

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

STREAM: Panther Creek (UMP-96)
BASIN: Umpqua River
SURVEY TYPE: Post-Tx
DATE: February 14, 2008
SURVEY CREW: Kyle Brachter, Bobby Gomez
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 13.1 km²
USGS MAPS: Beaver Creek
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Panther Creek habitat survey extended 514 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 14 (range: 12-18). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 1.2 percent. Scour pools (65%) and riffles (22%) dominated stream habitat. Bedrock (42%) and cobble (22%) dominated stream substrate. Wood volume was 29.8m³/100m.

COMMENTS:

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

The crew noted several habitat structures and debris jams during the survey.

Raccoon tracks were observed during the survey.

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

**PANTHER CREEK
GCG: 4-UMP SITE ID: 96**

Survey Date: 2/14/2008

Report Date: 5/8/2008

T20S-R07W-S26SE

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	14.0	VWI Range:	12 - 18

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	514	3,069	0
Secondary	36	64	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 5.3	Width: 7.4	9.1 (7.4 - 10.9)	12.2 (8.4 - 15.1)
Depth: 0.43	Height: 0.5	1.0 (0.8 - 1.1)	1.4 (1.1 - 1.75)

W:D ratio: 15.2

Stream Flow Type: MF

Average Unit Gradient: 1.2%

Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.2

Habitat Units/100m (total channel length): 7.6

Habitat Units/100m (primary channel length): 8.2

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
Riparian Vegetation:	M30	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):	122	23.8
Volume (m ³):	153	29.8
Key pieces (>=12m x 0.60m):	0	0.0

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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/BOULDERS	1	10	0.4	0.01	4	0	0	100	0	0	0	0
POOL-BACKWATER	4	23	2.6	0.29	58	0	0	33	19	6	0	43
POOL-DAMMED	1	17	7.5	0.70	130	0	0	40	0	60	0	0
POOL-LATERAL SCOUR	18	329	5.7	0.68	1,934	0	0	14	16	20	0	50
POOL-PLUNGE	1	14	8.2	0.70	112	0	0	40	0	10	0	50
RAPID/BEDROCK	1	11	6.0	0.20	66	0	0	10	0	0	0	90
RIFFLE	8	112	5.8	0.23	640	0	0	7	35	47	3	8
RIFFLE W/ POCKETS	1	10	7.5	0.30	71	0	0	0	10	14	0	76
STEP/BEDROCK	3	13	3.9	0.14	58	0	0	0	7	0	0	93
STEP/COBBLE	2	9	4.9	0.23	45	0	0	6	39	39	0	17
STEP/LOG	2	2	6.9	0.13	14	0	0	50	10	0	0	40
Total:	42	550	5.3	0.43	3,133	0	Avg: 0	18	18	22	0	42

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	5	40	3.6	0.37	187	5.98%	0	0.0
Scour Pools	19	343	5.8	0.68	2,046	65.32%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	9	121	6.0	0.24	711	22.70%	0	0.0
Rapids	1	11	6.0	0.20	66	2.11%	0	0.0
Cascades	1	10	0.4	0.01	4	0.13%	0	0.0
Step/Falls	7	25	5.1	0.16	118	3.76%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

