

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

STREAM: HUDSON CREEK SEGMENT A
 GCG: 3-MS
 SITE ID: 386
 BASIN: COQUILLE
 TREATMENT DATE: 2008
 SURVEY DATE: 4/28/2009
 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-S03SE

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Young forest trees (3-15 cm dbh)

Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh

Primary channel length (meters) and area (m²): 1,659 : 7,599

Secondary channel length (meters) and area (m²) 118 : 188

VWI average: 5.1 VWI Range: 1.5 - 10 Average Gradient: 1.3%

Pieces LWD per 100m: 30.7 Wood Volume (m³) per 100m: 26.6

Percent pools: 41% Complex pools (LWD pieces \geq 3): 31 Pools \geq 1m deep: 2

<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	3	28	37	10	6	16
Pool units	6	40	27	8	5	15
Fast water units	0	15	48	13	6	19

SURVEY COMMENTS:

Hudson Creek Segment A is a post-treatment, restoration site. The crew noted habitat structures and debris jams throughout the survey reach. They also observed recent beaver activity throughout much of the survey. Winter steelhead redds, resident trout, and juvenile coho salmon were observed. The crew also noted a cutthroat trout redd had been flagged by a previous survey. Evidence of amphibians included multiple observations of rough skinned newts. There were no potential barriers to upstream fish migration observed within the survey reach. The crew made note of a clear cut on both sides of the upper survey in which riparian trees had blown into the stream contributing a large percentage of wood to the survey.

Survey Date: 4/28/2009

Report Date: 2/16/2010

T27S-R11R-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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.1	VWI Range:	1.5 - 10

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	1,659	7,599	0
Secondary	118	188	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 7	<u>First Terrace</u> n = 6
Width: 4.2	Width: 4.9	7.2 (6 - 8.3)	9.3 (8.2 - 11.4)
Depth: 0.37	Height: 0.4	0.7 (0.6 - 0.8)	1.3 (0.9 - 2)

W:D ratio: 14.0

Stream Flow Type: MF

Average Unit Gradient: 1.3%

Water temperature (°C): 8.0 - 8.0

Entrenchment (ACW:FPW ratio): 1.5

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

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

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	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):	509	30.7
Volume (m ³):	442	26.6
Key pieces (>=12m x 0.60m):	10	0.6

HABITAT INVENTORY

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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	5	1.7	0.02	9	0	5	5	0	0	0	90
CASCADE/BOULDERS	1	15	0.7	0.05	11	0	0	5	70	15	10	0
POOL-BACKWATER	4	20	1.9	0.29	35	0	15	58	10	1	3	13
POOL-DAMMED	4	60	5.5	0.88	321	0	8	63	19	5	5	1
POOL-LATERAL SCOUR	42	544	4.8	0.57	2,681	0	6	38	27	8	5	17
POOL-PLUNGE	3	30	5.8	0.70	172	0	3	27	37	18	10	5
PUDDLED UNIT	2	15	2.2	0.33	26	0	5	43	45	5	3	0
RAPID/BEDROCK	6	135	3.6	0.20	629	0	0	8	16	9	5	62
RAPID/BOULDERS	10	135	4.3	0.17	644	0	0	10	48	24	12	7
RIFFLE	31	706	3.5	0.20	2,746	0	1	17	55	10	3	14
RIFFLE W/ POCKETS	3	99	4.5	0.23	444	0	0	26	47	12	12	3
STEP/BEAVER DAM	1	2	4.0	0.20	8	0	0	50	45	5	0	0
STEP/BOULDERS	2	4	4.8	0.23	20	0	0	10	23	18	50	0
STEP/COBBLE	1	2	5.5	0.15	13	0	0	5	65	20	5	5
STEP/LOG	4	5	5.4	0.11	30	0	1	24	53	5	3	15
Total:	115	1,776	4.2	0.37	7,787	0	Avg: 3	28	37	10	6	16

