

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

STREAM: Lobster Creek (MC-374)
BASIN: Alsea River
SURVEY TYPE: Pre-Tx
DATE: July 5, 2007
SURVEY CREW: Janice Sloan, Robert Gomez, Jeff Snyder
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 25.4 km²
USGS MAPS: Digger Mountain
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Lobster Creek habitat survey extended 1,637 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 7.9 (range: 3.2-15.0). Land use for the reach was second growth (15-30 cm dbh) trees and timber harvest. The average unit gradient was 1.0 percent. Scour pools (64%) dominated stream habitat. Cobble (35%), gravel (23%) and sand (21%) dominated stream substrate. Wood volume was low at 15.0 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

T15S-R08W-S15SE

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	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	7.9	VWI Range:	3.2 - 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	1,637	13,036	0
Secondary Channel	204	887	3
Off-Channel Units	115	408	2

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 9
Width: 6.6	Width: 14.1	20.2 (13.35 - 37.4)	32.6 (17.35 - 77.4)
Depth: 0.52	Height: 0.5	1.0 (0.86 - 1.3)	1.9 (1.1 - 4.5)

W:D ratio: 26.5
 Stream Flow Type: MF
 Average Unit Gradient: 1.0%
 Water temperature (°C): 12.0 - 12.0

Entrenchment (ACW:FPW ratio): 1.9
 Habitat Units/100m (total channel length): 4.8
 Habitat Units/100m (primary channel length): 5.7

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	3%	Reach avg: 71%
Undercut Banks:	0%	Range: 40 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	131	8.0
Volume (m ³):	245	15.0
Key pieces (>=12m x 0.60m):	11	0.7

OREGON DEPT OF FISH AND WILDLIFE

LOBSTER CREEK PRE-TX (2-MC, 374)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

6/28/2007

REACH 1

T15S-R08W-S15SE

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	1	45	8.0	0.45	360	128	5	10	25	25	35	0
CULVERT CROSSING	1	13	0.4	0.05	5	0	0	40	40	0	20	0
DRY UNIT	4	75	4.0	0.15	350	0	3	48	26	23	0	0
GLIDE	1	24	9.2	0.30	218	0	5	5	10	80	0	0
POOL-ALCOVE	1	12	6.8	0.85	80	1	30	65	0	0	5	0
POOL-BACKWATER	2	15	4.3	0.40	66	0	20	41	20	20	0	0
POOL-DAMMED	2	31	6.5	1.00	235	0	20	40	20	20	0	0
POOL-ISOLATED	3	61	3.4	0.32	232	0	37	18	23	23	0	0
POOL-LATERAL SCOUR	35	993	7.8	0.90	8,159	166	14	26	22	31	6	1
POOL-STRAIGHT SCOUR	6	143	7.6	0.98	1,053	28	17	22	19	24	11	7
PUDDLED UNIT	1	10	5.0	0.10	51	0	80	10	0	10	0	0
RAPID/BOULDERS	1	22	8.0	0.30	175	38	0	5	11	21	63	0
RIFFLE	16	414	6.0	0.17	2,640	20	3	12	29	51	5	0
STEP/BEDROCK	1	2	1.3	0.05	2	0	0	0	5	0	11	84
STEP/BOULDERS	4	6	3.4	0.09	14	21	0	7	9	21	63	0
STEP/COBBLE	14	91	7.4	0.13	690	29	0	9	29	56	5	0
Total:	93	1,957	6.6	0.52	14,331	431	Avg: 10	21	23	35	9	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	8	120	4.8	0.58	613	4.28%	1	0.2
Scour Pools	41	1,136	7.8	0.91	9,212	64.28%	194	2.1
Glides	1	24	9.2	0.30	218	1.52%	0	0.0
Riffles	16	414	6.0	0.17	2,640	18.42%	20	0.8
Rapids	1	22	8.0	0.30	175	1.22%	38	21.7
Cascades	1	45	8.0	0.45	360	2.51%	128	35.6
Step/Falls	19	99	6.2	0.12	706	4.93%	50	7.1
Dry	5	85	4.2	0.14	401	2.80%	0	0.0
Culverts	1	13	0.4	0.05	5	0.04%	0	0.0

