

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

STREAM: Little Wallooskee River (N-366)  
BASIN: Lower Columbia River  
SURVEY TYPE: Post-Tx  
DATE: September 18, 2007  
SURVEY CREW: Lanoah Babcock, Kara Morris, David Stewart  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 13.1 km<sup>2</sup>  
USGS MAPS: Cathlamet Bay  
ECOREGION: Coast Range Coastal Uplands

**GENERAL DESCRIPTION:**

The Little Wallooskee River habitat survey extended 2,288 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 14.5 (range: 2.5-20.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.6 percent. Scour pools (63%) and riffles (35%) dominated stream habitat. Gravel (32%), sand (29%) and silt (22%) dominated stream substrate. Wood volume was low at 17.8 m<sup>3</sup>/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 WALLOOSKEE RIVER POST-TX      (1-NC, 366)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

9/17/2007

REACH 1		T08N-R08W-S31SE					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
DRY CHANNEL	2	9	1.1	0.00	10	0	18	30	43	10	0	0
POOL-LATERAL SCOUR	45	1,311	4.1	0.49	5,181	20	27	34	26	12	0	1
PUDDLED UNIT	2	19	0.8	0.11	12	0	20	43	37	0	0	0
RIFFLE	33	949	2.5	0.15	2,679	19	21	25	35	17	1	0
RIFFLE W/ POCKETS	1	25	6.0	0.30	151	0	32	26	26	16	0	0
STEP/BEDROCK	1	2	1.4	0.07	3	0	0	0	25	15	10	50
STEP/COBBLE	11	42	3.9	0.07	162	4	7	16	44	29	5	0
STEP/LOG	2	4	0.6	0.02	2	0	20	38	42	0	0	0
<b>Total:</b>	97	2,361	3.3	0.29	8,201	43	<b>Avg:</b> 22	29	32	15	1	1

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	0	0			0	0.00%	0	0.0	
Scour Pools	45	1,311	4.1	0.49	5,181	63.18%	20	0.4	
Glides	0	0			0	0.00%	0	0.0	
Riffles	34	974	2.6	0.15	2,831	34.52%	19	0.7	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	14	48	3.3	0.06	168	2.04%	4	2.4	
Dry	4	28	0.9	0.06	21	0.26%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	45	19.1	19.7
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	34	14.4	14.9
Pool frequency (channel widths/pool):	8.0		
Residual pool depth (avg):	0.39		

Survey Date 9/17/2007  
Report Date: 11/7/2007

**RIPARIAN ZONE  
VEGETATION SUMMARY**

**REACH 1**

**Summary of Riparian Zone (0-30m) 8 transects**

Total hardwoods/1000	762
Total conifers/1000 ft	1090
Total conifers >20" dbh/1000 ft	107
Total conifers >35" dbh/1000 ft	8

**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	0.9	1.0	1.4	2.0	2.6	1.4	4.9	4.4
15-30cm	1.6	0.8	1.3	1.3	2.4	2.3	5.3	4.3
30-50cm	1.5	1.5	1.8	1.0	2.8	1.1	6.0	3.6
50-90cm	0.8	0.3	0.5	0.0	0.4	0.0	1.6	0.3
>90cm	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Total/100m2	4.8	3.5	4.9	4.3	8.3	4.8	6.0	4.2

**Canopy closure and ground cover**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	79		74		87	
Shrub cover	2		2		4	
Grass/forb cover	65		59		55	

**Predominant landform in each zone**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	6		13		19	
High terrace	81		81		69	
Low terrace	6		0		0	
Floodplain	0		0		0	
Wetland/meadow	6		0		6	
Stream channel	0		0		6	
Roadbed/Railroad	0		6		0	
Riprap	0		0		0	
Surface slope (%)	3		5		3	

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

8 transects

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

Total hardwoods/1000	762
Total conifers/1000 ft	1090
Total conifers >20" dbh/1000 ft	107
Total conifers >35" dbh/1000 ft	8

**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	4.9	4.4
15-30cm	5.3	4.3
30-50cm	6.0	3.6
50-90cm	1.6	0.3
>90cm	0.1	0.0

