

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

STREAM: Deadhorse Creek (W-78)
BASIN: Molalla River
SURVEY TYPE: Pre-Tx
DATE: February 13, 2001
SURVEY CREW: Joe Zuccarello, Eric Brown
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 38.1 km²
USGS MAPS: Soosap Peak
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Deadhorse Creek habitat survey extended 575 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 2.4 (range: 1.5 – 4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 3.3 percent. Rapids (38%) and riffles (37%) dominated stream habitat. Boulders (34%) and cobble (29%) dominated stream substrate. Wood volume was low at 19.1 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

REACH SUMMARY

REACH 1

T5S-R4E-S31NE

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 avg: 2.4 range: 1.5-4.0

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	575	5,454	0
Secondary	81	270	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	8.0	Width	10.9	15.9	15.3
Depth	0.46	Height	0.6	1.2	1.7
		W:D ratio	18.8	Entrenchment	1.5

Stream Flow Type: MF Water Temp: 2.0-2.0°C
Avg. Unit Gradient: 3.3% Habitat Units/100m: 4.9

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	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	58	10.1
Volume (m ³)	110	19.1
Key pieces ($\geq 10m \times 0.6m$)	4	0.7

HABITAT UNIT SUMMARY

REACH 1 T5S-R4E-S31NE 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	Cbbl	Bldr	Bdrk
CASCADE/BOULDERS	3	28	4.2	0.11	156	0	20	13	10	28	28	0
GLIDE	3	54	7.8	0.40	404	0	2	18	19	33	26	2
POOL-ALCOVE	2	14	1.0	0.25	10	0	80	5	5	5	5	0
POOL-LATERAL SCOUR	6	85	8.8	1.08	731	0	1	23	28	31	15	2
POOL-PLUNGE	1	9	8.4	1.00	73	0	0	20	20	10	50	0
RAPID/BOULDERS	8	226	9.6	0.34	2,198	0	0	4	12	26	53	6
RIFFLE	2	38	12.0	0.28	497	0	0	10	43	35	13	0
RIFFLE W/ POCKETS	6	195	8.3	0.24	1,617	0	0	6	13	43	38	0
STEP/BOULDERS	1	7	5.3	0.35	38	0	0	0	0	10	90	0
Total:	32	656	8.0	0.46	5,724	0	Avg: 7	11	17	29	34	2

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	2	14	1.0	0.25	10	0.18	0	0.0
Scour Pools	7	94	8.8	1.07	804	14.05	0	0.0
Glides	3	54	7.8	0.40	404	7.06	0	0.0
Riffles	8	233	9.3	0.25	2,114	36.93	0	0.0
Rapids	8	226	9.6	0.34	2,198	38.39	0	0.0
Cascades	3	28	4.2	0.11	156	2.72	0	0.0
Step/Falls	1	7	5.3	0.35	38	0.67	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

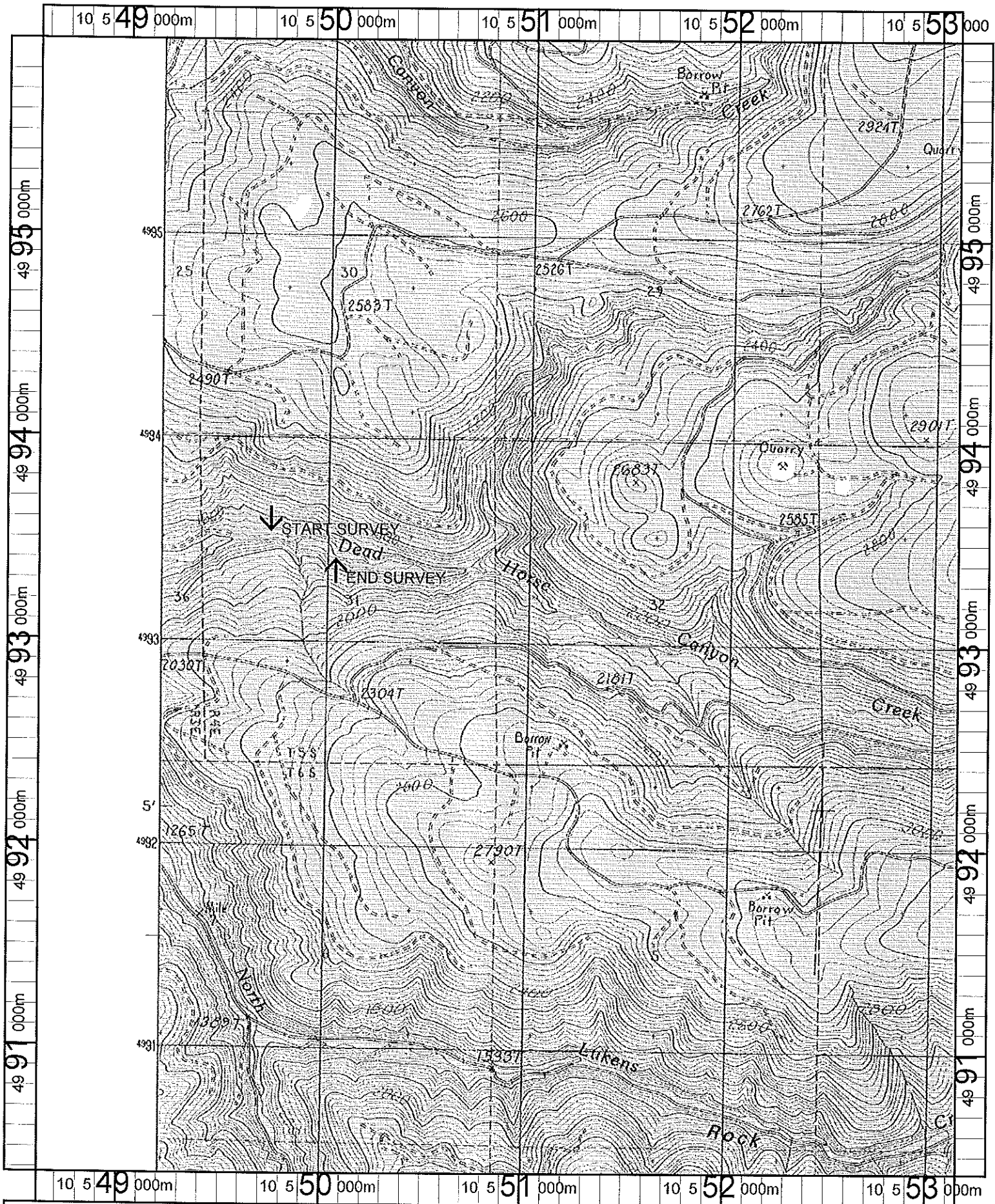
All Pools	<u>Total</u>	<u>#/Km</u>
	9	13.7
Pools ≥1m deep:	6	9.1
Complex pools (LWD pieces ≥3):	2	3.0
Pool Frequency (channel widths/pool):	6.7	
Residual pool depth (avg)	0.54m	

STREAM SUMMARY

DEADHORSE CREEK PRE-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
32	656	8.0	0.46	5,724	7	11	17	29	34	2	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	804	14.0
Backwater Pools	10	0.2
Glide	404	7.1
Riffle	2,114	36.9
Rapid	2,198	38.4
Cascade	156	2.7
Step	38	0.7
Dry	0	0.0



Name: SOOSAP PEAK
 Date: 5/29/101
 Scale: 1 inch equals 2000 feet

Location: 10 550758 E 4993163 N
 Caption: DEADHORSE CREEK RESTORATION SITE -
 MOLALLA RIVER