

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

STREAM: Munson Creek Tributary B (N-344)
BASIN: Tillamook River
SURVEY TYPE: Pre-Tx
DATE: August 6, 2007
SURVEY CREW: Lanoah Babcock, Kara Morris
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 0.6 km²
USGS MAPS: Beaver
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Munson Creek Tributary B habitat survey extended 501 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.9 (range: 1.0-6.0). Land use for the reach was large (30-50 cm dbh) trees and timber harvest. The average unit gradient was 8.5 percent. Rapids (95%) dominated stream habitat. Gravel (55%) and cobble (21%) dominated stream substrate. Wood volume was moderate at 28.6 m³/100m.

COMMENTS:

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

OREGON DEPT OF FISH AND WILDLIFE MUNSON CREEK TRIBUTARY B PRE-TX (1-NC, 344)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date: 8/6/2007

REACH 1

T02S-R09W-S27SW

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	3.9	VWI Range:	1 - 6

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 Channel	501	765	0
Secondary Channel	0	0	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 4	<u>First Terrace</u> n = 3
Width: 1.4	Width: 3.2	7.3 (4.5 - 13.4)	8.9 (6 - 13.8)
Depth: 0.06	Height: 0.4	0.8 (0.7 - 0.8)	1.0 (0.85 - 1.2)

W:D ratio: 8.5 Entrenchment (ACW:FPW ratio): 2.3
Stream Flow Type: LF Habitat Units/100m (total channel length): 8.6
Average Unit Gradient: 8.5% Habitat Units/100m (primary channel length): 8.6
Water temperature (°C): 13.0 - 13.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	TH
Riparian Vegetation:	S	

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	35%	Reach avg: 91%
Undercut Banks:	2%	Range: 78 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	97	19.3
Volume (m ³):	143	28.6
Key pieces (>=12m x 0.60m):	4	0.8

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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
CULVERT CROSSING	1	10	0.4	0.05	4	0	0	0	0	100	0	0
POOL-PLUNGE	2	4	2.5	0.38	10	0	19	23	55	3	0	0
RAPID/BOULDERS	25	468	1.5	0.05	727	31	6	18	55	20	2	0
STEP/COBBLE	6	11	1.3	0.03	17	0	0	7	50	42	1	0
STEP/LOG	9	9	0.9	0.02	7	0	6	22	64	7	0	0
Total:	43	501	1.4	0.06	765	31	Avg: 6	17	55	21	1	0

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	0	0			0	0.00%	0	0.0	
Scour Pools	2	4	2.5	0.38	10	1.28%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	0	0			0	0.00%	0	0.0	
Rapids	25	468	1.5	0.05	727	95.10%	31	4.3	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	15	20	1.0	0.03	24	3.10%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	10	0.4	0.05	4	0.51%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	<u>Total of all Channel Lengths # / Km</u>	<u>Primary Channel Length # / Km</u>
All Pools:	2	4.0	4.0
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	78.3		
Residual pool depth (avg):	0.35		

Survey Date 8/6/2007
Report Date: 11/7/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	102
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	163
Total conifers >35" dbh/1000 ft	122

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0
15-30cm	0.0	0.0	0.7	0.3	1.0	0.0	1.7	0.3
30-50cm	0.0	0.0	0.7	0.0	0.0	0.3	0.7	0.3
50-90cm	0.0	0.0	0.0	1.0	0.7	0.0	0.7	1.0
>90cm	0.0	0.0	0.3	0.0	1.7	0.0	2.0	0.0
Total/100m2	0.0	0.0	1.7	1.3	3.7	0.3	1.8	0.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	63		63		71	
Shrub cover	76		55		33	
Grass/forb cover	11		26		23	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		100		100	
High terrace	50		0		0	
Low terrace	0		0		0	
Floodplain	17		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	16		67		62	

Summary of Riparian Zone (0-30m) for all reaches 3 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	102
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	163
Total conifers >35" dbh/1000 ft	122

Average number of trees in a 5-m wide band

Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	0.0
15-30cm	1.7	0.3
30-50cm	0.7	0.3
50-90cm	0.7	1.0
>90cm	2.0	0.0

