

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

STREAM: Munson Creek (NC-342)  
BASIN: Tillamook River  
SURVEY TYPE: Pre-Tx  
DATE: February 13, 2007  
SURVEY CREW: Matthew Strickland, Sharon Tippery  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 7.4 km<sup>2</sup>  
USGS MAPS: Beaver  
ECOREGION: Coast Range Coastal Uplands

**GENERAL DESCRIPTION:**

The Munson Creek habitat survey extended 1,798 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 11 (range: 2.5-17). Land use for the reach was timber harvest and designated wilderness area. The average unit gradient was 2.3 percent. Riffles (50%) and scour pools (32%) dominated stream habitat. Gravel (40%) and sand (30%) dominated stream substrate. Wood volume was low at 15.1 m<sup>3</sup>/100m.

**COMMENTS:**

There were no potential barriers to upstream fish migration in the surveyed length. A culvert crossing was recorded at 684 meters into the survey reach.

Minimal beaver activity was noted in the survey. A downy woodpecker, deer trails, and a juvenile Cutthroat trout were observed during the survey.

REACH 1

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	11.0	VWI Range:	2.5 - 17

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 Channel	1,798	7,436	1
Secondary Channel	149	246	1
Off-Channel Units	75	136	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 7
Width: 3.6	Width: 5.8	11.2 ( 6.2 - 27.4 )	22.0 ( 9.8 - 30 )
Depth: 0.36	Height: 0.5	0.9 ( 0.8 - 1 )	1.1 ( 0.95 - 1.2 )

W:D ratio: 13.1

Entrenchment (ACW:FPW ratio): 1.9

Stream Flow Type: MF

Habitat Units/100m (total channel length): 7.0

Average Unit Gradient: 2.3%

Habitat Units/100m (primary channel length): 7.8

Water temperature (°C): 8.0 - 8.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	WA
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):	269	15.0
Volume (m <sup>3</sup> ):	271	15.1
Key pieces (>=12m x 0.60m):	10	0.6

OREGON DEPT OF FISH AND WILDLIFE

MUNSON CREEK PRE-TX (1-NC, 342)

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

2/13/2007

REACH 1		T02S-R09W-S28SE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	2	18	2.2	0.14	38	0	0	10	32	44	15	0
CULVERT CROSSING	1	10	1.1	0.20	11	0	0	57	33	5	5	0
DRY UNIT	1	13	3.0	0.00	38	0	20	80	0	0	0	0
POOL-DAMMED	1	7	4.2	0.65	31	0	15	45	35	5	0	0
POOL-LATERAL SCOUR	59	567	3.8	0.57	2,273	0	12	43	33	10	2	0
POOL-PLUNGE	5	49	4.8	0.66	266	0	16	42	33	7	3	0
PUDDLED UNIT	1	52	0.9	0.25	44	0	25	65	10	0	0	0
RAPID/BOULDERS	15	270	3.5	0.19	1,001	0	2	13	43	32	10	0
RIFFLE	39	984	3.5	0.18	3,894	0	3	19	53	23	2	0
STEP/BOULDERS	1	3	2.9	0.10	8	0	0	0	18	32	50	0
STEP/COBBLE	13	39	3.9	0.13	172	0	2	13	40	40	5	0
STEP/LOG	3	10	3.3	0.15	43	0	0	21	59	20	0	0
<b>Total:</b>	141	2,021	3.6	0.36	7,818	0	<b>Avg:</b> 7	30	40	19	4	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	1	7	4.2	0.65	31	0.39%	0	0.0	
Scour Pools	64	616	3.8	0.58	2,539	32.48%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	39	984	3.5	0.18	3,894	49.81%	0	0.0	
Rapids	15	270	3.5	0.19	1,001	12.80%	0	0.0	
Cascades	2	18	2.2	0.14	38	0.49%	0	0.0	
Step/Falls	17	52	3.8	0.13	223	2.85%	0	0.0	
Dry	2	64	1.9	0.13	81	1.04%	0	0.0	
Culverts	1	10	1.1	0.20	11	0.14%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	65	32.2	36.2
Pools >=1m deep:	6	3.0	3.3
Complex pools (LWD pieces>=3):	22	10.9	12.2
Pool frequency (channel widths/pool):	5.3		
Residual pool depth (avg):	0.41		

# Comment Summary

## Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC      SITE ID: 342      MUNSON CREEK PRE-TX