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OREGON DEPT OF FISH AND WILDLIFE    LITTLE WALLOOSKEE RIVER POST-TX    (1-NC, 366)

HABITAT INVENTORY    Report Date: 11/14/2007

Survey Date: 9/17/2007

GCG: 1-NC    SITE ID: 366

**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		
16	LT	1	HT	0	45	0	90	Conifer							
								Hardwood			1				
16	LT	2	RB	0	20	0	80	Conifer							
								Hardwood		2	1				
16	LT	3	HT	0	75	20	70	Conifer		2					SWAMPY AREA
								Hardwood		5					
16	RT	1	HS	0	60	0	90	Conifer							
								Hardwood							
16	RT	2	HS	32	60	0	30	Conifer			1	1			
								Hardwood							
16	RT	3	HS	6	90	0	0	Conifer	1						
								Hardwood	2	1	1				
30	LT	1	HT	0	50	10	20	Conifer		2	1				
								Hardwood	1						
30	LT	2	HT	0	40	10	20	Conifer			1	2			
								Hardwood							
30	LT	3	HT	0	70	5	20	Conifer	3	3	1				
								Hardwood							
30	RT	1	HT	0	95	5	80	Conifer							
								Hardwood	4		2	1			
30	RT	2	HT	0	95	0	45	Conifer	3		2				
								Hardwood	5						
30	RT	3	HT	0	95	0	15	Conifer	1		2				
								Hardwood							
44	LT	1	HT	0	100	0	50	Conifer	3	4	2				
								Hardwood		1	2				
44	LT	2	HT	0	90	5	25	Conifer	2	1	1				
								Hardwood							
44	LT	3	HT	0	90	0	90	Conifer	1						
								Hardwood			2				
44	RT	1	HT	0	95	5	45	Conifer			1	2			
								Hardwood			1				
44	RT	2	HT	0	95	5	80	Conifer	4	1	3	1			
								Hardwood							
44	RT	3	HT	0	95	0	70	Conifer	2	2	3				
								Hardwood							

48	LT	1	HT	0	90	0	40	Conifer	1	2		
								Hardwood				
48	LT	2	HT	0	40	0	30	Conifer	1	1	SEEDLINGS	
								Hardwood			CONIFERS	
48	LT	3	HT	0	75	0	40	Conifer	1	2	1	
								Hardwood				
48	RT	1	HT	0	100	0	20	Conifer	1	2	3	
								Hardwood				
48	RT	2	HT	0	100	0	50	Conifer		2	1	
								Hardwood	1			
48	RT	3	HT	0	95	0	0	Conifer	7	1	7	1
								Hardwood				
59	LT	1	HT	0	65	5	55	Conifer	2	1	1	
								Hardwood	2			
59	LT	2	HT	0	85	0	30	Conifer	1	2		
								Hardwood	2			
59	LT	3	HT	0	95	5	30	Conifer	2	5	2	
								Hardwood				
59	RT	1	HT	0	95	0	90	Conifer	1	2		
								Hardwood	1			
59	RT	2	HT	0	75	0	75	Conifer				
								Hardwood	8	4		
59	RT	3	HT	0	90	5	60	Conifer			1	
								Hardwood	3			
68	LT	1	LT	0	80	0	95	Conifer				
								Hardwood		1		
68	LT	2	HT	0	60	5	85	Conifer				
								Hardwood	3	3		
68	LT	3	HT	0	85	20	70	Conifer	2	1		
								Hardwood	6	3		
68	RT	1	HT	0	95	0	95	Conifer				NO TREES
								Hardwood				
68	RT	2	HT	0	95	0	100	Conifer				
								Hardwood		3		
68	RT	3	HT	0	90	5	95	Conifer				RIGHT OVER
								Hardwood	6	3		ACTIVE
												CHANNEL
75	LT	1	HT	55	90	0	90	Conifer	1			
								Hardwood		2		
75	LT	2	HT	0	85	0	80	Conifer	2	1		
								Hardwood				
75	LT	3	WL	0	70	0	60	Conifer	1	3		
								Hardwood				
75	RT	1	HT	0	80	0	100	Conifer				
								Hardwood	1	2		
75	RT	2	HT	0	90	0	90	Conifer	1			
								Hardwood		1		