REACH 1

T15S-R08W-S15SE

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	49	25.0	29.9
Pools >=1m deep:	19	9.7	11.6
Complex pools (LWD pieces>=3):	12	6.1	7.3
Pool frequency (channel widths/pool):	2.8		
Residual pool depth (avg):	0.79		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

LOBSTER CREEK PRE-TX
GCG: 2-MC SITE ID: 374

Survey Date 6/28/2007
Report Date: 11/7/2007

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	439
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	12
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	0.2	0.8	1.2	0.2	0.2	1.2	1.6	2.2
15-30cm	0.0	0.0	0.0	0.6	0.0	0.6	0.0	1.2
30-50cm	0.0	0.4	0.2	1.2	0.0	1.8	0.2	3.4
50-90cm	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.4
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.2	1.2	1.6	2.2	0.2	3.8	0.7	2.4

Canopy closure and ground cover

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Canopy closure	53	67	75
Shrub cover	42	62	63
Grass/forb cover	50	34	27

Predominant landform in each zone

	Zone 1 0-10 meters (%)	Zone 2 10 - 20 meters (%)	Zone 3 20 - 30 meters (%)
Hillslope	0	0	20
High terrace	50	90	70
Low terrace	0	0	0
Floodplain	50	0	0
Wetland/meadow	0	0	0
Stream channel	0	0	0
Roadbed/Railroad	0	10	10
Riprap	0	0	0
Surface slope (%)	11	3	5

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	439
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	12
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	1.6	2.2
15-30cm	0.0	1.2
30-50cm	0.2	3.4
50-90cm	0.2	0.4
>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			
1	LF	1	HT	21	25	15	70	Conifer							
								Hardwood			1				
1	LF	2	HT	3	70	65	25	Conifer			1	1			
								Hardwood							
1	LF	3	HT	5	90	75	15	Conifer							
								Hardwood	2	1	2				
1	RT	1	FP	55	60	65	35	Conifer							
								Hardwood							
1	RT	2	HT	5	10	20	80	Conifer							
								Hardwood							
1	RT	3	RB	0	0	0	50	Conifer							
								Hardwood							
14	LF	1	FP	12	75	10	85	Conifer							
								Hardwood							
14	LF	2	HT	4	80	90	5	Conifer							ESTIMATED
								Hardwood		1	4				
14	LF	3	HT	4	70	80	10	Conifer							ESTIMATED
								Hardwood		2					
14	RT	1	FP	13	15	5	95	Conifer							FP/HT
								Hardwood							
14	RT	2	HT	7	60	15	80	Conifer							
								Hardwood				1			
14	RT	3	HT	7	95	90	10	Conifer							ESTIMATED
								Hardwood							
27	LF	1	FP	5	35	10	90	Conifer							FP/SC
								Hardwood							
27	LF	2	HT	4	85	50	50	Conifer	2						
								Hardwood							
27	LF	3	HT	3	98	98	2	Conifer							ESTIMATED
								Hardwood							
27	RT	1	FP	2	20	10	40	Conifer							40% ROCK
								Hardwood							
27	RT	2	HT	2.5	95	85	15	Conifer							
								Hardwood							
27	RT	3	HT	2.5	95	85	15	Conifer							
								Hardwood							

