

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

STREAM: Fall Creek Tributary B (MS-277)
BASIN: Coos River
SURVEY TYPE: Post-Tx
DATE: July 19, 2005
SURVEY CREW: Kevin Cellura, Eric Himmelreich
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.9 km²
USGS MAPS: Tioga
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Fall Creek Tributary B habitat survey extended 1,258 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.6 (range: 1.5-9.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.4 percent. Riffles (50%) and scour pools (28%) dominated stream habitat. Gravel (47%) and sand (24%) dominated stream substrate. Wood volume was low at 19.4 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

T25S-R09W-S20SW

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	4.6	VWI Range:	1.5 - 9

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 Channel	1,258	3,177	0
Secondary Channel	0	0	0
Off-Channel Units	47	112	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 2.8	Width: 4.0	5.4 (3.6 - 7.8)	5.6 (4.5 - 8.2)
Depth: 0.49	Height: 0.4	0.8 (0.7 - 0.8)	1.0 (0.9 - 1)

W:D ratio: 10.4

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: LF

Habitat Units/100m (total channel length): 4.9

Average Unit Gradient: 2.4%

Habitat Units/100m (primary channel length): 5.1

Water temperature (°C): 15.0 - 15.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	19%	Reach avg: 94%
Undercut Banks:	9%	Range: 53 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	326	25.9
Volume (m ³):	244	19.4
Key pieces (>=12m x 0.60m):	4	0.3

OREGON DEPT OF FISH AND WILDLIFE FALL CREEK TRIBUTARY B POST-TX (3-MS, 277)

HABITAT INVENTORY Report Date: 4/26/2006 Survey Date: 7/19/2005

REACH 1		T25S-R09W-S20SW					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
CASCADE/BOULDERS	3	102	1.5	0.72	154	72	8	15	63	4	9	2
CULVERT CROSSING	1	13	0.8	0.10	10	0	0	10	80	0	10	0
POOL-LATERAL SCOUR	16	205	3.9	0.67	779	41	32	35	31	1	1	0
POOL-PLUNGE	4	21	3.8	0.60	82	0	55	35	10	0	0	0
POOL-STRAIGHT SCOUR	2	17	4.3	0.68	70	0	20	38	43	0	0	0
RAPID/BEDROCK	2	60	2.2	0.16	131	18	0	5	18	15	3	60
RAPID/BOULDERS	7	208	2.3	0.54	388	77	11	16	55	11	6	1
RIFFLE	21	617	2.4	0.46	1,526	62	5	17	66	7	1	4
RIFFLE W/ POCKETS	1	50	2.2	0.20	110	5	30	30	30	5	0	5
STEP/BEDROCK	1	6	5.3	0.08	30	0	0	5	5	0	0	90
STEP/BOULDERS	3	5	0.8	0.05	4	7	13	30	37	0	20	0
STEP/LOG	3	3	1.3	0.15	5	0	17	33	47	3	0	0
Total:	64	1,305	2.8	0.49	3,289	282	Avg: 17	24	47	5	3	5

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	0	0			0	0.00%	0	0.0
Scour Pools	22	243	3.9	0.65	931	28.31%	41	4.4
Glides	0	0			0	0.00%	0	0.0
Riffles	22	667	2.4	0.45	1,637	49.76%	67	4.1
Rapids	9	268	2.2	0.46	519	15.79%	95	18.3
Cascades	3	102	1.5	0.72	154	4.68%	72	46.8
Step/Falls	7	13	1.6	0.10	38	1.16%	7	18.4
Dry	0	0			0	0.00%	0	0.0
Culverts	1	13	0.8	0.10	10	0.30%	0	0.0

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	22	16.9	17.5
Pools >=1m deep:	1	0.8	0.8
Complex pools (LWD pieces>=3):	10	7.7	7.9
Pool frequency (channel widths/pool):	15.0		
Residual pool depth (avg):	0.57		

