

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

STREAM: Big Tom Folley Creek Phase 3 (UMP-245)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: 9/13/2006
SURVEY CREW: Jennifer Jacobs, Andy Livesay
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 57.5 km²
USGS MAPS: Putnam Valley
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Big Tom Folley Creek Phase 3 habitat survey extended 1910 meters. The channel was constrained by alternating hillslopes and terraces within a broad valley floor. The average valley width index was 3.3 (range: 1.5-5.2). Land use for the reach was second growth timber (15-30 cm dbh) and young timber (3-15 cm dbh). The average unit gradient was 0.8 percent. Scour pools (61%) and riffles (34%) dominated stream habitat. Bedrock (34%) and fines (21%) dominated stream substrate. Wood volume was low at 7.1 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.

Coho were observed within the surveyed reach.

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

HABITAT INVENTORY

Report Date: 2/27/2007

Survey Date: 9/13/2006

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	3.3	VWI Range:	1.5 - 5.2

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	1,910	9,863	0
Secondary Channel	18	35	0
Off-Channel Units	54	68	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 7
Width: 4.6	Width: 9.5	14.1 (9.6 - 19)	15.7 (11.4 - 18.7)
Depth: 0.27	Height: 0.5	1.0 (0.86 - 1.2)	1.3 (1.1 - 1.7)

W:D ratio: 18.8

Stream Flow Type: LF

Average Unit Gradient: 0.8%

Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.5

Habitat Units/100m (total channel length): 4.9

Habitat Units/100m (primary channel length): 5.1

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	5%	Reach avg: 97%
Undercut Banks:	5%	Range: 67 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	149	7.8
Volume (m ³):	136	7.1
Key pieces (>=12m x 0.60m):	1	0.1

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

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

9/13/2006

REACH 1		T21S-R07W-S36NE					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
CASCADE/BOULDERS	3	16	0.7	0.02	10	0	14	32	52	2	0	0
CULVERT CROSSING	1	19	1.8	0.03	34	0	0	10	50	30	0	10
DRY UNIT	1	7	1.3	0.00	8	0	0	0	70	30	0	0
POOL-BACKWATER	1	3	1.4	0.12	4	0	33	44	22	0	0	0
POOL-LATERAL SCOUR	46	1,037	5.7	0.49	6,129	189	3	27	15	10	9	36
RAPID/BOULDERS	1	18	3.0	0.06	54	0	0	5	35	60	0	0
RIFFLE	28	794	4.3	0.08	3,422	235	0	10	19	18	13	40
STEP/BEDROCK	4	20	4.1	0.03	71	1	0	5	5	0	1	89
STEP/BOULDERS	2	22	4.0	0.04	85	33	0	8	13	26	37	16
STEP/COBBLE	9	48	3.3	0.04	149	43	0	15	35	30	11	9
STEP/LOG	1	0	1.5	0.02	0	0	5	35	30	20	0	10
Total:	97	1,982	4.6	0.27	9,967	501	Avg: 2	19	20	15	10	34

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	1	3	1.4	0.12	4	0.04%	0	0.0	
Scour Pools	46	1,037	5.7	0.49	6,129	61.49%	189	3.1	
Glides	0	0			0	0.00%	0	0.0	
Riffles	28	794	4.3	0.08	3,422	34.33%	235	6.9	
Rapids	1	18	3.0	0.06	54	0.54%	0	0.0	
Cascades	3	16	0.7	0.02	10	0.10%	0	0.0	
Step/Falls	16	89	3.5	0.04	305	3.06%	77	25.2	
Dry	1	7	1.3	0.00	8	0.08%	0	0.0	
Culverts	1	19	1.8	0.03	34	0.34%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	47	23.7	24.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	12	6.1	6.3
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.42		

Survey Date 9/13/2006
Report Date: 3/5/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

Summary of Riparian Zone (0-30m) 7 transects

Total hardwoods/1000	732
Total conifers/1000 ft	105
Total conifers >20" dbh/1000 ft	9
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	0.1	1.1	0.0	1.9	0.0	0.9	0.1
15-30cm	0.1	3.7	0.0	1.6	0.6	1.4	0.7	6.7
30-50cm	0.0	1.1	0.0	0.1	0.7	0.1	0.7	1.4
50-90cm	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	6.0	0.0	3.6	1.4	2.4	0.6	4.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
	Canopy closure	62		53		51
Shrub cover	42		30		23	
Grass/forb cover	46		55		48	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
	Hillslope	43		71		57
High terrace	50		29		0	
Low terrace	0		0		0	
Floodplain	7		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		43	
Riprap	0		0		0	
Surface slope (%)	26		32		33	

Summary of Riparian Zone (0-30m) for all reaches 7 transects

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

Total hardwoods/1000	732
Total conifers/1000 ft	105
Total conifers >20" dbh/1000 ft	9
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	0.1	3.9
15-30cm	0.7	6.7
30-50cm	0.7	1.4
50-90cm	0.1	0.0
>90cm	0.0	0.0