48	LF	1	HT	0	80	85	10	Conifer					
								Hardwood			1		
48	LF	2	HT	0	75	80	20	Conifer					
								Hardwood		1			
48	LF	3	HS	29	75	50	40	Conifer					HS/HT
								Hardwood			2		
48	RT	1	HT	0	45	40	60	Conifer	1				
								Hardwood	4				
48	RT	2	HT	0	70	60	30	Conifer					
								Hardwood	1				
48	RT	3	HT	0	75	40	60	Conifer					
								Hardwood	1		5		
62	LF	1	HT	0	85	85	10	Conifer					4 PLANTED CEDAR SAPLINGS
								Hardwood					HT/RB
62	LF	2	RB	0	40	60	30	Conifer	2				
								Hardwood		1			
62	LF	3	HT	0	70	40	40	Conifer					
								Hardwood	2				
62	RT	1	HT	0	90	95	5	Conifer					
								Hardwood					
62	RT	2	HT	0	85	90	5	Conifer	2				MULTIPLE HOLES OBSERVED
								Hardwood			2		HS/HT
62	RT	3	HS	0	80	75	25	Conifer	1				
								Hardwood	1			1	

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 374 STREAM: LOBSTER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	CB	01	45	TJ/	UTM 0448836, 4900820 (2D)
2	SB	11	45	AM	H=1.50M, T=11, PGS, ACW=0.70M
3	LP	00	75.5		T=12, SALMONIDS
4	SB	00	76.2		H=0.15M
5	LP	00	122.8		FISH
8	BW	10	150.5	AM	RSN, COHO
9	SC	00	153.7		T=11.5
12	SC	00	210.2	AM	RSN
16	LP	00	367.2		SCULPIN
17	SC	00	371.7		T=13
18	LP	00	427.4	HS	CABLED LOGS
19	SC	00	438.3	TJ/	
23	LP	00	472.4		SCULPIN
24	LP	01	482.6	SS/	
27	RI	01	526	AM	RSN, 5 IN SC
30	SC	01	568.3		UTM 0449074, 4900484 (3D)
31	LP	01	578.3		U31-37 ESTIMATED -COUGAR
32	LP	02	578.3	WL	COUGAR
38	DP	01	628.7	DJ	NO POOL TAIL
40	LP	01	697.2	DJ	
43	DP	03	697.2	AM	RSN
44	RI	03	697.2	AM	RSN, COHO

