

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

STREAM: Cruiser Creek (N-272)
BASIN: Trask River
SURVEY TYPE: Post-Tx
DATE: August 1, 2006
SURVEY CREW: Gordon Rose, 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 1,614 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 1.3 (range: 1.1-2.0). Land use for the reach was second growth (15-30 cm dbh) and large (30-50 cm dbh) trees. The average unit gradient was 4.0 percent. Rapids (69%) dominated stream habitat. Gravel (37%), cobble (26%) and boulders (22%) dominated stream substrate. Wood volume was very high at 56.3 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

T02S-R06W-S05SW

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	100%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.3	VWI Range:	1.1 - 2

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
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	1,614	9,435	0
Secondary Channel	115	531	4
Off-Channel Units	8	8	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 6.1	Width: 12.6	13.9 (12.1 - 14.7)	16.0 (16 - 16)
Depth: 0.30	Height: 0.8	1.6 (1.6 - 1.6)	1.7 (1.7 - 1.7)

W:D ratio: 15.7
 Stream Flow Type: LF
 Average Unit Gradient: 4.0%
 Water temperature (°C): 10.0 - 10.0

Entrenchment (ACW:FPW ratio): 1.1
 Habitat Units/100m (total channel length): 3.3
 Habitat Units/100m (primary channel length): 3.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	D30	D15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	18%	Reach avg: 85%
Undercut Banks:	7%	Range: 78 - 94

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	450	27.9
Volume (m ³):	909	56.3
Key pieces (>=12m x 0.60m):	59	3.7

OREGON DEPT OF FISH AND WILDLIFE

CRUISER CREEK POST-TX (1-NC, 272)

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

8/1/2006

REACH 1		T02S-R06W-S05SW					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	1.0	0.04	8	1	0	0	10	70	20	0
DRY CHANNEL	2	68	5.3	0.00	365	0	10	10	45	28	8	0
POOL-LATERAL SCOUR	13	189	5.8	0.67	1,125	95	7	18	44	19	10	2
POOL-PLUNGE	2	17	9.5	0.60	163	7	5	15	53	13	8	8
POOL-TRENCH	1	14	3.8	0.60	53	2	0	5	10	10	10	65
PUDDLED UNIT	2	37	3.5	0.00	126	10	3	3	43	43	10	0
RAPID/BOULDERS	26	1,156	6.0	0.23	6,853	2,084	0	1	28	31	35	5
RIFFLE	4	216	4.6	0.16	1,000	76	1	6	61	21	9	1
STEP/BEDROCK	1	4	4.0	0.10	16	3	0	0	0	0	10	90
STEP/BOULDERS	1	10	8.0	0.15	80	4	0	0	0	20	80	0
STEP/COBBLE	2	9	11.0	0.07	90	3	0	0	50	40	10	0
STEP/LOG	3	9	10.7	0.06	96	6	2	3	70	15	10	0
Total:	58	1,737	6.1	0.30	9,974	2,291	Avg: 2	6	37	26	22	6

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	0	0			0	0.00%	0	0.0	
Scour Pools	16	220	6.1	0.65	1,340	13.44%	104	7.8	
Glides	0	0			0	0.00%	0	0.0	
Riffles	4	216	4.6	0.16	1,000	10.02%	76	7.6	
Rapids	26	1,156	6.0	0.23	6,853	68.71%	2,084	30.4	
Cascades	1	8	1.0	0.04	8	0.08%	1	12.5	
Step/Falls	7	32	9.4	0.08	282	2.83%	16	5.7	
Dry	4	105	4.4	0.00	491	4.92%	10	2.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	16	9.2	9.9
Pools >=1m deep:	2	1.2	1.2
Complex pools (LWD pieces>=3):	12	6.9	7.4
Pool frequency (channel widths/pool):	8.6		
Residual pool depth (avg):	0.56		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

CRUISER CREEK POST-TX
GCG: 1-NC SITE ID: 272

Survey Date 8/1/2006
Report Date: 3/5/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	935
Total conifers/1000 ft	81
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	3.7	0.0	2.7	0.7	0.3	0.7	6.7
15-30cm	0.0	4.7	0.0	2.7	0.0	0.3	0.0	7.7
30-50cm	0.0	0.7	0.3	0.3	0.3	0.0	0.7	1.0
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	0.0	9.0	0.3	5.7	1.0	0.7	0.4	5.1

