

Upper Willamette Water Quality Monitoring Project  
2008-2010

**Appendix E -- Water Quality Data Results**

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**Oakridge Middle Fork Willamette Upstream Sampling Site Results**

Cascades Ecoregion/Core Cold Water Habitat/September 15 - May 15th 13 degrees/ 16 degrees otherwise; DO 11 mg/liter Sept 15 through June 15; otherwise 8mg/liter

OakMFWUP	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	8:52	8:00 8:20	10:20	10:30	10:45	11:05	11:55	10:10 10:10	12:15	10:00	11:20	10:10 10:15	9:45	10:45	10:20	10:15	10:25	10:10	11:10	10:15 10:30	10:10	12:10	10:40	11:15
Air Temp (°F)	46	48	35	43	35	37	42	48	70	69	79	69	50	46	41	48	50	39	49	48	61	71	73	60
Water Temp (°C)	12.9	12.5 12.5	6.2	5.3	4.6	5.3	6.4	7.0 7.0	7.9	8.1	9.5	12.8 12.8	14.6*	10.6	5.7	6	7	6.5	6.7	6.9 6.9	9.8	9.2	9.5	13.6*
Conductivity (µS/cm)	54.4	58.1 58.4	59.4	52.6	52	54.3	54.5	51.1 51.1	53.3	47.1	46	47.2	55.4	54.9	61	50.4	55.9	56.6	59	60.3 60.2	53.8	53.9	53.9	58.4
DO (mg/L)	8.28	9.53 9.24	--	--	--	--	11.96	10.96 10.98	10.80	9.68	10.23	8.35 8.22	8.30	8.86	--	--	--	--	11.42	10.81 10.73	11.39	10.15	9.60	8.90
Turbidity (NTU)	1.41	1.10 1.09	1.44	10.7	11.8	4.8	6.24	4.46 4.46	3.56	2.43	2.2	1.98 1.98	1.28	1.44	3.46	8.54	3.83	3.2	3.83	3.62 3.73	3.1	3.36	3.49	2.66
E. coli (#/mL)	1	4	<1	2	<1	1	<1	4 5	4	1	2	4	3	<1	<1	1	<1	<1	<1	1	5	4	<1	1
TSS (mg/L)	4	.5 .5	0.8	2	1.2	1.2	2.4	2.4 .8	0.8	0.4	0.4	2.8 .4	0.4	1.2	0.8	2	0.4	0.4	1.6	.4 .4	0.4	0.4	0.4	1.6
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	0.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	0.263	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.3	<.23	<.23	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	12:20	10:45
Turbidity	5.37	1.44
E. coli	2	<1
TSS	2	1.2
TP	<.02	<.02
Nitrate	--	<.23

**Key:**

- = months where DEQ benchmarks are applied
- = fair water quality according to summer DEQ benchmarks
- = poor water quality according to summer DEQ benchmarks
- = exceeded State Standard

\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

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Upper Willamette Water Quality Monitoring Project  
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**Oakridge Middle Fork Willamette Downstream Sampling Site Results**

Cascades Ecoregion/Core Cold Water Habitat/September 15 - May 15th 13 degrees/16 degrees otherwise; DO 11 mg/liter Sept 15 through June 15; otherwise 8mg/liter

OakMFWDW	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	11:25	10:00	11:25	9:55	10:25	9:30 38	10:00	11:30	9:40	9:10	9:20	9:30	9:10	9:05	9:25	9:15	8:55	9:15	9:05	9:00	9:05	9:55	9:05	9:20
Air Temp (°F)	56	49	46	42	34	38	38	--	61	60	67	64	48	47	44	47	53	37	50	55	67	67	63	58
Water Temp (°C)	11.8	11.4	6.6	5	3.7	3.8 3.8	4.8	6.7	9.5	10.4	10.8	12.9	13.2*	9.7	4.9	6.4	6.9	4.7	6.7	6.7	9.2	11.2	10.8	12.3
Conductivity (µS/cm)	61.5	59.8	64.6	50.1	55	58.6 58.6	50.8	46.3	47.7	55	53.4	52.3	57.9	60.6	63.6	52.1	58.5	62.1	59	53.9	51.5	58.1	56.9	60.1
DO (mg/L)	10.36	9.83	--	--	--	--	11.88	11.43	9.90	9.72	10.14	9.69	9.22	10.25	--	--	--	--	11.32	10.72	11.13	10.24	9.90	9.99
Turbidity (NTU)	1.17	1.21	1.02	8.61	3.12	3.18 3.13	3.13	3.86	1.67	2.96	1.96	1.63	1.43	1.36	2.43	5.04	2.29	1.95	2.35	2.17	5.2	2.48	3.03	2.22
E. coli (#/mL)	3	3	<1	<1	<1	<1	8	8	11	11	1	10	4	3	9	8	1	6	9	9	9	13	1	4
TSS (mg/L)	1.2	0.5	<1	1.6	<1	1.6 2	2	2	0.8	0.4	2	0.4	0.8	1.6	1.6	0.8	0.4	0.4	2	41.2	4	0.8	0.4	0.4
TP (mg/L)	0.02	<.02	<.02	<.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.15	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23 <.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	1:15	9:05
Turbidity	73.3	1.36
E. coli	105	3
TSS	104.8	1.6
TP	0.2	<.02
Nitrate	--	<.23

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Upper Willamette Water Quality Monitoring Project  
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Oakridge Salt Creek Sampling Site Results

Cascades Ecoregion/Core Cold Water Habitat/September 1 - May 15th 13 degrees/ 16 degrees otherwise; DO 11 mg/liter Sept 1 through June 15; otherwise 8mg/liter

OakSTMO	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	9:50	8:50	10:30	10:50	11:10	11:25	12:10	10:55	12:40	10:40	11:45	10:35	10:15	10:15	10:40	10:35	10:35	10:25	11:25	11:00	10:35	11:55	11:15	11:45
Air Temp (°F)	48	47	34	44	36	38	42	53	68	83	84	72	50	47	41	50	51	40	50	49	64	68	74	66
Water Temp (°C)	7.1	6.8	6.6	3.7	2.8	3	4.7	5.8	11.3	12.4	12.7	11.9	7.3	6.3	3.9	6.8	6.7	3.3	6.6	6.5	9	14.8	13	10.9
Conductivity (µS/cm)	78.4	71.7	74.2	57.9	62.9	64.7	53.5	46.6	48	67.1	71.6	75	81.8	57.8	75.6	51	65.8	68.5	62.6	56.1	44.4	65.4	76.9	81.8
DO (mg/L)	11	10.71	--	--	--	--	11.98	11.35	10.07	9.57	9.58	10.5	10.84	10.7	--	--	--	--	11.13	11.12	10.61	9.24	9.29	9.96
Turbidity (NTU)	1.1	1.47	0.95	7.5	1.93	2.93	2.43	2.2	1.08	1.46	0.75	0.82	0.82	0.92	2.95	4.2	2.64	0.84	1.81	1.77	4.87	0.58	0.92	0.83
E. coli (#/mL)	28	3	<1	3	3	1	1	2	4	23	9	6	6	19	7	4	3	3	3	3	13	6	2	3
TSS (mg/L)	0.8	0.5	0.8	0.4	2.4	1.2	5.6	0.4	2	1.6	2	0.4	0.4	1.2	0.4	1.2	0.8	0.4	0.4	1.2	4	4	1.6	0.4
TP (mg/L)	0.03	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.02	0.04	0.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	0.333	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	12:40	10:15
Turbidity	106	0.92
E. coli	44	19
TSS	191.2	1.2
TP	3.4	<.02
Nitrate	--	<.23

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Oakridge Salmon Creek Sampling Site Results

Cascades Ecoregion/Core Cold Water Habitat/September 1 - May 15th 13 degrees/ 16 degrees otherwise; DO 11 mg/liter Sept 1 through June 15; otherwise 8mg/liter

OakSCMO	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	10:50	9:20	10:55	11:15 11:25	11:25	11:45	12:40	11:25	12:55	11:00	12:00	11:10	10:45	11:15	9:45	9:35 9:35	10:45	9:40	11:45	9:30	9:25	12:30	11:45	10:00 10:40
Air Temp (°F)	51	49	34	43 43	34	40	49	54	71	80	79	76	53	47	42	50 50	54	34.5	57	50	64	72	80	62 62
Water Temp (°C)	8.2	7.3	4.4	4.6 4.6	3.5	3.8	5.3	5.9	12.2	13.3	13.9	12.7	8.2	6.2	4	6.9 6.9	7.1	4.1	7	6.8	9.1	15	14.2	11.0 11.1
Conductivity (µS/cm)	71.5	62.3	66.4	51.4 51.4	52.6	56.1	46.6	43	51.9	60.4	64.1	67.2	73	65.6	64.6	45.6 45.5	55.3	58.7	54.9	50.2	46.6	68.8	68.4	71.5 71.7
DO (mg/L)	10.67	10.72	--	--	--	--	11.71	11.29	9.95	9.53	9.29	9.88	10.68	10.89	--	--	--	--	11.23	10.87	8.11	8.79	8.94	9.91
Turbidity (NTU)	6.5	0.74	0.43	2.1 1.98	4.02	2.37	2.27	0.94	0.8	0.97	0.73	0.5	0.85	2.5	1.32	1.49 1.49	1.35	0.66	0.99	1.77	3.28	0.94	0.98	.50 .80
E. coli (#/mL)	6	13	2	3 3	<1	<1	<1	3	5	15	8	4	11	16	8	4 9	2	<1	1	2	8	22	4	5 6
TSS (mg/L)	1.2	0.5	<1	<1 <1	<1	0.4	<1	0.4	0.8	0.4	0.8	0.4	0.4	0.4	1.2	1.2 1.6	0.4	0.4	0.4	0.8	1.6	0.8	0.4	1.6 1.6
TP (mg/L)	<.02	<.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.02	<.02	<.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	0.05	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23 <.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23 <.23	<.23	<.23	0.243	<.23	<.23	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	1:00	11:15
Turbidity	45.4	2.5
E. coli	166	16
TSS	52	0.4
TP	0.14	<.02
Nitrate	--	<.23

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Westfir North Fork Willamette Upstream Sampling Site Results

