

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

STREAM: North Fork Big Tom Folley Creek (U-267)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: September 9, 2005
SURVEY CREW: Jennifer Jacobs, Andy Livesay
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 13.8 km²
USGS MAPS: Putnam Valley
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The North Fork Big Tom Folley Creek habitat survey extended 3,548 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.4 (range: 1.0-9.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Riffles (47%) and scour pools (43%) dominated stream habitat. Bedrock (34%) and gravel (30%) dominated stream substrate. Wood volume was moderate at 24.9 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.

REACH 1

T21S-R07W-S35SW

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	4.4	VWI Range:	1 - 9

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	3,548	13,074	0
Secondary Channel	16	22	1
Off-Channel Units	61	83	4

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 15	<u>First Terrace</u> n = 12
Width: 3.5	Width: 7.4	9.1 (7.3 - 13.3)	12.3 (9.5 - 16.3)
Depth: 0.23	Height: 0.3	0.6 (0.48 - 0.8)	1.4 (0.87 - 2.6)

W:D ratio: 25.0
 Stream Flow Type: LF
 Average Unit Gradient: 1.3%
 Water temperature (°C): 13.0 - 13.0

Entrenchment (ACW:FPW ratio): 1.2
 Habitat Units/100m (total channel length): 6.1
 Habitat Units/100m (primary channel length): 6.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	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:	6%	Reach avg: 94%
Undercut Banks:	5%	Range: 72 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	873	24.6
Volume (m ³):	884	24.9
Key pieces (>=12m x 0.60m):	40	1.1

OREGON DEPT OF FISH AND WILDLIFE

NF BIG TOM FOLLEY POST-TX (4-UJP, 267)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

9/13/2005

REACH 1

T21S-R07W-S35SW

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	54	1.8	0.13	109	68	0	3	15	7	52	23
CULVERT CROSSING	2	44	3.9	0.28	172	0	0	10	23	23	3	43
DRY CHANNEL	3	30	1.6	0.00	47	8	5	18	30	31	16	0
DRY UNIT	2	5	3.0	0.00	13	0	5	48	30	18	0	0
POOL-BACKWATER	1	7	1.7	0.20	11	1	15	45	30	10	0	0
POOL-LATERAL SCOUR	84	1,089	4.2	0.41	4,548	481	2	16	33	13	7	29
POOL-PLUNGE	3	35	4.1	0.41	167	31	0	10	32	20	15	23
POOL-STRAIGHT SCOUR	17	249	4.2	0.42	1,005	89	2	14	20	10	5	49
RAPID/BEDROCK	4	57	3.3	0.06	175	40	0	3	10	6	14	68
RAPID/BOULDERS	6	111	3.1	0.09	359	70	0	6	43	32	18	2
RIFFLE	62	1,763	3.2	0.08	6,018	434	0	8	33	19	5	35
RIFFLE W/ POCKETS	1	51	3.5	0.11	179	25	0	10	50	30	5	5
STEP/BEDROCK	16	67	3.0	0.03	223	3	0	2	5	2	0	91
STEP/BOULDERS	8	27	2.6	0.07	72	49	0	5	31	18	41	5
STEP/COBBLE	8	32	2.0	0.05	72	16	1	9	62	15	11	3
STEP/LOG	1	6	2.2	0.05	12	1	0	0	50	50	0	0
Total:	221	3,624	3.5	0.23	13,179	1,316	Avg: 1	12	30	15	8	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	7	1.7	0.20	11	0.08%	1	9.0
Scour Pools	104	1,372	4.2	0.41	5,720	43.40%	601	10.5
Glides	0	0			0	0.00%	0	0.0
Riffles	63	1,814	3.2	0.08	6,196	47.01%	459	7.4
Rapids	10	168	3.2	0.08	533	4.05%	110	20.6
Cascades	3	54	1.8	0.13	109	0.82%	68	62.6
Step/Falls	33	130	2.6	0.05	378	2.87%	69	18.2
Dry	5	35	2.1	0.00	60	0.46%	8	13.2
Culverts	2	44	3.9	0.28	172	1.30%	0	0.0

REACH 1

T21S-R07W-S35SW

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	105	29.0	29.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	48	13.2	13.5
Pool frequency (channel widths/pool):	4.6		
Residual pool depth (avg):	0.37		

