

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

STREAM: Fourth of July Creek (MC-87)
BASIN: Siletz River
SURVEY TYPE: Post-Tx
DATE: August 8, 2006
SURVEY CREW: Annette Garrigues, Jeff Snyder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 6.7 km²
USGS MAPS: Valsetz
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Fourth of July Creek habitat survey extended 453 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 17.8 (range: 15.0-24.0). Land use for the reach was young (3-15 cm dbh) trees. The average unit gradient was 0.5 percent. Scour pools (90%) dominated stream habitat. Gravel (57%) and sand (28%) dominated stream substrate. Wood volume was moderate at 25.2 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-S07NW

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	17.8	VWI Range:	15 - 24

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	453	2,909	0
Secondary Channel	0	0	0
Off-Channel Units	40	56	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 4.3	Width: 7.7	11.5 (9.2 - 13.9)	15.8 (10.9 - 18.9)
Depth: 0.39	Height: 0.3	0.7 (0.6 - 0.7)	1.1 (0.9 - 1.25)

W:D ratio: 23.2

Entrenchment (ACW:FPW ratio): 1.5

Stream Flow Type: LF

Habitat Units/100m (total channel length): 5.3

Average Unit Gradient: 0.5%

Habitat Units/100m (primary channel length): 5.7

Water temperature (°C): 15.0 - 15.0

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	51%	Reach avg: 88%
Undercut Banks:	30%	Range: 68 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	85	18.7
Volume (m ³):	114	25.2
Key pieces (>=12m x 0.60m):	10	2.2

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

8/8/2006

REACH 1		T09S-R08W-S07NW					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
POOL-BACKWATER	2	26	1.6	0.25	49	0	30	35	35	0	0	0
POOL-LATERAL SCOUR	11	375	6.5	0.75	2,675	0	16	42	40	2	0	0
RIFFLE	5	59	2.3	0.08	131	0	9	19	69	3	0	0
STEP/COBBLE	8	34	3.2	0.13	110	0	5	13	79	4	0	0
Total:	26	494	4.3	0.39	2,966	0	Avg: 13	28	57	3	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	2	26	1.6	0.25	49	1.66%	0	0.0	
Scour Pools	11	375	6.5	0.75	2,675	90.20%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	59	2.3	0.08	131	4.43%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	8	34	3.2	0.13	110	3.71%	0	0.0	
Dry	0	0			0	0.00%	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:	13	26.3		28.7
Pools >=1m deep:	1	2.0		2.2
Complex pools (LWD pieces>=3):	9	18.2		19.9
Pool frequency (channel widths/pool):	5.0			
Residual pool depth (avg):	0.67			

Survey Date 8/8/2006
Report Date: 3/5/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	630
Total conifers/1000 ft	0
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	0.3	0.0	0.0	0.0	0.0	0.0
15-30cm	0.0	1.0	0.0	0.7	0.0	1.7	0.0	3.3
30-50cm	0.0	0.7	0.0	2.0	0.0	1.7	0.0	4.3
50-90cm	0.0	0.3	0.0	1.3	0.0	0.3	0.0	2.0
>90cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Total/100m2	0.0	2.3	0.0	4.3	0.0	3.7	0.0	3.4

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	73	76	90
Shrub cover	50	58	70
Grass/forb cover	43	38	24

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	0	0
High terrace	100	100	100
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	0	0
Riprap	0	0	0
Surface slope (%)	9	3	3

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	630
Total conifers/1000 ft	0
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	0.0	0.3
15-30cm	0.0	3.3
30-50cm	0.0	4.3
50-90cm	0.0	2.0
>90cm	0.0	0.3

