

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

STREAM: Whiskey Creek (MC-155)
BASIN: Siletz River
SURVEY TYPE: Post-Tx
DATE: July 17, 2006
SURVEY CREW: Brian Cannon, Paul Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.8 km²
USGS MAPS: Valsetz
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Whiskey Creek habitat survey extended 619 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 17.0 (range: 10.0-25.0). Land use for the reach was young (3-15 cm dbh) and second growth (15-30 cm dbh) trees. The average unit gradient was 0.4 percent. Scour pools (81%) dominated stream habitat. Sand (48%) and gravel (37%) dominated stream substrate. Wood volume was low at 16.6 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

T09S-R08W-S07SE

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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	17.0	VWI Range:	10 - 25

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	619	1,871	0
Secondary Channel	8	9	0
Off-Channel Units	43	98	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 2.8	Width: 5.2	7.9 (6 - 10.5)	9.4 (8.1 - 11.5)
Depth: 0.48	Height: 0.5	1.1 (0.8 - 1.2)	1.4 (1.2 - 1.6)

W:D ratio: 10.0
 Stream Flow Type: LF
 Average Unit Gradient: 0.4%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.5
 Habitat Units/100m (total channel length): 6.3
 Habitat Units/100m (primary channel length): 6.8

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	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:	20%	Reach avg: 76%
Undercut Banks:	10%	Range: 28 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	101	16.3
Volume (m ³):	103	16.6
Key pieces (>=12m x 0.60m):	7	1.1

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

7/17/2006

REACH 1		T09S-R08W-S07SE					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	8	0.2	0.02	2	0	20	60	20	0	0	0
POOL-ALCOVE	1	22	3.5	0.00	77	0	40	60	0	0	0	0
POOL-BACKWATER	2	9	2.1	0.40	16	0	30	65	5	0	0	0
POOL-ISOLATED	1	4	0.7	0.01	3	0	40	60	0	0	0	0
POOL-LATERAL SCOUR	25	458	3.5	0.72	1,607	0	16	59	25	0	0	0
RIFFLE	10	147	1.6	0.07	242	0	5	22	72	0	0	0
RIFFLE W/ POCKETS	1	18	1.4	0.10	25	0	5	15	80	0	0	0
STEP/COBBLE	1	4	1.4	0.50	5	0	5	15	80	0	0	0
Total:	42	669	2.8	0.48	1,977	0	Avg: 15	48	37	0	0	0

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	4	34	2.1	0.20	96	4.85%	0	0.0	
Scour Pools	25	458	3.5	0.72	1,607	81.28%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	11	165	1.6	0.07	267	13.52%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	1	8	0.2	0.02	2	0.08%	0	0.0	
Step/Falls	1	4	1.4	0.50	5	0.27%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	29	43.3	46.9
Pools >=1m deep:	4	6.0	6.5
Complex pools (LWD pieces>=3):	11	16.4	17.8
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.67		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

WHISKEY CREEK POST-TX
GCG: 2-MC SITE ID: 155

Survey Date 7/17/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 3 transects

Total hardwoods/1000	1382
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	0
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	0.0	5.7	0.0	8.3	1.7	6.0	1.7	20.0
15-30cm	0.0	0.3	0.3	0.0	0.0	0.7	0.3	1.0
30-50cm	0.0	0.3	1.0	1.0	0.7	0.0	1.7	1.3
50-90cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.0	6.3	1.3	9.7	2.3	6.7	1.2	7.6

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	42	51	38
Shrub cover	19	19	27
Grass/forb cover	81	73	73

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	0	17
High terrace	67	67	67
Low terrace	17	0	0
Floodplain	17	17	17
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	17	0
Riprap	0	0	0
Surface slope (%)	1	1	4

