

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

STREAM: Green Creek (MC-385)
BASIN: Siuslaw River
SURVEY TYPE: Pre-Tx
DATE: March 19, 2008
SURVEY CREW: Matt Weeber, Sharon Tippery
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 9.7 km²
USGS MAPS: Mapleton
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Green Creek habitat survey extended 6,009 meters. The channel was alternately constrained by terrace and hillslope in a broad valley floor. The average valley width index was 4.8 (range: 1.5-10). Land use for the reach was second growth timber (15-30cm dbh) and large growth timber (30-50cm dbh). The average unit gradient was 1.2 percent. Scour pools (45%) and riffles (28%) dominated stream habitat. Gravel (34%) and sand (29%) dominated stream substrate. Wood volume was 8.9m³/100m.

COMMENTS:

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

The crew noted seven debris jams and one inactive landslide during the survey.

Beaver activity, including four blown out beaver dams, was noted throughout the survey.

Coho fry, winter wren, hummingbirds, mallards, ruffed grouse, American dipper, rough-skinned newts, amphibian egg masses, a deer trail, and elk tracks were observed during the survey.

**OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY**

**GREEN CREEK
GCG: 2-MC SITE ID: 385**

Survey Date: 3/17/2008

Report Date: 5/8/2008

T17S-R09W-S09SE

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	4.8	VWI Range:	1.5 - 10

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	6,009	33,223	0
Secondary	420	1,077	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 25	<u>First Terrace</u> n = 20
Width: 5.0	Width: 5.3	8.3 (3.8 - 14.7)	10.3 (4.5 - 20.8)
Depth: 0.55	Height: 0.4	0.8 (0.7 - 0.8)	1.0 (0.8 - 1.4)

W:D ratio: 13.9

Stream Flow Type: HF

Average Unit Gradient: 1.2%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.6

Habitat Units/100m (total channel length): 4.7

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

Riparian, Bank, and Wood Summary

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

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):	549	9.1
Volume (m ³):	537	8.9
Key pieces (>=12m x 0.60m):	14	0.2

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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/BEDROCK	3	38	2.4	0.18	151	0	13	3	3	8	13	59
CASCADE/BOULDERS	12	91	1.0	0.09	94	0	4	9	37	40	2	8
POOL-ALCOVE	2	16	2.0	0.30	32	0	100	0	0	0	0	0
POOL-BACKWATER	10	132	3.1	0.36	570	0	89	12	0	0	0	0
POOL-BEAVER DAM	1	51	5.0	1.40	255	0	5	70	25	0	0	0
POOL-DAMMED	14	508	6.9	0.94	3,861	0	5	57	16	3	1	18
POOL-ISOLATED	7	57	2.5	0.33	153	0	96	4	0	0	0	0
POOL-LATERAL SCOUR	115	2,666	5.4	0.82	14,501	0	2	45	31	10	2	10
POOL-PLUNGE	6	39	6.1	0.79	236	0	1	40	37	12	3	7
POOL-STRAIGHT SCOUR	8	129	6.8	0.83	907	0	2	43	23	8	5	20
PUDDLED UNIT	1	25	2.0	0.65	50	0	100	0	0	0	0	0
RAPID/BEDROCK	7	294	6.5	0.27	1,890	0	0	7	6	7	2	78
RAPID/BOULDERS	18	323	3.3	0.25	1,358	0	1	11	42	37	9	0
RIFFLE	74	2,003	4.8	0.32	9,803	0	0	11	57	26	1	4
STEP/BEAVER DAM	1	1	2.4	0.45	2	0	10	80	10	0	0	0
STEP/BEDROCK	4	14	3.4	0.26	49	0	0	5	0	3	0	93
STEP/BOULDERS	2	7	6.5	0.23	46	0	0	30	10	3	57	0
STEP/COBBLE	1	3	4.0	0.40	12	0	0	10	50	40	0	0
STEP/LOG	9	11	6.9	0.18	87	0	0	43	30	11	3	13
STEP/STRUCTURE	6	24	10.0	0.31	245	0	0	24	7	4	35	30
Total:	301	6,430	5.0	0.55	34,299	0	Avg: 8	29	34	15	3	11

