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: June 27, 2007

SURVEY CREW: Kara Anlauf, Jeff Snyder

REPORT PREPARED BY: Paul Jacobsen

BASIN AREA: 8.7 km²

USGS MAPS: Harlan

ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Feagles Creek habitat survey extended 485 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 5.5 (range: 3.5-9.0). Land use for the reach was second growth (15-30 cm dbh) trees. The average unit gradient was 1.4 percent. Riffles (73%) and scour pools (23%) dominated stream habitat. Cobble (42%) and gravel (25%) dominated stream substrate. Wood volume was moderate at 24.0 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.

OREGON DEPT OF FISH AND WILDLIFE

FEAGLES CREEK POST-TX (2-MC, 31)

HABITAT INVENTORY Report Date: 11/14/2007 Survey Date: 6/27/2007

REACH 1 T12S-R08W-S30NE REACH 1

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley	Floor	Broad Valley Floor		
Steep V-shape	0%	Constraining Terraces	100%	
Moderate V-shape	0%	Multiple Terraces	0%	
Open V-shape	0%	Wide Floodplain	0%	

Valley Width Index 5.5 VWI Range: 3.5 - 9

Channel Morphology (Percent Reach Length)

Constrained	d	Unconstrained		
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>	Length (m)	<u>Area (m2)</u>	Dry Units
Primary Channel	485	2,651	0
Secondary Channel	19	29	1
Off-Channel Units	8	23	0

Channel Dimensions (m)

Wetted		<u>Active</u>	<u> </u>	Floodprone $n = 5$	First Terrace $n = 5$
Width:	5.1	Width:	6.5	14.8 (7.1 - 21.4)	18.6 (10.8 - 29.3)
Depth:	0.32	Height:	0.5	1.0 (1-1.1)	1.9 (1.3 - 3.2)

W:D ratio: 12.9 Entrenchment (ACW:FPW ratio): 2.5

Stream Flow Type: MF Habitat Units/100m (total channel length): 7.2

Average Unit Gradient: 1.4% Habitat Units/100m (primary channel length): 7.6

Water temperature (°C): 11.0 - 11.0

Riparian, Bank, and Wood Summary

<u>Primary</u>	<u>Secondary</u>

Land Use: ST

Riparian Vegetation: D30 S

Bank Condition and Shade

Bank StatusPercent Reach LengthShade (% of 180)Actively Eroding:5%Reach avg: 66%Undercut Banks:3%Range: 31 - 100

Large Wood Debris

	<u>l otal</u>	I otal / 100m primary channel
All pieces (>=3m x 0.15m):	130	26.8
Volume (m ³):	116	24.0
Key pieces (>=12m x 0.60m):	1	0.2

OREGON DEPT OF FISH AND WILDLIFE

FEAGLES CREEK POST-TX

(2-MC, 31)

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

6/27/2007

REACH 1					T12S-	R08W-	S30NE			RI	EACH	1	
					HAB	ITAT DE	TAIL						
Habitat Type	Numb	er	Total	Avg	Avg	Total	Large			Substra	ate		
	Units		Length	Width	Depth	Area	Boulders		Perc	ent We	tted A	rea	
			(m)	(m)	(m)	(m ²)	(#>0.5m)	S/O	Snd	Grvl	Cbl	Bldr	Bdrk
DRY CHANNEL		1	19	1.5	0.00	29	0	0	10	35	55	0	0
POOL-BACKWATER	₹	2	6	3.1	0.18	17	0	93	8	0	0	0	0
POOL-LATERAL SC	OUR	12	129	4.8	0.61	580	14	12	26	26	28	0	8
POOL-STRAIGHT S	COUR	2	14	3.1	0.50	43	5	3	23	30	35	5	5
RIFFLE		17	330	6.1	0.16	1,976	116	1	13	29	53	2	1
STEP/BEDROCK		1	2	3.0	0.05	6	0	0	0	0	0	0	100
STEP/COBBLE		2	12	4.4	0.20	52	6	0	0	10	90	0	0
Total:		37	512	5.1	0.32	2,703	141	Avg: 10	16	25	42	1	6

			HABITA	T SUMMARY	,			
Habitat Group	Number	Total	Avg	Avg				
	Units	Length	Width	Depth	Wette	d Area	Large B	oulders
		(m)	(m)	(m)	(m ²)	Percent	Number	(# / 100m ²)
Dammed & BW Pools	2	6	3.1	0.18	17	0.62%	0	0.0
Scour Pools	14	143	4.6	0.60	623	23.05%	19	3.1
Glides	0	0			0	0.00%	0	0.0
Riffles	17	330	6.1	0.16	1,976	73.09%	116	5.9
Rapids	0	0			0	0.00%	0	0.0
Cascades	0	0			0	0.00%	0	0.0
Step/Falls	3	14	3.9	0.15	59	2.18%	6	10.2
Dry	1	19	1.5	0.00	29	1.07%	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 # / Km
All Pools:	16	31.3	33.0
Pools >=1m deep:	1	2.0	2.1
Complex pools (LWD pieces>=3):	8	15.6	16.5
Pool frequency (channel widths/pool):	4.9		
Residual pool depth (avg):	0.42		

