

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

STREAM: Big Tom Folley Creek (U-184)
BASIN: Umpqua River
SURVEY TYPE: Pre-Tx
DATE: July 1, 2003
SURVEY CREW: Jeremiah Bernier, Alex Higgins
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 57.5 km²
USGS MAPS: Elkton, Putnam Valley
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Big Tom Folley Creek habitat survey extended 541 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.3 (range: 3.5-5.5). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Scour pools (28%), rapids (24%) and riffles (24%) dominated stream habitat. Bedrock (52%) dominated stream substrate. Wood volume was very low at 4.0 m³/100m.

COMMENTS:

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

REACH 1

T22S-R07W-S02NW

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	4.3	VWI Range:	3.5 - 5.5

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	541	4,406	0
Secondary	48	176	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	7.4	Width	15.1	19.3	22.8
Depth	0.29	Height	0.7	1.4	2.4
		W:D ratio	21.9	Entrenchment	1.3

Stream Flow Type: MF Water temp (C): 15.5 - 15.5
 Avg. Unit Gradient: 1.3% Habitat Units/100m: 5.4

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	D15	C30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 95%
Undercut Banks:	9%	Range: 69 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces ($\geq 3m \times 0.15m$):	29	5.4
Volume (m^3):	22	4.0
Key pieces ($\geq 10m \times 0.60m$):	0	0.0

OREGON DEPARTMENT OF FISH AND WILDLIFE

BIG TOM FOLLEY CREEK PRE-TX (U-184)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

7/1/03

REACH 1		T22S-R07W-S02NW					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	1	19	3.0	0.25	56	0	0	0	30	0	0	70	
GLIDE	5	106	7.5	0.30	811	74	0	7	10	6	9	68	
POOL-LATERAL SCOUR	7	149	8.3	0.62	1,289	80	0	13	8	9	12	58	
RAPID/BEDROCK	3	55	6.2	0.08	333	9	0	5	5	10	8	72	
RAPID/BOULDERS	3	96	7.9	0.27	770	86	0	5	10	36	36	13	
RIFFLE	4	78	6.9	0.14	544	41	0	9	19	13	9	51	
RIFFLE W/ POCKETS	2	54	10.5	0.23	550	32	0	3	27	22	22	26	
STEP/BEDROCK	4	25	7.4	0.18	181	0	0	3	3	4	6	85	
STEP/COBBLE	3	8	6.4	0.09	48	41	0	3	13	27	56	0	
Total:	32	589	7.4	0.29	4,582	363	Avg	0	7	11	13	17	52

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		48
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	7	149	8.3	0.62	1,289	28.13%	80	6.2	
Glides	5	106	7.5	0.30	811	17.69%	74	9.1	
Riffles	6	132	8.1	0.17	1,094	23.87%	73	6.7	
Rapids	6	151	7.1	0.17	1,103	24.08%	95	8.6	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	7	32	6.9	0.14	229	5.00%	41	17.9	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	19	3.0	0.25	56	1.22%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	7	11.9
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	3	5.1
Pool frequency (channel widths/pool):	5.6	
Residual pool depth (avg):	0.53	

STREAM SUMMARY

BIG TOM FOLLEY CREEK PRE-TX (U-184)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
32	589	7.4	0.29	4,582	0	7	11	13	17	52	363

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	0	0.00%
Scour Pools	1,289	28.13%
Glides	811	17.69%
Riffles	1,094	23.87%
Rapids	1,103	24.08%
Cascades	0	0.00%
Step/Falls	229	5.00%
Dry	0	0.00%
Culverts	56	1.22%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1	REACH 1
Summary of Riparian Zone (0-30m) 3 transects	
Total hardwoods/1000	467
Total conifers/1000 ft	284
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	1.7	1.3	1.3	3.0	0.0	4.3	3.0
15-30cm	0.0	2.7	0.3	0.3	0.0	1.0	0.3	4.0
30-50cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
50-90cm	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	5.0	1.7	1.7	3.0	1.0	1.6	2.6