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	34	764	4.6	0.62	4,870	14.20%	0	0.0
Scour Pools	129	2,833	5.5	0.82	15,644	45.61%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	74	2,003	4.8	0.32	9,803	28.58%	0	0.0
Rapids	25	617	4.2	0.25	3,247	9.47%	0	0.0
Cascades	15	129	1.3	0.11	244	0.71%	0	0.0
Step/Falls	23	59	6.7	0.25	441	1.28%	0	0.0
Dry	1	25	2.0	0.65	50	0.15%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

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POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	163	25.4	27.1
Pools >=1m deep:	34	5.3	5.7
Complex pools (LWD pieces>=3):	42	6.5	7.0
Pool frequency (channel widths/pool):	7.5		
Residual pool depth (avg):	0.51		

COMMENT SUMMARY

MONITORING AREA: 2-MC SITE ID: 385 STREAM: GREEN CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
3	LP	00	137.8	DJ	DJ AT POOL TAIL
6	SS	00	184	HS	CABLED IN LOG FORMS STEP
8	SS	00	241.3	HS,DJ	CABLED LOG, BOULDERS, DJ
9	DP	01	325.3	BV,SS/	CHEWED STICKS
11	RI	00	351.8	WL	2 HUMMINGBIRDS
13	LP	01	397	TJ/	
14	CB	11	397		TRASH, ACW=2.2M
18	DP	01	506.6	TJ/	COHO FRY
19	CB	11	506.6		ACW=0.7M
24	SB	00	583.6	DJ	
27	LP	01	666.1	BV	CHEWED LOG AND STICKS
29	SP	00	679.6	DJ	
31	RI	01	721.8	TJ/, WL	WINTER WREN
32	RB	11	721.8		ACW=1.3M
34	RI	00	757.4	/SS	
36	RI	01	786.6	SS/SS	
37	IP	10	786.6	SS/	PART OF SS/ TO MAINSTEM
40	RI	00	877.6	WL	DEER TRAIL
46	LP	00	1008.5	BC,CS/CS	VERY POOR CONDITION BRIDGE, BOULDERS
52	LP	01	1200.3	/TJ	
53	CR	11	1200.3		ACW=0.8M
54	SS	00	1205.3	HS,DJ	CABLED LOG, BOULDERS

COMMENT SUMMARY

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
55	DP	01	1275.3	BV	CHEWED STICKS
57	SS	00	1282.3	HS	CABLED LOG
60	LP	00	1358.5	BV	CHEWED STICKS
62	LP	00	1418.7	WL	AMERICAN DIPPER
63	SS	00	1425.7	HS,DJ	CABLED LOG
64	DP	01	1446.7	WL	PAIR OF MALLARDS, HUMMINGBIRDS
65	BW	10	1446.7	AM	ROUGH-SKINNED NEWTS MATING
68	LP	00	1554.7	BV	VERY OLD BLOWN OUT BEAVER DAM AT POOL TAIL, COHO FRY
69	LP	01	1574.7	TJ/	
70	RB	11	1574.7		ACW=1.3M
77	RI	00	1705.2	/SS	
80	LP	01	1758.6	TJ/	
81	CB	00	1770.6		ACW=1.4M
83	LP	00	1846.6		COHO FRY
94	LP	00	1997.4	/SS	
97	RI	00	2062.3	SS/	
98	LP	01	2076.9	/TJ	
99	RI	11	2076.9		ACW=1.5M
101	LP	00	2114.3	SS,BC	SGS END-2 START-3, AMERICAN DIPPER NEST UNDER BRIDGE
102	LP	00	2135.3		START DAY 2, WATER IS HIGHER AND BROWN, STILL RAINING
103	RI	00	2162.7	/SS	
112	LP	01	2388.1	/TJ	

