

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

STREAM: CRAB CREEK
 GCG: 2-MC
 SITE ID: 20
 BASIN: ALSEA
 TREATMENT DATE: 2002
 SURVEY DATE: 3/10/2009
 SURVEY CREW: David Jones / Ryan Emig
 USGS MAPS: FIVE RIVERS
 ECOREGION: Mid-Coastal Sedimentary
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T15S-R10W-S12SE

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Mature timber (50-90 cm dbh)
 Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh
 Primary channel length (meters) and area (m²): 614 : 7,843
 Secondary channel length (meters) and area (m²): 125 : 369
 VWI average: 5.3 VWI Range: 3.5 - 7 Average Gradient: 0.5%
 Pieces LWD per 100m: 15.1 Wood Volume (m³) per 100m: 21.1
 Percent pools: 74% Complex pools (LWD pieces>=3): 7 Pools >=1m deep:3
 Percent substrate (avg):

	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	8	40	39	3	1	9
Pool units	6	39	35	4	3	13
Fast water units	3	21	66	2	0	7

SURVEY COMMENTS:

The Crab Creek habitat survey is a post-treatment, long term monitoring site. The crew observed winter steelhead redds throughout the survey. Two habitat structures were noted, but overall, a general lack of habitat structures were observed. The crew noted observing rough skinned newts within the survey. There were no potential barriers to upstream fish migration observed 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 wood volume, which showed a slight decrease.

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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	5.3	VWI Range:	3.5 - 7

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

Type	Length (m)	Area (m ²)	Dry Units
Primary	614	7,843	0
Secondary	125	369	1

Channel Dimensions (m)

Wetted	Active	Floodprone <i>n</i> = 5	First Terrace <i>n</i> = 5
Width: 7.7	Width: 9.3	13.7 (10.3 - 19)	15.5 (12 - 20.5)
Depth: 0.56	Height: 0.4	0.7 (0.7 - 0.8)	1.8 (1.6 - 1.9)

W:D ratio: 25.3

Stream Flow Type: MF

Average Unit Gradient: 0.5%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.5

Habitat Units/100m (total channel length): 5.4

Habitat Units/100m (primary channel length): 6.5

Riparian, Bank, and Wood Summary

	Primary	Secondary
Land Use:	MT	LT
Riparian Vegetation:	D30	S

Bank Condition and Shade

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

Large Wood Debris

	Total	Total / 100m primary channel
All pieces (>=3m x 0.15m):	93	15.1
Volume (m ³):	129	21.1
Key pieces (>=12m x 0.60m):	8	1.3

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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
POOL-BACKWATER	3	16	2.3	0.50	37	0	18	80	2	0	0	0
POOL-ISOLATED	4	47	2.4	0.29	220	0	26	71	3	0	0	0
POOL-LATERAL SCOUR	17	382	11.2	0.83	6,115	0	6	39	35	4	3	13
PUDDLED UNIT	1	43	1.3	0.35	56	0	15	85	0	0	0	0
RIFFLE	14	250	6.7	0.37	1,777	0	3	21	66	2	0	7
STEP/LOG	1	1	6.0	0.20	6	0	0	10	30	10	0	50
Total:	40	739	7.7	0.56	8,211	0	Avg: 8	40	39	3	1	9

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	7	63	2.3	0.38	257	3.13%	0	0.0
Scour Pools	17	382	11.2	0.83	6,115	74.47%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	14	250	6.7	0.37	1,777	21.64%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	1	1	6.0	0.20	6	0.07%	0	0.0
Dry	1	43	1.3	0.35	56	0.68%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

CRAB 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:	24	32.5	39.1
Pools >=1m deep:	3	4.1	4.9
Complex pools (LWD pieces>=3):	7	9.5	11.4
Pool frequency (channel widths/pool):	3.3		
Residual pool depth (avg):	0.56		

