

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

STREAM: Honeygrove Creek (MC-35)
BASIN: Alsea River
SURVEY TYPE: Post-Tx
DATE: February 16, 2006
SURVEY CREW: Paul Jacobsen, Brian Bangs
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 16.2 km³
USGS MAPS: Alsea
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Honeygrove Creek habitat survey extended 507 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 3.9 (range: 2.3-6.5). Land use for the reach was mature (50-90 cm dbh) and young (3-15 cm dbh) trees. The average unit gradient was 0.5 percent. Scour pools (72%) dominated stream habitat. Gravel (49%) and sand (31%) dominated stream substrate. Wood volume was moderate at 29.5 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.

Stream Honey Grove Creek (MC-35)
 Basin Alsea River
 Treatment Large Wood

	ODFW Benchmark		Pre 1/31/00	Post 2/27/01	Post 2/16/06		
Habitat Variable	Desirable	Undesirable					
% Pool Area	>35%	<10%	69.6	58.5	79.5		
Number of Pools			25	23	21		
Deep Pools/km (>1.0 m)			17.9	7.6	13.8		
% Off-Channel			19.1	23.0	15.3		
LWD – Pieces/100m	>20	<10	17.7	22.5	32.9		
LWD – Volume/100m	>30	<20	25.8	30.9	29.5		
LWD – Key Pieces/100m	>3	<1	0.9	1.9	1.6		
Large Wood Jams/km			18.3	17.2	15.8		
% Riffle Fines	<10	>20	26	13	39		
% Riffle Gravel	>35	<15	55	85	48		
% Bedrock			0	0	0		

Bold is noticeable change

Comments: Since the treatment was large wood assembled in complex jams, it is no surprise that there was an increase in those variables. What is important is that the large wood is being retained in the treated reach and is accumulating additional wood pieces and key pieces. Deep pools were reduced as were the total number of pools, but pool area has increased. Since the reach was pool-rich and had plenty of riffle gravel prior to treatment, it was unlikely that there would be significant increases in those characteristics.

REACH 1

T14S-R07W-S05NE

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	3.9	VWI Range:	2.3 - 6.5

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	100%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	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 Channel	507	2,924	0
Secondary Channel	44	193	0
Off-Channel Units	102	335	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 2
Width: 5.1	Width: 12.5	31.1 (19 - 51)	35.5 (31 - 40)
Depth: 0.60	Height: 0.7	1.5 (1.4 - 1.6)	1.7 (1.6 - 1.8)

W:D ratio: 17.3
 Stream Flow Type: LF
 Average Unit Gradient: 0.5%
 Water temperature (°C): 4.5 - 4.5

Entrenchment (ACW:FPW ratio): 2.4
 Habitat Units/100m (total channel length): 5.2
 Habitat Units/100m (primary channel length): 6.7

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	MT	YT
Riparian Vegetation:	D30	S

Bank Condition and Shade

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

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	167	32.9
Volume (m ³):	150	29.5
Key pieces (>=12m x 0.60m):	8	1.6

HABITAT INVENTORY

Report Date: 12/6/2006

Survey Date:

2/16/2006

REACH 1		T14S-R07W-S05NE					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
POOL-ALCOVE	1	8	27.0	0.55	203	0	30	70	0	0	0	0
POOL-BACKWATER	2	26	2.0	0.63	55	0	15	50	28	5	3	0
POOL-ISOLATED	1	8	2.1	0.60	17	0	25	45	30	0	0	0
POOL-LATERAL SCOUR	17	435	5.2	0.93	2,470	0	11	34	46	7	1	0
RIFFLE	6	125	3.3	0.18	447	0	6	33	48	13	2	0
STEP/COBBLE	7	52	4.7	0.16	260	0	1	9	74	16	0	0
Total:	34	653	5.1	0.60	3,452	0	Avg: 9	31	49	9	1	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	4	42	8.3	0.60	275	7.96%	0	0.0	
Scour Pools	17	435	5.2	0.93	2,470	71.54%	0	0.0	
Glides	0	0			0	0.00%	0	0.0	
Riffles	6	125	3.3	0.18	447	12.96%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	7	52	4.7	0.16	260	7.54%	0	0.0	
Dry	0	0			0	0.00%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

