

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

STREAM: Little Tom Folley Creek Phase 1 (U-266)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: September 18, 2006
SURVEY CREW: Brian Cannon, Paul Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 14.9 km²
USGS MAPS: Elkton
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Little Tom Folley Creek habitat survey extended 2,445 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 4.4 (range: 1.5-10.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 1.1 percent. Scour pools (57%) and riffles (24%) dominated stream habitat. Bedrock (38%) and gravel (24%) dominated stream substrate. Wood volume was moderate at 20.0 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 LITTLE TOM FOLLEY PHASE 1 POST-TX (4-UJP, 266)

HABITAT INVENTORY

Report Date: 2/27/2007

Survey Date: 9/18/2006

REACH 1

T22S-R07W-S17NE

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:	1.5 - 10

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	2,445	8,764	0
Secondary Channel	43	69	1
Off-Channel Units	231	672	4

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 11	<u>First Terrace</u> n = 9
Width: 3.2	Width: 7.7	11.7 (5.9 - 40)	11.0 (6.4 - 16)
Depth: 0.27	Height: 0.5	1.0 (0.8 - 1.2)	1.6 (1.2 - 2.1)

W:D ratio: 15.3

Entrenchment (ACW:FPW ratio): 1.4

Stream Flow Type: LF

Habitat Units/100m (total channel length): 5.9

Average Unit Gradient: 1.1%

Habitat Units/100m (primary channel length): 6.5

Water temperature (°C): 16.0 - 16.0

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	8%	Reach avg: 84%
Undercut Banks:	11%	Range: 14 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	337	13.8
Volume (m ³):	489	20.0
Key pieces (>=12m x 0.60m):	25	1.0

OREGON DEPT OF FISH AND WILDLIFE LITTLE TOM FOLLEY PHASE 1 POST-TX (4-UJP, 266)

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

9/18/2006

REACH 1		T22S-R07W-S17NE					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	1	6	0.9	0.01	5	0	10	40	50	0	0	0
DRY CHANNEL	1	27	2.2	0.00	60	0	10	20	60	10	0	0
DRY UNIT	3	43	1.5	0.00	62	2	8	43	20	15	7	7
GLIDE	14	219	3.5	0.11	778	28	7	15	18	4	2	53
POOL-ISOLATED	1	4	2.5	0.60	10	0	30	60	10	0	0	0
POOL-LATERAL SCOUR	67	1,304	4.1	0.54	5,400	87	9	22	23	5	1	39
PUDDLED UNIT	1	5	0.2	0.02	1	0	5	15	70	10	0	0
RAPID/BEDROCK	10	247	2.7	0.05	684	5	2	8	2	0	0	88
RAPID/BOULDERS	4	36	2.1	0.06	85	7	8	22	37	24	6	2
RIFFLE	36	682	2.6	0.07	1,980	81	4	15	30	18	6	26
RIFFLE W/ POCKETS	3	65	3.8	0.12	278	12	3	10	7	7	6	69
STEP/BEDROCK	6	25	2.6	0.04	76	1	0	1	1	0	0	98
STEP/BOULDERS	1	6	1.7	0.05	10	8	0	10	25	30	30	5
STEP/COBBLE	12	49	1.5	0.04	75	5	6	18	43	25	4	4
Total:	160	2,718	3.2	0.27	9,505	236	Avg: 7	18	24	10	3	38

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	4	2.5	0.60	10	0.11%	0	0.0	
Scour Pools	67	1,304	4.1	0.54	5,400	56.81%	87	1.6	
Glides	14	219	3.5	0.11	778	8.18%	28	3.6	
Riffles	39	747	2.7	0.07	2,258	23.75%	93	4.1	
Rapids	14	283	2.5	0.05	769	8.09%	12	1.6	
Cascades	1	6	0.9	0.01	5	0.06%	0	0.0	
Step/Falls	19	79	1.9	0.04	162	1.70%	14	8.7	
Dry	5	75	1.4	0.00	123	1.29%	2	1.6	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	68	25.0	27.8
Pools >=1m deep:	2	0.7	0.8
Complex pools (LWD pieces>=3):	20	7.4	8.2
Pool frequency (channel widths/pool):	5.2		
Residual pool depth (avg):	0.51		

