

REACH 1

T12W-R8W-S30

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	0
Open V-shape	100	Wide Floodplain	0

Valley Width Index avg: 3.1 range: 2.0-5.0

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	566	2,346	3
Secondary	37	84	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.9	Width	10.6	26.8	11.5
Depth	0.38	Height	0.9	1.7	1.2
		W:D ratio	12.1	Entrenchment	3.1

Stream Flow Type: MF Water Temp: 11.0-11.0°C  
 Avg. Unit Gradient: 1.7% Habitat Units/100m: 7.0

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	11%	Reach avg: 48%
Undercut Banks	2%	Range: 17- 78

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ( $\geq 3m \times 0.15m$ )	117	20.7
Volume (m <sup>3</sup> )	95	16.8
Key pieces ( $\geq 10m \times 0.6m$ )	0	0.0

HABITAT UNIT SUMMARY

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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	Cbbl	Bldr	Bdrk
CULVERT CROSSING	1	12	3.5	0.20	43	0	0	0	0	60	40	0
DRY CHANNEL	1	23	3.6	0.00	81	0	0	10	10	70	10	0
DRY UNITS	1	40	5.3	0.00	212	0	0	10	10	70	10	0
POOL-BACKWATER	3	29	2.7	0.43	71	0	57	20	7	17	0	0
POOL-ISOLATED	1	5	2.0	0.25	10	0	0	50	50	0	0	0
POOL-LATERAL SCOUR	10	132	4.0	0.84	520	10	11	25	9	38	3	14
POOL-PLUNGE	1	11	13.2	2.50	147	0	0	0	0	60	40	0
PUDDLED CHANNEL	1	19	2.1	0.00	40	0	0	10	10	70	10	0
RAPID/BOULDERS	1	13	4.6	0.15	59	6	0	0	0	80	20	0
RIFFLE	12	263	3.4	0.18	957	21	0	2	15	73	2	9
RIFFLE W/ POCKETS	1	26	4.3	0.20	113	0	0	30	35	35	0	0
STEP/BEDROCK	2	7	2.0	0.06	14	1	0	0	0	5	0	95
STEP/BOULDERS	2	4	3.7	0.13	13	12	0	0	5	50	45	0
STEP/COBBLE	3	20	5.4	0.13	148	3	0	0	23	77	0	0
STEP/LOG	1	1	4.1	0.01	2	0	100	0	0	0	0	0
STEP/STRUCTURE	1	0	3.2	0.10	0	0	0	0	0	60	40	0
<b>Total:</b>	<b>42</b>	<b>603</b>	<b>3.9</b>	<b>0.38</b>	<b>2,430</b>	<b>53</b>	<b>Avg: 9</b>	<b>10</b>	<b>12</b>	<b>51</b>	<b>7</b>	<b>10</b>

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m <sup>2</sup> )	Percent	Large Boulders Number	#/100m <sup>2</sup>
Dammed & BW Pools	4	34	2.5	0.39	81	3.33	0	0.0
Scour Pools	11	143	4.9	0.99	667	27.44	10	1.5
Glides	0	0	-	-	0	0.00	0	0.0
Riffles	13	289	3.5	0.18	1,070	44.02	21	2.0
Rapids	1	13	4.6	0.15	59	2.42	6	10.2
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	9	31	3.9	0.10	177	7.29	16	9.0
Dry	3	82	3.7	0.00	334	13.73	0	0.0

POOL SUMMARY

	Total	#/Km
All Pools	15	24.9
Pools ≥1m deep:	5	8.3
Complex pools (LWD pieces≥3):	7	11.6
Pool Frequency (channel widths/pool):	3.8	
Residual pool depth (avg)	0.82m	

STREAM SUMMARY

FEAGLES CREEK (PRE-TX)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m <sup>2</sup> )	Substrate Percent Wetted Area						Total Large Boulder
					S/O	Sand	Grvl	Cbbl	Bldr	Bdrk	
42	603	3.9	0.38	2,430	9	10	12	51	7	10	53

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Scour Pool	667	27.4
Backwater Pools	81	3.3
Glide	0	0.0
Riffle	1,070	44.0
Rapid	59	2.4
Cascade	0	0.0
Step	177	7.3
Dry	334	13.7

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RIPARIAN ZONE VEGETATION SUMMARY

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Summary of Riparian Zone (0-30m) (3 transects)

Total hardwoods/1000 ft	264
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-meter wide band

Diameter class (cm)	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters		Zones 1-3 0-30 meters	
	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood	Conifer	Hardwood
3-15cm	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0
15-30cm	0.0	0.0	0.0	0.3	0.0	0.7	0.0	1.0
30-50cm	0.0	0.0	0.0	0.3	0.3	0.7	0.3	1.0
50-90cm	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m <sup>2</sup>	0.0	0.0	0.0	1.0	0.3	3.3	0.1	1.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	8		28		39	
Shrub cover	18		47		52	
Grass/forb cover	78		51		25	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	Hillslope	67		83		50
High terrace	0		0		0	
Low terrace	17		0		0	
Floodplain	17		17		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		17	
Roadbed/Railroad	0		0		33	
Riprap	0		0		0	
Surface slope (%)	13		20		16	

Summary of Riparian Zone (0-30m) for all reaches ( 3 transects)

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

Total hardwoods/1000 ft	264
Total conifers/1000 ft	20
Total conifers >20" dbh/1000 ft	0

Average number of trees in a 5-meter wide band

Diameter class (cm)	Zones 1-3	
	Conifer	Hardwood
3-15cm	0.0	2.0
15-30cm	0.0	1.0
30-50cm	0.3	1.0
50-90cm	0.0	0.3
>90cm	0.0	0.0

