

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

STREAM: Cruiser Creek (N-273)
BASIN: Trask River
SURVEY TYPE: Pre-Tx
DATE: June 28, 2005
SURVEY CREW: Scott Young, Ben Walczak
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.9 km²
USGS MAPS: Gobblers Knob
ECOREGION: Coast Range Volcanic

GENERAL DESCRIPTION:

The Cruiser Creek habitat survey extended 951 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.3 (range: 1.5-4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.0 percent. Rapids (43%) and riffles (32%) dominated stream habitat. Gravel (30%), cobble (28%) and sand (25%) dominated stream substrate. Wood volume was very low at 4.6 m³/100m.

COMMENTS:

There was one potential barrier to upstream fish migration in the surveyed length. This was a 0.7 m high step to a culvert at unit 53 (923 m).

REACH 1 T02S-R06W-S06SW 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	3.3	VWI Range:	1.5 - 4

Channel Morphology (Percent Reach Length)

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

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	951	3,710	0
Secondary Channel	28	28	1
Off-Channel Units	37	62	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 3.7	Width: 6.7	8.8 (6.6 - 11.3)	11.0 (8.3 - 14.4)
Depth: 0.30	Height: 0.4	0.8 (0.7 - 0.9)	1.0 (0.85 - 1.2)

W:D ratio: 16.3 Entrenchment (ACW:FPW ratio): 1.3
 Stream Flow Type: MF Habitat Units/100m (total channel length): 5.3
 Average Unit Gradient: 3.0% Habitat Units/100m (primary channel length): 5.7
 Water temperature (°C): -

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 83%
Undercut Banks:	2%	Range: 67 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	68	7.2
Volume (m ³):	43	4.6
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE CRUISER CREEK TRIBUTARY PRE-TX (1-NC, 273)

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

6/28/2005

REACH 1		T02S-R06W-S06SW					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	35	4.5	0.25	158	26	0	10	19	29	29	14
CULVERT CROSSING	1	32	2.3	0.10	74	0	11	44	44	0	0	0
POOL-ISOLATED	2	7	1.8	0.35	12	0	5	28	40	18	0	10
POOL-LATERAL SCOUR	11	121	4.0	0.51	476	0	8	46	27	17	0	3
POOL-PLUNGE	5	29	4.9	0.79	130	1	4	47	19	16	1	13
PUDDLED UNIT	1	28	1.0	0.05	28	0	0	10	50	40	0	0
RAPID/BEDROCK	2	50	4.3	0.18	220	6	0	13	18	25	3	43
RAPID/BOULDERS	12	375	3.4	0.16	1,425	18	0	12	37	48	2	0
RIFFLE	12	328	3.8	0.18	1,227	1	1	15	42	34	0	8
STEP/BEDROCK	3	6	4.3	0.10	27	0	0	0	0	0	0	100
STEP/BOULDERS	1	1	3.0	0.25	3	5	0	0	0	0	100	0
STEP/COBBLE	1	1	4.0	0.10	4	0	0	0	30	70	0	0
STEP/LOG	1	3	7.0	0.10	18	0	6	67	22	6	0	0
STEP/STRUCTURE	1	1	0.5	0.10	0	0	0	56	11	11	0	22
Total:	54	1,016	3.7	0.30	3,799	57	Avg: 3	25	30	28	3	12

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	7	1.8	0.35	12	0.30%	0	0.0	
Scour Pools	16	150	4.3	0.60	605	15.93%	1	0.2	
Glides	0	0			0	0.00%	0	0.0	
Riffles	12	328	3.8	0.18	1,227	32.29%	1	0.1	
Rapids	14	425	3.5	0.16	1,645	43.29%	24	1.5	
Cascades	1	35	4.5	0.25	158	4.15%	26	16.5	
Step/Falls	7	11	3.9	0.12	52	1.36%	5	9.7	
Dry	1	28	1.0	0.05	28	0.74%	0	0.0	
Culverts	1	32	2.3	0.10	74	1.94%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	18	17.7	18.9
Pools >=1m deep:	1	1.0	1.1
Complex pools (LWD pieces>=3):	2	2.0	2.1
Pool frequency (channel widths/pool):	8.4		
Residual pool depth (avg):	0.48		

