

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

STREAM: Trout Creek Lower (L-204)
BASIN: Clackamas River
SURVEY TYPE: Post-Tx
DATE: June 26, 2003
SURVEY CREW: Tory Fitchett, Sarah Beldin
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 5.7 km²
USGS MAPS: Cherryville, Wildcat Mtn.
ECOREGION: Willamette Valley Foothills

GENERAL DESCRIPTION:

The Trout Creek habitat survey extended 528 meters. The channel was constrained by terraces in a broad valley floor. The average valley width index was 4.3 (range: 2.0-8.5). Land use for the reach was timber harvest and second growth (15-30 cm dbh) trees. The average unit gradient was 4.5 percent. Rapids (69%) dominated stream habitat. Cobble (49%) dominated stream substrate. Wood volume was moderate at 23.4 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.

OREGON DEPARTMENT OF FISH AND WILDLIFE

TROUT CREEK LOWER POST-TX (L-204)

HABITAT INVENTORY

Report Date: 12/17/03

Survey Date:

6/26/03

REACH 1		T03S-R05E-S01SE					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
CASCADE/BOULDERS	4	46	3.4	0.20	156	24	0	4	19	50	28	0
POOL-DAMMED	3	23	4.2	0.32	94	9	11	32	36	10	11	0
POOL-LATERAL SCOUR	1	3	2.6	0.40	7	3	0	5	10	55	20	10
POOL-PLUNGE	1	7	3.2	0.60	23	2	0	0	40	40	20	0
POOL-STRAIGHT SCOUR	1	8	5.0	0.80	38	2	0	9	45	27	18	0
PUDDLED UNIT	1	12	7.0	0.30	84	0	11	17	17	56	0	0
RAPID/BOULDERS	21	372	4.0	0.19	1,529	158	0	2	22	56	19	0
RIFFLE	4	61	3.6	0.21	214	24	0	6	27	43	23	0
RIFFLE W/ POCKETS	1	17	3.1	0.30	51	15	0	5	10	55	30	0
STEP/BOULDERS	1	2	3.7	0.15	7	3	0	0	15	50	35	0
STEP/LOG	1	4	3.8	0.15	13	8	0	0	0	60	40	0
Total:	39	553	3.9	0.24	2,217	248	Avg 1	6	23	49	21	0

HABITAT SUMMARY									
Habitat Group	Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Wetted Area		Large Boulders		25
					(m ²)	Percent	Number	(# / 100m ²)	
Dammed & BW Pools	3	23	4.2	0.32	94	4.25%	9	9.6	
Scour Pools	3	18	3.6	0.60	69	3.10%	7	10.2	
Glides	0	0			0	0.00%	0	0.0	
Riffles	5	78	3.5	0.23	265	11.95%	39	14.7	
Rapids	21	372	4.0	0.19	1,529	68.96%	158	10.3	
Cascades	4	46	3.4	0.20	156	7.02%	24	15.4	
Step/Falls	2	6	3.8	0.15	21	0.93%	11	53.1	
Dry	1	12	7.0	0.30	84	3.79%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY		
	<u>Total</u>	<u># / Km</u>
All Pools:	6	10.9
Pools >=1m deep:	0	0.0
Complex pools (LWD pieces>=3):	0	0.0
Pool frequency (channel widths/pool):	18.4	
Residual pool depth (avg):	0.40	

STREAM SUMMARY

TROUT CREEK LOWER POST-TX (L-204)

Number Units	Total Length (m)	Avg Width (m)	Avg Depth (m)	Total Area (m ²)	Substrate Percent Wetted Area						Large Boulders (>0.5m)
					S/O	Snd	Grvl	Cbl	Bldr	Bdrk	
39	553	3.9	0.24	2,217	1	6	23	49	21	0	248

Habitat Group	Wetted Area	
	(m ²)	Percent
Dammed & BW Pools	94	4.25%
Scour Pools	69	3.10%
Glides	0	0.00%
Riffles	265	11.95%
Rapids	1,529	68.96%
Cascades	156	7.02%
Step/Falls	21	0.93%
Dry	84	3.79%
Culverts	0	0.00%