Summary of Riparian Zone (0-30m) for all reaches**3 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	1382
Total conifers/1000 ft	224
Total conifers >20" dbh/1000 ft	0
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	1.7	20.0
15-30cm	0.3	1.0
30-50cm	1.7	1.3
50-90cm	0.0	0.3
>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		
9	RT	1	HT	0	70	30	70	Conifer							ELDERBERRY
								Hardwood	2						
9	LF	1	LT	0	70	30	70	Conifer							ELDERBERRY
								Hardwood	7	1					
9	LF	3	HS	25	30	90	10	Conifer	5						DOUGLAS FIR
								Hardwood							
9	RT	2	HT	0	95	50	50	Conifer							ALDER, ELDERBERRY
								Hardwood	9		3				
9	RT	3	HT	0	95	10	90	Conifer							
								Hardwood	9	2					
9	LF	2	RB	5	30	30	20	Conifer							50%RB, NO TREES
								Hardwood							
21	LF	1	HT	0	20	30	70	Conifer							ELDERBERRY
								Hardwood	5						
21	LF	2	HT	0	60	10	90	Conifer							ALDER, ELDERBERRY
								Hardwood	6			1			
21	LF	3	HT	0	0	10	90	Conifer							NO TREES
								Hardwood							
21	RT	1	FP	5	90	5	95	Conifer							ALDER
								Hardwood	1		1				
21	RT	2	HT	0	95	5	95	Conifer		1	3				
								Hardwood							
21	RT	3	HT	0	90	20	80	Conifer				2			VINE MAPLE
								Hardwood	7						
30	LF	2	HT	0	15	5	95	Conifer							
								Hardwood	6						
30	LF	1	HT	0	0	5	95	Conifer							ELDERBERRY
								Hardwood	1						
30	LF	3	HT	0	5	10	90	Conifer							ELDERBERRY
								Hardwood	2						
30	RT	2	FP	0	10	15	85	Conifer							ELDERBERRY
								Hardwood	4						
30	RT	3	FP	0	10	20	80	Conifer							NO TREES
								Hardwood							
30	RT	1	HT	0	0	15	85	Conifer							ELDERBERRY
								Hardwood	1						

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **155** **WHISKEY CREEK POST-TX**

