

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

STREAM: Feagles Creek (MC-31)
BASIN: Yaquina River
SURVEY TYPE: Post-Tx
DATE: February 19, 2004
SURVEY CREW: April Waters, Jim Andrews
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 522 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 3.6 (range: 2.7-5.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.3 percent. Riffles (48%) and scour pools (33%) dominated stream habitat. Gravel (49%) dominated stream substrate. Wood volume was high at 44.3 m³/100m.

COMMENTS:

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

The crew noted several habitat structures during the survey.

REACH 1

T12S-R08W-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	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	3.6	VWI Range:	2.7 - 5

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	522	3,539	0
Secondary	44	104	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 5
Width: 6.4	Width: 9.9	15.8 (12.4 - 20.7)	21.1 (15.5 - 26)
Depth: 0.51	Height: 0.6	1.2 (1.1 - 1.3)	1.9 (1.57 - 2.85)

W:D ratio: 16.7

Stream Flow Type: MF

Avg. Unit Gradient: 1.3%

Entrenchment (ACW:FPW ratio): 1.6

Water temp (°C): 8.5 - 8.5

Habitat Units/100m: 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	G	D30

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</u>
All pieces (>=3m x 0.15m):	189	36.2
Volume (m ³):	231	44.3
Key pieces (>=10m x 0.60m):	20	3.8

OREGON DEPARTMENT OF FISH AND WILDLIFE

FEAGLES CREEK POST-TX (MC-31)

HABITAT INVENTORY

Report Date: 6/16/2004

Survey Date:

2/19/2004

REACH 1

T12S-R08W-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	Cbl	Bldr	Bdrk
CASCADE/BOULDERS	2	10	0.7	0.13	6	0	13	26	11	42	7	0
POOL-BACKWATER	1	16	3.4	0.60	54	0	20	80	0	0	0	0
POOL-DAMMED	1	10	12.0	1.40	114	0	9	70	17	4	0	0
POOL-ISOLATED	1	4	2.6	0.60	11	0	89	11	0	0	0	0
POOL-LATERAL SCOUR	11	154	7.5	0.85	1,134	0	8	31	41	11	3	6
POOL-PLUNGE	1	7	12.0	0.90	78	0	11	33	44	11	0	0
RAPID/BOULDERS	4	82	5.3	0.36	431	0	0	1	58	35	6	0
RIFFLE	14	273	6.5	0.31	1,751	0	0	4	66	26	3	2
STEP/BEDROCK	1	1	1.5	0.10	2	0	0	5	95	0	0	0
STEP/COBBLE	1	6	4.5	0.30	28	0	0	6	67	22	6	0
STEP/LOG	1	3	11.0	0.20	33	0	0	63	32	5	0	0
Total:	38	565	6.4	0.51	3,643	0	Avg: 6	19	49	20	3	2

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	30	6.0	0.87	179	4.92%	0	0.0
Scour Pools	12	160	7.9	0.85	1,212	33.26%	0	0.0
Glides	0	0			0	0.00%	0	0.0
Riffles	14	273	6.5	0.31	1,751	48.08%	0	0.0
Rapids	4	82	5.3	0.36	431	11.83%	0	0.0
Cascades	2	10	0.7	0.13	6	0.18%	0	0.0
Step/Falls	3	11	5.7	0.20	63	1.73%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

POOL SUMMARY

	Total	# / Km	
All Pools:	15	26.5	44
Pools >=1m deep:	3	5.3	
Complex pools (LWD pieces>=3):	7	12.4	
Pool frequency (channel widths/pool):	3.8		
Residual pool depth (avg):	0.58		

STREAM SUMMARY

FEAGLES CREEK POST-TX (MC-31)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Large Boulders (#>0.5m)
					Percent Wetted Area						
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
38	565	6.4	0.51	3,643	6	19	49	20	3	2	

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	179	4.92%
Scour Pools	1,212	33.26%
Glides	0	0.00%
Riffles	1,751	48.08%
Rapids	431	11.83%
Cascades	6	0.18%
Step/Falls	63	1.73%
Dry	0	0.00%
Culverts	0	0.00%

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: **2-MC** SITE ID: **31** **FEAGLES CREEK POST-TX (MC-31)**

