

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

STREAM: Big Elk Creek Site 1 (MC-399)  
BASIN: Yaquina River  
SURVEY TYPE: Pre-Tx  
DATE: April 17, 2008  
SURVEY CREW: Charlie Stein, Jeremy Romer  
REPORT PREPARED BY: Sharon Tippery  
BASIN AREA: 24.6 km<sup>2</sup>  
USGS MAPS: Elk City  
ECOREGION: Coast Range Coastal Uplands

**GENERAL DESCRIPTION:**

The Big Elk Creek Site 1 habitat survey extended 296 meters. The channel was constrained by hillslopes in a moderate V-shaped valley. The average valley width index was 1.5 (range: 1.5-1.5). Land use for the reach was young trees (3-15cm dbh) and second growth timber (15-30cm dbh). The average unit gradient was 0.8 percent. Riffles (100%) dominated stream habitat. Bedrock (59%) and boulder (23%) dominated stream substrate. Wood volume was 8.0m<sup>3</sup>/100m.

**COMMENTS:**

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

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

**BIG ELK CREEK - SITE#1 (PRE-TX)  
GCG: 2-MC SITE ID: 399**

**Survey Date: 4/17/2008**

**Report Date: 5/8/2008**

**T12S-R09W-S04SW**

**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	0%
Moderate V-shape	100%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	1.5	VWI Range:	1.5 - 1.5

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	296	7,160	0
Secondary	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 3	<u>First Terrace</u> n = 3
Width: 24.1	Width: 25.3	28.8 ( 27 - 32 )	33.0 ( 29.8 - 35.8 )
Depth: 0.50	Height: 0.9	1.7 ( 1.6 - 1.8 )	2.2 ( 2.1 - 2.3 )

W:D ratio: 29.2

Stream Flow Type: HF

Average Unit Gradient: 0.8%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.1

Habitat Units/100m (total channel length): 2.0

Habitat Units/100m (primary channel length): 2.0

**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):	30	10.1
Volume (m <sup>3</sup> ):	24	8.0
Key pieces (>=12m x 0.60m):	1	0.3

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REACH 1

HABITAT DETAIL

Habitat Type	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Large Boulders (>0.5m)	Substrate Percent Wetted Area					
							S/O	Snd	Grvl	Cbl	Bldr	Bdrk
RIFFLE	6	296	24.1	0.50	7,160	0	0	2	4	12	23	59
<b>Total:</b>	6	296	24.1	0.50	7,160	0	<b>Avg:</b> 0	2	4	12	23	59

HABITAT SUMMARY

Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders	
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )
Dammed & BW Pools	0	0			0	0.00%	0	0.0
Scour Pools	0	0			0	0.00%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	6	296	24.1	0.50	7,160	100.00		
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	0	0			0	0.00%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

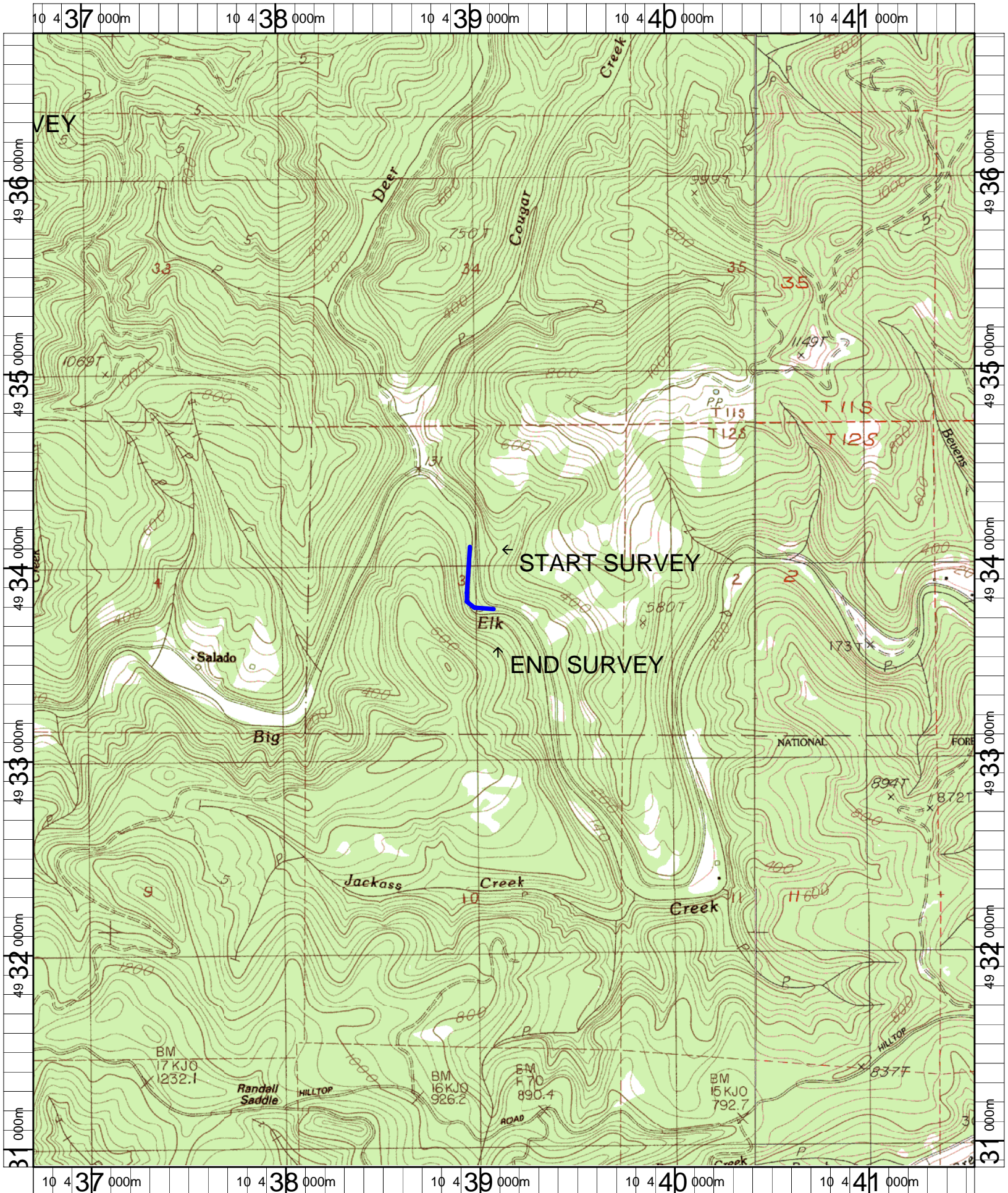
POOL SUMMARY

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

**COMMENT SUMMARY**

MONITORING AREA: 2-MC      SITE ID: 399      STREAM: BIG ELK CREEK - SITE#1 (PRE-TX)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	RI	00	50		REST SITE 1 2MC 399 PRE-TX
2	RI	00	102	/SS	
4	RI	00	211		DEEP POCKET ON LEFT+ SUBUNIT POOL
5	RI	00	271		OCCASSIONAL POCKETS 0.8-1M DEEP
6	RI	00	296		END SIGN D30 LEFT



Name: ELK CITY (OR)  
 Date: 3/3/2008  
 Scale: 1 inch equals 2000 feet

Location: 10 0439144 E 4933817 N NAD 27  
 Caption: BIG ELK CREEK SITE 1 RESTORATION SITE - YAQUINA BASIN