

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

STREAM: Dement Creek Phase 1 (MS-281)  
BASIN: Coquille River  
SURVEY TYPE: Post-Tx  
DATE: March 13, 2007  
SURVEY CREW: Andy Lanier, Laurel Moulton  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 16.7 km<sup>2</sup>  
USGS MAPS: Dement Creek  
ECOREGION: Southern Oregon Coastal Mountains

**GENERAL DESCRIPTION:**

The Dement Creek habitat survey extended 1,431 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.6 (range: 1.5-2.0). Land use for the reach was mature (50-90 cm dbh) trees and agriculture. The average unit gradient was 1.0 percent. Scour pools (57%) and riffles (35%) dominated stream habitat. Gravel (49%) and cobble (22%) dominated stream substrate. Wood volume was moderate at 24.2 m<sup>3</sup>/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

T30S-R13W-S25-N

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	1.6	VWI Range:	1.5 - 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	1,431	8,819	0
Secondary Channel	0	0	0
Off-Channel Units	40	111	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 3
Width: 6.0	Width: 10.5	12.4 ( 9 - 18 )	12.8 ( 11 - 14 )
Depth: 0.54	Height: 0.5	0.9 ( 0.8 - 1 )	1.6 ( 1.5 - 1.8 )

W:D ratio: 22.8

Entrenchment (ACW:FPW ratio): 1.2

Stream Flow Type: MF

Habitat Units/100m (total channel length): 4.8

Average Unit Gradient: 1.0%

Habitat Units/100m (primary channel length): 4.9

Water temperature (°C): 9.0 - 9.0

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	AG
Riparian Vegetation:	D30	G

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):	197	13.8
Volume (m <sup>3</sup> ):	346	24.2
Key pieces (>=12m x 0.60m):	34	2.4

OREGON DEPT OF FISH AND WILDLIFE

DEMENT CREEK PHASE 1 POST-TX (3-MS, 281)

HABITAT INVENTORY

Report Date: 5/3/2007

Survey Date:

3/13/2007

REACH 1		T30S-R13W-S25-N					REACH 1					
HABITAT DETAIL												
Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (#>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	2	8	0.9	0.08	7	0	0	3	30	35	30	3
POOL-DAMMED	1	20	7.0	1.30	140	0	5	50	20	10	15	0
POOL-ISOLATED	1	12	2.0	0.30	24	0	0	20	10	70	0	0
POOL-LATERAL SCOUR	31	759	6.1	0.92	4,778	0	0	21	53	14	5	7
POOL-PLUNGE	2	31	8.5	1.10	270	0	0	47	48	2	2	0
RIFFLE	6	97	4.8	0.12	526	0	0	5	59	31	5	0
RIFFLE W/ POCKETS	13	451	5.5	0.18	2,556	0	0	9	51	28	7	4
STEP/BEDROCK	1	7	5.0	0.20	35	0	0	0	0	20	20	60
STEP/COBBLE	10	83	7.4	0.16	570	0	0	4	50	37	3	6
STEP/STRUCTURE	3	3	7.0	0.13	24	0	0	27	40	0	33	0
<b>Total:</b>	70	1,471	6.0	0.54	8,930	0	<b>Avg:</b> 0	15	49	22	7	6

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	2	32	4.5	0.80	164	1.84%	0	0.0	
Scour Pools	33	790	6.2	0.93	5,048	56.53%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	19	548	5.3	0.16	3,082	34.51%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	2	8	0.9	0.08	7	0.08%	0	0.0	
Step/Falls	14	93	7.1	0.15	629	7.04%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	Primary Channel Length
		<u># / Km</u>	<u># / Km</u>
All Pools:	35	23.8	24.5
Pools >=1m deep:	15	10.2	10.5
Complex pools (LWD pieces>=3):	14	9.5	9.8
Pool frequency (channel widths/pool):	4.0		
Residual pool depth (avg):	0.77		

# Comment Summary

## Restoration Monitoring Sites 2007

MONITORING AREA: **3-MS**      SITE ID: **281**      **DEMENT CREEK PHASE 1 POST-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	LP	00	41		TEMPERATURE =9.0
2	LP	01	91	SS, TJ/	
3	CB	11	91		ACW=1.7
5	LP	00	115		JUVENILE SALMON
6	RP	00	145	/SS	
7	LP	00	180	/SS	
8	RP	00	240	/SS	
9	LP	00	278	HS	SALMON REDDS
10	RP	00	303	/SS	
12	DP	00	323.3	HS	ADULT SALMON, W/FUNGUS GROWTH.
14	LP	00	339.3	HS	LP
15	LP	00	375.3	HS	JUVENILE COHO. LP
16	RP	00	389.3	HS	LP= LOGS PUT IN STREAM.
17	PP	00	398.3	BV	
18	SS	00	400.3	HS	LP. LOOKS LIKE THE STREAM CHAN
19	LP	00	451.3	SS/, BV	
21	RI	00	473.3		ACW=1.6
22	LP	00	505.3		REDD
24	LP	00	567.3	HS	LP. PICTURE OF SNAIL LIVING
25	RP	00	584.3	/SS	REDD
29	RP	00	656.3		POWERLINE XING

