

**ODFW AQUATIC INVENTORY PROJECT
RESTORATION MONITORING
STREAM HABITAT REPORT**

STREAM: GALES CREEK
 GCG: 8-W
 SITE ID: 424
 BASIN: TUALATIN
 TREATMENT DATE: 2010
 SURVEY DATE: 3/22/2010
 SURVEY CREW: Andrew Walch / Josh Williams
 USGS MAPS: TIMBER
 ECOREGION: Prairie Terraces
 REPORT PREPARED BY: Sharon Tippery / Charles Stein

REACH: 1 LOCATION: T02N-R05W-S20NE

SURVEY DESCRIPTION:

Channel morphology: Constrained by high terraces
 Dominant landuse(s): Large timber (30-50 cm dbh)
 Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh
 Primary channel length (meters) and area (m²): 1,612 : 16,250
 Secondary channel length (meters) and area (m²) 65 : 167
 VWI average: 5.8 VWI Range: 4 - 12 Average Gradient: 2.0%
 Pieces LWD per 100m: 7.4 Wood Volume (m³) per 100m: 6.0
 Percent pools: 17% Complex pools (LWD pieces>=3): 2 Pools >=1m deep:6
 Percent substrate (avg):

	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	0	12	34	29	13	12
Pool units	1	15	47	24	6	9
Fast water units	0	11	30	30	15	13

SURVEY COMMENTS:

This is a pre-treatment restoration survey. There were no potential barriers to upstream fish migration in the surveyed length. Coho fry, beaver chewed sticks, and redds were observed during the survey.

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 ECOREGION: Prairie Terraces
 REPORT PREPARED BY: Sharon Tippery / Charles Stein

REACH: 2 LOCATION: T02N-R05W-S20NW

SURVEY DESCRIPTION:

Channel morphology: Constrained alternately by high terraces and hillslopes

Dominant landuse(s): Large timber (30-50 cm dbh)

Dominant riparian vegetation: Deciduous trees: size class 30-50cm dbh

Primary channel length (meters) and area (m²): 2,133 : 20,410

Secondary channel length (meters) and area (m²): 446 : 1,665

VWI average: 10.3 VWI Range: 9 - 13 Average Gradient: 2.3%

Pieces LWD per 100m: 17.9 Wood Volume (m³) per 100m: 24.2

Percent pools: 10% Complex pools (LWD pieces>=3): 4 Pools >=1m deep:8

<u>Percent substrate (avg):</u>	<u>Silt / organics</u>	<u>Sand</u>	<u>Gravel</u>	<u>Cobble</u>	<u>Boulder</u>	<u>Bedrock</u>
All units	3	12	48	21	9	8
Pool units	3	18	50	15	4	11
Fast water units	1	11	47	24	11	6

SURVEY COMMENTS:

This is a pre-treatment restoration survey. There were no potential barriers to upstream fish migration in the surveyed length. Beaver chewed sticks, steelhead, and redds were observed during the survey.

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NE

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	100%
Moderate V-shape	0%	Multiple Terraces	0%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	5.8	VWI Range:	4 - 12

Channel Morphology (Percent Reach Length)

<u>Constrained</u>		<u>Unconstrained</u>	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	100%	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	1,612	16,250	0
Secondary	65	167	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 6	<u>First Terrace</u> n = 6
Width: 8.5	Width: 13.0	22.4 (14 - 30)	27.3 (18.2 - 32.8)
Depth: 0.64	Height: 0.7	1.4 (1.1 - 1.6)	3.8 (2.7 - 5.5)

W:D ratio: 19.4

Stream Flow Type: MF

Average Unit Gradient: 2.0%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.7

Habitat Units/100m (total channel length): 2.4

Habitat Units/100m (primary channel length): 2.5

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	
Riparian Vegetation:	D30	C30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	7%	Reach avg: 83%
Undercut Banks:	1%	Range: 58 - 89

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	120	7.4
Volume (m ³):	97	6.0
Key pieces (>=12m x 0.60m):	0	0.0

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NW

REACH 2

Valley and Channel Summary

Valley Characteristics (Percent Reach Length)

