

**ODFW AQUATIC INVENTORY PROJECT
OREGON PLAN FOR SALMON & WATERSHEDS
STREAM RESTORATION HABITAT REPORT**

STREAM: Canyon Creek (L-12)
BASIN: Molalla River
SURVEY TYPE: Post-Tx
DATE: February 28, 2001
SURVEY CREW: Eric Brown, Joe Zuccarello
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 12.2 km²
USGS MAPS: Colton, Elwood
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Canyon Creek habitat survey extended 539 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 7.6 (range: 5.0 – 10.0). Land use for the reach was second growth (15-30 cm dbh) trees and timber harvest. The average unit gradient was 5.5 percent. Rapids (38%), cascades (27%) and riffles (21%) dominated stream habitat. Cobble (39%) and gravel (31%) dominated stream substrate. Wood volume was moderate at 28.8 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.

REACH SUMMARY

REACH 1

T5S-R3E-S24NE

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: 7.6 range: 5.0-10.0

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0	Single Channel	0
Bedrock	0	Multiple Channel	0
Terrace	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	539	2,330	0
Secondary	18	39	0

Channel Dimensions (m)

<u>Wetted</u>		<u>Active</u>		<u>Floodprone</u>	<u>First Terrace</u>
Width	3.9	Width	5.4	8.9	9.5
Depth	0.32	Height	0.5	1.0	1.6
		W:D ratio	10.5	Entrenchment	1.6

Stream Flow Type: MF Water Temp: 4.0-4.0°C
 Avg. Unit Gradient: 5.5% Habitat Units/100m: 5.7

Riparian, Bank, and Wood Summary

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

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding	0%	Reach avg: 0%
Undercut Banks	0%	Range: 0- 0

Large Woody Debris

	<u>Total</u>	<u>Total/100m</u>
All pieces (≥3m x 0.15m)	125	23.2
Volume (m ³)	155	28.8
Key pieces (≥10m x 0.6m)	5	0.9

HABITAT UNIT SUMMARY

REACH 1

T5S-R3E-S24NE

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
CASCADE/BOULDERS	8	169	3.6	0.22	645	0	0	2	14	47	38	0
GLIDE	2	21	3.9	0.28	83	0	3	3	73	15	5	3
POOL-DAMMED	1	6	4.4	0.80	25	0	0	20	30	40	10	0
POOL-LATERAL SCOUR	1	14	4.1	0.90	59	0	0	15	30	30	20	5
POOL-PLUNGE	3	18	5.6	0.67	101	0	0	15	40	37	8	0
POOL-STRAIGHT SCOUR	2	17	4.3	0.73	73	0	0	23	48	18	13	0
RAPID/BOULDERS	6	181	5.0	0.18	891	0	0	4	24	34	38	0
RIFFLE	3	63	3.3	0.25	222	0	0	0	30	53	17	0
RIFFLE W/ POCKETS	2	66	4.0	0.23	265	0	0	8	45	35	13	0
STEP/BOULDERS	1	1	1.7	0.15	1	0	0	0	0	20	80	0
STEP/LOG	3	2	1.9	0.08	3	0	0	0	47	53	0	0
Total:	32	557	3.9	0.32	2,369	0	Avg: 0	6	31	39	24	0

HABITAT SUMMARY

Habitat Group	No. Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area (m ²)	Percent	Large Boulders Number	#/100m ²
Dammed & BW Pools	1	6	4.4	0.80	25	1.06	0	0.0
Scour Pools	6	49	4.9	0.73	233	9.85	0	0.0
Glides	2	21	3.9	0.28	83	3.49	0	0.0
Riffles	5	129	3.6	0.24	487	20.57	0	0.0
Rapids	6	181	5.0	0.18	891	37.62	0	0.0
Cascades	8	169	3.6	0.22	645	27.23	0	0.0
Step/Falls	4	2	1.8	0.10	4	0.19	0	0.0
Dry	0	0	-	-	0	0.00	0	0.0

