

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

STREAM: Hudson Creek Segment A (MS-386)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: February 12, 2008
SURVEY CREW: Kyle Brachter, Bobby Gomez
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 7.9 km²
USGS MAPS: Coos Mountain
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Hudson Creek habitat survey extended 1,662 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.9 (range: 1-4.5). Land use for the reach was timber harvest and second growth timber (15-30cm dbh). The average unit gradient was 2.4 percent. Scour pools (45%), riffles (29%) and rapids (22%) dominated stream habitat. Gravel (34%), sand (32%) and bedrock (22%) dominated stream substrate. Wood volume was 16.7m³/100m.

COMMENTS:

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

The crew noted several debris jams during the survey.

Beaver activity, cutthroat trout, steelhead redds, and a Pacific treefrog were observed during the survey.

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**HUDSON CREEK SEGMENT A
GCG: 3-MS SITE ID: 386**

Survey Date: 3/12/2008

Report Date: 5/8/2008

T27S-R11W-S03SE

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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.9	VWI Range:	1 - 4.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	1,662	8,213	1
Secondary	81	133	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 4.5	Width: 8.7	11.0 (7.3 - 17.8)	10.1 (10.1 - 10.1)
Depth: 0.39	Height: 0.5	0.9 (0.7 - 1.1)	1.6 (1.6 - 1.6)

W:D ratio: 20.2

Stream Flow Type: MF

Average Unit Gradient: 2.4%

Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.3

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

Habitat Units/100m (primary channel length): 6.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	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:		Reach avg:
Undercut Banks:		Range: -

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	378	22.7
Volume (m ³):	277	16.7
Key pieces (>=12m x 0.60m):	2	0.1

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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	7	2.0	0.15	14	0	0	0	0	0	0	100
DRY UNIT	1	6	8.6	0.00	52	0	0	76	24	0	0	0
POOL-DAMMED	1	14	4.1	0.50	56	0	0	95	5	0	0	0
POOL-LATERAL SCOUR	57	787	4.6	0.58	3,703	0	2	44	26	3	3	23
POOL-PLUNGE	2	10	5.7	0.60	57	0	0	78	15	5	2	0
PUDDLED UNIT	1	16	1.4	0.25	23	0	20	50	30	0	0	0
RAPID/BEDROCK	8	308	5.7	0.15	1,765	0	0	1	3	0	12	85
RAPID/BOULDERS	3	20	4.9	0.27	99	0	2	19	62	2	9	7
RIFFLE	27	537	4.2	0.17	2,436	0	0	21	58	16	1	4
STEP/BEAVER DAM	1	1	3.8	0.05	2	0	0	90	10	0	0	0
STEP/BEDROCK	1	5	5.2	0.15	23	0	0	0	0	0	0	100
STEP/BOULDERS	4	15	3.7	0.23	55	0	0	0	13	25	55	8
STEP/COBBLE	5	14	3.3	0.10	48	0	0	6	87	4	2	0
STEP/LOG	1	3	4.5	0.07	14	0	0	5	5	0	0	90
Total:	113	1,743	4.5	0.39	8,347	0	Avg: 1	32	34	6	5	22

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	14	4.1	0.50	56	0.67%	0	0.0
Scour Pools	59	797	4.6	0.58	3,760	45.04%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	27	537	4.2	0.17	2,436	29.18%	0	0.0
Rapids	11	329	5.5	0.18	1,864	22.33%	0	0.0
Cascades	1	7	2.0	0.15	14	0.17%	0	0.0
Step/Falls	12	37	3.8	0.14	143	1.71%	0	0.0
Dry	2	22	5.0	0.13	75	0.89%	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:	60	34.4	36.1
Pools >=1m deep:	3	1.7	1.8
Complex pools (LWD pieces>=3):	18	10.3	10.8
Pool frequency (channel widths/pool):	3.3		
Residual pool depth (avg):	0.42		

