

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

STREAM: Seelander Creek (MS-217)
BASIN: Coos Bay
SURVEY TYPE: Post-Tx
DATE: July 27, 2004
SURVEY CREW: Alex Dale, Kevin Cellura
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 494 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 17.4 (range: 13.0-20.0). Land use for the reach was timber harvest and young (3-15 cm dbh) trees. The average unit gradient was 0.9 percent. Scour pools (49%), slackwater pools (27%) and riffles (24%) dominated stream habitat. Gravel (38%), sand (36%) and fines (25%) dominated stream substrate. Wood volume was moderate at 21.4 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

T26S-R12W-S28SW

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	17.4	VWI Range:	13 - 20

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m2)	Dry Units
Primary	494	1,466	0
Secondary	19	32	0

Channel Dimensions (m)

Wetted	Active	Floodprone	n = 5	First Terrace	n = 5
Width: 2.4	Width: 2.7	6.1	(3.5 - 13.4)	20.4	(4.2 - 70)
Depth: 0.31	Height: 0.4	0.8	(0.7 - 1)	1.5	(0.95 - 2.4)

W:D ratio: 7.0
 Stream Flow Type: MF
 Average Unit Gradient: 0.9%
 Water temperature (°C): 17.5 - 17.5
 Entrenchment (ACW:FPW ratio): 2.2
 Habitat Units/100m (total channel length): 7.4
 Habitat Units/100m (primary channel length): 7.7

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	TH	YT
Riparian Vegetation:	M15	S

Bank Condition and Shade

Bank Status	Percent Reach Length	Shade (% of 180)
Actively Eroding:	5%	Reach avg: 66%
Undercut Banks:	27%	Range: 31 - 100

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	102	20.6
Volume (m ³):	105	21.4
Key pieces (>=12m x 0.60m):	2	0.4

OREGON DEPARTMENT OF FISH AND WILDLIFE

SEELANDER CREEK POST-TX (MS-217)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/27/2004

REACH 1

T26S-R12W-S28SW

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	3	19	1.7	0.33	32	0	64	34	2	0	0	0
POOL-BEAVER DAM	2	84	3.3	0.86	370	0	53	40	8	0	0	0
POOL-LATERAL SCOUR	13	173	2.9	0.51	673	0	32	46	22	0	0	0
POOL-STRAIGHT SCOUR	2	15	3.7	0.54	55	0	33	55	13	0	0	0
RIFFLE	12	147	1.7	0.07	245	0	4	23	73	0	0	0
RIFFLE W/ POCKETS	4	72	1.6	0.13	112	0	17	36	47	0	0	0
STEP/BEAVER DAM	2	3	3.3	0.01	10	0	30	40	30	0	0	0
Total:	38	513	2.4	0.31	1,498	0	Avg: 25	36	38	0	0	0

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	5	102	2.3	0.54	402	26.87%	0	0.0
Scour Pools	15	188	3.0	0.51	728	48.61%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	16	219	1.7	0.08	358	23.87%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	2	3	3.3	0.01	10	0.65%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	20	39.0	40.5
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	7	13.7	14.2
Pool frequency (channel widths/pool):	9.4		
Residual pool depth (avg):	0.49		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	467
Total conifers/1000 ft	671
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	0.7	0.7	0.3	0.0	1.7	1.0	2.7	1.7
15-30cm	0.7	1.7	2.7	1.0	5.0	0.7	8.3	3.3
30-50cm	0.0	1.7	0.0	0.7	0.0	0.0	0.0	2.3
50-90cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.3	4.3	3.0	1.7	6.7	1.7	3.7	2.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	68		43		47	
Shrub cover	37		28		23	
Grass/forb cover	40		27		16	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		33		67	
High terrace	50		67		33	
Low terrace	0		0		0	
Floodplain	17		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	11		13		20	

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	RT	2	HT	5	80	10	40	Conifer		5					CLAW MARKS ON ALDER
								Hardwood		1					CLEARCUT, NO TREES
10	LF	3	HS	20	0	10	40	Conifer							408207
								Hardwood							4793221
10	LF	1	HS	20	90	10	5	Conifer							
								Hardwood		3	2				
10	RT	3	HT	0	95	0	5	Conifer							
								Hardwood		11					
10	RT	1	HT	5	20	20	75	Conifer			1				
								Hardwood	1						
10	LF	2	HS	20	0	20	40	Conifer							CLEARCUT, NO TREES
								Hardwood							
18	LF	2	HS	40	10	30	30	Conifer							CLEARCUT
								Hardwood			2				
18	LF	3	HS	40	0	5	5	Conifer							
								Hardwood							
18	RT	1	HT	10	95	70	20	Conifer			1				
								Hardwood							
18	RT	2	HT	0	95	30	10	Conifer	1	2					
								Hardwood							
18	RT	3	HT	0	90	70	25	Conifer			2				
								Hardwood	2	1					
18	LF	1	HS	20	70	40	40	Conifer							408330/
								Hardwood		1	2	1			4793222
30	RT	3	HS	40	90	25	10	Conifer	5	2					
								Hardwood	1	1					
30	LF	1	FP	5	45	60	35	Conifer							408436/
								Hardwood	1	1	1				4793222
30	LF	2	HT	5	5	40	10	Conifer							CLEARCUT
								Hardwood							
30	LF	3	HS	20	5	30	10	Conifer							CLEARCUT
								Hardwood							
30	RT	1	HT	5	85	20	65	Conifer	2						
								Hardwood							
30	RT	2	HT	5	70	35	30	Conifer			1				ELKRUBS ON TREES
								Hardwood			2				