COMMENT SUMMARY

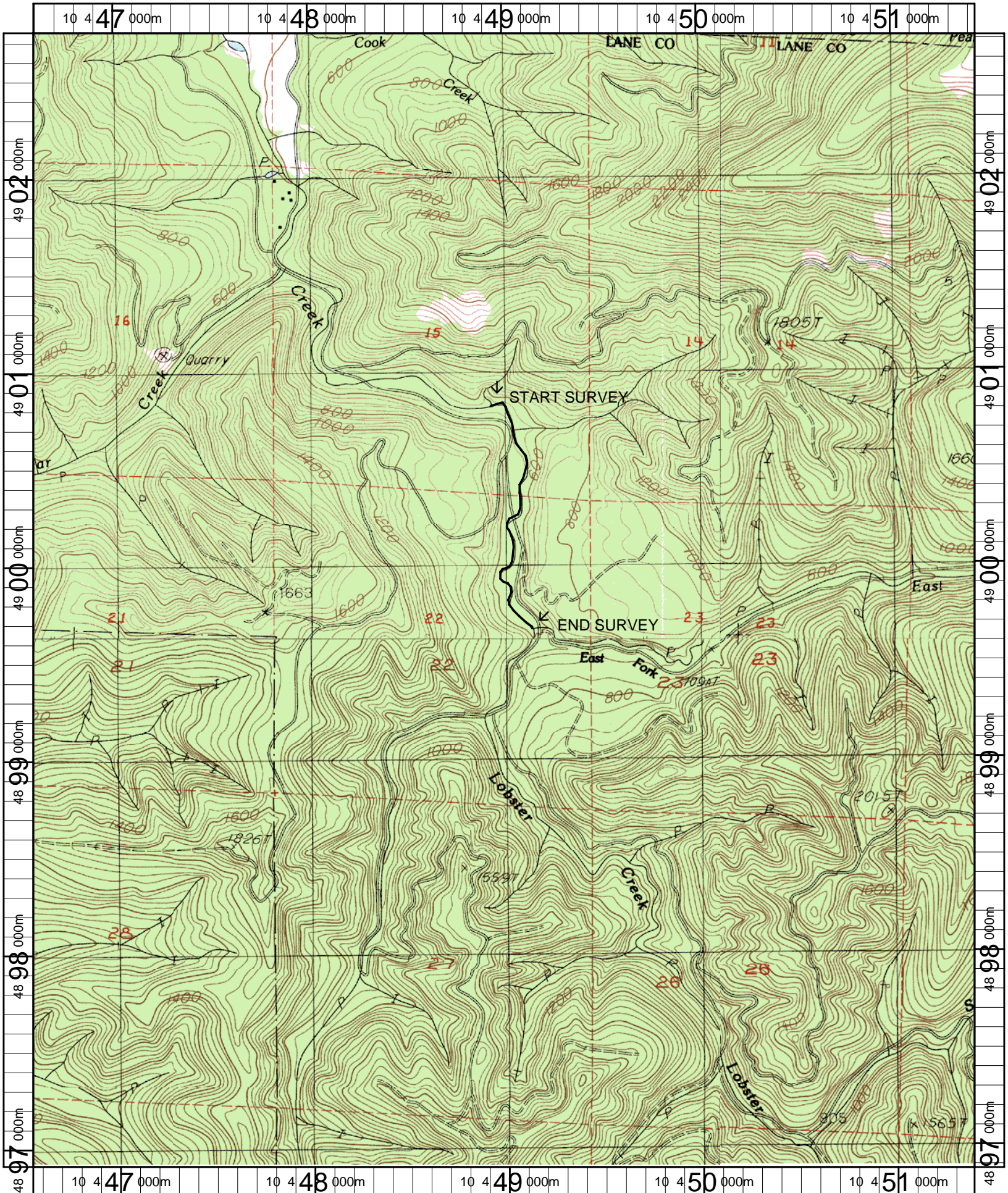
MONITORING AREA: 2-MC SITE ID: 374 STREAM: LOBSTER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
46	IP	10	697.2	AM	RSN, COHO
48	LP	00	735.9		UTM 0449101, 4900374, COHO
52	GL	00	827.3		70M SOUTH OF BRIDGE
53	LP	00	836.4		T=13
55	LP	00	917.7	BC, HS	RIPRAP
58	LP	00	969.8		COHO
62	LP	00	1056.5		UTM 0449033, 4900155 (2D), SCULPIN
66	LP	00	1182.2	HS	CABLED LOG
67	RB	00	1204.1	AM	RSN
69	LP	01	1234.1	/TJ	DEEPER, COULD NOT REACH CENTER
70	SR	11	1234.1		H=0.50M, T=12
72	IP	10	1278.1		UTM 0448980, 4900969 (3D)
74	SC	00	1300.7	BV	
75	LP	00	1325.3		COHO, LARGE SALMON
79	LP	01	1415.2		DIPPER IN FLIGHT
80	RI	01	1449	CC, TJ,AM	UTM 0449005, 4899813 (3D), METAL CULVERT DIA=0.60M, PGS
81	SB	11	1449		H=1.0M, T:10
82	CC	11	1449	CC	DIAM=0.60M, H=1.20M
85	PD	02	1476.4	/TJ	T=12.5, COHO
86	DU	11	1476.4		ACW=8.0M, T=12.5, SUBSURFACE FLOW
87	LP	00	1527.6	WL	SCULPIN, DIPPER
88	RI	00	1542.2		2 DIPPERS FEEDING IN WATER

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 374 STREAM: LOBSTER CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
93	RI	00	1637.3		UTM 04491111, 4899707 (3D)



Name: DIGGER MT (OR)
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0448992 E 4899816 N
 Caption: LOBSTER CREEK RESTORATION SITE - LOBSTER BASIN