

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: September 24, 2007
SURVEY CREW: Peter Cole, Lisa Biggs
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 16.7 km²
USGS MAPS: Dement Creek
ECOREGION: Southern Oregon Coastal Mountains

GENERAL DESCRIPTION:

The Dement Creek habitat survey extended 1,574 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 2.3 (range: 1.0-6.0). Land use for the reach was second growth (15-30 cm dbh) trees and rural residential. The average unit gradient was 1.0 percent. Scour pools (64%) and riffles (30%) dominated stream habitat. Gravel (36%) and sand (28%) dominated stream substrate. Wood volume was moderate at 29.1 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

T30S-R13W-S25NE

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	2.3	VWI Range:	1 - 6

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	1,574	6,942	0
Secondary Channel	0	0	0
Off-Channel Units	133	208	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 7	<u>First Terrace</u> n = 4
Width: 3.7	Width: 12.5	15.6 (12.8 - 19.9)	16.3 (14.6 - 17.9)
Depth: 0.39	Height: 0.6	1.2 (1 - 1.3)	1.6 (1.5 - 1.65)

W:D ratio: 20.5

Entrenchment (ACW:FPW ratio): 1.3

Stream Flow Type: LF

Habitat Units/100m (total channel length): 5.0

Average Unit Gradient: 1.0%

Habitat Units/100m (primary channel length): 5.4

Water temperature (°C): 9.0 - 9.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	RR
Riparian Vegetation:	D30	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	8%	Reach avg: 88%
Undercut Banks:	13%	Range: 39 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	259	16.5
Volume (m ³):	458	29.1
Key pieces (>=12m x 0.60m):	37	2.4

OREGON DEPT OF FISH AND WILDLIFE

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

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

9/20/2007

REACH 1		T30S-R13W-S25NE					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	4	41	0.6	0.02	22	14	3	21	41	22	13	0
POOL-BACKWATER	6	61	2.1	0.43	115	8	19	49	24	7	1	0
POOL-ISOLATED	1	4	1.7	0.40	7	0	15	35	25	15	0	10
POOL-LATERAL SCOUR	36	940	4.8	0.75	4,569	173	10	37	25	13	8	7
RAPID/BOULDERS	1	10	3.8	0.07	37	4	0	14	33	29	24	0
RIFFLE	14	320	4.0	0.08	1,227	70	1	19	50	22	8	0
RIFFLE W/ POCKETS	8	249	3.3	0.15	945	71	3	16	42	26	12	2
STEP/COBBLE	14	81	2.7	0.07	226	23	0	10	55	22	7	5
STEP/LOG	1	0	1.3	0.02	1	0	0	100	0	0	0	0
Total:	85	1,707	3.7	0.39	7,149	363	Avg: 6	28	36	17	8	4

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	7	65	2.1	0.43	123	1.71%	8	6.5	
Scour Pools	36	940	4.8	0.75	4,569	63.91%	173	3.8	
Glides	0	0			0	0.00%	0	0.0	
Riffles	22	569	3.7	0.10	2,172	30.38%	141	6.5	
Rapids	1	10	3.8	0.07	37	0.52%	4	10.9	
Cascades	4	41	0.6	0.02	22	0.31%	14	64.1	
Step/Falls	15	81	2.6	0.07	227	3.17%	23	10.1	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	43	25.2	27.3
Pools >=1m deep:	5	2.9	3.2
Complex pools (LWD pieces>=3):	23	13.5	14.6
Pool frequency (channel widths/pool):	3.2		
Residual pool depth (avg):	0.71		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

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

Survey Date 9/20/2007

RIPARIAN ZONE

Report Date: 11/7/2007

VEGETATION SUMMARY

REACH 1

Summary of Riparian Zone (0-30m) 5 transects

Total hardwoods/1000	1256
Total conifers/1000 ft	317
Total conifers >20" dbh/1000 ft	24
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	0.8	3.4	0.4	2.6	0.8	4.8	2.0	10.8
15-30cm	0.4	3.4	0.4	1.2	0.8	1.2	1.6	5.8
30-50cm	0.4	1.6	0.2	0.0	0.6	0.6	1.2	2.2
50-90cm	0.0	0.8	0.2	1.0	0.2	0.0	0.4	1.8
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	1.6	9.2	1.2	4.8	2.4	6.6	1.7	6.9

