

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

STREAM: Elliott Creek (N-337)
BASIN: Wilson River
SURVEY TYPE: Pre-Tx
DATE: June 29, 2006
SURVEY CREW: Gordon Rose, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.8 km²
USGS MAPS: Woods Point
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Elliott Creek habitat survey extended 1,273 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 5.1 (range: 3.0-6.5). Land use for the reach was large (30-50 cm dbh) trees. The average unit gradient was 2.9 percent. Rapids (39%) and riffles (37%) dominated stream habitat. Cobble (50%) and gravel (43%) dominated stream substrate. Wood volume was low at 17.2 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

T02N-R06W-S35SW

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	5.1	VWI Range:	3 - 6.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	1,273	7,271	0
Secondary Channel	343	732	8
Off-Channel Units	30	35	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 4.3	Width: 8.9	19.0 (5.8 - 50)	12.6 (8.8 - 17.2)
Depth: 0.28	Height: 0.4	0.8 (0.76 - 0.8)	1.4 (1.2 - 1.8)

W:D ratio: 22.9

Entrenchment (ACW:FPW ratio): 2.2

Stream Flow Type:

Habitat Units/100m (total channel length): 5.2

Average Unit Gradient: 2.9%

Habitat Units/100m (primary channel length): 6.8

Water temperature (°C): -

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	9%	Reach avg: 92%
Undercut Banks:	2%	Range: 81 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	289	22.7
Volume (m ³):	219	17.2
Key pieces (>=12m x 0.60m):	6	0.5

OREGON DEPT OF FISH AND WILDLIFE

ELLIOTT CREEK PRE-TX (1-NC, 337)

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

6/29/2006

REACH 1		T02N-R06W-S35SW					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	2	18	0.9	0.05	16	7	5	20	35	25	15	0
DRY CHANNEL	3	61	1.3	0.00	86	0	0	0	40	60	0	0
POOL-BACKWATER	3	11	1.5	0.43	18	0	8	17	47	28	0	0
POOL-ISOLATED	1	1	1.0	0.20	1	0	10	20	40	30	0	0
POOL-LATERAL SCOUR	23	245	4.6	0.62	1,186	2	4	5	47	42	0	1
POOL-PLUNGE	3	24	5.3	0.73	114	0	5	8	53	33	0	0
PUDDLED UNIT	5	151	1.2	0.01	177	0	2	8	57	33	0	0
RAPID/BOULDERS	18	584	5.4	0.13	3,164	48	0	1	39	57	2	0
RIFFLE	16	505	4.9	0.14	2,973	25	0	1	39	58	2	0
STEP/COBBLE	9	38	5.5	0.10	278	0	0	1	33	66	0	0
STEP/LOG	3	10	2.7	0.07	25	0	0	0	47	53	0	0
Total:	86	1,647	4.3	0.28	8,038	82	Avg: 2	4	43	50	1	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	12	1.4	0.38	19	0.24%	0	0.0	
Scour Pools	26	268	4.7	0.63	1,300	16.18%	2	0.2	
Glides	0	0			0	0.00%	0	0.0	
Riffles	16	505	4.9	0.14	2,973	36.98%	25	0.8	
Rapids	18	584	5.4	0.13	3,164	39.36%	48	1.5	
Cascades	2	18	0.9	0.05	16	0.19%	7	44.9	
Step/Falls	12	48	4.8	0.09	303	3.77%	0	0.0	
Dry	8	212	1.3	0.01	263	3.27%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	30	18.2	23.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	15	9.1	11.8
Pool frequency (channel widths/pool):	6.2		
Residual pool depth (avg):	0.54		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

ELLIOTT CREEK PRE-TX
GCG: 1-NC SITE ID: 337

Survey Date 6/29/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	488
Total conifers/1000 ft	345
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	0.7	1.3	0.7	0.3	0.3	0.0	1.7	1.7
15-30cm	0.3	1.0	0.0	1.7	1.7	0.0	2.0	2.7
30-50cm	0.7	3.3	0.7	0.0	0.7	0.3	2.0	3.7
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.7	5.7	1.3	2.0	2.7	0.3	1.9	2.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	78		72		73	
Shrub cover	12		12		10	
Grass/forb cover	88		88		90	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		33		33	
High terrace	50		67		67	
Low terrace	17		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 (%)	11		12		24	

