

REACH 1

T5N-R8W-S18SE

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	100
Moderate V-shape	0	Multiple Terraces	0
Open V-shape	0	Wide Floodplain	0

Valley Width Index avg: 9.3 range: 6.0-12.0

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	388	1,413	0
Secondary	43	74	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>	<u>Floodprone</u>	<u>First Terrace</u>
Width 3.4	Width	6.8	9.7	11.6
Depth 0.32	Height	0.7	1.3	1.5
	W:D ratio	9.8	Entrenchment 1.4	

Stream Flow Type: LF Water Temp: 11.0-11.0°C  
Avg. Unit Gradient: 2.9% Habitat Units/100m: 6.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	ST	
Riparian Vegetation:	D15	C15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	42%	Reach avg: 85%
Undercut Banks	13%	Range: 78- 94

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	16	4.1
Volume (m <sup>3</sup> )	30	7.6
Key pieces (≥10m x 0.6m)	1	0.3

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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
GLIDE	1	9	3.5	0.30	31	0	15	40	10	35	0	0
POOL-BACKWATER	2	11	2.6	0.40	29	0	50	15	3	33	0	0
POOL-LATERAL SCOUR	6	44	3.3	0.54	143	0	22	30	13	31	2	2
POOL-STRAIGHT SCOUR	3	19	4.9	0.52	94	0	20	22	18	38	2	0
RAPID/BOULDERS	5	90	2.8	0.19	254	0	9	12	15	49	15	0
RIFFLE	9	240	3.4	0.20	868	0	10	18	18	43	11	0
STEP/COBBLE	2	19	3.3	0.10	68	0	8	8	15	60	10	0
<b>Total:</b>	<b>28</b>	<b>431</b>	<b>3.4</b>	<b>0.32</b>	<b>1,487</b>	<b>0</b>	<b>Avg:16</b>	<b>20</b>	<b>15</b>	<b>41</b>	<b>7</b>	<b>0</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	2	11	2.6	0.40	29	1.96	0	0.0
Scour Pools	9	62	3.8	0.53	237	15.94	0	0.0
Glides	1	9	3.5	0.30	31	2.07	0	0.0
Riffles	9	240	3.4	0.20	868	58.36	0	0.0
Rapids	5	90	2.8	0.19	254	17.09	0	0.0
Cascades	0	0	-	-	0	0.00	0	0.0
Step/Falls	2	19	3.3	0.10	68	4.57	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

All Pools	<u>Total</u>	<u>#/Km</u>
	11	25.5
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	2	4.6
Pool Frequency (channel widths/pool):	5.7	
Residual pool depth (avg)	0.42m	

STREAM SUMMARY

UPPER NECANICUM R (PRE SUM 99)

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	
28	431	3.4	0.32	1,487	16	20	15	41	7	0	0

Habitat Group	Wetted Area	
	(m <sup>2</sup> )	Percent
Scour Pool	237	15.9
Backwater Pools	29	2.0
Glide	31	2.1
Riffle	868	58.4
Rapid	254	17.1
Cascade	0	0.0
Step	68	4.6
Dry	0	0.0

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RIPARIAN ZONE VEGETATION SUMMARY

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Summary of Riparian Zone (0-30m) (2 transects)

Total hardwoods/1000 ft	914
Total conifers/1000 ft	488
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	1.0	0.5	0.0	0.0	3.0	0.0	4.0	0.5
15-30cm	0.5	4.0	0.0	5.5	3.0	3.0	3.5	12.5
30-50cm	0.0	0.5	0.0	0.0	0.5	1.5	0.5	2.0
50-90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m <sup>2</sup>	1.5	5.0	0.0	5.5	6.5	4.5	2.7	5.0

Canopy closure and ground cover

	Zone 1 0-10 meters	Zone 2 10-20 meters	Zone 3 20-30 meters
	(%)	(%)	(%)
Canopy closure	75	74	70
Shrub cover	56	50	59
Grass/forb cover	44	50	31

Predominant landform in each zone

	Zone 1 0-10 meters	Zone 2 10-20 meters	Zone 3 20-30 meters
	Hillslope	0	0
High terrace	100	75	0
Low terrace	0	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 (%)	7	7	31

Summary of Riparian Zone (0-30m) for all reaches ( 2 transects)

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

Total hardwoods/1000 ft	914
Total conifers/1000 ft	488
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	4.0	0.5
15-30cm	3.5	12.5
30-50cm	0.5	2.0
50-90cm	0.0	0.0
>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	
11	LF	1	HT	1.0	75	60	40	Conifer	0	0	0	0	0	
								Hardwood	1	3	0	0	0	
11	LF	2	HT	3.0	75	60	40	Conifer	0	0	0	0	0	
								Hardwood	0	4	0	0	0	
11	LF	3	HS	11.0	80	65	35	Conifer	3	2	0	0	0	
								Hardwood	0	0	0	0	0	
11	RT	1	HT	15.0	65	75	25	Conifer	2	1	0	0	0	
								Hardwood	0	2	1	0	0	
11	RT	2	HT	10.0	70	70	30	Conifer	0	0	0	0	0	
								Hardwood	0	0	0	0	0	
11	RT	3	HS	18.0	80	70	30	Conifer	1	0	0	0	0	
								Hardwood	0	2	3	0	0	
18	LF	1	HT	5.0	80	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	1	0	0	0	
18	LF	2	HT	2.0	70	30	70	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
18	LF	3	15	70.0	40	60	0	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
18	RT	1	HT	7.0	80	50	50	Conifer	0	0	0	0	0	
								Hardwood	0	2	0	0	0	
18	RT	2	HT	11.0	80	40	60	Conifer	0	0	0	0	0	
								Hardwood	0	5	0	0	0	
18	RT	3	HS	23.0	80	40	60	Conifer	2	4	1	0	0	
								Hardwood	0	2	0	0	0	