Narrow Valley Floor		Broad Valley Floor	
Steep V-shape	0%	Constraining Terraces	0%
Moderate V-shape	0%	Multiple Terraces	100%
Open V-shape	0%	Wide Floodplain	0%
Valley Width Index	10.3	VWI Range:	9 - 13

Channel Morphology (Percent Reach Length)

Constrained		Unconstrained	
Hillslope	0%	Single Channel	0%
Bedrock	0%	Multiple Channel	0%
Terrace	0%	Braided Channel	0%
Alt. Terrace/Hill	100%		
Landuse	0%		

Channel Characteristics

Type	Length (m)	Area (m ²)	Dry Units
Primary	2,133	20,410	0
Secondary	446	1,665	0

Channel Dimensions (m)

<u>Wetted</u>	<u>Active</u>	<u>Floodprone</u> n = 8	<u>First Terrace</u> n = 8
Width: 7.3	Width: 12.2	20.1 (13 - 51.5)	23.5 (14.3 - 54.4)
Depth: 0.45	Height: 0.6	1.1 (1 - 1.3)	1.8 (1.3 - 3.2)

W:D ratio: 21.6

Stream Flow Type: MF

Average Unit Gradient: 2.3%

Water temperature (°C): 7.0 - 7.0

Entrenchment (ACW:FPW ratio): 1.7

Habitat Units/100m (total channel length): 2.4

Habitat Units/100m (primary channel length): 2.9

Riparian, Bank, and Wood Summary

	<u>Primary</u>	<u>Secondary</u>
Land Use:	LT	
Riparian Vegetation:	D30	C30

Bank Condition and Shade

<u>Bank Status</u>	<u>Percent Reach Length</u>	<u>Shade (% of 180)</u>
Actively Eroding:	10%	Reach avg: 73%
Undercut Banks:	3%	Range: 44 - 92

Large Wood Debris

	<u>Total</u>	<u>Total / 100m primary channel</u>
All pieces (>=3m x 0.15m):	381	17.9
Volume (m ³):	517	24.2
Key pieces (>=12m x 0.60m):	4	0.2

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

GALES CREEK
GCG: 8-W SITE ID: 424

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NE

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/BEDROCK	3	75	5.1	0.42	536	14	0	5	7	8	7	74
CASCADE/BOULDERS	3	27	1.6	0.13	58	20	0	10	27	43	20	0
POOL-LATERAL SCOUR	3	104	9.2	1.23	955	5	0	14	49	21	5	11
POOL-STRAIGHT SCOUR	5	183	10.2	1.55	1,917	11	1	15	46	25	6	7
RAPID/BEDROCK	1	24	8.5	0.35	202	5	0	0	5	10	14	71
RAPID/BOULDERS	7	200	9.2	0.52	1,894	97	0	9	26	27	28	10
RIFFLE	13	652	8.8	0.45	6,339	121	0	13	38	35	12	2
RIFFLE W/ POCKETS	5	413	10.7	0.53	4,517	42	0	16	37	32	10	4
Total:	40	1,678	8.5	0.64	16,417	315	Avg: 0	12	34	29	13	12

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	0	0			0	0.00%	0	0.0
Scour Pools	8	287	9.9	1.43	2,872	17.49%	16	0.6
Glides	0	0			0	0.00%	0	0.0
Riffles	18	1,064	9.3	0.47	10,855	66.12%	163	1.5
Rapids	8	224	9.1	0.50	2,097	12.77%	102	4.9
Cascades	6	102	3.4	0.28	593	3.61%	34	5.7
Step/Falls	0	0			0	0.00%	0	0.0
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NW

