

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

STREAM: Feagles Creek (MC-31)
BASIN: Yaquina River
SURVEY TYPE: Pre-Tx
DATE: January 29, 2001
SURVEY CREW: Eric Brown, Joe Zuccarello
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 21.0 km²
USGS MAPS: Harlan
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Feagles Creek habitat survey extended 477 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 3.8 (range: 1.2 – 5.0). Land use for the reach was light grazing and second growth (15-30 cm dbh) trees. The average unit gradient was 2.3 percent. Riffles (64%) and scour pools (30%) dominated stream habitat. Gravel (39%) and sand (34%) dominated stream substrate. Wood volume was moderate at 25.6 m³/100m.

COMMENTS:

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

REACH SUMMARY

REACH 1

T12S-R8W-S30NE

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 avg: 3.8 range: 1.2-5.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	0	Braided Channel	0
Alt. Terrace/Hill	100		
Landuse	0		

Channel Characteristics

<u>Type</u>	<u>Length(m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary	477	2,709	0
Secondary	104	223	1

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	4.5	Width	10.0	18.2	16.7
Depth	0.49	Height	0.8	1.6	2.2
		W:D ratio	12.7	Entrenchment	1.9

Stream Flow Type: MF Water Temp: 6.0-6.0°C
Avg. Unit Gradient: 2.3% Habitat Units/100m: 5.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LG	ST
Riparian Vegetation:	D15	S

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3\text{m} \times 0.15\text{m}$)	170	35.7
Volume (m ³)	122	25.6
Key pieces ($\geq 10\text{m} \times 0.6\text{m}$)	1	0.2

HABITAT UNIT SUMMARY

REACH 1

T12S-R8W-S30NE

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	Cbbl	Bldr	Bdrk
CASCADE/BOULDERS	1	2	1.0	0.25	2	0	0	0	0	0	0	100
CULVERT CROSSING	1	18	2.0	0.15	37	0	0	50	50	0	0	0
DRY CHANNEL	1	27	2.3	0.00	63	0	0	0	90	10	0	0
POOL-BACKWATER	6	34	2.8	0.45	93	0	48	34	3	2	0	14
POOL-LATERAL SCOUR	10	122	5.2	0.81	620	0	19	59	18	3	1	2
POOL-PLUNGE	1	17	14.9	2.00	247	0	15	65	10	5	5	0
RIFFLE	10	359	5.0	0.18	1,868	0	3	8	81	7	1	0
STEP/STRUCTURE	1	1	2.0	0.10	1	0	0	50	50	0	0	0
Total:	31	581	4.5	0.49	2,932	0	Avg:17	34	39	4	1	6

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	6	34	2.8	0.45	93	3.19	0	0.0
Scour Pools	11	139	6.1	0.92	868	29.59	0	0.0
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	10	359	5.0	0.18	1,868	63.72	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	1	2	1.0	0.25	2	0.07	0	0.0
Step/Falls	1	1	2.0	0.10	1	0.03	0	0.0
Dry	1	27	2.3	0.00	63	2.15	0	0.0

