

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

STREAM: Toms Creek (MS-296)
BASIN: Coos Bay
SURVEY TYPE: Reference
DATE: July 21, 2005
SURVEY CREW: Kevin Cellura, Eric Himmelreich
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 0.9 km²
USGS MAPS: Charleston
ECOREGION: Coast Range Coastal Lowlands

GENERAL DESCRIPTION:

The Toms Creek habitat survey extended 406 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 36.5 (range: 17.5-50.0). Land use for the reach was conservation area and wetland. The average unit gradient was 0.6 percent. Glides (51%) and beaver pools (49%) comprised stream habitat. Stream substrate was made up of silt (90%) and sand (10%). Wood volume was very low at 1.9 m³/100m.

COMMENTS:

There were no potential barriers to upstream fish migration in the surveyed length.

REACH 1

T26S-R14W-S36NW

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	0%
Open V-shape	0%	Wide Floodplain	100%
Valley Width Index	36.5	VWI Range:	17.5 - 50

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	100%
Alt. Terrace/Hill	0%		
Landuse	0%		

Channel Characteristics

<u>Type</u>	<u>Length (m)</u>	<u>Area (m2)</u>	<u>Dry Units</u>
Primary Channel	406	960	0
Secondary Channel	89	200	0
Off-Channel Units	16	54	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 0
Width: 2.6	Width: 1.5	62.0 (25 - 100)	(-)
Depth: 0.53	Height: 0.9	1.9 (1.4 - 2.2)	(-)

W:D ratio: 1.6 Entrenchment (ACW:FPW ratio): 50.5
 Stream Flow Type: HF Habitat Units/100m (total channel length): 5.9
 Average Unit Gradient: 0.6% Habitat Units/100m (primary channel length): 7.4
 Water temperature (°C): 17.5 - 17.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	CR	WL
Riparian Vegetation:	P	

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:		Reach avg: 34%
Undercut Banks:		Range: 25 - 56

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	11	2.7
Volume (m ³):	8	1.9
Key pieces (>=12m x 0.60m):	0	0.0

HABITAT INVENTORY

Report Date: 4/26/2006

Survey Date:

7/21/2005

REACH 1		T26S-R14W-S36NW					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	Cbl	Bldr	Bdrk
GLIDE	20	450	1.4	0.58	618	0	90	10	0	0	0	0
POOL-BACKWATER	2	16	3.5	0.43	54	0	90	10	0	0	0	0
POOL-BEAVER DAM	4	42	9.6	0.70	535	0	90	10	0	0	0	0
STEP/BEAVER DAM	4	4	1.7	0.16	6	0	90	10	0	0	0	0
Total:	30	511	2.6	0.53	1,213	0	Avg: 90	10	0	0	0	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	6	58	7.6	0.61	589	48.51%	0	0.0	
Scour Pools	0	0			0	0.00%	0	0.0	
Glides	20	450	1.4	0.58	618	50.96%	0	0.0	
Riffles	0	0			0	0.00%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	4	4	1.7	0.16	6	0.53%	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>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	6	11.7	14.8
Pools >=1m deep:	1	2.0	2.5
Complex pools (LWD pieces>=3):	0	0.0	0.0
Pool frequency (channel widths/pool):	58.4		
Residual pool depth (avg):	0.58		

OREGON DEPARTMENT OF FISH AND WILDLIFE
HABITAT INVENTORY

TOMS CREEK REFERENCE
GCG: 3-MS SITE ID: 296

Survey Date 7/21/2005
Report Date: 4/26/2006

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

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

Total hardwoods/1000	274
Total conifers/1000 ft	122
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	0.0	0.0	0.0	1.0	4.5	1.0	4.5
15-30cm	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0
30-50cm	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.0
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/100m2	0.0	0.0	0.0	0.0	2.0	4.5	0.7	1.5

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	0		0		56	
Shrub cover	0		0		58	
Grass/forb cover	100		100		39	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	0		0		75	
High terrace	0		0		0	
Low terrace	0		0		0	
Floodplain	100		100		25	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	0		0		15	

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

2 transects

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

Total hardwoods/1000	274
Total conifers/1000 ft	122
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	1.0	4.5
15-30cm	0.5	0.0
30-50cm	0.5	0.0
50-90cm	0.0	0.0
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

