

**ODFW AQUATIC INVENTORY PROJECT
RESTORATION MONITORING
STREAM HABITAT REPORT**

STREAM: CEDAR CREEK
 GCG: 5-SC
 SITE ID: 128
 BASIN: ELK
 TREATMENT DATE: 2002
 SURVEY DATE: 4/1/2009
 SURVEY CREW: David Jones / Ryan Emig
 USGS MAPS: CAPE BLANCO
 ECOREGION: Coastal Lowlands
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T32S-R15W-S17SW

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Light grazing pressure

Dominant riparian vegetation: Deciduous trees: size class 3-15cm dbh

Primary channel length (meters) and area (m²): 379 : 3,865

Secondary channel length (meters) and area (m²): 4 : 3

VWI average: 16.8 VWI Range: 7 - 20 Average Gradient: 0.4%

Pieces LWD per 100m: 5.3 Wood Volume (m³) per 100m: 20.1

Percent pools: 73% Complex pools (LWD pieces \geq 3): 1 Pools \geq 1m deep:0

<u>Percent substrate (avg):</u>	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	19	60	21	0	0	0
Pool units	21	65	14	0	0	0
Fast water units	16	52	31	1	1	0

SURVEY COMMENTS:

The Cedar Creek habitat survey is a post-treatment, long term monitoring site. The crew noted beaver activity throughout the survey. The also observed rough skinned newts. Habitat structures were observed near the mid point of the survey. There were no potential barriers to upstream fish migration within the survey reach. A previous post-treatment habitat survey was conducted during the winter of 2003. Comparisons were made among key coho salmon habitat attributes: total secondary channel length, pieces of LWD per 100 m, wood volume per 100 m, percent pools, and complex pools. All key attributes increased significantly except secondary channels, which showed a significant decrease.

Survey Date: 4/1/2009

Report Date: 2/16/2010

T32S-R15W-S17SW

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	16.8	VWI Range:	7 - 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	379	3,865	0
Secondary	4	3	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 4	<u>First Terrace</u> n = 4
Width: 3.8	Width: 8.4	20.9 (2.5 - 50)	24.9 (4.5 - 62)
Depth: 0.39	Height: 0.4	0.8 (0.7 - 0.9)	0.9 (0.85 - 1)

W:D ratio: 23.8

Stream Flow Type: MF

Average Unit Gradient: 0.4%

Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 4.5

Habitat Units/100m (total channel length): 6.0

Habitat Units/100m (primary channel length): 6.1

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LG	MI
Riparian Vegetation:	D3	S

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):	20	5.3
Volume (m ³):	76	20.1
Key pieces (>=12m x 0.60m):	6	1.6

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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	1	4	0.7	0.07	3	0	0	5	85	5	5	0
GLIDE	1	12	1.8	0.25	21	0	10	80	10	0	0	0
POOL-DAMMED	1	8	2.0	0.75	15	0	15	70	15	0	0	0
POOL-LATERAL SCOUR	10	225	4.9	0.60	2,803	0	22	64	14	0	0	0
RIFFLE	8	133	3.8	0.23	1,021	0	18	58	24	0	0	0
STEP/BEAVER DAM	1	2	3.0	0.10	5	0	29	67	5	0	0	0
STEP/LOG	1	1	1.7	0.07	1	0	15	45	40	0	0	0
Total:	23	383	3.8	0.39	3,868	0	Avg: 19	60	21	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	1	8	2.0	0.75	15	0.39%	0	0.0
Scour Pools	10	225	4.9	0.60	2,803	72.47%	0	0.0
Glides	1	12	1.8	0.25	21	0.54%	0	0.0
Riffles	8	133	3.8	0.23	1,021	26.40%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	4	0.7	0.07	3	0.07%	0	0.0
Step/Falls	2	2	2.4	0.09	5	0.14%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

GCG: 5-SC CEDAR CREEK
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POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	11	28.8	29.1
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	1	2.6	2.6
Pool frequency (channel widths/pool):	4.1		
Residual pool depth (avg):	0.42		

