

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 5, 2006
SURVEY CREW: Gordon Rose, Ben Walczak
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 817 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 3.4 (range: 2.0-5.0). Land use for the reach was timber harvest. The average unit gradient was 5.3 percent. Rapids (93%) dominated stream habitat. Cobble (33%) and gravel (30%) dominated stream substrate. Wood volume was low at 10.8 m³/100m.

COMMENTS:

There were three potential barriers to upstream fish migration in the surveyed length. The first was a 0.6 m high step over log at unit 28 (671 m). The second was a 0.6 m high step to a culvert, and a high gradient culvert at unit 32 (716 m). The third was a 0.6 m step over log at unit 35 (760 m).

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

HABITAT INVENTORY

Report Date: 2/27/2007

Survey Date: 7/5/2006

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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	3.4	VWI Range:	2 - 5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	817	3,038	0
Secondary Channel	38	75	1
Off-Channel Units	2	4	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 3.5	Width: 5.6	6.9 (6.2 - 8.4)	8.4 (7.4 - 9.5)
Depth: 0.16	Height: 0.4	0.8 (0.6 - 0.9)	1.1 (1 - 1.1)

W:D ratio: 14.1

Stream Flow Type: MF

Average Unit Gradient: 5.3%

Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.2

Habitat Units/100m (total channel length): 4.4

Habitat Units/100m (primary channel length): 4.6

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 73%
Undercut Banks:	5%	Range: 39 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	111	13.6
Volume (m ³):	89	10.8
Key pieces (>=12m x 0.60m):	2	0.2

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

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

7/5/2006

REACH 1		T02S-R09W-S27SW					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	25	1.1	0.02	28	4	3	10	18	28	43	0
POOL-BACKWATER	1	1	2.0	0.10	2	0	5	15	35	35	10	0
POOL-ISOLATED	1	1	2.0	0.05	2	0	20	20	30	20	10	0
POOL-LATERAL SCOUR	2	13	3.5	0.35	45	0	5	11	37	33	15	0
POOL-PLUNGE	3	13	5.0	0.68	65	11	8	14	34	25	18	0
PUDDLED UNIT	1	21	2.0	0.01	42	0	5	16	32	26	21	0
RAPID/BOULDERS	22	777	3.7	0.13	2,910	180	3	8	29	36	24	0
STEP/BOULDERS	1	1	4.0	0.02	4	5	0	0	20	20	60	0
STEP/LOG	3	4	4.7	0.07	18	0	5	16	34	36	9	0
STEP/STRUCTURE	2	1	1.1	0.02	1	4	4	6	25	27	38	0
Total:	38	857	3.5	0.16	3,117	204	Avg: 4	10	30	33	24	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	2	2	2.0	0.08	4	0.13%	0	0.0	
Scour Pools	5	26	4.4	0.55	110	3.51%	11	10.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	0	0			0	0.00%	0	0.0	
Rapids	22	777	3.7	0.13	2,910	93.36%	180	6.2	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	6	6	3.4	0.04	23	0.75%	9	38.5	
Dry	1	21	2.0	0.01	42	1.35%	0	0.0	
Culverts	2	25	1.1	0.02	28	0.90%	4	14.3	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	7	8.2	8.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	1	1.2	1.2
Pool frequency (channel widths/pool):	22.0		
Residual pool depth (avg):	0.29		

Survey Date 7/5/2006
Report Date: 3/5/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	151
Total conifers/1000 ft	581
Total conifers >20" dbh/1000 ft	86
Total conifers >35" dbh/1000 ft	22

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	1.1	0.0	2.5	0.0	0.7	0.0	4.2	0.0
15-30cm	0.0	0.7	1.8	0.7	1.1	0.0	2.8	1.4
30-50cm	0.7	1.1	0.4	0.0	0.0	0.0	1.1	1.1
50-90cm	0.4	0.0	0.4	0.0	0.4	0.0	1.1	0.0
>90cm	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0
Total/100m2	2.1	1.8	5.3	0.7	2.1	0.0	3.2	0.8