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Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10		
Time	12:45	11:05	12:00	10:50	10:45	10:30	11:15	11:00	11:50	10:40	10:35	10:40	10:45	10:45	10:30	10:25	10:00	10:20	10:15	10:15	10:35	11:20	10:05	11:00		
Air Temp (°F)	56	48	46	37	30	34	42	51	68	73	75	67	50	45	41	47	51	36	49	47	62	72	66	60		
Water Temp (°C)	9.4	7.5	4.1	4.3	3	3.1	4.3	5.7	12.2	14.7	15.3	14.1*	8.4	5.9	3.1	6.7	6.8	4	6.4	6.6	9.2	16*	15.2	12.7		
Conductivity (µS/cm)	55	48.2	49.7	36.8	39.3	40.3	34.9	31.2	38	43.5	47	52.4	53.8	49.7	45.6	37.8	42	44.5	41.9	38.1	36.5	46.3	49.7	52.6		
DO (mg/L)	10.56	10.77	--	--	--	--	12.25	11.81	10.11	9.00	9.26	9.82	10.39	10.81	--	--	--	--	11.47	11.12	10.55	9.17	9.02	9.64		
Turbidity (NTU)	0.31	1.46	0.74	2.57	1.19	2.05	5.2	2.24	1.11	0.8	0.59	0.42	0.92	1.94	2.41	3.04	1.36	0.9	1.54	1.09	3.06	0.81	.50	.48		
E. coli (#/mL)	66	14	2	1	2	<1	<1	<1	2	10	5	5	<1	3	3	2	4	<1	2	3	4	1	3	5	2	1
TSS (mg/L)	1.6	4	<1	1.2	<1	1.2	2.4	2.4	0.8	0.4	3.2	0.4	0.4	3.6	2.8	2.4	0.4	0.4	0.4	1.2	4	0.4	.4	.4		
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23		

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	12:20	10:45
Turbidity	32.7	1.94
E. coli	14	3
TSS	40	3.6
TP	0.15	<.02
Nitrate	--	<.23

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	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10			
Parameter	12:00				10:15		10:20		10:20		9:45	9:45	9:40		9:45	9:35	9:15	9:35	9:25	9:25	9:25	10:15					
Time	12:10	10:20	11:40	10:15	10:20	9:55	10:20	8:45	10:20	9:45	9:45	9:45	9:40	10:00	9:45	9:35	9:15	9:35	9:25	9:25	9:25	10:15	9:20	9:50			
Air Temp (°F)	61.5	49	46	41	36	38	45	46	70	68	67	64	51	45	42	47	51	36	50	49	67	67	67	62			
Water Temp (°C)	9.6				3.3		4.6		12.3		16.1	14.7	8.5		2.9	6.8	6.9	4.3	6.8	7.0	9.4	17.1					
	9.6	7.8	4.7	4.5	3.3	3.4	4.6	6.1	12.3	16	16.1	14.7	8.5	6	2.9	6.8	6.9	4.3	6.8	7.0	9.4	17.1	16	12.7			
Conductivity (µS/cm)	56.4				40.0		35.7		35.7		47.8	53.6	55.5		48.6	39.3	43.2	45.4	43.1	39.1	37.7	46.7					
	56.4	48.6	51.3	38.4	40.0	42.4	35.7	31.7	35.7	44.1	48.2	53.6	55.5	50.9	48.6	39.3	43.2	45.4	43.1	39.1	37.8	46.7	50.4	53.4			
DO (mg/L)	10.98						12.04		9.39		9.17	9.92	10.65		11.02				11.02	10.48	8.86	8.96					
	10.83	10.8	--	--	--	--	11.97	11.61	9.57	8.85	9.32	9.76	10.64	11.43	--	--	--	--	10.84	10.72	8.74	9.12	9.16	9.97			
Turbidity (NTU)	.35				.83		1.87		.61		.46	.43	.29		1.72	2.55	1.11	.72	1.16	1.28	3.39	.54					
	.32	1.12	0.49	2.84	.82	1.78	1.81	1.47	.61	0.47	.50	.41	.28	1.56	1.66	2.49	1.16	.69	1.16	1.2	3.49	.55	0.64	0.5			
E. coli (#/mL)	5				1		2		6		17	17	7		19			<1	1	12		10					
	6	39	1	1	2	3	<1	3	8	11	16	11	14	16	11	2	4	5	1	<1	1	20	4	4	8	18	38
TSS (mg/L)	.8				2.4		1.6		1.6		3.8	4	0		1.2	.8	.4	.4	.8	.8	4	.4					
	.4	0.5	0.4	0.4	<1	<1	2.4	4.8	.8	0.4	3.6	2	.4	2	1.2	.8	.4	.4	.4	.8	3.2	.4	0.4	0.4			
TP (mg/L)	<.02				<.02		<.02		<.02		<.02	<.02	<.02		.08	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02			
	<.02	<.02	<.02	<.02	<.02	<.02	0.04	<.02	<.02	<.02	<.02	<.02	<.02	<.02	.1	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02			
Nitrate (mg/L)	<.23				<.23		<.23		<.23		<.23	<.23	<.23		<.23	<.23	<.23	<.23	.429	.269	<.23	<.23	<.23	<.23			
	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	.391	<.23	<.23	<.23	<.23	<.23			

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	1:00	10:00
Turbidity	66.8	1.56
E. coli	50	16
TSS	75.6	2
TP	0.15	<.02
Nitrate	--	<.23

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Westfir McLean Creek Sampling Site Results

Cascades Ecoregion/Core Cold Water Habitat/no designation 16 degrees; DO 11 mg/liter January 1 through June 15; otherwise 8mg/liter

WFMCMO	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	1:15	11:35	12:20	10:30 10:35	11:10	10:10	10:55	8:55	11:15	10:15	10:20	10:25	10:20	10:20	10:10	10:05	9:40	10:00	9:50	9:55	10:10	10:55	9:45	10:35
Air Temp (°F)	60	49	47	40	32	36	45	46	72	73	76	66	51	45	43	49	51	38	52	49	66	70	67	58
Water Temp (°C)	8.7	9.4	4.4	5.6 5.6	3.7	5.6	7.4	8.9	14.1	14.8	15.4	14.7	8.2	8.3	5	8.6	8.7	4.8	9.3	10	12.7	17*	14.1	12.1
Conductivity (µS/cm)	228.3	139.1	129.1	65.0	85.3	71.5	78.0	89.2	139.4	200.5	230.8	258.8	237.4	92.3	90.5	72.5	81.2	91.6	81.1	87.4	82.0	146.4	202.6	225.9
DO (mg/L)	9.13	9.04	--	--	--	--	10.76	10.40	8.76	6.95	6.08	6.60	9.10	11.37	--	--	--	--	10.27	10.45	7.11	8.09	8.01	6.69
Turbidity (NTU)	11.8	114	6.84	10.8 11.0	7.28	17.5	10.9	10.3	6.78	3.89	3.06	3.54	7.36	45.1	24.7	11	10.4	6.98	1.52	10	16.1	5.32	4.45	5.28
E. coli (#/mL)	649	1120	52	24 27	75	78	43	82	25	201	27	219	548	1553	196	47	36	20	24	45	135	37	44	20
TSS (mg/L)	2.8	103.5	0.4	2 1.6	1.2	2	3.6	1.2	2	2	2	3.2	2	45.6	6.4	2.8	2.4	0.4	6.4	4.4	6.8	0.8	0.4	1.6
TP (mg/L)	0.06	0.33	<.02	.04 <.02	<.02	0.02	<.02	0.05	<.02	0.02	0.03	<.02	<.02	0.22	0.06	<.02	<.02	<.02	<.02	<.02	0.08	<.02	0.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23 .283	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.296	<.23	0.443	0.477	0.368	<.23	<.23	0.391	<.23	<.23	0.413	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	12:45	10:20
Turbidity	114	45.1
E. coli	435	1553
TSS	75.6	45.6
TP	0.27	0.22
Nitrate	--	0.443

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Lowell Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through June 15; otherwise 8mg/liter

LWUP	Date																								
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	--	--	--	8:53	--	12:55	1:30	2:00	--	--	--	--	--	12:45	11:40	11:45	11:35	11:30	12:55	12:05	12:15	--	--	--	
Air Temp (°F)	--	--	--	41	--	45	46	58	--	--	--	--	--	48	52	53	57	47	56	53	73	--	--	--	
Water Temp (°C)	--	--	--	6.6	--	7.8	10.3	13.4	--	--	--	--	--	10.1	6.1	9.3	10.9	8.8	11.4	11.9	15.9	--	--	--	
Conductivity (µS/cm)	--	--	--	79.2	--	83.5	87.4	102.3	--	--	--	--	--	71.5	77.8	72.6	87.2	93.2	87.5	112.5	93.4	--	--	--	
DO (mg/L)	--	--	--	--	--	--	9.89	8.59	--	--	--	--	--	8.96	--	--	--	--	9.59	9.39	7.98	--	--	--	
Turbidity (NTU)	--	--	--	13	--	17.2	22.4	5.54	--	--	--	--	--	26.8	38	14.8	12.9	8.23	12.6	5.02	17.2	--	--	--	
E. coli (#/mL)	--	--	--	29	--	36	36	22	--	--	--	--	--	866	2420	326	488	67	39	435	308	--	--	--	
TSS (mg/L)	--	--	--	0.8	--	0.04	1.2	0.8	--	--	--	--	--	5.2	3.2	0.4	0.8	0.4	0.4	0.4	1.2	--	--	--	
TP (mg/L)	--	--	--	<.02	--	<.02	0.03	<.02	--	--	--	--	--	0.06	0.08	<.02	<.02	<.02	<.02	<.02	<.02	<.02	--	--	--
Nitrate (mg/L)	--	--	--	<.23	--	<.23	<.23	<.23	--	--	--	--	--	0.546	0.513	<.23	<.23	<.23	<.23	<.23	<.23	--	--	--	

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	12/15
Time	2:00	11:40
Turbidity	53.5	38
E. coli	125	2420
TSS	8	3.2
TP	0.1	0.08
Nitrate	--	0.513

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Lowell Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through June 15; otherwise 8mg/liter

LWDW	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	9:10	--	12:35	1:45	1:35	--	--	--	--	--	12:20	11:55	11:55	11:50	11:45	1:05	12:15	12:30	--	--	--
Air Temp (°F)	--	--	--	41	--	47	46	59	--	--	--	--	--	48	50	53	59	51	57	54	76	--	--	--
Water Temp (°C)	--	--	--	5.9	--	7.6	10.5	12.6	--	--	--	--	--	10.3	6.3	9.5	11.8	7.9	11.8	11.8	16.5	--	--	--
Conductivity (µS/cm)	--	--	--	99.8	--	110.2	15.8	138.8	--	--	--	--	--	102.4	106.2	97.2	115.9	126.9	116.7	161.7	122.4	--	--	--
DO (mg/L)	--	--	--	--	--	--	10.35	9.69	--	--	--	--	--	9.12	--	--	--	--	9.86	9.59	8.61	--	--	--
Turbidity (NTU)	--	--	--	15.4	--	21	34	8.11	--	--	--	--	--	47.8	54.7	18.6	18	10.4	15.5	8.29	18.4	--	--	--
E. coli (#/mL)	--	--	--	46	--	45	387	411	--	--	--	--	--	>2420	>2420	248	727	26	59	411	172	--	--	--
TSS (mg/L)	--	--	--	0.8	--	2.4	7.2	2	--	--	--	--	--	20	24.8	2.4	2.4	1.6	2.8	6.4	2.4	--	--	--
TP (mg/L)	--	--	--	<.02	--	0.05	0.1	<.02	--	--	--	--	--	0.18	0.18	<.02	<.02	<.02	0.1	<.02	<.02	--	--	--
Nitrate (mg/L)	--	--	--	0.331	--	0.38	0.303	<.23	--	--	--	--	--	1.42	1.32	<.23	0.355	<.23	<.23	<.23	<.23	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	12/29	11/17
Time	2:20	12:20
Turbidity	63.4	47.8
E. coli	816	>2420
TSS	16.4	20
TP	6	0.18
Nitrate	--	1.42