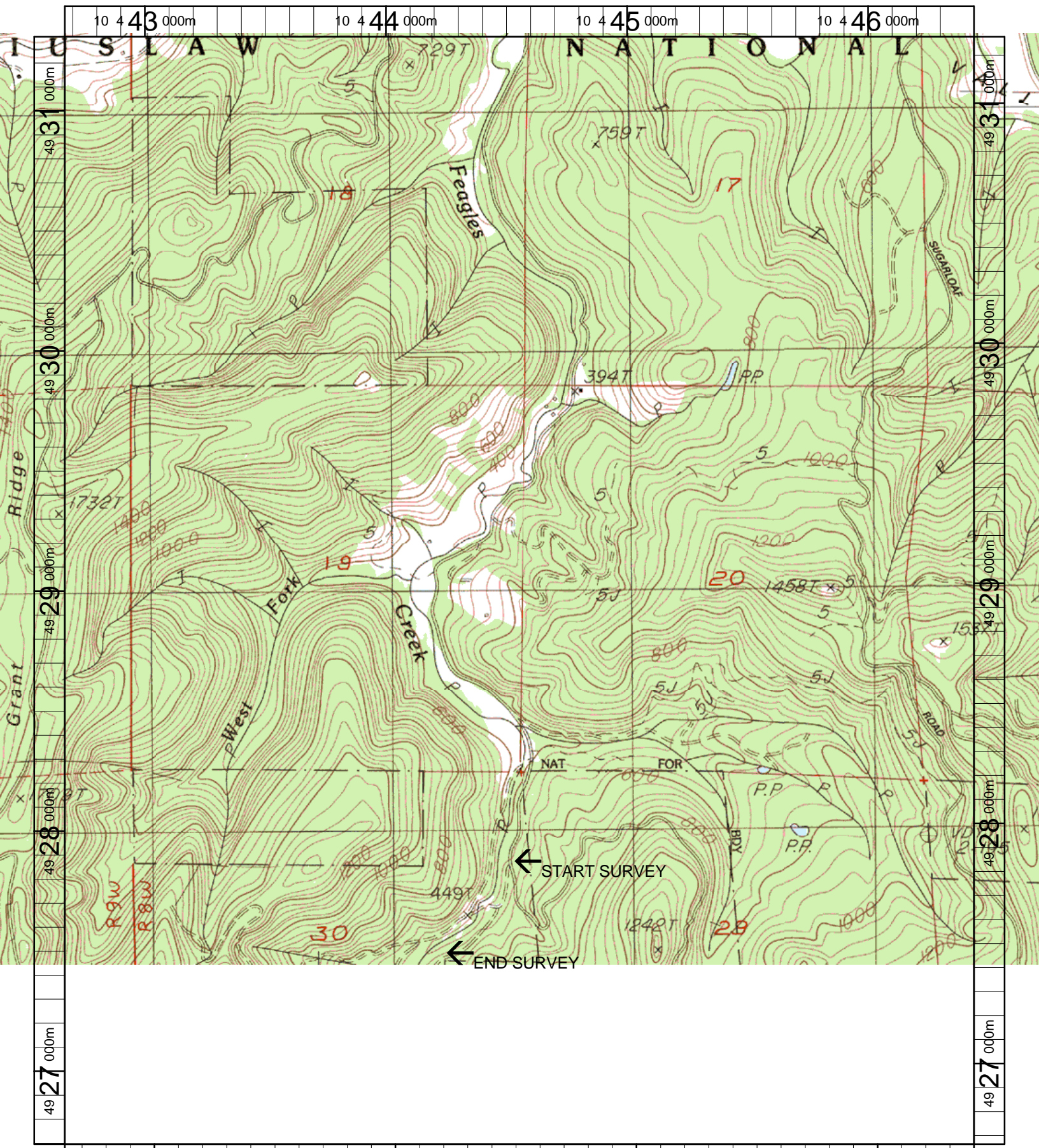
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	18	SS/	T=8C/1040	
2	RI	00	30.5		7M WETTED WIDTH	
3	LP	01	39.5		FISH BONES	
4	BW	10	39.5		FISH PARTS	
5	RI	00	59.9	/SS		
7	LP	00	96.5		DEER CARCASS	
9	IP	10	122	WL	NEWTS	
10	RI	00	136		6.3M WETTED WIDTH	
12	LP	00	175.8	SS/	FISH PART	
13	SC	01	182.1		RT SIDE, 60%	
14	RB	02	182.1		LF SIDE, 40%	
15	LP	01	189.1	TJ/		
16	CB	11	189.1		TRIB UNIT, T=9C, ACW=.7	
20	DP	00	225.6	/SS		
21	RI	00	240.6	/SS		
22	LP	01	259.2	TJ/, HS, S	SG=4M	
23	SR	11	259.2		T=9.1C, ACW=1.6M	
24	RI	00	270.2	SS/	SG=4M	
25	LP	00	281.4	HS	FISH BONE	
26	LP	00	294.9	HS	4M OF PTC LENGTH	
28	RI	00	329.5	WL	ELK TRAIL	

Comment Summary

Oregon Plan Monitoring Sites 2002

MONITORING AREA: 2-MC SITE ID: 31 FEAGLES CREEK POST-TX (MC-31)

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
29	LP	00	344.5	HS	FISH PARTS	
31	LP	00	381	CS, BC	DIPPER	
32	RB	01	412	CS, TJ/		
33	CB	11	412		.8M ACW, T=8.5C	
34	RB	00	433.6		METRIC MOVED-BC INFL	
36	RI	00	472.4	HS		
38	RI	00	521.7		ADULT STHD, EOS, T=8.5	



Name: HARLAN
 Date: 3/20/2003
 Scale: 1 inch equals 1666 feet

Location: 10 444529 E 4928990 N
 Caption: FEAGLES CREEK RESTORATION SITE - YAQUINA BASIN