POOL SUMMARY

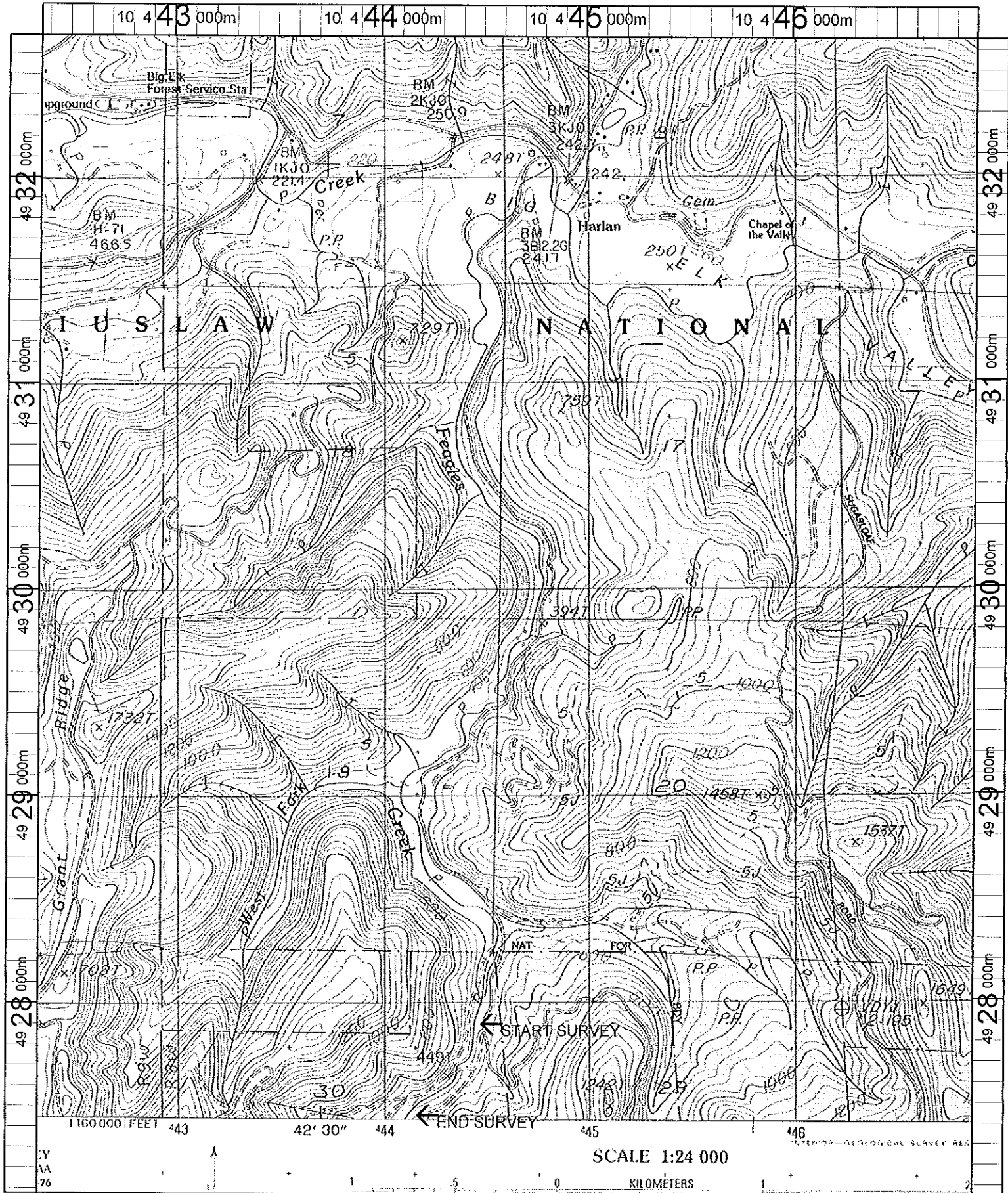
	<u>Total</u>	<u>#/Km</u>
All Pools	17	29.3
Pools ≥1m deep:	3	5.2
Complex pools (LWD pieces ≥3):	7	12.1
Pool Frequency (channel widths/pool):	3.4	
Residual pool depth (avg)	0.72m	

STREAM SUMMARY

FEAGLES CREEK PRE-TX

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area					Total Large Boulder	
					S/O	Sand	Grvl	Cbbl	Bldr		Bdrk
31	581	4.5	0.49	2,932	17	34	39	4	1	6	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	868	29.6
Backwater Pools	93	3.2
Glide	0	0.0
Riffle	1,868	63.7
Rapid	0	0.0
Cascade	2	0.1
Step	1	**.*
Dry	63	2.1



Name: HARLAN
 Date: 10/3/01
 Scale: 1 inch equals 2000 feet

Location: 10 444509 E 4929847 N
 Caption: FEAGLES CREEK RESTORATION SITE - YAQUINA BASIN