REACH 2

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/BEDROCK	1	24	7.3	0.50	177	3	0	5	10	10	10	67
CASCADE/BOULDERS	3	20	0.6	0.13	13	14	0	5	22	32	34	7
GLIDE	1	13	8.3	0.40	106	0	0	11	47	32	11	0
POOL-ISOLATED	1	4	2.8	0.35	12	0	100	0	0	0	0	0
POOL-LATERAL SCOUR	8	152	7.8	0.92	1,196	8	5	21	55	14	2	3
POOL-STRAIGHT SCOUR	6	106	8.4	1.07	901	6	0	14	45	15	6	21
RAPID/BOULDERS	5	188	8.9	0.45	1,828	75	0	8	24	32	23	12
RIFFLE	17	907	8.1	0.30	8,588	140	0	12	51	24	7	5
RIFFLE W/ POCKETS	16	1,159	6.5	0.30	9,204	198	2	12	56	21	7	2
STEP/BEDROCK	1	1	0.4	0.05	0	0	0	0	0	0	0	100
STEP/LOG	3	4	11.3	0.17	47	4	0	8	77	15	0	0
Total:	62	2,578	7.3	0.45	22,075	448	Avg: 3	12	48	21	9	8

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	1	4	2.8	0.35	12	0.06%	0	0.0
Scour Pools	14	258	8.0	0.98	2,098	9.50%	14	0.7
Glides	1	13	8.3	0.40	106	0.48%	0	0.0
Riffles	33	2,066	7.4	0.30	17,793	80.60%	338	1.9
Rapids	5	188	8.9	0.45	1,828	8.28%	75	4.1
Cascades	4	44	2.3	0.23	190	0.86%	17	8.9
Step/Falls	4	5	8.6	0.14	48	0.22%	4	8.4
Dry	0	0			0	0.00%	0	0.0
Culverts	0	0			0	0.00%	0	0.0

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

GCG: 8-W GALES CREEK
SITE ID: 424

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NE

REACH 1

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	8	4.8	5.0
Pools >=1m deep:	6	3.6	3.7
Complex pools (LWD pieces>=3):	2	1.2	1.2
Pool frequency (channel widths/pool):	16.1		
Residual pool depth (avg):	1.08		

Survey Date: 3/22/2010

Report Date: 5/13/2010

T02N-R05W-S20NW

REACH 2

POOL SUMMARY

	<u>Total</u>	Total of all Channel Lengths <u># / Km</u>	Primary Channel Length <u># / Km</u>
All Pools:	15	5.8	7.0
Pools >=1m deep:	8	3.1	3.8
Complex pools (LWD pieces>=3):	4	1.6	1.9
Pool frequency (channel widths/pool):	14.1		
Residual pool depth (avg):	0.61		

Survey Date 3/22/2010

RIPARIAN ZONE
VEGETATION SUMMARY

REACH 1

Report Date: 5/13/2010

Summary of Riparian Zone (0-30m) 5 transects

Total hardwoods/1000	549
Total conifers/1000 ft	146
Total conifers >20" dbh/1000 f	49
Total conifers >35" dbh/1000 f	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	0.4	0.0	0.6	0.0	0.4	0.0	1.4
15-30cm	0.4	0.8	0.0	1.2	0.0	0.2	0.4	2.2
30-50cm	0.0	3.6	0.2	1.0	1.0	0.8	1.2	5.4
50-90cm	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.0
>90cm	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total/100m2	0.4	4.8	0.2	2.8	1.8	1.4	0.8	3.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	89		94		97	
Shrub cover	18		18		21	
Grass/forb cover	63		70		70	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	10		40		40	
High terrace	80		60		50	
Low terrace	0		0		0	
Floodplain	10		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		10	
Riprap	0		0		0	
Surface slope (%)	6		7		9	

Survey Date 3/22/2010

**RIPARIAN ZONE
VEGETATION SUMMARY**

Report Date: 5/13/2010

REACH 2

Summary of Riparian Zone (0-30m) 7 transects

Total hardwoods/1000	540
Total conifers/1000 ft	105
Total conifers >20" dbh/1000 f	44
Total conifers >35" dbh/1000 f	9

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	0.6	0.0	0.7	0.0	0.4	0.0	1.7
15-30cm	0.0	0.4	0.1	0.9	0.0	0.6	0.1	1.9
30-50cm	0.1	3.0	0.4	0.9	0.3	0.7	0.9	4.6
50-90cm	0.0	0.6	0.3	0.0	0.3	0.0	0.6	0.6
>90cm	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1
Total/100m2	0.1	4.6	0.9	2.6	0.7	1.7	0.6	3.0