POOL SUMMARY

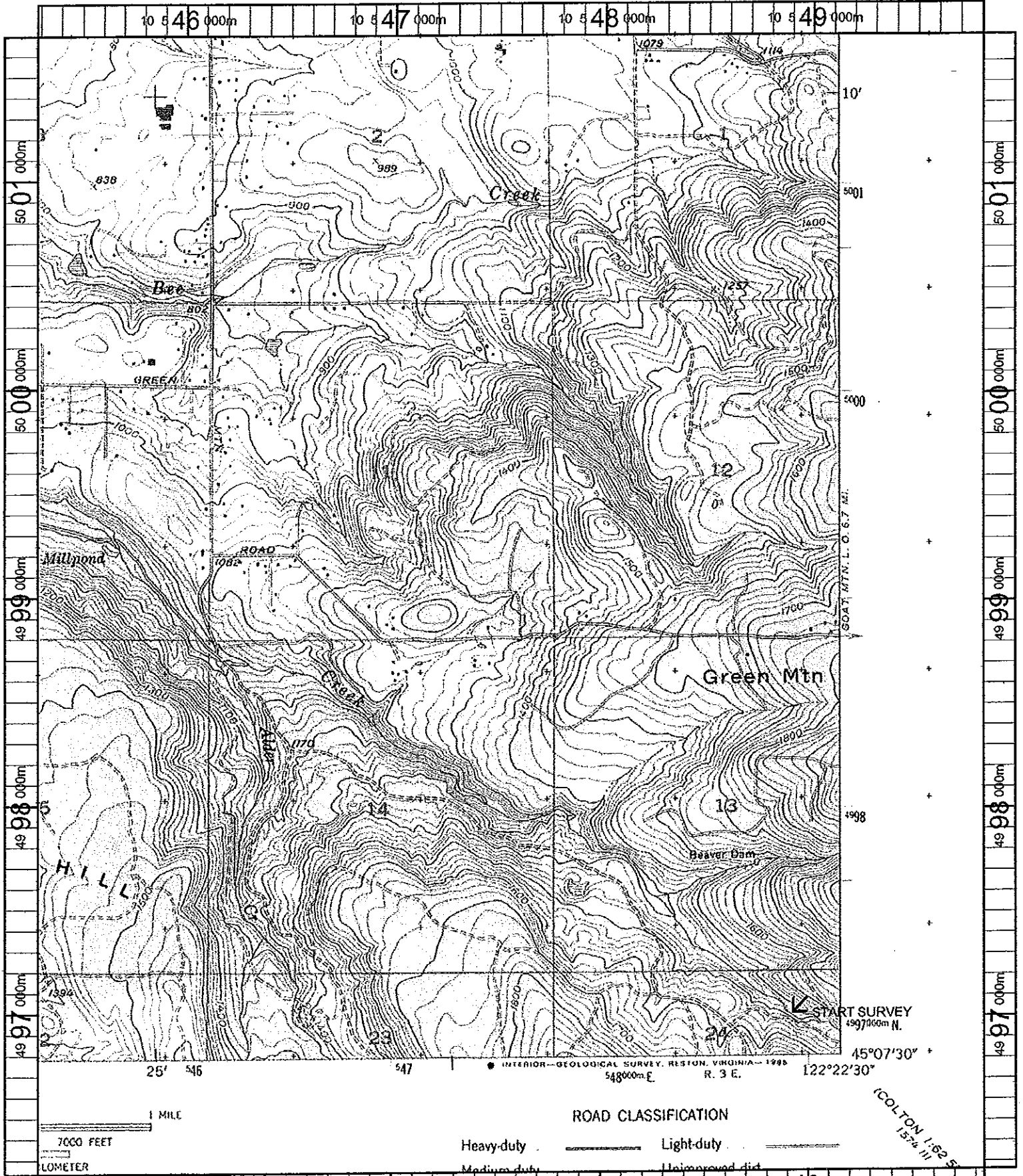
All Pools	<u>Total</u>	<u>#/Km</u>
	7	12.6
Pools ≥1m deep:	0	0.0
Complex pools (LWD pieces ≥3):	4	7.2
Pool Frequency (channel widths/pool):	14.7	
Residual pool depth (avg)	0.54m	

