

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: July 25, 2006
SURVEY CREW: Trevan Cornwell, Paul Jacobsen
REPORT PREPARED BY: Paul Jacobsen
BASIN AREA: 16.2 km²
USGS MAPS: Alsea
ECOREGION: Coast Range Sedimentary

GENERAL DESCRIPTION:

The Honeygrove Creek habitat survey extended 504 meters. The channel was unconstrained in a broad valley floor. The average valley width index was 5.7 (range: 2.0-10.0). 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 (79%) dominated stream habitat. Gravel (70%) dominated stream substrate. Wood volume was moderate at 27.9 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 Honeygrove Creek (MC-35)
 Basin Alsea River
 Treatment Large Wood

	ODFW Benchmark		Pre 7/10/00	Post 7/11/01	Post 7/25/06		
Habitat Variable	Desirable	Undesirable					
% Pool Area	>35%	<10%	67.6	83.0	84.5		
Number of Pools			23	20	25		
Deep Pools/km (>1.0 m)			4.9	6.4	4.7		
% Off-Channel			23.2	9.5	17.7		
LWD – Pieces/100m	>20	<10	21.3	22.1	30.7		
LWD – Volume/100m	>30	<20	11.1	19.8	27.9		
LWD – Key Pieces/100m	>3	<1	0.5	1.0	1.2		
Large Wood Jams/km			16.1	14.0	13.9		
% Riffle Fines	<10	>20	13	22	15		
% Riffle Gravel	>35	<15	62	76	82		
% 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. It appears that additional large wood is also being recruited into the reach over time. Pool area appears to have increased while the number of pools has remained somewhat constant. Deep pools increased right after treatment but appear to have lowered since then, but that may be a symptom of stream flows rather than an actual change. Gravel numbers appear to be trending upward.

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	5.7	VWI Range:	2 - 10

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	504	2,138	0
Secondary Channel	95	328	3
Off-Channel Units	42	133	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 5	<u>First Terrace</u> n = 4
Width: 3.4	Width: 9.1	23.3 (13.6 - 37)	28.0 (15.8 - 43.2)
Depth: 0.45	Height: 0.6	1.2 (1.1 - 1.3)	1.3 (1.3 - 1.4)

W:D ratio: 15.3
 Stream Flow Type: LF
 Average Unit Gradient: 0.5%
 Water temperature (°C): -

Entrenchment (ACW:FPW ratio): 2.7
 Habitat Units/100m (total channel length): 6.7
 Habitat Units/100m (primary channel length): 8.5

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:	5%	Reach avg: 92%
Undercut Banks:	13%	Range: 72 - 100

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	155	30.7
Volume (m ³):	140	27.9
Key pieces (>=12m x 0.60m):	6	1.2

HABITAT INVENTORY

Report Date: 3/5/2007

Survey Date:

7/25/2006

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
DRY UNIT	2	22	3.5	0.00	73	0	4	5	88	4	0	0
GLIDE	1	15	2.2	0.25	33	0	10	15	30	30	15	0
POOL-BACKWATER	1	12	2.2	0.60	26	0	15	60	25	0	0	0
POOL-ISOLATED	2	31	2.7	0.35	107	0	35	33	33	0	0	0
POOL-LATERAL SCOUR	22	459	4.2	0.77	2,063	1	10	20	63	6	0	0
PUDDLED UNIT	1	12	9.0	0.10	111	0	5	10	76	10	0	0
RIFFLE	2	27	1.8	0.10	48	0	3	12	82	2	0	0
STEP/COBBLE	12	64	2.1	0.05	138	0	1	6	89	4	0	0
Total:	43	642	3.4	0.45	2,599	1	Avg: 8	16	70	5	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	3	42	2.5	0.43	133	5.11%	0	0.0	
Scour Pools	22	459	4.2	0.77	2,063	79.38%	1	0.0	
Glides	1	15	2.2	0.25	33	1.27%	0	0.0	
Riffles	2	27	1.8	0.10	48	1.85%	0	0.0	
Rapids	0	0			0	0.00%	0	0.0	
Cascades	0	0			0	0.00%	0	0.0	
Step/Falls	12	64	2.1	0.05	138	5.32%	0	0.0	
Dry	3	34	5.3	0.03	184	7.07%	0	0.0	
Culverts	0	0			0	0.00%	0	0.0	

POOL SUMMARY			
	Total of all Channel Lengths		Primary Channel Length
	<u>Total</u>	<u># / Km</u>	<u># / Km</u>
All Pools:	25	39.0	49.6
Pools >=1m deep:	3	4.7	5.9
Complex pools (LWD pieces>=3):	13	20.3	25.8
Pool frequency (channel widths/pool):	2.8		
Residual pool depth (avg):	0.70		

