

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

STREAM: Munson Creek (NC-342)
BASIN: Tillamook River
SURVEY TYPE: Post-Tx
DATE: February 20, 2008
SURVEY CREW: Sharon Tippery, Matt Weeber
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 7.4 km²
USGS MAPS: Beaver
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Munson Creek habitat survey extended 1,744 meters. The channel was constrained by multiple terraces in a broad valley floor. The average valley width index was 11.4 (range: 1-20). Land use for the reach was timber harvest and greenway. The average unit gradient was 3.9 percent. Riffles (47%) and rapids (21%) dominated stream habitat. Cobble (29%), gravel (25%) and sand (17%) dominated stream substrate. Wood volume was 46.3m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey. One inactive landslide was noted on the left bank.

Beaver activity, two redds, a large steelhead, small salmonids, and a fish carcass were observed during the survey.

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

**MUNSON CREEK
GCG: 1-NC SITE ID: 342**

Survey Date: 2/20/2008

Report Date: 5/6/2008

T02S-R09W-S28SE

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	11.4	VWI Range:	1 - 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	1,744	6,861	0
Secondary	374	723	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 8	<u>First Terrace</u> n = 7
Width: 3.5	Width: 5.9	7.4 (5.7 - 10.3)	11.5 (7 - 23)
Depth: 0.38	Height: 0.3	0.6 (0.5 - 0.7)	1.0 (0.75 - 1.15)

W:D ratio: 20.7

Stream Flow Type: MF

Average Unit Gradient: 3.9%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.3

Habitat Units/100m (total channel length): 5.5

Habitat Units/100m (primary channel length): 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	GN
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):	414	23.7
Volume (m ³):	808	46.3
Key pieces (>=12m x 0.60m):	45	2.6

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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	2	14	1.0	0.10	13	0	8	45	13	15	5	15
CASCADE/BOULDERS	7	161	1.6	0.16	302	0	4	14	11	35	37	0
POOL-ALCOVE	2	9	2.4	0.43	22	0	88	10	3	0	0	0
POOL-BACKWATER	7	18	2.3	0.43	37	0	37	35	21	5	2	0
POOL-DAMMED	4	39	6.4	0.71	248	0	25	42	19	9	5	1
POOL-ISOLATED	2	11	1.5	0.33	19	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	29	322	3.5	0.70	1,157	0	6	20	38	25	7	3
POOL-PLUNGE	2	11	4.8	0.63	52	0	13	43	28	13	5	0
POOL-STRAIGHT SCOUR	6	50	4.3	0.78	241	0	6	20	28	33	13	0
PUDDLED UNIT	2	59	0.6	0.05	36	0	25	65	10	0	0	0
RAPID/BEDROCK	1	43	1.5	0.20	65	0	30	10	5	5	0	50
RAPID/BOULDERS	11	466	3.1	0.20	1,583	0	1	4	14	46	36	0
RIFFLE	31	889	3.6	0.18	3,633	0	6	9	31	40	10	4
STEP/BEAVER DAM	1	1	2.0	0.20	2	0	50	10	20	20	0	0
STEP/BEDROCK	2	3	2.3	0.05	8	0	50	0	0	0	0	50
STEP/BOULDERS	1	1	6.0	0.10	6	0	0	0	0	50	50	0
STEP/COBBLE	4	19	8.1	0.14	136	0	0	0	13	68	20	0
STEP/LOG	3	5	5.2	0.27	28	0	39	21	15	3	0	22
Total:	117	2,119	3.5	0.38	7,585	0	Avg: 13	17	25	29	12	4

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	15	76	3.3	0.49	325	4.29%	0	0.0
Scour Pools	37	383	3.7	0.71	1,449	19.11%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	31	889	3.6	0.18	3,633	47.90%	0	0.0
Rapids	12	509	3.0	0.20	1,647	21.72%	0	0.0
Cascades	9	175	1.4	0.14	315	4.15%	0	0.0
Step/Falls	11	28	5.5	0.16	179	2.36%	0	0.0
Dry	2	59	0.6	0.05	36	0.47%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

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POOL SUMMARY

	<u>Total</u>	<u>Total of all Channel Lengths # / Km</u>	<u>Primary Channel Length # / Km</u>
All Pools:	52	24.5	29.8
Pools >=1m deep:	5	2.4	2.9
Complex pools (LWD pieces>=3):	19	9.0	10.9
Pool frequency (channel widths/pool):	6.9		
Residual pool depth (avg):	0.42		

COMMENT SUMMARY

MONITORING AREA: 1-NC SITE ID: 342 STREAM: MUNSON CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	14	HS	
2	BW	10	14	HS	ON LEFT
3	RI	00	56	HS	
4	LP	00	76	HS	
5	RI	00	136	HS, BC	
9	SP	00	165.8	HS,BC	SCOURED OUT BY LARGE HABITAT LOG
12	RI	01	229.8	HS, TJ/	
13	CB	11	229.8		ACW=0.65M
15	RI	00	294.3	SS/	
16	LP	00	300.6	HS	
19	SD	01	341.6	BV, BD	
22	RI	01	367.9	/SS, BC	
23	LP	02	367.9	BC	PRIVATE DRIVEWAY
24	CR	02	367.9	BV	
26	LP	02	367.9	BV	
27	RI	00	397.9		BLOW DOWN
28	LP	00	404.9		MORE BLOW DOWN
32	RI	01	510.9	/TJ	STEELHEAD BIG MALE
33	RB	11	510.9	HS	MUNSON CREEK TRIB A, ACW=3.8M
34	RI	00	538.9	HS	
35	LP	00	544.9	HS	
36	RI	00	587.9	HS	