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Middle Fork Willamette Upstream Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 15 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 15 through June 15; otherwise 6.5mg/liter

MFWDR	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	11:30	11:40	10:40	9:50 10:00	11:30	10:30	10:45	11:00 11:00	10:45 10:30	10:35	11:45	10:40	9:30 9:35	10:00 10:05	10:00	9:30	10:01	10:22	11:10	10:35	11:14	11:20	10:33 10:33	10:25
Air Temp (°F)	--	53.5	42	38 40	39	42	48	57 57	69 69	85	85	71	58 58	46 46	49	48	56	46	57	53	68	75	76 76	63
Water Temp (°C)	14.3	12.8	8.8	5.7 5.7	5.2	6.2	8.4	9.5 9.5	10.6 10.6	13.2	15.4	17.9	14.9 14.9	10.9 10.9	6	6.4	7.8	8	9.5	10.4	13.1	15.2	17.6 17.6	17.5
Conductivity (µS/cm)	50.3	51.8	56.5	30.5 30.5	48.6	50.4	50.1	33.9 33.9	44.8 44.8	44	46.8	52.1	53.1 53.2	41.1 41.1	57.1	49.8	52.1	52.2	53.3	52.4	49.5	48.6	51.3 51.3	54.8
DO (mg/L)	9.69	9.9	--	--	--	--	11.23	10.41 9.67	10.57 10.44	10.08	8.99	8.58	8.95 9.36	9.63 9.82	--	--	--	--	11.24	9.32	11.78	9.61	9.56 9.33	8.6
Turbidity (NTU)	1.1	1.66	1.54	8.5 8.44	4.8	3.37	3.95	4.86 4.22	1.84 1.82	1.47	9.7	1.53	1.41 1.47	2.48 2.22	2.74	7.08	3.58	2.86	3.59	3.32	4.59	3.64	3.18 3.18	1.45
E. coli (#/mL)	461**	3	6	2 4	2	4	2	19 23	1 1	2	11	2	3 1	19	14	2	1	<1	5	2	6	4	4 4	5
TSS (mg/L)	4.8	1.5	0.8	2.8 2.4	1.2	0.4	1.6	2.4 1.6	4 1.2	0.8	0.4	0.4	.8 .8	1.6	0.8	3.2	0.4	0.4	4	0.8	0.4	1.2	1.2 1.2	1.6
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	0.398	<.23	.264	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	1.56

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

**Middle Fork Willamette Downstream Sampling Site Results**

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 6.5mg/liter

MFWSTP	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	8:35 8:45	8:15	7:50	9:45	8:45	8:20	8:30	8:15	8:04	9:15	8:18	8:00	8:10	8:10	8:00	8:17	8:30	8:28 8:28	8:00	8:36	8:50	8:40	8:23
Air Temp (°F)	--	54	34	32	38	40	39	51	--	63	69	60	44	46	47	47	52	37	48 49	49	64	71	65	57
Water Temp (°C)	--	12.6 12.6	7.2	5.9	4.7	5.6	7.1	9.5	10.9	12.7	14.7	16.4	13.6	10.5	6.2	6.7	8.2	6.3	9.1 9.1	9.6	11.7	13.5	14.5	16.9
Conductivity (µS/cm)	--	51.4 50.9	58.8	46.4	50.7	51.0	48.9	47.9	46.0	45.2	47.5	56.8	52.0	54.9	60.0	49.9	54.0	55.4	52.4 52.4	50.5	49.7	47.2	49.1	62.5
DO (mg/L)	--	10.2 9.6	--	--	--	--	10.76	9.42	8.16	9.32	5.85	8.48	7.85	9.37	--	--	--	--	10.32 10.29	8.84 9.01	10.50	9.21	9.03	7.99
Turbidity (NTU)	--	3.2 3.48	2.27	11.8	4.41	4.43	5.32	6.09	2.29	1.44	1.91	1.89	1.66	4.06	2.59	6.8	4.15	3.36	6.04 6.04	3.62	6.59	3.1	3.44	1.47
E. coli (#/mL)	--	17 17	11	6	6	6	5	74	10	16	13	11	5	35	33	9	22	8	44 26	28	8	24	9	29
TSS (mg/L)	--	1 1.5	3.2	6.4	<1	0.8	4.8	7.6	5.2	3.2	1.6	4	1.6	2.8	2	2.8	1.6	0.4	1.6 1.6	1.2	1.2	0.4	0.8	1.2
TP (mg/L)	--	<.02 <.02	<.02	0.04	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	--	<.23 <.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23 <.23	<.23	<.23	<.23	<.23	<.23

**Key:**

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- = poor water quality according to summer DEQ benchmarks
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Upper Willamette Water Quality Monitoring Project  
2008-2010

Wallace Creek Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/No designation 16 degrees; DO 11 mg/liter January 1 through June 15; otherwise 6.5mg/liter

WCMO	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	10:00	9:15	8:30	10:20	9:20	9:15	9:30	9:12	--	--	--	--	8:50	8:45	8:30	9:00	9:06	9:31	9:00	9:44	9:50	--	--
Air Temp (°F)	--	54	39	34	41	41	42	59	64	--	--	--	--	46	49	49		39	55	53	61	71	--	--
Water Temp (°C)	--	10.4	5.2	6.1	4.7	5.1	6.2	9.6	13.3	--	--	--	--	9.4	5.1	8.3	9.2	5.4	9.3	9.5	12.9	14.9	--	--
Conductivity (µS/cm)	--	81.1	73.9	59.1	65	59.7	66.3	63.7	75	--	--	--	--	64.1	69	57.3	62.5	63.1	60.3	67.5	73.7	85.5	--	--
DO (mg/L)	--	9.8	--	--	--	--	9.88	10.36	9.07	--	--	--	--	10.18	--	--	--	--	10.7	10.19	10.27	9.01	--	--
Turbidity (NTU)	--	14.3	7.16	16	14.7	19.3	19.6	20.6	8.43	--	--	--	--	61.7	25.9	23.9	22.5	17.7	21.6	14.3	17.7	4.39	--	--
E. coli (#/mL)	--	2420	47	23	15	44	76	2420	291	--	--	--	--	2420	2420	613	770	20	81	365	186	488	--	--
TSS (mg/L)	--	0.5	0.4	4	0.4	1.2	7.2	3.2	3.6	--	--	--	--	21.6	6	7.2	3.6	0.4	2	5.2	2.4	0.4	--	--
TP (mg/L)	--	0.05	<.02	<.02	<.02	<.02	0.03	<.02	<.02	--	--	--	--	0.29	0.06	0.04	<.02	<.02	<.02	<.02	<.02	<.02	--	--
Nitrate (mg/L)	--	0.68	--	<.23	<.23	<.23	<.23	<.23	0.259	--	--	--	--	1	0.399	0.328	<.23	<.23	<.23	<.23	<.23	<.23	--	--

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Hills Creek Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Jan 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter January 1 through June 15; otherwise 6.5mg/liter

HCMO	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	8:34	10:30	9:45	8:50	10:45	9:45	9:40	9:55	9:45	9:32	10:00	9:15	8:40	9:10	9:05	8:45	9:18	9:26	10:00	9:30	10:11	10:15	9:20	9:13
Air Temp (°F)	--	54	39	32	37	42	44	58	65	68	88	63	48	47	49	49	53	46	55	53	71	71	69	61
Water Temp (°C)	9.2	9.1	3.5	5.8	3.3	4.7	5.7	--	13.2	15	16.7	16	7.7	9	2.3	8.4	8.8	4.4	8.9	8.9	11.7	14.6	14.5	13.1
Conductivity (µS/cm)	76.8	61.9	67	46.4	55.3	50.2	51.1	53.3	61.4	67.4	68.8	76.1	74.2	56.5	56.7	51.1	55.4	56.1	51	52	53	62	64.3	67.1
DO (mg/L)	9.9	10.15	--	--	--	--	11.22	10.64	8.25	9.11	6.39	8.7	9.52	10.19	--	--	--	--	10.93	9.3	10.49	9.6	9.35	8.35
Turbidity (NTU)	2.09	13.8	11.2	14	11.5	18.8	18.5	16	5.79	2.48	6.46	3.59	1.96	32.4	12.4	19.8	23.6	17.8	21.4	20.6	16.3	5.83	3.61	3.29
E. coli (#/mL)	488	88	1300	12	91	22	727	21	387	365	921	186	143	2420	813	46	57	17	15	86	26	>2420	687	613
TSS (mg/L)	3.2	1	1.2	3.2	0.4	1.6	2.8	3.2	4	2.4	0.8	2.4	3.2	5.6	1.6	3.2	4.4	0.8	3.6	0.8	4.8	0.8	0.4	1.2
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	0.02	0.02	<.02	<.02	<.02	<.02	<.02	<.02	0.1	<.02	<.02	0.04	<.02	<.02	0.03	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	0.242	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.384	0.399	0.27	0.259	<.23	0.274	<.23	0.236	0.269	<.23	<.23

Key:

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\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Fall Creek Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 6.5mg/liter

FCMO	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	12:15	11:15	10:10	9:20	11:05	10:05	10:15	10:30	10:15	10:01	10:45	10:00	9:10	9:30	9:30	9:10	9:45	10:04	10:40	10:10	10:41	10:45	10:05	10:00
Air Temp (°F)	--	54	38	33	37	46	46	58	71	78	89	78	58	46	48	49	57	45	62	51	64	70	78	63
Water Temp (°C)	13.8	11.9	5	6.3	4	4.6	6.3	8.3	12.5	15.2	16.9	9.7	11	9.3	4	8.3	8.6	5	9.2	9	12.2	12.4	13.8	17.9
Conductivity (µS/cm)	45.5	47	53.6	22.9	44	42.1	39.6	27.4	41.9	44.7	44.5	44.5	45.4	48.6	47.9	42.6	44.7	47.1	41	43.3	43.9	44.8	42.4	50.9
DO (mg/L)	8.5	10.3	--	--	--	--	10.6	10.1	7.97	9.12	8.11	10.9	9.18	10.52	--	--	--	--	11.27	10.17	10.68	10.45	10.04	8.48
Turbidity (NTU)	3.73	6.75	4.65	17.4	3.38	5.36	6.06	4.94	2.53	1.8	9.19	6.89	4.1	11.8	5.29	8.2	6.24	4.92	7.28	5.4	5.4	4.57	5.28	3.63
E. coli (#/mL)	397	16	9	1	2	101	6	7	17	35	36	75	5	38	20	5	10	7	8	9	19	46	9	51
TSS (mg/L)	4.8	1.5	2.8	6.8	<1	0.8	3.2	2	2.8	1.2	0.4	1.2	1.2	4.4	1.2	3.2	2.8	0.8	2.4	0.8	0.4	0.8	0.4	0.8
TP (mg/L)	<.02	<.02	<.02	0.05	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.246	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Lost Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 8 mg/liter

