

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

STREAM: Big Tom Folley Creek Phase 3 (U-245)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: February 22, 2005
SURVEY CREW: Neil Jensen, Jennifer Schmitt
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 57.4 km²
USGS MAPS: Putnam Valley
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Big Tom Folley Creek habitat survey extended 1,926 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.0 (range: 1.2-6.2). Land use for the reach was timber harvest and large (30-50 cm dbh) trees. The average unit gradient was 1.5 percent. Riffles (39%), rapids (26%) and scour pools (26%) dominated stream habitat. Bedrock (42%) dominated stream substrate. Wood volume was low at 12.0 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

OREGON DEPT OF FISH AND WILDLIFE BIG TOM FOLLEY CR PHASE 3 POST-TX (4-JUMP, 245)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date: 2/22/2005

REACH 1

T21S-R07W-S36NE

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	4.0	VWI Range:	1.2 - 6.2

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	1,926	14,101	0
Secondary Channel	0	0	0
Off-Channel Units	46	91	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 8
Width: 6.9	Width: 9.6	14.7 (11.7 - 18.9)	16.1 (13 - 19.7)
Depth: 0.44	Height: 0.6	1.1 (0.96 - 1.26)	1.3 (1.06 - 1.36)

W:D ratio: 17.0

Stream Flow Type: MF

Average Unit Gradient: 1.5%

Water temperature (°C): 7.5 - 7.5

Entrenchment (ACW:FPW ratio): 1.5

Habitat Units/100m (total channel length): 3.5

Habitat Units/100m (primary channel length): 3.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	LT
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):	199	10.3
Volume (m ³):	231	12.0
Key pieces (>=12m x 0.60m):	2	0.1

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REACH 1		T21S-R07W-S36NE					REACH 1					
HABITAT DETAIL												
Habitat Type	Number	Total	Avg	Avg	Total	Large	Substrate					
	Units	Length	Width	Depth	Area	Boulders	Percent Wetted Area					
		(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	2	22	3.7	0.16	91	0	5	3	20	37	20	15
GLIDE	3	80	8.0	0.48	641	0	12	18	16	3	5	47
POOL-BACKWATER	3	13	2.7	0.33	34	0	77	23	0	0	0	0
POOL-DAMMED	2	64	7.5	0.85	484	0	5	10	4	1	0	80
POOL-LATERAL SCOUR	13	305	7.9	0.87	2,473	0	12	14	10	5	4	56
POOL-STRAIGHT SCOUR	7	164	7.1	0.66	1,177	0	13	21	14	4	6	43
RAPID/BEDROCK	8	347	7.6	0.21	2,602	0	1	2	2	4	4	87
RAPID/BOULDERS	8	179	5.8	0.20	1,095	0	1	4	35	34	18	8
RIFFLE	18	672	7.0	0.30	4,721	0	2	7	24	16	9	41
RIFFLE W/ POCKETS	2	109	6.9	0.33	750	0	3	11	23	20	13	31
STEP/BOULDERS	2	15	6.6	0.23	101	0	0	3	10	43	43	3
STEP/COBBLE	1	2	9.9	0.05	22	0	0	0	10	80	10	0
Total:	69	1,972	6.9	0.44	14,192	0	Avg: 9	10	16	14	9	42

