

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

STREAM: South Fork Cow Creek (U-265)
BASIN: South Umpqua River
SURVEY TYPE: Pre-Tx
DATE: March 15, 2005
SURVEY CREW: Jennifer Schmitt, Neil Jensen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 31.3 km²
USGS MAPS: Richter Mountain
ECOREGION: Klamath Mountains Inland Siskiyou

GENERAL DESCRIPTION:

The South Fork Cow Creek habitat survey extended 474 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.7 (range: 2.3-9.7). Land use for the reach was mature (50-90 cm dbh) and old growth (90+ cm dbh) trees. The average unit gradient was 2.8 percent. Rapids (53%) and scour pools (20%) dominated stream habitat. Sand (29%) and cobble (27%) dominated stream substrate. Wood volume was low at 19.6 m³/100m.

COMMENTS:

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

REACH 1

T32S-R03W-S12SE

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	4.7	VWI Range:	2.3 - 9.7

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	474	2,982	0
Secondary Channel	0	0	0
Off-Channel Units	23	67	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.4	Width: 13.4	24.9 (20 - 31)	26.1 (20.9 - 31.6)
Depth: 0.45	Height: 0.6	1.2 (1.18 - 1.32)	1.5 (1.3 - 1.8)

W:D ratio: 21.5
 Stream Flow Type: LF
 Average Unit Gradient: 2.8%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.9
 Habitat Units/100m (total channel length): 6.4
 Habitat Units/100m (primary channel length): 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	OG
Riparian Vegetation:	D15	M30

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	55	11.6
Volume (m ³):	93	19.6
Key pieces (>=12m x 0.60m):	3	0.6

OREGON DEPT OF FISH AND WILDLIFE

SOUTH FORK COW CREEK PRE-TX (4-UJP, 265)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/15/2005

REACH 1		T32S-R03W-S12SE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number	Total	Avg	Avg	Total	Large	Substrate					
	Units	Length	Width	Depth	Area		Boulders	Percent Wetted Area				
		(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	1	18	3.8	0.30	70	0	5	19	10	14	14	38
CASCADE/BOULDERS	3	48	5.7	0.30	291	0	0	10	20	47	23	0
GLIDE	1	10	3.9	0.30	38	0	5	25	5	10	0	55
POOL-BACKWATER	3	11	2.2	0.28	24	0	22	66	3	9	0	0
POOL-DAMMED	2	34	4.8	0.95	165	0	6	46	14	19	12	3
POOL-LATERAL SCOUR	3	37	5.3	0.82	197	0	8	52	10	16	13	0
POOL-PLUNGE	2	14	5.8	0.85	79	0	5	22	10	28	35	0
POOL-STRAIGHT SCOUR	3	59	5.4	1.02	324	0	5	22	22	17	8	26
RAPID/BOULDERS	10	232	6.9	0.22	1,621	0	1	18	26	36	18	1
RIFFLE	1	23	7.3	0.35	169	0	1	26	36	26	10	0
STEP/BOULDERS	1	9	7.1	0.20	66	0	0	10	30	40	20	0
STEP/LOG	2	1	2.7	0.10	4	0	0	45	18	18	20	0
Total:	32	497	5.4	0.45	3,048	0	Avg: 5	29	18	27	15	6

HABITAT SUMMARY									
Habitat Group	Number	Total	Avg	Avg	Wetted Area		Large Boulders		
	Units	Length	Width	Depth	(m ²)	Percent	Number	(# / 100m ²)	
		(m)	(m)	(m)					
Dammed & BW Pools	5	45	3.2	0.55	189	6.20%	0	0.0	
Scour Pools	8	110	5.5	0.90	600	19.67%	0	0.0	
Glides	1	10	3.9	0.30	38	1.25%	0	0.0	
Riffles	1	23	7.3	0.35	169	5.56%	0	0.0	
Rapids	10	232	6.9	0.22	1,621	53.16%	0	0.0	
Cascades	4	67	5.3	0.30	361	11.84%	0	0.0	
Step/Falls	3	11	4.1	0.13	70	2.31%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

