

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

STREAM: Wildcat Creek (MC-306)  
BASIN: Siuslaw River  
SURVEY TYPE: Pre-Tx  
DATE: August 3, 2005  
SURVEY CREW: Andy Livesay, Jennifer Jacobs  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 9.6 km<sup>2</sup> (above survey start)  
USGS MAPS: High Point  
ECOREGION: Coast Range Mid-Coastal Sedimentary

**GENERAL DESCRIPTION:**

The Wildcat Creek habitat survey extended 1,999 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20.2 (range: 12.0-30.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.9 percent. Scour pools (61%) and riffles (23%) dominated stream habitat. Sand (55%) and gravel (31%) dominated stream substrate. Wood volume was low at 19.0 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.

REACH 1

T18S-R07W-S13SE

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	20.2	VWI Range:	12 - 30

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	Braided Channel	0%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	1,999	6,123	0
Secondary Channel	170	392	14
Off-Channel Units	29	33	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 9
Width: 2.7	Width: 4.9	8.2 ( 5.6 - 14.5 )	10.0 ( 7.2 - 15.5 )
Depth: 0.27	Height: 0.5	1.1 ( 0.9 - 1.2 )	1.4 ( 1.1 - 1.62 )

W:D ratio: 9.5  
 Stream Flow Type: LF  
 Average Unit Gradient: 0.9%  
 Water temperature (°C): 13.5 - 13.5

Entrenchment (ACW:FPW ratio): 1.7  
 Habitat Units/100m (total channel length): 7.4  
 Habitat Units/100m (primary channel length): 8.1

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	21%	Reach avg: 80%
Undercut Banks:	13%	Range: 33 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	353	17.7
Volume (m <sup>3</sup> ):	380	19.0
Key pieces (>=12m x 0.60m):	13	0.7

OREGON DEPT OF FISH AND WILDLIFE

WILDCAT CREEK PRE-TX (2-MC, 306)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

8/3/2005

REACH 1

T18S-R07W-S13SE

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
CULVERT CROSSING	1	13	0.6	0.08	8	0	0	25	25	0	0	50
DRY CHANNEL	5	34	1.9	0.00	69	0	27	55	18	0	0	0
DRY UNIT	8	79	2.3	0.00	194	0	23	56	21	1	0	0
GLIDE	2	31	2.5	0.17	76	0	5	49	20	6	0	19
POOL-BACKWATER	1	6	1.1	0.20	7	0	10	40	50	0	0	0
POOL-BEAVER DAM	1	159	3.5	1.30	557	0	24	76	0	0	0	0
POOL-ISOLATED	1	3	1.5	0.20	5	0	47	47	5	0	0	0
POOL-LATERAL SCOUR	76	1,064	3.3	0.44	3,610	2	12	72	14	1	0	2
POOL-PLUNGE	2	57	6.6	0.55	395	0	10	55	20	0	0	15
PUDDLED UNIT	1	4	0.7	0.10	3	0	50	50	0	0	0	0
RIFFLE	41	683	2.1	0.11	1,479	5	3	40	52	1	0	4
STEP/BEAVER DAM	1	0	7.5	0.02	0	0	19	76	5	0	0	0
STEP/COBBLE	18	64	2.0	0.08	141	0	2	26	68	2	0	1
STEP/LOG	3	3	2.6	0.04	6	0	3	46	51	0	0	0
STEP/STRUCTURE	1	0	0.7	0.04	0	0	0	10	10	0	0	80
<b>Total:</b>	162	2,198	2.7	0.27	6,548	7	<b>Avg:</b> 10	55	31	1	0	3

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	3	168	2.0	0.57	568	8.67%	0	0.0
Scour Pools	78	1,120	3.4	0.44	4,005	61.16%	2	0.0
Glides	2	31	2.5	0.17	76	1.17%	0	0.0
Riffles	41	683	2.1	0.11	1,479	22.59%	5	0.3
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	23	67	2.3	0.07	148	2.26%	0	0.0
Dry	14	117	2.0	0.01	265	4.05%	0	0.0
Culverts	1	13	0.6	0.08	8	0.11%	0	0.0

REACH 1

T18S-R07W-S13SE

REACH 1

**POOL SUMMARY**

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	81	36.9	40.5
Pools >=1m deep:	1	0.5	0.5
Complex pools (LWD pieces>=3):	34	15.5	17.0
Pool frequency (channel widths/pool):	5.5		
Residual pool depth (avg):	0.38		