HABITAT SUMMARY									
Habitat Group	Number	Total	Avg	Avg	Wetted Area		Large Boulders		
	Units	Length	Width	Depth	(m ²)	Percent	Number	(# / 100m ²)	
		(m)	(m)	(m)					
Dammed & BW Pools	5	77	4.6	0.54	518	3.65%	0	0.0	
Scour Pools	20	469	7.6	0.80	3,650	25.72%	0	0.0	
Glides	3	80	8.0	0.48	641	4.51%	0	0.0	
Riffles	20	780	7.0	0.30	5,472	38.56%	0	0.0	
Rapids	16	526	6.7	0.21	3,697	26.05%	0	0.0	
Cascades	2	22	3.7	0.16	91	0.64%	0	0.0	
Step/Falls	3	18	7.7	0.17	123	0.87%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	25	12.7	13.0
Pools >=1m deep:	3	1.5	1.6
Complex pools (LWD pieces>=3):	15	7.6	7.8
Pool frequency (channel widths/pool):	8.2		
Residual pool depth (avg):	0.52		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **245** **BIG TOM FOLLEY CR PHASE 3 POST**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	30.2	HS	CT-CT,C50,D15,ST,LT	UBTF SITE1
2	LP	00	53.3		UNIT 1 = LOGS, BOULDERS	
3	RR	00	77.5	/SS, HS	LOGS, BOULDERS	
4	DP	00	118.9	SS/	UBTF SITE 2	
5	RI	00	168.9	HS	BOULDER, LOGS, UBTF SITE 3	
6	RI	00	219.9	SS/, HS	BOULDER	
7	RI	01	259.7	HS	CH-MV, D15, S, LT, ST, BOULDER	
8	BW	10	259.7		U 8 = LOGS	
9	SP	00	294.6		SMALL STEP	
10	GL	00	323	HS, WL	BOULDERS, LOGS, ELK	
11	RI	00	351.5	HS	BOULDERS, LOGS, UBTF SITE 6	
12	RB	00	367.1	HS, LI/	BOULDERS, LOGS	
13	SP	00	387	HS	BOULDERS, LOGS	
14	RI	01	410	HS, TJ/	BOULDERS	
15	RB	11	410	WL	MOUSE, REDD, CC, SPAWN SIGN	
16	LP	00	431.3		U 15 = ACW=3.6, H=.41	
20	SP	01	528.3	SS/SS, /TJ	CH-MV, C50, D15, ST, LT	
21	CB	11	528.3		ACW = 1.5, H = .3	
24	RB	00	632.9	SS/		
30	LP	00	741.1	WL	REDDS	
31	RI	00	800.2	SS/, HS	CA-CT, D30,D3,TH,ST, BOULDERS	

