

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

STREAM: Dement Creek (MS-340)
BASIN: Coquille River
SURVEY TYPE: Reference
DATE: September 7, 2005
SURVEY CREW: Pat Burns, Eric Himmelreich
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 37.3 km²
USGS MAPS: Dement Creek
ECOREGION: Southern Oregon Coastal Mountains

GENERAL DESCRIPTION:

The Dement Creek habitat survey extended 580 meters. The channel was constrained by hillslopes in a moderate V-shaped valley.. The average valley width index was 1.2 (range: 1.0-1.4). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.0 percent. Scour pools (62%) dominated stream habitat. Cobble (27%) and gravel (26%) dominated stream substrate. Wood volume was very low at 4.7 m³/100m.

COMMENTS:

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

REACH 1

T30S-R13W-S25NW

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	1.2	VWI Range:	1 - 1.4

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	580	2,297	0
Secondary Channel	38	99	0
Off-Channel Units	6	9	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u>	<i>n = 5</i>	<u>First Terrace</u>	<i>n = 0</i>
Width: 3.5	Width: 10.0	12.3	(9.8 - 16.5)	(-)	(-)
Depth: 0.35	Height: 0.5	1.0	(0.9 - 1.1)	(-)	(-)

W:D ratio: 20.6
 Stream Flow Type: LF
 Average Unit Gradient: 1.0%
 Water temperature (°C): 12.5 - 12.5

Entrenchment (ACW:FPW ratio): 1.2
 Habitat Units/100m (total channel length): 5.0
 Habitat Units/100m (primary channel length): 5.3

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	1%	Reach avg: 85%
Undercut Banks:	2%	Range: 56 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	73	12.6
Volume (m ³):	27	4.7
Key pieces (>=12m x 0.60m):	0	0.0

OREGON DEPT OF FISH AND WILDLIFE

DEMENT CREEK REFERENCE (3-MS, 340)

HABITAT INVENTORY

Report Date: 5/1/2006

Survey Date:

9/7/2005

REACH 1		T30S-R13W-S25NW					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
POOL-BACKWATER	1	6	1.5	0.30	9	2	40	50	0	5	5	0
POOL-LATERAL SCOUR	11	246	5.5	0.70	1,426	37	6	26	21	19	9	19
POOL-STRAIGHT SCOUR	1	13	4.8	0.40	62	6	5	10	40	30	15	0
RAPID/BOULDERS	8	185	2.3	0.16	435	69	1	3	24	41	27	4
RIFFLE	8	163	2.8	0.15	460	57	3	10	40	31	10	5
STEP/BEDROCK	1	5	0.3	0.10	1	0	0	0	0	0	0	100
STEP/BOULDERS	1	6	2.2	0.05	12	10	0	0	20	30	50	0
Total:	31	623	3.5	0.35	2,405	181	Avg: 4	15	26	27	15	12

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	1	6	1.5	0.30	9	0.36%	2	23.4	
Scour Pools	12	259	5.4	0.67	1,488	61.88%	43	2.9	
Glides	0	0			0	0.00%	0	0.0	
Riffles	8	163	2.8	0.15	460	19.11%	57	12.4	
Rapids	8	185	2.3	0.16	435	18.10%	69	15.8	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	2	10	1.3	0.08	13	0.56%	10	74.3	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	13	20.9	22.4
Pools >=1m deep:	1	1.6	1.7
Complex pools (LWD pieces>=3):	6	9.6	10.4
Pool frequency (channel widths/pool):	4.8		
Residual pool depth (avg):	0.60		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

DEMENT CREEK REFERENCE
GCG: 3-MS SITE ID: 340

Survey Date 9/7/2005
Report Date: 5/1/2006

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	996
Total conifers/1000 ft	102
Total conifers >20" dbh/1000 ft	20
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	2.3	0.3	3.0	0.3	2.7	0.7
15-30cm	0.0	3.7	0.0	2.0	0.0	1.0	0.0	6.7
30-50cm	0.3	1.0	0.0	0.0	0.3	0.0	0.7	1.0
50-90cm	0.3	0.0	0.0	0.3	0.0	0.3	0.3	0.7
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.7	7.0	0.3	5.3	0.7	4.0	0.6	5.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer		Conifer		Conifer	
	(%)	(%)	(%)	(%)	(%)	(%)
Canopy closure	79	80	82			
Shrub cover	53	63	58			
Grass/forb cover	19	13	18			

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	Conifer		Conifer		Conifer	
	(%)	(%)	(%)	(%)	(%)	(%)
Hillslope	100	100	100			
High terrace	0	0	0			
Low terrace	0	0	0			
Floodplain	0	0	0			
Wetland/meadow	0	0	0			
Stream channel	0	0	0			
Roadbed/Railroad	0	0	0			
Riprap	0	0	0			
Surface slope (%)	50	42	38			

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	996
Total conifers/1000 ft	102
Total conifers >20" dbh/1000 ft	20
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	8.0
15-30cm	0.0	6.7
30-50cm	0.7	1.0
50-90cm	0.3	0.7
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

