

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

STREAM: Munson Creek Tributary A (N-343)
BASIN: Tillamook River
SURVEY TYPE: Pre-Tx
DATE: July 31, 2007
SURVEY CREW: Lanoah Babcock, Kara Morris
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 1.9 km²
USGS MAPS: Beaver
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Munson Creek Tributary A habitat survey extended 787 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 9.1 (range: 1.0-20.0). Land use for the reach was timber harvest and large (30-50 cm dbh) trees. The average unit gradient was 5.8 percent. Rapids (93%) dominated stream habitat. Cobble (40%) and gravel (31%) dominated stream substrate. Wood volume was low at 10.2 m³/100m.

COMMENTS:

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

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	9.1	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 Channel	787	2,305	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 = 5	<u>First Terrace</u> n = 3
Width: 2.8	Width: 4.1	6.3 (4.6 - 9.2)	13.5 (6.7 - 24.9)
Depth: 0.20	Height: 0.3	0.6 (0.6 - 0.6)	0.8 (0.7 - 0.9)

W:D ratio: 13.8

Entrenchment (ACW:FPW ratio): 1.6

Stream Flow Type: LF

Habitat Units/100m (total channel length): 4.3

Average Unit Gradient: 5.8%

Habitat Units/100m (primary channel length): 4.3

Water temperature (°C): 12.0 - 12.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	LT
Riparian Vegetation:	M15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	18%	Reach avg: 80%
Undercut Banks:	6%	Range: 47 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	80	10.2
Volume (m ³):	80	10.2
Key pieces (>=12m x 0.60m):	2	0.3

OREGON DEPT OF FISH AND WILDLIFE MUNSON CREEK TRIBUTARY A PRE-TX (1-NC, 343)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

7/31/2007

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 ²)	Large Boulders (#>0.5m)	Substrate					
							Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CULVERT CROSSING	2	31	1.1	0.09	31	0	0	15	25	40	20	0
POOL-LATERAL SCOUR	3	19	2.7	0.35	50	0	5	29	38	24	3	0
POOL-PLUNGE	2	10	5.1	0.75	51	0	2	28	35	23	12	0
POOL-STRAIGHT SCOUR	1	8	2.3	0.35	18	0	0	16	32	53	0	0
RAPID/BOULDERS	22	715	3.0	0.15	2,147	64	0	9	32	44	15	0
STEP/COBBLE	4	4	1.6	0.07	7	2	2	16	25	33	24	0
Total:	34	787	2.8	0.20	2,305	66	Avg: 1	14	31	40	15	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	6	37	3.4	0.48	120	5.19%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	0	0			0	0.00%	0	0.0	
Rapids	22	715	3.0	0.15	2,147	93.17%	64	3.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	4	1.6	0.07	7	0.29%	2	29.5	
Dry	0	0			0	0.00%	0	0.0	
Culverts	2	31	1.1	0.09	31	1.35%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	<u>Total of all Channel Lengths # / Km</u>	<u>Primary Channel Length # / Km</u>
All Pools:	6	7.6	7.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	31.7		
Residual pool depth (avg):	0.42		

Survey Date 7/31/2007
Report Date: 11/7/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	894
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

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	0.3	0.0	1.7	0.3	1.0	0.3	3.0
15-30cm	0.7	0.3	0.0	1.0	0.0	3.3	0.7	4.7
30-50cm	0.7	1.0	0.0	1.3	0.3	2.3	1.0	4.7
50-90cm	0.0	2.0	0.0	0.3	0.0	0.0	0.0	2.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.3	3.7	0.0	4.3	0.7	6.7	0.7	4.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	59		52		58	
Shrub cover	63		43		28	
Grass/forb cover	30		34		34	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	50		67		83	
High terrace	33		33		17	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	18		13		22	

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	894
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

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	3.0
15-30cm	0.7	4.7
30-50cm	1.0	4.7
50-90cm	0.0	2.3
>90cm	0.0	0.0

