

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

STREAM: Deep Creek Phase 1 (S-132)
BASIN: Pistol River
SURVEY TYPE: Post-Tx
DATE: February 23, 2004
SURVEY CREW: Michael Scheu, Jeremiah Bernier
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 8.3 km²
USGS MAPS: Sundown Mtn.
ECOREGION: Coast Range California Extension

GENERAL DESCRIPTION:

The Deep Creek habitat survey extended 557 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.0 (range: 1.5-3.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 2.9 percent. Rapids (44%) and riffles (25%) dominated stream habitat. Cobble (41%) and gravel (35%) dominated stream substrate. Wood volume was high at 36.1 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

T38S-R04W-S14SE

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	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	2.0	VWI Range:	1.5 - 3

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	557	2,471	0
Secondary	326	730	5

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 3.4	Width: 14.9	27.7 (16.9 - 39.8)	(-)
Depth: 0.41	Height: 0.7	1.4 (1.2 - 1.5)	(-)

W:D ratio: 21.7
Stream Flow Type: MF
Avg. Unit Gradient: 2.9%

Entrenchment (ACW:FPW ratio): 1.9
Water temp (°C): 9.5 - 9.5
Habitat Units/100m: 6.6

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	C15

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m</u>
All pieces (>=3m x 0.15m):	139	25.0
Volume (m ³):	201	36.1
Key pieces (>=10m x 0.60m):	18	3.2

OREGON DEPARTMENT OF FISH AND WILDLIFE

DEEP CREEK PHASE 1 POST-TX (S-132)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/23/2004

REACH 1

T38S-R04W-S14SE

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
DRY UNIT	3	116	2.5	0.00	294	0	0	3	40	53	3	0
POOL-BACKWATER	1	4	2.0	0.60	8	0	0	60	20	20	0	0
POOL-DAMMED	1	4	2.4	0.40	10	0	0	80	20	0	0	0
POOL-ISOLATED	1	3	3.2	0.50	10	0	0	60	20	20	0	0
POOL-LATERAL SCOUR	8	61	2.7	0.50	182	0	0	48	34	17	2	0
POOL-PLUNGE	12	74	4.2	0.78	310	0	0	7	48	40	5	0
PUDDLED UNIT	2	37	2.0	0.60	73	0	0	55	30	15	0	0
RAPID/BOULDERS	16	369	3.9	0.30	1,421	0	0	6	33	53	8	0
RIFFLE	7	185	3.6	0.24	787	0	0	11	33	51	4	0
STEP/COBBLE	5	28	2.9	0.23	98	0	0	18	21	50	11	0
STEP/LOG	1	2	4.5	0.30	7	0	0	0	0	60	40	0
STEP/STRUCTURE	1	1	2.1	0.01	1	0	0	5	57	38	0	0
Total:	58	882	3.4	0.41	3,201	0	Avg: 0	18	35	41	6	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	3	12	2.5	0.50	29	0.89%	0	0.0
Scour Pools	20	135	3.6	0.67	492	15.38%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	7	185	3.6	0.24	787	24.58%	0	0.0
Rapids	16	369	3.9	0.30	1,421	44.39%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	7	30	3.0	0.21	106	3.30%	0	0.0
Dry	5	153	2.3	0.24	367	11.46%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	<u>Total</u>	<u># / Km</u>	
All Pools:	23	26.1	326
Pools >=1m deep:	1	1.1	
Complex pools (LWD pieces>=3):	7	7.9	
Pool frequency (channel widths/pool):	2.6		
Residual pool depth (avg):	0.43		

STREAM SUMMARY

DEEP CREEK PHASE 1 POST-TX (S-132)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (#>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
58	882	3.4	0.41	3,201	0	18	35	41	6	0	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	29	0.89%
Scour Pools	492	15.38%
Glides	0	0.00%
Riffles	787	24.58%
Rapids	1,421	44.39%
Cascades	0	0.00%
Step/Falls	106	3.30%
Dry	367	11.46%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **5-SC** SITE ID: **132** DEEP CREEK PHASE 1 POST-TX (S-1)

