

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

STREAM: FISHHAWK CREEK TRIBUTARY
 GCG: 1-NC
 SITE ID: 395
 BASIN: NEHALEM
 TREATMENT DATE: 2008
 SURVEY DATE: 3/27/2009
 SURVEY CREW: Ryan Jacobsen / Miles Johnson
 USGS MAPS: VINEMAPLE
 ECOREGION: Willapa Hills
 REPORT PREPARED BY: Matt Strickland / Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T05S-R07W-S04SE

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Conservation area or wildlife refuge.
 Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh
 Primary channel length (meters) and area (m²): 559 : 1,297
 Secondary channel length (meters) and area (m²) 2 : 4
 VWI average: 14.2 VWI Range: 4 - 20 Average Gradient: 1.1%
 Pieces LWD per 100m: 27.2 Wood Volume (m³) per 100m: 21.2
 Percent pools: 69% Complex pools (LWD pieces>=3): 18 Pools >=1m deep:1
 Percent substrate (avg):

	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	19	33	39	8	1	1
Pool units	21	37	34	7	0	1
Fast water units	11	24	52	12	1	0

SURVEY COMMENTS:

The Fishhawk Creek Tributary survey is post-treatment, restoration site. The crew noted habitat structures throughout the survey reach. They also observed juvenile coho salmon throughout. There were no potential barriers to upstream fish migration observed within the survey reach.

Survey Date: 3/27/2009

Report Date: 2/16/2010

T05S-R07W-S04SE

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	14.2	VWI Range:	4 - 20

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	559	1,297	0
Secondary	2	4	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 2.2	Width: 2.5	3.5 (2.5 - 4.5)	4.9 (3.8 - 6)
Depth: 0.42	Height: 0.4	0.9 (0.6 - 1.1)	1.2 (1.1 - 1.4)

W:D ratio: 6.1

Stream Flow Type:

Average Unit Gradient: 1.1%

Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 9.8

Habitat Units/100m (primary channel length): 9.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	CR	ST
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):	152	27.2
Volume (m ³):	118	21.2
Key pieces (>=12m x 0.60m):	3	0.5

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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	14	2.1	0.10	29	0	0	11	44	33	11	0
POOL-BACKWATER	1	2	2.0	0.30	4	0	50	40	10	0	0	0
POOL-LATERAL SCOUR	35	340	2.4	0.53	881	0	21	36	34	7	0	1
POOL-PLUNGE	1	5	2.7	0.40	14	0	10	60	30	0	0	0
RIFFLE	11	180	1.8	0.23	328	0	12	25	51	12	0	0
RIFFLE W/ POCKETS	2	15	2.4	0.28	37	0	10	25	60	5	0	0
STEP/BOULDERS	1	3	1.5	0.20	5	0	0	10	40	30	20	0
STEP/LOG	3	2	1.8	0.12	3	0	20	40	37	3	0	0
Total:		55	561	2.2	0.42	1,301	0	Avg: 19	33	39	8	1

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	2	2.0	0.30	4	0.31%	0	0.0
Scour Pools	36	345	2.4	0.53	895	68.77%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	13	195	1.9	0.24	365	28.07%	0	0.0
Rapids	0	0			0	0.00%	0	0.0
Cascades	1	14	2.1	0.10	29	2.26%	0	0.0
Step/Falls	4	5	1.8	0.14	8	0.60%	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

FISHHAWK CREEK TRIBUTARY
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REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	37	65.9	66.2
Pools >=1m deep:	1	1.8	1.8
Complex pools (LWD pieces>=3):	18	32.1	32.2
Pool frequency (channel widths/pool):	6.2		
Residual pool depth (avg):	0.34		