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	89	75	74
Shrub cover	28	35	25
Grass/forb cover	55	49	49

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	60	90	70
High terrace	40	10	10
Low terrace	0	0	0
Floodplain	0	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	10
Roadbed/Railroad	0	0	10
Riprap	0	0	0
Surface slope (%)	35	49	24

Summary of Riparian Zone (0-30m) for all reaches

5 transects

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	1256
Total conifers/1000 ft	317
Total conifers >20" dbh/1000 ft	24
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	2.0	10.8
15-30cm	1.6	5.8
30-50cm	1.2	2.2
50-90cm	0.4	1.8
>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		
12	LT	1	HS	55	95	10	70	Conifer							
								Hardwood	6	2		2			
12	LT	2	HS	40	95	5	70	Conifer					1		
								Hardwood					5		
12	LT	3	HS	30	95	0	60	Conifer							
								Hardwood		4					
12	RT	1	HS	40	95	0	100	Conifer							
								Hardwood	1	1	2				
12	RT	2	HS	60	40	15	85	Conifer							
								Hardwood	2	1					
12	RT	3	HS	40	95	25	70	Conifer			1				
								Hardwood	7	1	1				
27	LT	1	HS	60	95	0	35	Conifer	1			1			
								Hardwood	2	3	1				
27	LT	2	HS	30	95	20	20	Conifer	2			1			
								Hardwood	2						
27	LT	3	HS	40	90	40	40	Conifer							
								Hardwood	3						
27	RT	1	HT	0	95	0	70	Conifer							
								Hardwood	3	2					
27	RT	2	HS	90	90	40	30	Conifer							
								Hardwood		2					
27	RT	3	HS	30	95	0	70	Conifer	1	2					
								Hardwood		1	1				
39	LT	1	HS	50	95	35	30	Conifer	1						
								Hardwood	1	4	1	1			
39	LT	2	HS	30	95	5	50	Conifer		2					
								Hardwood	1	1					
39	LT	3	HS	40	95	20	35	Conifer							
								Hardwood	10						
39	RT	1	HT	0	50	60	20	Conifer							2" RLF @
								Hardwood		2					START OF HT
39	RT	2	HT	0	0	100	0	Conifer							
								Hardwood							
39	RT	3	HT	0	0	100	0	Conifer							
								Hardwood							

51	LT	1	HT	0	95	15	75	Conifer	2	2	1	
								Hardwood				
51	LT	2	HS	60	95	20	80	Conifer				
								Hardwood	4	1		
51	LT	3	SC	0	90	10	30	Conifer				
								Hardwood			1	ZONE 3 IS MAIN CHANNEL
51	RT	1	HT	5	95	30	70	Conifer				
								Hardwood	2	1		
51	RT	2	HS	85	85	20	80	Conifer				
								Hardwood	4	1		
51	RT	3	HS	35	85	25	75	Conifer	1			1
								Hardwood	4			
65	LT	1	HS	80	95	75	25	Conifer				
								Hardwood	1	2	1	
65	LT	2	HS	30	95	50	50	Conifer				
								Hardwood				
65	LT	3	HS	20	90	20	70	Conifer	1	1	3	
								Hardwood				
65	RT	1	HS	60	80	50	50	Conifer				
								Hardwood	1		3	1
65	RT	2	HS	60	60	75	25	Conifer				
								Hardwood				
65	RT	3	RB	0	0	10	40	Conifer	1			
								Hardwood				

