

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

STREAM: HUDSON CREEK SEGMENT B
 GCG: 3-MS
 SITE ID: 387
 BASIN: COQUILLE
 TREATMENT DATE: 2008
 SURVEY DATE: 4/29/2009
 SURVEY CREW: David Jones / Ryan Emig
 USGS MAPS: COOS MOUNTAIN
 ECOREGION: Mid-Coastal Sedimentary
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T27S-R11R-S35SW

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

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): 1,739 : 7,996

Secondary channel length (meters) and area (m²): 230 : 379

VWI average: 4.5 VWI Range: 2 - 9 Average Gradient: 2.8%

Pieces LWD per 100m: 32.2 Wood Volume (m³) per 100m: 35.9

Percent pools: 34% Complex pools (LWD pieces \geq 3): 22 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	2	20	36	16	8	17
Pool units	4	30	28	12	6	20
Fast water units	0	11	46	19	9	16

SURVEY COMMENTS:

Hudson Creek Segment B is a post-treatment, restoration site. The crew noted habitat structures throughout the survey reach. They also noted a potential barrier to upstream fish migration consisting of a cascade over boulders approximately 1450 meters upstream from the start of the survey. Juvenile coho salmon were observed downstream of the potential barrier. Resident trout were observed throughout the survey reach, but increased in number upstream of the potential barrier. Evidence of wildlife included scattered beaver activity, rough skinned newts, and crayfish.

Survey Date: 4/29/2009

Report Date: 2/16/2010

T27S-R11R-S35SW

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	4.5	VWI Range:	2 - 9

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	1,739	7,996	0
Secondary	230	379	5

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 8	<u>First Terrace</u> n = 7
Width: 4.0	Width: 5.5	8.8 (5.5 - 16.5)	10.2 (7.4 - 18)
Depth: 0.31	Height: 0.3	0.5 (0.5 - 0.6)	1.5 (0.75 - 4.5)

W:D ratio: 21.6

Stream Flow Type: MF

Average Unit Gradient: 2.8%

Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.7

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

Habitat Units/100m (primary channel length): 6.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	LT
Riparian Vegetation:	D30	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):	560	32.2
Volume (m ³):	624	35.9
Key pieces (>=12m x 0.60m):	13	0.7

OREGON DEPT OF FISH AND WILDLIFE

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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/BEDROCK	1	13	7.0	0.07	91	0	0	5	0	0	5	90
CASCADE/BOULDERS	9	123	2.9	0.17	415	0	1	9	40	25	21	6
DRY CHANNEL	2	15	1.2	0.00	18	0	5	20	50	20	5	0
POOL-BACKWATER	4	20	2.7	0.35	55	0	10	43	11	9	6	21
POOL-DAMMED	1	12	3.0	0.95	36	0	10	60	15	10	5	0
POOL-ISOLATED	2	7	0.7	0.15	4	0	15	60	23	3	0	0
POOL-LATERAL SCOUR	35	510	4.6	0.57	2,472	0	4	29	29	11	5	22
POOL-PLUNGE	5	53	6.2	0.69	373	0	2	25	28	20	14	11
PUDDLED UNIT	3	29	1.3	0.17	40	0	7	25	28	28	12	0
RAPID/BEDROCK	10	448	4.5	0.17	2,027	0	0	9	11	10	5	64
RAPID/BOULDERS	15	223	2.8	0.15	756	0	0	9	51	28	10	2
RIFFLE	18	448	3.5	0.17	1,729	0	0	13	67	12	3	5
RIFFLE W/ POCKETS	4	45	4.3	0.25	211	0	1	14	43	24	19	0
STEP/BEDROCK	4	9	5.3	0.15	51	0	0	11	4	4	9	73
STEP/BOULDERS	2	5	4.0	0.13	22	0	0	5	33	33	30	0
STEP/COBBLE	2	3	5.5	0.10	21	0	3	10	25	48	15	0
STEP/LOG	3	7	8.2	0.12	56	0	5	20	58	10	7	0
Total:	120	1,969	4.0	0.31	8,375	0	Avg: 2	20	36	16	8	17

