

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

STREAM: West Fork Dairy Creek (W-363)
BASIN: Tualatin River
SURVEY TYPE: Post-Tx
DATE: March 5, 2008
SURVEY CREW: Sharon Tippery, Matt Weeber
REPORT PREPARED BY: Sharon Tippery
BASIN AREA: 8.6 km²
USGS MAPS: Buxton
ECOREGION: Willamette Valley Plain and Foothills

GENERAL DESCRIPTION:

The West Fork Dairy Creek habitat survey extended 966 meters. The channel was constrained by hillslopes in a steep V-shaped valley. The average valley width index was 1.7 (range: 1-2.5). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 4.3 percent. Riffles (29%), rapids (28%), and scour pools (20%) dominated stream habitat. Cobble (23%), boulders (18%) and gravel (16%) dominated stream substrate. Wood volume was 34.2m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

Minimal beaver activity was noted in the survey.

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

**WEST FORK DAIRY CREEK
GCG: 8-W SITE ID: 363**

Survey Date: 3/5/2008

Report Date: 5/8/2008

T03N-R04W-S20NE

REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

<u>Narrow Valley Floor</u>		<u>Broad Valley Floor</u>	
Steep V-shape	100%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.7	VWI Range:	1 - 2.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	100%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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	966	2,475	0
Secondary	102	120	1

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 1
Width: 2.7	Width: 4.4	6.1 (3 - 10.4)	12.5 (12.5 - 12.5)
Depth: 0.34	Height: 0.4	0.7 (0.6 - 0.9)	1.5 (1.5 - 1.5)

W:D ratio: 13.3

Stream Flow Type: MF

Average Unit Gradient: 4.3%

Water temperature (°C): 4.0 - 4.0

Entrenchment (ACW:FPW ratio): 1.4

Habitat Units/100m (total channel length): 7.3

Habitat Units/100m (primary channel length): 8.1

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):	339	35.1
Volume (m ³):	330	34.2
Key pieces (>=12m x 0.60m):	5	0.5

OREGON DEPT OF FISH AND WILDLIFE

WEST FORK DAIRY CREEK

HABITAT INVENTORY

GCG: 8-W SITE ID: 363

Survey Date: 3/5/2008

Report Date: 5/8/2008

T03N-R04W-S20NE

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/BEDROCK	1	7	0.6	0.05	4	0	0	0	0	5	5	90
CASCADE/BOULDERS	7	126	2.7	0.19	278	0	5	5	10	31	47	3
CULVERT CROSSING	1	50	0.9	0.25	45	0	0	5	0	0	5	90
POOL-BACKWATER	3	9	1.6	0.35	14	0	37	30	13	10	10	0
POOL-DAMMED	3	34	3.3	0.77	113	0	40	43	10	3	2	3
POOL-LATERAL SCOUR	7	82	3.0	0.64	256	0	11	21	24	17	8	19
POOL-PLUNGE	10	54	3.3	0.74	177	0	16	25	17	19	21	1
POOL-STRAIGHT SCOUR	5	27	4.0	0.56	108	0	19	16	22	16	13	14
PUDDLED UNIT	1	21	1.3	0.25	27	0	90	0	0	0	0	10
RAPID/BEDROCK	1	14	1.0	0.35	14	0	0	0	0	0	0	100
RAPID/BOULDERS	9	289	2.5	0.18	734	0	8	9	13	33	29	8
RIFFLE	16	334	2.2	0.17	753	0	7	10	31	34	13	4
STEP/BEDROCK	2	4	2.5	0.13	11	0	0	0	0	10	0	90
STEP/BOULDERS	2	4	3.6	0.18	14	0	5	3	3	15	75	0
STEP/LOG	10	14	3.1	0.11	46	0	27	15	6	27	12	13
Total:	78	1,067	2.7	0.34	2,595	0	Avg: 15	15	16	23	18	13

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	6	43	2.4	0.56	128	4.92%	0	0.0
Scour Pools	22	162	3.4	0.67	541	20.84%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	16	334	2.2	0.17	753	29.01%	0	0.0
Rapids	10	303	2.4	0.20	748	28.81%	0	0.0
Cascades	8	133	2.4	0.17	282	10.86%	0	0.0
Step/Falls	14	22	3.1	0.12	72	2.78%	0	0.0
Dry	1	21	1.3	0.25	27	1.05%	0	0.0
Culverts	1	50	0.9	0.25	45	1.73%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

