

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

STREAM: Gooseneck Creek (W-361)
BASIN: Yamhill River
SURVEY TYPE: Pre-Tx
DATE: February 5, 2007
SURVEY CREW: Ryan Jacobsen, Paul Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 26.5 km²
USGS MAPS: Sheridan
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Gooseneck Creek habitat survey extended 763 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 20 (range: 20-20). Land use for the reach was agriculture and rural residential area. The average unit gradient was 2.1 percent. Riffles (39%), scour pools (28%) and dammed and backwater pools (23%) dominated stream habitat. Gravel (31%) and cobble (30%) dominated stream substrate. Wood volume was very low at 1.9 m³/100m.

COMMENTS:

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

The crew noted 1 habitat structure during the survey.

Beaver activity was noted throughout the survey.

REACH 1

T6S-R6W-S43NE

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	20.0	VWI Range:	20 - 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	763	4,668	0
Secondary Channel	0	0	0
Off-Channel Units	219	1,399	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 5.8	Width: 11.6	20.2 (12.9 - 31.5)	26.5 (14.4 - 43.4)
Depth: 0.48	Height: 0.7	1.5 (1.3 - 1.6)	2.2 (1.6 - 3.2)

W:D ratio: 16.0
 Stream Flow Type: LF
 Average Unit Gradient: 2.1%
 Water temperature (°C): 5.0 - 5.0

Entrenchment (ACW:FPW ratio): 1.7
 Habitat Units/100m (total channel length): 3.9
 Habitat Units/100m (primary channel length): 5.0

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	AG	RR
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):	12	1.6
Volume (m ³):	15	1.9
Key pieces (>=12m x 0.60m):	1	0.1

HABITAT INVENTORY

Report Date: 4/25/2007

Survey Date:

2/5/2007

REACH 1		T6S-R6W-S43NE					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
POOL-ALCOVE	1	185	7.2	0.05	1,332	0	30	30	40	0	0	0
POOL-BACKWATER	3	34	1.9	0.45	67	0	7	5	24	15	0	49
POOL-LATERAL SCOUR	15	309	5.5	0.90	1,680	0	9	13	30	25	1	23
RAPID/BOULDERS	2	48	6.6	0.15	295	0	0	3	26	49	21	3
RIFFLE	11	369	6.0	0.20	2,415	0	1	6	31	35	6	20
STEP/BOULDERS	2	15	8.8	0.15	124	0	0	0	23	38	35	5
STEP/COBBLE	4	22	6.9	0.18	154	0	1	7	40	45	7	0
Total:	38	981	5.8	0.48	6,067	0	Avg: 5	9	31	30	6	19

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	219	3.2	0.35	1,399	23.06%	0	0.0	
Scour Pools	15	309	5.5	0.90	1,680	27.69%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	11	369	6.0	0.20	2,415	39.81%	0	0.0	
Rapids	2	48	6.6	0.15	295	4.87%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	6	37	7.5	0.17	278	4.58%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