Canopy closure and ground cover

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Canopy closure	94		97		99	
Shrub cover	16		21		26	
Grass/forb cover	66		69		68	

Predominant landform in each zone

	Zone 1 0-10 meters		Zone 2 10 - 20 meters		Zone 3 20 - 30 meters	
	(%)		(%)		(%)	
Hillslope	21		36		43	
High terrace	64		57		50	
Low terrace	7		7		7	
Floodplain	7		0		0	
Wetland/meadow	0		0		0	
Stream channel	0		0		0	
Roadbed/Railroad	0		0		0	
Riprap	0		0		0	
Surface slope (%)	11		14		16	

Summary of Riparian Zone (0-30m) for all reaches**12 transects****Summary of riparian zone (0-100 feet) extrapolated to 1,000 feet along stream**

Total hardwoods/1000	932
Total conifers/1000 ft	209
Total conifers >20" dbh/1000 f	78
Total conifers >35" dbh/1000 f	9

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	2.7
15-30cm	0.4	3.4
30-50cm	1.7	8.4
50-90cm	1.1	0.6
>90cm	0.1	0.1

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		
3	LT	1	HS	45	90	35	15	Conifer							50%GROUND
								Hardwood							
3	LT	2	HS	30	90	5	5	Conifer							HIGHWAY ROAD
								Hardwood							
3	LT	3	HS	30	90	20	60	Conifer							20%GROUND
								Hardwood	2						
3	RT	1	HT	2	100	5	45	Conifer							50%GROUND
								Hardwood	1	2	2				
3	RT	2	HT	2	100	30	70	Conifer							
								Hardwood	1						
3	RT	3	HT	2	100	30	70	Conifer					1		
								Hardwood		1					
9	LT	1	HT	2	100	20	80	Conifer		2					RB
								Hardwood							
9	LT	2	HT	2	100	10	90	Conifer							
								Hardwood			2				
9	LT	3	HS	15	100	10	90	Conifer					1		
								Hardwood			1				
9	RT	1	HT	2	65	15	85	Conifer							
								Hardwood			2				
9	RT	2	HS	2	75	15	85	Conifer							
								Hardwood		1	1				
9	RT	3	HS	20	90	65	35	Conifer							
								Hardwood							
16	LT	1	HT	2	100	10	90	Conifer							
								Hardwood		1	3				
16	LT	2	HT	2	100	15	85	Conifer							
								Hardwood		2	2				
16	LT	3	RB	0	95	5	20	Conifer							75%RB
								Hardwood							
16	RT	1	HT	2	100	20	80	Conifer							
								Hardwood		1	1				
16	RT	2	HS	2	100	10	90	Conifer					1		
								Hardwood							
16	RT	3	HT	2	100	10	90	Conifer					2		
								Hardwood							
28	LT	1	HT	2	100	10	90	Conifer							
								Hardwood				2			
28	LT	2	HT	2	100	30	70	Conifer							
								Hardwood		3					

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		
28	LT	3	HT	2	100	20	80	Conifer							
								Hardwood			1				
28	RT	1	HT	2	100	15	85	Conifer							
								Hardwood	1		5				
28	RT	2	HT	2	100	20	80	Conifer							
								Hardwood	1						
28	RT	3	HT	2	100	10	90	Conifer				2			
								Hardwood							
37	LT	1	FP	0	45	10	0	Conifer							
								Hardwood							
37	LT	2	HS	20	70	25	45	Conifer							30%GROUND
								Hardwood	1						
37	LT	3	HS	15	90	10	90	Conifer				2			
								Hardwood							
37	RT	1	HT	1	85	40	60	Conifer							
								Hardwood			3				
37	RT	2	HT	1	100	20	80	Conifer							
								Hardwood							
37	RT	3	HT	2	100	25	75	Conifer				1			
								Hardwood				2			