LCUP	Date																								
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	10:45	12:20 12:40	1:00	8:20	9:15	8:35	9:15	7:50	8:55	8:15	8:30	8:25	8:15	8:07	8:15	8:25	8:05	8:30	8:10	8:00	8:10	9:00	8:10	8:15	
Air Temp (°F)	50	50	46	43	34	37	38	46	56	59	62	53	48	46	39	46	49	28	47	50	57	62	57	54	
Water Temp (°C)	7	9.3 9.3	4.5	5.6	3.1	4	5.2	6.4	12	12.9	14	14.1*	7.4	8	3	8.3	7.8	3.7	7	7.6	10.1	15	12.9	11.5	
Conductivity (µS/cm)	70	62.2 62.7	65.7	39.4	51.6	42.4	44.8	47.2	58.5	66.2	67.7	74.6	76.5	50.1	56.8	44.7	50.8	55.9		49.5	48.2	63.4	69.2	70.5	
DO (mg/L)	10.29	9.85	--	--	--	--	11.63	11.3	10.37	9.39	9.11	8.94	10.39	10.42	--	--	--	--	10.97	10.14	10.22	9.03	9.01	9.43 9.65	
Turbidity (NTU)	1.23	4.42 4.44	2.38	7.78	3.56	6.89	9.61	3.45	2.9	1.76	1.24	1.15	0.92	12.5	7.54	5.18	6.24 6.09	4.96 4.90		5.97	9.42	9.32	2.72	2.42	1.54 1.47
E. coli (#/mL)	770**	5 2	8	2	5	20	5	15	24	39	80	110	12	93	158	19	4 1	1 <1	2	26	5	55	16	22 27	
TSS (mg/L)	4.4	0.5 .5	<1	3.2	5.2	4.4	7.6	3.2	5.2	0.8	2.4	4.8	0.4	15.6	3.2	0.8	2 2	1.6 1.2	4	3.6	3.2	2	0.4	1.2	
TP (mg/L)	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.04	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23 <.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Lost Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 6.5mg/liter

LCMO	Date																										
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10			
Time	8:45	12:35	11:20	10:45	12:45	11:00 11:01		11:25	12:00	12:50	11:40	12:30	12:05	10:40	11:10	10:30	10:05	10:36 10:36		11:15	11:45	11:15	11:50	12:10 12:10		11:15	11:35
Air Temp (°F)	48	54	48	41	41	51 51	50	59	72	89	93	90	66	48	50	52	56	56	57	57	59	69	77	78	69		
Water Temp (°C)	8.6	9.4	4.5	6.7	3.9	4.7 4.7	6.3	9.7	15.4	19.3	20.9	20.7	10.7	8.5	3.4	8.4	9.0 9.0	5	8.5	8.5	13	17.5 17.5	17.8	15.2			
Conductivity (µS/cm)	72.2	61.5	65.8	30	55.3	49.1 49.1	48.6	37.3	62.4	66.4	70.8	73.3	73.2	38.5	53.6	50.2	54.5 54.5	56.1	43.5	50.1	53.2	62.5 62.5	46.5	70.0			
DO (mg/L)	11.07	9.64	-	-	--	-	11.4	10.02	8.95	8.26	7.75	8.50	--	9.44	--	--	--	--	11.08	10.37	10.38	9.11 9.0	7.9	8.32 9.11			
Turbidity (NTU)	2.51	6.88	2.98	7.74	3.62	7.69 7.69	8.77	5.91	2	1.22	1.4	1.69	1.11	20.5	13	9.04	7.95 7.95	6.12	7.56	8.13	7.43	2.19 2.19	1.48	1.45			
E. coli (#/mL)	194	84	28	16	39	14 6	24	116	236	41	69	23	16	1733	649	24	9 10	5	27	38	25	66 50	91	866 649			
TSS (mg/L)	1.8	4.5	<1	2.8	<1	1.6 1.6	5.2	2	4.4	2.8	0.4	0.4	0.4	16	7.2	1.2	1.2 1.2	4	2	2.8	2	.4 .4	0.4	.4			
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.12	0.02	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02 <.02	<.02	<.02			
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23 <.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.267	<.23	<.23	<.23 <.23	<.23	<.23	<.23	<.23	<.23 <.23	<.23	<.23			

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Little Fall Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 8 mg/liter

LFCUP	Date																								
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	10:50	9:45	8:35 9:10	8:17	10:25	11:45	9:45	9:45	8:50	8:00	8:05	12:50	12:45	10:45	11:05	10:56	10:55	11:55	11:05	10:45	11:15	11:10	10:35	10:40	
Air Temp (°F)	57	50	32 33	32	37	41	35	45	58	62	55	74	51 50	46	45	50	55	44	42	53	57	64	74	56	
Water Temp (°C)	9.3	9.3	4.5 4.5	5.9	4	4.7	5.5	8.5 8.5	12.5	14	15.4	15.9*	8.5 8.5	7.3	3.8	8.6	8.5	4.8	7.3	8.8	10.5	13.3	14.2	12.3	
Conductivity (µS/cm)	54.1	44.9	40.8 40.8	32.6	23.9	38.3	32.5	38.6 38.6	40.1	48.8	52.2	50.3	55.8 55.8	37.7	37	36.9	39.3 39.6	41.2	34.3	37.1	34.6	45.8	48.6	50.4	
DO (mg/L)	10.7	10.86	--	--	--	--	12.16	10.69 10.59	9.77	9.53	8.7	9.33	10.54 10.72	10.72	--	--	--	--	--	11.13 10.95	10.31	9.71	9.41	9.9	
Turbidity (NTU)	1.12	3.29	1.68 1.77	3.96	2.36	3.35	3.51	3.09 3.36	2.96	1.47	1.34	1.04	1.62 1.72	6.71	8.23	4.38	5.52 5.4	3.16	4.25 4.49	3.35	7.96	2.64	1.86	1.41	
E. coli (#/mL)	19	2	1 2	1	<1	<1	1	2 10	16	67	44	25	10 9	6	11	1	3 1	<1	1	<1	1	8	36	23	13
TSS (mg/L)	1.6	0.5	1.6 .4	5.2	1.2	0.4	3.6	4.4 3.6	2	0.8	0.8	3.2	.8 .4	5.2	10.8	3.2	2.4 2.4	2.4	3.2	2.8	10.8	2	1.2	2	
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.263	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.44	<.23	

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Little Fall Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Core Cold Water Habitat/Salmon and Trout Rearing and Migration Sept 1 - June 15th 13deg/other 16 deg; DO 11 mg/liter Sept 1 through June 15; otherwise 6.5 mg/liter

LFCMO	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	9:30	11:10	9:45	8:39	10:50	11:20	10:45	10:45	8:15	8:30	8:35	12:30	12:25	11:10	10:26 10:40	11:15	11:18	12:15	10:35	10:25	10:45	10:50	10:00	10:06
Air Temp (°F)	55	50	38	33	43	49	44	58	60	60	62	79	51	50	49	49	59	48	47	55	62	64	68	58
Water Temp (°C)	9.5	9.6	0.46	5.8	4.3	4.7	6	9.2	13.2	15.5	16.2*	16.8*	9	7.5	4.0 4.0	8.8	8.8	5.2	7.2	9.1	10.8	13.9	15.4	13
Conductivity (µS/cm)	55.9	46.3	42	34.1	25.6	40.2	34.4	41.8	42	50.2	55.4	53.4	58.3	39.3	39.2 39.1	38.9	41.2	43.5	35.8	38.3	36.4	46.7	50.1	52.8
DO (mg/L)	10.02	10.06	--	--	--	--	11.29	10.83	9.42	9.1	8.79	9.25	9.85	9.78	--	--	--	--	11.30	11.10	10.36	9.42	9.01	9.29
Turbidity (NTU)	1.25	3.07	2.67	5.42	2.24	3.99	3.74	3.26	2.57	1.51	1.47	1.36	1.41	8.04	4.09 4.62	4.92	5.43	3.48	4.18	3.22	8.15	2.66	1.63	1.17
E. coli (#/mL)	119	20	10	1	1	3	12	12	57	140	102	166	38	25	26 40	2	5	<1	13	9	27	55	31	43
TSS (mg/L)	0.8	0.5	2.8	6	1.2	1.6	--	3.6	2.8	0.8	0.8	0.4	0.8	5.6	2.8 4	2.4	2.4	0.4	2.8	2.4	4	2	0.4	1.2
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.26	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	0.272	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	0.325	<.23 <.23	<.23	<.23	<.23	<.23	<.23	<.23	0.96	<.23	<.23

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Cottage Grove Coast Fork Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CGCFUP Parameter	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	11:30	10:45	11:35	10:15	8:55	8:35	8:25	8:30	8:25	9:12	8:25	8:20	8:33	8:20	8:23	8:20	8:35	8:30	8:21	8:25	10:50	8:42	8:25	9:00
Air Temp (°F)	62	61	48	4.4	40	32.4	43.90	48.9	58	75	70.3	55.8	56.2	39.2	40.5	48	49	38.6	41	56.6	59	60	65	56
Water Temp (°C)	15.2	11.8	6.1	7.1	5.4	5.2	8.3	8.9	12.5	14.4	17.5	17.7	14.8	7.8	3.8	NA	8.7	7.2	8.1	9.9	12.5	15.9	14.9	16.2
Conductivity (µS/cm)	69.2	85	86.7	49.6	66.4	35.8	39.1	43.3	50.7	56.1	64.8	77.4	70.5	74.5	41.1	NA	68.2	67.3	55.3	60.5	59.7	65	66.1	69.5
DO (mg/L)	9.3	9.74	--	--	--	--	11.02	10.04	9.96	9.6	8.26	8.26	7.98	10.6	--	--	--	--	9.98	10.32	10.09	8.38	8.84	8.62
Turbidity (NTU)	2.59	6.18	3.69	14.1	8.82	10.76	7.86	7.77	5.96	4.42	3.85	3.9	1.18	17.2	22.2	13.9	10.3	9.27	13.9	9.7	10.7	6.86	5.23	2.95
E. coli (#/mL)	365	75	43	14	71	30	35	110	980	120	291	345	816	194	770	55	517	166	40	84	93	155	179	83
TSS (mg/L)	5.2	3.6	2.8	5.2	7.2	2.8	25.6	2.8	2	1.2	7.2	2	10.8	9.2	12.4	4.8	2.8	1.6	3.6	1.6	0.8	0.8	0.8	1.2
TP (mg/L)	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.03	0.02	0.02	0.04	<.02	<.02	0.05	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	0.244	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.313	0.331	0.293	0.237	<.23	<.23	<.23	<.23	0.244	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	11/20	11/17
Time	1:30	2:25
Turbidity	33	76.8
E. coli	116	1733
TSS	14.5	37.6
TP	0.11	0.19
Nitrate	--	0.523