Survey Date 6/28/2005
Report Date: 4/26/2006

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	345
Total conifers/1000 ft	284
Total conifers >20" dbh/1000 ft	41
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	1.7	0.3	0.3	0.0	0.0	0.3	2.0
15-30cm	0.3	2.7	0.3	0.0	2.0	0.0	2.7	2.7
30-50cm	0.0	1.0	0.7	0.0	0.3	0.0	1.0	1.0
50-90cm	0.3	0.0	0.3	0.0	0.0	0.0	0.7	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.7	5.3	1.7	0.3	2.3	0.0	1.6	1.9

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	65		63		58	
Shrub cover	8		9		9	
Grass/forb cover	86		91		88	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		50		50	
High terrace	50		50		33	
Low terrace	17		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		17	
Riprap	0		0		0	
Surface slope (%)	17		18		22	

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	345
Total conifers/1000 ft	284
Total conifers >20" dbh/1000 ft	41
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	0.3	2.0
15-30cm	2.7	2.7
30-50cm	1.0	1.0
50-90cm	0.7	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

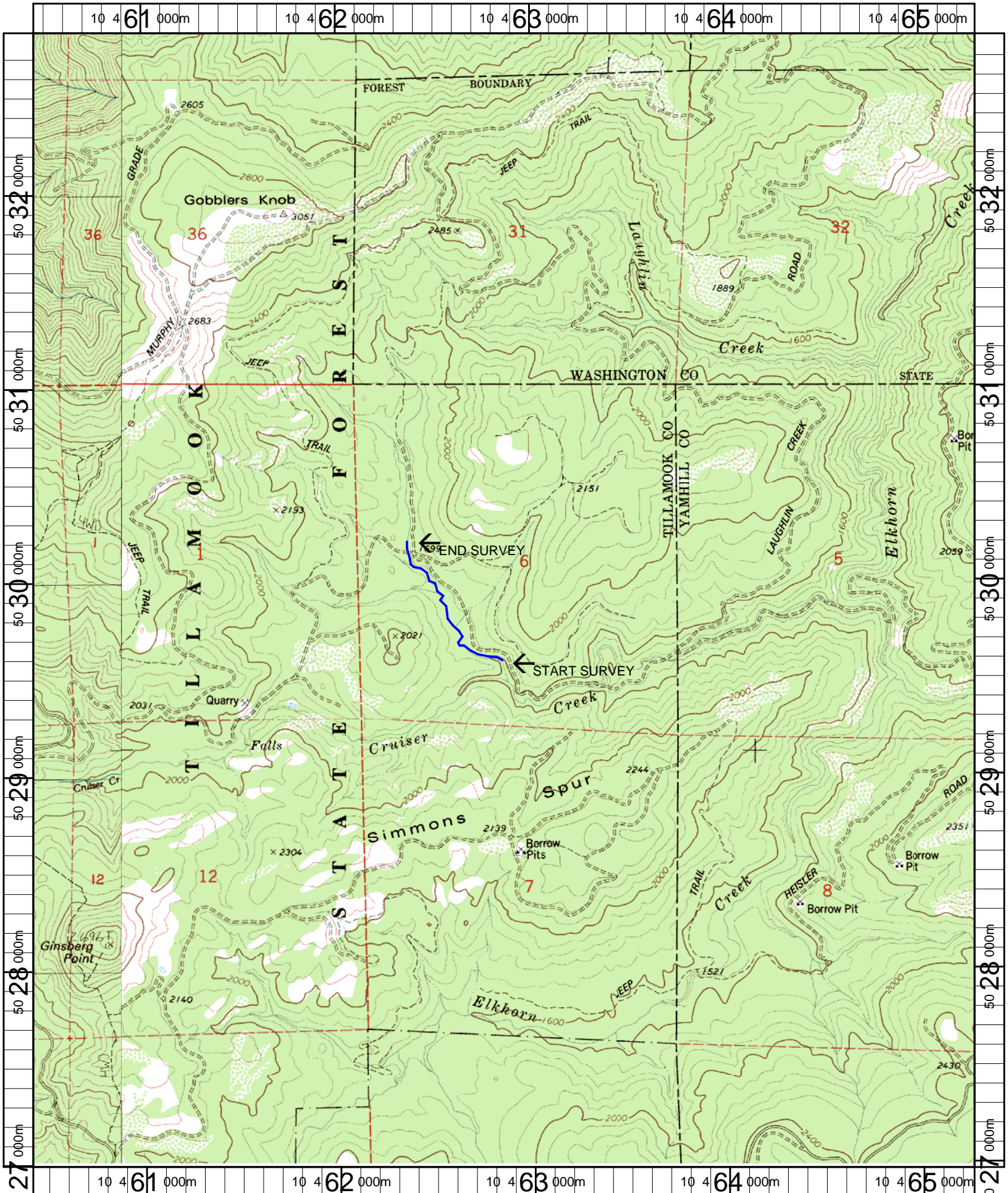
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
15	LF	1	LT	0	45	15	85	Conifer							2D
								Hardwood	1	3					0462634/50296
15	LF	2	HT	0	45	10	90	Conifer							34
								Hardwood							
15	LF	3	HT	0	25	0	100	Conifer							
								Hardwood							
15	RT	1	HT	0	35	0	100	Conifer							IN MEADOW
								Hardwood							
15	RT	2	HS	15	45	0	100	Conifer							
								Hardwood							
15	RT	3	HS	15	65	5	75	Conifer		1	1				
								Hardwood							
33	RT	1	HS	60	70	5	95	Conifer							
								Hardwood			3				
33	LF	2	HT	0	60	5	95	Conifer		1					
								Hardwood							
33	LF	3	HT	0	50	10	90	Conifer		2					
								Hardwood							
33	RT	3	HS	45	70	5	95	Conifer		1					
								Hardwood							
33	LF	1	HT	0	80	10	60	Conifer				1			3D
								Hardwood	1						0462546/50296
33	RT	2	HS	45	70	5	95	Conifer			1	1			02
								Hardwood							
41	RT	2	HS	45	80	10	90	Conifer	1		1				
								Hardwood							
41	RT	3	RB	0	80	10	90	Conifer		2					
								Hardwood							
41	RT	1	HS	40	80	10	90	Conifer		1					
								Hardwood	1	2					
41	LF	3	HS	70	55	25	75	Conifer							
								Hardwood							
41	LF	2	HT	0	75	25	75	Conifer							
								Hardwood	1						
41	LF	1	HT	0	80	5	85	Conifer							POOR GPS
								Hardwood	2	3					COVERAGE