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	39	2.2	0.38	95	1.13%	0	0.0
Scour Pools	40	563	4.8	0.58	2,845	33.96%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	22	493	3.6	0.18	1,940	23.17%	0	0.0
Rapids	25	671	3.5	0.16	2,783	33.23%	0	0.0
Cascades	10	136	3.3	0.16	506	6.04%	0	0.0
Step/Falls	11	24	5.9	0.13	150	1.79%	0	0.0
Dry	5	44	1.2	0.10	57	0.68%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

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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:	47	23.9	27.0
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	22	11.2	12.7
Pool frequency (channel widths/pool):	7.6		
Residual pool depth (avg):	0.43		

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OREGON PLAN MONITORING SITE
SURVEY DATE: 4/29/2009

COMMENT SUMMARY

MONITORING AREA: 3-MS SITE ID: 387 STREAM: HUDSON CREEK SEGMENT B

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	2	RR	00	111	HS,DJ	
1	3	RR	00	155	HS,DJ	
1	5	SR	00	198	HS,DJ	
1	8	BW	10	245		COHO FRY
1	9	LP	00	254	HS	
1	11	LP	01	287	HS	
1	16	LP	01	305	HS,DJ	
1	20	RB	00	355	HS	
1	21	PP	00	378		SEVERAL RESIDENT TROUT
1	22	SR	00	379.3	HS,DJ	
1	23	RR	00	437.3		TROUT COHO FRY AND SMOLTS
1	25	LP	00	500.3	HS,DJ	
1	27	LP	00	521.3		RESIDENT TROUT, UNKNOWN SALMONID FRY
1	29	RB	00	581.3		STEELHEAD REDD
1	30	LP	01	603.3		COHO FRY
1	32	RR	01	636.8	BC,CS	
1	38	SL	01	677.3	HS,DJ	DIFFICULT TO SEE STREAM DUE TO DEBRIS JAM
1	41	RB	02	677.3		CHANNEL FLOWS UNDER LARGE DEBRIS JAM
1	43	RI	03	677.3	/TJ	
1	44	CB	11	677.3		ACW=1.6M, T=8.5C
1	48	LP	00	744.3		STEELHEAD REDD
1	50	PP	00	777.3		COHO FRY
1	53	LP	00	806	HS,DJ	
1	55	IP	10	831	AM	ROUGH-SKINNED NEWT
1	58	IP	10	911	AM	PACIFIC TREEFROGS