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	85		85		85	
Shrub cover	22		25		30	
Grass/forb cover	58		58		53	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	50		100		83	
High terrace	17		0		0	
Low terrace	0		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	33		0		17	
Riprap	0		0		0	
Surface slope (%)	39		66		63	

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	935
Total conifers/1000 ft	81
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	0.7	6.7
15-30cm	0.0	7.7
30-50cm	0.7	1.0
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			
15	LF	3	HS	75	85	5	90	Conifer							
								Hardwood							
15	LF	2	HS	75	85	5	90	Conifer				1			
								Hardwood	1		1				
15	RT	1	HS	85	85	15	60	Conifer							
								Hardwood	1	1					
15	RT	2	HS	80	85	20	20	Conifer							
								Hardwood			1				
15	RT	3	HS	80	85	20	20	Conifer	1						
								Hardwood							
15	LF	1	RB	0	85	10	70	Conifer							
								Hardwood			1	2			
27	RT	1	HS	80	85	30	40	Conifer							
								Hardwood	2	4					
27	LF	3	HS	80	85	35	60	Conifer	1			1			
								Hardwood							
27	LF	2	HS	85	85	5	90	Conifer							
								Hardwood			3				
27	LF	1	RB	0	85	20	30	Conifer							
								Hardwood	3	3					
27	RT	3	HS	80	85	30	40	Conifer							
								Hardwood	1	1					
27	RT	2	HS	80	85	30	40	Conifer							
								Hardwood	1	1					
43	RT	3	HS	65	85	30	70	Conifer							
								Hardwood							
43	RT	2	HS	65	85	30	70	Conifer							
								Hardwood	3	3					
43	LF	1	HS	70	85	50	50	Conifer							
								Hardwood	2	3					
43	RT	1	HT	0	85	5	95	Conifer							
								Hardwood	3	2					
43	LF	3	RB	0	85	60	40	Conifer							
								Hardwood							
43	LF	2	HS	10	85	60	40	Conifer							
								Hardwood	3						

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 272 CRUISER CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	PP	00	29.5	HS		
3	SB	00	39.5		H = 0.3	
4	LP	00	51.5	HS		
6	RB	00	151.5	HS		
8	LP	00	191	HS		BOULDERS AND LOGS
9	RB	00	219.5	HS		
10	PP	00	228.5	HS		
11	SL	00	229.5		H = 0.25	
12	RB	00	266	HS		SIDE CHANNEL STARTING
13	RB	00	311	HS		
14	LP	00	322.5	HS		BOULDERS AND LOGS
15	RB	00	383.5	SS/, HS	RIPARIAN	DRY SEEP, LOGS AND BO
16	RB	00	403.5	HS		BOULDERS
17	RB	00	453.5	HS		
18	RB	00	522.5	HS		LOGS AND BOULDERS
19	LP	00	542.5	HS		
20	RB	01	592.5	HS, /TJ		DEAD ELK IN CREEK
22	RB	00	642.5			ROAD ERODING INTO CR
23	RB	00	692.5	SS/		DRY SEEP
24	RB	00	717.5	HS		
25	LP	00	737	HS		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 272 CRUISER CREEK POST-TX