RIPARIAN ZONE VEGETATION

Reach 2

Reach 2

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
44	LT	1	FP	3	100	15	25	Conifer							
								Hardwood		1	1				
44	LT	2	HS	45	100	20	80	Conifer							
								Hardwood		3					
44	LT	3	HS	45	100	15	85	Conifer							
								Hardwood				1			
44	RT	1	HT	2	100	10	90	Conifer							
								Hardwood	1			2			
44	RT	2	HT	2	100	5	95	Conifer						1	
								Hardwood							
44	RT	3	HT	2	100	10	90	Conifer						2	
								Hardwood							
52	LT	1	HS	60	100	5	95	Conifer							
								Hardwood		1					
52	LT	2	HS	55	100	5	95	Conifer							
								Hardwood		1					
52	LT	3	HS	50	100	15	85	Conifer							
								Hardwood	1						
52	RT	1	HT	0	100	5	95	Conifer							
								Hardwood						2	
52	RT	2	HT	2	100	15	85	Conifer							
								Hardwood	2						
52	RT	3	HT	1	100	10	90	Conifer					1		
								Hardwood							
55	LT	1	HS	55	75	10	90	Conifer							
								Hardwood						1	
55	LT	2	HS	50	90	10	90	Conifer						1	
								Hardwood				1			
55	LT	3	HS	35	100	15	85	Conifer							
								Hardwood							
55	RT	1	HT	2	65	15	85	Conifer							
								Hardwood	2	1					
55	RT	2	HT	1	85	45	55	Conifer							
								Hardwood	1	2					
55	RT	3	HT	2	100	60	40	Conifer							
								Hardwood		2	1				
64	LT	1	HT	2	100	20	80	Conifer							
								Hardwood						4	
64	LT	2	HT	2	100	10	90	Conifer							
								Hardwood						5	

RIPARIAN ZONE VEGETATION

Reach 2

Reach 2

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
64	LT	3	HS	15	100	30	70	Conifer							
								Hardwood	1						
64	RT	1	HT	2	100	35	65	Conifer							
								Hardwood			4				
64	RT	2	HT	2	100	45	55	Conifer							
								Hardwood	1						
64	RT	3	HT	2	100	60	40	Conifer							
								Hardwood	1						
71	LT	1	HS	15	100	20	80	Conifer							
								Hardwood							
71	LT	2	HS	15	100	20	80	Conifer							
								Hardwood						1	
71	LT	3	HS	25	100	15	85	Conifer							
								Hardwood		1					
71	RT	1	HT	2	100	10	90	Conifer							
								Hardwood	1		6				
71	RT	2	HT	2	100	20	80	Conifer			1	1			
								Hardwood							
71	RT	3	HT	2	100	20	80	Conifer							
								Hardwood			2				
82	LT	1	HT	2	100	40	60	Conifer							
								Hardwood			2				
82	LT	2	HS	20	100	20	80	Conifer							
								Hardwood	1						
82	LT	3	HS	35	100	10	90	Conifer							1
								Hardwood							
82	RT	1	HT	2	90	40	60	Conifer							
								Hardwood							
82	RT	2	HT	2	100	40	60	Conifer							
								Hardwood							
82	RT	3	HT	2	100	45	55	Conifer							
								Hardwood		1					
100	LT	1	LT	1	85	0	0	Conifer							100% RIVER ROCK
								Hardwood			2				
100	LT	2	LT	1	80	5	0	Conifer							95% RIVER ROCK
								Hardwood							
100	LT	3	LT	2	85	20	0	Conifer							80% RIVER ROCK
								Hardwood			1				
100	RT	1	HT	2	100	5	15	Conifer				1			80% CAMP GROUND
								Hardwood					1		

RIPARIAN ZONE VEGETATION

Reach 2

Reach 2

Unit	Side	Zone	Surface	Slope	Cover (percent)				Diameter class (cm)					Notes	
					Canopy	Shrub	Grass		3-15	15-30	30-50	50-90	>90		
100	RT	2	HT	0	100	30	20	Conifer				2			50% CAMP GROUBD
100	RT	3	HT	2	100	45	55	Conifer				1			
								Hardwood							
								Hardwood							

