

REACH 1

T11S-R9W-36SE

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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 avg: 6.5 range: 2.0-10.0

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	1,128	6,282	0
Secondary	35	61	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>		<u>First Terrace</u>	
Width	5.1	Width	9.6		35.5		15.0
Depth	0.36	Height	0.7		1.4		1.4
		W:D ratio	14.4	Entrenchment	4.0		

Stream Flow Type: MF Water Temp: 14.5-14.5°C
 Avg. Unit Gradient: 0.9% Habitat Units/100m: 6.3

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	LT
Riparian Vegetation:	M15	G

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	1%	Reach avg: 72%
Undercut Banks	2%	Range: 28-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	141	12.5
Volume (m ³)	142	12.6
Key pieces (≥10m x 0.6m)	8	0.7

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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
GLIDE	3	118	5.1	0.31	609	0	15	60	23	2	0	0
POOL-DAMMED	1	28	7.7	1.20	219	0	40	60	0	0	0	0
POOL-LATERAL SCOUR	33	611	5.6	0.56	3,503	15	15	40	29	3	0	13
POOL-PLUNGE	3	29	7.7	0.63	226	0	4	29	18	1	1	46
POOL-STRAIGHT SCOUR	2	25	4.3	0.55	126	0	18	43	40	0	0	0
RIFFLE	16	279	4.5	0.11	1,363	2	4	19	51	4	0	22
STEP/BEDROCK	5	32	5.4	0.06	153	0	0	9	10	0	0	81
STEP/COBBLE	6	31	3.5	0.09	120	1	1	15	73	12	0	0
STEP/LOG	2	8	2.4	0.06	20	0	0	15	80	5	0	0
STEP/STRUCTURE	2	1	5.7	0.02	6	7	20	33	5	0	43	0
Total:	73	1,163	5.1	0.36	6,344	25	Avg:10	31	36	4	1	18

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Area Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	1	28	7.7	1.20	219	3.45	0	0.0
Scour Pools	38	665	5.7	0.57	3,855	60.76	15	0.4
Glides	3	118	5.1	0.31	609	9.60	0	0.0
Riffles	16	279	4.5	0.11	1,363	21.49	2	0.1
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	15	73	4.3	0.07	298	4.70	8	2.7
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	39	33.5
Pools ≥1m deep:	5	4.3
Complex pools (LWD pieces ≥3):	15	12.9
Pool Frequency (channel widths/pool):	3.1	
Residual pool depth (avg)	0.44m	

STREAM SUMMARY

WOLF CREEK (PRE SUM 99)

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	
73	1,163	5.1	0.36	6,344	10	31	36	4	1	18	25

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	3,855	60.8
Backwater Pools	219	3.4
Glide	609	9.6
Riffle	1,363	21.5
Rapid	0	0.0
Cascade	0	0.0
Step	298	4.7
Dry	0	0.0

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RIPARIAN ZONE VEGETATION SUMMARY

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Summary of Riparian Zone (0-30m) (4 transects)

Total hardwoods/1000 ft	488
Total conifers/1000 ft	1,006
Total conifers >20" dbh/1000 ft	15
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	0.5	2.0	1.0	0.3	1.3	1.0	2.8	3.3
15-30cm	0.3	2.5	5.0	0.5	4.3	0.8	9.5	3.8
30-50cm	1.0	0.5	1.5	0.0	1.5	0.3	4.0	0.8
50-90cm	0.0	0.3	0.0	0.0	0.3	0.0	0.3	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	1.8	5.3	7.5	0.8	7.3	2.0	5.5	2.7

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	61		70		79	
Shrub cover	20		21		9	
Grass/forb cover	80		74		75	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
Hillslope	13		50		38	
High terrace	75		50		50	
Low terrace	13		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		13	
Riprap	0		0		0	
Surface slope (%)	12		25		19	

Summary of Riparian Zone (0-30m) for all reaches (4 transects)

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

Total hardwoods/1000 ft	488
Total conifers/1000 ft	1,006
Total conifers >20" dbh/1000 ft	15

Average number of trees in a 5-meter wide band

<u>Diameter</u> <u>class (cm)</u>	<u>Zones 1-3</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	2.8	3.3
15-30cm	9.5	3.8
30-50cm	4.0	0.8
50-90cm	0.3	0.3
>90cm	0.0	0.0