75	RT	3	HS	14	95	0	90	Conifer	2	2	1	
								Hardwood			3	
86	LT	1	HT	0	60	0	0	Conifer		3	3	
								Hardwood				
86	LT	2	HT	0	60	0	30	Conifer		2		1
								Hardwood				
86	LT	3	TC	0	90	0	85	Conifer			1	1
								Hardwood				
86	RT	1	WL	0	65	5	85	Conifer				
								Hardwood	3		2	1
86	RT	2	HS	40	90	0	100	Conifer		1		
								Hardwood	1			
86	RT	3	HS	30	90	0	90	Conifer		1		
								Hardwood		3		



COMMENT SUMMARY

MONITORING AREA: 1-NC      SITE ID: 366      STREAM: LITTLE WALLOOSKEE RIVER POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	11.7		TANNINS COLORING WATER
3	LP	00	46.6	AM	NEWT
4	LP	01	70.6	BV,HS TJ/	CHEW-TRAILS
8	LP	00	122.4	HS	WATER VERY DARK W/ TANNIN-SUBSTRATE HARD TO SEE
9	LP	00	145.2	HS	
10	LP	01	187.7	TJ/	SITE 3
13	LP	00	207.7	WL	TRAIL
15	LP	00	240.5		REST. FLAGGING - PP4
16	RP	01	265.7	HS, DJ TJ/	
18	RI	00	295.2	WL	TRACKS
23	LP	00	379	HS	
24	SC	00	384	DJ	
25	LP	00	405.5	HS, DJ	
27	LP	00	456.9	BV	
28	RI	00	484.9	HS, DJ	
34	LP	00	630.4	HS	
36	LP	01	675.4	TJ/	
37	RI	11	675.4		0444516
39	LP	00	710.4	HS, DJ	
41	LP	00	735.4	HS, DJ	
42	RI	00	745.4	HS, DJ	
44	RI	00	798.3	HS, DJ	