Survey Date 9/9/2005
Report Date: 4/26/2006

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

Summary of Riparian Zone (0-30m) 13 transects

Total hardwoods/1000	853
Total conifers/1000 ft	427
Total conifers >20" dbh/1000 ft	5
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	0.5	3.0	0.8	1.8	1.0	2.5	2.4	7.3
15-30cm	0.5	2.5	1.1	1.6	1.8	1.5	3.4	5.6
30-50cm	0.1	0.7	0.3	0.2	0.8	0.2	1.2	1.1
50-90cm	0.0	0.0	0.1	0.0	0.0	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	1.2	6.2	2.3	3.7	3.5	4.2	2.3	4.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	71		66		74	
Shrub cover	37		17		23	
Grass/forb cover	52		66		61	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	42		54		81	
High terrace	50		15		15	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	8		31		4	
Riprap	0		0		0	
Surface slope (%)	17		22		33	

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

13 transects

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

Total hardwoods/1000	853
Total conifers/1000 ft	427
Total conifers >20" dbh/1000 ft	5
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	2.4	7.3
15-30cm	3.4	5.6
30-50cm	1.2	1.1
50-90cm	0.1	0.0
>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		
24	LF	3	HS	35	55	15	10	Conifer		1					
								Hardwood	2						
24	RT	3	HT	0	65	65	30	Conifer				1			
								Hardwood	3						
24	RT	1	HT	0	85	40	60	Conifer							
								Hardwood	3						
24	LF	2	RB	0	40	15	15	Conifer							ALSO HS
								Hardwood	1						
24	LF	1	HS	30	80	10	70	Conifer	3						0460107, 4837993, ALSO RB
								Hardwood				1			
24	RT	2	HT	0	75	25	70	Conifer							
								Hardwood	4			1			
40	LF	1	HT	0	60	80	10	Conifer							NO GPS COVERAGE
								Hardwood	2						
40	LF	2	RB	0	60	10	90	Conifer							
								Hardwood		2		1			
40	LF	3	HS	35	65	70	20	Conifer	1	1					
								Hardwood		3					
40	RT	1	HT	0	70	35	50	Conifer							
								Hardwood	3	2					
40	RT	2	HS	30	65	30	60	Conifer					1		ALSO HT
								Hardwood	1	3					
40	RT	3	HS	30	80	25	70	Conifer	1				1		
								Hardwood	2	2					
56	RT	2	HS	30	65	15	75	Conifer				1			
								Hardwood	2	1					
56	RT	1	HT	0	60	85	10	Conifer							
								Hardwood	1	1					
56	LF	2	RB	0	30	15	85	Conifer							ALSO HT
								Hardwood	1						
56	LF	1	HT	0	70	85	10	Conifer							NO GPS COVERAGE
								Hardwood		4		1			
56	RT	3	HS	30	75	25	70	Conifer					1		
								Hardwood	3	2					
56	LF	3	HS	35	60	30	60	Conifer	2				1		
								Hardwood							

69	LF	1	HS	40	60	10	80	Conifer	1	1		0460306, 4838664
								Hardwood	1		1	
69	LF	2	HS	40	80	5	85	Conifer	3	2		LOTS OF FERNS ON THIS SIDE
								Hardwood	2			
69	LF	3	HS	40	80	5	85	Conifer		4		
								Hardwood				
69	RT	1	HS	55	70	3	75	Conifer				
								Hardwood	1	2	1	
69	RT	2	HS	60	65	20	75	Conifer		2		
								Hardwood	1			
69	RT	3	HS	55	70	10	80	Conifer		1		
								Hardwood		2		
84	RT	3	HT	0	80	60	35	Conifer	1	1	2	
								Hardwood				
84	LF	1	HT	0	85	40	40	Conifer				0460325, 4838916, ALSO HS
								Hardwood	1	3	1	
84	LF	2	HS	40	90	0	90	Conifer				
								Hardwood		3	1	
84	LF	3	RB	0	40	10	85	Conifer	1			ALSO HS
								Hardwood	1			
84	RT	1	HT	0	80	90	10	Conifer	1		1	
								Hardwood		2	1	
84	RT	2	HT	0	85	60	35	Conifer	1	3	1	
								Hardwood				
94	LF	2	RB	0	20	20	10	Conifer				
								Hardwood				
94	LF	3	HS	75	90	10	10	Conifer	2	1		BARE ROCK CLIFF
								Hardwood				
94	RT	1	HT	0	75	10	85	Conifer				ALSO FP
								Hardwood	1	1		
94	RT	2	HT	0	70	20	80	Conifer			1	
								Hardwood	1			
94	RT	3	HT	0	75	20	75	Conifer			1	ALSO HS
								Hardwood	2			
94	LF	1	HS	60	80	10	80	Conifer		4		0460352, 4839140, ALSO RB
								Hardwood	3			
105	RT	2	HS	55	80	5	85	Conifer		1		
								Hardwood	2	1		
105	LF	1	HS	20	75	10	80	Conifer				0460309, 4839357
								Hardwood	9		1	
105	LF	2	RB	0	55	10	70	Conifer				
								Hardwood				
105	LF	3	HS	20	70	60	30	Conifer			1	
								Hardwood		1	2	
105	RT	1	HS	55	75	5	90	Conifer				
								Hardwood	1			