OREGON DEPARTMENT OF FISH AND WILDLIFE  
HABITAT INVENTORY

WILDCAT CREEK PRE-TX  
GCG: 2-MC SITE ID: 306

Survey Date 8/3/2005  
Report Date: 4/26/2006

RIPARIAN ZONE  
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	1202
Total conifers/1000 ft	174
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	5.0	0.0	2.7	0.9	3.3	1.0
15-30cm	0.0	0.7	0.0	1.9	0.6	2.4	0.6	5.0
30-50cm	0.4	1.0	0.1	1.1	0.6	0.9	1.1	3.0
50-90cm	0.1	0.3	0.0	0.3	0.0	0.1	0.1	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.7	7.0	0.1	6.0	2.0	6.7	1.0	6.6

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Canopy closure	59		70		71
Shrub cover	73		65		63	
Grass/forb cover	23		28		28	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer (%)		Conifer (%)		Conifer (%)	
	Hillslope	0		7		21
High terrace	100		93		71	
Low terrace	0		0		0	
Floodplain	0		0		7	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	0		4		8	

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	1202
Total conifers/1000 ft	174
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	1.0	11.0
15-30cm	0.6	5.0
30-50cm	1.1	3.0
50-90cm	0.1	0.7
>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		
17	LF	1	HT	0	95	65	35	Conifer							
								Hardwood	6		2				
17	RT	3	HT	0	80	50	10	Conifer				1			
								Hardwood	3	1					
17	RT	2	HT	0	75	60	20	Conifer							
								Hardwood	6						
17	RT	1	HT	0	75	70	20	Conifer							
								Hardwood				2			
17	LF	2	HT	0	50	90	10	Conifer							
								Hardwood	2	1					
17	LF	3	FP	0	10	95	5	Conifer							
								Hardwood	3						
49	RT	3	HT	0	80	80	15	Conifer					1		
								Hardwood			2				
49	RT	2	HT	0	75	90	5	Conifer							
								Hardwood	1	1	1				
49	RT	1	HT	0	50	95	0	Conifer							
								Hardwood	1	1					
49	LF	3	HT	0	90	65	30	Conifer							
								Hardwood	2	3	1				
49	LF	2	HT	0	85	80	15	Conifer							
								Hardwood			2	1			
49	LF	1	HT	0	75	90	5	Conifer							
								Hardwood	3	1					
59	LF	2	HT	0	0	90	10	Conifer							WILLOWS
								Hardwood			1				
59	LF	3	HT	0	50	90	10	Conifer							WILLOWS
								Hardwood			1	1			
59	RT	3	HS	40	85	5	70	Conifer							
								Hardwood			2	1			
59	RT	1	HT	0	70	55	35	Conifer							
								Hardwood	6	1					
59	RT	2	HS	40	90	10	70	Conifer							
								Hardwood	1	1	1				
59	LF	1	HT	0	0	60	40	Conifer							WILLOWS
								Hardwood	7						

86	RT	1	HT	0	75	70	25	Conifer			1		
								Hardwood	1	2			
86	LF	1	HT	0	65	85	5	Conifer					
								Hardwood	1			1	
86	LF	3	HT	0	30	90	5	Conifer					
								Hardwood					
86	RT	2	HT	0	70	55	40	Conifer					
								Hardwood	1	2		1	
86	RT	3	HT	0	70	50	45	Conifer	2				
								Hardwood		1		1	
86	LF	2	HT	0	50	90	5	Conifer					
								Hardwood	1				
103	LF	1	HT	3	80	60	35	Conifer					1
								Hardwood					2
103	RT	2	HT	0	75	75	20	Conifer					
								Hardwood	1	1		1	
103	RT	1	HT	0	25	75	25	Conifer	1				
								Hardwood	1				
103	LF	3	HT	3	90	15	80	Conifer	3	1			
								Hardwood	3	2			
103	LF	2	HT	3	90	10	80	Conifer					
								Hardwood	1		1	1	
103	RT	3	HS	30	90	70	20	Conifer		1			
								Hardwood			1		
137	RT	1	HT	0	40	90	5	Conifer					
								Hardwood	1				
137	LF	1	HT	0	60	80	20	Conifer				2	
								Hardwood	1		1		
137	LF	2	HT	0	70	90	5	Conifer					
								Hardwood		1		1	
137	LF	3	HT	0	80	80	15	Conifer					
								Hardwood	1		1	1	
137	RT	2	HT	0	80	90	5	Conifer					
								Hardwood	1	2			
137	RT	3	HT	0	80	90	5	Conifer	1	2		1	
								Hardwood	1				
152	RT	3	HS	35	85	70	25	Conifer					
								Hardwood	3	4			
152	RT	2	HT	0	75	70	25	Conifer					
								Hardwood	2	1		2	
152	RT	1	HT	0	50	90	5	Conifer					
								Hardwood	4				
152	LF	3	HT	0	75	35	60	Conifer				1	
								Hardwood	7	1			
152	LF	2	HT	15	90	10	85	Conifer				1	
								Hardwood	2				