COMMENT SUMMARY

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
113	CB	11	2388.1		ACW=0.5M
116	RI	01	2417	/TJ	
117	RI	00	2425		ACW=1.9M
123	LP	01	2575.8	/TJ	
124	RB	11	2575.8		ACW=0.8M
126	SR	00	2604.1	BV	USED TO BE A BEAVER DAM HERE, ONLY A FEW STICKS LEFT
128	PD	02	2618.7	AM	ROUGH-SKINNED NEWTS MATING & EGG MASSES
129	LP	00	2675.1	BV	FELLED TREES, CHEWED TREES
132	SL	00	2706.6	LI/	
133	DP	01	2750.6	BV	FRESHLY CHEWED STICKS
135	IP	10	2750.6	AM	ROUGH-SKINNED NEWT EGG MASS
136	LP	01	2788.6	BV	CHEWED ROOTS & STICKS
143	LP	01	2928.9	TJ/	
144	SR	11	2928.9		ACW=1.0M, PRETTY WATERFALL
147	SL	00	2939.7	BV	BLOWN OUT BEAVER DAM
154	AL	10	3062.3	SS/	
155	RI	00	3131.5	/SS	
158	RI	01	3202.7	TJ/TJ	
159	RB	11	3202.7		ACW=1.1M
160	RB	11	3202.7		ACW=1.2M
166	RI	00	3378.6		COHO FRY
167	LP	01	3385	/TJ	

COMMENT SUMMARY

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
168	CB	11	3385		ACW=1.0M
169	RB	01	3420.6	TJ/	
170	CB	11	3420.6		ACW=1.1M
179	RB	00	3578.6	BV	CHEWED STICKS
180	LP	00	3668.6	BV	
181	RI	00	3678.6	BV	SGS SIGN
182	LP	00	3698.3	BV	
183	LP	01	3712.8	BV,TJ/	
185	SD	01	3713.8	BD,BV	BLOWN OUT BEAVER DAM, START DAY 3
187	BP	00	3764.8	BV,WL	OLD BEAVER POOL -BLOWN OUT DAM, COHO FRY, BOBCAT TRACKS
188	LP	00	3831.8	BV	COHO FRY
190	SP	00	3891.9		LUMPED 2 SMALL POOLS
191	RI	01	3908.3	/TJ	
192	CB	11	3908.3		ACW=1.5M
201	LP	00	4129.1	AM	ROUGH-SKINNED NEWTS
203	LP	01	4193.1	/TJ	
204	RI	00	4201.3		SGS SIGN, ACW=3.5M
205	LP	00	4211.3	BV,/SS	
212	RI	01	4317.2	/TJ	
213	RB	11	4317.2		ACW=3.5M
215	RI	00	4345.2	WL	RUFFED GROUSE
216	SP	00	4360.7	DJ	