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	38.5		TEMP=10.5C AT 9:35AM. START MAPLE LEFT
3	LP	01	94	HS, TJ/ 1	HS(LWD).
4	CB	11	94		ACW=4.4, TRIB A
5	RI	00	104.6	HS	HS(LWD). LARGE WIDOW MAKER RIGHT VERY DANGEROUS
6	LP	00	132.4	HS	LWD
7	RP	01	159.5	HS	LWD
10	LP	00	205.1	BV, HS, AM	(LWD). AM=1 RSN. /LA=12WIDE X 12HIGH. HILL SLUMP/ =300M X 35M. FLOCK TUR
11	RP	00	255.1	HS	HS(LWD)
12	LP	00	267.2		DEER TRACKS THROUGHOUT SURVEY OLD REDD. STRONG SKUNK SMELL. PIX,
14	LP	00	306.3	HS, BV	HS(LWD)
15	RP	00	336.1	HS, WL	PILEATED WOODPECKER. HS(LWD)
16	LP	00	361.1	HS, DJ	HS(LWD) . 2 SMALL DARTY FISH ASSUME SALMONIDS
17	RP	00	372.7	HS	HS(LWD)
18	LP	00	393.1	HS, DJ	HS(LWD)
20	LP	00	427.5	HS, BV	HS(LWD) . COHO PRESENT
23	LP	00	456	HS	HS(LWD)
24	RI	01	477.2	BV, .TJ/	
25	CB	11	477.2		ACW=.8, TRIB B
26	LP	00	527.4	BV	LG DOG TRACK.DEER TRACKS
27	RI	01	547.3	TJ/, LA/	LA/=6X6 M, RIP 2
28	CB	11	547.3		ACW=1.7, TRIB C
29	LP	00	585.3		TINY STEP IN POOL