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 3/22/2010

COMMENT SUMMARY

MONITORING AREA: 8-W SITE ID: 424 STREAM: GALES CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	1	RP	01	263	/TJ	HWY 6 IS ON LEFT BANK, COHO FRY
1	2	CB	11	263		ACW=0.9M
1	3	RB	00	287	LI/	
1	4	CR	00	332.5	/SS	
1	8	RI	00	504	LI/	
1	9	RI	00	542.4	DJ,LI/	COHO FRY
1	13	RB	00	670.9	/SS	
1	14	RI	01	771.9	CE/,TJ/	
1	15	CB	11	771.9		ACW=3.6M, FROM 1M DIA CC UNDER HWY
1	18	SP	00	898.8		REDD IN TAILOUT
1	19	RB	00	917	BV	CHEW STICKS
1	20	LP	01	946.2	TJ/	REDD IN TAILOUT
1	21	CR	11	946.2		ACW=0.5M
1	23	LP	00	1016.8	SS/	REDD IN TAILOUT
1	24	RR	00	1040.6	/LI	
1	25	RI	00	1085.6	DJ	
1	26	SP	00	1135.8	/SS	
1	28	RB	00	1203.6	/SS	
1	29	RP	00	1237.4	DJ,/SS	
1	32	RI	01	1336.2	BV,TJ/	
1	33	RI	11	1336.2		ACW=0.9M
1	35	RI	01	1499	/TJ,DJ	
1	36	CB	11	1499		ACW=1.4M
1	37	RP	00	1527	SS/	
1	38	RP	00	1592	LI/	

