

REACH 1

T15S-R7W-36NE

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 avg: 4.8 range: 4.0-6.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	100
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	571	2,132	0
Secondary	36	78	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>		<u>First Terrace</u>	
Width	3.2	Width	6.3		10.4		9.0
Depth	0.58	Height	0.6		1.1		1.0
		W:D ratio	10.9	Entrenchment	1.7		

Stream Flow Type: LF Water Temp: 12.5-12.5°C
 Avg. Unit Gradient: 0.2% Habitat Units/100m: 7.7

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	17%	Reach avg: 78%
Undercut Banks	26%	Range: 47-100

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces ($\geq 3m \times 0.15m$)	143	25.0
Volume (m ³)	136	23.9
Key pieces ($\geq 10m \times 0.6m$)	2	0.4

REACH 1 T15S-R7W-36NE 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
GLIDE	1	24	3.2	0.20	76	0	5	15	80	0	0	0
POOL-DAMMED	1	13	2.8	0.40	36	0	15	35	50	0	0	0
POOL-ISOLATED	3	16	2.6	0.48	43	0	23	57	20	0	0	0
POOL-LATERAL SCOUR	25	412	3.7	0.83	1,588	40	7	23	69	0	0	1
POOL-PLUNGE	2	30	8.8	1.40	263	0	5	31	64	0	0	0
RIFFLE	11	95	1.8	0.10	172	0	0	10	89	0	0	0
STEP/COBBLE	4	17	1.9	0.10	32	0	0	9	91	0	0	0
Total:	47	607	3.2	0.58	2,210	40	Avg: 6	21	72	0	0	1

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	Boulders #/100m ²
Dammed & BW Pools	4	29	2.6	0.46	79	3.58	0	0.0
Scour Pools	27	442	4.1	0.87	1,851	83.77	40	2.2
Glides	1	24	3.2	0.20	76	3.43	0	0.0
Riffles	11	95	1.8	0.10	172	7.80	0	0.0
Rapids	0	0	-	-	0	0.00	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	4	17	1.9	0.10	32	1.43	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	31	51.1
Pools ≥1m deep:	9	14.8
Complex pools (LWD pieces ≥3):	19	31.3
Pool Frequency (channel widths/pool):	3.1	
Residual pool depth (avg)	0.78m	

STREAM SUMMARY

SWARTZ CK (POST 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
47	607	3.2	0.58	2,210	6	21	72	0	0	1	40

Wetted Area

Habitat Group	(m ²)	Percent
Scour Pool	1,851	83.8
Backwater Pools	79	3.6
Glide	76	3.4
Riffle	172	7.8
Rapid	0	0.0
Cascade	0	0.0
Step	32	1.4
Dry	0	0.0

REACH 1

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000 ft	1,179
Total conifers/1000 ft	325
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	2.3	0.0	3.7	3.3	2.0	3.3	8.0
15-30cm	0.0	1.7	0.0	1.7	1.7	2.3	1.7	5.7
30-50cm	0.0	0.7	0.0	1.0	0.3	1.7	0.3	3.3
50-90cm	0.0	0.7	0.0	1.0	0.0	0.7	0.0	2.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m ²	0.0	5.3	0.0	7.3	5.3	6.7	1.8	6.4

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
	(%)		(%)		(%)	
Canopy closure	53		70		89	
Shrub cover	58		60		38	
Grass/forb cover	42		40		55	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10-20 meters		Zone 3 20-30 meters	
Hillslope	17		67		100	
High terrace	33		33		0	
Low terrace	50		0		0	
Floodplain	0		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	1		13		21	

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	1,179
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	0

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	3.3	8.0
15-30cm	1.7	5.7
30-50cm	0.3	3.3
50-90cm	0.0	2.3
>90cm	0.0	0.0