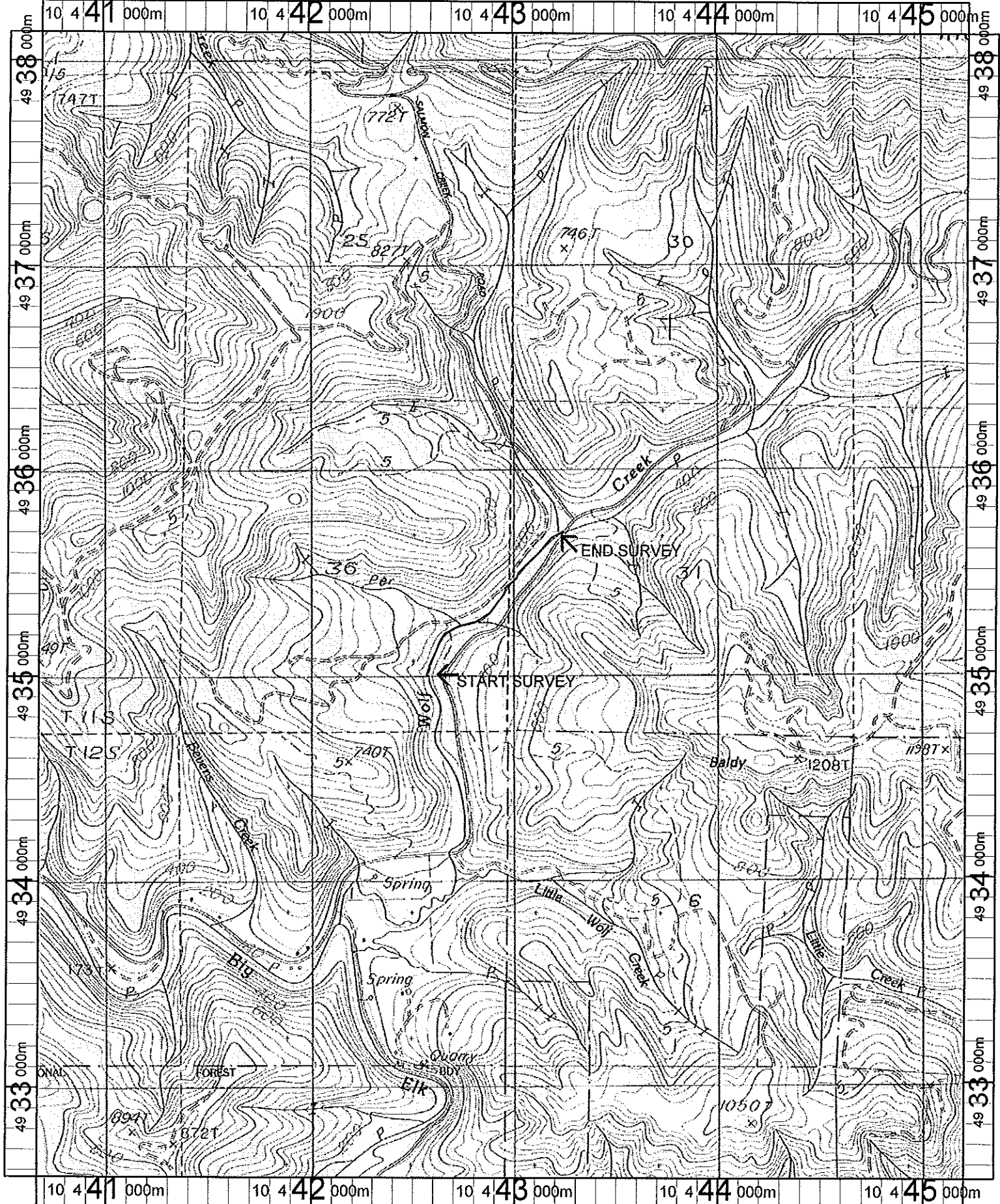
RIPARIAN ZONE VEGETATION

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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	
15	RT	1	HS	60.0	50	90	10	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
15	RT	2	HS	70.0	50	60	40	Conifer	0	0	0	0	0	
								Hardwood	1	1	0	0	0	
15	RT	3	RB	0.0	30	20	0	Conifer	0	1	0	0	0	
								Hardwood	1	0	0	0	0	ALSO HILLSLOPE
15	LF	1	HT	10.0	0	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
15	LF	2	HS	60.0	50	35	65	Conifer	0	1	0	0	0	
								Hardwood	0	0	0	0	0	
15	LF	3	HS	40.0	90	10	40	Conifer	0	1	2	0	0	
								Hardwood	0	0	0	0	0	SLOPE EST, 50% GRAV
46	RT	1	HT	0.0	70	20	80	Conifer	1	1	0	0	0	
								Hardwood	4	0	0	0	0	
46	RT	2	HT	5.0	90	10	90	Conifer	2	4	0	0	0	
								Hardwood	0	0	0	0	0	
46	RT	3	HT	10.0	85	0	100	Conifer	1	0	0	1	0	
								Hardwood	0	1	0	0	0	
46	LF	1	HT	0.0	5	0	100	Conifer	1	0	1	0	0	
								Hardwood	0	0	0	0	0	
46	LF	2	HT	0.0	25	0	100	Conifer	2	3	0	0	0	
								Hardwood	0	0	0	0	0	
46	LF	3	HT	0.0	75	20	80	Conifer	2	2	0	0	0	
								Hardwood	0	0	0	0	0	
53	LF	1	HT	3.0	90	0	100	Conifer	0	0	0	0	0	
								Hardwood	1	5	1	1	0	
53	LF	2	HT	0.0	90	40	60	Conifer	0	4	1	0	0	
								Hardwood	0	0	0	0	0	
53	LF	3	HT	5.0	95	0	100	Conifer	0	1	2	0	0	
								Hardwood	0	0	0	0	0	
53	RT	1	LT	20.0	85	10	90	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
53	RT	2	HS	55.0	85	0	55	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	50% ROADBED
53	RT	3	HS	80.0	90	0	100	Conifer	1	1	1	0	0	
								Hardwood	3	0	0	0	0	
63	LF	1	HT	0.0	90	0	100	Conifer	0	0	2	0	0	
								Hardwood	1	2	1	0	0	
63	LF	2	HS	10.0	85	0	100	Conifer	0	5	2	0	0	
								Hardwood	0	0	0	0	0	ALSO HIGH TERRACE
63	LF	3	HS	15.0	85	5	95	Conifer	0	6	1	0	0	
								Hardwood	0	2	1	0	0	
63	RT	1	HT	0.0	95	0	100	Conifer	0	0	1	0	0	
								Hardwood	0	0	0	0	0	
63	RT	2	HT	0.0	85	20	80	Conifer	0	3	3	0	0	
								Hardwood	0	0	0	0	0	
63	RT	3	HT	0.0	80	15	85	Conifer	1	5	0	0	0	
								Hardwood	0	0	0	0	0	



Name: HARLAN
 Date: 4/25/100
 Scale: 1 inch equals 2000 feet

Location: 10 442853 E 4935318 N
 Caption: WOLF CREEK
 RESTORATION SITE
 ODFW 1999