COMMENT SUMMARY

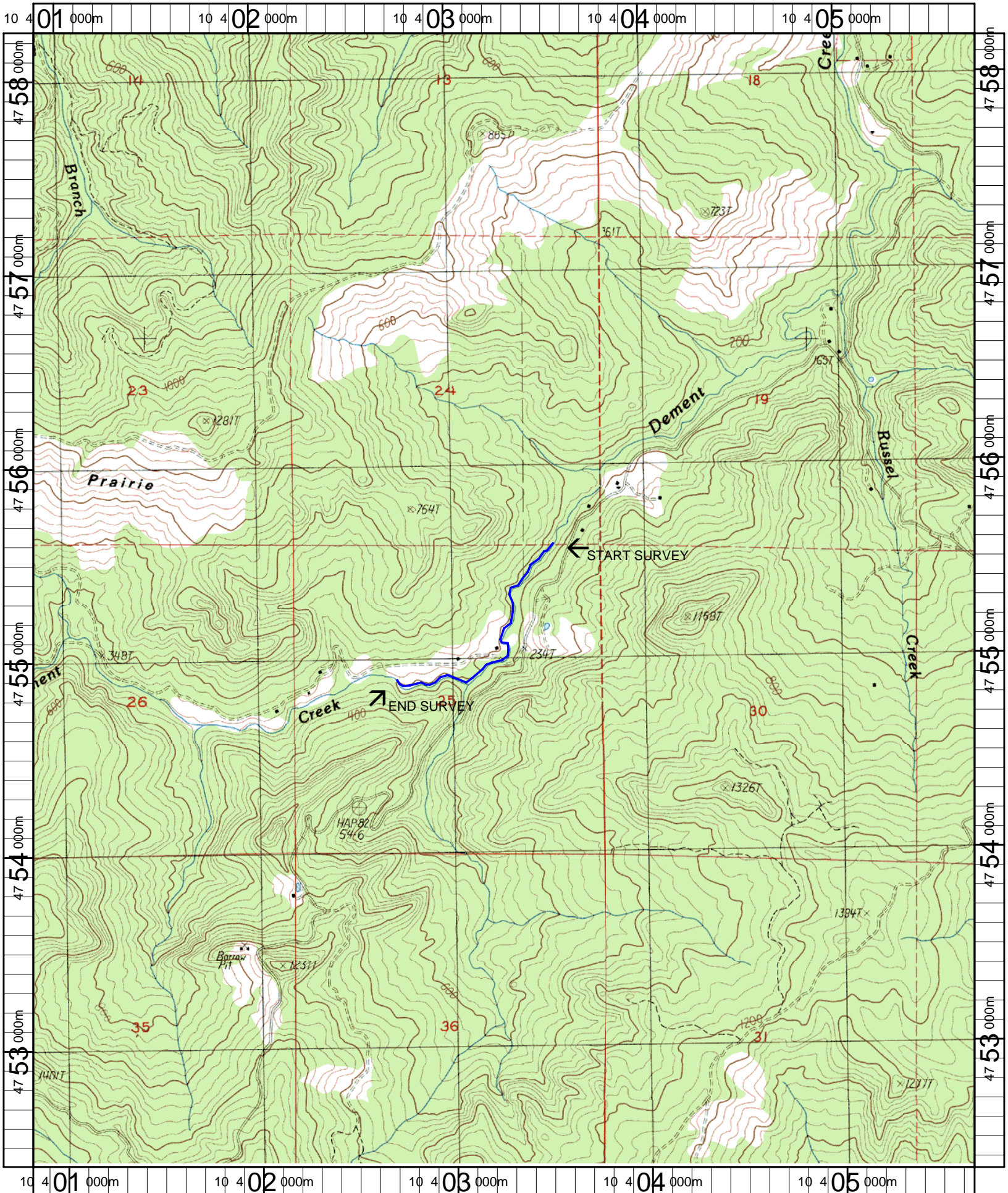
MONITORING AREA: 3-MS SITE ID: 281 STREAM: DEMENT CREEK PHASE 1 POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
30	LP	00	643		DOGGIES
31	SC	00	648.2	/SS	BLACK PIPE IN CREEK NOT CONNECTED TO ANYTHING
33	SC	00	664.9	LA	LA=10W X 9H METERS
34	LP	00	679.7	/SS	1" PIPE XING OVERHEAD
35	SC	00	685.7		HUGE OLD MYRTLE RIGHT (2.5M)
36	LP	00	724.5	BV, AM, HS	1, 12" CT. AM=YL FROG (SKINNY). HS (LWD) . LA=7H X 10W METERS
38	BW	10	751.7	HS	LWD
39	LP	00	768.9		OLD FLAG 7.11.05 RIP3 U38. =>, RIP 3
41	LP	01	826.5	BC, TJ/	DRIVEWAY BC
42	CB	11	826.5		ACW=2M. TEMPERATURE = 11.5C @ 2:30 PM, TRIB D
48	LP	00	943.2		DEAD CT 6"
51	RP	00	1035.5		RIP 3
56	LP	00	1144.1	HS, DJ	HS(LWD)
57	RI	00	1165.3	RC	GRAVEL ROAD XING
58	LP	01	1183.6	TJ/ E	TEMPERATURE=8.5C AT 10:50
60	RI	11	1183.6		ACW=6M. TEMPERATURE = 9C @ 11:06AM, TRIB E
62	RI	00	1223.9		SALMONIDS PRESENT
63	LP	00	1243.1	LA/	LA=5MX5M
65	LP	00	1268.3	HS	HS(LWD AND 1 BOULDER), RIP 4
67	LP	00	1299.9	HS	LWD
69	LP	00	1376.1	HS, DJ	HS(LWD)
71	LP	00	1404.6	LS	LS=16M WIDE X 6M HIGH

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
72	RP	01	1425.8	AM	CAN HEAR A FROG
74	LP	00	1433.8	HS	LWD
75	SC	00	1441.1	HS	SITE 14, LWD
76	LP	00	1459.8		SHALLOW SPOT IN MIDDLE OF POOL
77	SC	00	1463.5	SS/	
80	LP	00	1498.1	HS	LWD
81	RI	00	1515.9	HS	LWD
82	LP	01	1530.2	HS, DJ	HS(LWD)
84	RP	01	1574	AM, HS	AM=1.5" YLFROG. END SIGN RIGHT. HS(LWD), END



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