OREGON DEPT OF FISH AND WILDLIFE
HABITAT INVENTORY

OREGON PLAN MONITORING SITE
SURVEY DATE: 3/22/2010

COMMENT SUMMARY

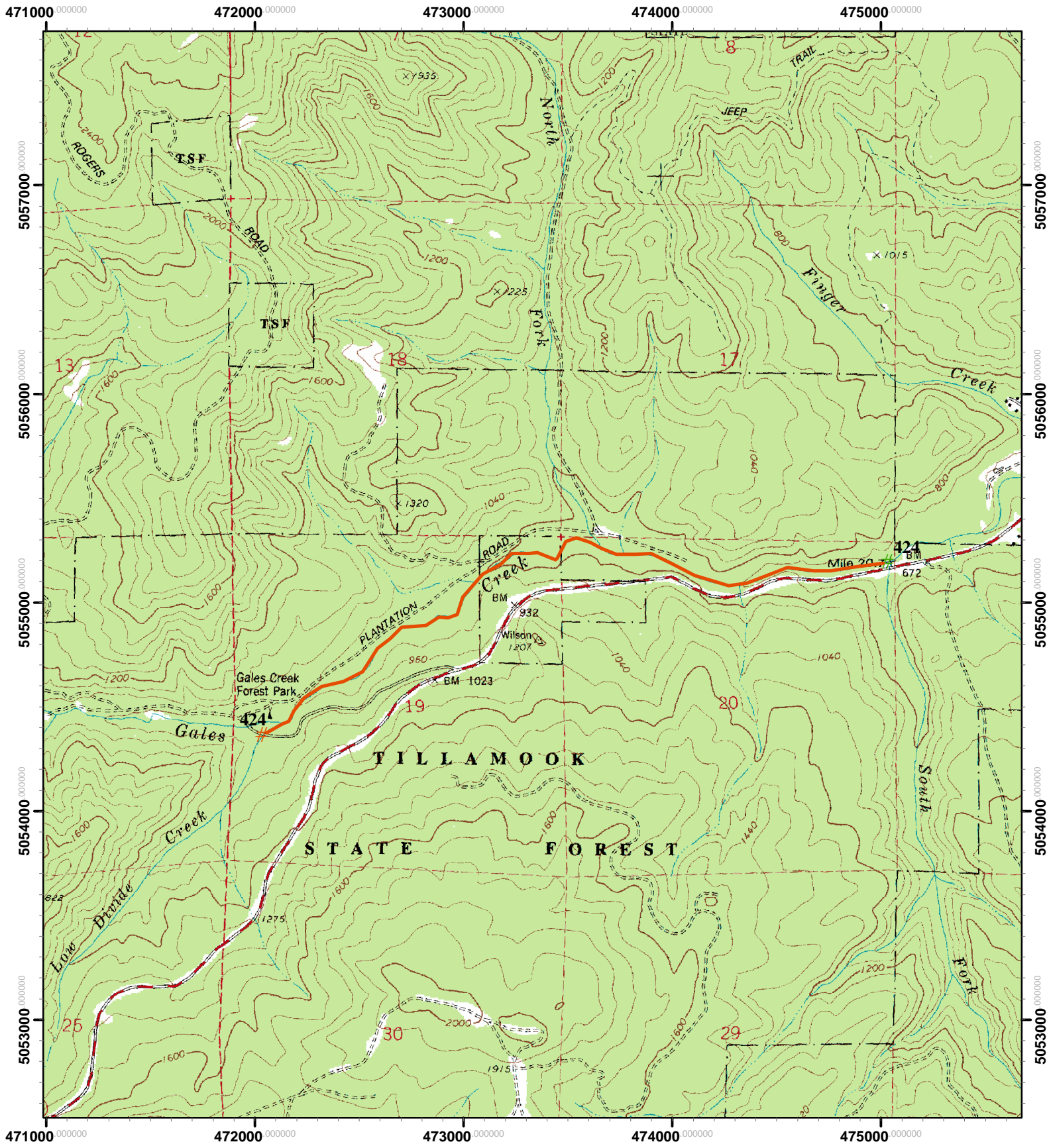
MONITORING AREA: 8-W SITE ID: 424 STREAM: GALES CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
1	39	RI	01	1612.4	/TJ	
1	40	RI	11	1612.4		ACW=5.0M, NORTH FORK GALES CREEK
2	41	RI	00	1663.4		START REACH 2
2	43	RI	00	1756.6	DJX2	
2	44	RI	01	1833.9	TJ,LI/	
2	45	RP	11	1833.9	DJ,LI/	ACW=3.0M
2	50	RP	02	1968.9	BV	CHEW STICKS
2	51	LP	00	1993.6		A STEELHEAD IN TAILOUT, DIGGING TEST REDDS
2	52	RI	00	2151.4	/SS,BV	CHEW STICKS
2	54	RI	00	2273.2	BV	CHEW STICKS, REDD
2	55	LP	00	2296		2 STEELHEAD BUILDING REDD IN TAILOUT
2	56	RB	01	2374.8	DJ,/TJ	
2	57	RI	11	2374.8	DJ	ACW=2.0M, ENTERING CREEK UNDER HUGE LOG JAM
2	59	RB	01	2425.6	TJ/	
2	60	CB	11	2425.6		ACW=1.7M
2	62	LP	00	2489.6		REDD IN TAILOUT
2	64	GL	00	2510.6	/SS	
2	65	RP	00	2579.6	DJ	
2	67	RI	00	2625.2	LA/	
2	68	RI	00	2692.6	SS/	
2	70	RP	00	2830.6		REDD PRESENT
2	71	RI	00	2848.5		REDD
2	77	RB	01	2966.7	TJ/TJ	
2	78	CB	11	2966.7		ACW=0.7M, LEFT BANK TRIB
2	79	RP	11	2966.7		ACW=1.1M, RIGHT BANK TRIB

COMMENT SUMMARY

MONITORING AREA: 8-W SITE ID: 424 STREAM: GALES CREEK

REACH	UNIT#	TYPE	CHAN	DIST. (m)	COMMENTS	NOTES
2	82	RP	01	3105.9	LI,TJ,DJ	
2	83	RP	02	3105.9	DJ	
2	84	CB	11	3105.9		ACW=0.6M
2	87	RP	00	3227.1	DJ	MASSIVE DEBRIS JAMS
2	91	RP	02	3434.3	DJ	
2	93	RP	02	3434.3	DJ,TJ	
2	94	SR	11	3434.3		ACW=0.8M
2	99	SL	00	3483.3	LA/	
2	100	RP	01	3562	TJ/	
2	101	RI	11	3562		ACW=4.7M
2	102	RP	00	3745	BC	CAMPGROUND ON RIGHT BANK



Restoration Site ID:424
 Stream: Gales Creek
 T02N - R05W - S20
 USGS Map: Timber

- # Approximate Start Point
- # Approximate End Point
- Approximate Location of Each Survey



8-W-424 Gales Creek - Restoration 2010 Winter