RIPARIAN ZONE VEGETATION

Reach 1 Reach 1

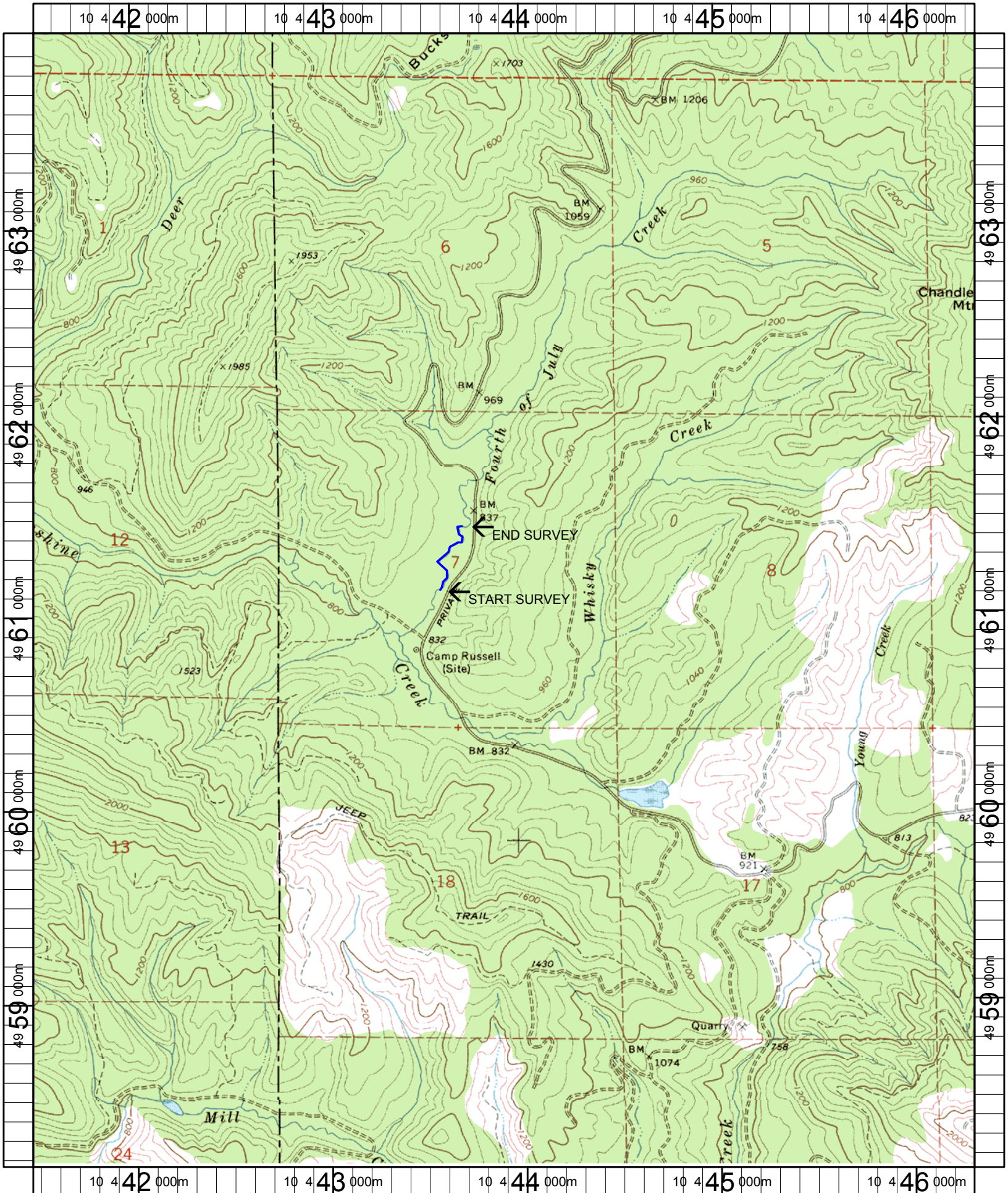
Unit	Side	Zone	Surface	Slope	Cover (percent)			Diameter class (cm)					Notes		
					Canopy	Shrub	Grass	3-15	15-30	30-50	50-90	>90			
8	RT	2	HT	8	75	75	20	Conifer							
								Hardwood				2			
8	LF	1	HT	10	80	75	20	Conifer							UTM 0443628-4961238 3D
								Hardwood				1			
8	LF	2	HT	1	90	75	10	Conifer							
								Hardwood				1	1		
8	LF	3	HT	6	90	75	10	Conifer							
								Hardwood			2	1			
8	RT	1	HT	9	70	80	20	Conifer							NO TREES
								Hardwood							
8	RT	3	HT	3	90	80	10	Conifer							NO TREES
								Hardwood							
17	LF	1	HT	7	70	5	50	Conifer							RED-LEGGED FROG
								Hardwood							
17	RT	3	HT	3	90	80	20	Conifer							
								Hardwood			2				
17	RT	2	HT	2	80	80	20	Conifer							
								Hardwood							
17	RT	1	HT	14	90	40	60	Conifer							
								Hardwood							
17	LF	3	HT	1	90	10	90	Conifer							
								Hardwood			2	2			
17	LF	2	HT	2	80	20	80	Conifer							UTM 0443633-4961328 3D
								Hardwood			1	2			
23	LF	2	HT	2	50	10	90	Conifer							
								Hardwood					1		
23	RT	3	HT	1	90	85	10	Conifer							
								Hardwood			2	1			
23	RT	2	HT	3	80	90	10	Conifer							
								Hardwood			1	2			
23	LF	3	HT	1	90	90	5	Conifer							
								Hardwood							
23	LF	1	HT	7	60	10	90	Conifer							UTM 0443663-4961373 3D
								Hardwood			1				
23	RT	1	HT	9	70	90	20	Conifer							
								Hardwood				1			

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **87** **FOURTH OF JULY CREEK POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SC	00	4.4	BV	T=15.0C	
2	LP	00	39.5	WL		FISH
3	SC	00	46.8	WL		GAME TRAIL
4	LP	01	71.9		FISH	
7	LP	00	101.6	DJ, HS	DJ, FISH	
8	RI	00	112.6		RIPARIAN #1	COHO, RIPARIAN #1
9	LP	00	130.5	WL	FISH	ELK, COHO
11	LP	00	201.4	BV, HS	FISH = COHO	
13	LP	00	236.6	DJ, HS	DJ	
14	SC	00	238		H=0.10M	
15	LP	01	257.8		TJ/	
16	RI	11	257.8		T=13.0C	RED-LEGGED FROG
17	SC	00	261.5	WL	RIPARIAN #2	RED-LEGGED FROG, RIPA
18	LP	00	275.3		FISH	
20	LP	00	295.8		FISH	FISH
22	LP	00	334.4	DJ, HS	DJ, FISH	
23	SC	00	339			RIPARIAN #3
24	LP	01	443	DJ, WL	FISH, DJ	FISH, RSN
25	BW	10	443	WL		FROG, RSN
26	RI	00	453.4		END SURVEY	



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

Location: 10 443903 E 4961073 N
 Caption: FOURTH OF JULY CREEK RESTORATION SITE - SILETZ BASIN