Canopy closure and ground cover

	Zone 1	Zone 2	Zone 3
	0-10 meters (%)	10 - 20 meters (%)	20 - 30 meters (%)
Canopy closure	54	41	11
Shrub cover	58	65	45
Grass/forb cover	25	26	27

Predominant landform in each zone

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

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	467
Total conifers/1000 ft	284
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	4.3	3.0
15-30cm	0.3	4.0
30-50cm	0.0	0.3
50-90cm	0.0	0.3
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

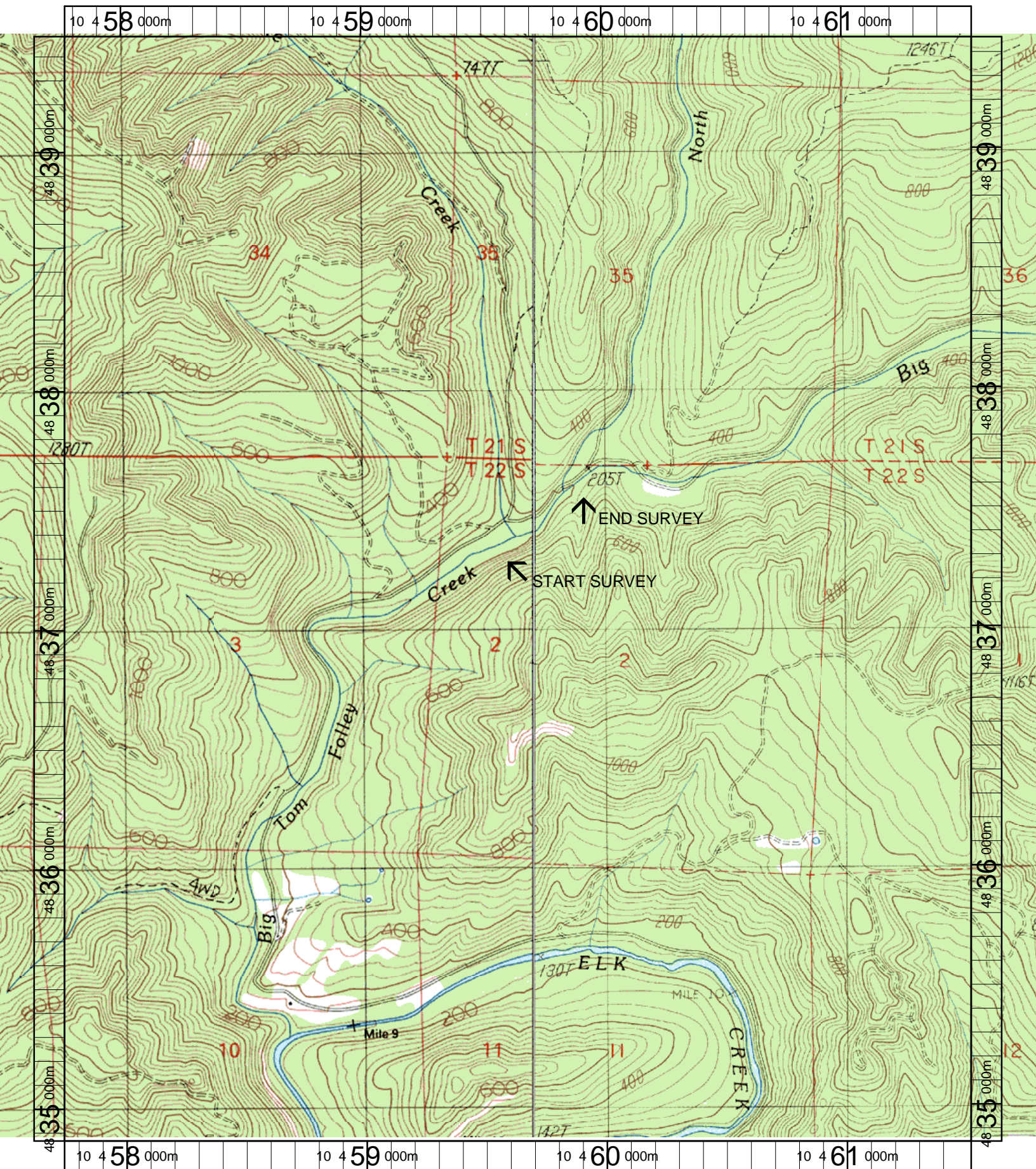
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LF	3	HT	0	0	80	10	Conifer	3						PLANTED CONIFERS
								Hardwood							
10	RT	3	HS	40	30	60	20	Conifer	1						
								Hardwood							
10	RT	1	HS	75	25	20	20	Conifer							ESTIMATED-SHEER FACE
								Hardwood							
10	LF	2	HT	0	45	60	30	Conifer							
								Hardwood	1						
10	LF	1	FP	14	65	60	20	Conifer							
								Hardwood	1	1					
10	RT	2	HS	75	25	40	30	Conifer							PICTURE 100-0036
								Hardwood							
15	LF	3	HT	0	0	50	30	Conifer	5						PLANTED CONIFERS
								Hardwood							
15	RT	3	HS	20	35	50	50	Conifer							
								Hardwood		2					
15	RT	1	FP	20	75	50	50	Conifer							
								Hardwood		2	1				
15	LF	2	HT	0	15	70	15	Conifer	4	1					
								Hardwood							
15	LF	1	FP	15	65	70	20	Conifer							PICTURE 100-0037
								Hardwood	2	3					
15	RT	2	HS	10	70	70	30	Conifer							
								Hardwood	2						
23	RT	2	HS	25	80	50	50	Conifer							
								Hardwood	1	1					
23	RT	1	FP	10	80	50	40	Conifer							
								Hardwood	2	2		1			
23	LF	3	RB	0	0	0	0	Conifer							
								Hardwood							
23	LF	2	HT	0	10	100	0	Conifer							BLACKBERRIES
								Hardwood							
23	LF	1	HT	0	15	100	0	Conifer							BLACKBERRIES PHOTO 100-0038
								Hardwood							
23	RT	3	HS	15	0	30	50	Conifer							
								Hardwood		1					