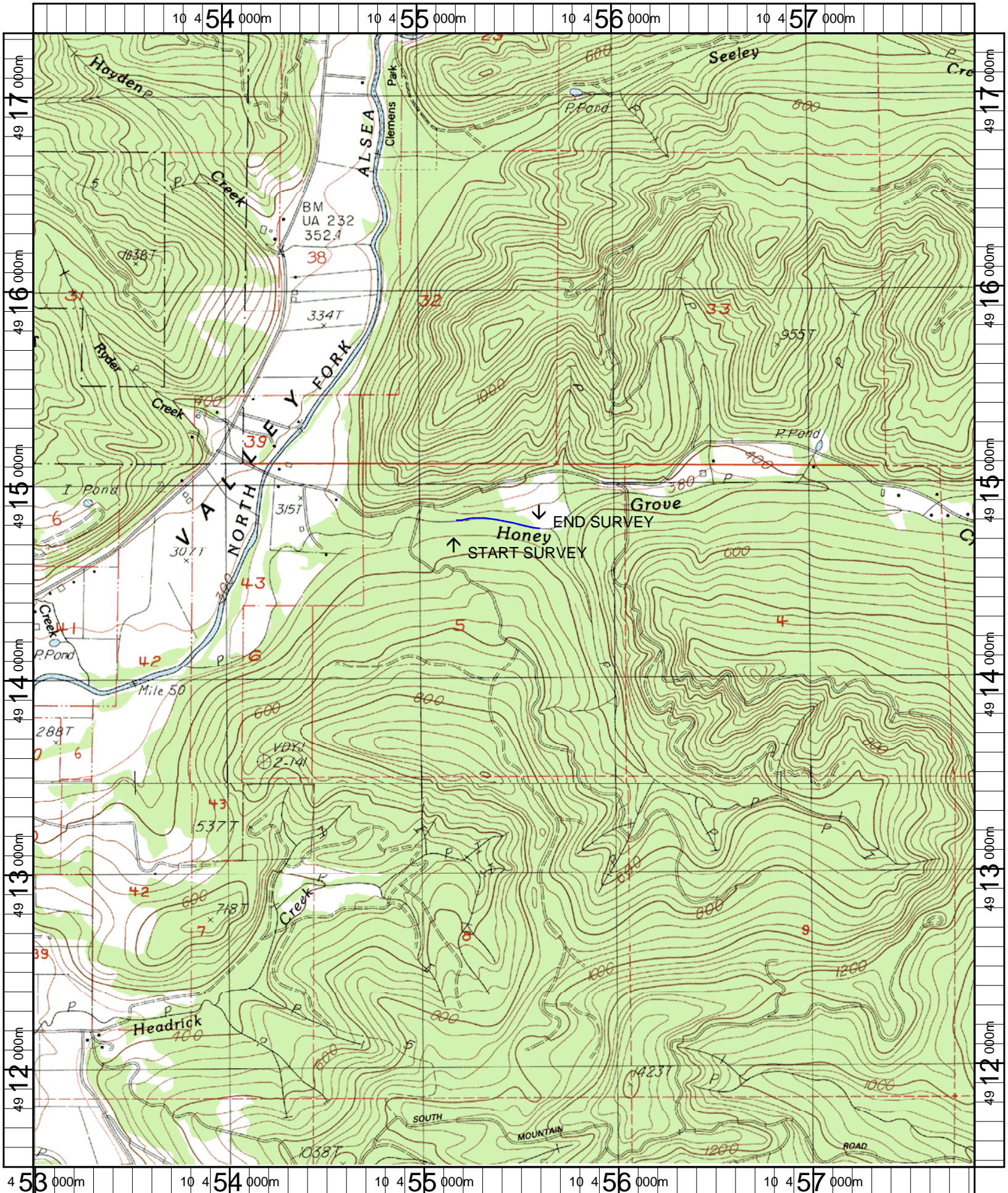
POOL SUMMARY			
	<u>Total</u>	Total of all Channel Lengths	
		<u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	21	32.1	41.4
Pools >=1m deep:	9	13.8	17.7
Complex pools (LWD pieces>=3):	13	19.9	25.6
Pool frequency (channel widths/pool):	2.5		
Residual pool depth (avg):	0.72		

Comment Summary

Restoration Monitoring Sites 2006

MONITORING AREA: **2-MC** SITE ID: **35** HONEYGROVE CREEK POST-TX

UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
2	RI	01	36.5		FISH	
4	LP	00	68.5	HS	SITE 19	
6	LP	01	122.7	HS	BIG LOG JAM, SITE 20	
7	AL	10	122.7		EGG MASSES, 7/97 SURVEY FLAG	
9	RI	00	141.7	SS/		
12	LP	00	216.4	HS, /SSx2	BIG LOG JAM	
14	LP	00	247.4	HSx2, DJ	CABLED ROOT WADS	
18	RI	00	316.2	HS, WL	ONE CABLED LOG, CAT TRACKS	
19	LP	01	336.3	TJ/		
20	LP	11	336.3		LEFT TRIB	
27	LP	00	436.8	HS	CABLED LOGS	
34	LP	00	507.4	HS	END SIGN AT TOP OF 01-02 SPLIT	



Name: ALSEA (OR)
 Date: 2/13/2007
 Scale: 1 inch equals 2000 feet

Location: 10 0455429 E 4914398 N
 Caption: HONEY GROVE CREEK RESTORATION SITE - ALSEA BASIN