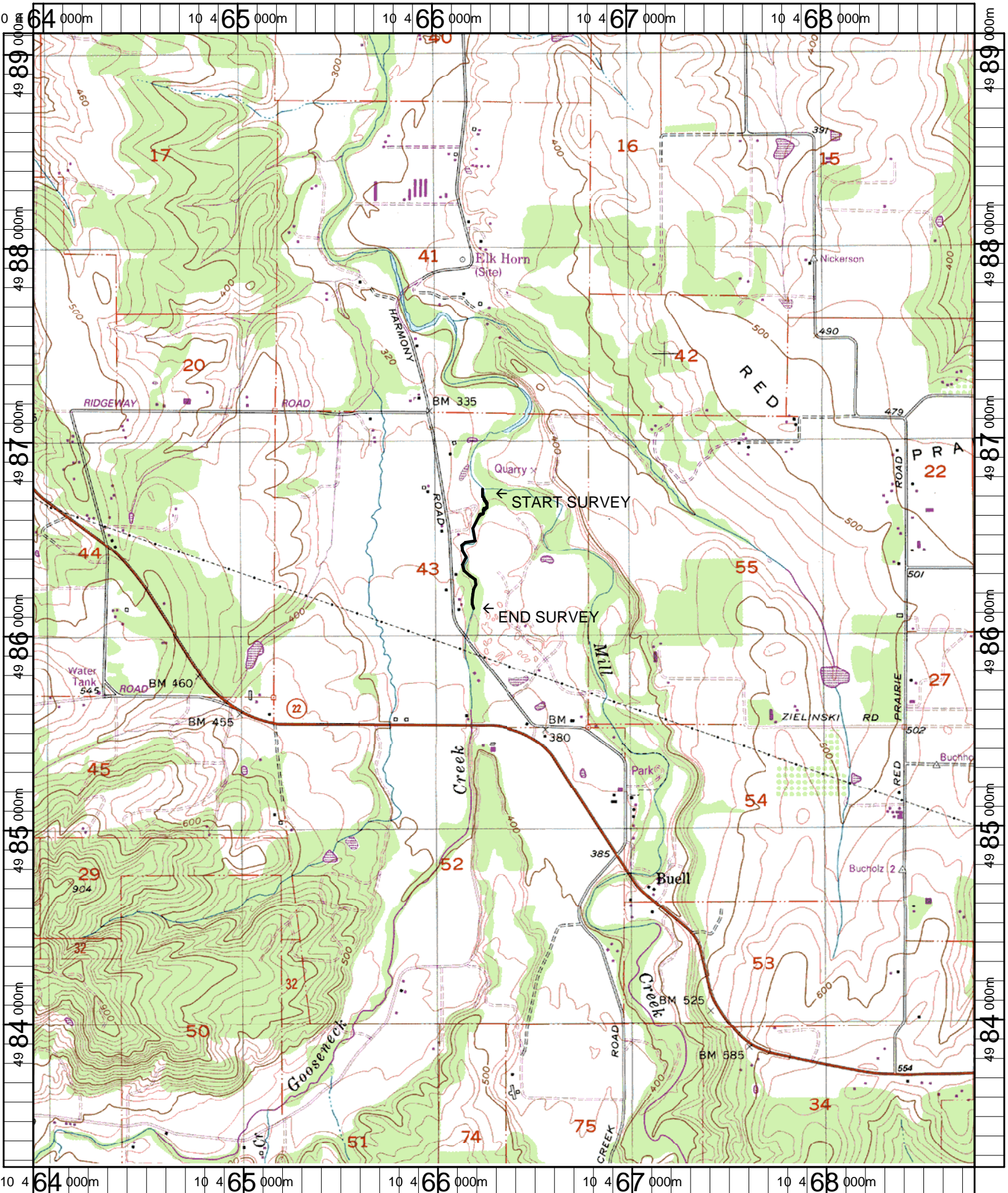
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	19	19.4	24.9
Pools >=1m deep:	4	4.1	5.2
Complex pools (LWD pieces>=3):	1	1.0	1.3
Pool frequency (channel widths/pool):	4.5		
Residual pool depth (avg):	0.68		

Comment Summary

Restoration Monitoring Sites 2007

MONITORING AREA: 8-W SITE ID: 361 GOOSENECK CREEK PRE-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR
4	LP	00	69.8	BV	
9	RB	00	135.1	BV	
10	LP	00	165.1	BV/, HS	
13	RI	00	230.7	BV	
16	SC	00	285	BV	
20	LP	00	345.9	BV	
21	RI	00	357.8	BV	
33	RI	01	580.8	/SS	



Name: SHERIDAN
 Date: 4/25/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0466354 E 4986175 N
 Caption: GOOSENECK CREEK RESTORATION SITE - YAMHILL BASIN