STREAM SUMMARY

CANYON CREEK POST-TX

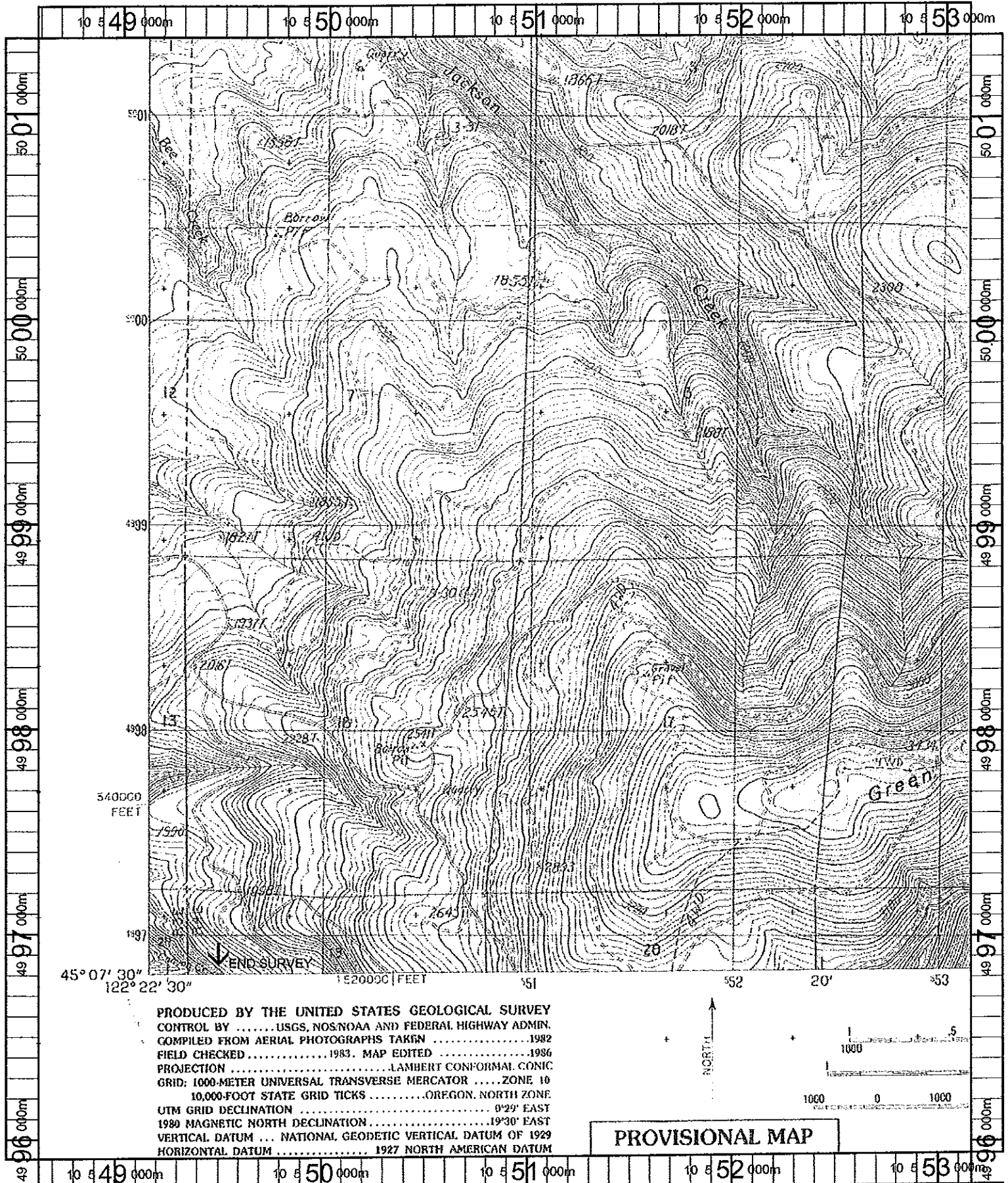
Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate						Total Large Boulder
					S/O	Percent Wetted Area					
					Sand	Grvl	Cbbl	Bldr	Bdrk		
32	557	3.9	0.32	2,369	0	6	31	39	24	0	0

Habitat Group	Wetted Area	
	(m ²)	Percent
Scour Pool	233	9.9
Backwater Pools	25	1.1
Glide	83	3.5
Riffle	487	20.6
Rapid	891	37.6
Cascade	645	27.2
Step	4	0.2
Dry	0	0.0



Name: COLTON
 Date: 10/23/100
 Scale: 1 Inch equals 2000 feet

Location: 10 547464 E 4998963 N
 Caption: CANYON CREEK RESTORATION SITE - CLACKAMAS BASIN



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
 CONTROL BY USGS, NOS, NOAA AND FEDERAL HIGHWAY ADMIN.
 COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1982
 FIELD CHECKED 1983. MAP EDITED 1986
 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°29' EAST
 1980 MAGNETIC NORTH DECLINATION 19°30' EAST
 VERTICAL DATUM ... NATIONAL GEODETIC VERTICAL DATUM OF 1929
 HORIZONTAL DATUM 1927 NORTH AMERICAN DATUM

PROVISIONAL MAP

Name: ELWOOD
 Date: 10/23/100
 Scale: 1 Inch equals 2000 feet

Location: 10 550777 E 4998638 N
 Caption: CANYON CREEK RESTORATION SITE - CLACKAMAS BASIN