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HABITAT INVENTORY Report Date: 11/14/2007

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GCG: 1-NC SITE ID: 343

RIPARIAN ZONE VEGETATION

Reach 1

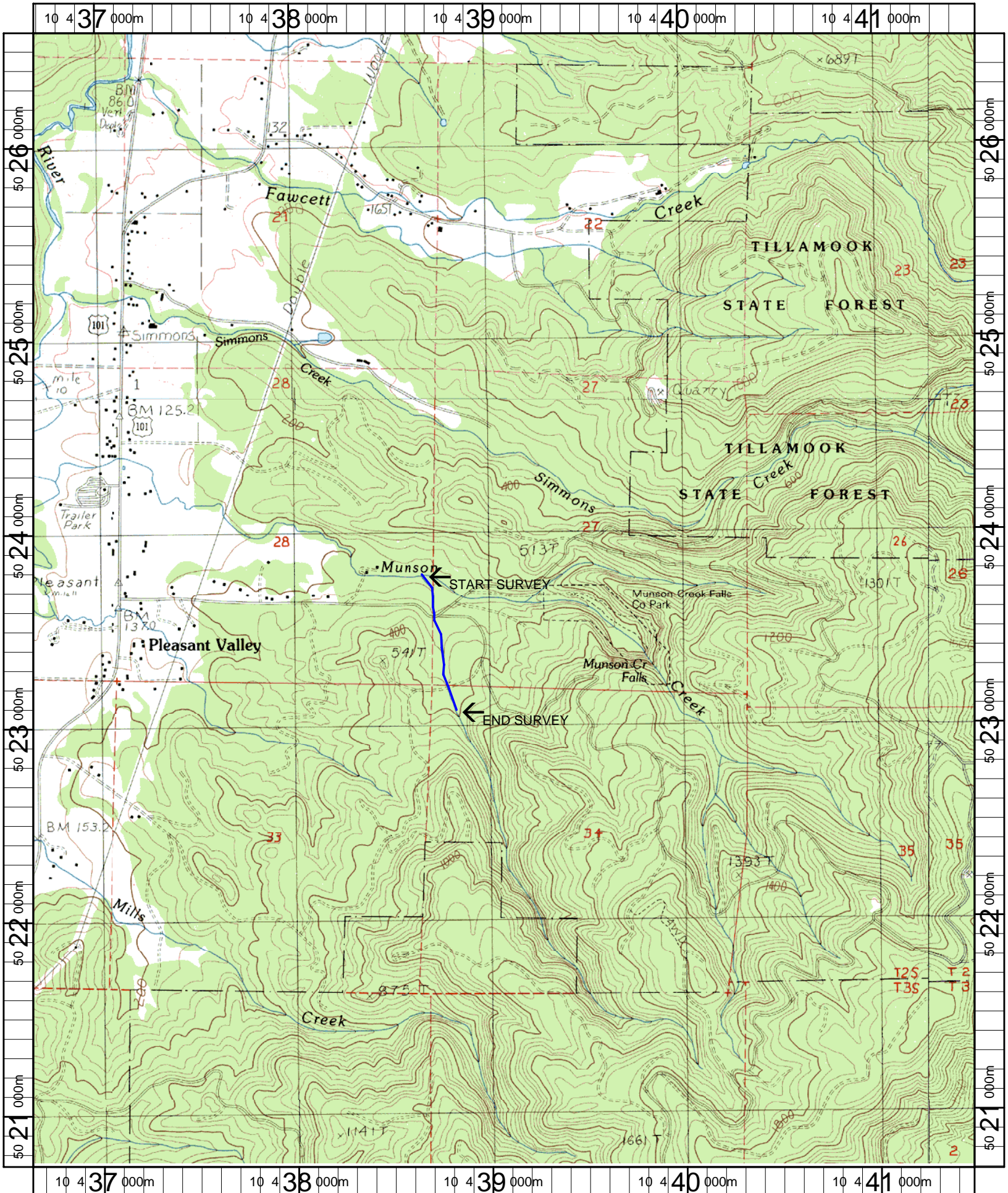
Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
16	LT	1	HT	0	95	40	55	Conifer							
								Hardwood		1	2	2			
16	LT	2	HT	0	100	40	50	Conifer							
								Hardwood	3	2	1	1			
16	LT	3	HT	0	100	50	40	Conifer							
								Hardwood	2	4	2				
16	RT	1	HT	0	75	90	10	Conifer							
								Hardwood							
16	RT	2	HT	0	80	90	10	Conifer							
								Hardwood	2						
16	RT	3	HS	70	95	15	50	Conifer	1		1				
								Hardwood		1	1				
21	LT	1	HS	60	40	0	60	Conifer		2	2				
								Hardwood							
21	LT	2	HS	15	0	0	40	Conifer							CLEAR CUT
								Hardwood							
21	LT	3	HS	17	0	0	35	Conifer							CLEAR CUT
								Hardwood							
21	RT	1	HS	12	55	70	30	Conifer							
								Hardwood				1			
21	RT	2	HS	15	60	40	50	Conifer							
								Hardwood			1				
21	RT	3	HS	15	75	35	25	Conifer							CLEAR CUT
								Hardwood		4	1				JUST BEYOND 30M
32	LT	1	HS	35	75	80	20	Conifer							
								Hardwood	1			2			
32	LT	2	HS	10	70	70	30	Conifer							
								Hardwood		1	2				
32	LT	3	HS	12	80	60	40	Conifer							
								Hardwood	1	1	3				
32	RT	1	LT	0	15	95	5	Conifer							
								Hardwood			1	1			
32	RT	2	HS	35	0	15	25	Conifer							CLEARCUT
								Hardwood							
32	RT	3	HS	15	0	10	15	Conifer							CLEARCUT
								Hardwood							