Comment Summary

Restoration Monitoring Sites 2005

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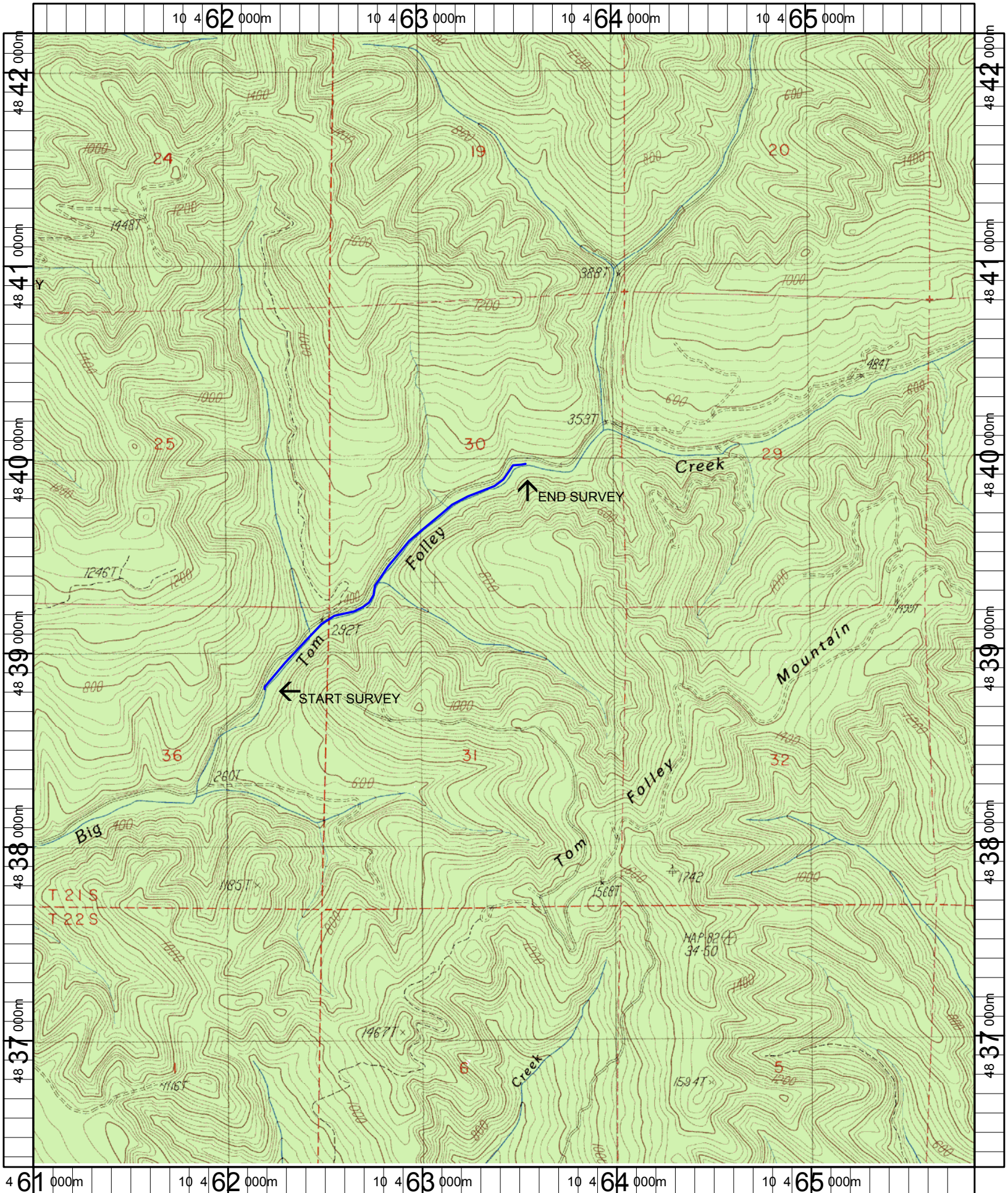
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
32	LP	00	824.4			SNORKEL POOL 12, SF
35	LP	01	920.1	/TJ		
36	RB	11	920.1			ACW = 2.7, H = .34
37	RB	00	959.3	HS		BOULDERS
38	LP	00	973.1	HS		BOULDERS, SMALL STEP
39	DP	00	995.7	HS		BOULDERS, SMALL STEP
40	SP	00	1009			CT-CT, D30, S, TH, LT
45	RI	00	1097.6	WL		REDDS
46	RI	00	1129.3	WL SS/ CE/		REDDS
48	SB	00	1174.3	CE/, LI/		
50	RP	00	1244.3	WL SS/ HS		REDDS, UBTF SITE 11, BOULDERS
51	LP	00	1256.9			CT-CT, D15, S, TH, LT
52	RI	00	1302.8	/SS, LS/		
53	RP	00	1358.3	HS		BOULDERS
54	GL	00	1374.1			SF
57	RR	00	1524.1	SS/, SS/		
58	RR	00	1574.1	SS/		CT-CT, D15, S, TH, LT
60	RB	01	1656.4	WL		REDDS
61	BW	10	1656.4			NEWT
62	SP	00	1685.9	/LI		
63	RI	00	1735.9	HS, /LI		LOGS

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 4-UMP SITE ID: 245 BIG TOM FOLLEY CR PHASE 3 POST

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
64	RI	00	1754.5		CT-CT, D15, TH, LT	
66	RR	01	1820.3	/LS		
67	BW	10	1820.3		NEWT	
69	RR	00	1925.5	SS/, WL	CT-CT, D30, D15, TH, LT, REDD	



Name: PUTNAM VALLEY
 Date: 6/13/2005
 Scale: 1 inch equals 2000 feet

Location: 10 463434 E 4839262 N
 Caption: BIG TOM FOLLEY CREEK PHASE III RESTORATION SITE -
 UMPQUA BASIN