COMMENT SUMMARY

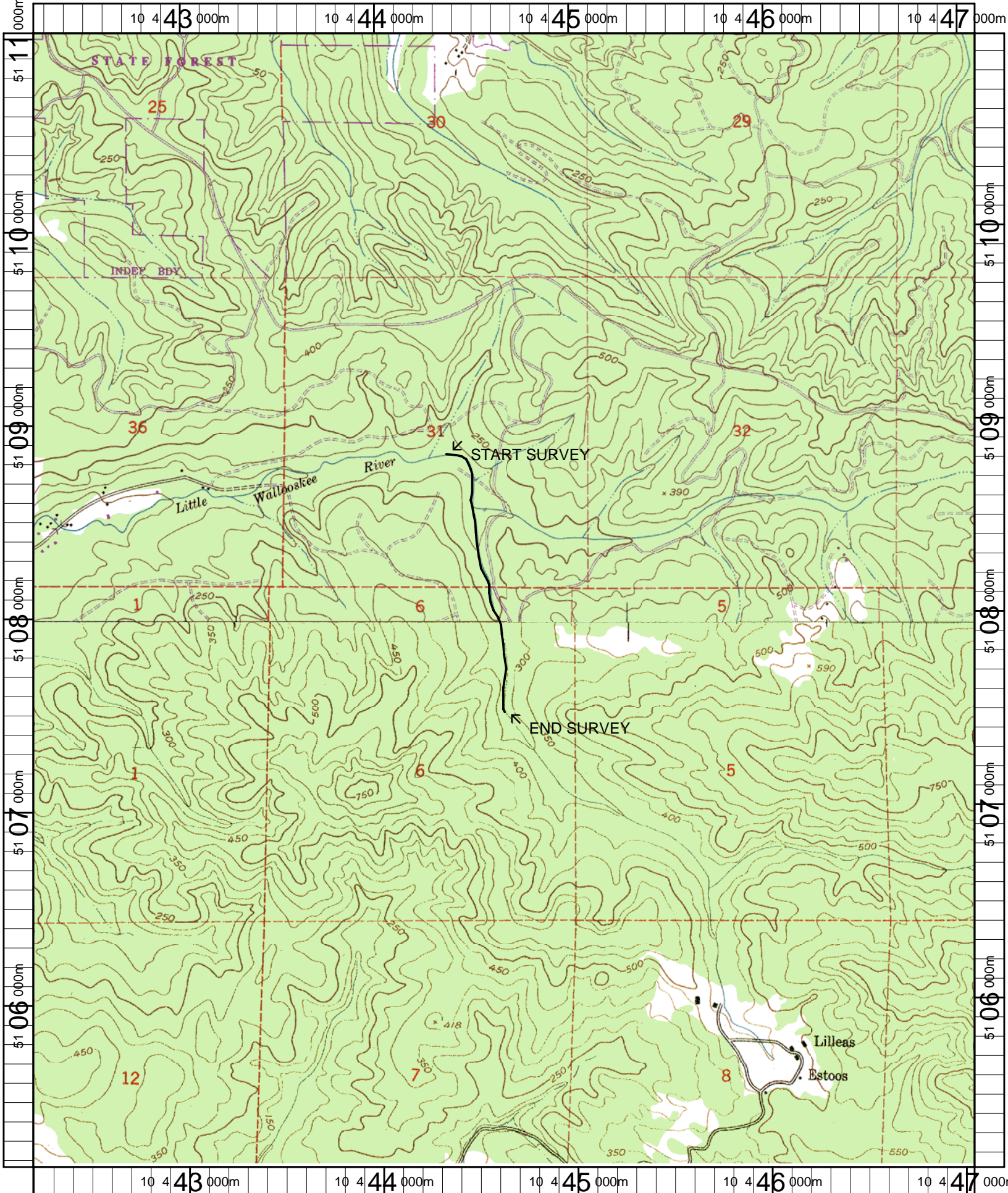
MONITORING AREA: 1-NC      SITE ID: 366      STREAM: LITTLE WALLOOSKEE RIVER POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
45	LP	00	831.5	HS	
47	LP	00	952.9	/EA, AM HS	NEWT
48	RI	00	986.5	HS	
49	LP	00	1008.5	BV, HS, DJ	TRAIL
51	LP	00	1046.3	HS, DJ AM	FROG
52	RI	00	1061.7	DJ, HS	
53	LP	00	1093	HS	
54	RI	00	1140		X-SECTION=NO LOG PLACEMENT
56	LP	00	1206.7	HS, DJ	
58	RI	00	1250.2	HS, DJ /SS	
59	LP	00	1297.2	HS, DJ	
60	LP	00	1327.2	HS	
63	RI	00	1424.3	HS, DJ	
67	RI	00	1520.8	HS, DJ EA	MARSH W/O WATER LEFT
68	RI	00	1561.8	DJ, HS	
69	LP	00	1598.5	HS, DJ	
71	LP	00	1626.3	HS	
72	LP	00	1686.3	HS, DJ	
75	LP	00	1804.3	HS	
76	RI	00	1817	WL HS	TRAILS
77	LP	00	1842.3	HS, DJ	CRAWDAD
79	LP	00	1886	HS	

COMMENT SUMMARY

MONITORING AREA: 1-NC      SITE ID: 366      STREAM: LITTLE WALLOOSKEE RIVER POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
81	LP	00	1938	DJ, HS	
82	RI	01	1985	TJ/	PP31-REST FLAGGING
83	PD	11	1985		0444475
84	RI	01	2029.5	/TJ HS, DJ	
86	LP	00	2060	DJ, HS	
87	LP	00	2094.3	HS, DJ	
88	SL	00	2095.7		SL=LIVING ALDERS GROWING OUT OF SLOPE
89	RI	01	2108.5	/TJ	
90	RI	11	2108.5		0444493
97	RI	00	2288.1	RF	



Name: CATHLAMET BAY  
 Date: 4/25/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 0444642 E 5108077 N  
 Caption: LITTLE WALLOOSKEE RIVER RESTORATION SITE -  
 COLUMBIA/YOUNGS BAY BASIN