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Upper Necanicum Restoration Site

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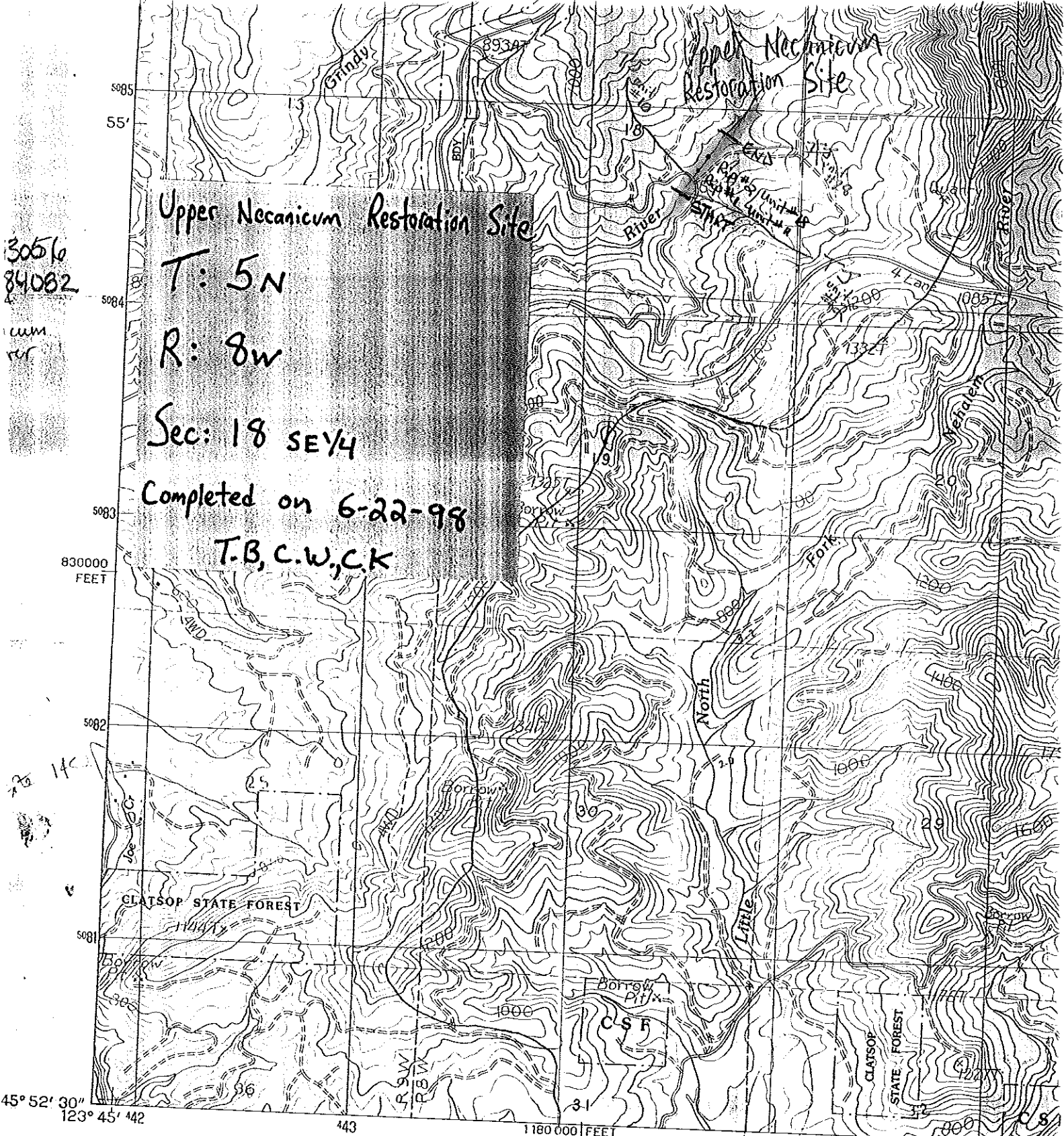
R: 8W

Sec: 18 SE 1/4

Completed on 6-22-98

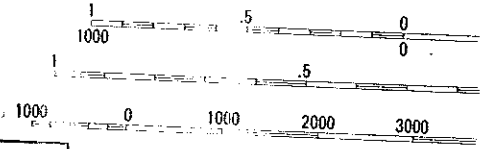
T.B, C.W, C.K

Upper Necanicum Restoration Site



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY  
 CONTROL BY ..... USGS, NOS/NOAA AND OSHD  
 COMPILED FROM AERIAL PHOTOGRAPHS TAKEN ..... 1975 AND 1980  
 FIELD CHECKED ..... 1983. MAP EDITED ..... 1984  
 PROJECTION ..... LAMBERT CONFORMAL CONIC  
 GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ..... ZONE 10  
 10,000-FOOT STATE GRID TICKS ..... OREGON, NORTH ZONE  
 UTM GRID DECLINATION ..... 0°30' WEST  
 1980 MAGNETIC NORTH DECLINATION ..... 20° EAST  
 VERTICAL DATUM ... NATIONAL GEODETIC VERTICAL DATUM OF 1929  
 HORIZONTAL DATUM ..... 1927 NORTH AMERICAN DATUM  
 To place on the predicted North American Datum of 1983,  
 move the projection lines as shown by dashed corner ticks  
 ( 24 meters north / 97 meters east )  
 There may be private inholdings within the boundaries of any  
 Federal and State Reservations shown on this map  
 No d...

**PROVISIONAL MAP**  
 Produced from original  
 manuscript drawings. Infor-  
 mation shown as of date of  
 photography.



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