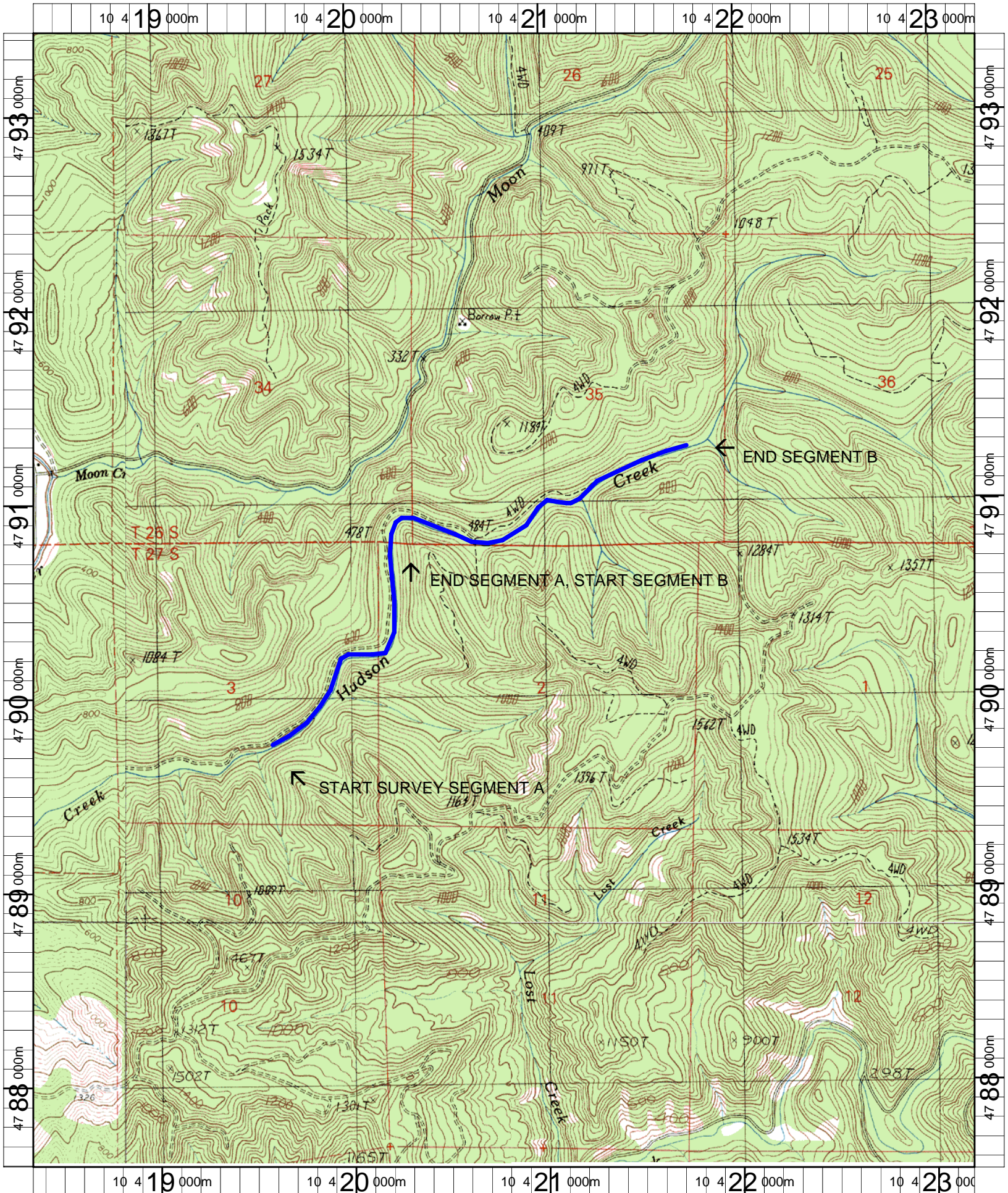
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OREGON PLAN MONITORING SITE
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REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	61	LP	01	936	HS,DJ	
1	65	LP	02	980		FRY
1	69	LP	00	1022	HS	
1	70	RR	00	1063	HS,DJ	
1	72	RR	00	1103	HS,DJ	
1	73	LP	00	1116	SS/	RESIDENT TROUT
1	81	LP	01	1238	HS	
1	82	RR	01	1265	DJ,HS	
1	86	LP	00	1273	SS/	
1	87	CB	00	1294		FRY
1	88	LP	00	1305		RESIDENT TROUT
1	97	CB	11	1371		ACW=2.8M, T=9C
1	103	CB	00	1467	PN	
1	104	DP	00	1479		RESIDENT TROUT
1	106	LP	00	1488	SS/	
1	111	LP	00	1548.8	WL	SEVERAL RESIDENT TROUT, CRAYFISH
1	112	RI	00	1576.8	SS/,HS	
1	113	LP	00	1587.8	HS	SEVERAL RESIDENT CUTTHROAT
1	115	LP	00	1619.8		MORE RESIDENT CUTTHROAT
1	117	LP	00	1676.8	AM	ROUGH-SKINNED NEWT, MORE TROUT
1	118	RI	00	1715.8	HS	
1	119	LP	00	1723.8	HS	



Name: COOS MT
 Date: 12/13/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0420789 E 4790488 N NAD 27
 Caption: HUDSON CREEK SEGMENTS A_B RESTORATION SITES -
 COQUILLE BASIN

Hudson Creek Segment B (MS-387) 2009 Winter Habitat Survey Photographs



Upstream view at the start of Hudson Creek Segment B survey.



Upstream view of stream habitat and riparian.



Upstream view of stream habitat and riparian.



Upstream view of stream habitat and riparian.



Upstream view at end of survey.