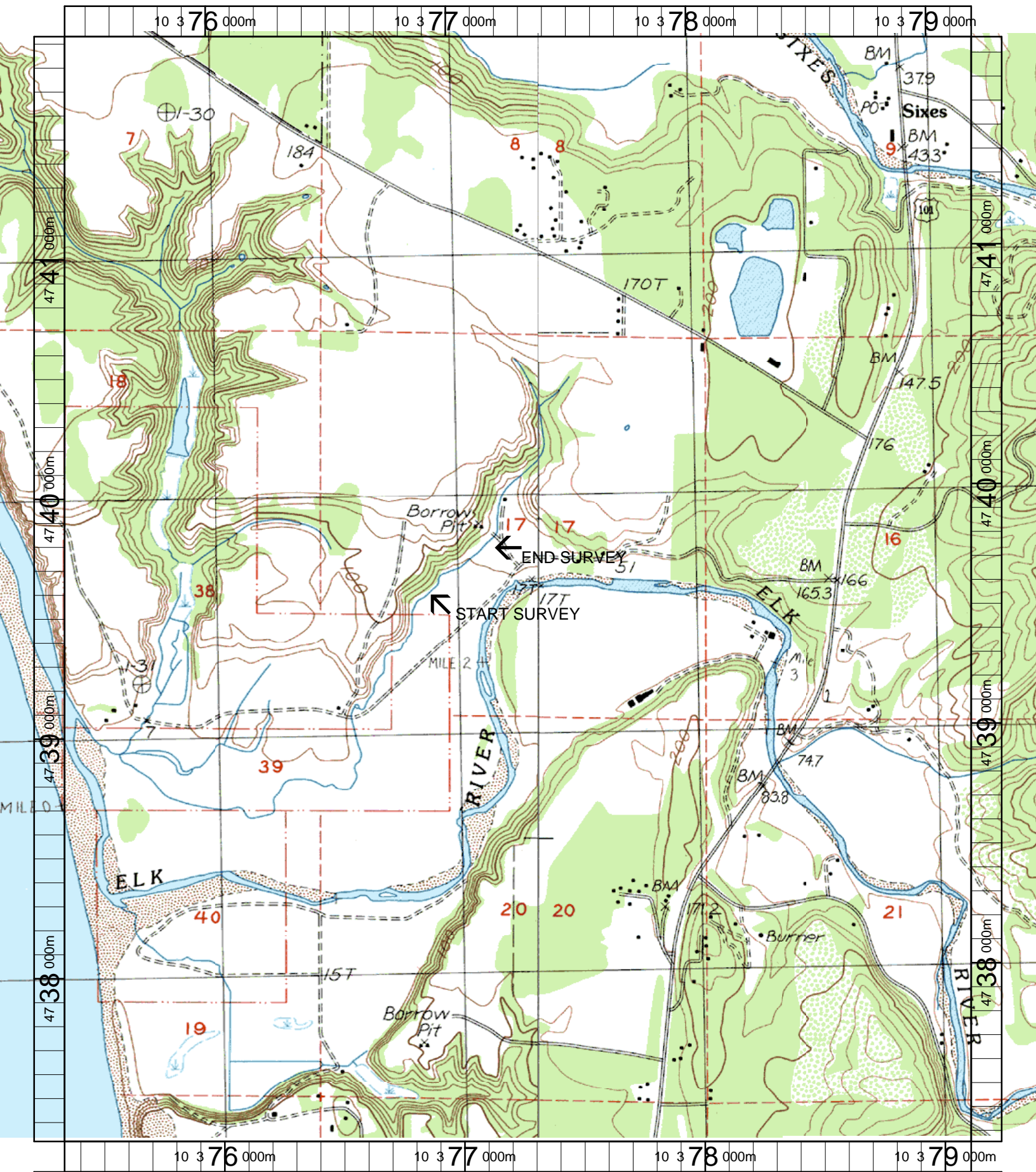
OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 4/1/2009

COMMENT SUMMARY

MONITORING AREA: 5-SC SITE ID: 128 STREAM: CEDAR CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RI	00	5.5		VWI=160 W/ ELK RIVER AS THE SOUTH BOUNDARY
1	4	SL	00	13.5		STEP LOG TOO SMALL TO MEASURE
1	5	GL	00	25	SS/	
1	8	SD	00	45	BV	SMALL OLDER BEAVER DAM
1	11	RI	01	73	TJ/	
1	12	CB	11	73		ACW=1.4M, T=10.5C
1	13	LP	00	218	HS,DJ,BV	MIDDLE OF POND IS APPROX 25M WIDE
1	14	RI	00	269	AM,HS,SS/	ROUGH-SKINNED NEWT
1	16	LP	00	315.5	BV,AM	WIDTH IS AVG INCLUDING LARGE WETLAND BW
1	17	LP	00	322.5	SS/SS	



Name: CAPE BLANCO
 Date: 3/21/2003
 Scale: 1 inch equals 1666 feet

Location: 10 377256 E 4739596 N
 Caption: CEDAR CREEK RESTORATION SITE - ELK BASIN

Cedar Creek (SC-128) 2009 Winter Habitat Survey Photographs



Upstream view of the Cedar Creek willow riparian near start of survey.



Off-channel wetland habitat with placed logs.



Wetland/pond interacting with active channel near unit 14.



Off-channel wetland habitat near unit 14.



Willow dominated riparian near end of survey.