152	LF	1	HT	0	70	35	60	<b>Conifer</b>		
								<b>Hardwood</b>	3	1

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC**      SITE ID: **306**      WILDCAT CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RI	00	11.5		2D 0461918 / 4871472	
4	LP	00	58.5	SS		
7	LP	00	124	SS	YELLOW FLAGGING NO.	
10	LP	00	175	SS		
11	LP	00	193		BRAIDED CHANNEL	UNKNOWN FRY
12	LP	00	204		YELLOW FLAGGING NO.	
14	LP	02	234.5			BRAIDED CHANNEL
15	LP	00	249.5	BV		
16	RI	00	255		RIPARIAN 1	
17	LP	00	272		2D 0461850 / 4871429	METRICS/RIPARIAN
25	LP	01	352.5	BV		
27	LP	02	352.5			NO PTC, SURROUNDED BY
29	LP	02	352.5			NO PTC BECAUSE OF DU
31	LP	00	361		TEMP 13.5C	
36	SC	00	417.3	BV		
43	LP	00	480.4			SEVERE EROSION
47	LP	00	502.4	DJ		
49	LP	00	545.4	BC	RIPARIAN 2, 2D 0461852/4	
54	SC	00	600.7	DJ		
57	SD	00	632.23	BD, BV	H=0.6M	
58	BP	00	791.23	BV		

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC**      SITE ID: **306**      WILDCAT CREEK PRE-TX