105	RT	3	HS	55	75	10	85	Conifer	1	2		
								Hardwood		1		
118	LF	2	RB	0	70	20	35	Conifer			1	
								Hardwood				
118	LF	3	HS	20	80	5	40	Conifer	1	4		
								Hardwood				
118	RT	1	HS	50	85	0	90	Conifer				
								Hardwood	4	2		
118	RT	2	HS	50	75	0	85	Conifer			1	
								Hardwood	2	1		
118	RT	3	HS	50	80	0	85	Conifer		1	1	
								Hardwood	1			
118	LF	1	HS	40	75	20	75	Conifer		1		NO GPS COVERAGE
								Hardwood	1	1		
142	LF	1	RB	0	65	30	15	Conifer				0460359, 4839800, ALSO HS
								Hardwood			1	
142	LF	2	HS	45	65	5	90	Conifer	2			
								Hardwood	1	1		
142	LF	3	HS	45	80	10	85	Conifer	1	2		
								Hardwood	1			
142	RT	1	HT	5	75	45	50	Conifer				ALSO HS
								Hardwood		4		
142	RT	2	HS	40	75	5	90	Conifer		3		FERNS
								Hardwood				
142	RT	3	HS	40	80	5	85	Conifer		2		FERNS
								Hardwood	1			
159	LF	1	RB	0	70	35	35	Conifer				0460454, 4839997, RIPRAP
								Hardwood				
159	RT	3	HS	35	80	20	75	Conifer	1	1		
								Hardwood		2		
159	RT	2	HS	35	75	25	70	Conifer	1			
								Hardwood		2		
159	RT	1	HS	20	80	60	30	Conifer	2	1		ALSO FP
								Hardwood	4			
159	LF	2	HT	0	75	75	20	Conifer	1			
								Hardwood		3		
159	LF	3	HT	0	75	75	20	Conifer			1	
								Hardwood	2			
172	LF	1	HT	0	40	20	75	Conifer				0460540, 4840249
								Hardwood				
172	LF	2	HS	50	80	2	50	Conifer	1	1		ALSO RB
								Hardwood	1	1		
172	LF	3	HS	50	80	25	65	Conifer	1			
								Hardwood	3	2		
172	RT	1	HS	35	65	10	60	Conifer				ALSO HT
								Hardwood	2	1		

172	RT	2	HS	40	75	0	85	Conifer		1	
								Hardwood	3		
172	RT	3	HS	40	80	5	85	Conifer			
								Hardwood	4	1	
187	RT	1	HT	0	65	55	40	Conifer			ALSO HS
								Hardwood		2	
187	RT	3	HS	30	75	0	90	Conifer			
								Hardwood	1	1	
187	RT	2	HS	20	70	5	85	Conifer	1		
								Hardwood	1	1	
187	LF	1	HT	0	60	40	55	Conifer			0460516, 4840467, ALSO RB ALSO HS
								Hardwood	1	2	
187	LF	2	RB	0	55	15	60	Conifer			
								Hardwood			
187	LF	3	HS	50	75	0	85	Conifer		2	
								Hardwood	1		
201	RT	3	HS	50	75	5	85	Conifer			1
								Hardwood		1	
201	LF	1	HT	0	65	80	15	Conifer			NO GPS COVERAGE
								Hardwood	1	2	
201	LF	3	HS	40	80	30	50	Conifer			
								Hardwood	5	1	
201	RT	1	HS	20	65	45	50	Conifer			ALSO HT
								Hardwood	1	3	
201	RT	2	HS	45	70	10	80	Conifer	1		
								Hardwood	1	2	
201	LF	2	RB	0	50	25	35	Conifer			ALSO HT
								Hardwood			

