

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

STREAM: Wildcat Creek (NC-369)
BASIN: Nestucca River
SURVEY TYPE: Pre-Tx
DATE: March 21, 2007
SURVEY CREW: Matthew Strickland, Sharon Tippery
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 2.2 km²
USGS MAPS: Beaver
ECOREGION: Coast Range Coastal Uplands

GENERAL DESCRIPTION:

The Wildcat Creek habitat survey extended 2,047 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.4 (range: 1-20). Land use for the reach was young timber (3-15 cm dbh) and second growth timber (15-30 cm dbh). The average unit gradient was 3.0 percent. Riffles (52%) and rapids (35%) dominated stream habitat. Cobble (37%) and gravel (32%) dominated stream substrate. Wood volume was low at 11.5 m³/100m.

COMMENTS:

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

4 culverts were documented. Minimal beaver activity and a Steelhead trout redd were noted in the survey.

REACH 1

T03S-R09W-S08SW

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	7.4	VWI Range:	1 - 20

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 Channel	2,047	5,125	0
Secondary Channel	0	0	0
Off-Channel Units	54	48	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 9	<u>First Terrace</u> n = 6
Width: 2.5	Width: 3.7	4.2 (3.3 - 4.9)	5.6 (4.7 - 7.4)
Depth: 0.28	Height: 0.3	0.6 (0.5 - 0.86)	2.3 (0.85 - 6.8)

W:D ratio: 12.2
 Stream Flow Type: MF
 Average Unit Gradient: 3.0%
 Water temperature (°C): 6.0 - 6.0

Entrenchment (ACW:FPW ratio): 1.1
 Habitat Units/100m (total channel length): 5.1
 Habitat Units/100m (primary channel length): 5.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	YT	ST
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):	341	16.7
Volume (m ³):	235	11.5
Key pieces (>=12m x 0.60m):	2	0.1

OREGON DEPT OF FISH AND WILDLIFE

WILDCAT CREEK PRE-TX (1-NC, 369)

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

3/21/2007

REACH 1		T03S-R09W-S08SW					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
CULVERT CROSSING	2	42	0.8	0.15	32	0	0	0	13	38	38	13
POOL-BACKWATER	1	8	1.2	0.25	10	0	20	65	15	0	0	0
POOL-DAMMED	2	10	3.7	0.78	36	0	5	33	40	10	0	13
POOL-LATERAL SCOUR	25	170	3.1	0.59	524	0	0	17	44	30	7	1
POOL-PLUNGE	4	16	3.8	0.71	59	0	0	14	43	29	11	4
RAPID/BEDROCK	2	80	3.1	0.13	240	0	0	3	5	8	5	80
RAPID/BOULDERS	21	690	2.0	0.14	1,566	0	0	7	27	42	19	5
RIFFLE	31	1,024	2.5	0.16	2,552	0	0	7	33	47	11	2
RIFFLE W/ POCKETS	2	43	2.9	0.15	116	0	0	13	25	45	18	0
STEP/BEDROCK	3	3	1.4	0.11	4	0	0	2	2	0	0	97
STEP/COBBLE	3	6	3.0	0.12	18	0	0	5	23	66	7	0
STEP/LOG	10	8	2.1	0.14	16	0	0	9	36	37	8	11
STEP/STRUCTURE	2	1	0.6	0.15	1	0	0	0	10	36	34	20
Total:	108	2,101	2.5	0.28	5,173	0	Avg: 0	10	32	37	12	8

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	3	18	2.9	0.60	45	0.88%	0	0.0	
Scour Pools	29	186	3.2	0.61	582	11.26%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	33	1,066	2.5	0.16	2,668	51.57%	0	0.0	
Rapids	23	770	2.1	0.14	1,806	34.92%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	18	19	2.0	0.13	39	0.75%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	2	42	0.8	0.15	32	0.62%	0	0.0	