OREGON DEPARTMENT OF FISH AND WILDLIFE HABITAT INVENTORY

FEAGLES CREEK POST-TX
GCG: 2-MC SITE ID: 31

HADITAT INVENTORY						GCG: 2-IVI	C 3	וובוט:	<u> </u>
Survey Date Report Date			RIPARIAN ZONE VEGETATION SUMMARY				R	EACH	1
			Summ	ary of Riparia	an Zone (()-30m)	3 tra	ansects	
Total hardwo Total conifers Total conifers Total conifers	s/1000 ft s >20" dbl	h/1000 ft			671 20 0 0				
		Avera	ge numbe	er of trees in	a 5-meter	wide band			
Diameter		one 1 meters		one 2 20 meters		ne 3 30 meters		Zones 1-3 0-30 mete	
class (cm)	Conifer	<u>Hardwood</u>	Conifer	<u>Hardwood</u>	Conifer	Hardwood	<u>Coni</u>	<u>fer</u> <u>Hard</u>	<u>wood</u>
3-15cm 15-30cm 30-50cm 50-90cm >90cm	0.0 0.0 0.0 0.0 0.0	4.0 1.3 1.3 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.3 0.3 0.3 0.0	0.0 0.0 0.3 0.0 0.0	1.3 1.7 0.3 0.0 0.0	0.0 0.0 0.3 0.0	3 3 2 0	.3 .0 .0
Total/100m2	0.0	6.7	0.0	1.0	0.3	3.3	0.1	1 3.	.7
			Canopy	closure and	ground c	over			
		Zone 1		Zon	e 2		Zoi	ne 3	
	(0-10 meters		<u> 10 - 20</u>	meters		20 - 3	30 meters	
	_	(%)		(%				(%)	
Canopy closu	re	59	38				53		
Shrub cover		52	48				48		
Grass/forb co	orb cover 48 52						52		
			Predom	inant landfor	rm in each	zone			
		Zone 1		Zor	ne 2		Zo	ne 3	
		0-10 meters		<u> 10 - 20</u>	meters		<u> 20 -</u>	30 meters	<u> </u>
		(%)		(%	%)			(%)	
Hillslope		17			33			50	
High terrace		83		6	67			33	
Low terrace Floodplain		0 0			0			0 0	
Wetland/mea	dow	0			0			0	
Stream chann		Ö			0		0		
Roadbed/Rail		0			0		17		
Riprap		0			0			0	
Surface slope	e (%)	6		1	15			23	

OREGON DEPARTMENT OF FISH AND WILDLIFE

FEAGLES CREEK POST-TX

6/27/2007

HABITAT INVENTORY - RIPARIAN SURVEY GCG: 2-MC SITE ID:

Summary of Riparian Zone (0-30m) for all reaches

3 transects

31

Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream

Total hardwoods/1000	671
Total conifers/1000 ft	20
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

Average number of trees in a 5-m wide band

Zones 1-3

Diameter	<u>0-30 meters</u>				
class (cm)	Conifer	<u>Hardwood</u>			
3-15cm	0.0	5.7			
15-30cm	0.0	3.3			
30-50cm	0.3	2.0			
50-90cm	0.0	0.0			
>90cm	0.0	0.0			

OREGON DEPT OF FISH AND WILDLIFE

FEAGLES CREEK POST-TX (2-MC, 31)

HABITAT INVENTORY Report Date: 11/14/2007 Survey Date: 6/27/2007

GCG: 2-MC SITE ID: 31

RIPARIAN ZONE VEGETATION

Reach	ո 1													Reach 1
					Cov	er (perc	ent)			Dia	meter cl	ass (cm)	
Unit	Side	Zone	Surface	Slope	Canopy	Shrub	Grass	•	3-15	15-30	30-50	50-90	>90	Notes
9	LT	1	HS	35	85	90	10	Conifer						
								Hardwood	6	2				
9	LT	2	HS	65	50	90	10	Conifer						
								Hardwood						
9	LT	3	HS	65	90	85	15	Conifer						
								Hardwood		2				
9	RT	1	HT	0	65	50	50	Conifer	_					10% SURFACE IS
•	БТ	0		0				Hardwood	6	2	1			FLOODPLAIN.
9	RT	2	HT	0	25	25	75	Conifer						
9	RT	3	HS	45		40	00	Hardwood Conifer						5% ROADBED
9	KI	3	113	45	60	40	60	Hardwood	1	1	1			370 NOADBED
19	LT	1	HT	0	50	0	100	Conifer	'	,	,			
10		•		O	30	U	100	Hardwood						
19	LT	2	HT	0	0	5	95	Conifer						
					· ·	· ·		Hardwood						
19	LT	3	HT	0	0	10	90	Conifer						
								Hardwood	1					
19	RT	1	HT	0	70	35	65	Conifer						46% SLOPE
								Hardwood			2			FOR ZONE 1.
19	RT	2	HT	0	75	30	70	Conifer						
								Hardwood		1	1			
19	RT	3	RB	0	75	10	90	Conifer			1			VEGETATED ROADBED
								Hardwood						NOADBLD
33	LT	1	HT	0	85	95	5	Conifer						
								Hardwood			1			
33	LT	2	HS	25	80	95	5	Conifer						
20		2		00		25	_	Hardwood	1					
33	LT	3	HS	28	90	95	5	Conifer	2	2				
33	RT	1	HT	0	0	40	60	Hardwood Conifer	2	2				
JJ	IXI	'	111	U	0	40	00	Hardwood						
33	RT	2	HT	0	0	45	55	Conifer						
		_		ŭ	J	40	00	Hardwood						
33	RT	3	HT	0	0	50	50	Conifer						
					-		-	Hardwood						