Survey Date 7/25/2006
Report Date: 3/5/2007

**RIPARIAN ZONE
VEGETATION SUMMARY**

REACH 1

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

Total hardwoods/1000	914
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	41
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	3.0	0.0	4.7	0.0	9.0
15-30cm	0.0	0.7	0.0	0.0	0.3	1.3	0.3	2.0
30-50cm	0.0	1.0	0.7	0.3	0.3	1.7	1.0	3.0
50-90cm	0.3	0.3	0.0	0.0	0.3	0.7	0.7	1.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.3	3.3	0.7	3.3	1.0	8.3	0.7	5.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	84		83		89	
Shrub cover	9		18		22	
Grass/forb cover	82		82		78	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	17		33		50	
High terrace	33		33		33	
Low terrace	33		33		17	
Floodplain	17		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	13		15		17	

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	914
Total conifers/1000 ft	122
Total conifers >20" dbh/1000 ft	41
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	0.0	9.0
15-30cm	0.3	2.0
30-50cm	1.0	3.0
50-90cm	0.7	1.0
>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	
16	LF	1	HS	70	90	10	80	Conifer				1		DOUGLAS FIR
								Hardwood	2					
16	LF	2	HS	20	80	10	90	Conifer						
								Hardwood	2					
16	LF	3	HS	10	95	10	90	Conifer				1		DOUGLAS FIR
								Hardwood	5					
16	RT	1	LT	0	60	5	90	Conifer						NO TREES
								Hardwood						
16	RT	2	LT	0	85	0	100	Conifer						NETTLES
								Hardwood						
16	RT	3	LT	0	90	5	95	Conifer						ALDER
								Hardwood			1	2		
25	RT	1	HT	0	90	30	70	Conifer						NO TREES
								Hardwood						
25	RT	2	HS	65	90	90	10	Conifer			2			
								Hardwood	3					
25	LF	3	HS	70	85	5	95	Conifer						
								Hardwood	3	2				
25	LF	2	LT	0	60	0	100	Conifer						NO TREES
								Hardwood						
25	LF	1	LT	0	80	0	60	Conifer						ALDER
								Hardwood	2	1		1		
25	RT	3	HS	20	90	90	10	Conifer		1	1			DOUGLAS FIR
								Hardwood	6					
32	LF	1	HT	0	90	0	100	Conifer						ALDER
								Hardwood		1	3			
32	RT	3	HT	2	85	15	85	Conifer						
								Hardwood			1			
32	RT	2	HT	3	95	5	95	Conifer						
								Hardwood	4		1			
32	RT	1	FP	5	95	10	90	Conifer						NO TREES
								Hardwood						
32	LF	2	HT	0	90	5	95	Conifer						NO TREES
								Hardwood						
32	LF	3	HT	0	90	5	95	Conifer						ALDER
								Hardwood		2	3			