Survey Date 9/18/2006
Report Date: 3/5/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

Summary of Riparian Zone (0-30m) 9 transects

Total hardwoods/1000	718
Total conifers/1000 ft	420
Total conifers >20" dbh/1000 ft	7
Total conifers >35" dbh/1000 ft	7

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	2.1	0.7	2.4	1.3	3.1	2.1	7.7
15-30cm	0.6	2.0	0.9	0.6	1.4	0.8	2.9	3.3
30-50cm	0.6	0.4	0.4	0.0	0.8	0.1	1.8	0.6
50-90cm	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.2
>90cm	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Total/100m2	1.2	4.7	2.1	3.1	3.6	4.0	2.3	3.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	53		59		59	
Shrub cover	62		56		38	
Grass/forb cover	31		33		50	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	39		44		83	
High terrace	44		39		6	
Low terrace	11		6		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	6		11		11	
Riprap	0		0		0	
Surface slope (%)	13		23		46	

Summary of Riparian Zone (0-30m) for all reaches 9 transects

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

Total hardwoods/1000	718
Total conifers/1000 ft	420
Total conifers >20" dbh/1000 ft	7
Total conifers >35" dbh/1000 ft	7

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	2.1	7.7
15-30cm	2.9	3.3
30-50cm	1.8	0.6
50-90cm	0.0	0.2
>90cm	0.1	0.0

OREGON DEPT OF FISH AND WILDLIFE LITTLE TOM FOLLEY PHASE 1 POST-TX (4-UMP:266)

HABITAT INVENTORY Report Date: 3/5/2007

Survey Date: 9/18/2006

GCG: 4-UM SITE ID: 266

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		
23	LF	1	HT	0	80	90	10	Conifer							MAPLE
								Hardwood				1			
23	RT	1	HT	0	0	100	0	Conifer							BLACKBERRY
								Hardwood							
23	RT	2	HT	0	0	100	0	Conifer							
								Hardwood							
23	LF	3	RB	5	0	40	20	Conifer	1						RB/HS
								Hardwood							
23	LF	2	HT	0	50	90	10	Conifer							ALDER
								Hardwood	2						
23	RT	3	HT	3	0	100	0	Conifer							HT/HS
								Hardwood							
35	LF	2	HT	0	90	100	0	Conifer							ALDER
								Hardwood				1			
35	RT	3	HS	10	80	60	40	Conifer		1	1				DOUG FIR, ALDER
								Hardwood	5						
35	LF	1	LT	0	30	100	0	Conifer							
								Hardwood	2						
35	RT	2	LT	0	80	100	0	Conifer							
								Hardwood							
35	RT	1	LT	0	30	100	0	Conifer							
								Hardwood	1						
35	LF	3	RB	3	20	30	20	Conifer							RB/HS
								Hardwood							
51	LF	2	HS	10	20	30	10	Conifer	1	1					HS/RB
								Hardwood							
51	RT	1	HT	0	20	100	0	Conifer							
								Hardwood							
51	LF	3	HS	30	10	20	80	Conifer	2						DOUG FIR
								Hardwood							
51	LF	1	HS	30	20	100	0	Conifer							ALDER
								Hardwood			1				
51	RT	2	HT	0	10	100	0	Conifer							
								Hardwood							
51	RT	3	HS	15	40	80	20	Conifer							ALDER
								Hardwood		1					