COMMENT SUMMARY

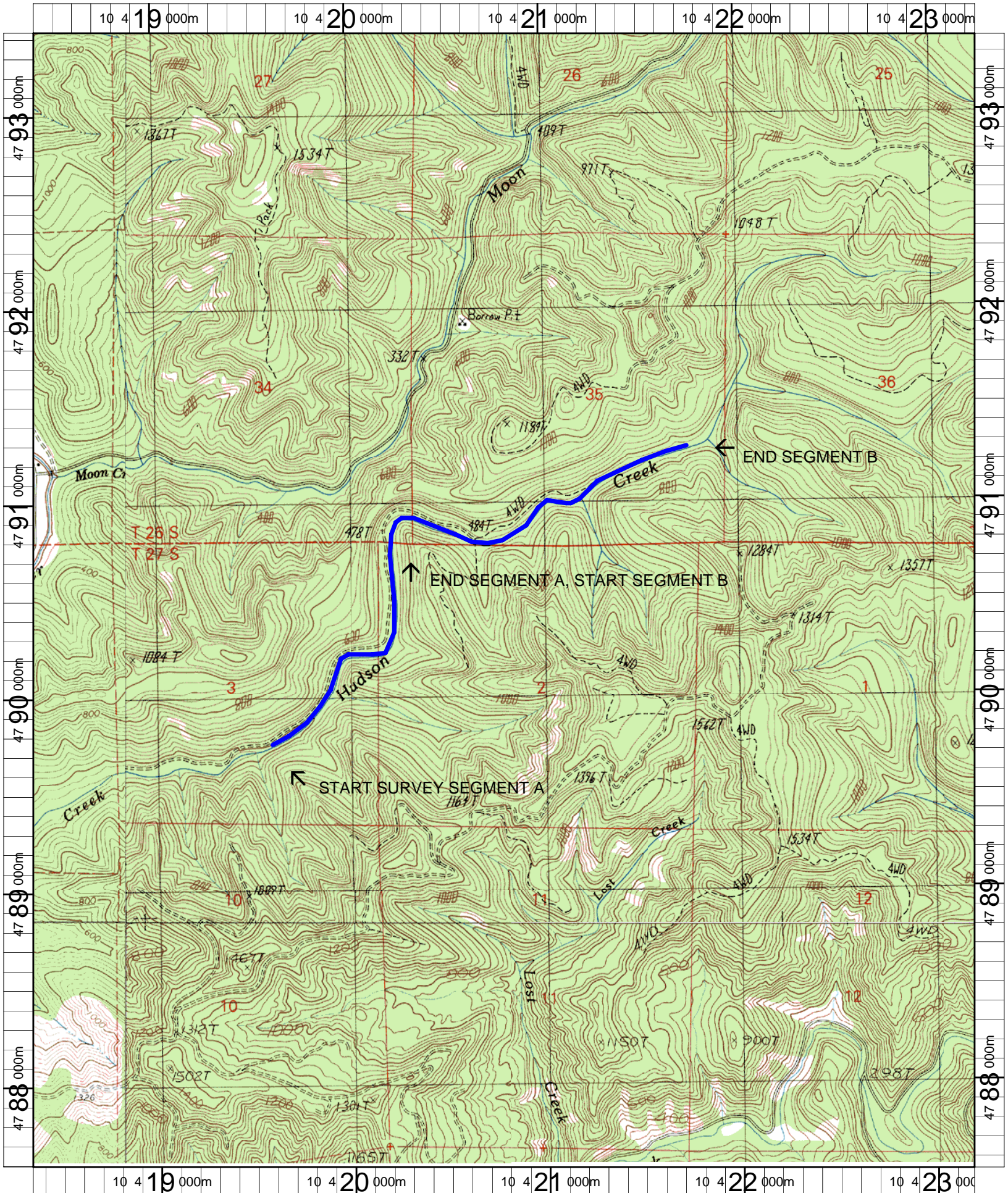
MONITORING AREA: 3-MS SITE ID: 386 STREAM: HUDSON CREEK SEGMENT A

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	9.5	DJ	CHMV D15S THST
3	LP	00	64.5	DJ	1 CUTTHROAT
4	DU	00	70.5		SUBSURFACE WATER FLOW BENEATH LARGE SAND DEPOSIT
5	SC	00	74.8	DJ	
10	LP	00	132.3	BV	STICKS
15	LP	00	196.7	BV	SMALL DAM
16	SD	00	197.2	BV,BD	
18	RI	00	245.9	/SS	
21	LP	01	271.7	CE/	DIAMETER =0.45M
28	RR	00	401.3	DJ	CACT D30S STYT
35	RR	01	583.6	/TJ	
36	CR	11	583.6		T=8C ACW=2.7M
44	LP	00	723.7	BV	STEELHEAD REDD FLAGGED AT TAILOUT
45	RR	00	773.7		STEELHEAD REDD FLAGGED
46	LP	00	790.2		OLD HABITAT SURVEY SIGN SITE 515 END 9/6/04
48	LP	00	807.8		CUTTHROAT
49	RI	00	851.1	SS/	CHMV D15S THST
59	LP	02	968.6	DJ	
64	SL	01	1020.8	DJ	
75	LP	00	1071.1	DJ	
77	LP	00	1117.1		SURVEY START SIGN SITE 513 8/15/07
78	RI	01	1133.5	/TJ	

COMMENT SUMMARY

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
86	RI	00	1244.7		CHMV D15S TH
89	LP	00	1290.8	/SS	
92	LP	00	1331.2	DJ	
94	LP	00	1366.2	AM	PACIFIC TREEFROG
97	LP	00	1397.9	CE/	CUTTTHROAT REDD
101	LP	00	1506.8	/SS	
112	LP	00	1654.2	DJ	
114	PP	00	1662.2		CHMV M30S THST



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