# Comment Summary

## Restoration Monitoring Sites 2007

MONITORING AREA: **3-MS**      SITE ID: **281**      **DEMENT CREEK PHASE 1 POST-TX**

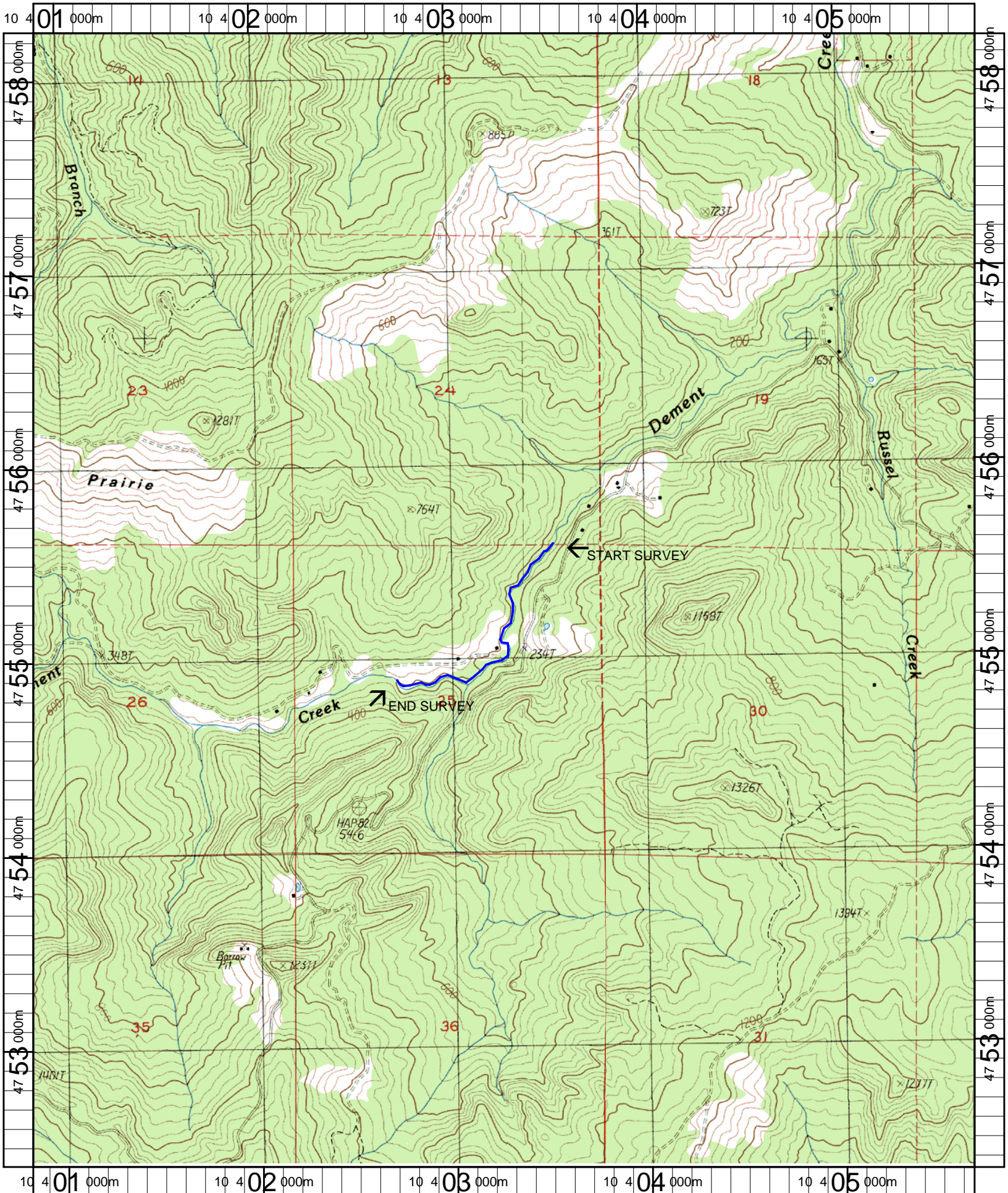
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
30	LP	00	672.3		AQ INV FLAG RIP 3
32	LP	01	733.3	TJ,CS/CSBC	REDD IN TAILOUT
33	CB	11	733.3		ACW= 1.3
34	SC	00	736.3		STREAM VWI IS SMALLER NOW
37	LP	00	799.3	/SS	JUVENILE SALMONID
39	LP	00	841.3		REDD. JUVENILE SALMONID
41	LP	00	866.3	/SS	
44	LP	00	975.3		REDD
47	LP	00	1024.3	HS	LP
49	PP	01	1065.3	TJ/	
50	RI	11	1065.3		ACW=6
51	SS	00	1066.3	HS	BOULDERS PLACED
55	LP	00	1138.3	HS	BOULDERS AND LOGS
57	LP	00	1169.3	HS	LOGS. ADULT SALMON CARCASS
59	LP	00	1235.3	HS	LOGS. JUVENILE SALMONIDS.
61	LP	00	1258.3		JUVENILE SALMONIDS. SR
62	RP	00	1278.3	SS/	
63	LP	00	1286.3	HS	LOGS
64	RP	00	1311.3	HS	LOGS
65	LP	00	1321.3	SS/	
66	SC	00	1327.3	/SS	

# Comment Summary

## Restoration Monitoring Sites 2007

MONITORING AREA: 3-MS      SITE ID: 281      DEMENT CREEK PHASE 1 POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
67	LP	00	1340.3	HS	LOGS
68	RP	00	1357.3	HS	LOGS
69	LP	00	1367.3	HS	LOGS
70	RP	00	1431.3	SS/, HS	LOGS



Name: DEMENT CREEK  
 Date: 5/9/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 403274 E 4755296 N  
 Caption: DEMENT CREEK PHASE 1 RESTORATION SITE - COQUILLE BASIN