Survey Date 7/19/2005
Report Date: 4/26/2006

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	691
Total conifers/1000 ft	569
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	0.0	2.3	1.3	3.0	0.7	0.0	2.0
15-30cm	0.0	2.7	1.7	0.3	1.7	0.0	3.3	3.0
30-50cm	0.0	3.0	1.0	0.0	3.0	0.0	4.0	3.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	8.0	4.0	3.3	5.3	0.0	3.1	3.8

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Canopy closure	87	82	78	8	52
Shrub cover	6	6	8			
Grass/forb cover	72	61				

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Hillslope	67	67	67	17	17
High terrace	33	17	17			
Low terrace	0	0	0			
Floodplain	0	0	0			
Wetland/meadow	0	0	0			
Stream channel	0	0	0			
Roadbed/Railroad	0	17	17			
Riprap	0	0	0			
Surface slope (%)	35	35	34			

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	691
Total conifers/1000 ft	569
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	2.0	5.3
15-30cm	3.3	3.0
30-50cm	4.0	3.0
50-90cm	0.0	0.0
>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			
18	LF	1	HS	50	80	15	70	Conifer							0435608 / 4803208
								Hardwood		1	3				
18	LF	2	RB	5	50	0	30	Conifer				1			
								Hardwood							
18	LF	3	RB	5	50	0	30	Conifer				1			
								Hardwood							
18	RT	1	HS	30	95	10	50	Conifer							
								Hardwood	7	6	2				
18	RT	2	HT	10	85	5	80	Conifer							
								Hardwood	1	1					
18	RT	3	HT	5	95	0	80	Conifer	2			1			
								Hardwood							
37	LF	1	HT	5	90	0	70	Conifer							NO GPS COVERAGE
								Hardwood				1			
37	RT	3	HS	65	90	0	40	Conifer		1	3				
								Hardwood							
37	RT	2	HS	65	85	0	75	Conifer			1				
								Hardwood	2						
37	RT	1	HS	40	85	0	80	Conifer							
								Hardwood				1			
37	LF	2	HS	40	90	0	70	Conifer			2	1			
								Hardwood	6						
37	LF	3	HS	40	80	5	55	Conifer			1	2			
								Hardwood							
50	RT	3	HS	40	75	30	30	Conifer				2			
								Hardwood							
50	RT	2	HS	40	90	20	40	Conifer	3	2					
								Hardwood							
50	LF	1	HT	5	90	5	80	Conifer							0435151 / 4803331
								Hardwood			1	2			
50	LF	2	HS	50	90	10	70	Conifer	1			1			
								Hardwood							
50	RT	1	HS	80	80	5	80	Conifer							
								Hardwood							
50	LF	3	HS	50	80	10	75	Conifer			3				
								Hardwood							

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **277** FALL CREEK TRIBUTARY B POST-T