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	488
Total conifers/1000 ft	345
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	1.7
15-30cm	2.0	2.7
30-50cm	2.0	3.7
50-90cm	0.0	0.0
>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		
22	RT	3	HT	0	60	35	65	Conifer		1					
								Hardwood							
22	RT	2	HT	0	70	35	65	Conifer							
								Hardwood							
22	RT	1	HT	0	80	30	70	Conifer							
								Hardwood	1	1	2				
22	LF	1	HS	30	85	5	95	Conifer				1			POOR GPS COVERAGE
								Hardwood	1						
22	LF	3	HS	35	85	5	95	Conifer							
								Hardwood			1				
22	LF	2	HS	20	85	5	95	Conifer							
								Hardwood		2					
42	LF	2	HS	50	50	10	90	Conifer				1			
								Hardwood							
42	LF	1	HS	35	60	5	95	Conifer							UTM 0469633-5050731-2D
								Hardwood	2		1				
42	LF	3	HS	50	70	5	95	Conifer	1	1					
								Hardwood							
42	RT	2	HT	0	60	5	95	Conifer				1			
								Hardwood							
42	RT	3	HT	0	60	5	95	Conifer			1	2			
								Hardwood							
42	RT	1	HT	0	70	5	95	Conifer	1	1	1				
								Hardwood		1	1				
63	LF	3	HT	25	80	5	95	Conifer							
								Hardwood							
63	RT	1	LT	0	85	10	90	Conifer	1						
								Hardwood		1	5				
63	RT	2	HT	0	85	5	95	Conifer	2						
								Hardwood		1					
63	RT	3	HT	35	85	5	95	Conifer		2					
								Hardwood							
63	LF	2	HT	0	80	10	90	Conifer							
								Hardwood	1	2					
63	LF	1	HT	0	85	15	85	Conifer							
								Hardwood				1			

