

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

STREAM: Dement Creek (MS-281)
BASIN: Coquille River
SURVEY TYPE: Pre-Tx
DATE: July 11, 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 1,518 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 1.9 (range: 1.0-4.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 0.8 percent. Scour pools (56%) and riffles (29%) dominated stream habitat. Gravel (33%) and cobble (28%) dominated stream substrate. Wood volume was very low at 4.3 m³/100m.

COMMENTS:

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

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.9	VWI Range:	1 - 4

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	1,518	7,515	0
Secondary Channel	69	84	2
Off-Channel Units	97	207	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 8	<u>First Terrace</u> n = 3
Width: 4.3	Width: 9.6	12.1 (10.3 - 13.8)	14.3 (12.3 - 16)
Depth: 0.41	Height: 0.5	1.0 (0.9 - 1.1)	1.3 (1.25 - 1.4)

W:D ratio: 18.7
 Stream Flow Type: MF
 Average Unit Gradient: 0.8%
 Water temperature (°C): 15.0 - 15.0

Entrenchment (ACW:FPW ratio): 1.3
 Habitat Units/100m (total channel length): 4.7
 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	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 79%
Undercut Banks:	1%	Range: 44 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	102	6.7
Volume (m ³):	65	4.3
Key pieces (>=12m x 0.60m):	1	0.1

OREGON DEPT OF FISH AND WILDLIFE

DEMENT CREEK PRE-TX (3-MS, 281)

HABITAT INVENTORY

Report Date: 4/27/2006

Survey Date:

7/11/2005

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	2	28	0.8	0.10	23	10	5	8	31	41	15	0
POOL-BACKWATER	3	21	2.9	0.57	64	1	33	40	18	7	2	0
POOL-ISOLATED	1	4	1.6	0.30	7	2	30	70	0	0	0	0
POOL-LATERAL SCOUR	31	730	5.3	0.75	4,126	96	7	28	27	20	8	10
POOL-STRAIGHT SCOUR	3	48	4.7	0.65	249	12	5	22	32	25	15	2
PUDDLED UNIT	2	62	1.3	0.08	60	10	3	15	35	35	3	10
RAPID/BOULDERS	10	206	3.8	0.15	884	100	1	7	29	40	20	4
RIFFLE	21	541	4.2	0.15	2,260	105	1	11	45	31	8	4
RIFFLE W/ POCKETS	1	14	2.3	0.30	33	1	5	20	25	20	10	20
STEP/COBBLE	6	30	3.5	0.08	103	5	0	4	42	47	3	3
Total:	80	1,685	4.3	0.41	7,806	342	Avg: 5	19	33	28	9	6

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	4	25	2.6	0.50	70	0.90%	3	4.3	
Scour Pools	34	778	5.3	0.74	4,374	56.04%	108	2.5	
Glides	0	0			0	0.00%	0	0.0	
Riffles	22	555	4.1	0.15	2,293	29.37%	106	4.6	
Rapids	10	206	3.8	0.15	884	11.32%	100	11.3	
Cascades	2	28	0.8	0.10	23	0.29%	10	44.1	
Step/Falls	6	30	3.5	0.08	103	1.31%	5	4.9	
Dry	2	62	1.3	0.08	60	0.77%	10	16.7	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	38	22.6	25.0
Pools >=1m deep:	6	3.6	4.0
Complex pools (LWD pieces>=3):	9	5.3	5.9
Pool frequency (channel widths/pool):	4.6		
Residual pool depth (avg):	0.63		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

DEMENT CREEK PRE-TX
GCG: 3-MS SITE ID: 281

Survey Date 7/11/2005

RIPARIAN ZONE

Report Date: 4/27/2006

VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	1414
Total conifers/1000 ft	49
Total conifers >20" dbh/1000 ft	24
Total conifers >35" dbh/1000 ft	24

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	3.8	0.0	4.0	0.2	7.2	0.2	15.0
15-30cm	0.0	3.4	0.0	1.0	0.2	2.0	0.2	6.4
30-50cm	0.0	1.0	0.0	0.6	0.0	0.0	0.0	1.6
50-90cm	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
>90cm	0.2	0.0	0.2	0.0	0.0	0.0	0.4	0.0
Total/100m2	0.2	8.2	0.2	5.6	0.4	9.4	0.3	7.7

Canopy closure and ground cover

	Zone 1 0-10 meters (%)		Zone 2 10 - 20 meters (%)		Zone 3 20 - 30 meters (%)	
Canopy closure	67		62		65	
Shrub cover	38		41		54	
Grass/forb cover	53		50		36	

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	60	70	90
High terrace	20	20	10
Low terrace	0	0	0
Floodplain	10	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	10	10	0
Riprap	0	0	0
Surface slope (%)	38	37	41

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	1414
Total conifers/1000 ft	49
Total conifers >20" dbh/1000 ft	24
Total conifers >35" dbh/1000 ft	24