Key:

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- = exceeded State Standard

\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

\*\*If in italicized type it means that the value was excluded from the analysis as an anomaly

Upper Willamette Water Quality Monitoring Project  
2008-2010

Cottage Grove Coast Fork Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CGCFDW	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Parameter																								
Time	11:15	9:30	11:00 11:15	9:30	10:30	10:30	9:30	--	10:30	11:50	10:00 10:00	9:30	10:30	10:30	10:15	11:05	10:30	10:15	10:00	9:30	9:15	9:00	9:20	10:00
Air Temp (°F)	58	60	48 48	41	41	--	42	--	59	68	61 61	55	61	43	52	46	45 45	39	37	53 53	55	61	63	57
Water Temp (°C)	14.7	11.5	6.2 6.2	7.1	5.7	5.4	8.3	--	13.5	15.3	18.7 18.7	18.3	14.9	7.9	4.5	8.7	8.9 8.9	7.4	8.5	10.4 10.4	11.8	18.2	15.9	16.1
Conductivity (µS/cm)	70.4	91.7	95 95	54.2	80.3	64.7	59	--	71.2	80.7	81 81	84	76.9	77.5	67	58.1	69.7 69.7	68	43.8	72.2 72.2	64.3	75.6	76.1	70.5
DO (mg/L)	9.14	9.31	-- --	--	--	--	10.87	--	9.02	9.39	7.97 7.97	8.44	8.87	10.2	--	--	-- --	--	--	10.91 10.91	9.82	8.51	9.43	9.39
Turbidity (NTU)	2.54	8.43	5.41 5.36	17.7	8.94	12.2	10.8	--	7.51	6.13	4.67 5.61	5.61	12.2	31.8	52.2	19.6	12.6 12.6	9.68	14.3	9.80 9.80	12	6.33	4.48	0
E. coli (#/mL)	228	192	61 63	84	154	54	--	214	1230	365	345 344	361 344	980	222	1046	205	770 579	488	81	816 727	77	613	123	308
TSS (mg/L)	4	5.2	2.8 2.8	4	2.4	6.4	--	3.2	2	3.2	2.4 2.4	2.4	8	14.4	34.8	9.6	2 2.4	2	5.2	2.4 2.4	2.4	0.8	0.8	0.4
TP (mg/L)	<.02	<.02	.03 .04	0.04	0.12	0.05	--	0.1	0.05	0.09	.11 .08	.08	0.16	<.02	0.12	0.06	.06 .05	<.02	<.02	.02 .03	<.02	0.03	<.02	<.02
Nitrate (mg/L)	<.23	<.23	-- --	0.259	<.23	0.246	--	<.23	0.261	0.328	<.23 .23	.448 .371	0.254	0.364	0.54	0.366	.296 .314	<.23	<.23	.254 .247	0.246	0.324	0.3	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	11/20	11/17
Time	1:10	1:45
Turbidity	10.3	46.1
E. coli	921	1553
TSS	4	30.4
TP	0.16	0.24
Nitrate	--	0.559

Key:

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\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Cottage Grove Silk Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CGSKUP	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	8:45 9:00	8:55	11:15	9:45	10:03	9:10	9:20	9:50	9:15	10:20	9:35	9:22	9:27	9:40	9:20 9:20	9:00	9:30	9:20	9:09	9:18	10:05	9:33	9:20	9:40
Air Temp (°F)	58 58	58	48	43	48	33.8	44	57	60.8	75	67	62.8	54.7	46	41 41	45	47.4	40	44.2	51.7	58	65	64	55
Water Temp (°C)	8.9 8.8	10.8	4.2	6.5	4.6	4.6	6.9	8.5	13.9	16.7	16.9	15.3	9.5	7.6	5.4 5.4	8.3	8.8	5.8	7.1	9.9	12	18.5*	15.5	13.2
Conductivity (µS/cm)	119 118.7	91.5	105.5	55.1	72.2	57.5	44.5	45.6	68.5	107.6	135.9	137.3	80.4	65.8	35.1 35.1	NA	59.8	64.6	57.2	66.2	68.7	89.4	100.1	110.0
DO (mg/L)	9.15 9.45	9.02	--	--	--	--	11.04	10.62	8.4	8.04	6.12	6.14	8.32	10.2	--	--	--	--	10.1	10.06	9.80	7.78	7.70	8.02
Turbidity (NTU)	6.41 6.55	24	16.6	18.7	17.1	19.4	15.7	18.7	13.2	6.32	4.29	8.61	27	41.6	170 171	27	22.3	18.5	21.5	14.1	17.6	11.4	10.5	17.7
E. coli (#/mL)	167 115	727	63	43	36	39	56	101	285	248	179	687	2420	727	1046 1733	411	33	51	65	133	178	225	219	1733
TSS (mg/L)	4.4 4.8	5.2	1.2	4.8	3.6	2	2.8	2	2.4	2	5.6	3.6	12	8.4	97.5 90	8	4	2.4	5.2	3.2	4.4	2.4	2	10.8
TP (mg/L)	<.02 <.02	0.07	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.12	0.07	.2 .25	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.04
Nitrate (mg/L)	<.23 <.23	<.23	--	0.414	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.278	0.566	.89 .87	<.23	0.272	<.23	<.23	<.23	<.23	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	11/20	11/17
Time	1:30	2:05
Turbidity	24.3	165
E. coli	770	>2420
TSS	11	104
TP	0.09	0.18
Nitrate	--	0.652

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Cottage Grove Silk Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CGSKMO	Date																								
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	10:00	10:10	11:25	10:00	9:35	8:55	8:55	9:07	8:50	9:45	9:00	8:50	8:56	8:55	8:50	8:43	9:01	8:52	8:46	8:49	10:25	9:12	9:00	9:20	
Air Temp (°F)	58	60	50	45	46	34.5	44.4	48.6	58.3	80	67.3	59.4	56.3	42	41	49	46.2	40	40.8	56.3	59	63	63	56	
Water Temp (°C)	9.2	11.1	4.7	6.7	4.6	4.6	7.1	8.7	14.2	16.6	17.4	15.3	11.1	6.7	5.4	8.4	8.9	5.9	7.2	10.3	12.4	18.8*	15.8	13.5	
Conductivity (µS/cm)	119.7	94.8	107.1	56.1	72.8	35.6	46.5	46.1	69.6	110.1	117.6	138.3	71.6	66.3	34.4	NA	61.2	66.2	57.9	66.9	69.4	89.1	99.1	110.8	
DO (mg/L)	9.44	9.04	--	--	--	--	10.96	10.68	8.63	8.56	6.8	6.82	7.52	10.08	--	--	--	--	10.2	9.68	9.38	9.79	7.74	8.16	8.68
Turbidity (NTU)	7.22	21.5	14.8	19.3	19.3	19.7	15.8	19	12.6	5.78	3.49	4.47	38.4	45.4	209	26.6	23.9	19.3	21.9	14.4	14.6	19	11.5	10.1	8.15
E. coli (#/mL)	96	128	172	43	96	23	61	133	276	138	125	649	2420	980	1414	365	88	68	27	122	548	411	238	411	
TSS (mg/L)	8.4	5.2	0.4	3.2	6	2.4	2	1.6	3.2	2	3.6	2	25.2	9.2	123.1	7.2	6	3.6	8.4	2.8	2.4	6.8	2.8	2	2
TP (mg/L)	<.02	0.06	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.14	0.07	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.456	0.405	0.618	0.946	0.263	0.246	<.23	<.23	<.23	<.23	<.23	<.23	0.234	

Parameter	1st Storm 08-09	1st Storm 09-10
Date	11/20	11/17
Time	2:10	2:15
Turbidity	59	136
E. coli	921	>2420
TSS	40.5	88.67
TP	0.25	0.23
Nitrate	--	0.671

Key:

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Creswell Hill Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CWHCUP Parameter	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	10:45	10:10	9:25 9:43	8:58	12:50	9:35	9:47	9:20	--	--	--	--	--	--	--	9:00	9:00	8:55	8:50	--	--	--	--	--
Air Temp (°F)	53	58	43 43	35	55	34	50	66	--	--	--	--	--	--	--	48	45	42	44	--	--	--	--	--
Water Temp (°C)	12.4	13.5	6 6.1	5.7	5.6	4.7	10.4	14.7	--	--	--	--	--	--	--	8.6	8.5	5.8	8.8	--	--	--	--	--
Conductivity (µS/cm)	66.3	76.2	102.2 98.5	63.3	83.7	73.3	69	108.7	--	--	--	--	--	--	--	101.5	76.1	78.1	77	--	--	--	--	--
DO (mg/L)	7.11	6.6	--	--	--	--	9.51	8.39	--	--	--	--	--	--	--	--	--	--	8.68	--	--	--	--	--
Turbidity (NTU)	3.84	6.85	6.97 7.37	15.8	18	19.9	17.9	13.4	--	--	--	--	--	--	--	10.9	14.4	10.8	13.5	--	--	--	--	--
E. coli (#/mL)	365	649*	31 15	35	210	157	162	145	--	--	--	--	--	--	--	33	105	313	49	--	--	--	--	--
TSS (mg/L)	0.8	2.4	4 4.8	9.6	6.8	8.8	10.8	10	--	--	--	--	--	--	--	2	2.8	0.4	5.2	--	--	--	--	--
TP (mg/L)	0.03	0.04	.07 .07	0.03	0.03	0.04	0.06	0.07	--	--	--	--	--	--	--	<.02	<.02	<.02	<.02	--	--	--	--	--
Nitrate (mg/L)	<.23	<.23	--	0.453	0.382	0.396	<.23	0.271	--	--	--	--	--	--	--	0.611	0.439	<.23	<.23	--	--	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	6/2
Time	10:20 10:35	9:20
Turbidity	37.9 37.7	18.1
E. coli	1733 2419	>2420
TSS	14.5 15	7.6
TP	.11 .12	0.09
Nitrate	--	0.245

Key:

- = months where DEQ benchmarks are applied
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- = poor water quality according to summer DEQ benchmarks
- = exceeded State Standard

\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Creswell Hill Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CWHCDW	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Parameter	11:30	11:15 11:30	9:57	9:21	12:30	9:50	10:05	9:41	--	--	--	--	--	--	--	9:30 9:42	9:35	9:25	9:20	--	--	--	--	--
Time	53	58	40	35	55	35	46	66	--	--	--	--	--	--	--	44 42	48	42	47	--	--	--	--	--
Air Temp (°F)	12.8	13.8 13.9	7.1	6.3	6.8	5.8	10.3	15.9	--	--	--	--	--	--	--	8.8 8.6	9.4	7.8	11.2	--	--	--	--	--
Water Temp (°C)	107.5	99.9 99.4	219.2	73.3	114	52.8	77.1	111.9	--	--	--	--	--	--	--	113 110.8	88.4	93.4	88.9	--	--	--	--	--
Conductivity (µS/cm)	6.03	6.44 6.74	--	--	--	--	9.58	7.76	--	--	--	--	--	--	--	--	--	--	8.46	--	--	--	--	--
DO (mg/L)	2.83	2.54 2.68	9.54	12.5	6.62	17.5	10	11	--	--	--	--	--	--	--	12.2 12.3	13	6.4	10.5	--	--	--	--	--
Turbidity (NTU)	192	59 72	3	9	12	17	57	38	--	--	--	--	--	--	--	29 30	70	10	52	--	--	--	--	--
E. coli (#/mL)	1.6	1.2	5.2	3.2	6	5.6	4	8.5	--	--	--	--	--	--	--	3.6 3.6	2.8	0.4	3.6	--	--	--	--	--
TSS (mg/L)	0.03	.02 .04	0.05	<.02	<.02	0.03	0.03	0.09	--	--	--	--	--	--	--	.02 .04	<.02	<.02	<.02	--	--	--	--	--
TP (mg/L)	<.23	<.23	--	4.13	0.231	0.385	<.23	0.232	--	--	--	--	--	--	--	.619 .578	0.561	<.23	0.252	--	--	--	--	--
Nitrate (mg/L)																								

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	6/2
Time	10:50	9:45
Turbidity	16.7	5.2
E. coli	41	130
TSS	4	1.6
TP	<.02	0.02
Nitrate	--	<.23

Key:

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- = poor water quality according to summer DEQ benchmarks
- = exceeded State Standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Creswell Unnamed Creek Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CWNNCMO	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	9:20	--	8:41	--	8:55 8:57	9:15	--	--	--	--	--	--	--	--	8:50	--	--	--	--	--	--	--	--
Air Temp (°F)	--	56	--	35	--	28	48	--	--	--	--	--	--	--	--	44	--	--	--	--	--	--	--	--
Water Temp (°C)	--	14.7	--	9.7	--	8.4 8.3	9.4	--	--	--	--	--	--	--	--	12.9	--	--	--	--	--	--	--	--
Conductivity (µS/cm)	--	181	--	154.8	--	169.8 169.8	76.6	--	--	--	--	--	--	--	--	111.2	--	--	--	--	--	--	--	--
DO (mg/L)	--	7.87	--	--	--	--	8.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity (NTU)	--	42.6	--	3.47	--	10.5 10.5	62.8	--	--	--	--	--	--	--	--	11.2	--	--	--	--	--	--	--	--
<i>E. coli</i> (#/mL)	--	1986	--	23	--	29 31	2420	--	--	--	--	--	--	--	--	47	--	--	--	--	--	--	--	--
TSS (mg/L)	--	4.4	--	5.6	--	6.8 3.2	32	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--
TP (mg/L)	--	0.17	--	<.02	--	<.02	0.23	--	--	--	--	--	--	--	--	<.02	--	--	--	--	--	--	--	--
Nitrate (mg/L)	--	2.4	--	0.449	--	2.82 2.9	0.693	--	--	--	--	--	--	--	--	0.582	--	--	--	--	--	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	NA
Time	9:55	NA
Turbidity	52.6	NA
<i>E. coli</i>	236	NA
TSS	25.5	NA
TP	0.14	NA
Nitrate	--	NA

Key:

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- = poor water quality according to summer DEQ benchmarks
- = exceeded State Standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

**Silk Creek Upstream Sampling Site Results**

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

SKUP	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	12:00	8:10	10:50	9:25	10:20	9:25	9:50	10:30	9:50	10:00	10:00	9:50	10:00	10:15	9:40	9:20	9:52	9:57	9:36	9:48	9:45	10:00	9:45	10:05
Air Temp (°F)	63	58	48	41	49	35.4	48.9	56.2	60.4	89.5	72.1	68.7	59.2	46	46.4	45.8	51.3	44	48.1	65	57	71	72	61.5
Water Temp (°C)	9.5	10.7	4.3	6.9	4.9	5	6.7	8.3	13.5	16.2	15.9	13.9	9.7	7.4	6.1	8.6	8.8	6.6	7.4	9.8	10.9	17.4	14.9	12
Conductivity (µS/cm)	111.5	80.7	96.9	50.6	65.6	5.1	41.1	38.0	58.4	97.0	100.7	128.4	74.5	63.2	31.8	NA	52.9	57.1	50.4	58.2	58.3	78.3	89.5	104.3
DO (mg/L)	9.68	8.72	--	--	--	--	11.36	10.36	8.84	7.68	6.78	6.38	8.6	9.96	--	--	--	--	10.34	10.22	10.00	7.40	6.36	7.94
Turbidity (NTU)	9.25	25.9	12.7	15.4	14	18	14.9	16.9	13.7	11.6	10.3	10.9	23.9	37.4	81.4	21	21	15.3	16.9	13.5	15	12.5	20.8	8.23
<i>E. coli</i> (#/mL)	488	179	29	22	12	15	9	8	40	66	461	75	1986	62	816	32	3	4	7	7	83	179	131	20
TSS (mg/L)	2.8	4.8	0.8	3.6	2.4	2.8	0.8	1.6	2.4	2.8	3.2	2.8	12.8	5.6	20.67	3.6	3.2	0.4	0.4	1.6	0.4	2.4	4.8	1.2
TP (mg/L)	0.13	0.05	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.04	<.02	0.06	0.05	<.02	0.1	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	<.23	--	0.295	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.55	0.817	0.25	0.263	<.23	<.23	<.23	<.23	<.23	<.23	<.23

**Key:**

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- = exceeded State Standard

\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Mosby Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

MCUP	Date																								
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	1:15	11:30 11:45	12:40	10:45	11:45	10:40	12:05	10:05	11:40	12:30	11:20	11:36	11:53	12:20	11:08	11:05	11:55	12:11 12:30	11:47	11:36	11:25	12:20	11:30	11:50	
Air Temp (°F)	64	63 63	52	42	54	33.7	--	55.8	64.8	82	82.1	74	58.7	11	51	45	49	52	58.4	68	62	71	80.2	63	
Water Temp (°C)	9.7	10.7 10.8	4.6	4.8	4.2	4.3	6.3	8.9	14.2	20.7	19.2	17.1	10.8	7.8	6.5	8.2	8.5	6.2	8.2	9.6	11.8	19.6	18.1	14.6	
Conductivity (µS/cm)	71.1	57.4 57.3	62.8	42.3	52.4	51.3	32.5	36.8	47.9	62.7	67.4	77.4	52.7	55.5	31.1	NA	53.2	57.6	50.8	51.8	58.3	66	68.3	73.3	
DO (mg/L)	11.17	9.99 10.07	--	--	--	--	12.06	10.44	9.5	8.96	8.18	8.72	9.76	10.6	--	--	--	--	10.66	10.82	10.18	8.98	9.64	9.72	
Turbidity (NTU)	1.45	6.4 6.76	3.86	4.53	2.6	5.32	4.93	3.84	2.16	1.23	1.14	0.99	2.3	12.6	16.5	6.51	5.34	5.89	7.78	4.01	8.31	2.1	1.41	1.02	
E. coli (#/mL)	161	20 23	<1	<1	3	2	2	1	12	16	49	32	21	133	43	50	13	10	3	3	5	14	240	57	17
TSS (mg/L)	2.8	3.2 4	0.4	2.8	0.4	1.2	0.4	2	1.6	1.2	1.2	0.4	1.2	2	3.2	0.4	1.2	.4	1.2	1.2	1.2	0.4	0.4	0.4	
TP (mg/L)	<.02	<.02 <.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.03	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	
Nitrate (mg/L)	<.23	.35 .33	--	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	<.23	0.652	0.368	<.23	<.23	<.23	<.23	<.23	0.347	<.23	<.23	<.23	

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Mosby Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

MCMO	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	1:45	12:15	1:35	11:15	11:10	10:05	10:55		10:40	11:55	10:45	11:07	10:58	11:20	10:45	10:45	11:00	11:26	11:10	11:07	11:45	11:38	10:40	12:20
Air Temp (°F)	64	65	53	45	48	35.8	52.7	50.1	61.3	84	74.9	73.3	59.6	8.9c	52.3	45.5	48.9	49	53.2	60	61	69	74	63
Water Temp (°C)	10.6	11	4.7	5.2	4.1	4.5	6.2	9	14.4	20.4	20.6	18.1	10.8	7.8	6.3	8.3	8.6	5.9	7.9	9.6	12.2	20.4	18.2	15
Conductivity (µS/cm)	73.5	57.8	65.6	44.5	54.1	52.2	33.7	37.4	48.7	69.1	70.5	79.3	54.8	56	31.6	NA	53.5	57.8	51.6	52.7	58.6	34.6	69.4	72
DO (mg/L)	10.45	9.92	--	--	--	--	11.76	10.92	9.34	8.86	8.08	8.46	9.56	10.86	--	--	--	--	10.90	10.94	9.59	8.18	8.72	9.52
Turbidity (NTU)	1.07	11.6	1.99	6.16	3.3	6.98	6.52	4.37	2.26	1.1	.75	0.88	1.62	13.6	18.9	7.57	5.55	6.04	8.24	7.3	8.59	2.01	1.57	1.05
E. coli (#/mL)	133	66	16	9	13	6	5	50	58	37	80	19	225	78	73	8	5	6	6	11	15	142	25	12
TSS (mg/L)	2	10	<1	0.8	0.4	1.2	.4	0.4	1.2	2	.8	0.4	1.6	2	3.2	0.4	.4	0	2.4	0.4	0.8	.4	.4	0.4
TP (mg/L)	<.02	0.07	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	0.31	--	0.4	<.23	0.242	<.23	0.231	<.23	<.23	<.23	<.23	<.23	0.641	0.392	0.243	.253	<.23	<.23	<.23	0.241	<.23	<.23	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Gettings Creek Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