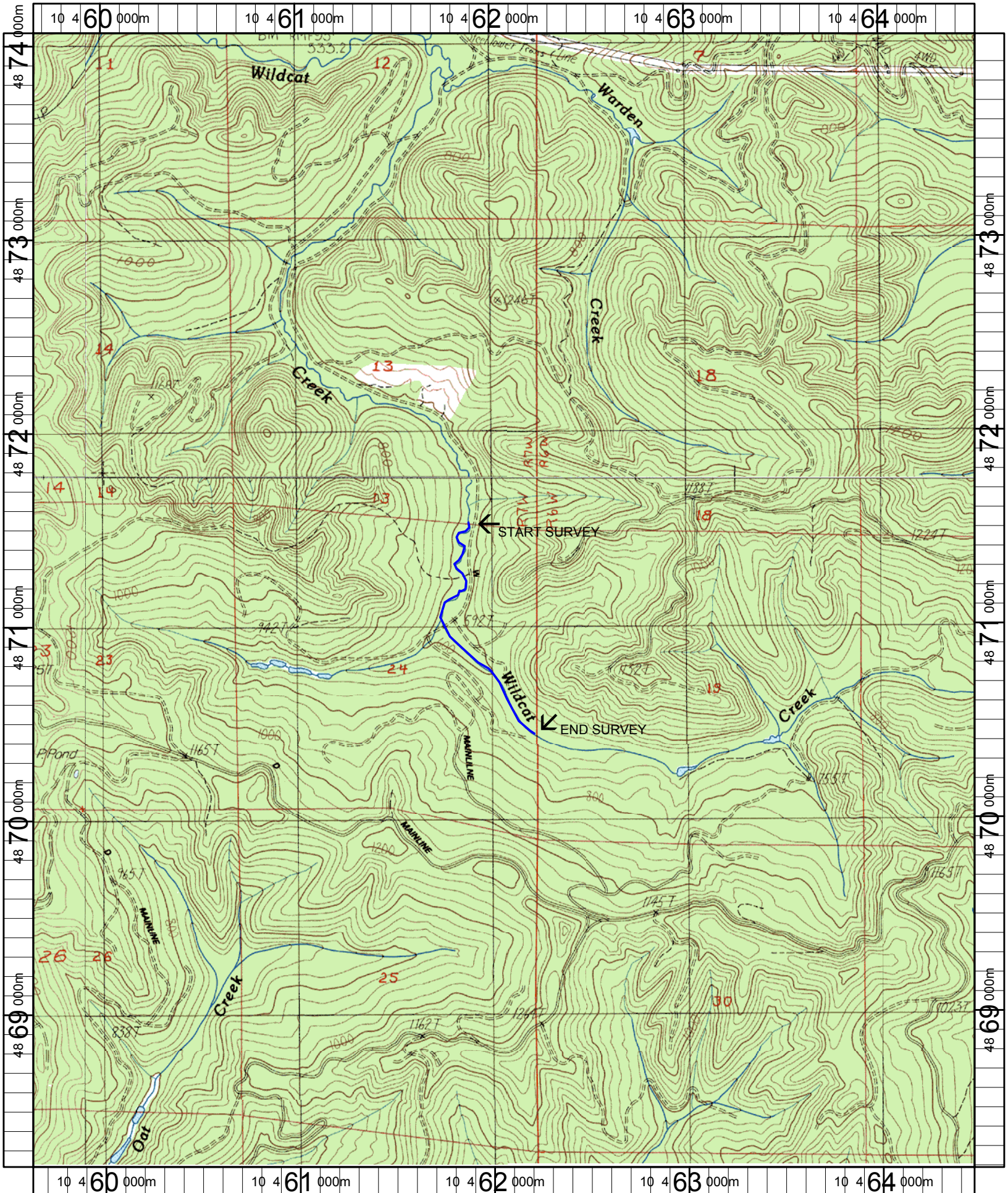
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
59	SC	00	796.23		RIP 3, 0461725 / 4871133	METRICS AND RIPARIAN
61	SL	00	817.93		H=0.23M	BARRIER TO FRY
64	LP	00	860.93		COHO FRY PRESENT	
65	RI	00	873.93	BV		
70	LP	00	935.73		FRY PRESENT	
78	LP	02	996.43		NEWT ORGY	DU, NO PTC
80	LP	02	996.43			DU, NO PTC
81	SS	00	996.63		H=0.28M	
82	CC	00	1009.13	CC	2.2M DIA, CORRUGATED	
83	LP	01	1042.63	TJ		
84	RI	11	1042.63		SPAWNING SURVEY SIG	
86	RI	00	1052.93		RIP 4, 0461715 / 4870950	METRICS AND RIPARIAN
92	RI	00	1147.13		FRY	
93	LP	00	1155.33		FRY PRESENT	
103	LP	00	1276.03		RIP 5, 2D 0461852 / 48708	
109	LP	02	1311.53	WL, BV		DEER TRACKS
111	LP	00	1331.03		FRY PRESENT	
116	LP	00	1399.03	BV		COHO FRY
118	LP	00	1424.03			MC-576 START SIGN
119	SC	01	1427.53	TJ/		
121	LP	01	1434.03		START SIGN FOR MC-576	

# Comment Summary

## Restoration Monitoring Sites 2005

MONITORING AREA: 2-MC      SITE ID: 306      WILDCAT CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
122	RI	01	1440.53		3D 0461996 / 4870767	
123	LP	01	1459.53	WL		DEER TRACKS
132	SL	00	1503.63		H=0.15M	
137	RI	00	1554.13		RIP 6, 0462059 / 4870630	METRICS AND RIPARIAN
138	LP	01	1581.13		BIG COHO FRY	
144	RI	00	1643.13	BV		
152	RI	00	1811.13		RIP 7, 0462121 / 4870502	
153	GL	00	1823.13		VALLEY FLOOR IS NARR	
162	RI	00	1999.13		END, 2D 0462249 / 487044	



Name: HIGH POINT  
 Date: 6/13/2005  
 Scale: 1 inch equals 2000 feet

Location: 10 462061 E 4871129 N  
 Caption: WILDCAT CREEK RESTORATION SITE - SIUSLAW BASIN