RESTORATION MONITORING SITE SURVEY DATE: 6/27/2007

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	LP	00	13.5	US, SS/	
4	RI	00	41.8	US	
7	LP	00	90.1	СО	
11	SP	00	164.5	СО	
12	RI	00	186	СО	
13	LP	00	192.2	СО	
15	LP	00	213.8	СО	
17	LP	00	233.6	CO, HS	
18	BW	10	233.6	SS/, AM	TREE FROG
20	LP	00	255.5	HS	
22	BW	10	255.5	AM	RSN
23	LP	00	261.8	HS, CO, AM	
24	RI	00	288.8	CO, BV	
25	LP	00	297.1	BV, CO, AM	
26	RI	00	313.3	BV	
27	LP	00	322.4	HS, CO, AM	
28	RI	01	344.5	BV	
29	DC	02	344.5		DRY CHANNEL
30	LP	00	353.1	ВС	
32	RI	00	385.7	/CS, WL	AM. DIPPER
34	RI	00	424.7	СО	
35	SP	00	432.3	СО	

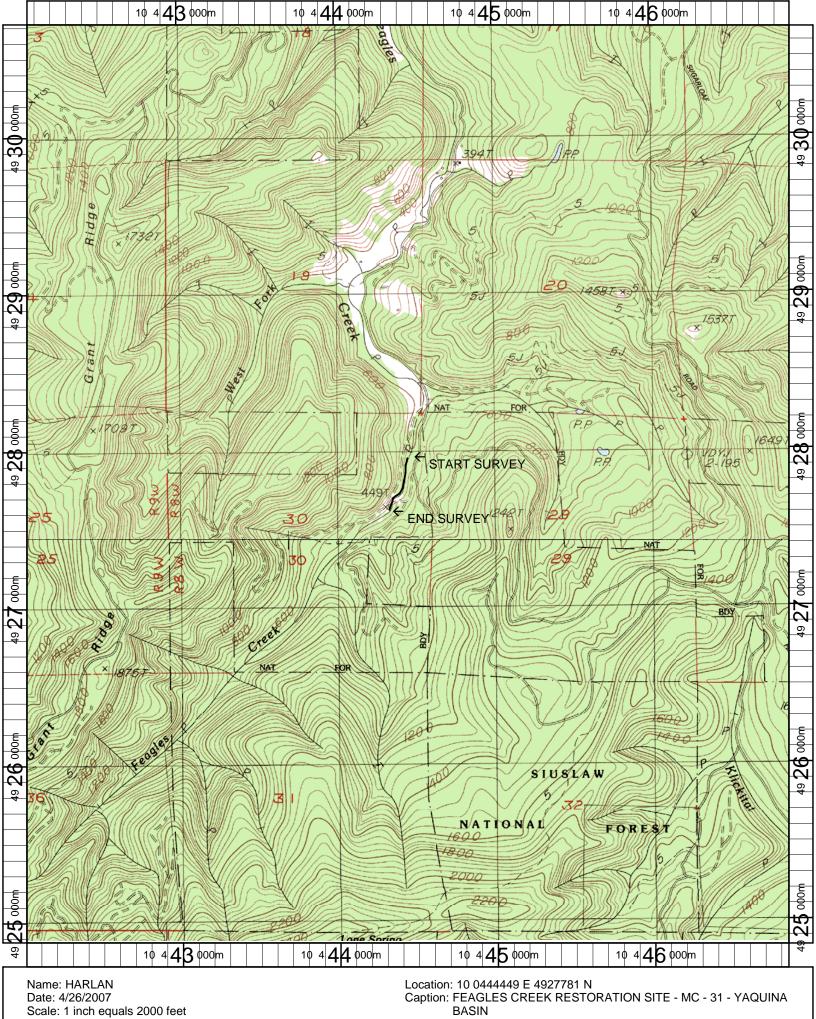
OREGON DEPT OF FISH AND WILDLIFE HABITAT INVENTORY

RESTORATION MONITORING SITE SURVEY DATE: 6/27/2007

COMMENT SUMMARY

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

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
36	RI	00	457.6	CO, HS	
37	RI	00	484.6	BV. CO	DEER TRACKS, GAME TRAII



Scale: 1 inch equals 2000 feet

Copyright (C) 1998, Maptech, Inc.