

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

STREAM: Lane Creek (U-41)  
BASIN: Umpqua River  
SURVEY TYPE: Post-Tx  
DATE: July 25, 2007  
SURVEY CREW: Jim Deshler, Stephanie McCary  
REPORT PREPARED BY: Paul Jacobsen  
BASIN AREA: 6.6 km<sup>2</sup>  
USGS MAPS: Canyonville  
ECOREGION: Umpqua Interior Foothills

**GENERAL DESCRIPTION:**

The Lane Creek habitat survey extended 497 meters. The channel was alternately constrained by hillslopes and terraces in a broad valley floor. The average valley width index was 20.0. Land use for the reach was exclosure and large (30-50 cm dbh) trees. The average unit gradient was 1.6 percent. Riffles (70%) and scour pools (30%) comprised stream habitat. Gravel (45%), sand (25%) and cobble (23%) dominated stream substrate. Wood volume was low at 14.1 m<sup>3</sup>/100m.

**COMMENTS:**

REACH 1

T30S-R06W-S51NW

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	20.0	VWI Range:	20 - 20

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 Channel	497	890	0
Secondary Channel	0	0	0
Off-Channel Units	0	0	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 1.8	Width: 3.0	4.6 ( 3.1 - 7.7 )	4.1 ( 3.8 - 4.3 )
Depth: 0.22	Height: 0.3	0.6 ( 0.5 - 0.7 )	1.6 ( 1.5 - 1.6 )

W:D ratio: 10.8  
 Stream Flow Type: LF  
 Average Unit Gradient: 1.6%  
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 1.6  
 Habitat Units/100m (total channel length): 6.6  
 Habitat Units/100m (primary channel length): 6.6

**Riparian, Bank, and Wood Summary**

	<u>Primary</u>	<u>Secondary</u>
Land Use:	EX	LT
Riparian Vegetation:	S	D15

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	2%	Reach avg: 92%
Undercut Banks:	1%	Range: 58 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	45	9.1
Volume (m <sup>3</sup> ):	70	14.1
Key pieces (>=12m x 0.60m):	3	0.6

HABITAT INVENTORY

Report Date: 11/14/2007

Survey Date:

7/22/2007

REACH 1		T30S-R06W-S51NW					REACH 1					
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	Cbl	Bldr	Bdrk
POOL-LATERAL SCOUR	14	137	2.0	0.44	267	0	6	44	39	10	1	1
RIFFLE	18	360	1.7	0.07	623	1	1	12	50	33	3	1
STEP/LOG	1	0	1.7	0.02	1	0	0	10	60	30	0	0
<b>Total:</b>	<b>33</b>	<b>497</b>	<b>1.8</b>	<b>0.22</b>	<b>890</b>	<b>1</b>	<b>Avg: 3</b>	<b>25</b>	<b>45</b>	<b>23</b>	<b>2</b>	<b>1</b>

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m <sup>2</sup> )	Percent	Number	(# / 100m <sup>2</sup> )	
Dammed & BW Pools	0	0			0	0.00%	0	0.0	
Scour Pools	14	137	2.0	0.44	267	30.03%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	18	360	1.7	0.07	623	69.91%	1	0.2	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	1	0	1.7	0.02	1	0.06%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	<u>Total</u>	<u>Total of all Channel Lengths # / Km</u>	<u>Primary Channel Length # / Km</u>
All Pools:	14	28.2	28.2
Pools >=1m deep:	0	0.0	0.0
Complex pools (LWD pieces>=3):	2	4.0	4.0
Pool frequency (channel widths/pool):	11.9		
Residual pool depth (avg):	0.41		

Survey Date 7/22/2007  
Report Date: 11/7/2007

**RIPARIAN ZONE  
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	569
Total conifers/1000 ft	81
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	1.3	0.0	0.7	0.3	1.3	0.3	3.3
15-30cm	0.3	2.0	0.0	2.0	0.7	1.3	1.0	5.3
30-50cm	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.7
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/100m2	0.3	3.7	0.0	3.0	1.0	2.7	0.4	3.1

**Canopy closure and ground cover**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	51		39		33	
Shrub cover	86		23		19	
Grass/forb cover	14		73		81	

**Predominant landform in each zone**

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	33		33		50	
High terrace	0		0		0	
Low terrace	0		0		0	
Floodplain	50		17		33	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	17		50		17	
Riprap	0		0		0	
Surface slope (%)	29		15		11	

**Summary of Riparian Zone (0-30m) for all reaches****3 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	569
Total conifers/1000 ft	81
Total conifers >20" dbh/1000 ft	0
Total conifers >35" dbh/1000 ft	0