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	64		57		66	
Shrub cover	66		42		45	
Grass/forb cover	26		27		24	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	35		71		71	
High terrace	71		35		18	
Low terrace	0		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 (%)	9		20		19	

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	151
Total conifers/1000 ft	581
Total conifers >20" dbh/1000 ft	86
Total conifers >35" dbh/1000 ft	22

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	4.2	0.0
15-30cm	2.8	1.4
30-50cm	1.1	1.1
50-90cm	1.1	0.0
>90cm	0.4	0.0

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

HABITAT INVENTORY Report Date: 3/5/2007

Survey Date: 7/5/2006

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	
8	LF	1	HT	0	80	60	40	Conifer				1		
								Hardwood						
8	LF	2	HT	15	85	60	20	Conifer				1	1	
								Hardwood						
8	LF	3	HT	0	75	40	30	Conifer		1				
								Hardwood						
8	RT	1	HT	0	40	90	10	Conifer						CLEARCUT
								Hardwood		1				STARTS END
8	RT	2	HT	0	0	80	20	Conifer						ZONE 1
								Hardwood						CLEARCUT
15	RT	2	HS	5	80	60	20	Conifer						
								Hardwood		1				
15	LF	2	HS	12	85	30	30	Conifer	5	5				NO
								Hardwood		1				AMPHIBIANS
15	RT	1	HT	13	80	65	35	Conifer				2		
								Hardwood		1				
15	LF	3	HS	12	85	70	15	Conifer	1	2				
								Hardwood						
15	RT	3	HS	5	80	95	5	Conifer						
								Hardwood						
15	LF	1	HT	0	85	40	30	Conifer	3					UTM 0438774-
								Hardwood			1			5023446-2D
33	LF	1	HS	20	90	70	20	Conifer						UTM 0438810-
								Hardwood			2			5023158-3D
33	LF	2	HS	50	90	10	40	Conifer	2		1			
								Hardwood						
33	LF	3	HS	40	90	10	40	Conifer	1			1		
								Hardwood						
33	RT	1	HS	20	10	70	20	Conifer						CLEARCUT
								Hardwood						ALL 3 ZONES
33	RT	2	HS	40	0	10	30	Conifer						
								Hardwood						
33	RT	3	HS	40	0	10	30	Conifer						
								Hardwood						