GCUP Parameter	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	11:55	1:30	11:30 11:45	10:35	10:15	12:30	12:10	10:45	10:40	12:25	7:28	10:25	10:30	10:00	9:55	10:15	10:25	11:10	9:35	9:05	9:45	9:11	9:00	9:15
Air Temp (°F)	64	64	47.5 48	39	44	38	53	58	58	71	58	76	57	59	46	45	48	48	40	53	60	59	62	54
Water Temp (°C)	9.8	11.5	4.4 4.4	4.4	4.2	4	6.5	7.9	11.8	13.9	14.9	14.2	9.9	7.8	5.5	8.1	7.6	5.1	6.4	8.5	10.9	12.2	13.1	11.8
Conductivity (µS/cm)	114.6	78.8	82.9 82.9	51.4	69.0	58.6	58.2	63.5	74.8	101.2	131.1	127.2	111.7	65.4	66.5	55.5	42.0	63.0	49.3	59.3	47.6	89.7	107.1	117.4
DO (mg/L)	10.52	9.56	--	--	--	--	11.36	10.10	9.86	9.65	8.69	9.37	9.94	10.54	--	--	--	--	11.19	10.85	9.99	9.34	8.98	9.56
Turbidity (NTU)	3	14.2	9.12 7.88	8.45	8.21	11.3	10.5	9.23	10.2	4.86	1.63	1.47	11.2	9.99	21.1	10.9	13.9	13.4	1.12	9.83	15.4	5.87	3.5	1.85
E. coli (#/mL)	167	10	2 1	6	2	6	3	3	579*	84	57	44	435*	5	3	6	3	2	5	4	16	46	63	36
TSS (mg/L)	0.4	3.2	4 0	0.4	2	0.4	4.4	1.2	3.6	3.2	1.6	0.4	5.6	1.6	3.6	1.6	3.2	0.8	3.2	3.2	3.2	1.6	0.8	0.8
TP (mg/L)	<.02	<.02	<.02	<.02	--	<.02	<.02	<.02	<.02	<.02	<.02	<.02	0.06	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	1.5	--	0.321	<.23	0.339	0.275	<.23	<.23	<.23	<.23	<.23	0.5	0.347	0.581	<.23	0.304	0.296	<.23	<.23	<.23	1.04	<.23	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Gettings Creek Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/Jan 1st - May 15th 13 degrees; otherwise 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

GCDW	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	12:25	12:50 1:05	11:00	11:05	10:00	12:10	1:00	11:25 11:25	11:20	12:45	7:45	10:55	10:55	10:30	10:22	10:00	10:05	10:50	9:15	8:45	9:30	8:42 8:42	8:40	9:00
Air Temp (°F)	64	64.5 64.5	52.5	43	46	38	59	59 59	62	73	61	75	57	62	49	45	52	50	44	58	65	60 60	70	57
Water Temp (°C)	12.4	12.8 12.8	5	5	4.3	5.2	8.6	9.9 9.9	14.2	18.9*	18.6*	17.2	12.2	8.1	5.8	8.4	8.7	5.9	7	9.8	12.8	14.5 14.5	15.8	14.1
Conductivity (µS/cm)	114.4	81.4 81.4	85.5	59.6	73.8	66.0	66.3	70.4 70.4	77.2	101.3	134.1	128.1	109.7	70.6	68.6	66.1	71.6	69.1	59.2	65.9	58.2	94.2 94.2	110.2	121.9
DO (mg/L)	10.27	9.14 9.33	--	--	--	--	11.08	10.35 10.53	9.44	9.7	8.7	8.82	9.01	10.43	--	--	--	--	10.88	10.60	9.81	13.05 12.01	8.39	7.36
Turbidity (NTU)	3.59	17.6 16.9	21.2	10.3	10.2	13.1	16.3	12.1 12.1	11	5.23	4.27	11.6	24.9	16.7	26.3	14.6	14.1	13.5	12.9	9.97	18.8	6.87 6.75	3.74	5.65
E. coli (#/mL)	326	172 127	102	20	1733	96	435	435 435	1986	1230	1046	1414	>2420	980	687	59	99	61	238	326	365	>2420 >2420	1120	1120
TSS (mg/L)	1.2	8.8 8	9.6	0.8	2.4	1.6	6.4	1.6 1.2	4.4	5.2	4.4	6	17.2	2.8	9.6	3.2	3.2	2.4	4.4	1.6	6.8	3.6 3.6	0.4	0.36
TP (mg/L)	<.02	.02 .03	0.06	<.02	--	<.02	<.02	<.02 <.02	<.02	<.02	0.03	0.05	0.1	<.02	0.04	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02
Nitrate (mg/L)	<.23	1.3 1.4	--	0.362	<.23	0.3	0.255	.238 <.23	<.23	<.23	<.23	<.23	0.276	0.34	0.526	0.341	0.314	0.283	<.23	<.23	0.264	0.243	<.23	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Camas Swale Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

CSUP Parameter	Date																								
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	9:30	12:30	9:35	8:50 9:00	1:25	9:00	9:10	9:15	9:10	--	--	--	--	--	--	9:55 10:10	11:15	9:10	1:30	1:45	10:15	9:15	--	--	--
Air Temp (°F)	53	56	43	40 40	55	37	46	68	68	--	--	--	--	--	--	46 47	NA	48 52	56 57	55	56	--	--	--	
Water Temp (°C)	9.6	12.2	4.8	5.7 5.8	5.2	4.9	8.1	10.9	13.1	--	--	--	--	--	--	7.9 7.9	8.4	5.8 5.7	9.9 10.0	9.5	12	--	--	--	
Conductivity (µS/cm)	133.6	105.3	127.2	69.5 69.9	82.8	66.8	84.7	70.3	123.6	--	--	--	--	--	--	60.1 60.1	66.4	78.5 78.9	64.3 64.6	78.6	79.4	--	--	--	
DO (mg/L)	8.8	8.71	--	--	--	--	10.98	10.04	8.8	--	--	--	--	--	--	--	--	--	--	9.66	10.82	--	--	--	
Turbidity (NTU)	12.2	32.4	13.3	23.1 22.8	21.3	31.2	23.1	32.7	21	--	--	--	--	--	--	27.2 27.2	26	22.5 22.7	29.9 30.5	20.6	22.8	--	--	--	
E. coli (#/mL)	88	649*	93	58 30	40	28	140	56	260	--	--	--	--	--	--	30 23	65	65 82	33 10	160	219	--	--	--	
TSS (mg/L)	2.4	7.6	2.8	2 3.6	1.6	4.4	9.6	4	8	--	--	--	--	--	--	6.4 6.4	3.6	1.2 1.2	5.2 4.4	2.8	2.8	--	--	--	
TP (mg/L)	0.11	0.16	0.05	0.03 .02	0.02	0.06	0.04	0.07	0.05	--	--	--	--	--	--	.05 .02	0.04	<.02 <.02	.02 <.02	0.03	0.06	--	--	--	
Nitrate (mg/L)	<.23	<.23	--	<.23 <.23	<.23	<.23	<.23	<.23	<.23	--	--	--	--	--	--	<.23 <.23	<.23	<.23 <.23	<.23 <.23	<.23	<.23	--	--	--	

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Camas Swale Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CSDW	Date																								
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Parameter																									
Time	10:15	1:05	10:00	9:25	1:10	9:30	9:45	9:40	9:55	--	--	--	--	--	--	10:20	11:35	9:40	2:30	11:00	8:20	--	--	--	
Air Temp (°F)	52	58	42	40	55	36	41	69	64	--	--	--	--	--	--	47	--	46	63	61	52	--	--	--	
Water Temp (°C)	10.3	13	5.1	5.6	4.7	4.2	9.1	12.4	16	--	--	--	--	--	--	7.7	9	5.7	11.1	10.3	13.4	--	--	--	
Conductivity (µS/cm)	373.8	128.6	139.6	74.3	88.7	75.8	99.4	79.3	128.8	--	--	--	--	--	--	64.4	74	89.9	75.3	91.2	92	--	--	--	
DO (mg/L)	2.83**	7.92	--	--	--	--	9.62	9.41	7.24	--	--	--	--	--	--	--	--	--	--	9.22	9.75	8.89	--	--	--
Turbidity (NTU)	85.8	41.9	16.5	24.7	24.7	30.6	21.2	35.8	26.3	--	--	--	--	--	--	27.6	24.9	20.8	32.1	21.1	24.2	--	--	--	
E. coli (#/mL)	572	687	37	47	62	34	291	308	124	--	--	--	--	--	--	46	63	56	78	411	387	--	--	--	
TSS (mg/L)	74	6.8	2	4.4	3.2	6.4	7.2	5	10	--	--	--	--	--	--	7.2	3.2	2	8.4	2.8	4	--	--	--	
TP (mg/L)	0.42	0.18	0.05	0.02	0.03	.06	0.02	.08	<.02	--	--	--	--	--	--	0.11	0.03	<.02	<.02	<.02	0.04	--	--	--	
Nitrate (mg/L)	<.23	<.23	--	<.23	<.23	<.23	<.23	<.23	<.23	--	--	--	--	--	--	3.42	0.271	<.23	<.23	<.23	0.23	--	--	--	

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Junction City Tributary 1 Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

JCUPTR1	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	--	--	2:15	--	--	--	--	--	--	--	--	--	1:30	2:15	2:25	2:00	--	2:00	--	--	--
Air Temp (°F)	--	--	--	--	--	44	--	--	--	--	--	--	--	--	--	56	57	51	62	--	73	--	--	--
Water Temp (°C)	--	--	--	--	--	10.1	--	--	--	--	--	--	--	--	--	11.1	14.3	11.2	19.4	--	27	--	--	--
Conductivity (µS/cm)	--	--	--	--	--	239.2	--	--	--	--	--	--	--	--	--	214.1	237.9	246	244.3	--	234	--	--	--
DO (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.14*	--	5.52*	--	--	--
Turbidity (NTU)	--	--	--	--	--	22.6	--	--	--	--	--	--	--	--	--	31.5	54.2	20.8	9.8	--	4.93	--	--	--
E. coli (#/mL)	--	--	--	--	--	3	--	--	--	--	--	--	--	--	--	80	21	39	2	--	45	--	--	--
TSS (mg/L)	--	--	--	--	--	7.2	--	--	--	--	--	--	--	--	--	7.2	56.8	14.8	8.8	--	3.2	--	--	--
TP (mg/L)	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--	--	0.11	0.19	0.08	0.04	--	0.04	--	--	--
Nitrate (mg/L)	--	--	--	--	--	0.489	--	--	--	--	--	--	--	--	--	3.42	3.36	2.33	1.59	--	<.23	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	3/5	6/2
Time	1:05	12:00
Turbidity	36.8	118
E. coli	30	>2420
TSS	17.2	57.6
TP	0.18	.25
Nitrate	2.16	.442
		.547

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Upper Willamette Water Quality Monitoring Project  
2008-2010