COMMENT SUMMARY

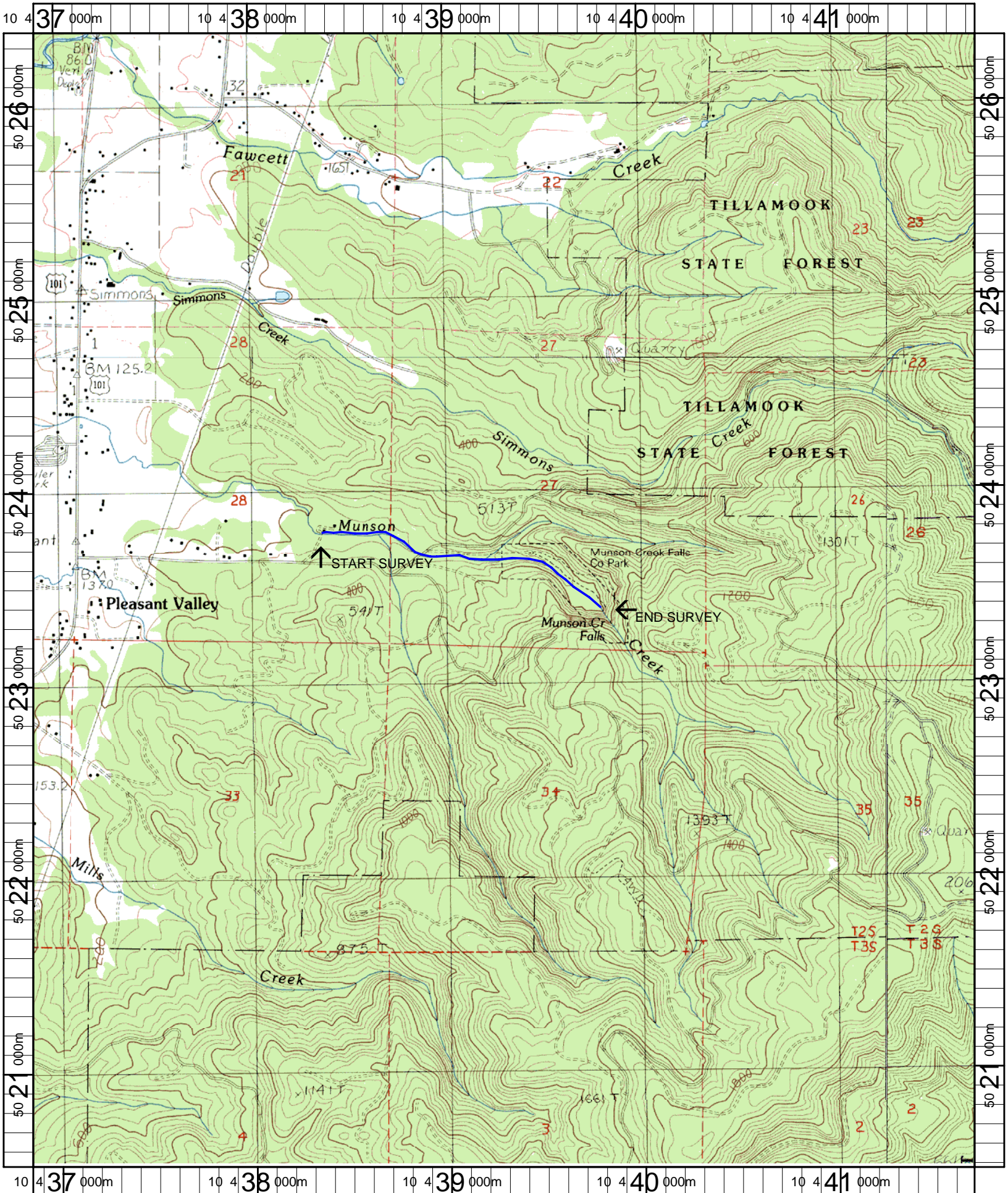
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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
37	LP	00	597.4	HS	
38	RI	00	633.4	HS, SS/	
39	LP	00	641.4	HS	
40	RI	01	718.4	HS, BC	
42	RI	01	780.4	/TJ	CHANNEL SPLIT
45	LP	01	791.4		HARDPAN
46	RI	01	815.4		FISH CARCASS SP?
57	RI	02	823.9	HS	
58	SR	03	823.9		STEPS INTO UNIT 47
61	RI	01	851.6	SS/	
62	LP	01	862.6	BC	MUNSON CREEK ROAD
63	RB	04	862.6	/TJ	
65	RI	04	862.6	/SS	
68	RB	00	1027.6	SS/	
71	LP	00	1051.6		BEDROCK HILLSLOPE ON RIGHT, MAJOR BLOW DOWN ACTION
72	RI	00	1069.6	/SS	
73	LP	01	1074.6	/TJ	
74	CB	11	1074.6		ACW=1.8M
77	BW	10	1097.1		FORMED BY LARGE DEBRIS JAM
78	LP	01	1114.9	BV	REDD AT POOL TAIL
79	PD	02	1114.9	BV	ACW=1.5M
85	BW	10	1195	/SS	

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
87	RI	00	1203		RUNS THROUGH LARGE DEBRIS JAM
89	RI	01	1238.5	TJ/, HS	
90	RB	11	1238.5		MUNSON CREEK TRIB B
92	LP	00	1254		FRESH REDD AT TAIL SPILL
101	LP	01	1307.5		SMALL SALMONIDS PRESENT(4), 100-200MM
104	LP	00	1342.2	BV	
105	LP	00	1352.4	BV	
106	RI	00	1364.4	/SS	
115	SP	00	1634.3	LI/	



Name: BEAVER
 Date: 1/3/2007
 Scale: 1 inch equals 2000 feet

Location: 10 439294 E 5023428 N
 Caption: MUNSON CREEK RESTORATION SITE - TILLAMOOK BASIN