

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

STREAM: 15B Creek (MS-211)
BASIN: Coquille River
SURVEY TYPE: Post-Tx
DATE: July 22, 2004
SURVEY CREW: Alex Dale, Kevin Cellura
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 0.8 km²
USGS MAPS: Coos Mountain
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The 15B Creek habitat survey extended 495 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 12.1 (range: 3.5-20.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 7.2 percent. Dry channel (47%), rapids (22%) and scour pools (15%) dominated stream habitat. Gravel (27%), sand (25%) and cobble (21%) dominated stream substrate. Wood volume was low at 18.8³/100m.

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-R11W-S15NW

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	12.1	VWI Range:	3.5 - 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	495	730	6
Secondary	31	27	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 1.3	Width: 3.5	4.4 (2.5 - 7.1)	5.1 (3.2 - 7.6)
Depth: 0.15	Height: 0.4	0.8 (0.6 - 0.9)	1.3 (1.1 - 1.8)

W:D ratio: 8.7
Stream Flow Type: LF
Average Unit Gradient: 7.2%
Water temperature (°C): 11.5 - 11.5

Entrenchment (ACW:FPW ratio): 1.4
Habitat Units/100m (total channel length): 11.6
Habitat Units/100m (primary channel length): 12.3

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	11%	Reach avg: 97%
Undercut Banks:	10%	Range: 50 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	77	15.6
Volume (m ³):	93	18.8
Key pieces (>=12m x 0.60m):	3	0.6

OREGON DEPARTMENT OF FISH AND WILDLIFE

15B CREEK POST-TX (MS-211)

HABITAT INVENTORY

Report Date: 10/27/2004

Survey Date:

7/22/2004

REACH 1		T26S-R11W-S15NW					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	5	45	1.0	0.11	49	56	5	16	34	25	20	0	
CULVERT CROSSING	1	11	0.6	0.01	6	0	15	85	0	0	0	0	
DRY CHANNEL	3	75	2.5	0.00	193	70	0	11	30	30	30	0	
DRY UNIT	2	46	3.3	0.00	149	0	0	68	33	0	0	0	
POOL-DAMMED	1	5	1.8	0.25	9	0	92	3	0	0	5	0	
POOL-LATERAL SCOUR	8	42	1.7	0.39	67	4	32	38	20	7	4	0	
POOL-PLUNGE	7	15	2.4	0.36	35	18	10	31	41	17	2	0	
POOL-STRAIGHT SCOUR	2	12	1.2	0.25	13	0	53	35	8	5	0	0	
PUDDLED UNIT	3	23	0.4	0.07	11	0	42	13	18	18	8	0	
RAPID/BOULDERS	13	171	1.0	0.07	166	29	5	14	33	31	17	0	
RIFFLE	3	32	0.5	0.07	16	0	10	30	23	33	3	1	
RIFFLE W/ POCKETS	2	34	0.9	0.10	30	0	23	23	20	30	5	0	
STEP/BEDROCK	1	7	0.9	0.50	6	0	0	5	5	10	5	75	
STEP/BOULDERS	2	1	0.3	0.01	0	6	0	5	38	19	38	0	
STEP/COBBLE	1	5	0.9	0.02	5	0	5	10	10	75	0	0	
STEP/LOG	5	2	0.4	0.01	1	0	30	28	25	16	1	0	
STEP/STRUCTURE	2	1	0.7	0.11	1	0	13	28	30	30	0	0	
Total:	61	525	1.3	0.15	757	183	Avg: 16	25	27	21	10	1	

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	5	1.8	0.25	9	1.24%	0	0.0	
Scour Pools	17	69	1.9	0.36	115	15.19%	22	19.1	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	66	0.7	0.08	46	6.10%	0	0.0	
Rapids	13	171	1.0	0.07	166	21.91%	29	17.5	
Cascades	5	45	1.0	0.11	49	6.44%	56	114.8	
Step/Falls	11	16	0.5	0.07	13	1.69%	6	47.0	
Dry	8	144	1.9	0.03	353	46.59%	70	19.8	
Culverts	1	11	0.6	0.01	6	0.84%	0	0.0	

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	18	34.3	36.4
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	6	11.4	12.1
Pool frequency (channel widths/pool):	8.4		
Residual pool depth (avg):	0.31		