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GCG: 1-NC SITE ID: 344

RIPARIAN ZONE VEGETATION

Reach 1

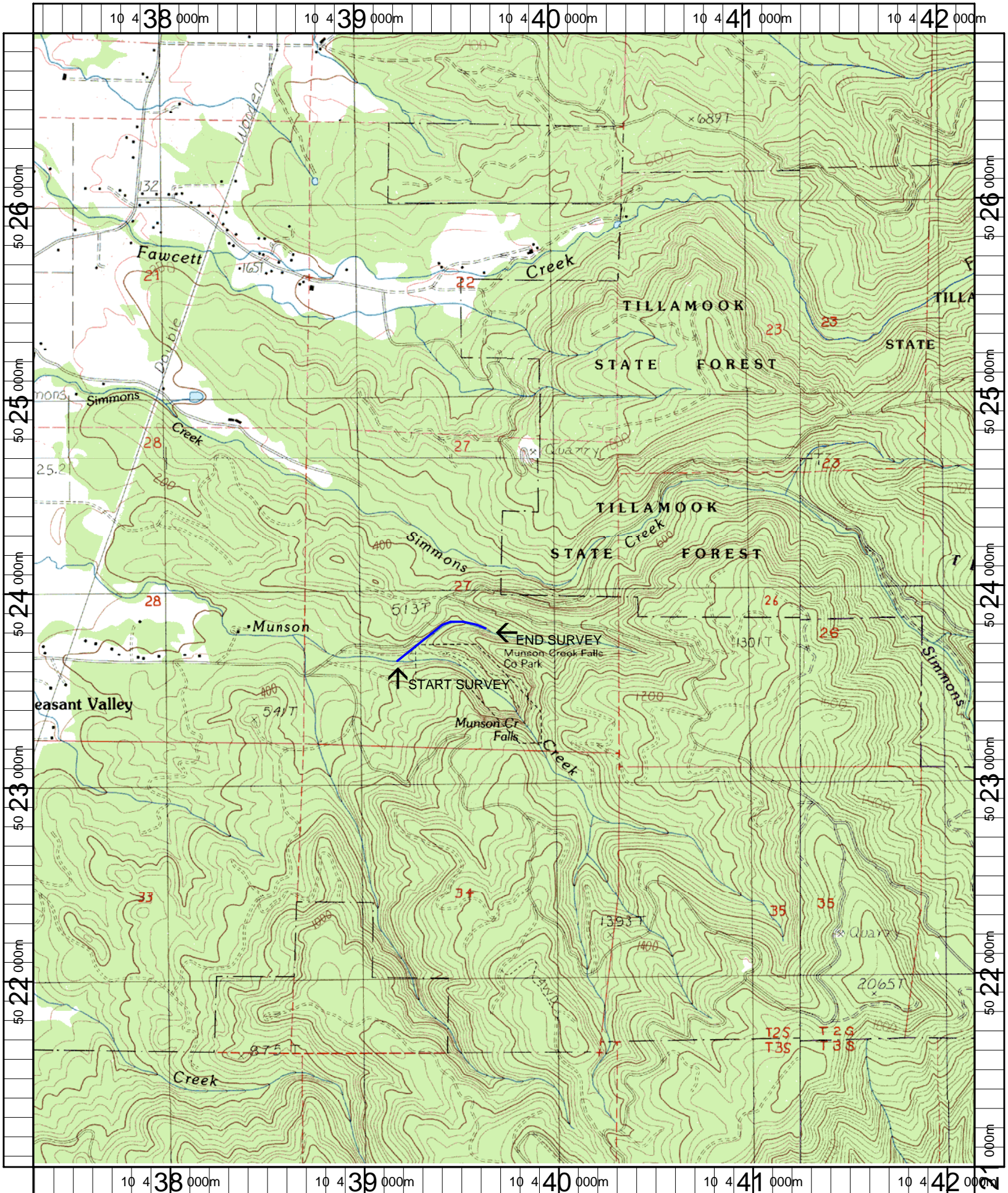
Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LT	1	HT	0	95	95	5	Conifer							CANOPY FROM SALMONBERRY
								Hardwood							
10	LT	2	HS	60	95	15	45	Conifer		2				1	
								Hardwood					1		
10	LT	3	HS	75	90	35	40	Conifer						2	BLUE HUCKLEBERRIES
								Hardwood							HILLSLOPE
10	RT	1	HT	0	80	95	5	Conifer							SALMONBERRY CANOPY
								Hardwood							
10	RT	2	HS	48	60	35	45	Conifer			2				SALMONBERRY
								Hardwood							Y
10	RT	3	HS	45	85	5	45	Conifer	1			1	3		
								Hardwood							
19	LT	1	HS	18	45	85	10	Conifer							
								Hardwood							
19	LT	2	HS	75	75	90	10	Conifer							NO TREES
								Hardwood							
19	LT	3	HS	65	65	20	10	Conifer		2					
								Hardwood			1				
19	RT	1	FP	0	45	90	5	Conifer							SALMONBERRY COVERS
								Hardwood							
19	RT	2	HS	75	30	75	15	Conifer							SALMONBERRY COVERS
								Hardwood							HILLSLOPE.
19	RT	3	HS	80	65	70	10	Conifer					1		
								Hardwood							
28	LT	1	HS	75	65	25	20	Conifer							NO TREES
								Hardwood							SALMONBERRY AND VINEM
28	LT	2	HS	80	45	35	20	Conifer							
								Hardwood		1		2			
28	LT	3	HS	65	70	40	20	Conifer		1					ESTIMATE
								Hardwood							
28	RT	1	HT	0	50	65	20	Conifer							SALMONBERRY
								Hardwood							VINEMAPLE
28	RT	2	HS	65	75	80	20	Conifer							
								Hardwood							
28	RT	3	HS	40	50	30	15	Conifer							
								Hardwood							

COMMENT SUMMARY

MONITORING AREA: 1-NC SITE ID: 344 STREAM: MUNSON CREEK TRIBUTARY B PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
5	RB	00	29.1		JUV FISH
6	SC	00	29.3		.8X.8 METAL BOTTOM-CORRUGATED
7	CC	00	39.1	CC	
8	RB	00	60.3		JUV FISH
11	RB	00	108.8		LOGGING ACTIVITY FOR RESTORATION?
12	RB	00	125.2		JUV FISH-DACE
14	RB	00	150.1	WL	TRAIL
17	RB	00	197.7		ORANGE FLAGGING-NO WRITING
18	RB	00	222.7	AM	FROG
21	SC	00	276.4		LOG ASSOCIATED WITH SC
24	RB	00	313.7	WL	TRAIL
26	SL	00	345.7		WATER FLOWS UNDER LOG
31	RB	00	384		JUV FISH
40	RB	00	456.85		JUV FISH



Name: BEAVER
 Date: 1/9/2007
 Scale: 1 inch equals 2000 feet

Location: 10 439744 E 5023946 N
 Caption: MUNSON CREEK TRIBUTARY B RESTORATION SITE -
 TILLAMOOK BASIN