

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

STREAM: Deer Creek (MC-301)
BASIN: Alsea River
SURVEY TYPE: Pre-Tx
DATE: March 29, 2005
SURVEY CREW: Jeremy Romer, Sheila Davis
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 3.2 km²
USGS MAPS: Toledo South, Elk City
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Deer Creek habitat survey extended 1,825 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 6.4 (range: 1.0-15.0). Land use for the reach was large (30-50 cm dbh) and mature (50-90 cm dbh) trees. The average unit gradient was 2.1 percent. Riffles (37%), beaver pools (22%) and scour pools (21%) dominated stream habitat. Gravel (42%) and sand (26%) dominated stream substrate. Wood volume was very low at 7.4 m³/100m.

COMMENTS:

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

REACH 1

T12S-R10W-S10SE

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	6.4	VWI Range:	1 - 15

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	1,825	8,805	0
Secondary Channel	31	44	0
Off-Channel Units	169	223	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 6
Width: 3.7	Width: 8.0	13.5 (5.6 - 37)	9.8 (6 - 12)
Depth: 0.49	Height: 0.5	0.9 (0.8 - 1.5)	1.1 (0.85 - 1.25)

W:D ratio: 15.0

Entrenchment (ACW:FPW ratio): 2.1

Stream Flow Type: HF

Habitat Units/100m (total channel length): 7.9

Average Unit Gradient: 2.1%

Habitat Units/100m (primary channel length): 8.8

Water temperature (°C): 8.0 - 8.0

Riparian, Bank, and Wood Summary

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

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 primary channel</u>
All pieces (>=3m x 0.15m):	193	10.6
Volume (m ³):	136	7.4
Key pieces (>=12m x 0.60m):	3	0.2

OREGON DEPT OF FISH AND WILDLIFE

DEER CREEK PRE-TX (2-MC, 301)

HABITAT INVENTORY

Report Date: 11/29/2005

Survey Date:

3/29/2005

REACH 1		T12S-R10W-S10SE					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	8	136	5.1	0.37	686	0	2	7	15	20	46	11
CULVERT CROSSING	1	10	2.3	0.75	23	0	10	40	50	0	0	0
POOL-BACKWATER	20	67	1.3	0.21	93	0	40	44	9	5	2	0
POOL-BEAVER DAM	5	147	11.1	1.29	1,883	0	52	43	5	0	0	0
POOL-LATERAL SCOUR	41	402	4.2	0.85	1,719	0	10	30	52	6	2	0
POOL-PLUNGE	4	34	5.3	1.14	183	0	12	34	48	6	0	0
RAPID/BOULDERS	16	280	3.3	0.32	1,054	0	6	15	27	30	21	1
RIFFLE	48	827	3.5	0.34	3,059	0	7	20	61	9	2	0
RIFFLE W/ POCKETS	6	99	2.7	0.33	267	0	13	21	65	0	2	0
STEP/BEAVER DAM	4	5	6.4	0.18	29	0	37	44	17	1	0	0
STEP/BOULDERS	2	2	1.6	0.09	3	0	0	9	14	41	36	0
STEP/COBBLE	1	3	2.3	0.10	6	0	0	5	60	35	0	0
STEP/LOG	2	2	2.1	0.15	4	0	5	30	65	0	0	0
STEP/STRUCTURE	2	12	4.2	0.58	62	0	0	0	0	0	0	100
Total:	160	2,025	3.7	0.49	9,072	0	Avg: 14	26	42	10	6	2

