

**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: Pre-Tx  
DATE: August 8, 2005  
SURVEY CREW: Andy Livesay, Jennifer Jacobs  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 14.9 km<sup>2</sup>  
USGS MAPS: Elkton  
ECOREGION: Coast Range Sedimentary

**GENERAL DESCRIPTION:**

The Little Tom Folley Creek Phase 1 habitat survey extended 2,642 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.3 (range: 2.2-18.0). Land use for the reach was timber harvest and second growth (15-30 cm dbh) trees. The average unit gradient was 1.1 percent. Scour pools (61%) and riffles (25%) dominated stream habitat. Bedrock (29%), gravel (27%) and sand (25%) dominated stream substrate. Wood volume was very low at 7.8 m<sup>3</sup>/100m.

**COMMENTS:**

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

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	7.3	VWI Range:	2.2 - 18

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	2,642	10,443	0
Secondary Channel	114	204	7
Off-Channel Units	99	86	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 12	<u>First Terrace</u> n = 12
Width: 3.2	Width: 6.5	10.4 ( 6.25 - 12.6 )	15.8 ( 12.25 - 19.4 )
Depth: 0.25	Height: 0.4	0.8 ( 0.6 - 0.96 )	1.6 ( 1.2 - 1.8 )

W:D ratio: 16.8

Entrenchment (ACW:FPW ratio): 1.7

Stream Flow Type: LF

Habitat Units/100m (total channel length): 7.2

Average Unit Gradient: 1.1%

Habitat Units/100m (primary channel length): 7.8

Water temperature (°C): 15.0 - 15.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	TH	ST
Riparian Vegetation:	M30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	18%	Reach avg: 88%
Undercut Banks:	7%	Range: 31 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	294	11.1
Volume (m <sup>3</sup> ):	207	7.8
Key pieces (>=12m x 0.60m):	2	0.1

OREGON DEPT OF FISH AND WILDLIFE

L. TOM FOLLEY PHASE 1 PRE-TX (4-UJP, 266)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

8/10/2005

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 <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BEDROCK	7	124	3.1	0.06	430	2	1	9	9	3	1	77
CASCADE/BOULDERS	2	13	0.8	0.05	11	3	5	33	33	20	10	0
CULVERT CROSSING	2	31	0.7	0.03	22	0	6	32	32	8	13	11
DRY UNIT	5	51	2.8	0.00	134	0	17	38	35	10	0	0
POOL-BACKWATER	4	25	1.2	0.23	29	0	45	33	23	0	0	0
POOL-ISOLATED	2	12	1.1	0.14	15	0	40	50	10	0	0	0
POOL-LATERAL SCOUR	80	1,265	3.9	0.48	5,281	122	10	32	23	5	5	25
POOL-PLUNGE	3	29	4.3	0.47	148	1	2	21	15	3	4	56
POOL-STRAIGHT SCOUR	15	237	4.6	0.39	1,121	25	6	25	22	6	5	36
PUDDLED UNIT	2	22	0.5	0.06	10	0	50	45	5	0	0	0
RAPID/BEDROCK	5	72	3.1	0.03	226	5	0	9	11	1	3	76
RAPID/BOULDERS	6	81	3.4	0.04	348	13	1	20	47	20	4	7
RIFFLE	36	762	3.0	0.05	2,636	158	2	18	32	14	8	26
RIFFLE W/ POCKETS	1	11	3.0	0.02	33	4	0	20	30	30	10	10
STEP/BEDROCK	14	46	2.5	0.02	129	4	0	3	3	3	3	88
STEP/BOULDERS	1	8	4.0	0.05	32	9	0	5	10	29	38	19
STEP/COBBLE	21	67	1.9	0.04	127	2	2	25	64	8	0	1
<b>Total:</b>	206	2,855	3.2	0.25	10,733	348	<b>Avg:</b> 7	25	27	7	5	29

