SALMON
34	RI	00	323.8			BROOK LAMPREY REDDS
35	LP	00	331.8	WL		DEER COHO
36	RI	00	336.1			BROOK LAMPREY REDDS, C
37	LP	00	344.2	LI		COHO
38	RI	00	354.2			COHO
39	RI	00	360.7	WL	RIP#3	REDLEGGED FROG, COHO
40	LP	00	365.2		CRAYFISH	COHO
41	SC	00	366.5			BROOK LAMPREY REDDS
42	LP	00	374.7	WL		CRAWDAD, COHO
43	RI	00	399.7	DJ (SMALL)		COHO
44	RI	00	422.7	WL	RED LEGGED FROG	MALFORMED FROG, COHO
49	LP	00	447.9			LAMPREY REDDS
51	LP	01	457.2			COHO

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 3-MS SITE ID: 217 SEELANDER CREEK PRE-TX (MS-21)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
52	BW	10	457.2			SEDIMENT.1 DEEP
54	LP	00	479.9			COHO
55	RI	00	496.9			LAMPREY REDDS
56	SP	00	505.2			COHO
57	SL	00	505.8		H=0.3	HT=.3 PACIFIC LAMPREY RE
58	DP	00	512.6		END SURVEY	COHO



Name: COOS BAY
 Date: 12/17/2003
 Scale: 1 inch equals 2000 feet

Location: 10 408347 E 4792801 N
 Caption: SEELANDER CREEK RESTORATION SITE - COOS BAY BASIN