WEST FORK DAIRY CREEK
GCG: 8-W SITE ID: 363

Survey Date: 3/5/2008

Report Date: 5/8/2008

T03N-R04W-S20NE

REACH 1

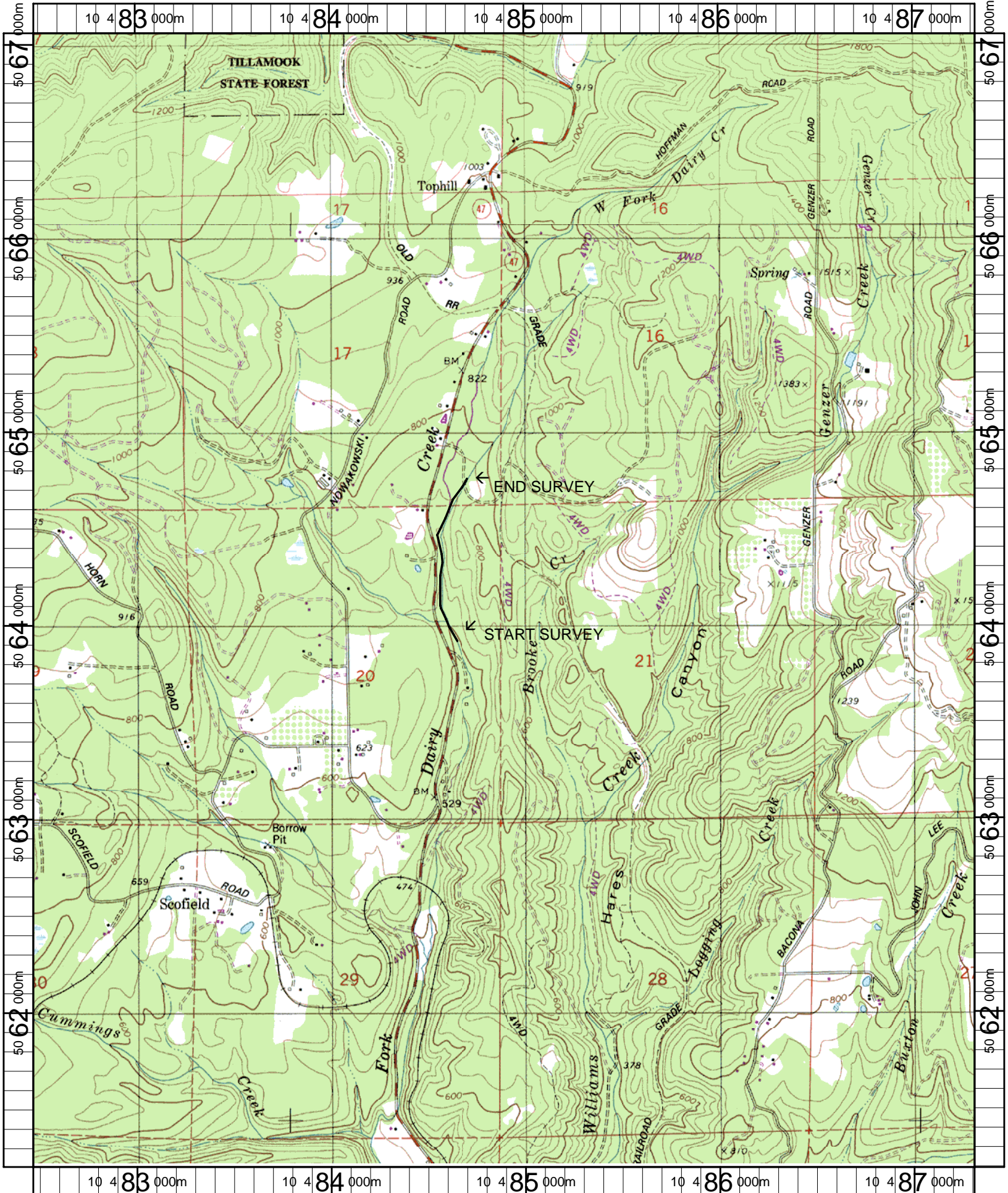
POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	28	26.2	29.0
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	5	4.7	5.2
Pool frequency (channel widths/pool):	8.6		
Residual pool depth (avg):	0.48		

COMMENT SUMMARY

MONITORING AREA: 8-W SITE ID: 363 STREAM: WEST FORK DAIRY CREEK

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RB	00	32.5	/SS X2	
3	RB	01	98.8	/SS	
17	RR	01	214.1	TJ/	
18	CC	11	214.1	CC	CONCRETE D=1.2M, UNDER HWY47, NO LIGHT AT END OF TUNNEL
23	RI	00	303.5	BV	FRESH CHEW
33	CB	00	445.7	CS/, /CS/	CONCRETE BLOCKS
34	PP	00	450.7	CS/	
35	SB	00	452.2		STEP OVER CONCRETE BLOCKS
42	PP	00	542.6	/SS	
44	DP	00	551.4	BV	FRESH CHEWING
57	RB	01	662.9	TJ/	FORK
58	RB	11	662.9		ACW=2.7M
68	RI	00	793.7	/SS	
72	RB	01	895.7	/TJ, /LI	
73	CR	11	895.7		ACW=0.8M
75	PP	00	928.2	/SS	



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

Location: 10 0484893 E 5064127 N
 Caption: WEST FORK DAIRY CREEK RESTORATION SITE - TUALATIN
 BASIN