Comment Summary

Restoration Monitoring Sites 2006

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

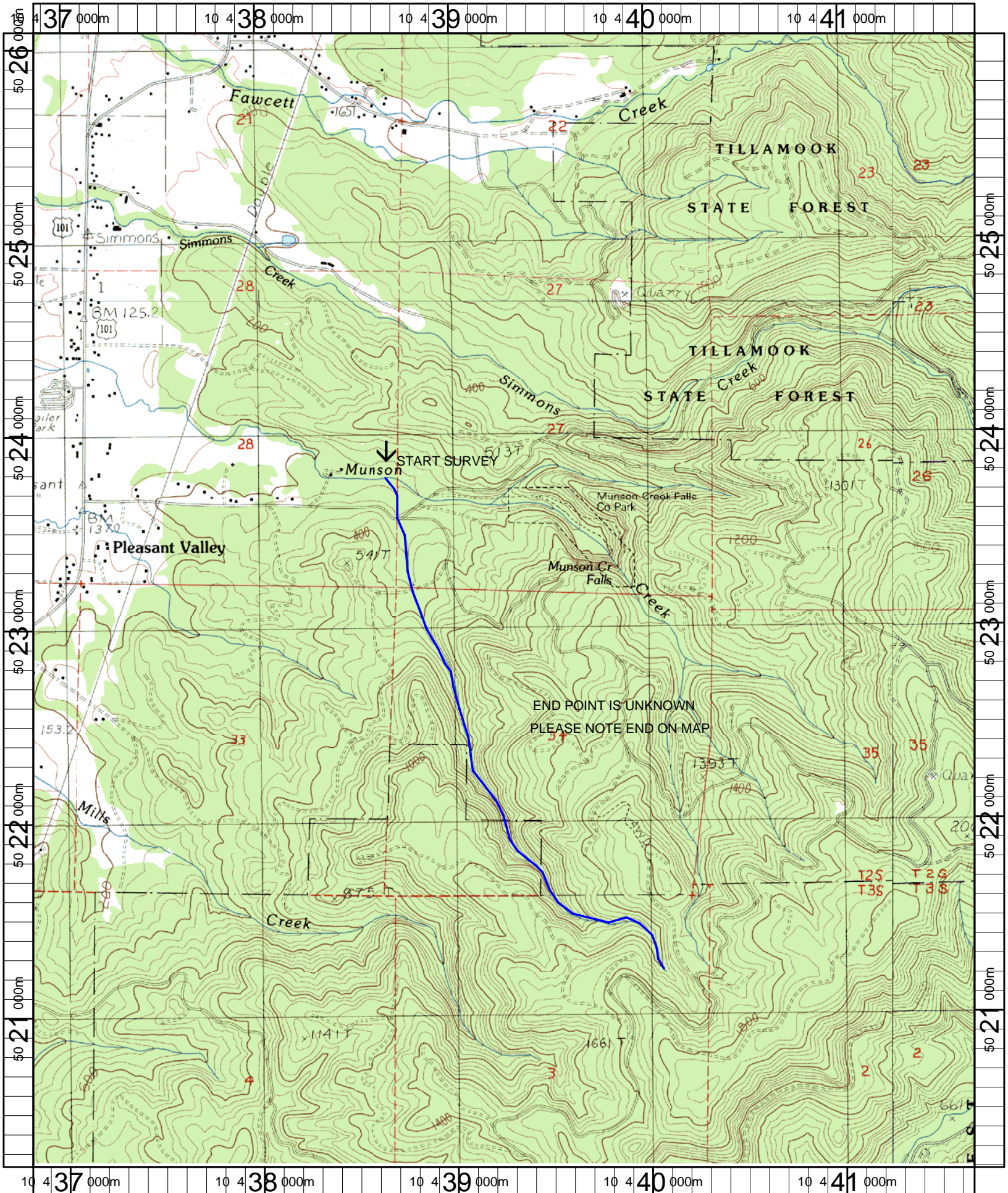
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	38.7		START AT MUNSON CR	0438702-5023753-2D
3	SL	00	43.7		H=0.25M	
8	RB	00	177.9		RIPARIAN #1	
12	SS	00	255.7		H=0.35M	
13	CC	00	267.7	CC		W=1.8M, H=1.0M, OVAL
14	RB	00	317.7	/SS		
15	RB	00	367.7		RIPARIAN #2	
20	RB	00	526.1	SS/, /SS		
23	LP	00	557.4		COHO FRY	COHO, CRAYFISH
24	RB	01	607.4	/SS		
28	SL	00	671.2	PN	H=0.60M	
31	SS	00	703.45	PA	H=0.60M	
32	CC	00	716.45	CC		1.0M CIRCLE
33	RB	01	759.45		RIPARIAN #3, PHOTO #6	
35	SL	00	760.45	PN	H=0.60M	
37	SB	00	781.25		H=0.45M	H=0.45M
38	RB	00	817.45		END SURVEY	UTM 0438809-5023109-3D

Comment Summary

Restoration Monitoring Sites 2006

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
3	CC	00	44	CC	(2) 0.90M ROUND STEEL CC	DOUBLE CULVERT
9	RB	00	123	SS/	RIPARIAN #1	
15	RB	01	259.9		RIPARIAN #2	
21	RB	00	384.9		RIPARIAN #3	
23	RB	00	434.9		END-LACK OF FLOW, POOL	



Name: BEAVER
 Date: 5/22/2006
 Scale: 1 inch equals 2000 feet

Location: 10 439259 E 5023139 N
 Caption: MUNSON CREEK TRIBUTARY A RESTORATION SITE -
 TILLAMOOK BASIN