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **267** **NF BIG TOM FOLLEY POST-TX**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	LP	00	13.5		START SIGN ALDER RT	0459931, 4837843
2	CC	00	38.5	CC		CC HAS A OPEN BOTTOM
4	RR	01	56.5	/TJ	HILLSLOPE ON RT AFFEC	
5	DU	11	56.5		TRIB	SOME SUBSURFACE FLOW
10	RI	00	110	HS		
11	LP	00	117.5	HS		
14	RI	00	166.5	HS		
15	LP	00	183	HS		
20	SR	00	224.3	HS		
21	LP	00	234.8	HS		
24	SR	00	249.7		0460107, 4837993	
28	RI	00	308.7	HS	T = 13 C	PLACED BOULDERS
29	LP	00	324.7	HS		
31	LP	00	336.2	HS		PLACED BOULDERS AND LO
32	RI	00	348.7	HS		PLACED BOULDERS AND LO
33	SP	00	367.7	HS		
35	LP	00	405.2	HS		PLACED BOULDERS AND LO
36	SR	00	407.2	HS		
37	LP	00	416.2	HS		
38	RI	00	449.7	HS		PLACED BOULDERS
40	RI	00	518.2	HS		PLACED BOULDERS AND LO

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **267** **NF BIG TOM FOLLEY POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
49	LP	00	630.2	DJ		
50	RI	00	644.2	HS		PLACED BOULDERS
52	RI	00	689.7	SS		
55	LP	00	736.2	HS		
56	RI	00	802.2	HS		
60	RI	00	871.2	HS		
61	LP	00	885.7	HS		
69	RB	00	993.2			0460306, 4838664
70	LP	00	1005.7	DJ		
72	SP	00	1036.7	DJ		
74	SP	01	1101.7	/TJ		
83	LP	00	1257.7		BRAIDED CHANNEL	
84	LP	00	1274.2		0460325, 4838916	
94	SP	00	1499.7		0460352, 4839140	COHO FRY
95	RI	00	1562.7	HS		
98	LP	00	1609.2	HS		
99	RI	00	1651.7	HS		
100	LP	00	1665.2	HS		
101	RI	00	1698.7	HS		PLACED BOULDERS
103	RI	00	1719.7	HS		PLACED BOULDERS
104	SP	00	1732.7	HS		PLACED BOULDERS

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **267** **NF BIG TOM FOLLEY POST-TX**

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
105	RI	00	1748.2	HS	0460309, 4839357	PLACED BOULDERS
106	LP	00	1759.7		RB MAY BE ON HT, OR C	PTC IS INFLUENCED BY DEB
107	RI	00	1767.7		U 107 = THE HS	
109	RI	00	1831.2	HS		PLACED BOULDERS
110	LP	00	1847.2	HS		
111	RP	00	1898.2	HS		PLACED BOULDERS
114	LP	00	1934.2	HS		
115	RI	00	1985.7	HS		PLACED BOULDERS AND LO
116	SP	01	1991.2	TJ/		DRY TRIB
117	DC	11	1991.2	CE/		
118	RR	00	2002.7			LARGE BOULDER IN AC, 2.5
119	LP	00	2008.2			0460350, 4839551
123	LP	00	2069.7	HS		PLACED BOULDERS
124	LP	00	2075.7	HS		PLACED BOULDERS
125	SC	00	2077.7	HS		PLACED BOULDERS
126	LP	00	2091.2	HS		PLACED BOULDERS
128	LP	01	2106.7	DJ		
133	LP	00	2109.7	HS		PLACED BOULDERS
134	LP	00	2115.7	HS		PLACED BOULDERS
135	RI	00	2165.7	DJ		
137	LP	00	2192.7	HS, DJ		PLACED BOULDERS

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP** SITE ID: **267** **NF BIG TOM FOLLEY POST-TX**