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	8	80	3.7	0.58	356	4.57%	0	0.0
Scour Pools	45	574	4.9	0.58	2,853	36.63%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	34	805	3.6	0.20	3,190	40.96%	0	0.0
Rapids	16	270	4.0	0.18	1,273	16.35%	0	0.0
Cascades	2	20	1.2	0.04	19	0.24%	0	0.0
Step/Falls	8	14	5.1	0.16	71	0.92%	0	0.0
Dry	2	15	2.2	0.33	26	0.33%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
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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:	53	29.8	32.0
Pools >=1m deep:	2	1.1	1.2
Complex pools (LWD pieces>=3):	31	17.5	18.7
Pool frequency (channel widths/pool):	6.8		
Residual pool depth (avg):	0.44		

OREGON DEPT OF FISH AND WILDLIFE
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OREGON PLAN MONITORING SITE
SURVEY DATE: 4/28/2009

COMMENT SUMMARY

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

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	2	SL	00	11	DJ,HS	
1	3	DP	00	22	HS	POOL DAMMED BY DEBRIS JAM, COHO FRY
1	4	RI	01	28		CHANNEL FLOWS UNDER DEBRIS
1	10	LP	01	102		COHO SMOLTS AND FRY
1	15	LP	00	156	HS,DJ,BV	OLD BEAVER STICK
1	16	SD	00	158	BV	OLD BLOWN OUT BEAVER DAM
1	17	DP	00	187	HS	COHO SMOLTS AND FRY
1	19	LP	01	204	HS,/TJ	
1	20	CB	11	204		ACW=0.9M, T=8.5C
1	21	LP	00	212	HS	
1	22	RI	00	229	HS	FLAGGED STEELHEAD REDD
1	25	LP	00	259.2	SS/	
1	28	RR	00	286.2	/SS	
1	29	RB	00	314.2	HS,DJ	
1	31	RI	00	437.2	HS,DJ	
1	33	RP	00	523.2	HS,DJ	STEELHEAD REDD, COHO SMOLT
1	34	RR	01	572.2	/TJ,HS,DJ	
1	36	CR	11	572.2		ACW=2.2M, T=8.5C
1	37	RB	00	605.2		COHO FRY
1	38	LP	00	622.2		COHO FRY
1	40	LP	00	637.2	HS,DJ,SS/	
1	42	LP	00	654.2		STEELHEAD REDD
1	44	RI	00	684.2	HS	
1	46	LP	00	708.5		STEELHEAD REDD
1	49	LP	00	737.5	HS,DJ	