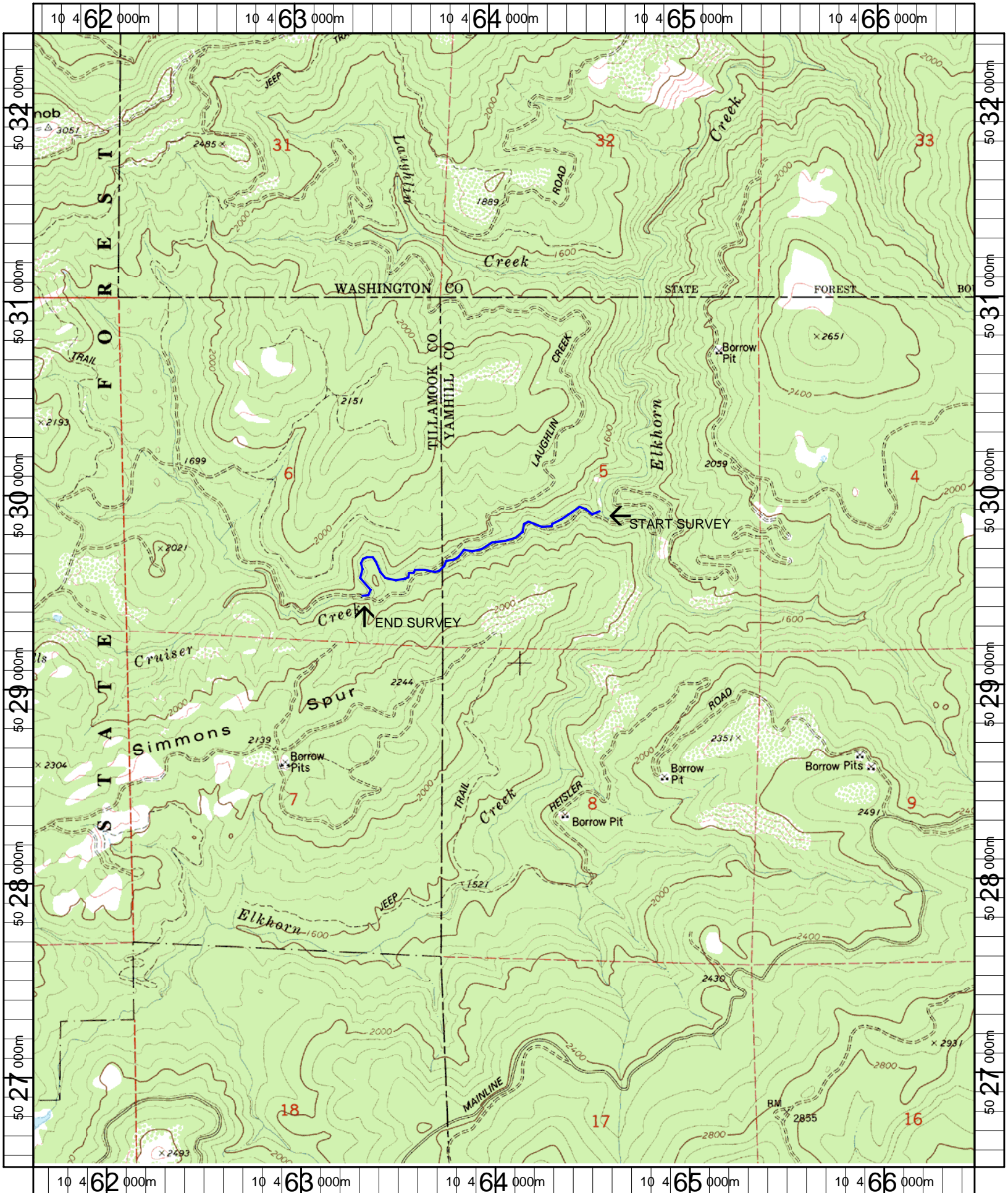
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
26	RB	00	787	SS/		DRY SEEP
27	RB	00	847		RIPARIAN	
28	SL	00	852	DJ, HS	H = 1.0	
30	RB	00	922.5	SS/, HS		
31	RB	00	982.5	RF, HS		
32	LP	00	993	RF, HS		
33	SL	00	996	HS, DJ	H = 0.5	
36	RI	00	1113.5	BC		
38	SC	01	1134	DJ	H = 0.25	
41	SC	00	1154		H = 0.3	
43	RB	00	1206		RIPARIAN	T = 10 AT 12:30
44	RI	01	1266	HS	SPAWNING SURVEY SIGN	PHOTO 26
45	LP	02	1266	HS		
46	DC	02	1266	HS, /EA		
47	DC	03	1266	HS		
48	PD	03	1266	HS		
49	RI	00	1316	HS		
50	RI	00	1351.5	HS		
52	RB	00	1410.5		SPAWNING SURVEY SIGN	
55	RB	00	1560.5	/SS x 2		
57	SR	00	1578.5		H = 0.65	

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: 1-NC SITE ID: 272 CRUISER 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>
58	RB	00	1613.5	/SS	END SURVEY	



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

Location: 10 464059 E 5029447 N
 Caption: CRUISER CREEK RESTORATION SITE - TRASK BASIN