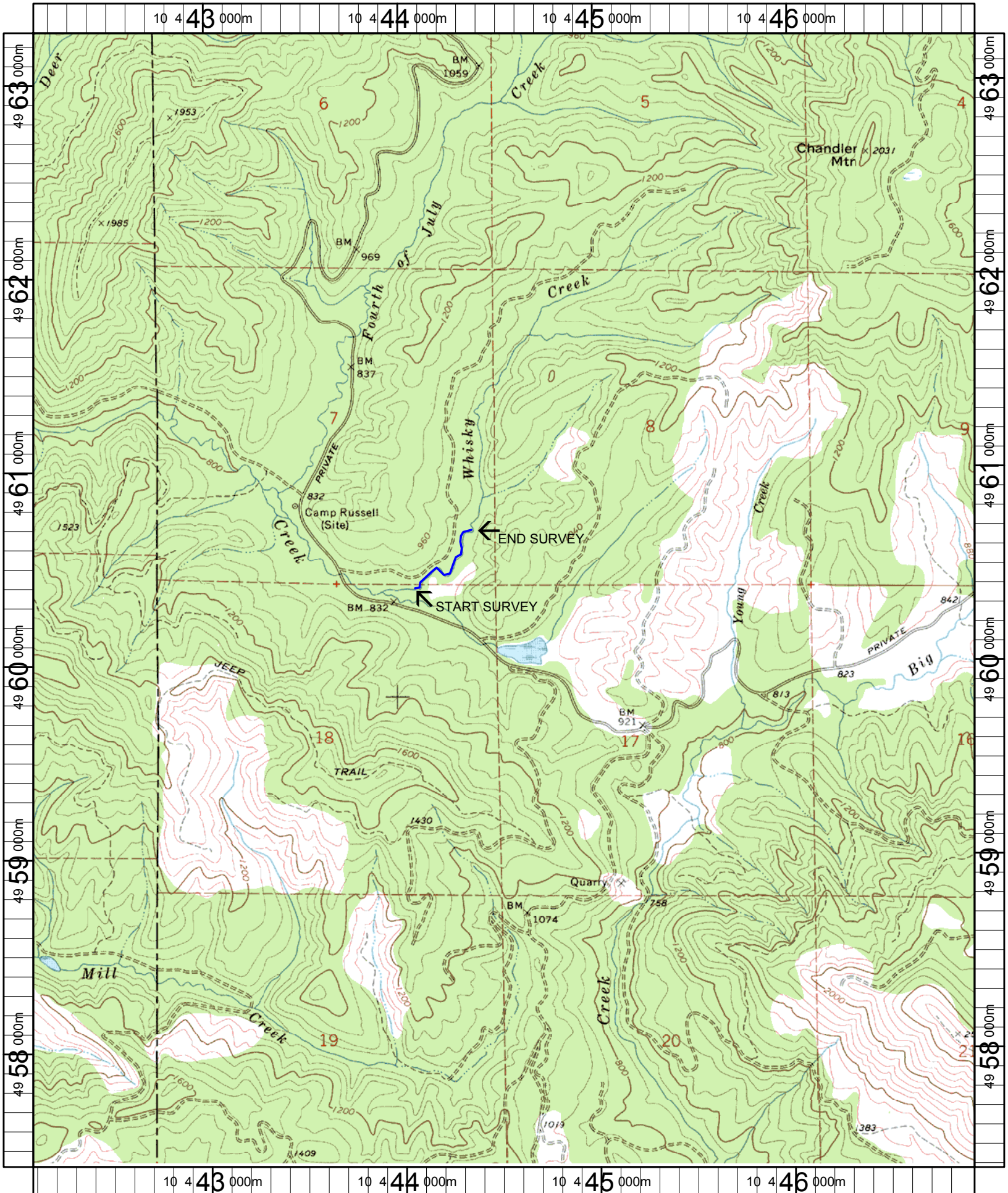
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	15.1	HS, WL	CT,MT,ST,YT,D3,S	RSN
2	SC	00	18.9	HS		
3	LP	00	30.4		COHO FRY	COHO FRY
4	RI	01	61.9	HS		
5	BW	10	61.9		COHO FRY	
6	LP	00	85		COHO FRY, DJ	
9	LP	01	153.2	TJ/	CT,MT,ST,YT,D30,S	
10	IP	10	153.2	WL	2 RSN	RSN, COHO FRY
11	CB	11	153.2		ACW=0.60M	
12	LP	00	172.7	HS	COHO FRY	
14	LP	00	206.7	HS		
17	LP	01	235.8	HS		
21	RI	00	267.7		CT,MT,ST,YT,D15,G	
26	LP	00	332.2	HS	COHO FRY, CT	
27	LP	00	346.4	HS		
28	RI	01	375.8	HS		
29	AL	10	375.8		PRETTY MUCH DRY	PREV.H2O-DRY@SURVEY
30	LP	00	384.4	WL	CT,MT,ST,YT,D3,G	RSN, COHO FRY
31	RI	00	400.4	BV		
32	LP	00	440.4	HS	COHO FRY	
34	LP	01	491	HS	COHO FRY	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 2-MC SITE ID: 155 WHISKEY CREEK 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>
35	LP	02	491	HS		
39	LP	00	554.6	BV		
40	LP	00	576.1		COHO FRY	
41	LP	00	607.4	HS		
42	LP	00	618.7		CT,MT,YT,ST,D30,S	



Name: VALSETZ
 Date: 1/23/2006
 Scale: 1 inch equals 2000 feet

Location: 10 444523 E 4960325 N
 Caption: WHISKEY CREEK RESTORATION SITE - SILETZ BASIN