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	0.2	15.0
15-30cm	0.2	6.4
30-50cm	0.0	1.6
50-90cm	0.0	0.2
>90cm	0.4	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			
11	LF	2	HS	55	85	30	60	Conifer						1	
								Hardwood			1				
11	RT	3	HS	40	70	40	40	Conifer	1						2 CONIFER SNAGS, 40CM
								Hardwood	2	1					
11	RT	1	HS	80	80	10	80	Conifer							
								Hardwood	1		1				
11	LF	1	HS	55	80	15	75	Conifer						1	0403383 / 4755423
								Hardwood	1	4	1				
11	RT	2	HS	70	70	20	50	Conifer							
								Hardwood	1	2	1				
11	LF	3	HS	60	70	35	50	Conifer							
								Hardwood	4						
23	RT	2	HS	80	80	20	80	Conifer							
								Hardwood		1					
23	LF	1	HS	30	50	20	70	Conifer							0403323 / 4755218
								Hardwood	1	1					
23	LF	2	HS	35	70	55	45	Conifer							
								Hardwood	3	2					
23	LF	3	HS	40	65	40	45	Conifer							
								Hardwood	13	4					
23	RT	1	HS	80	70	55	45	Conifer							
								Hardwood							
23	RT	3	HS	80	90	40	60	Conifer							
								Hardwood							
38	LF	2	HS	30	60	40	40	Conifer							
								Hardwood	11						
38	LF	3	HS	30	50	70	10	Conifer							
								Hardwood	2						
38	RT	1	HT	5	20	100	0	Conifer							ESTIMATED, BLACKBERRY PATCH
								Hardwood	1	1					0403307 / 4755044
38	LF	1	HS	30	60	40	30	Conifer							
								Hardwood	3	4					
38	RT	2	HT	0	0	100	0	Conifer							
								Hardwood							
38	RT	3	HT	0	0	100		Conifer							
								Hardwood							

55	LF	2	HS	50	80	70	20	Conifer						0403157 / 4754874
								Hardwood	5			1		
55	RT	1	HT	5	50	20	80	Conifer						
								Hardwood	1	4		2		
55	RT	2	HT	0	0	5	95	Conifer						
								Hardwood						
55	RT	3	HS	20	70	30	40	Conifer						
								Hardwood	10			2		
55	LF	1	HS	30	90	60	30	Conifer						4M DIRT ROADBED
								Hardwood	4	1		1		
55	LF	3	HS	50	70	70	10	Conifer						
								Hardwood	5	1			1	
72	RT	1	RB	55	80	50	40	Conifer						
								Hardwood	3			1		
72	LF	1	FP	12	85	5	75	Conifer						
								Hardwood	4			1		
72	LF	2	RB	5	90	10	80	Conifer						
								Hardwood						
72	LF	3	HS	45	90	40	50	Conifer				1		
								Hardwood				2		
72	RT	2	HS	40	85	60	30	Conifer						
								Hardwood						
72	RT	3	HS	40	75	70	20	Conifer						
								Hardwood						

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **281** **DEMENT CREEK PRE-TX**