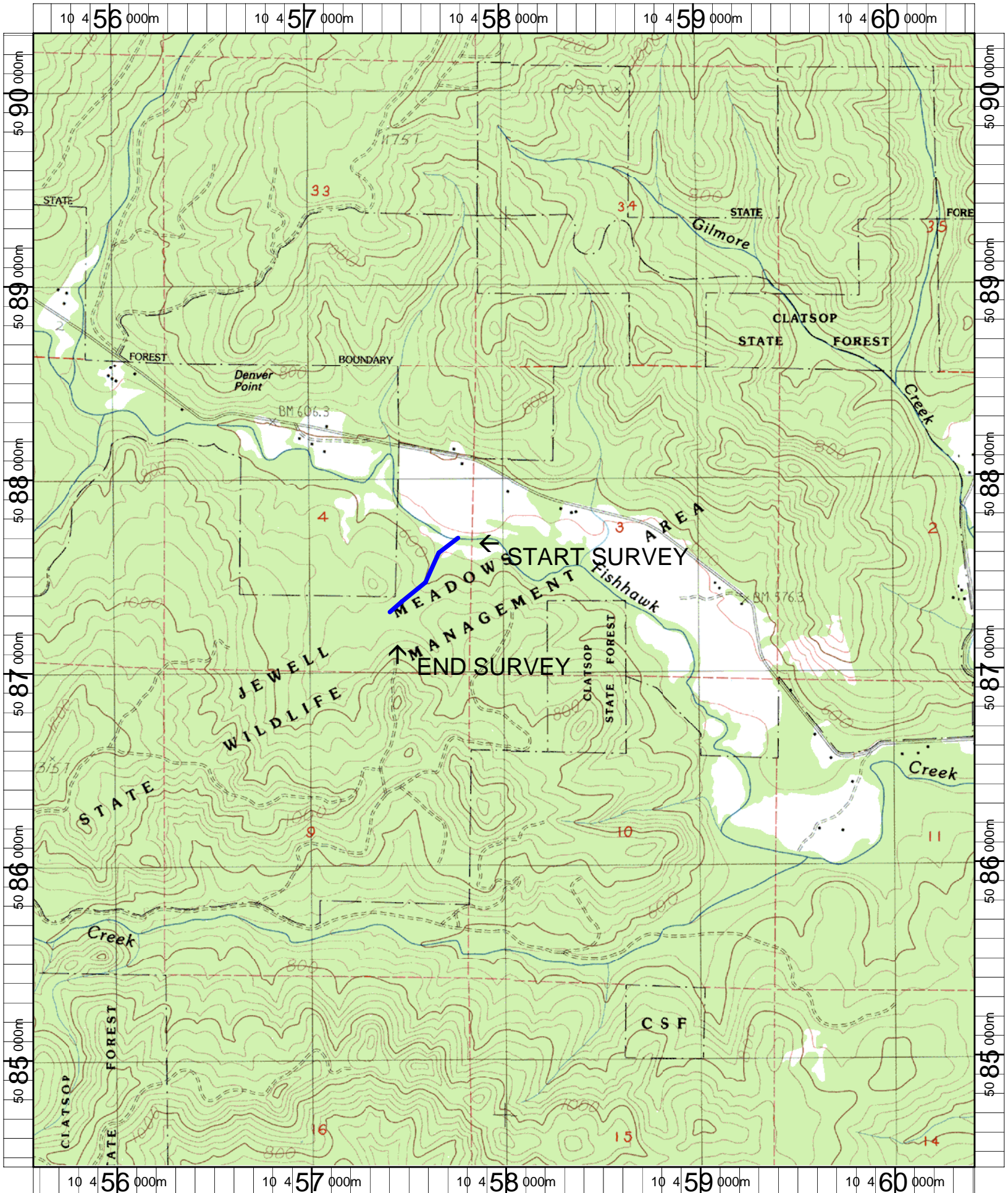
OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 3/27/2009

COMMENT SUMMARY

MONITORING AREA: 1-NC SITE ID: 395 STREAM: FISHHAWK CREEK TRIBUTARY

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RI	00	6		T=6C, CT\CT M50\G CR\LT
1	2	LP	00	16	HS	
1	4	LP	00	58.5	HS	(10) COHO FRY
1	5	LP	00	70.5	HS	
1	10	LP	00	136.5		CT\CT M30\S CR\LT
1	15	RI	00	203.5	HS	
1	16	LP	00	210	HS	
1	17	LP	00	224	HS	(5) COHO FRY
1	19	LP	00	253		CA\CT M30\S CR\LT
1	23	LP	00	288.5	HS	
1	26	LP	00	309.3		(3) COHO FRY
1	27	LP	00	315.7	HS	2M OF UNDERCUT BANK, (5) COHO 65MM
1	29	LP	00	327.7	HS	
1	33	BW	10	351.7	SS\	
1	36	LP	00	379.5	HS,SS\	
1	38	LP	00	392.6	SS\	
1	48	LP	00	467.8		CT\CT D30\S CR\ST
1	49	RP	00	476.8		POCKETS CREATED BY LOGS
1	56	LP	00	559.3		CA\CT D30\S CR\ST



Name: VINEMAPLE
 Date: 1/2/2008
 Scale: 1 inch equals 2000 feet

Location: 10 0458004 E 5087368 N NAD 27
 Caption: FISHHAWK CREEK TRIBUTARY RESTORATION SITE -
 NEHALEM BASIN

Fishhawk Creek Tributary (NC-395) 2009 Winter Habitat Survey Photographs



Unit 1 - A upstream view of the Fishhawk Creek Tributary survey start.



Unit 3 - Large wood placement with debris accumulation.



Unit 56 - Downstream view at the end of the survey.