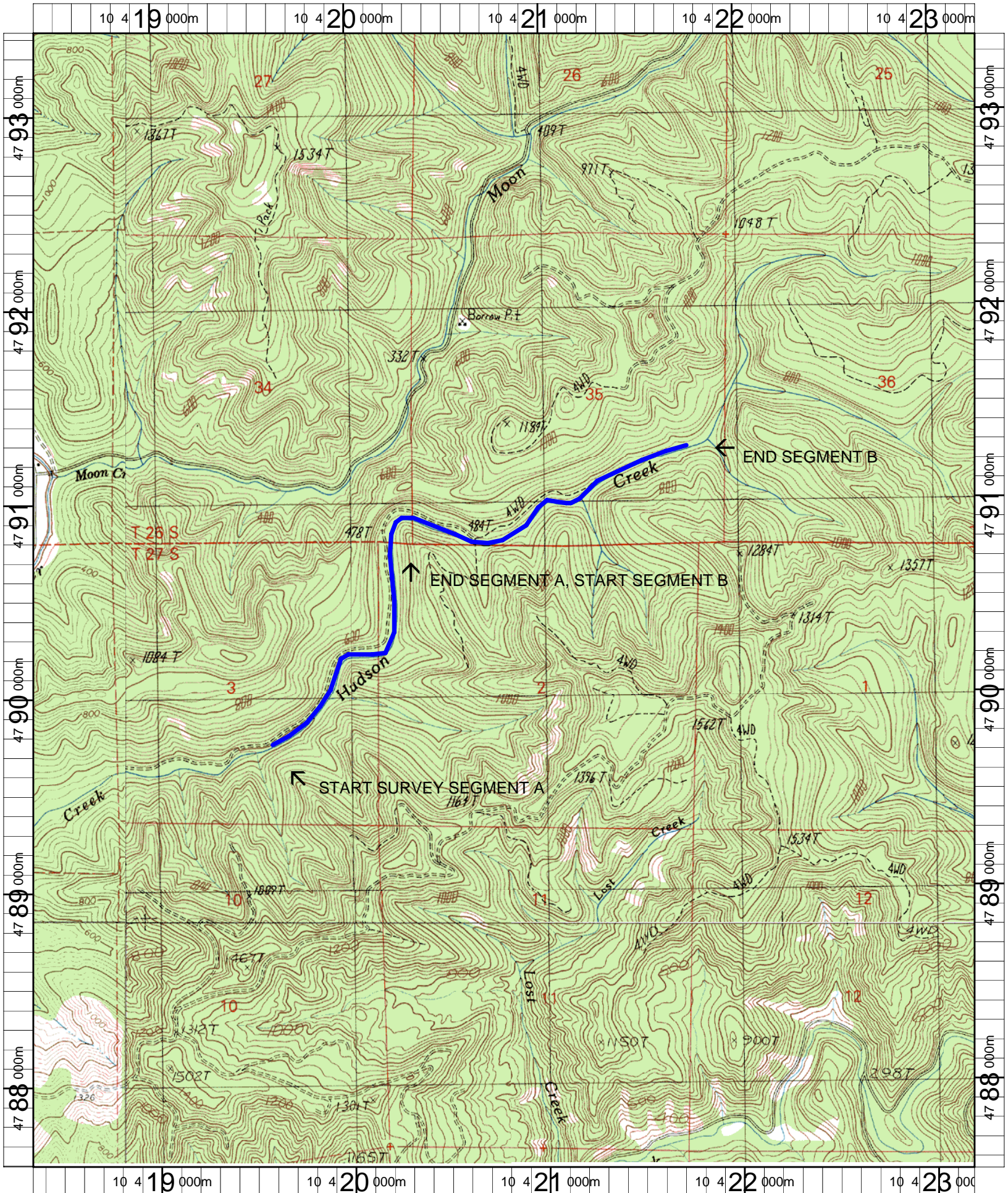
**OREGON DEPT OF FISH AND WILDLIFE
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**OREGON PLAN MONITORING SITE
SURVEY DATE: 4/28/2009**

COMMENT SUMMARY

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

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	56	BW	10	900.5		RESIDENT TROUT
1	61	SL	01	944.8	DJ	
1	62	DP	01	954.8	DJ	
1	70	SL	01	1008.8	DJ,HS	
1	71	DP	01	1018.8	HS	
1	73	LP	02	1018.8	AM	ROUGH-SKINNED NEWT
1	75	LP	02	1018.8	AM	COHO FRY, ROUGH-SKINED NEWT
1	76	LP	02	1018.8		COHO FRY
1	77	PD	02	1018.8		COHO FRY
1	78	RI	00	1045.8	/SS,AM	ROUGH-SKINNED NEWT
1	79	LP	00	1052.8	DJ	
1	84	RI	00	1123.8	/SS	
1	85	LP	00	1142.8	AM	ROUGH-SKINNED NEWT
1	87	LP	00	1158.8	HS,DJ	
1	88	LP	00	1178.8	HS	RESIDENT TROUT
1	92	LP	00	1240.8		COHO FRY
1	94	LP	00	1283.8	/SS	
1	95	RI	00	1305.8	SS/	
1	97	RP	00	1355.8	HS,DJ	
1	100	RP	00	1403.8	SS/	FLAGGED CUTTHROAT REDD
1	102	LP	00	1439.8	HS,DJ	RESIDENT TROUT
1	106	LP	00	1504.8		COHO FRY
1	108	LP	00	1534.8		COHO FRY
1	110	LP	00	1575.8	HS,DJ	
1	114	PP	00	1649.8		COHO FRY



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 A (MS-386) 2009 Winter Habitat Survey Photographs



Upstream view of large wood accumulation near start of survey.



Upstream view of large wood and boulder placement for habitat structure.



Upstream view of stream habitat and riparian.



Upstream view of stream habitat and riparian.



Upstream view at the end of segment A.