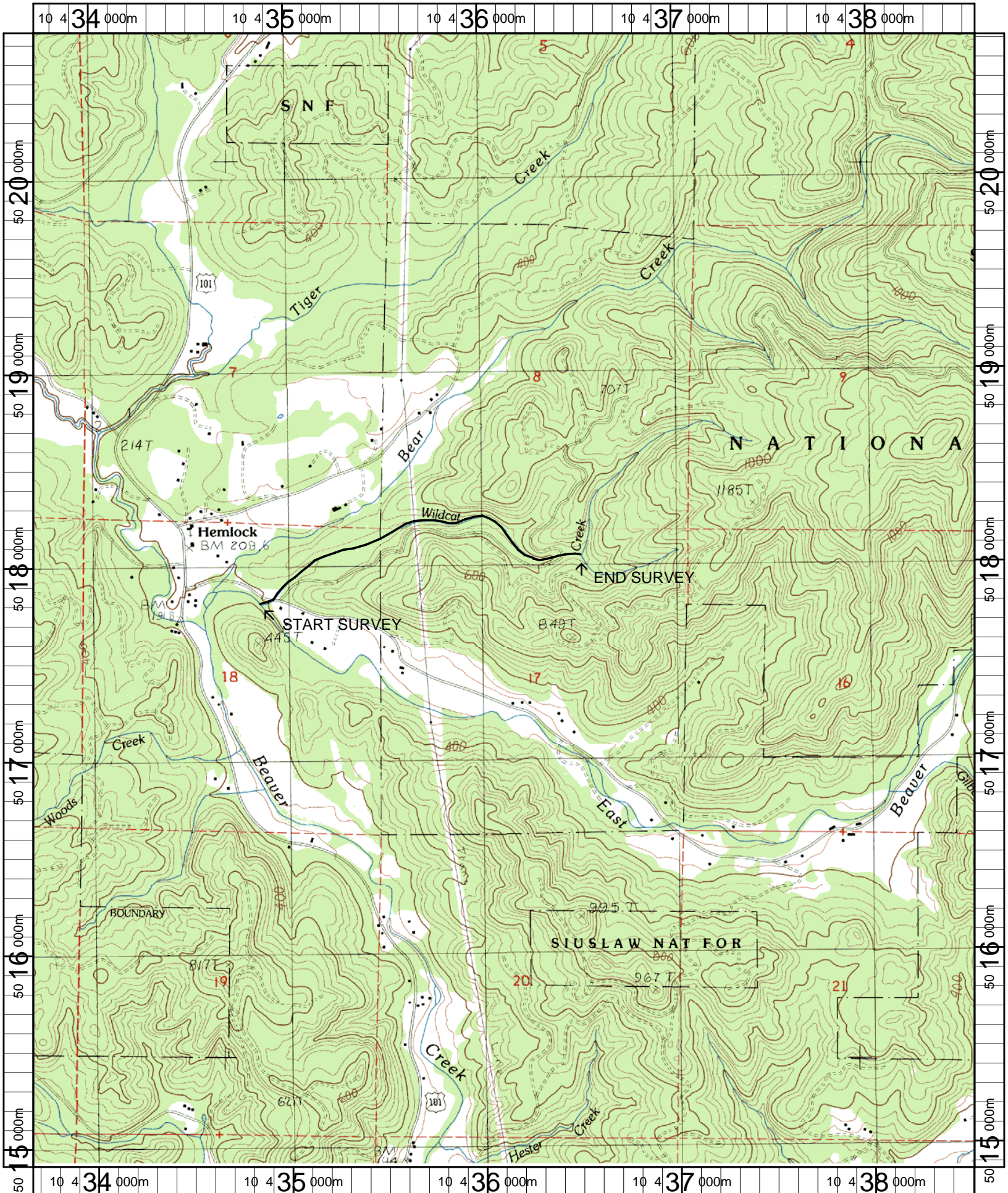
POOL SUMMARY			
	Total	Total of all Channel Lengths # / Km	Primary Channel Length # / Km
All Pools:	32	15.2	15.6
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	16	7.6	7.8
Pool frequency (channel widths/pool):	17.6		
Residual pool depth (avg):	0.47		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 1-NC SITE ID: 369 WILDCAT CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
1	RB	00	43.5	BC	2 PRIVATE FOOT BRIDGES. TEMPS
2	SS	00	43.9	CC	CULVERT DIAM=.9 E. BEAVER CR
3	CC	00	57.9	CC	
17	LP	01	264.4	/TJ	
18	RB	11	264.4		ACW=1.1 TEMPERATURE =7.0
21	RI	00	317.5	BC	PRIVATE FOOT BRIDGE.
31	RI	00	527.9	BC	PRIVATE FOOT BRIDGE.
44	RP	00	784		POCKET DEPTH =0.45
48	RI	01	840.4	/TJ	
49	RB	11	840.4		ACW=1.6 TEMPERATURE =7.5
52	RI	00	992.6		ODFW MARKED STEELHEAD REDD.
77	LP	00	1450.15	/SS	
79	SL	00	1469.55	BV	
82	RP	01	1545.85	TJ/	POCKET DEPTH=.5
83	RB	11	1545.85		ACW=1.3 TEMPERATURE=9.0
92	RB	01	1733.65	/TJ	
93	RB	11	1733.65		ACW=1.2 TEMPERATURE=8.0
94	RR	01	1786.15	/TJ	HEAVY ALDER BLOWDOWN.
95	RB	11	1786.15		ACW=1.4 TEMPERATURE =8.0
99	SS	00	1923.75	CC	CULVERT DIA =0.9 WILDCAT RD
100	CC	00	1951.75	CC	



Name: BEAVER
 Date: 4/26/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0436113 E 5017815 N
 Caption: WILDCAT CREEK RESTORATION SITE - NESTUCCA BASIN