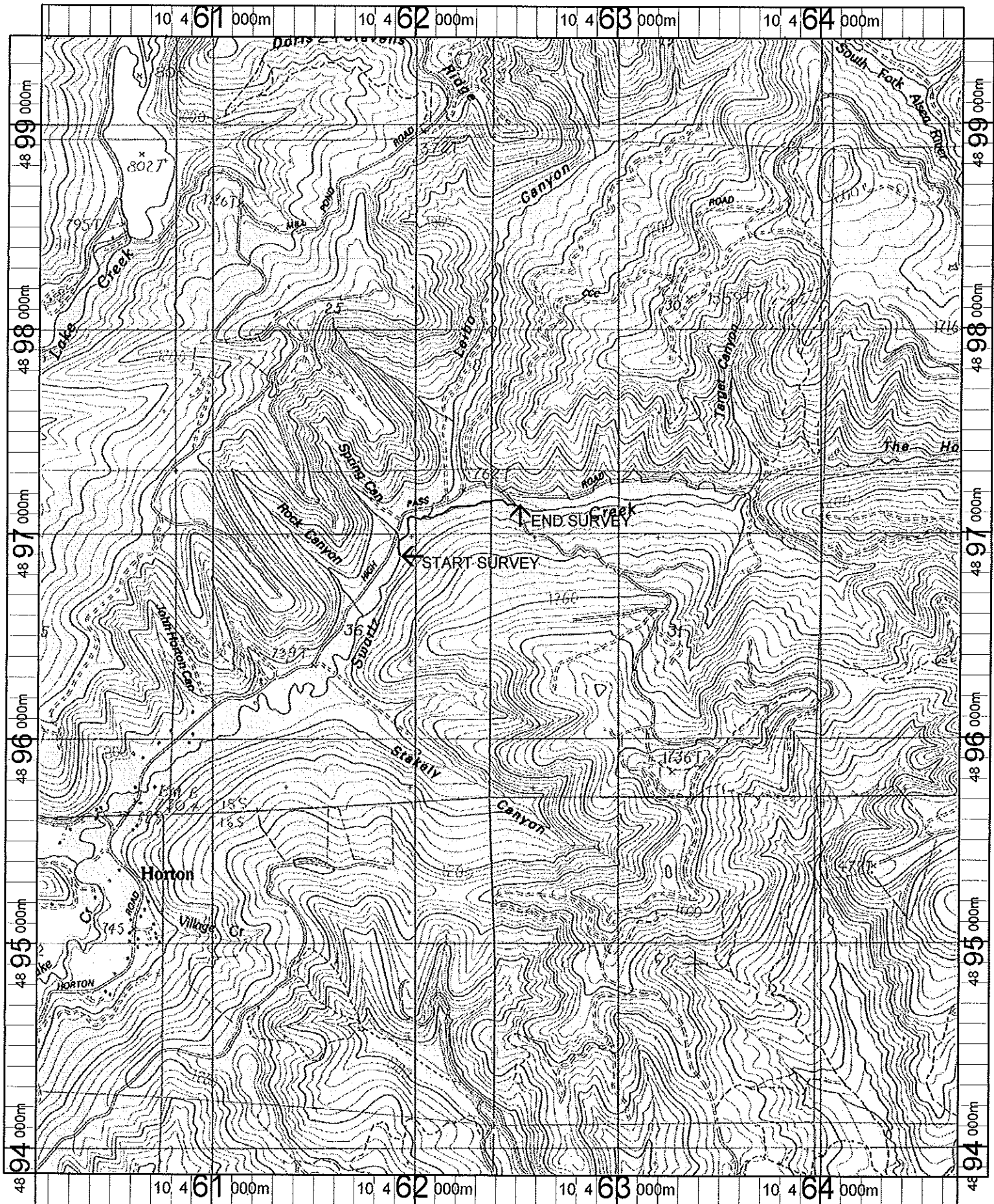
RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

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	
13	LF	1	HT	0.0	10	30	70	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	
13	LF	2	HT	0.0	75	50	50	Conifer	0	0	0	0	0	
								Hardwood	3	1	0	0	0	
13	LF	3	HS	15.0	100	10	65	Conifer	8	0	0	0	0	
								Hardwood	3	1	0	0	0	
13	RT	1	LT	0.0	30	95	5	Conifer	0	0	0	0	0	
								Hardwood	0	0	2	0	0	
13	RT	2	HS	50.0	60	90	10	Conifer	0	0	0	0	0	
								Hardwood	3	0	2	0	0	
13	RT	3	HS	50.0	75	95	5	Conifer	0	0	0	0	0	
								Hardwood	0	0	1	1	0	EST FROM 20M
26	LF	1	LT	0.0	85	85	15	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
26	LF	2	HS	15.0	10	95	5	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
26	LF	3	HS	10.0	70	25	75	Conifer	1	1	0	0	0	
								Hardwood	0	0	0	0	0	
26	RT	1	HT	0.0	40	98	2	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
26	RT	2	HS	10.0	95	100	0	Conifer	0	0	0	0	0	
								Hardwood	0	3	0	0	0	
26	RT	3	HS	10.0	100	70	15	Conifer	0	1	0	0	0	
								Hardwood	2	2	1	0	0	10% GROUND
42	LF	1	LT	0.0	90	15	85	Conifer	0	0	0	0	0	
								Hardwood	3	0	0	2	0	MAPLE
42	LF	2	HT	0.0	85	5	95	Conifer	0	0	0	0	0	
								Hardwood	3	0	1	2	0	BIG LEAF MAPLE
42	LF	3	HS	15.0	95	25	75	Conifer	1	3	1	0	0	
								Hardwood	0	0	3	1	0	2M HT BIG LEAF MAPL
42	RT	1	HS	5.0	60	25	75	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	0	0	4M HT
42	RT	2	HS	5.0	95	20	80	Conifer	0	0	0	0	0	
								Hardwood	2	0	0	1	0	
42	RT	3	HS	25.0	95	5	95	Conifer	0	0	0	0	0	
								Hardwood	1	4	0	0	0	



Name: HORTON
 Date: 4/24/100
 Scale: 1 inch equals 2000 feet

Location: 10 462321 E 4896628 N
 Caption: SWARTZ CREEK
 RESTORATION SITE
 ODFW 1999