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: **4-UMP** SITE ID: **184** **BIG TOM FOLLEY CREEK PRE-TX (U-**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
3	RI	00	77.8	HS	FLAG(SITE 1 14 BOULDE	BOULDER PLACEMENT
5	GL	00	105.3		REDYELLOW FLAG "PHO	
6	LP	01	135	TJ/	TJ/ SADDLE BUTTECR. S	SADDLE BUTTE CR.
7	RR	11	135		ACW= 4.5 T=15	
9	GL	00	161.2		FLAG-STRUCTURE SITE #	
10	RR	00	178.1		FLAG-PHOTO POINT #2	RIP 1
11	LP	00	189.6		PINK FLAG-SITE 3;FLAG-	
14	RP	00	229.9		FLAG-STRUCTURE SITE #	
15	GL	00	257.3			RIP 2
17	GL	00	285.3		STRUCTURE SITE #5	
19	RP	00	325.4		RED FLAG-SNORKLE #3	
20	LP	00	348.7		PINK FLAG 11 BOULDERS	
21	SC	00	350.5		H=.3 YELLOW=SS#6	
23	GL	00	381			RIP 3
24	RI	00	402		PINK FLAG- 11 BOULDER	
25	LP	00	430		RED FLAG-SNORKLE PO	
26	RI	01	444.3	TJ/	TJ/ YELLOWFLAG-SS#6 P	
27	LP	11	444.3		CE	SPAWNING SIGN; N.F. TOM
28	CC	11	444.3	CC	H=2.2 L=3 NO DROP	
31	RB	00	532.5		PINK FLAG-1 0 BOULDER	
32	SR	00	540.9		YELLOW FLAG-SS#9	



Name: ELKTON
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 459636 E 4837168 N
 Caption: BIG TOM FOLLEY CREEK RESTORATION SITE - UMPQUA BASIN