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	6	37	1.2	0.20	44	0.41%	0	0.0
Scour Pools	98	1,531	4.0	0.47	6,551	61.04%	148	2.3
Glides	0	0			0	0.00%	0	0.0
Riffles	37	773	3.0	0.05	2,669	24.87%	162	6.1
Rapids	11	154	3.2	0.04	574	5.35%	18	3.1
Cascades	9	136	2.6	0.05	441	4.11%	5	1.1
Step/Falls	36	121	2.2	0.04	288	2.68%	15	5.2
Dry	7	73	2.1	0.02	143	1.34%	0	0.0
Culverts	2	31	0.7	0.03	22	0.20%	0	0.0

REACH 1

T22S-R07W-S17NE

REACH 1

**POOL SUMMARY**

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	104	36.4	39.4
Pools >=1m deep:	2	0.7	0.8
Complex pools (LWD pieces>=3):	22	7.7	8.3
Pool frequency (channel widths/pool):	4.2		
Residual pool depth (avg):	0.41		

Survey Date 8/8/2005  
Report Date: 4/26/2006

**RIPARIAN ZONE  
VEGETATION SUMMARY**

REACH 1

**Summary of Riparian Zone (0-30m) 10 transects**

Total hardwoods/1000	610
Total conifers/1000 ft	421
Total conifers >20" dbh/1000 ft	24
Total conifers >35" dbh/1000 ft	6

**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	1.4	2.2	1.4	0.6	2.9	3.9
15-30cm	0.4	2.3	1.3	2.4	0.8	1.1	2.5	5.8
30-50cm	0.2	0.3	0.8	0.0	0.1	0.0	1.1	0.3
50-90cm	0.1	0.0	0.1	0.0	0.1	0.0	0.3	0.0
>90cm	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total/100m2	0.8	3.7	3.6	4.6	2.5	1.7	2.3	3.3

**Canopy closure and ground cover**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	50		53		37	
Shrub cover	52		47		33	
Grass/forb cover	27		29		26	

**Predominant landform in each zone**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	15		40		55	
High terrace	60		55		30	
Low terrace	0		0		0	
Floodplain	10		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	15		5		15	
Riprap	0		0		0	
Surface slope (%)	5		13		18	

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

**10 transects**

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

Total hardwoods/1000	610
Total conifers/1000 ft	421
Total conifers >20" dbh/1000 ft	24
Total conifers >35" dbh/1000 ft	6

**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	2.9	3.9
15-30cm	2.5	5.8
30-50cm	1.1	0.3
50-90cm	0.3	0.0
>90cm	0.1	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		
25	LF	3	RB	0	10	2	5	Conifer							
								Hardwood	1						
25	RT	1	HT	0	0	95	5	Conifer							
								Hardwood							
25	RT	2	HT	0	5	90	0	Conifer							
								Hardwood		1					
25	LF	1	HT	0	10	90	10	Conifer		1					THICK BLACKBERRIES IN THIS RIP
								Hardwood							
25	RT	3	HT	0	20	90	5	Conifer							
								Hardwood		2					
25	LF	2	HT	0	15	70	5	Conifer							0455617, 4834225
								Hardwood	1	1					
59	LF	3	HT	0	45	60	10	Conifer							
								Hardwood		1					
59	RT	3	HS	25	5	5	15	Conifer							CLEARCUT
								Hardwood							
59	RT	2	HT	0	75	80	10	Conifer							
								Hardwood	1	3					
59	RT	1	HT	0	75	90	5	Conifer							
								Hardwood	1	3					
59	LF	2	HT	0	75	80	5	Conifer							
								Hardwood	1	5					
59	LF	1	FP	0	60	80	5	Conifer							0455689, 4834379
								Hardwood	1	2					
73	LF	1	HT	0	30	90	0	Conifer							0455686, 4834670
								Hardwood							
73	LF	2	HT	0	25	90	0	Conifer	1	4					
								Hardwood		1					
73	LF	3	HT	0	30	50	20	Conifer		1					ALSO ROAD BED
								Hardwood		1					
73	RT	1	HT	0	20	90	10	Conifer							ALSO FP
								Hardwood							
73	RT	2	HT	0	20	85	5	Conifer				1			
								Hardwood		3					
73	RT	3	HT	0	5	80	10	Conifer							
								Hardwood							