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

HABITAT INVENTORY Report Date: 3/5/2007

Survey Date: 9/13/2006

GCG: 4-UM SITE ID: 245

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	1	HS	60	90	40	30	Conifer							
								Hardwood		4	1				
10	LF	2	HS	45	80	45	30	Conifer							
								Hardwood	3	1					
10	LF	3	HS	30	75	50	20	Conifer				1		HS/RB	
								Hardwood		1					
10	RT	1	HS	80	85	20	60	Conifer	1						
								Hardwood		2	1				
10	RT	2	HS	70	85	10	70	Conifer							
								Hardwood		2					
10	RT	3	HS	70	80	20	70	Conifer		1	1	1			
								Hardwood							
24	LF	3	RB	0	60	50	10	Conifer							
								Hardwood		2					
24	RT	3	HS	45	80	25	35	Conifer		2					
								Hardwood	3						
24	RT	1	HS	80	85	30	50	Conifer		1					
								Hardwood		1	3				
24	LF	1	HT	0	90	80	10	Conifer							
								Hardwood	1	3					
24	RT	2	HS	30	90	30	50	Conifer							
								Hardwood	6	1	1				
24	LF	2	HS	30	85	70	20	Conifer							
								Hardwood	1	3					
38	LF	1	FP	0	30	30	60	Conifer							
								Hardwood		2	1			DOUG FIR SEEDLINGS PLANTED	
38	LF	2	HS	30	0	20	70	Conifer						RB/HS	
								Hardwood							
38	LF	3	RB	0	0	10	20	Conifer						RB/HS, CLEARCUT	
								Hardwood							
38	RT	1	HS	30	90	30	70	Conifer							
								Hardwood	1	1					
38	RT	2	HS	60	90	30	60	Conifer							
								Hardwood	1						
38	RT	3	HS	60	90	10	35	Conifer			1				
								Hardwood		1					

54	LF	2	HT	0	0	5	80	Conifer Hardwood						CLEARCUT, HT/RB
54	RT	3	HS	70	80	60	30	Conifer Hardwood	1					
54	RT	2	HS	45	75	60	30	Conifer Hardwood						HT/HS
54	LF	3	RB	35	5	10	80	Conifer Hardwood	1					CLEARCUT
54	LF	1	HT	0	10	15	80	Conifer Hardwood						CLEARCUT
54	RT	1	HT	0	75	50	30	Conifer Hardwood		1				HT/FP
66	LF	2	HT	0	0	20	65	Conifer Hardwood						DOUG FIR SEEDLINGS
66	LF	3	RB	30	0	10	75	Conifer Hardwood						HS/RB
66	RT	1	HS	60	70	50	45	Conifer Hardwood						
66	RT	2	HS	60	80	40	45	Conifer Hardwood	1	1				
66	RT	3	HS	60	85	20	60	Conifer Hardwood	1	3				
66	LF	1	HT	0	30	75	20	Conifer Hardwood		2	2			
80	LF	2	HT	0	0	10	80	Conifer Hardwood						HT/HS
80	RT	2	HT	0	70	20	70	Conifer Hardwood	1	1				
80	RT	3	HS	30	85	10	65	Conifer Hardwood			1			
80	LF	1	HT	0	10	30	60	Conifer Hardwood	1	2				CLEARCUT
80	RT	1	HT	0	85	20	60	Conifer Hardwood	3	5				
80	LF	3	RB	0	0	10	80	Conifer Hardwood						HS/RB
90	RT	3	HS	30	75	20	60	Conifer Hardwood			2			
90	LF	1	HS	50	35	50	45	Conifer Hardwood			1			HS/FP
90	LF	2	HS	50	0	30	70	Conifer Hardwood	2	2				
90	LF	3	RB	0	0	10	30	Conifer Hardwood						RB/HS
90	RT	1	HT	0	85	65	30	Conifer Hardwood		1				HT/FP