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 1-NC SITE ID: 273 CRUISER CREEK TRIBUTARY PRE-T

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	RB	00	50		POOR GPS	
2	SB	00	51		H=1.1M	
5	SR	00	93		H=0.7M	
10	RI	01	209.6		FISH HAB SITE 2	
15	RI	00	265.5		RIPARIAN 1	
16	LP	00	279.6		FISH HAB SITE 4	
17	SC	00	280.6		H=0.25M	
21	RB	01	365.2	/TJ		
22	RB	11	365.2		ACW 1.0M	TRIB UNIT
29	SR	00	482.8		H=0.4M	
33	RI	00	555.9	/SS	RIPARIAN 2	RIPARIAN 2
36	RB	11	592.2		ACW 3.9M	
41	RB	00	767.1		RIPARIAN 3	
44	SR	00	809.1		H=0.65M	
46	RB	01	850	TJ/		
47	RB	11	850			TRIB UNIT
49	SL	00	854.9		H=0.7M	
52	SS	00	890.9	PA	H=0.7M	
53	CC	00	922.9	CC	ROUND, GALVANIZED	100 PCT CULVERT BOTTOM
54	RI	00	950.9		END AT SIGN	



Name: GOBBLERS KNOB
 Date: 5/1/2006
 Scale: 1 inch equals 2000 feet

Location: 10 462853 E 5029903 N
 Caption: CRUISER CREEK TRIBUTARY RESTORATION SITE - TRASK BASIN