86	LF	3	HS	40	60	45	35	Conifer	3	1	
								Hardwood	1		
86	RT	1	HT	0	75	30	60	Conifer			
								Hardwood			1
86	RT	2	HS	15	60	40	40	Conifer			
								Hardwood	4	3	
86	RT	3	HS	20	5	30	20	Conifer			CLEARCUT
								Hardwood			
86	LF	1	RB	0	50	30	15	Conifer			0455843,
								Hardwood	1	1	4834966,
86	LF	2	HS	40	70	30	40	Conifer	5	1	ALSO HT, HS
								Hardwood	2		
99	LF	3	HS	25	20	60	10	Conifer	4		
								Hardwood			
99	RT	2	HS	30	65	30	50	Conifer		1	
								Hardwood	1		
99	RT	1	HS	30	70	20	60	Conifer		2	1
								Hardwood	1		
99	LF	2	HS	25	5	60	20	Conifer	3	1	MANY SMALL YT
								Hardwood	2		
99	LF	1	RB	0	50	30	20	Conifer			0455945,
								Hardwood			4835065,
99	RT	3	HS	30	5	5	30	Conifer			ALSO HT CLEARCUT
								Hardwood			
116	RT	3	HS	25	0	5	20	Conifer			CLEARCUT
								Hardwood			
116	LF	1	HT	0	75	70	30	Conifer	1		0456075,
								Hardwood		3	4835234
116	LF	2	HT	0	65	70	20	Conifer			
								Hardwood	1	2	
116	LF	3	RB	0	20	30	20	Conifer	2		
								Hardwood			
116	RT	2	HS	30	65	20	40	Conifer			2
								Hardwood			
116	RT	1	HS	30	75	30	60	Conifer			
								Hardwood	1	2	
133	RT	3	HT	0	50	30	50	Conifer	3		
								Hardwood			
133	LF	1	RB	0	10	0	20	Conifer			0456238,
								Hardwood			4835432,
133	LF	2	HS	45	50	10	40	Conifer	1		ALSO HT ALSO ROAD BED
								Hardwood	6		
133	LF	3	HS	35	80	20	30	Conifer	1		1
								Hardwood	1	2	
133	RT	1	HT	0	65	40	50	Conifer			1
								Hardwood	2	3	ALSO FP



133	RT	2	HT	0	60	20	70	Conifer	4		1		
								Hardwood					
160	RT	3	HS	30	70	30	40	Conifer				1	
								Hardwood	1	2			
160	RT	2	HS	30	75	40	40	Conifer				1	ALSO HT
								Hardwood	2	2			
160	LF	3	HT	0	65	50	30	Conifer		2			
								Hardwood					
160	LF	2	HT	0	65	50	30	Conifer		2	1		
								Hardwood					
160	LF	1	HT	0	20	90	5	Conifer		1			NO GPS COORDINATE S
								Hardwood					ALSO FP
160	RT	1	HT	0	30	70	20	Conifer					
								Hardwood	1	2			
173	RT	2	HT	0	70	10	65	Conifer				1	
								Hardwood	1				
173	RT	1	HT	0	75	15	60	Conifer				1	ALSO FP
								Hardwood	2				
173	LF	3	HS	40	65	20	30	Conifer			3		
								Hardwood					
173	RT	3	HS	45	70	20	60	Conifer					1
								Hardwood		3			
173	LF	2	RB	0	70	20	15	Conifer					ALSO HT
								Hardwood		2			
173	LF	1	HT	0	80	35	35	Conifer					0456536, 4835754
								Hardwood	1	1			
198	LF	1	FP	0	55	30	25	Conifer					0456684, 4835973, ALSO HT
								Hardwood	1	5			
198	LF	2	HT	0	50	35	20	Conifer		3	2		
								Hardwood					
198	LF	3	RB	0	30	20	20	Conifer					ALSO HT
								Hardwood					
198	RT	1	HS	45	80	10	50	Conifer					
								Hardwood		1			
198	RT	2	HS	45	80	5	60	Conifer		1			
								Hardwood		1			
198	RT	3	HS	45	75	10	50	Conifer	1	1			
								Hardwood		2			