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

REACH 1

Summary of Riparian Zone (0-30m)

3 transects

Total hardwoods/1000	1991
Total conifers/1000 ft	975
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	2.0	7.3	7.3	10.3	2.7	5.0	12.0	22.7
15-30cm	0.0	2.7	1.3	1.7	2.3	3.3	3.7	7.7
30-50cm	0.0	0.7	0.0	0.3	0.3	0.0	0.3	1.0
50-90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
>90cm	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7
Total/100m2	2.0	12.0	8.7	12.3	5.3	8.3	5.3	10.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	88		88		86	
Shrub cover	29		48		40	
Grass/forb cover	43		31		23	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		50		50	
High terrace	100		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 (%)	6		19		19	

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		
19	LF	1	HT	10	90	5	30	Conifer							419494 4797237 3D
								Hardwood	8	1				1	
19	RT	3	HT	5	90	40	40	Conifer	2						
								Hardwood		2					
19	RT	2	HT	5	95	40	40	Conifer	2						
								Hardwood	2		1				
19	RT	1	HT	5	90	20	40	Conifer							ANTLER RUBS
								Hardwood	4		2	2	1		
19	LF	2	HT	10	65	90	5	Conifer							
								Hardwood		1					
19	LF	3	HT	10	90	75	25	Conifer			1				HORNED OWL
								Hardwood	2	5					
32	RT	2	HS	10	95	40	40	Conifer							
								Hardwood	17	2					
32	LF	2	HT	0	95	5	25	Conifer	11	4					
								Hardwood	1						
32	RT	3	HS	10	95	65	30	Conifer							
								Hardwood		2					
32	LF	3	HT	0	95	0	10	Conifer	1	4					
								Hardwood	1						
32	LF	1	HT	0	90	30	50	Conifer	4						0419578 4797160
								Hardwood	4	2					
32	RT	1	HT	0	95	30	40	Conifer	2						
								Hardwood	2						
50	LF	1	HT	10	95	50	45	Conifer							02 CHANNEL IN ZONE 1
								Hardwood	4	2					
50	LF	2	HS	70	80	50	40	Conifer	5						419640 4797047 2D
								Hardwood	1						
50	LF	3	HS	50	50	20	20	Conifer	4		1				
								Hardwood		1					
50	RT	1	HT	10	65	40	50	Conifer							ROADBED 5M GRASS
								Hardwood		3					
50	RT	2	HS	20	95	60	35	Conifer	4						
								Hardwood	10	2					
50	RT	3	HS	40	95	40	15	Conifer	1	2					
								Hardwood	12						

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **3-MS** SITE ID: **211** **15B CREEK POST-TX (MS-211)**