**Average number of trees in a 5-m wide band**

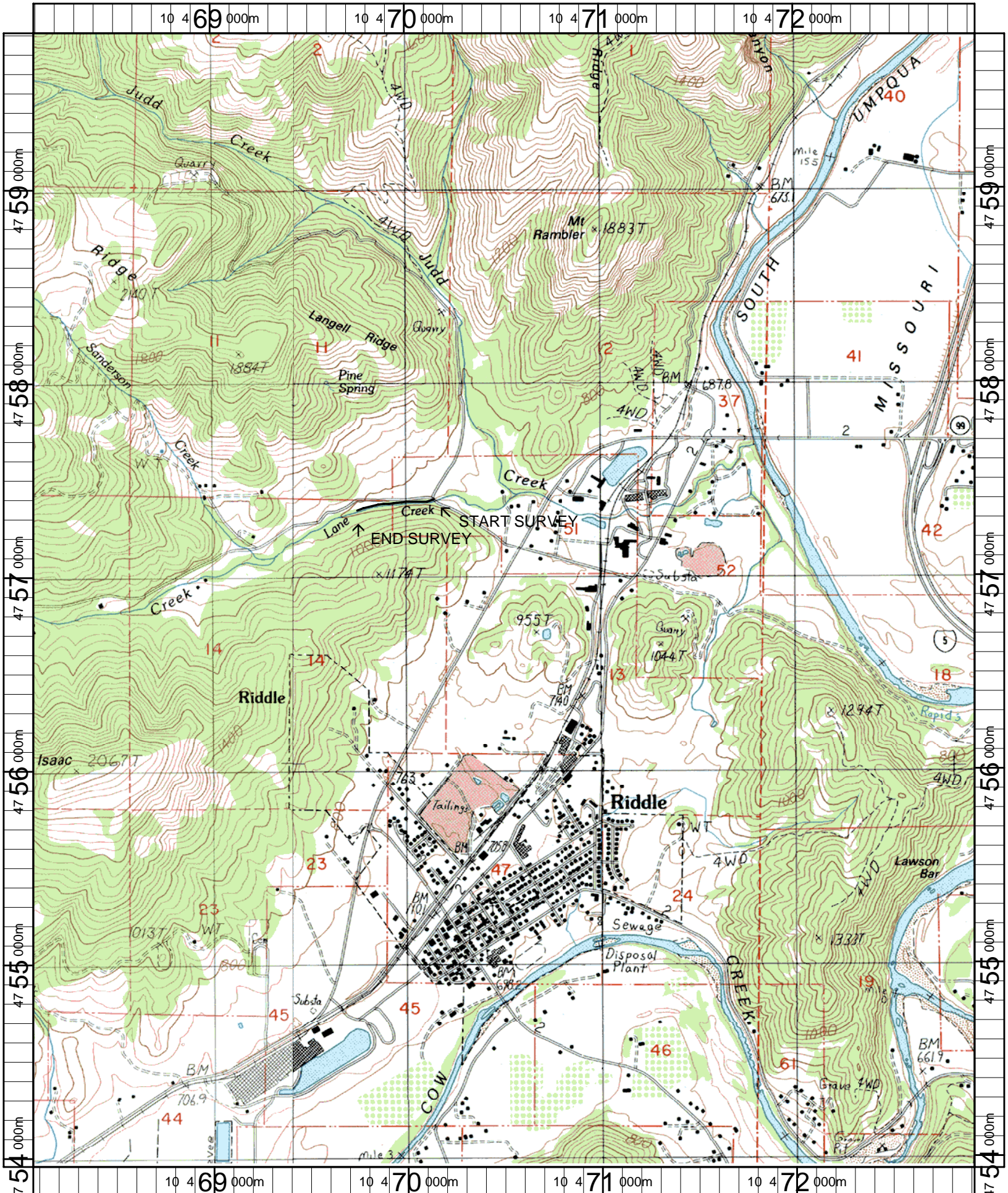
Diameter class (cm)	Zones 1-3	
	<u>0-30 meters</u>	
	<u>Conifer</u>	<u>Hardwood</u>
3-15cm	0.3	3.3
15-30cm	1.0	5.3
30-50cm	0.0	0.7
50-90cm	0.0	0.0
>90cm	0.0	0.0

**RIPARIAN ZONE VEGETATION**

Reach 1

Reach 1

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
10	LT	1	HS	55	60	90	10	Conifer		1					
								Hardwood	1	1					
10	LT	2	HS	35	95	20	80	Conifer							
								Hardwood	1	2					
10	LT	3	HS	25	90	10	90	Conifer	1						
								Hardwood	2	1					
10	RT	1	FP	5	45	100	0	Conifer							BLACKBERRY JAM
								Hardwood							
10	RT	2	RB	1	0	5	80	Conifer							ROADBED
								Hardwood							
10	RT	3	FP	0	0	0	100	Conifer							
								Hardwood							
16	LT	1	FP	10	65	90	10	Conifer							
								Hardwood	0	3	1				
16	LT	2	FP	14	80	20	80	Conifer							
								Hardwood	1	2	0				
16	LT	3	HS	20	80	20	80	Conifer							
								Hardwood	1	3					
16	RT	1	FP	25	30	85	15	Conifer							
								Hardwood		2					
16	RT	2	RB	0	15	20	80	Conifer							
								Hardwood							
16	RT	3	RB	0	0	5	95	Conifer							PASTURE
								Hardwood							
28	LT	1	HS	55	35	60	40	Conifer							
								Hardwood	2						
28	LT	2	HS	40	40	75	25	Conifer							
								Hardwood		2	1				
28	LT	3	HS	20	25	75	25	Conifer		2					
								Hardwood	1						
28	RT	1	RB	25	70	90	10	Conifer							
								Hardwood	1						
28	RT	2	RB	2	5	0	90	Conifer							
								Hardwood							
28	RT	3	FP	0	0	5	95	Conifer							
								Hardwood							



Name: CANYONVILLE  
 Date: 4/26/2007  
 Scale: 1 inch equals 2000 feet

Location: 10 0470502 E 4756876 N  
 Caption: LANE CREEK RESTORATION SITE - SOUTH UMPQUA BASIN