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: 4-UMP    SITE ID: 266    L. TOM FOLLEY PHASE 1 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	34.7		0455570, 4864217	START SIGN ALDER LT
2	CC	00	50.5	CC		CORRUGATED METAL CULV
3	LP	00	52.6			U 2 = 2.5 M IN DIAM.
4	RI	00	59.8		0455617, 4834225	
7	LP	00	98.2		COHO FRY	
22	LP	01	272.1	/TJ	TJ, MAIN STEM T = 15 C	BRAIDED
23	RB	11	272.1		TRIB T = 12.5 C	
24	BW	10	272.1	WL		
25	SC	00	274.9		0455689, 4834379	
28	LP	00	305.3			GRAZING IN THIS AREA
31	RI	00	326.1			LOTS OF ALGAE
33	LP	00	375.6	BV		
59	SC	00	572.1			0455713, 4834558
61	SC	00	614.9		COHO FRY	
66	LP	00	688	DJ		
69	SC	00	712.2	WL		DEER TRACKS
73	SC	00	766.5		0455686, 4834670	
79	LP	00	833.4	DJ	COHO FRY	
81	LP	00	885.5		SEVERAL LARGE CUTTH	COHO FRY
82	RR	00	898		U 81 = MANY COHO FRY	
83	LP	01	931.5	TJ/, DJ		

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: **4-UMP**    SITE ID: **266**    L. TOM FOLLEY PHASE 1 PRE-TX