COMMENT SUMMARY

MONITORING AREA: 1-NC SITE ID: 343 STREAM: MUNSON CREEK TRIBUTARY A PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
3	RB	00	45.2		GD TRIB LWD NUMBER 1
4	RB	00	70.5		ANOTHER PINK FLAG ON NEXT UNIT. CLEARCUT ON RIGHT
6	RB	00	109.4		CLEARCUT ON RIGHT
9	RB	00	184.4		ANOTHER PINK FLAG
10	RB	00	199		TLINE PT2 MD/AB 9-13-06
11	SP	00	207		FISH
13	PP	00	241.1	CC	WATER FLOWS UNDER CULVERT. MUNSON FALLS ROAD.
14	SC	00	241.7	CC	
15	CC	00	254.5	CC	1.1 X 1.7, METAL BOTTOM FLOWS UNDER ROAD.
16	RB	00	304.5		PINK FLAG GD NUMBER 6 LWD
17	RB	00	356.5		LWD PINK FLAG NUMBER 8
20	RB	00	463.9		PINK FLAG
21	RB	00	513.9		RIPARIAN NUMBER 2
24	RB	00	591.4		UNKNOWN FISH
29	PP	00	676.7	CE	
30	SC	00	677.4	CE	1X1 METAL BOTTOM
31	CC	00	695.4	CC	ESTIMATED LENGTH CULVERT FULL AT TOP HAS 0.7M OF OPEN ROOM FOR FL
32	RB	00	735.4	DJ	BLOW DOWN
33	RB	00	736.7		CHANNEL SPLITS BUT NOT TRUE CHANNEL . SAW A FISH.
34	RB	00	786.7		END SIGN ON RIGHT BANK ALDER 30-50



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

Location: 10 439082 E 5023645 N
 Caption: MUNSON CREEK TRIBUTARY A RESTORATION SITE -
 TILLAMOOK BASIN