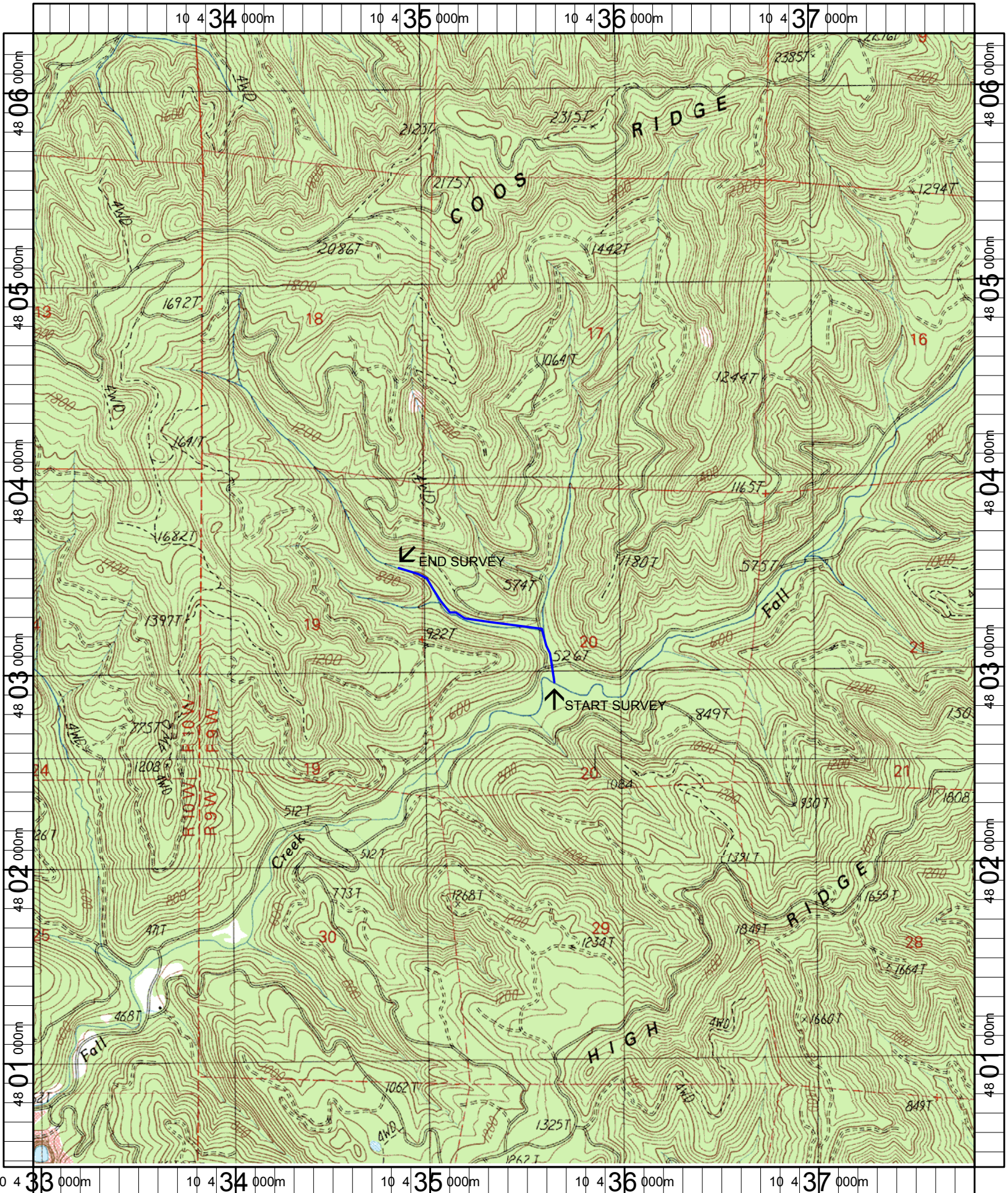
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	33.6	HS	CRAWDAD	TEMP 15C
3	RI	00	98.6	HS		
4	LP	00	131.7	BC	BC-6000	BC-6000
10	LP	00	200.1	HS	DACE	
11	RI	00	231.9		RED LEGGED FROG	
12	SP	00	244.5	HS		
14	LP	00	287.5	HS	FRY	
16	RI	01	333.9	/TJ	/TJ	TEMP 15.5C
17	RI	11	333.9		TRIB 1, TEMP 14.5C	TRIB 1, TEMP 14.5C
18	PP	00	337.4			RIPARIAN 1
19	SB	00	338.8		H 0.5M	
20	CC	00	351.3	CC	DIA = 2.2M	
24	LP	00	400.9	HS		
27	RI	00	457.1	HS		
30	LP	00	500.6	HS		
37	RI	00	653.5			RIPARIAN 2
40	PP	00	684.5	DJ		
41	SL	00	684.7		H=0.35M	
43	LP	00	746.9	BV		
49	SL	00	914.1		H=0.4M	
52	SB	00	938.6		H=0.75M	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 3-MS SITE ID: 277 FALL CREEK TRIBUTARY B POST-T

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
53	RI	01	982.5	TJ/		0435091 / 4803393, TEMP 15.
54	CB	11	982.5			TRIB 2, TEMP 15C
59	RB	00	1162.1	HS		
60	SL	00	1164.3		H=1.2M	
63	RB	00	1228.2	HS		
64	CB	00	1258.4	HS		0434915 / 4803561



Name: IVERS PEAK
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 435407 E 4803367 N
 Caption: FALL CREEK TRIBUTARY B RESTORATION SITE - COOS BASIN