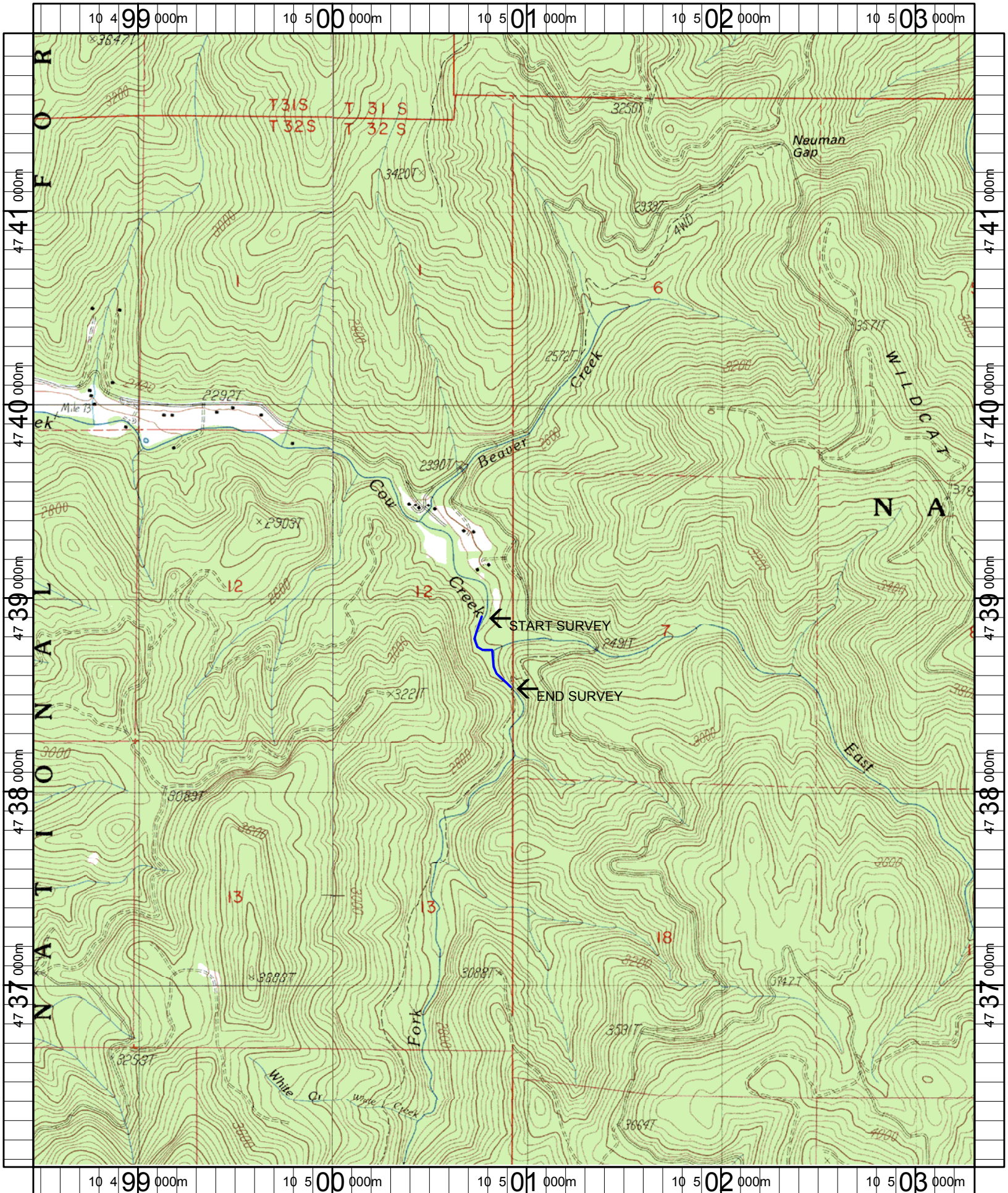
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	13	26.2	27.4
Pools >=1m deep:	4	8.0	8.4
Complex pools (LWD pieces>=3):	3	6.0	6.3
Pool frequency (channel widths/pool):	2.9		
Residual pool depth (avg):	0.56		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **265** SOUTH FORK COW CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SB	00	9.3		CT-CT,M30,D15,LT,MT	
5	SP	00	91.1	/SS		
6	RB	00	116.7	WL, /SS	WILDLIFE TRAIL	
7	DP	00	142.1		HANDMADE BLDR WEIR AT STRT PL	
8	SL	00	143.1		H= 0.31	
9	RI	00	166.3		CA-CT,D15,D1,LT,MT	
13	RB	01	222.1	/LI	14M x 10M	
17	LP	00	258.2		CT,CT,D30,S,LT,MT	
19	LP	01	285.1	TJ/		
20	CB	11	285.1		TRIB=E.FK.COW CR.ACH=.4,ACW5.3	
25	SL	00	342.6	DJ	H= 0.45, NATL. FOREST BOUNDARY	
27	LP	00	364		SM. STEP BETWEEN POOLS	
28	RB	00	392.1	WL	DEER TRACKS	
29	SP	00	415.6		CA,CT,C50 D3, MT, LT	
30	CR	00	434	/SS		
31	GL	00	443.8	/SS		
32	RB	00	474.1		CH,MV,M50,C30,OG,MT. E.O.S.	



Name: RICHTER MT
 Date: 1/27/2005
 Scale: 1 inch equals 2000 feet

Location: 10 500882 E 4738989 N
 Caption: SOUTH FORK COW CREEK RESTORATION SITE - UMPQUA BASIN