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	25	214	3.3	0.42	1,976	21.78%	0	0.0	
Scour Pools	45	436	4.3	0.87	1,902	20.97%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	54	926	3.4	0.34	3,326	36.66%	0	0.0	
Rapids	16	280	3.3	0.32	1,054	11.62%	0	0.0	
Cascades	8	136	5.1	0.37	686	7.57%	0	0.0	
Step/Falls	11	23	3.9	0.22	104	1.15%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	1	10	2.3	0.75	23	0.26%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	70	34.6	38.4
Pools >=1m deep:	14	6.9	7.7
Complex pools (LWD pieces>=3):	17	8.4	9.3
Pool frequency (channel widths/pool):	3.6		
Residual pool depth (avg):	0.62		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **301** DEER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	CC	00	10.2	CC	W=2.3 H=1.35	
2	RI	00	19.1		PHOTO 1, 2	
3	SD	00	20.2	CS, BD	H:0.5	
4	BP	00	68.3	BV	OLD BV SIGNS	
5	RI	00	93.3		LT US WF D30 D15 LT ST	
6	RI	00	121.7	DJ, BV		
8	SD	00	155.8	BD	H=0.4	
9	BP	00	179.5	BV		
10	RI	01	202.5	/TJ, DJ		
13	RI	00	235.9		CA CT D30 S ST LT	
15	SS	00	255	PA	H=0.95,BEDROCK=CONCRETE, PHOTO	
16	LP	00	278	BV		
17	SD	00	279	BD	H=0.5	
18	BP	00	308.8	BV		
22	RI	00	385.4		GAUGING STATION LEFT	
24	SS	00	397.3		PHOTO 5,6,7, BEDROCK=CONCRETE	
25	RI	01	420.9		CA CT D30 S ST LT	
28	BW	10	446.3	/SS		
29	RB	00	471.3		SGS 1/2 SIGN, CH MV D50	
33	RB	00	554.3		PHOTO 8	
36	CB	01	613.7	SS/	PHOTO 9	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **301** **DEER CREEK PRE-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
37	BW	10	613.7	SS/		NOT ON MAP
38	CB	01	628.3	/TJ		NORMALLY SS TODAY A TRIB
40	CB	01	655.4	TJ/		NORMALLY AN SS, TODAY A TRIB
43	CB	01	681.2			CH MV S D30 MT LT
45	CB	01	693.6	TJ/		
46	SB	11	693.6			H=1.1
48	SB	00	707.6			H=0.5
51	RP	02	745.9			END 03/29
52	RB	00	766.6			START 3/30
58	LP	00	833			D30, VALLEY OPENS UP
59	RI	00	843.5	SS/		
61	RI	01	868.8	/TJ		
62	RB	11	868.8			15 PERCENT FLOW CONTRIBUTION
66	SC	02	882	SS/		
67	LP	00	895	SS/		FISH FRY, MAJOR SS 5.8M
68	RI	00	920.2			CT MT D30 S LT MT
69	LP	00	927.8			WHITE PVC MARKER STAKE
72	RI	00	946.5			1/2 SGS SIGN
75	RI	01	978.7	SS/		
78	RI	00	997.7	/SS		
79	LP	00	1009.4			OLD REDD IN TAILOUT

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **301** **DEER CREEK PRE-TX**