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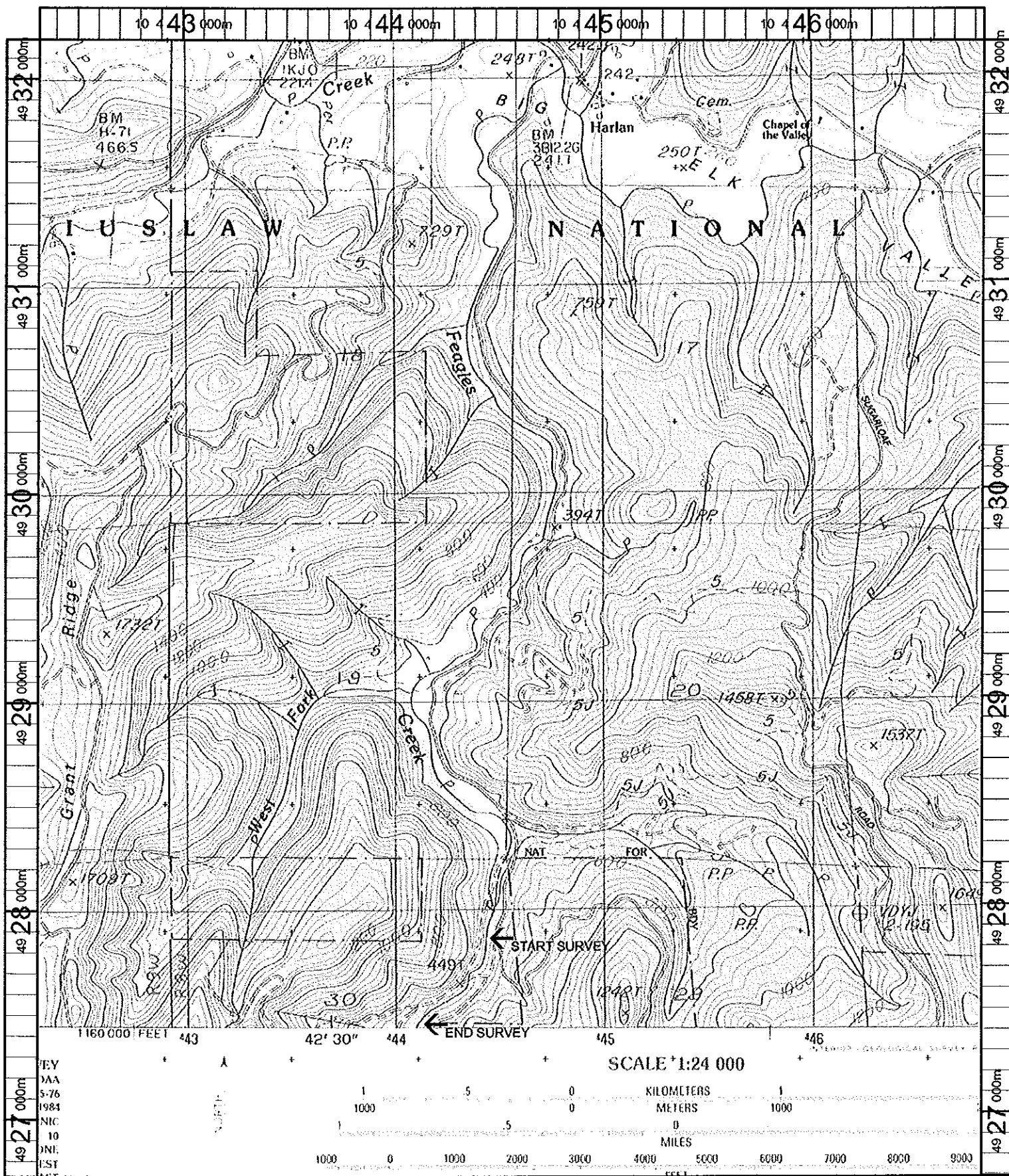
RIPARIAN ZONE VEGETATION

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VEGETATION DETAIL

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90	
12	LF	1	HS	30.0	0	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
12	LF	2	HS	40.0	20	60	40	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
12	LF	3	HS	50.0	100	60	40	Conifer	0	0	0	0	0	
								Hardwood	5	2	1	0	0	
12	RT	1	LT	0.0	5	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
12	RT	2	HS	40.0	80	80	20	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	1	0	ALDER
12	RT	3	RB	0.0	20	5	35	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	60% BARE, NO TREES
12	LF	1	HS	10.0	40	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
12	LF	2	HS	5.0	70	20	65	Conifer	0	0	0	0	0	
								Hardwood	0	1	1	0	0	
12	LF	3	RB	0.0	70	30	40	Conifer	0	0	1	0	0	
								Hardwood	0	0	1	0	0	
20	RT	1	HS	10.0	0	5	95	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	RT	2	HS	15.0	0	0	100	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
20	RT	3	HS	25.0	20	95	5	Conifer	0	0	0	0	0	
								Hardwood	1	0	0	0	0	
35	LF	1	FP	0.0	0	5	95	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
35	LF	2	FP	0.0	0	20	80	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
35	LF	3	SC	0.0	5	20	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
35	RT	1	HS	30.0	0	30	50	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	ROADBED
35	RT	2	HS	20.0	0	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
35	RT	3	HS	20.0	20	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	



Name: HARLAN  
Date: 11/7/100  
Scale: 1 inch equals 2000 feet

Location: 10 444460 E 4929426 N  
Caption: FEAGLES CREEK RESTORATION SITE - YAQUINA BASIN