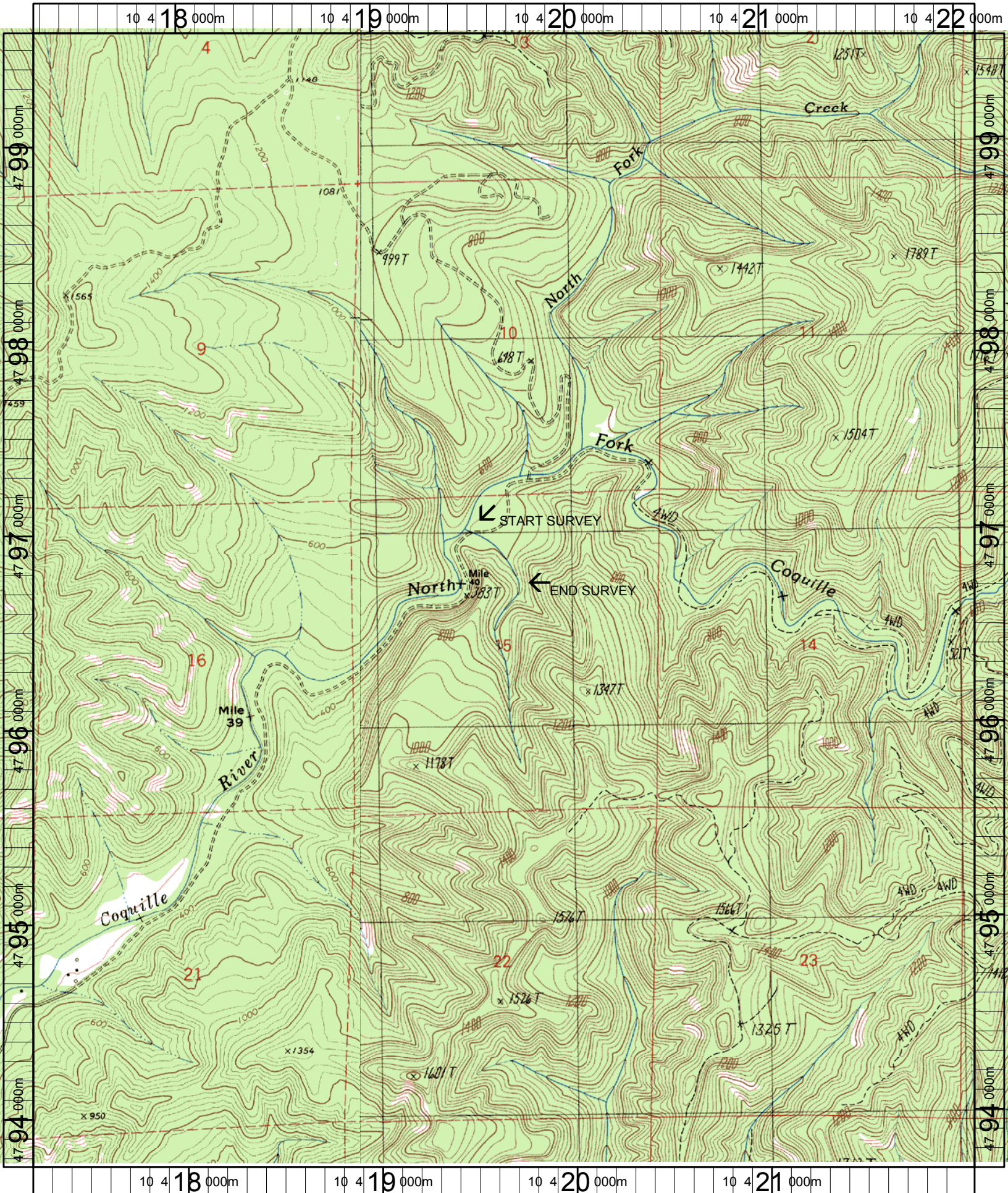
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SR	00	6.7		TJ/	
2	RB	01	26.7	BC, TJ/	BC CONCRETE UNDER B	TEMP=11.5 DEG C AT 11:20
3	PD	11	26.7	HS	ACW=.4	TEMP =12.5
4	LP	00	31.2	DJ		
5	SC	01	36.2	/TJ		
6	RB	11	36.2			FRY
7	RB	01	40.4	/TJ	TJ/	
8	RB	11	40.4	HS		
10	LP	00	52.3	HS		
12	LP	00	71.6	HS		
14	SP	00	82.1	WL	RED LEGGED FROG	RED LEGGED FROG
15	RP	00	98.4	HS		
16	SP	00	106	HS		
18	LP	00	124	HS		
19	RP	00	141.2	HS		
21	SS	00	147.9	HS	CUT OUT LOG	CUT OUT LOG
22	DP	00	153.1			419513 4797210
23	CC	00	163.7	CC	DIAMETER 1.2M	NO STEP, CULVERT
24	DU	00	187.9		RACCOON TRACKS	COMPLETELY BLOCKED WIT
25	DU	00	209.2	HS	CULVERT BLOCKED	
27	LP	00	227.4	HS		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 3-MS SITE ID: 211 15B CREEK POST-TX (MS-211)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
29	PP	00	245.8	HS		
32	LP	00	261.2	HS	RIP 2	
34	PP	00	278.5	HS		
36	RB	00	301		FISH	
37	CB	00	310.6	/SS	/SS	
45	RB	00	336.3		PGS	
46	CB	00	351.1	DJ		
59	DC	00	449.4	/SS	/SS	
61	DC	00	494.7	DJ		



Name: COOS MT
 Date: 7/22/2004
 Scale: 1 inch equals 2000 feet

Location: 10 419651 E 4796644 N
 Caption: 15B CREEK RESTORATION SITE - NF COQUILLE BASIN