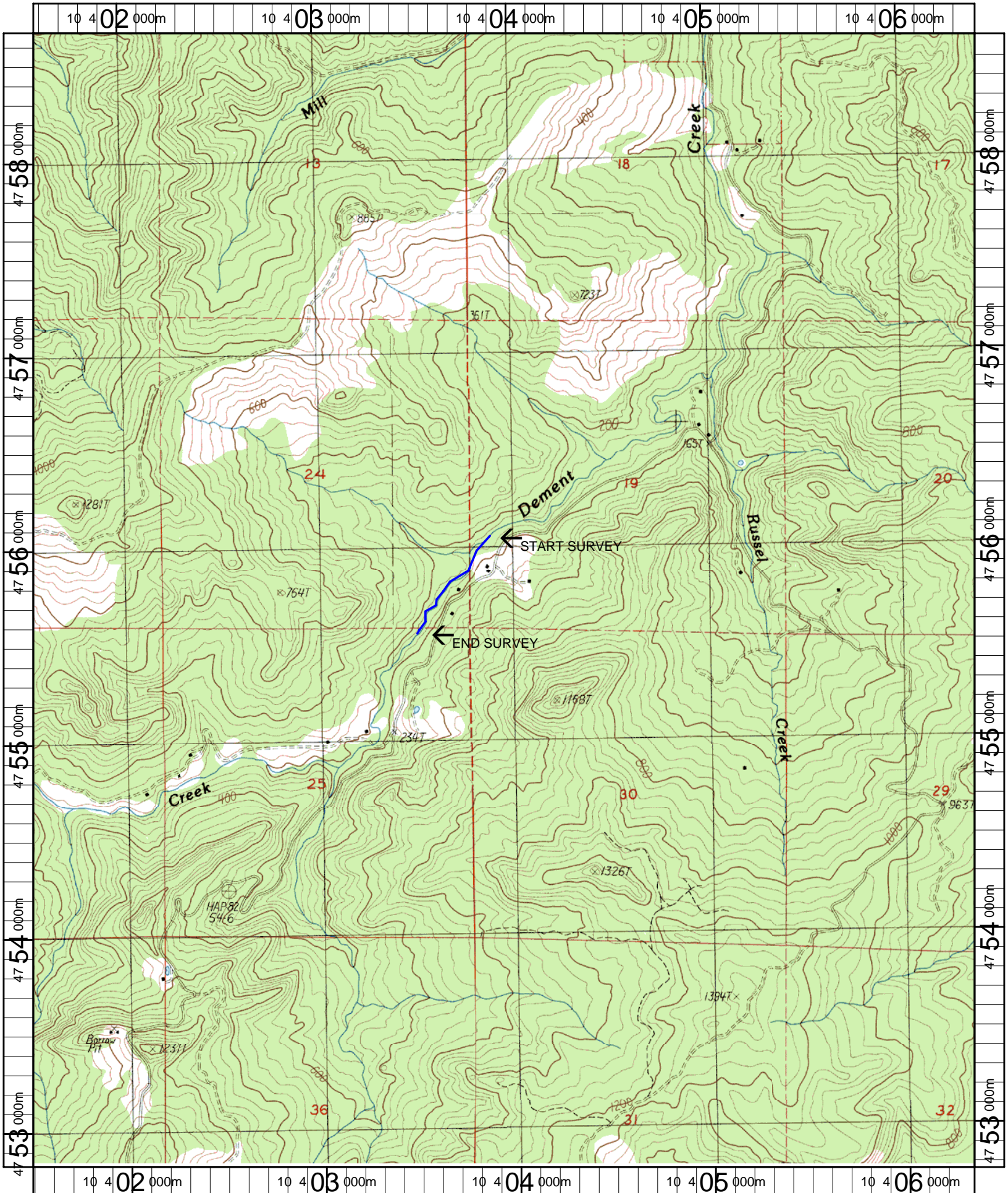
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
9	LF	2	HS	80	90	70	10	Conifer							
								Hardwood	2						
9	RT	3	HS	30	90	40	10	Conifer							
								Hardwood	3						
9	LF	3	HS	80	90	70	10	Conifer	1		1				
								Hardwood	2						
9	LF	1	HS	70	90	60	10	Conifer							0403767, 4755860
								Hardwood	2	4					
9	RT	2	HS	50	90	40	10	Conifer							
								Hardwood	3			1			
9	RT	1	HS	100	90	20	10	Conifer							
								Hardwood							
16	LF	1	HS	30	60	70	10	Conifer							0403674, 4755826
								Hardwood		2					
16	LF	2	HS	20	60	50	30	Conifer							
								Hardwood	1						
16	LF	3	HS	20	50	40	40	Conifer							
								Hardwood	1						
16	RT	1	HS	30	60	20	60	Conifer							
								Hardwood	4		1				
16	RT	2	HS	40	70	70	10	Conifer	1						
								Hardwood		1					
16	RT	3	HS	30	80	60	20	Conifer							
								Hardwood	1	1					
21	LF	3	HS	40	90	80	10	Conifer							
								Hardwood							
21	RT	2	HS	30	80	70	10	Conifer							
								Hardwood	1						
21	RT	1	HS	30	85	65	15	Conifer			1	1		ESTIMATED	
								Hardwood			1				
21	RT	3	HS	30	90	60	20	Conifer							
								Hardwood	1	2		1			
21	LF	1	HS	40	90	80	10	Conifer							0403595, 4755731
								Hardwood	1	5	1				
21	LF	2	HS	30	90	80	10	Conifer							
								Hardwood	2	5					

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: 3-MS SITE ID: 340 DEMENT CREEK REFERENCE

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	01	33.2		T = 12.5 C	
23	LP	00	463.8	/DJ		
25	LP	00	499.8	/SS		
27	LP	00	530.3	DJ/		



Name: DEMENT CREEK
 Date: 5/1/2006
 Scale: 1 inch equals 2000 feet

Location: 10 403950 E 4755719 N
 Caption: DEMENT CREEK LOWER REFERENCE SITE - COQUILLE BASIN