RIPARIAN ZONE VEGETATION SUMMARY

REACH 1	REACH 1
Summary of Riparian Zone (0-30m) 3 transects	
Total hardwoods/1000	1483
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	61
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	2.0	9.3	0.3	3.3	0.0	3.0	2.3	15.7
15-30cm	1.0	4.7	0.0	1.0	0.0	0.0	1.0	5.7
30-50cm	0.7	1.7	0.3	1.0	0.0	0.0	1.0	2.7
50-90cm	0.7	0.0	0.3	0.3	0.0	0.0	1.0	0.3
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	4.3	15.7	1.0	5.7	0.0	3.0	1.8	8.1

Canopy closure and ground cover

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Canopy closure	60	33	3
Shrub cover	49	25	13
Grass/forb cover	28	28	20

Predominant landform in each zone

	Zone 1 0-10 meters	Zone 2 10 - 20 meters	Zone 3 20 - 30 meters
	(%)	(%)	(%)
Hillslope	50	83	100
High terrace	33	17	0
Low terrace	17	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 (%)	5	14	12

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	1483
Total conifers/1000 ft	325
Total conifers >20" dbh/1000 ft	61
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	2.3	15.7
15-30cm	1.0	5.7
30-50cm	1.0	2.7
50-90cm	1.0	0.3
>90cm	0.0	0.0

RIPARIAN ZONE VEGETATION

Reach 1

Reach 1

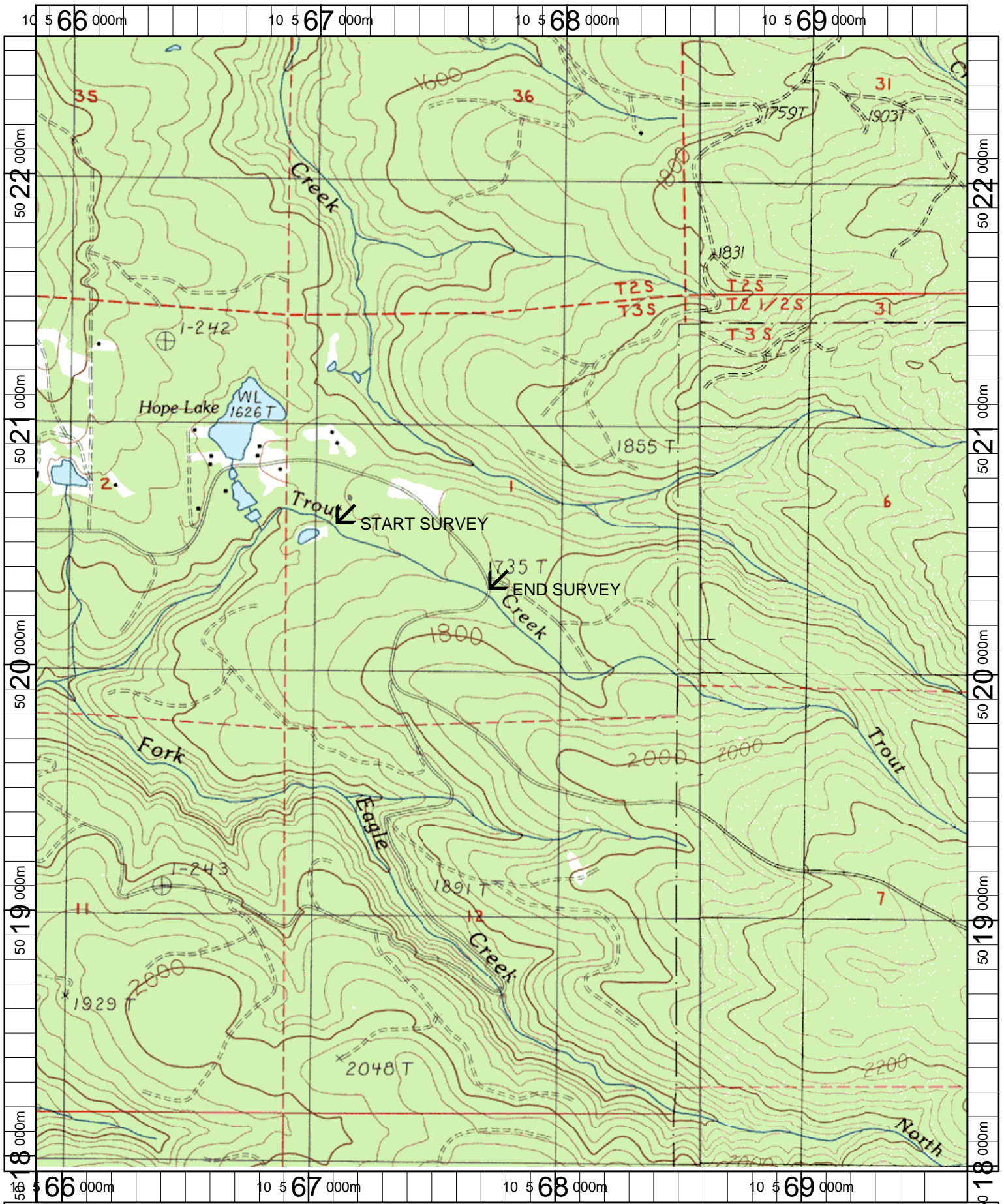
Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
8	LF	1	LT	-2	80	75	25	Conifer		1					
								Hardwood	1	2	3				
8	RT	3	HS	13	0	40	30	Conifer							
								Hardwood	4						
8	RT	2	HT	3	90	20	40	Conifer				1		90+ CEDAR STUMP	
								Hardwood			1	1			
8	RT	1	HT	3	95	40	40	Conifer	1						
								Hardwood	22	4	1				
8	LF	2	HS	13	20	25	40	Conifer				1		CLEARCUT, REPLANTED	
								Hardwood		1	2				
8	LF	3	HS	8	0	5	5	Conifer						YEARLINGS	
								Hardwood							
17	LF	3	HS	12	15	15	70	Conifer						IN CLEAR CUT	
								Hardwood	2						
17	LF	1	HS	15	80	40		Conifer	2	2	1			PART FP	
								Hardwood	1	3	1				
17	LF	2	HS	20	60	45	45	Conifer	1						
								Hardwood	6	1					
17	RT	1	HS	8	15	30	30	Conifer						HUGE DOWNED CEDAR	
								Hardwood		3					
17	RT	3	HS	9	2	5	7	Conifer							
								Hardwood	3						
17	RT	2	HS	12	20	35	20	Conifer			1				
								Hardwood	4						
28	RT	1	HT	-5	60	30	25	Conifer	1		1	2			
								Hardwood	4						
28	LF	1	HS	10	30	80	20	Conifer	2						
								Hardwood		2					
28	LF	3	HS	14	0	5	5	Conifer							
								Hardwood							
28	RT	2	HS	15	10	20	20	Conifer							
								Hardwood							
28	RT	3	HS	15	0	5	5	Conifer							
								Hardwood							
28	LF	2	HS	22	0	5	5	Conifer							
								Hardwood							