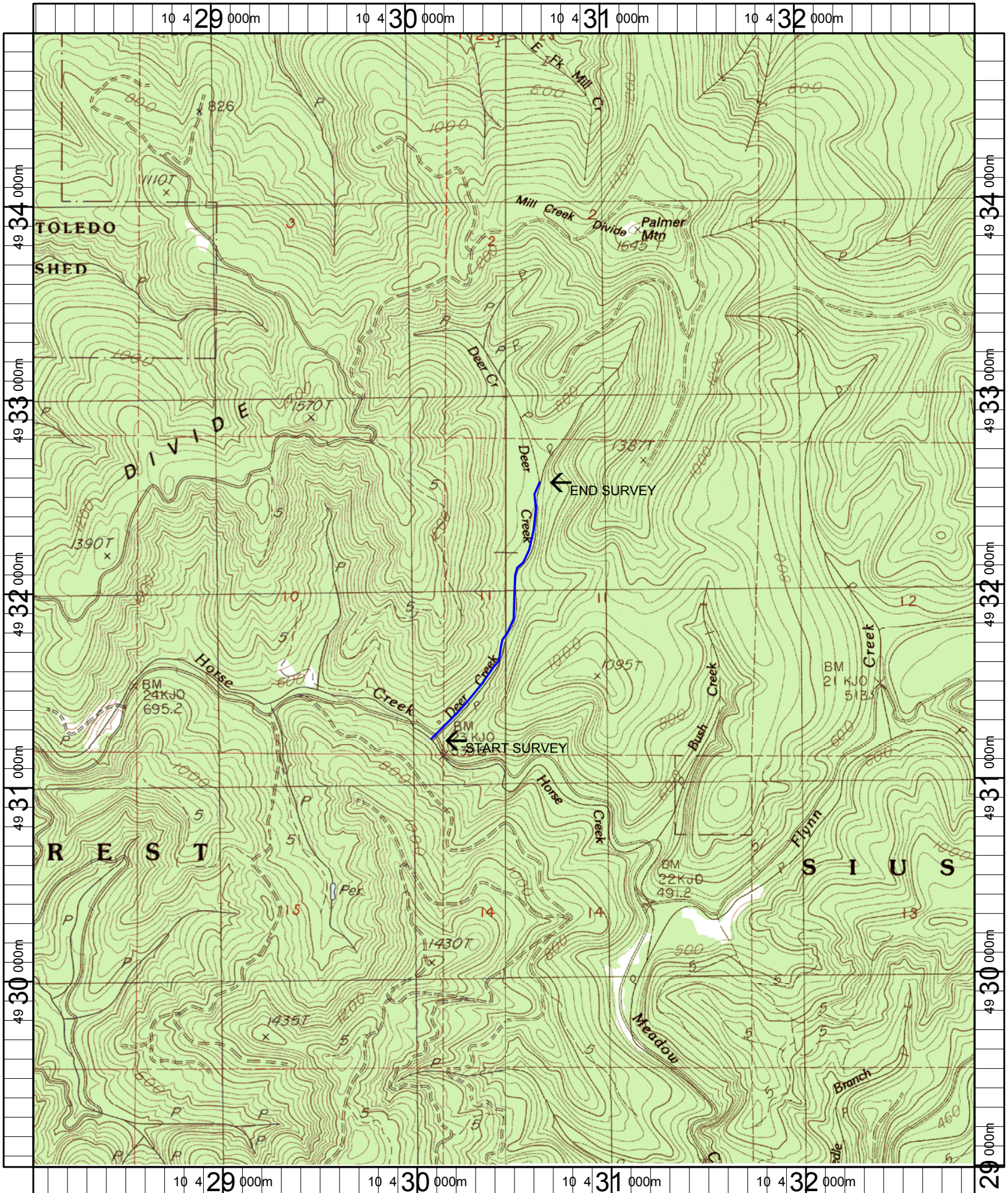
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
81	LP	00	1048.3	SS/SS		
82	RB	00	1074.1	/SS		
83	LP	00	1079.2	SS/SS	LT SITE RIFFLE	
90	LP	00	1137.7	TJ/		
91	RI	11	1137.7		RSN, NOT ON MAP	
93	RI	00	1160.7		SCULPIN, PHOTO 13 REACH	
94	LP	00	1174.5		CT MT G D30 MT ST	
95	LP	01	1189.4		JUVENILE FISH, FISH FRY	
96	BW	10	1189.4		FISH FRY	
97	RI	00	1208.7		SKULL OF RODENT	
98	LP	00	1218.2		DEN OF SOMETHING	
101	LP	00	1235.6		OLD BV DAM	
103	RI	00	1266.4		DRY TRIB CHANNEL LEFT	
104	LP	00	1275.5	/SS		
106	LP	00	1294.5	DJ	JUVENILE SALMONID	
112	RI	01	1341.4	/SS	JUVENILE FISH	
115	RP	00	1362.6		S/O=CLAY	
117	LP	00	1384.6		1/4 SFS SIGN	
119	PP	00	1401.8	DJ		
120	SL	00	1402.4		H=0.35	
121	LP	00	1411.1		METAL 50 GAL BARREL IN STREAM	

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **2-MC** SITE ID: **301** DEER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
126	RI	00	1465.2	SS/		
129	RI	01	1514.6	TJ/		
130	RI	11	1514.6		GREEN PVC BANDED TO TREE WITH	
131	RI	01	1539.3		BLUE RULER 2 MEASURE H2O DEPTH	
137	RI	00	1608.3	SS/		
139	LP	00	1618		OLD BV STICKS	
140	PP	00	1627.2	/SS		
141	SL	00	1628.4		H=0.35	
143	RP	00	1666.2	/SS	OLD BV SIGN, STICKS	
144	LP	00	1674.8		CA CT S D50 LT MT	
148	BW	10	1698.9		FISH FRY	
149	RI	00	1728.5	/SS		
155	BW	10	1767.8		FISH FRY	
158	SD	00	1790.2	BD	H=0.9, PHOTO 14,15	
159	BP	01	1825.2	BV, /TJ	BP BACKS UP INTO TRIB	
160	BP	11	1825.2	BV, PN	COHO FRY, SAME POOL	



Name: TOLEDO SOUTH
 Date: 6/13/2005
 Scale: 1 inch equals 2000 feet

Location: 10 430476 E 4931943 N
 Caption: DEER CREEK RESTORATION SITE - ALSEA BASIN