61	LF	2	HS	80	60	50	50	Conifer				
								Hardwood	1			
61	LF	3	HS	70	70	40	60	Conifer	2	1		DOUG FIR
								Hardwood				
61	RT	1	HT	0	70	30	70	Conifer				ALDER
								Hardwood	1		1	
61	RT	3	HS	70	40	20	70	Conifer				ALDER
								Hardwood	1	1		
61	LF	1	RB	0	20	20	20	Conifer				ALDER, 60% RB
								Hardwood		1		
61	RT	2	HS	50	70	20	80	Conifer				ALDER
								Hardwood		1		
74	LF	1	HS	30	50	40	10	Conifer				ALDER, 50% RB
								Hardwood			1	
74	LF	2	HS	80	70	40	60	Conifer	2			DOUG FIR, MAPLE, ALDER
								Hardwood	5			
74	LF	3	HS	70	70	30	70	Conifer	3			DOUG FIR, ALDER, MAPLE
								Hardwood	5			
74	RT	1	HS	50	80	40	60	Conifer		2		CEDAR, FIR
								Hardwood	1		1	
74	RT	2	HS	70	60	20	70	Conifer		1		DOUG FIR
								Hardwood				
74	RT	3	HS	75	50	40	60	Conifer		1		
								Hardwood				
94	LF	3	HS	70	80	50	30	Conifer		3		MAPLE
								Hardwood	3	2		
94	RT	3	HS	60	90	60	40	Conifer		1	1	
								Hardwood	4	1		
94	RT	2	HT	0	80	40	60	Conifer				1 CEDAR, VINE MAPLE
								Hardwood	5			
94	RT	1	HT	15	90	40	60	Conifer				ALDER, MAPLE
								Hardwood	7	5		
94	LF	2	HS	40	70	60	20	Conifer			1	
								Hardwood	5	1		
94	LF	1	HT	0	80	30	40	Conifer				ALDER, 30% RB
								Hardwood		7		
110	RT	3	HS	60	90	10	80	Conifer			2	CEDAR, DOUG FIR, MAPLE
								Hardwood	2			
110	LF	2	RB	10	60	10	50	Conifer	1	2	1	40% RB
								Hardwood				
110	LF	1	HS	25	85	20	80	Conifer		1	3	CEDAR, DOUG FIR, VINE MAPLE
								Hardwood	1			
110	RT	1	HT	20	80	30	70	Conifer			1	
								Hardwood				
110	LF	3	HS	80	90	10	70	Conifer	2	2		DOUG FIR, VINE MAPLE
								Hardwood	4			

110	RT	2	HT	0	90	20	70	Conifer	1		1	VINE MAPLE
								Hardwood	1			
131	LF	2	HT	0	40	90	10	Conifer				
								Hardwood				
131	LF	3	HS	10	70	20	60	Conifer	1	1	2	
								Hardwood				
131	RT	2	HS	60	80	70	30	Conifer	1	1	1	CEDAR
								Hardwood				
131	RT	3	HS	70	90	40	60	Conifer				MAPLE, VINE
								Hardwood	2		1	MAPLE
131	LF	1	HT	0	20	90	10	Conifer				
								Hardwood				
131	RT	1	HS	15	20	60	40	Conifer				VINE MAPLE
								Hardwood	3			
145	LF	3	HS	80	90	10	50	Conifer	1	3		DOUG FIR