Comment Summary

Oregon Plan Monitoring Sites 2003

MONITORING AREA: 7-L SITE ID: 204 TROUT CREEK LOWER POST-TX (L-

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	LP	00	2.8	SS	T=11.5 DEG C @11:30	START
2	RB	00	20	SS		
4	RB	00	61.3	BC, OLD	OLD BC	
5	RB	00	87.5	SS	/CC/ BEGINS (~15M RIP)	
7	PP	00	114.4		SPARSE TREES NEAR CR	
8	CB	00	133.9	SS	RIP#1	
9	CB	00	142.4	DJ		
10	DP	00	152.4	DJ		
13	RB	00	190.6		LOTS OF SM. WOOD	
16	DP	00	235.2	DJ		
18	RB	01	266.4	DJ		
19	RI	01	285.2	DJ,RF		
20	PD	02	285.2		RECIEVES SUB-SURFACE	
21	RB	00	298.6	DJ		
23	RB	11	312.6	/TJ		
27	RP	00	373.8	DJ		
28	RB	00	394.6		UT	
31	SL	00	420		H=.55M	H=.55M
33	RB	00	442.5	SS/		
35	SB	00	464.3		H=.3M	H=.3M
39	SP	00	527.8		END ON /CONIFER	END



Name: CHERRYVILLE
 Date: 6/11/2003
 Scale: 1 inch equals 1666 feet

Location: 10 567757 E 5020270 N
 Caption: TROUT CREEK LOWER RESTORATION MAP -
 CLACKAMAS BASIN