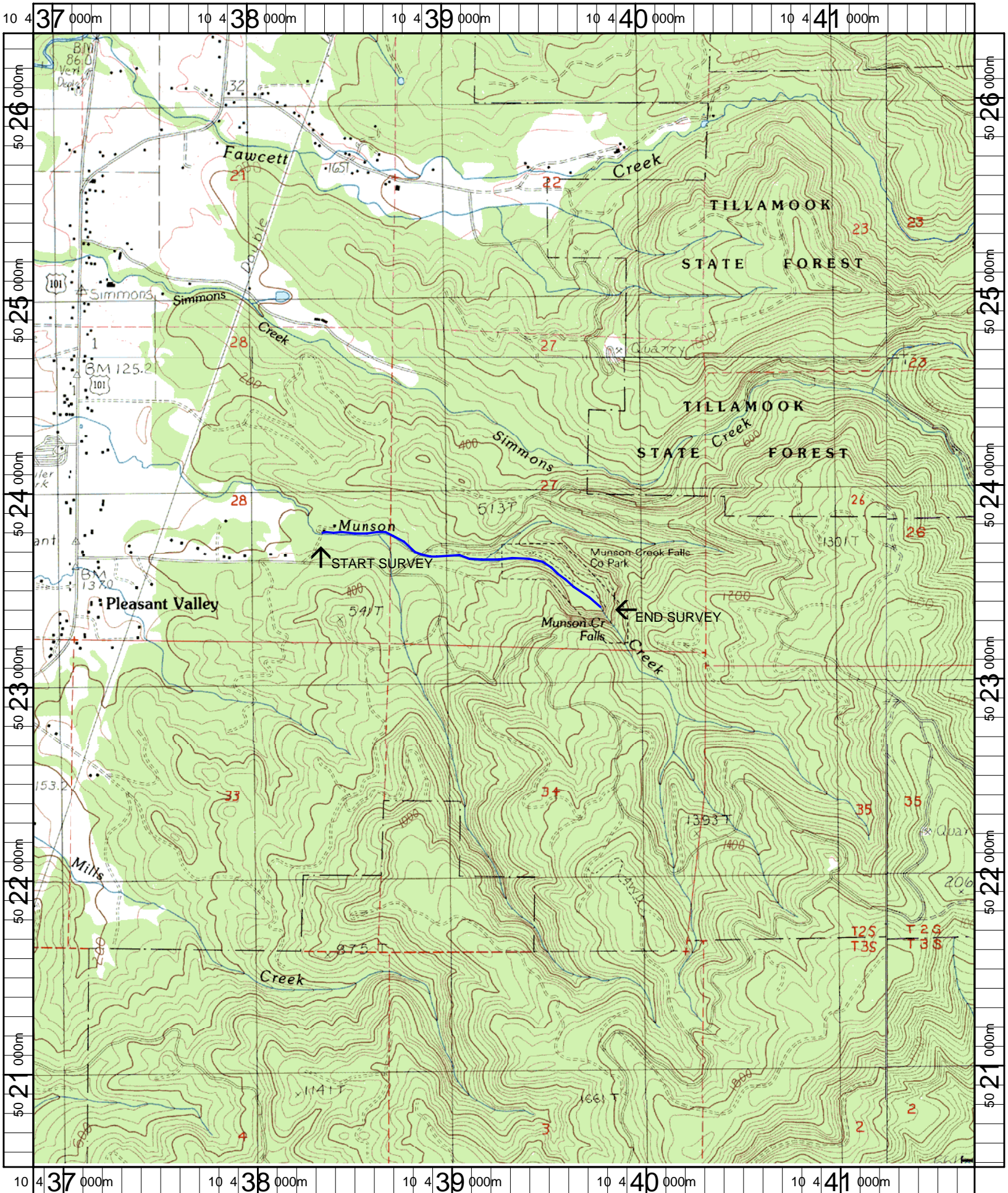
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
4	RI	00	125.2	BC	LOGGING ROAD
12	SL	01	218.5	TJ/	
13	RB	11	218.5		ACW=1.0, T=8.5
24	LP	05	340.1		FISH
26	LP	05	340.1	/SS	
28	LP	00	370.2	BV	
30	RB	00	422.3	WL	DOWNY WOODPECKER
32	LP	00	456.3	WL	DEER TRAIL
34	LP	01	488.8	/TJ	
35	RB	11	488.8		ACW=3.5, T=8.0
41	LP	00	583.8	WL	DEER TRAIL
48	CC	00	684.6	CC	
54	LP	01	755.4	/TJ	
55	RI	11	755.4		ACW=3.3, T=8.5
57	LP	01	788.9	DJ	
63	LP	02	795.3		CUTTHROAT JUV
75	RI	00	1031.9	SS/, SS/	
76	RI	00	1053.9		RIGHT CLEARCUT
82	LP	00	1094.6	DJ	
83	RI	01	1116.1	DJ, /TJ	
97	LP	01	1249.8	TJ/	

# Comment Summary

## Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC      SITE ID: 342      MUNSON CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
98	RI	11	1249.8		ACW=3.0, T=8.5
106	LP	00	1329.6	/SS	
107	RI	00	1353.3	BV	
111	RI	00	1398.6	/SS	
139	PP	00	1787.2	CS/	ROCK, WIRE FOR TRAIL



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