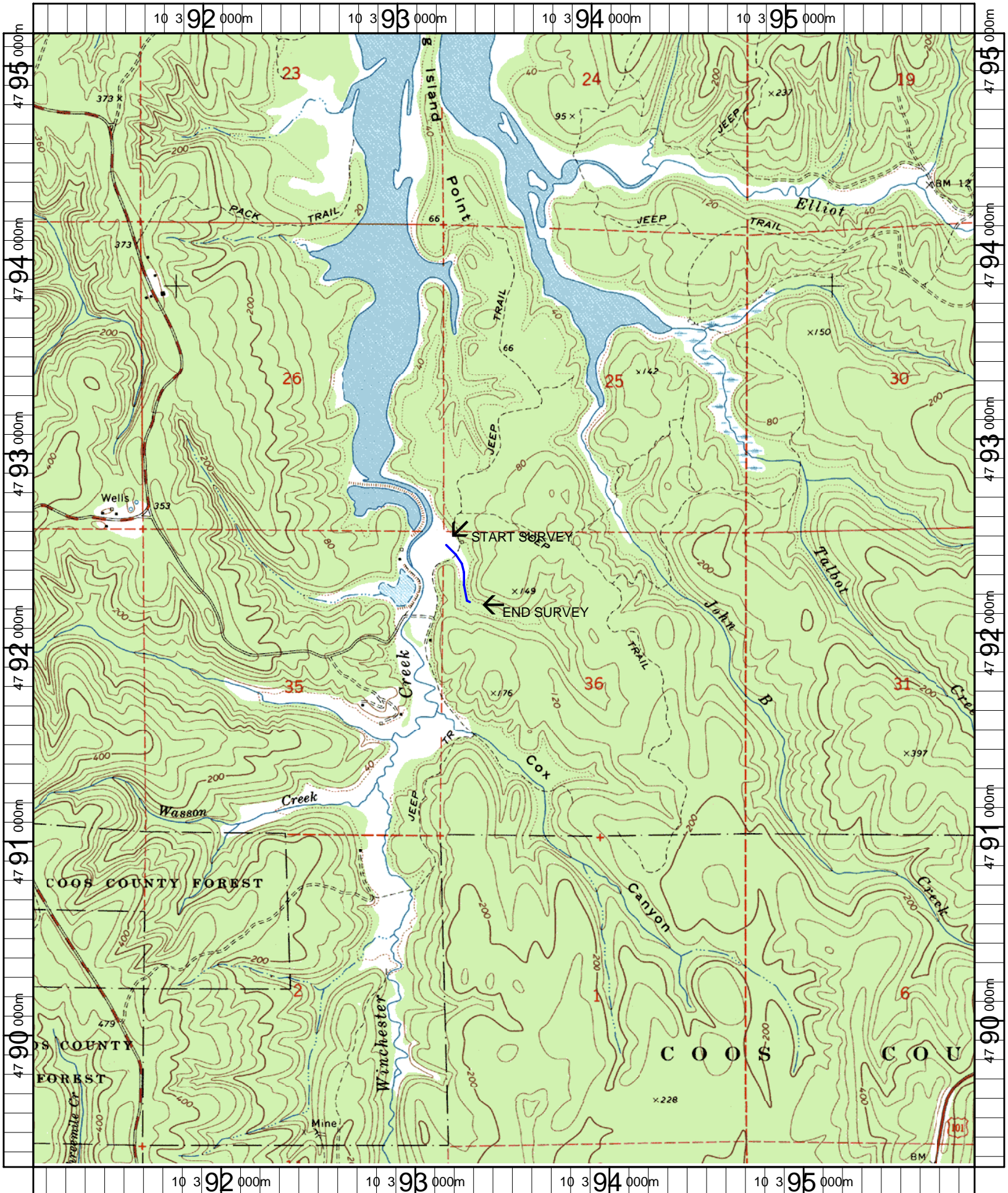
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
6	LF	1	FP	0	0	0	100	Conifer							0393285 / 4792453
								Hardwood							
6	LF	2	FP	0	0	0	100	Conifer							
								Hardwood							
6	LF	3	HS	20	60	80	15	Conifer							
								Hardwood							
6	RT	1	FP	0	0	0	100	Conifer							
								Hardwood							
6	RT	3	FP	0	0	0	100	Conifer							
								Hardwood	4						
6	RT	2	FP	0	0	0	100	Conifer							
								Hardwood							
10	RT	1	FP	0	0	0	100	Conifer							
								Hardwood							
10	LF	1	FP	0	0	0	100	Conifer							0393303 / 4792395
								Hardwood							
10	RT	2	FP	0	0	0	100	Conifer							
								Hardwood							
10	RT	3	HS	20	80	75	20	Conifer	1		1				
								Hardwood	2						
10	LF	2	FP	0	0	0	100	Conifer							
								Hardwood							
10	LF	3	HS	20	85	75	20	Conifer	1		1				
								Hardwood	3						

Comment Summary

Restoration Monitoring Sites 2005

MONITORING AREA: **3-MS** SITE ID: **296** TOMS CREEK REFERENCE

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
6	GL	00	151.7			RIPARIAN 1
8	SD	00	163.4	BD	H=0.4M	
9	BP	00	183.6	BV		
10	GL	00	208.9			RIPARIAN 2
13	SD	00	253	BD	H=0.3M	
14	BP	00	259.3	BV		
18	SD	02	310	BD	H=0.15M	
19	BP	02	310	BV		
20	GL	02	310	WL		UNKNOWN SALMONID
22	SD	03	310	BD	H=0.2M	
23	BP	03	310	BV		
24	GL	03	310		FISH	
26	GL	01	359.9		RSN	



Name: CHARLESTON
 Date: 5/2/2006
 Scale: 1 inch equals 2000 feet

Location: 10 393502 E 4792209 N
 Caption: TOMS CREEK RESTORATION SITE - COOS BASIN