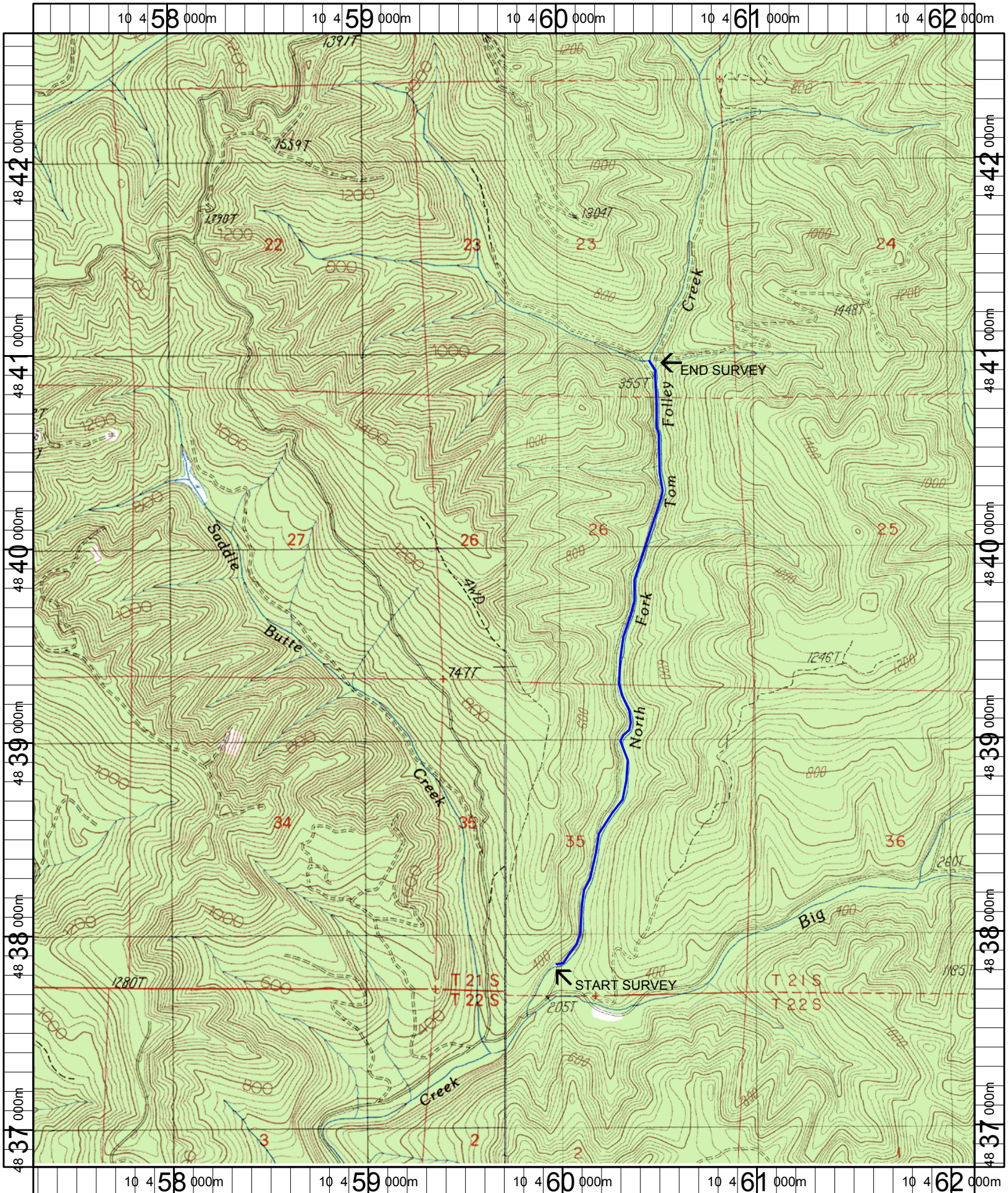
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
138	RI	00	2200.7	HS		
139	PP	00	2203.2	HS		
140	SB	00	2204.2	HS	H = .19 M	
142	RI	00	2267.7		0460359, 4839800	
143	LP	00	2285.7	CC, HS		NO FLOW ON CC, CC ON LE
144	RB	00	2296.7	HS		
149	LP	01	2344.2	/TJ, DJ		
156	LP	00	2452.7			PTC IS INFLUENCED BY DEB
159	RB	00	2494.7		0460454, 4839997	
160	LP	00	2513.2	CS/		PTC IS INFLUENCED BY DEB
161	SR	01	2515.7	/TJ		
162	SR	11	2515.7		H = 2.0 M	
163	CB	11	2515.7			VERY LOW FLOW
165	CB	00	2551.7	DJ		
166	RI	00	2572.2	CC		
172	LP	00	2736.2		0460540, 4840249	
186	RI	00	2993.2			0460516, 4840467
195	RI	00	3154.2			LARGE PIECE OF SHEET ME
196	LP	00	3174.2			U 196 = POSSIBLY OLD CUL
206	SP	00	3314.2			PTC IS INFLUENCED BY DEB
210	LP	00	3348.7			PTC IS INFLUENCED BY DEB

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 4-UMP SITE ID: 267 NF BIG TOM FOLLEY POST-TX

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
211	RI	01	3383.7			COHO FRY
216	CC	00	3412.2	CC	CULV IS 4M IN DIAM., NO	DIAM. = 4.2 M
217	RI	00	3462.2		U 216=CONCRETE W/ ME	
220	RI	00	3535.7		U 221=HIGH VWI BECAUS	
221	LP	00	3548.2		END SIGN AT TRIB	END AT TRIB CONFLUENCE



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

Location: 10 459715 E 4839723 N
 Caption: NORTH FORK BIG TOM FOLLEY CREEK RESTORATION SITE -
 UMPQUA BASIN