90 RT 2 HS 25 90 35 35 **Conifer**
Hardwood 2

Comment Summary

Restoration Monitoring Sites 2006

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

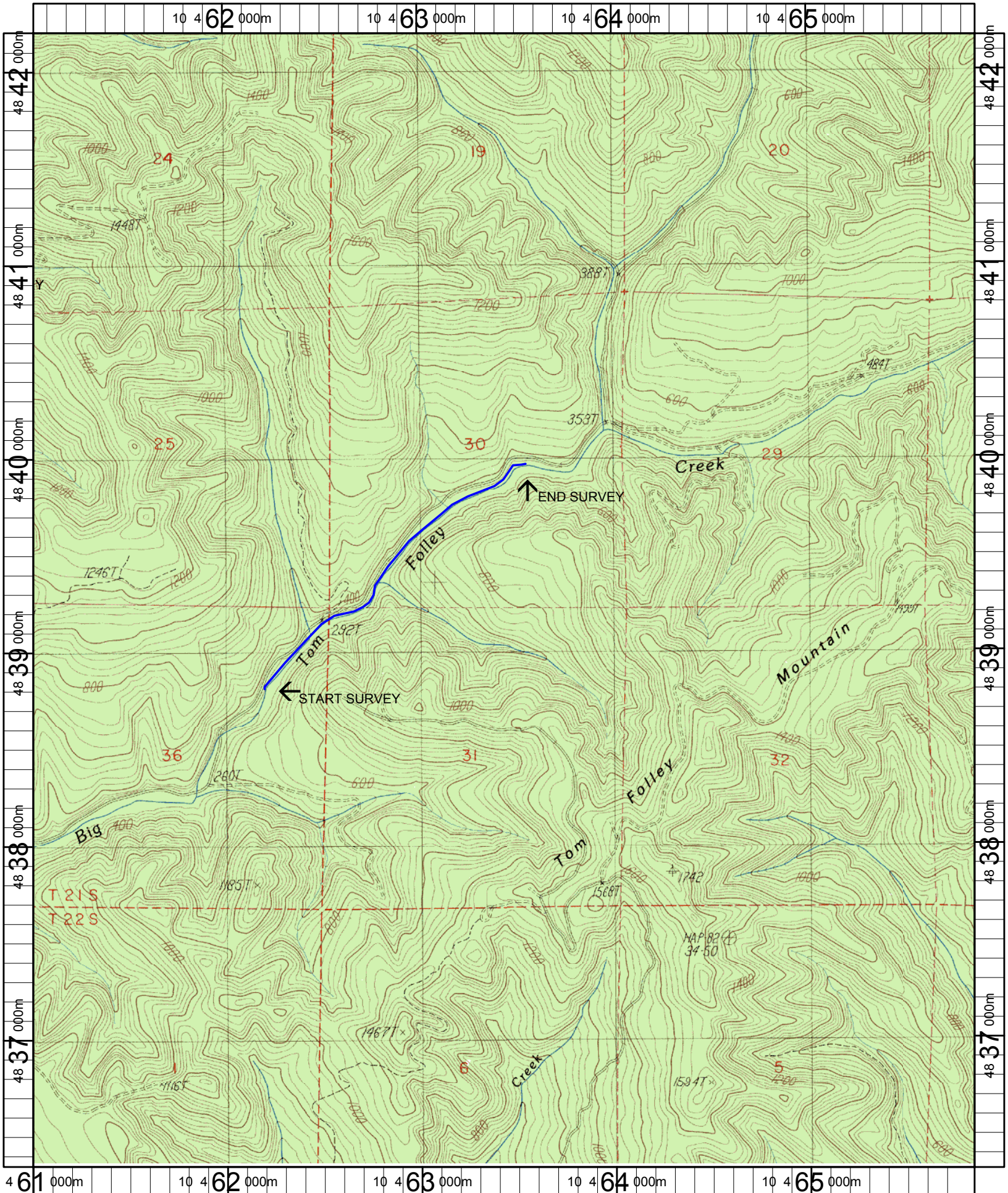
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	23.9	HS		T=13.0C, HS=BOULDERS
3	RI	00	78.5	HS		BOULDERS
5	RI	00	169.5	HS		BOULDERS
7	RI	00	216	HS		BOULDERS
10	SC	00	253.6	HS	3D-0462365-4838980	BOULDERS, RIAPARIAN #
14	RI	00	333.8	HS		BOULDERS
16	SB	00	373.8	HS		BOULDERS
18	RI	01	412.1	HS,CE/,TJ/		BOULDERS
19	CB	11	412.1			BIG TOM FOLY TRIB2 ON
20	CC	11	412.1	CC	DIA=2.50M, OPEN BOTTOM	
24	SC	00	494.9		2D-0462520-4839171	METRIC, RIPARIAN #2
25	LP	01	527.9	/TJ, SS/		
28	LP	00	609.4		COHO FRY	
29	RB	01	627.4	TJ/		
36	RI	00	746.4	HS		BOULDERS
38	RI	00	787.6		NO GPS COVERAGE	
43	LP	00	866.4		RESTORATION WORK LEFT	
44	SC	01	869.4	/TJ	DOUG FIR & CEDAR SEEDLI	
45	RI	11	869.4			T=12.5C
47	SB	00	924.4	HS		BOULDERS
49	RI	00	947.5	HS		BOULDERS

Comment Summary

Restoration Monitoring Sites 2006

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>
50	LP	00	966.5			RIPARIAN #4, METRIC
53	SL	00	987.95		H=0.11M	
54	LP	00	1000.55		3D-0462860-4839470	
56	LP	00	1034.15	DJ		
58	LP	00	1089.65	WL		RSN TERRESTRIAL
60	LP	00	1115.05	SS/		
61	SC	00	1122.35	SS/		
64	RI	00	1222.65	HS		BOULDERS
66	RI	00	1257.25		3D-0462907-4839595	METRIC, RIPARIAN #5
70	RI	00	1344.15	HS		BOULDERS
73	LP	00	1400.85		LOTS OF COHO	
80	RI	00	1524.05		3D-04613131-4839763	METRIC, RIPARIAN #6
94	LP	00	1895.55	SS/		
96	LP	01	1909.75	TJ/		END SURVEY MAPLE LT A



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