COMMENT SUMMARY

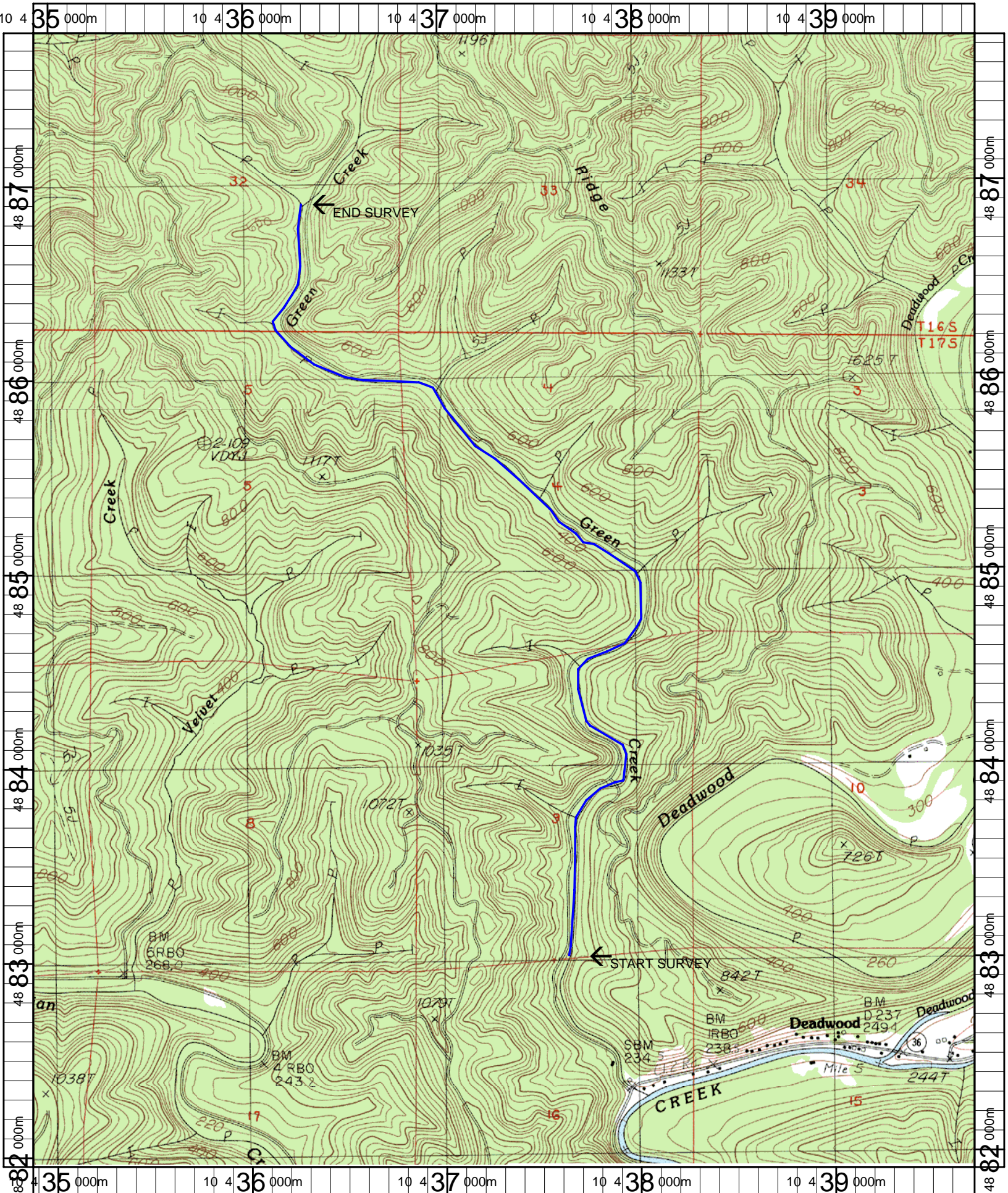
MONITORING AREA: 2-MC SITE ID: 385 STREAM: GREEN CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
221	LP	00	4404.3	/SS	
229	LP	00	4593.2	BV,SS/	
230	RI	00	4626.2	BV	
231	RB	01	4662.7	SS/,TJ/	
232	CB	00	4668.7		ACW=0.6M
235	DP	00	4692.4	SS/	
237	LP	00	4725.3	SS/	
242	DP	00	4781.8	BV	
243	RI	00	4804.3	/SS	
246	LP	00	4868.3	BV	
247	LP	00	4909.3	BV	
248	LP	00	4925.3	BV	
251	RB	01	5026.3	BV,TJ/	
252	CB	11	5026.3		ACW=1.2M, HARDPAN
257	LP	01	5140.9	SS/	
258	BW	10	5140.9	SS/	
260	RB	00	5202.9		COHO FRY
264	RB	01	5253.5	TJ/	
265	CB	11	5253.5		ACW=1.6M
266	RI	00	5283	SS/,BV	
268	RI	00	5304.9	SS/	
271	LP	00	5358.3	BV	

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UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
272	RI	00	5374.7		BLACKBERRY INFESTATION/
277	LP	00	5478.5	/SS	
278	RI	00	5500.5	SS/	
279	LP	01	5508.5	/TJ	
280	CB	11	5508.5		ACW=0.8M
284	RI	01	5611	/TJ	
285	CB	11	5611		ACW=1.2M
287	RI	00	5646.5	SS/SS	
291	LP	00	5730	/SS	
292	LP	00	5785	BV	
298	RI	00	5966.2	WL	ELK TRACKS
300	LP	01	6009.2	TJ/	
301	RB	11	6009.2		ACW=1.6M



Name: MAPLETON
 Date: 12/11/2007
 Scale: 1 inch equals 2000 feet

Location: 10 437318 E 4884851 N
 Caption: GREEN CREEK RESTORATION SITE - SIUSLAW BASIN