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 337 ELLIOTT CREEK PRE-TX

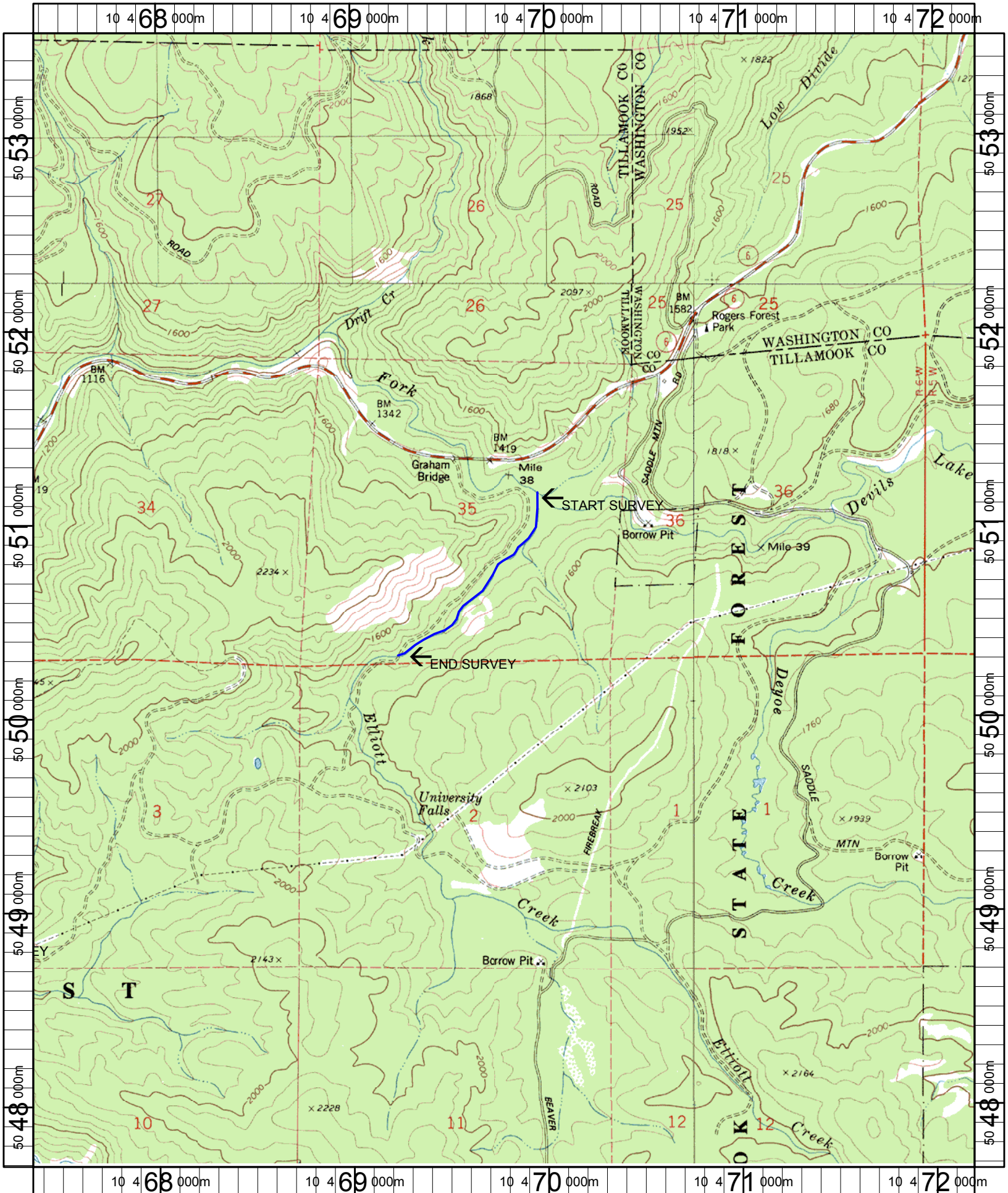
<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
1	RB	01	14.2			START AT MOUTH
4	PD	04	14.2		COHO FRY	
5	SL	00	17.2	DJ	H=0.50M	DJ CREATES 01-04 CHAN
8	RI	00	134	HS		
10	SC	00	157.6		H=0.25M	
11	LP	00	166.7	HS		
14	LP	00	210.1	HS		
16	LP	00	250	HS		
19	SC	00	279.9		H=0.40M	
22	RI	01	341.1	TJ/		RIPARIAN #1
24	RI	00	391.1	HS		
26	RI	01	496.1	HS		
28	LP	00	507.1		STEELHEAD SMOLT	
30	LP	00	531.4	HS		
31	RB	01	571.6	HS		
33	SC	01	585.7		H=0.40M	
35	RB	03	585.7	HS		
37	SC	03	585.7		H=0.25M	
40	SC	00	597.2		H=0.15M	
41	LP	00	609.4	HS		
42	RI	00	625			RIPARIAN #2

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 337 ELLIOTT CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
43	SC	00	636.1	SS/	H=0.40M	
44	LP	01	646.6	HS		
50	SC	00	770.1		H=0.30M	
54	SC	00	805.9		H=0.30M	
55	LP	00	821.9	/SS		
57	RB	01	910.6	HS		
58	LP	01	919	ES/		
59	RB	01	941.9	SS/		
62	SC	00	951.2		H=0.40M	
63	RI	01	969.4			RIPARIAN #3
64	IP	10	969.4			PHOTO #5
67	SL	01	995.9		H=0.55M	
69	SL	01	1007.9	DJ	H=1.20M	
74	RB	03	1030.9	SS/		
77	LP	00	1035.9		50M 01 & 02	
82	RB	00	1192.3	SS/		
83	RB	01	1227.1	TJ/		



Name: WOODS POINT
 Date: 1/19/2006
 Scale: 1 inch equals 2000 feet

Location: 10 469781 E 5050607 N
 Caption: ELLIOTT CREEK RESTORATION SITE - DEVILS LAKE FORK
 WILSON BASIN