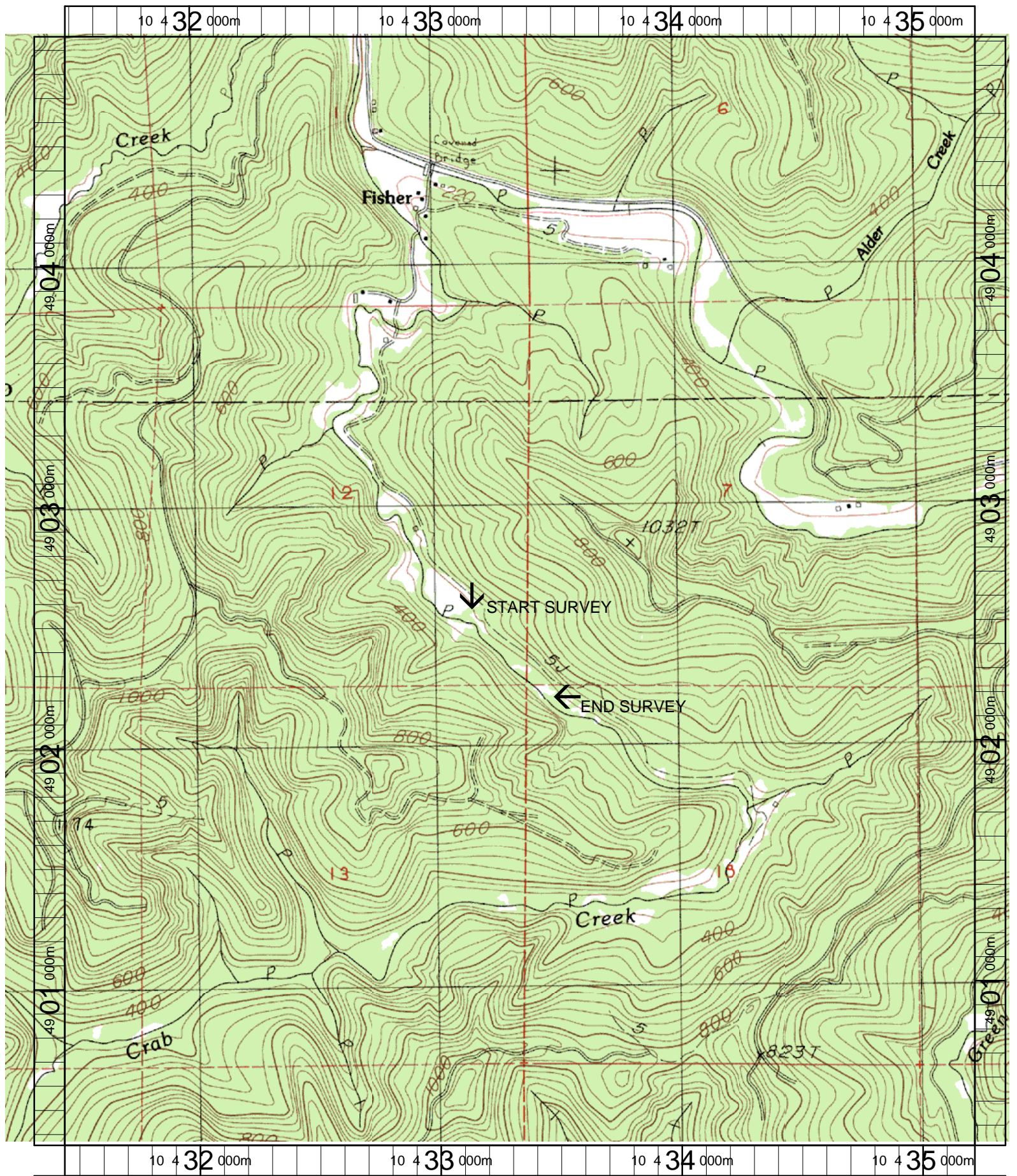
OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 3/10/2009

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 20 STREAM: CRAB CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RI	00	11	DJ	
1	2	LP	00	39	HS,DJ	REDDS IN TAILOUT
1	3	RI	00	47		REDDS IN RIFFLE
1	4	LP	00	98	SS/,DJ	REDDS IN RIFFLE
1	5	RI	01	137		REDD IN RIFFIE
1	11	BW	10	156		BACKWATER IS OFF THE 02 CHANNEL
1	15	RI	00	262		REDDS IN RIFFLE
1	16	LP	00	298		REDDS IN TAILOUT
1	28	RI	01	425.5	HS,DJ	REDD IN RIFFLE
1	29	IP	10	425.5	AM,/SS	ROUGH-SKINNED NEWT
1	30	LP	00	483	SS/	
1	32	LP	01	529.3	DJ,SS/	
1	35	LP	01	568.9	DJ	
1	40	LP	00	613.9	/SS	



Name: FIVE RIVERS
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 433345 E 4902640 N
 Caption: CRAB CREEK RESTORATION SITE - ALSEA BASIN

Crab Creek (MC-20) 2009 Winter Habitat Survey Photographs



Unit 1 - Looking upstream at pool at the start of the survey.



Looking upstream at the end of the survey.