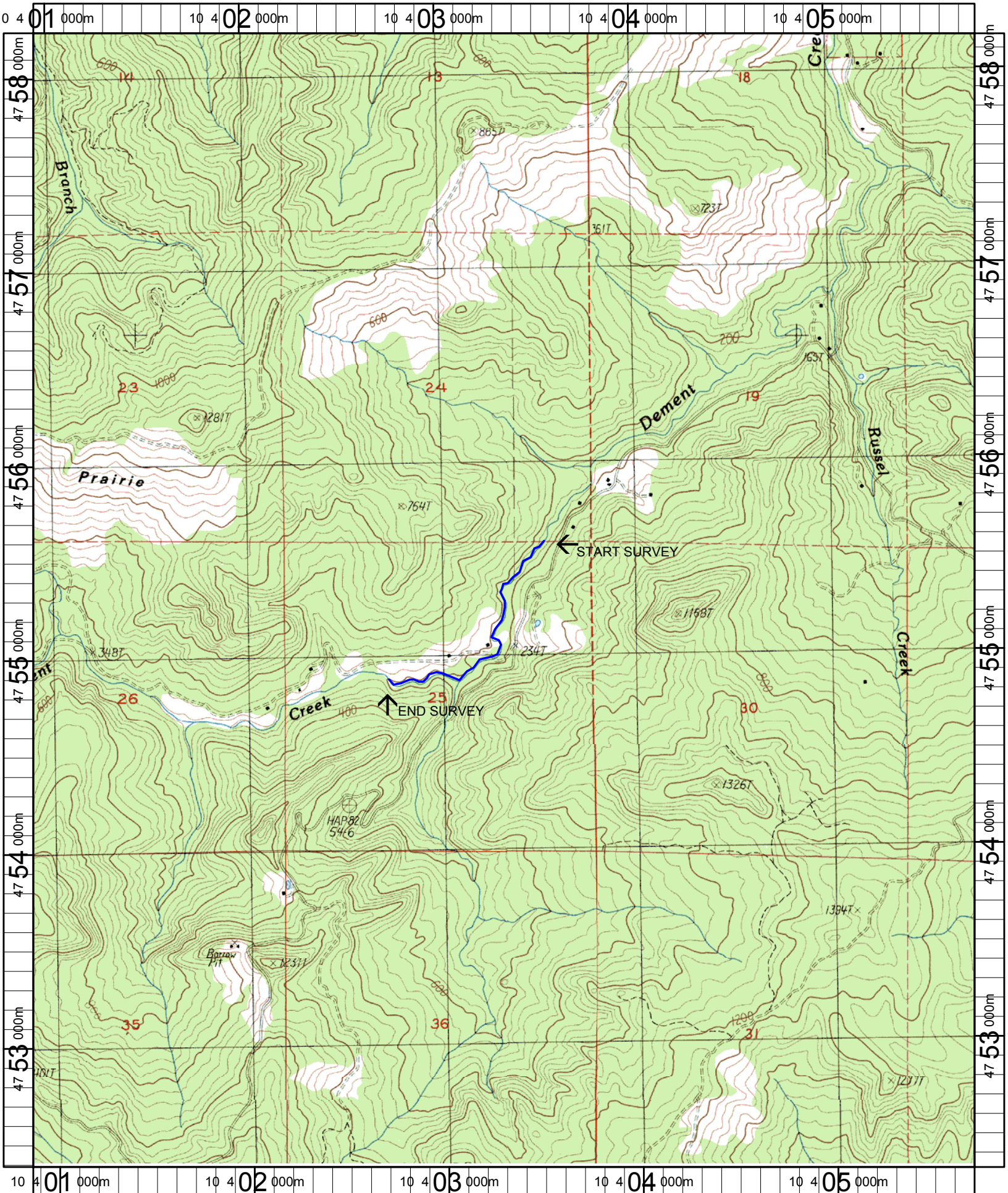
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
5	CB	11	84	TJ/	TRIB 1, ACW 2.5M	TEMP 13.5 C
6	RI	00	97.3			TEMP 15C
9	LP	00	196.5	SS/SS		
10	RB	00	215	SS/SS		
11	RI	00	231.4		RIPARIAN 1	
22	SC	00	461.2		RIPARIAN 2	
26	RI	01	518.3	TJ/		
27	RB	11	518.3		TRIB 2, ACW 1.3M	TEMP 13.5C
28	LP	00	554.6			TEMP 15C
33	SC	00	630.3	/SS		
38	LP	00	744.5		RIPARIAN 3	
40	LP	01	798.7	TJ/, BC		
41	CB	11	798.7		TRIB 3, ACW 1.8M	TEMP 14.5C
42	RI	11	798.7			TEMP 15.5C
55	LP	01	1078.1		RIPARIAN 4	
62	LP	01	1150.4	TJ/		
63	RB	11	1150.4		SCHOOL LINE CREEK, AC	SCHOOL LINE CREEK, TEMP
64	RI	00	1196.4			TEMP 16C
73	RI	00	1348.9		RIPARIAN 5	
77	LP	00	1441.7	DJ		

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **281** **DEMENT CREEK PRE-TX**

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
5	CB	11	84	TJ/	TRIB 1, ACW 2.5M	TEMP 13.5 C
6	RI	00	97.3			TEMP 15C
9	LP	00	196.5	SS/SS		
10	RB	00	215	SS/SS		
11	RI	00	231.4		RIPARIAN 1	
22	SC	00	461.2		RIPARIAN 2	
26	RI	01	518.3	TJ/		
27	RB	11	518.3		TRIB 2, ACW 1.3M	TEMP 13.5C
28	LP	00	554.6			TEMP 15C
33	SC	00	630.3	/SS		
38	LP	00	744.5		RIPARIAN 3	
40	LP	01	798.7	TJ/, BC		
41	CB	11	798.7		TRIB 3, ACW 1.8M	TEMP 14.5C
42	RI	11	798.7			TEMP 15.5C
55	LP	01	1078.1		RIPARIAN 4	
62	LP	01	1150.4	TJ/		
63	RB	11	1150.4		SCHOOL LINE CREEK, AC	SCHOOL LINE CREEK, TEMP
64	RI	00	1196.4			TEMP 16C
73	RI	00	1348.9		RIPARIAN 5	
77	LP	00	1441.7	DJ		



Name: DEMENT CREEK
 Date: 1/6/2005
 Scale: 1 inch equals 2000 feet

Location: 10 403321 E 4755280 N
 Caption: DEMENT CREEK RESTORATION SITE - COQUILLE BASIN