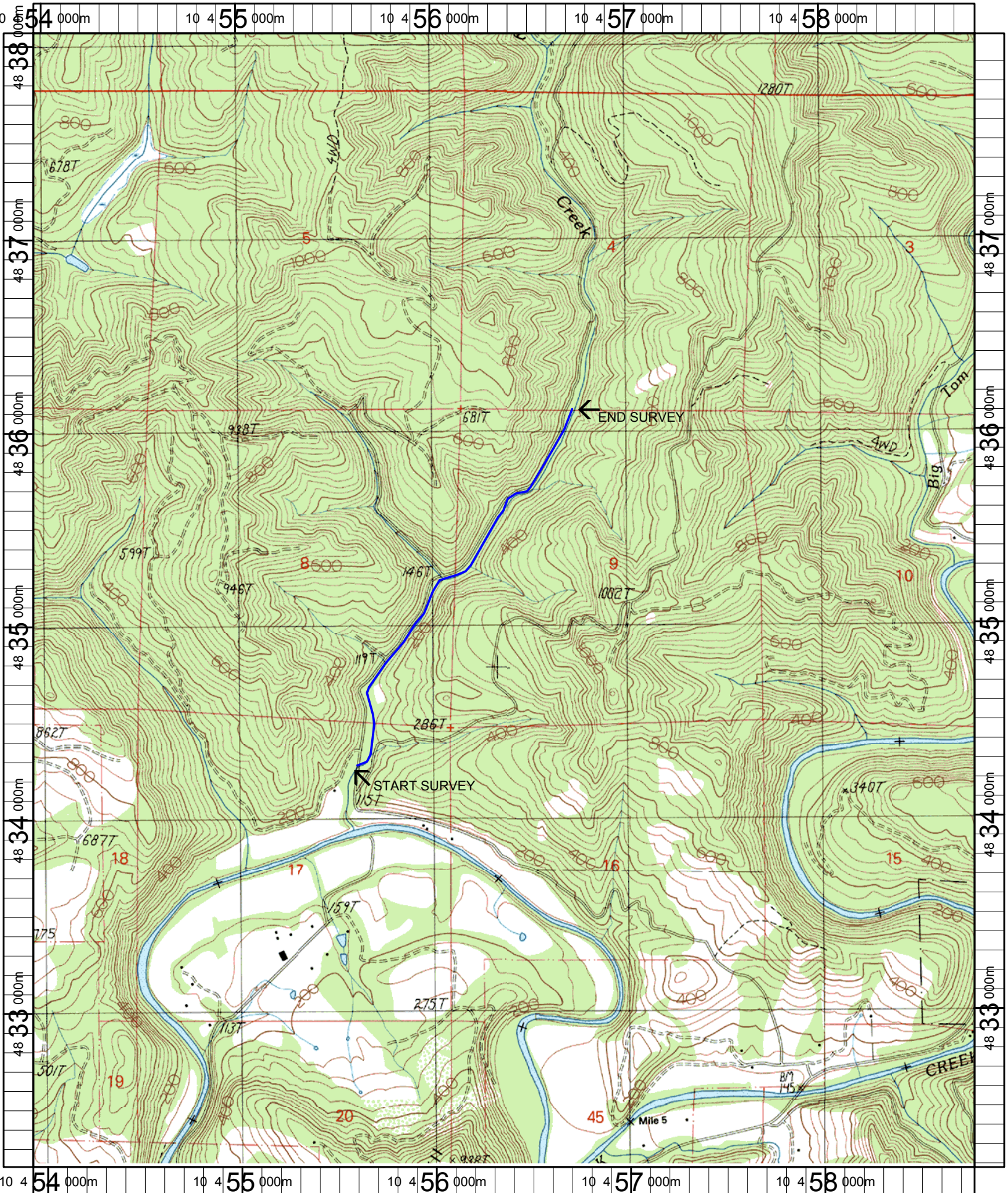
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
86	RI	00	1032	CS/		0455843, 4834966
99	RI	00	1245.3		0455945, 4835065	
103	RB	00	1331		LOTS OF CUTTHROAT AD	
104	LP	00	1360.7		U 103 = COHO FRY	
105	SB	00	1368.7	DJ		
111	LP	01	1448.9	TJ/		
113	CC	11	1448.9	CC		CULV IS 2.1 M IN DIAM.
114	RB	00	1459.4			U 113=CULV IS CORRUGATE
116	RR	00	1494.1		0456075, 4835234	
120	LP	00	1535.1	DJ		
123	LP	00	1588.1	DJ		
124	RI	01	1632.7	/TJ, DJ	TJ, T = 15.5 C	
125	CB	11	1632.7		TRIB T = 14.5 C	
133	RI	00	1760.8	CS/	0456238, 4835432	BROKEN METAL CULV IN BA
134	LP	00	1786.6		CUTTHROAT ADULTS, CO	
140	LP	00	1844.6	DJ		
144	LP	01	1872.4	DJ		
150	SC	00	1895.8	DJ		
156	LP	01	2013.3	DJ		COHO FRY
157	RI	02	2013.3			ROUGH SKIN NEWT
161	CR	00	2044.3		MANY COHO FRY	

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: 4-UMP    SITE ID: 266    L. TOM FOLLEY PHASE 1 PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
169	CR	00	2199.2	DJ		
170	SP	00	2233.2			RSN
173	RI	01	2294.9	/TJ	0456536, 4835754	
174	CR	11	2294.9		TRIB T = 14.5 C	
175	LP	00	2305.6		T = 14.5 C	
184	LP	00	2415.4		MANY COHO FRY	
188	LP	00	2462	DJ		
193	LP	02	2498.3	DJ		
198	LP	00	2532.4		0456684, 4835973	
200	LP	00	2560.7	DJ		
201	CR	00	2571.5			CRAYFISH
204	SR	00	2605.9		H = .25 M	
206	LP	00	2641.9		0456686, 4836112	END SIGN ALDER LT



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