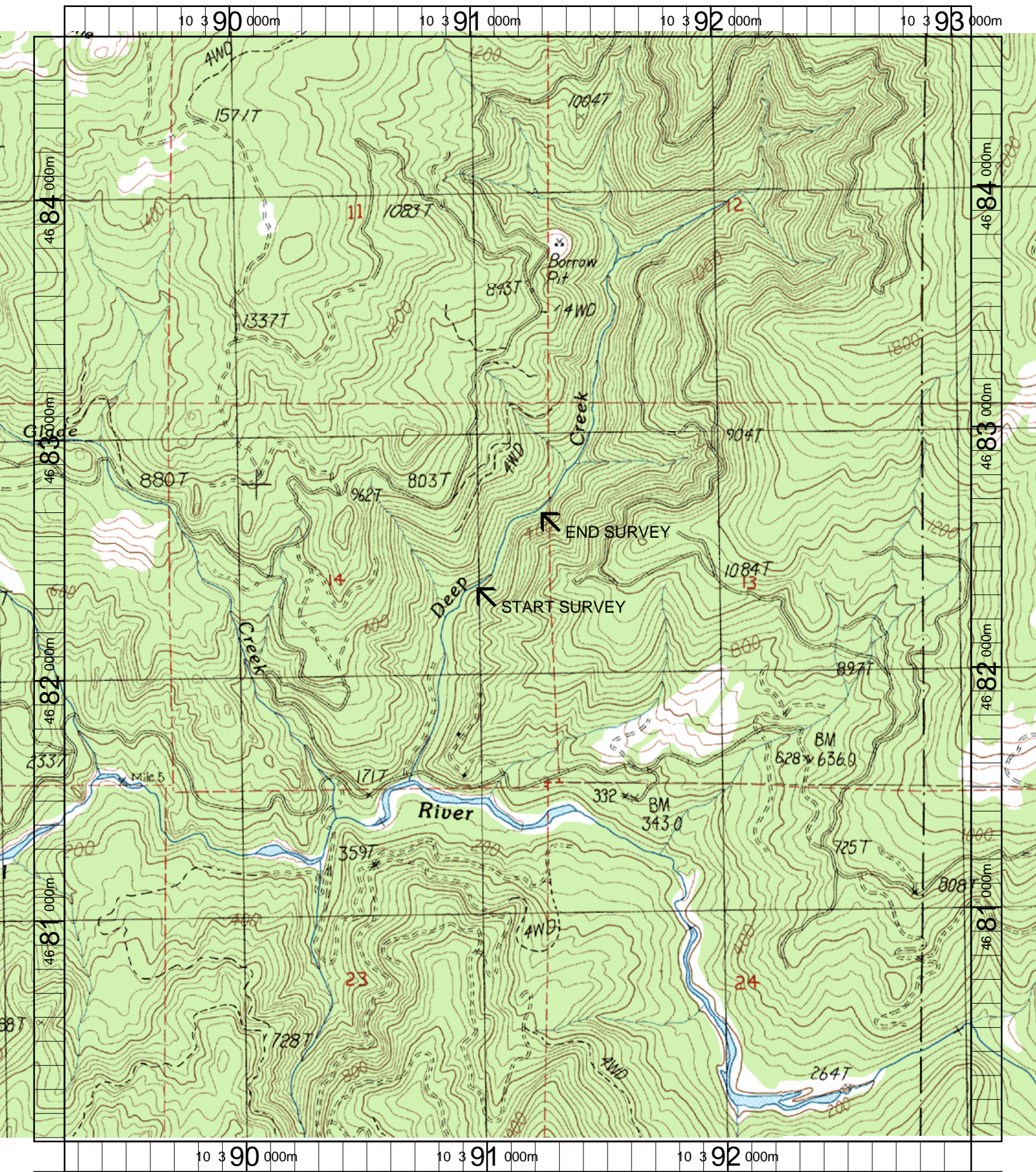
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
5	PP	01	87	HS		3 LOGS
11	RB	02	136.6	HS		
13	SC	02	136.6			H=0.4M
14	DP	02	136.6	HS		
15	IP	10	136.6	HS		
17	RB	01	161.6			BOULDER AND LOG
20	RB	01	220.2	HS		
21	LP	01	230			1 LOG
30	LP	02	298.3	HS		5 LOGS, 1 BOULDER
31	SS	02	298.3	HS		H=0.2M
32	RI	02	298.3	HS		
33	PP	02	298.3	HS		7 LOGS
35	LP	02	298.3	HS		2 LOGS
36	RB	02	298.3	HS		2 LOGS
37	LP	02	298.3	HS		4 LOGS
40	DU	02	298.3	/SS		
42	PD	03	298.3	DJ, HS		8 LOGS
49	RB	01	398.6	SS/, SS/		
51	PP	01	405.2	LA/		
52	RB	01	425.2	SS/, LA/		
53	PP	01	429.2	LA/		

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 5-SC SITE ID: 132 DEEP CREEK PHASE 1 POST-TX (S-1)

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
54	SL	01	430.7	LA/	H=0.9M	
55	RI	01	475.7		SALMON SPAWNING SUR	
57	RI	00	520.7	/LA		
58	RI	00	556.7	EOS		



Name: SUNDOWN MT
 Date: 6/18/2003
 Scale: 1 inch equals 1666 feet

Location: 10 391159 E 4682357 N
 Caption: DEEP CREEK PHASE 1 RESTORATION SITE - PISTOL RIVER BASIN