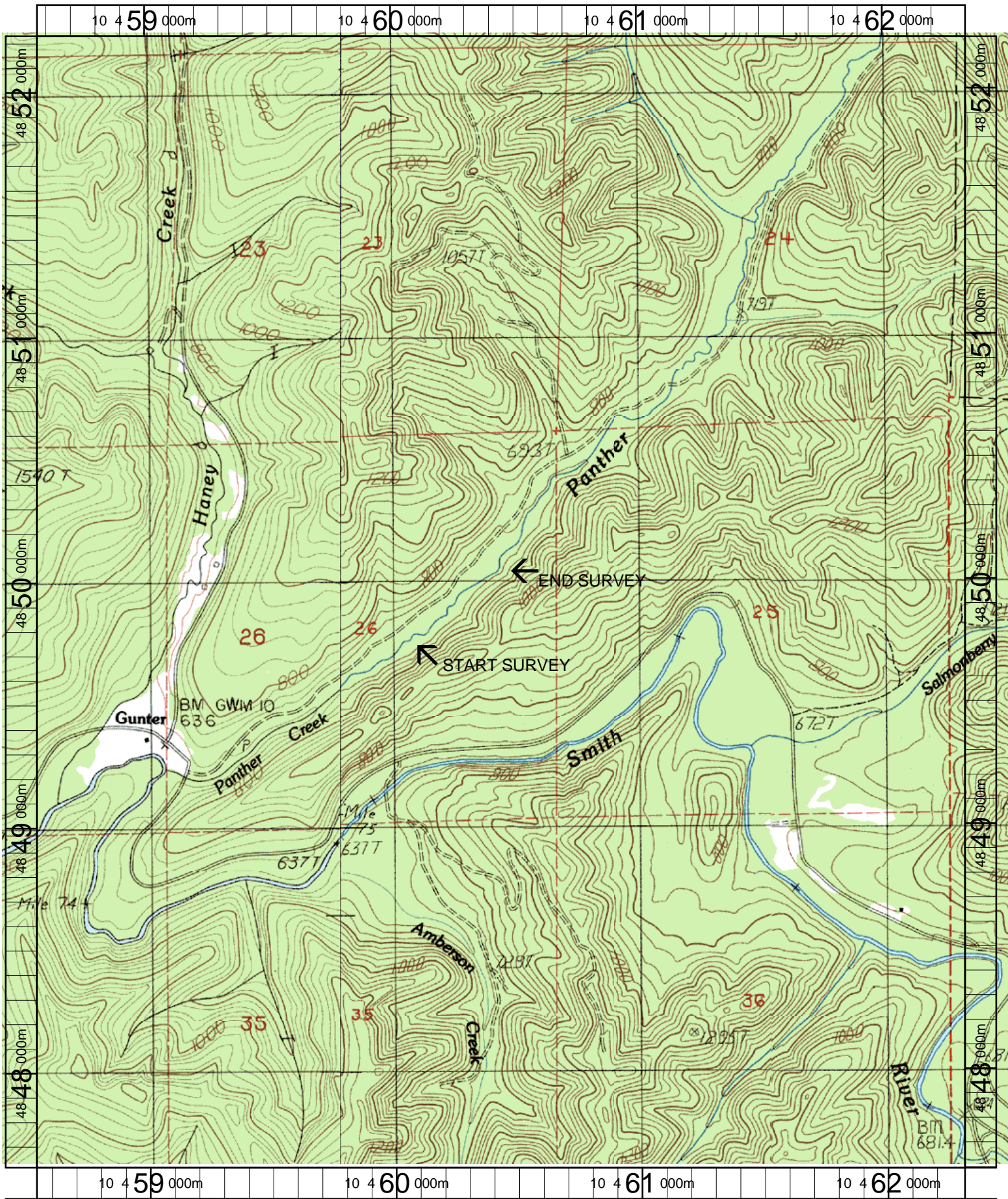
POOL SUMMARY

	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	24	43.7	46.7
Pools >=1m deep:	1	1.8	1.9
Complex pools (LWD pieces>=3):	8	14.6	15.6
Pool frequency (channel widths/pool):	3.1		
Residual pool depth (avg):	0.41		

COMMENT SUMMARY

MONITORING AREA: 4-UMP SITE ID: 96 STREAM: PANTHER CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	13.7		CTCT YT/ST D15/S
3	RI	00	49.7	HS	
9	RP	01	107	HS DJ	UNCABLED LOGS
15	RI	00	164		CTCT YT/ST M30/S
16	LP	00	179.5	HS	T=6.5C
18	SR	00	194	HS	
22	LP	01	248.9	HS	
25	LP	01	287.2	TJ/	
26	CB	11	287.2		ACW=0.5M T=6C
27	LP	00	298.2	HS	
30	SC	00	311.3		CTCT YT/ST M30/S
31	LP	01	352.3	TJ/ WL	RACCOON TRACKS ON BANKS
32	SR	11	352.3		HARDPAN ACW=0.9M T=7C
33	RI	00	385.8	HS	
35	RI	01	414.1		CTMT M30/S YT/ST
39	DP	00	446.6	DJ	DAM NOT CAUSED BY BEAVERS.
40	LP	00	462.2	HS DJ	
42	LP	00	509.6	DJ HS	
43	SC	00	513.6		CTCT M30S YT/ST



Name: BEAVER CREEK
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 460433 E 4849917 N
 Caption: PANTHER CREEK RESTORATION SITE - SMITH BASIN