Comment Summary

Restoration Monitoring Sites 2006

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

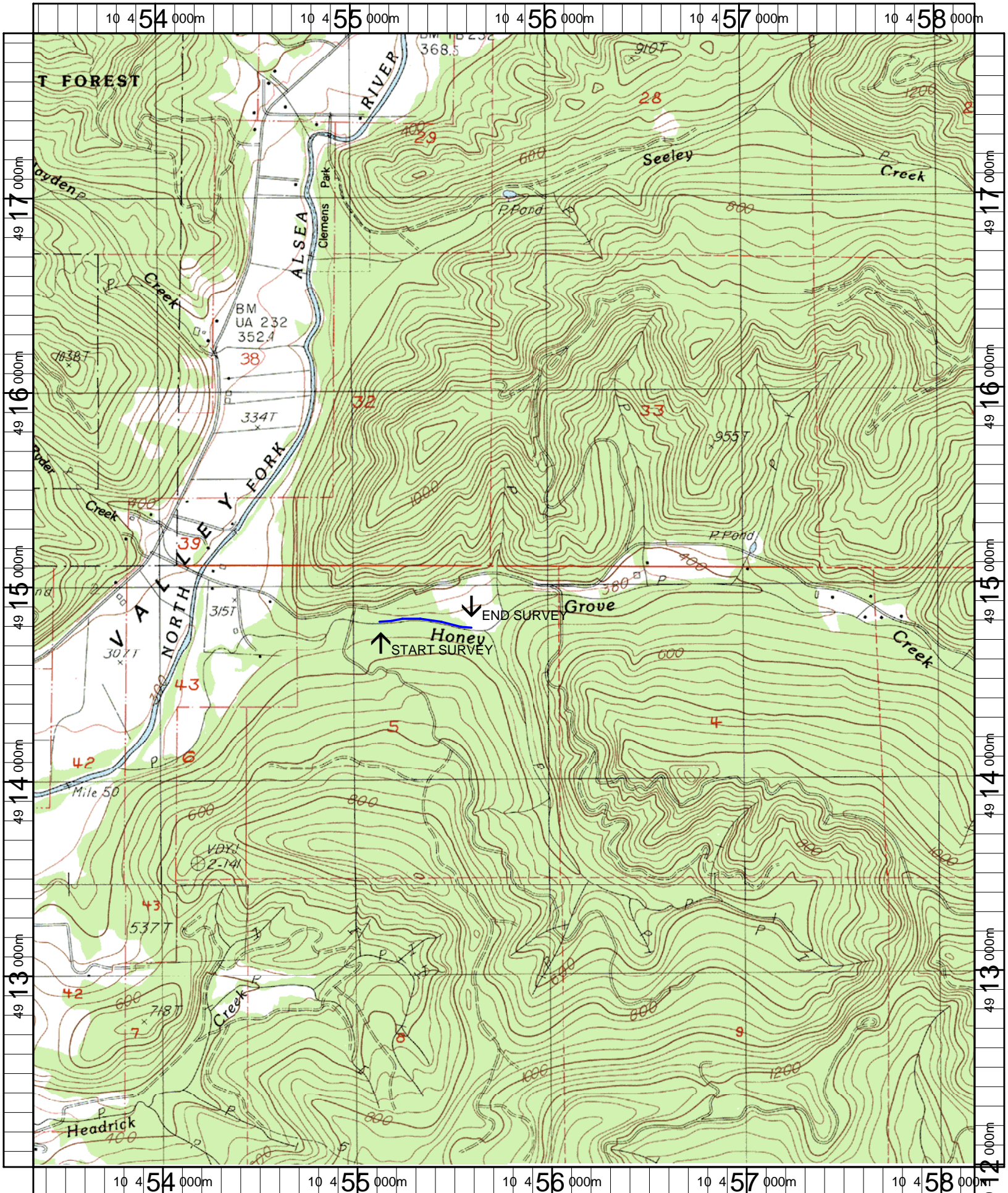
UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTE ESTIMATOR	NOTE NUMERATOR
1	SC	00	2		CH-MV,MT,D30,S	
4	LP	01	52.1	HS, DJ	HS	
5	LP	02	52.1			SMALL SALMONIDS
6	PD	02	52.1		WINTER WREN	
9	BW	10	66.3			SMALL SALMONIDS
10	RI	00	81.7		HS	
11	LP	01	118.7	HS	HS, SITE 20	SITE 20
12	IP	10	118.7	/SS	RSN - LOTS!	RSN
14	SC	01	139.7	SS/	WINTER WREN	
16	LP	00	164.1		US-MT,LT,YT,D30,G	
18	LP	00	215.7	WL, HS	RLF, HS	RED-LEGGED FROG
20	LP	01	231.3		PACIFIC SLOPE FLYCATCHER	
23	LP	00	245.7	HS	HS	
24	LP	00	259.3	HS	RSN, HS	
25	SC	00	268.5		USMT,CT,YT,D30,G	
26	LP	00	283.6		RSN, FRY	RSN, CRAWFISH, SALMON
27	SC	00	287.9		CF	
28	LP	00	317.9		HS	
31	LP	00	385.9		CTMT,LT,YT,D30,S	
32	LP	00	419.4		SONG SPARROW	
33	LP	01	437.4	HS	CHICKADEE, HS	

Comment Summary

Restoration Monitoring Sites 2006

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

<u>UNIT#</u>	<u>TYPE</u>	<u>CHAN</u>	<u>DIST. (m)</u>	<u>COMMENTS</u>	<u>NOTE ESTIMATOR</u>	<u>NOTE NUMERATOR</u>
34	SC	01	442.7		WESTERN TANAGER	
35	LP	01	452.1		MOSQUITOS, FLIES, NO-SEE	
36	LP	01	462.2		RSN	
39	LP	01	504.3	HS	HS, CTMT, STYT, D30,G	END MAINSTEM SURVEY
41	LP	02	504.3	HS		RSN, SALMONID FRY



Name: ALSEA
 Date: 5/22/2006
 Scale: 1 inch equals 2000 feet

Location: 10 455771 E 4914918 N
 Caption: HONEY GROVE CREEK RESTORATION SITE - ALSEA BASIN