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **217** SEELANDER CREEK POST-TX (MS-2)

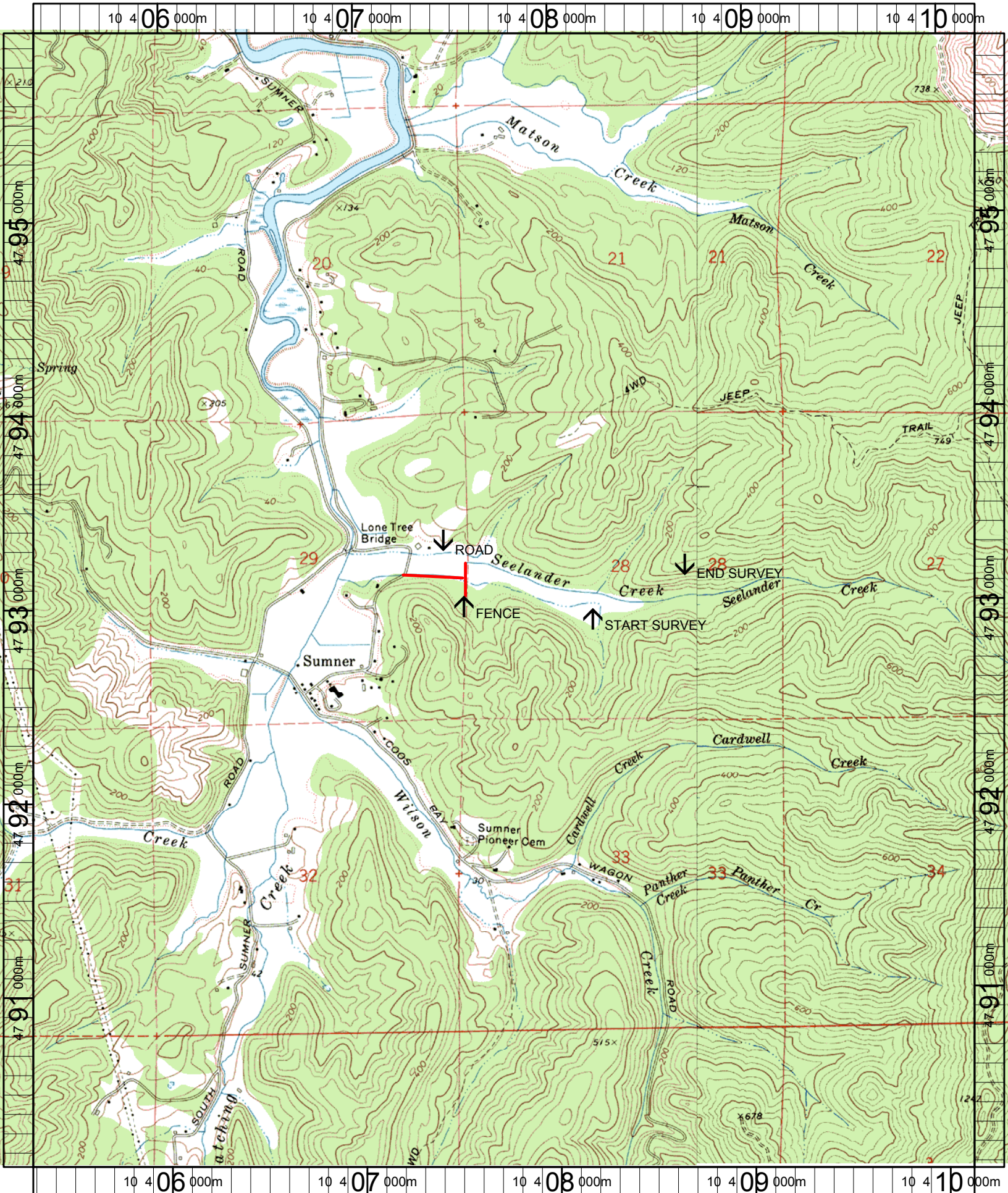
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	15.6			START ABOVE TJ
2	LP	00	19.9			COW TRACKS
5	LP	01	104.9	WL		COHO TROUT
6	BW	10	104.9	WL		FRY
7	SD	00	106.4	BV, BD	H=0.6	
8	BP	00	109.4	BV		
10	LP	00	141.4	BV	10T 408207 4793221	FRY
11	RI	00	146	WL		TREE SCRAPINGS -20' UP
12	LP	00	156.5			FRY
13	RP	01	172.3	BV, SS/	FRY	FRY
15	SD	00	173.8	BV, BD	H=1.1	
16	BP	01	254.7	BV, WL		COW TRACKS, BEAVER DEN
17	BW	10	254.7	BV		LARGE MAMMAL SCAT, FRY
18	RP	00	274		GPS=0408330 4793222	
19	LP	00	283			FRY
23	SP	00	311.7	HS		
24	RI	00	318.6			COW TRACKS
25	LP	00	323.9			FRY
27	LP	00	356.3	WL		FRY. RED LEGGED FROG
31	LP	00	394.8	HS		
35	LP	00	447.4	HS		FRY

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 217 SEELANDER CREEK POST-TX (MS-2)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
37	RI	00	481.1	WL	FRY	RED LEGGED FROG
38	LP	00	494	HS	FRY, END	END



Name: COOS BAY
 Date: 6/14/2004
 Scale: 1 inch equals 2000 feet

Location: 10 407737 E 4793025 N
 Caption: SEELANDER CREEK RESTORATION SITE - COOS BAY BASIN