								Hardwood				
145	RT	3	HS	40	80	20	70	Conifer			1	CEDAR, VINE
								Hardwood	2	2		MAPLE,
145	RT	1	HS	25	90	60	40	Conifer	1	2		MAPLE
								Hardwood	4	1		ALDER, VINE
145	LF	2	RB	0	60	30	10	Conifer		2		60% RB,
								Hardwood		1		DOUG FIR
145	LF	1	HS	25	85	60	40	Conifer			1	CEDAR,
								Hardwood		3		ALDER
145	RT	2	HS	15	80	40	60	Conifer		1		DOUG FIR
								Hardwood	3	2		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **266** **LITTLE TOM FOLLEY PHASE 1 POST**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SC	00	2.9	HS	HS=3 BLDRS	
2	GL	00	12.9	CS/CS,HS	BC, HS=4 BLDRS	BC
3	RB	00	21.9		PILEATED WOODPECKER	
4	LP	00	31.4			US
6	LP	00	59.7		CA,CT,YT,ST,D3,S	
10	RI	00	105.1	WL		PACIFIC TREE FROG
16	RI	00	179.6	BV		
19	LP	01	231.6	/TJ		
22	LP	00	268.1	WL	COWPIES	RSN
23	LP	00	303.1		CT,CT,YT,ST,D30,S	
26	RI	00	364.9	WL		SCULPIN
27	LP	00	377.9	WL		RSN
28	SC	00	381.7	WL	RSN	RSN
32	RI	01	454.9	TJ/	TJ/	
35	LP	00	509.4		US,MT,YT,D30,S	
39	LP	01	590	BV, DJ	COWPIE, DJ, BV	DEN
44	LP	00	668.6	DJ, WL	DJ	COHO FRY
47	SC	00	693		SONG SPARROW	
50	LP	00	744.5			T=16.5C AT 1400HRS
51	RI	00	756		CA,CT,YT,D30,S	
52	LP	00	771.5		SITE 1 FLAG	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **266** **LITTLE TOM FOLLEY PHASE 1 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>
53	LP	00	818.3		TOWHEE	COHO FRY
54	RI	00	834.6		WOODPECKER	
55	LP	00	867.6		SITE 2 FLAG	
57	LP	01	919.6	TJ/	TJ/	
59	RI	00	968.8		SITE 3	
61	RI	00	1042.5		CA,CT,YT,D15,S	
67	RP	00	1131.4		SITE 7 FLAG	
68	GL	00	1151.1		SITE 8 FLAG	
73	LP	00	1241.3	WL	CRF	CRAYFISH
74	SR	00	1243.3		CH,SV,YT,D15,S, FLAG SITE	
76	RI	00	1287.9	WL	CRF	CF
84	SC	00	1391.6		FLAG SITE 13	
85	LP	01	1415.7	TJ/	TJ/	
86	DU	11	1415.7		NEXT UNIT CC UNDER MAIN	
90	LP	10	1415.7			PROPERTY BOUNDARY LI
91	LP	10	1415.7		RAIN BEGINS	BLM PROPERTY
92	SR	10	1415.7	HS	HS=6 LOGS	WOOD
93	LP	10	1415.7		ENTER ST LEFT, STILL YT RI	
94	SR	10	1415.7		CT,CT,YT,ST,D15,S	
95	LP	10	1415.7	HS	FLAG-BLM SITE 1, HS=5 LOG	WOOD
96	RP	10	1415.7	HS	FLAG SITE 2, HS=6 LOGS	WOOD

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **4-UMP** SITE ID: **266** **LITTLE TOM FOLLEY PHASE 1 POST**

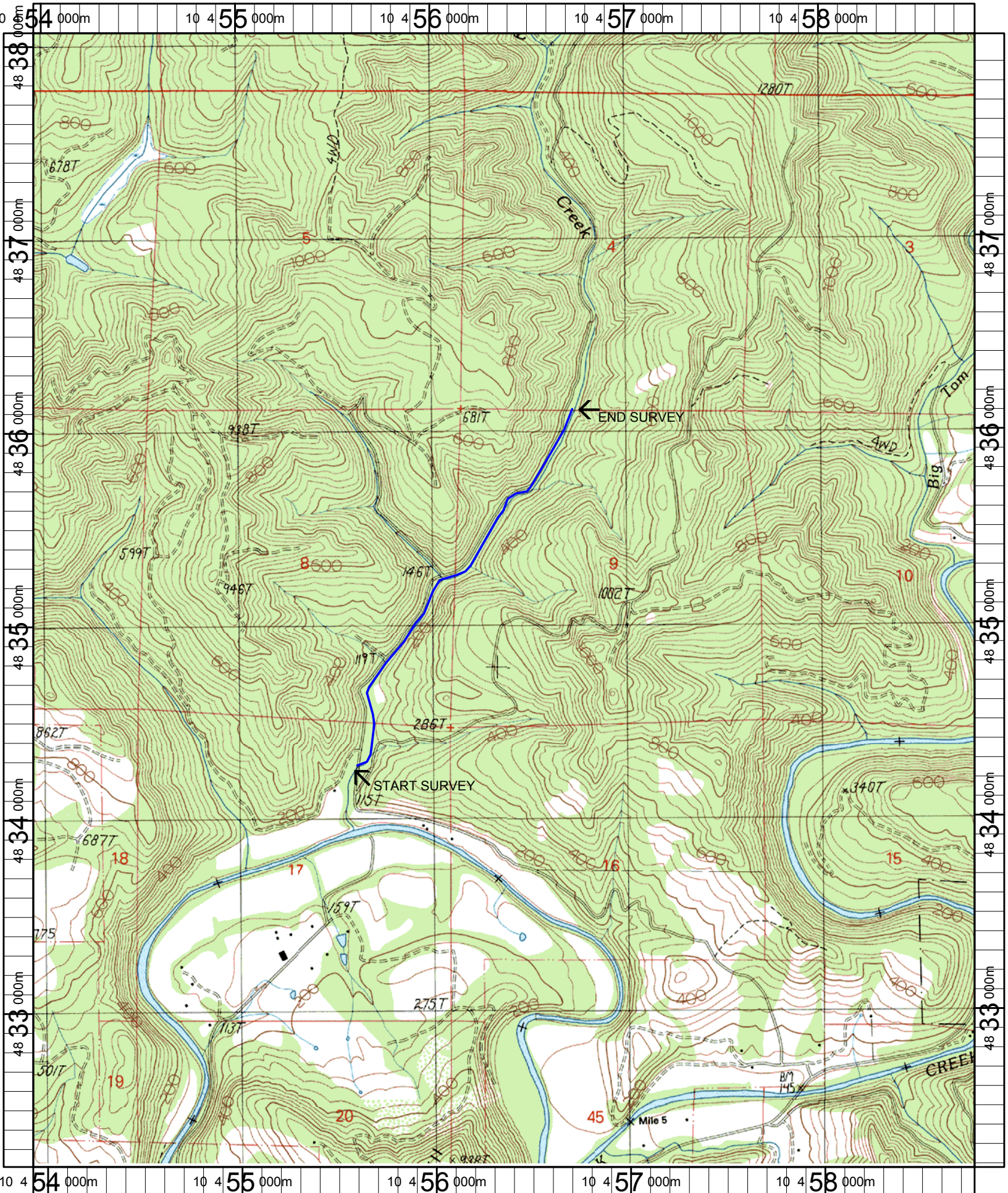
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
97	GL	10	1415.7		FLAG BLM SITE 3	
98	RI	01	1436.9	/TJ		
99	PD	11	1436.9			WOOD
100	LP	00	1445.3	HS	HS=12 LOGS	
104	RI	00	1496.3	HS	HS=10 LOGS, BLM SITE 6	WOOD
105	GL	00	1509.3		BLM SITE 7 FLAG	
108	RI	00	1558.2	CS/, CE/		
109	LP	00	1583.8	CS/	WINTER WREN	
110	RR	01	1603.3	HS	CT,MT,LT,ST,D15,S	
111	LP	01	1619.6	HS	HS=5 LOGS	
114	LP	00	1641.1	DJ		
125	LP	00	1817	WL		RSN
131	LP	00	1863.8		CT,CT,LT,ST,D30,S	
135	GL	00	1913.7		FLAG BLM SITE 9	
136	RI	00	1940.7	HS	HS=12 LOGS, BLM SITE 10	WOOD
138	RR	00	2009.3	DJ	DJ	
139	GL	00	2019.8	WL		COHO FRY
141	LP	00	2069.1	HS	HS=5 LOGS	WOOD, SITE 11
142	RI	01	2086.1	/TJ, HS	HS=6 LOGS	WOOD, SITE 12
144	GL	00	2113.1	WL		COHO FRY
145	RI	00	2146.1	HS	CH,MV,CT,MT,D15,S, HS=5 L	WOOD

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 4-UMP SITE ID: 266 LITTLE TOM FOLLEY PHASE 1 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>
146	LP	00	2170.1	HS	HS=5 LOGS	WOOD
148	LP	00	2225.1	HS	HS=11 LOGS	WOOD
150	LP	00	2252.1	HS	HS=5 LOGS	WOOD
151	RI	00	2287.1	HS		SAME HS AS UNIT 150
152	RR	00	2306.1	HS	HS=2 LOGS	
154	SR	00	2318.1	HS		
155	LP	00	2336.6	HS	HS=7 LOGS	SAME HS AS UNIT 154
160	RR	00	2444.7		CA,CT,LT,ST,D15,S	



Name: ELKTON
 Date: 1/27/2005
 Scale: 1 inch equals 2000 feet

Location: 10 456364 E 4835124 N
 Caption: LITTLE TOM FOLLEY CREEK RESTORATION SITE - UMPQUA BASIN