**Junction City Tributary 1 Downstream Sampling Site Results**

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

JCDWTR1	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	--	--	1:45	--	--	--	--	--	--	--	--	--	2:05	12:50	1:55	3:00	--	2:20	--	--	--
Air Temp (°F)	--	--	--	--	--	49	--	--	--	--	--	--	--	--	--	58	56	51	62	--	74	--	--	--
Water Temp (°C)	--	--	--	--	--	10.6	--	--	--	--	--	--	--	--	--	10.5	11.8	12.5	15.6	--	20.9	--	--	--
Conductivity (µS/cm)	--	--	--	--	--	274.8	--	--	--	--	--	--	--	--	--	122.4	241.5	286.2	242	--	245.3	--	--	--
DO (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<i>11.53**</i>	--	<i>11.61**</i>	--	--	--
Turbidity (NTU)	--	--	--	--	--	8.65	--	--	--	--	--	--	--	--	--	25.8	8.83	2.01	5.41	--	2.7	--	--	--
E. coli (#/mL)	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	249	16	2	68	--	86	--	--	--
TSS (mg/L)	--	--	--	--	--	6.4	--	--	--	--	--	--	--	--	--	13.6	2.8	1.6	3.2	--	0.4	--	--	--
TP (mg/L)	--	--	--	--	--	0.08	--	--	--	--	--	--	--	--	--	0.08	<.02	0.04	0.05	--	0.04	--	--	--
Nitrate (mg/L)	--	--	--	--	--	1.36	--	--	--	--	--	--	--	--	--	0.949	2.48	2.46	1.5	--	0.809	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	3/5	6/2
Time	1:35	11:40
Turbidity	22.8	7.71
E. coli	20	816
TSS	4.8	4.4
TP	0.14	0.19
Nitrate	2.07	<.23

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Upper Willamette Water Quality Monitoring Project  
2008-2010

**Junction City Tributary 2 Upstream Sampling Site Results**

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

JUCPTR2	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	--	--	2:30	--	--	--	--	--	--	--	--	--	1:40	1:05	2:10	2:20	--	--	--	--	--
Air Temp (°F)	--	--	--	--	--	47	--	--	--	--	--	--	--	--	--	56	57	53	64	--	--	--	--	--
Water Temp (°C)	--	--	--	--	--	7.1	--	--	--	--	--	--	--	--	--	8.7	10.2	8.5	12.7	--	--	--	--	--
Conductivity (µS/cm)	--	--	--	--	--	259.4	--	--	--	--	--	--	--	--	--	208.6	242.6	259.7	258	--	--	--	--	--
DO (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.19	--	--	--	--	--
Turbidity (NTU)	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	6.2	3.36	2.41	2.08	--	--	--	--	--
<i>E. coli</i> (#/mL)	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	67	4	<1	12	--	--	--	--	--
TSS (mg/L)	--	--	--	--	--	0.4	--	--	--	--	--	--	--	--	--	10.8	0.4	2.8	0.8	--	--	--	--	--
TP (mg/L)	--	--	--	--	--	0.16	--	--	--	--	--	--	--	--	--	0.15	0.08	0.06	0.09	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	0.827	--	--	--	--	--	--	--	--	--	1.83	2.4	1.22	2.1	--	--	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	3/5	6/2
Time	12:45	11:50
Turbidity	8.14	7.77
<i>E. coli</i>	4	866
TSS	3.6	2.8
TP	0.17	0.34
Nitrate	0.836	0.491

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Junction City Tributary 2 Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

JCDWTR2	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	--	--	1:35	--	--	--	--	--	--	--	--	--	1:55	12:40	1:45	2:40	--	--	--	--	--
Air Temp (°F)	--	--	--	--	--	49	--	--	--	--	--	--	--	--	--	58	56	51	65	--	--	--	--	--
Water Temp (°C)	--	--	--	--	--	8.7	--	--	--	--	--	--	--	--	--	10.2	11.2	10.4	18.1	--	--	--	--	--
Conductivity (µS/cm)	--	--	--	--	--	276.5	--	--	--	--	--	--	--	--	--	172.8	249.4	277.8	262.5	--	--	--	--	--
DO (mg/L)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.52**	--	--	--	--	--
Turbidity (NTU)	--	--	--	--	--	15.7	--	--	--	--	--	--	--	--	--	15.3	9.14	7.11	3.24	--	--	--	--	--
E. coli (#/mL)	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	238	10	6	32	--	--	--	--	--
TSS (mg/L)	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--	--	10.4	8	4	4.8	--	--	--	--	--
TP (mg/L)	--	--	--	--	--	0.13	--	--	--	--	--	--	--	--	--	0.04	0.09	0.04	.09	--	--	--	--	--
Nitrate (mg/L)	--	--	--	--	--	1.39	--	--	--	--	--	--	--	--	--	2.06	2.86	2.39	1.99	--	--	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	3/5	6/2
Time	1:20	11:20
Turbidity	16.5	11.9
E. coli	27	>2420
TSS	14.4	16.6
TP	.19	.12
Nitrate	1.96	.63

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Veneta Upstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

VNUP	Date																								
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	
Time	--	--	--	9:20	--	9:35	--	11:55	--	--	--	--	--	--	11:40	10:10	11:10	11:25	11:10	2:10	2:30	--	--	--	
Air Temp (°F)	--	--	--	54	--	37	--	64	--	--	--	--	--	--	58	45	49	52	55	67	68	--	--	--	
Water Temp (°C)	--	--	--	7	--	6.2	--	14.4	--	--	--	--	--	--	7.3	7.7	9.3	10.1	10.1	16.3	17.2	--	--	--	
Conductivity (µS/cm)	--	--	--	38.4	--	40.1	--	25.5	--	--	--	--	--	--	80.1	41.6	39.3	39.2	32.5	40	40.2	--	--	--	
DO (mg/L)	--	--	--	--	--	--	--	8.97	--	--	--	--	--	--	--	--	--	--	10.47	8.65	7.73	--	--	--	
Turbidity (NTU)	--	--	--	3.51	--	2.68	--	5.28	--	--	--	--	--	--	8.33	5.63	6.69	3.97	2.81	7.57	6.74	--	--	--	
E. coli (#/mL)	--	--	--	26	--	17	--	36	--	--	--	--	--	--	687	3	2	4	15	15	1046	--	--	--	
TSS (mg/L)	--	--	--	0.8	--	2	--	7	--	--	--	--	--	--	1.6	2	3.6	0.4	2.4	5.2	2	--	--	--	
TP (mg/L)	--	--	--	<.02	--	<.02	--	0.05	--	--	--	--	--	--	<.02	<.02	<.02	<.02	<.02	<.02	<.02	<.02	--	--	--
Nitrate (mg/L)	--	--	--	0.242	--	<.23	--	<.23	--	--	--	--	--	--	1.19	<.23	<.23	<.23	<.23	<.23	<.23	--	--	--	

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	12/16
Time	11:55	11:40
Turbidity	8.79	8.33
E. coli	2420	687
TSS	3	1.6
TP	<.02	<.02
Nitrate	--	1.19

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Upper Willamette Water Quality Monitoring Project  
2008-2010

Veneta Downstream Sampling Site Results

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 8 mg/liter

VNDW	Date																							
Parameter	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	--	--	9:55	--	9:50	--	11:17	--	--	--	--	--	--	11:55	9:50	10:55	10:55	11:20	1:50	2:45	--	--	--
Air Temp (°F)	--	--	--	52	--	37	--	68	--	--	--	--	--	--	55	44	48	50	54	67	70	--	--	--
Water Temp (°C)	--	--	--	6.9	--	5.5	--	13.9	--	--	--	--	--	--	6.3	7.5	8.7	6.8	9.1	13.1	14.9	--	--	--
Conductivity (µS/cm)	--	--	--	54.8	--	59.5	--	25.5	--	--	--	--	--	--	98	60.7	61.3	61.5	35.3	53.5	49	--	--	--
DO (mg/L)	--	--	--	--	--	--	--	9.94	--	--	--	--	--	--	--	--	--	--	11.94	10.18	8.78	--	--	--
Turbidity (NTU)	--	--	--	2.98	--	3.12	--	39.9	--	--	--	--	--	--	8.54	4.16	4.26	4.27	2.79	3.17	8.86	--	--	--
E. coli (#/mL)	--	--	--	21	--	61	--	71	--	--	--	--	--	--	1414	121	31	140	45	435	548	--	--	--
TSS (mg/L)	--	--	--	--	--	1.2	--	2	--	--	--	--	--	--	2	0.4	0.8	0.4	1.2	1.2	0.8	--	--	--
TP (mg/L)	--	--	--	<.02	--	<.02	--	<.02	--	--	--	--	--	--	0.02	<.02	<.02	<.02	<.02	<.02	0.05	--	--	--
Nitrate (mg/L)	--	--	--	0.267	--	<.23	--	<.23	--	--	--	--	--	--	0.787	<.23	<.23	<.23	<.23	<.23	<.23	--	--	--

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	12/16
Time	12:15 12:30	11:55
Turbidity	9.21 9.12	8.54
E. coli	727 1046	1414
TSS	3 3.5	2
TP	<.02 <.02	0.02
Nitrate	--	0.787

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Upper Willamette Water Quality Monitoring Project  
2008-2010

**Coburg Upstream Sampling Site Results**

Willamette Valley Ecoregion/Salmon and Trout Rearing and Migration Habitat/No designation 18 degrees; DO 11 mg/liter January 1 through May 15; otherwise 6.5 mg/liter

CBUP Parameter	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	7:32 7:48	7:32	12:45	2:05	12:30	12:15	2:30	12:50	2:15	1:15	1:25	2:00	1:20	--	12:10	--	--	--	--	--	2:35	1:55	2:15
Air Temp (°F)	49	--	34	50	41	46	45	52	70	73	82	75	67	63	--	42	--	--	--	--	--	72	85	61
Water Temp (°C)	11.5	13.2 13.1	7.4	8.2	7.3	8.3	8.7	9	13.7	14.7	17	13.7	11.6	10.8	--	9.3	--	--	--	--	--	17.0	17.0	13.1
Conductivity (µS/cm)	179.2	88.7 87.2	116.1	64.3	214.8	156.5	80.9	50.5	72.5	73.1	71.5	64.2	67.5	79.5	--	106.5	--	--	--	--	--	64.0	68.0	69.8
DO (mg/L)	5.9*	7.76 7.95	--	--	--	--	11.10	11.39	10.08	10.69	10.43	10.84	10.81	9.92	--	--	--	--	--	--	--	9.60	8.67	9.10
Turbidity (NTU)	6.25	50.7 51.4	7.84	2.35	8	15.1	1.78	5.61	2.21	1.04	0.96	1	2.82	5.38	--	1.8	--	--	--	--	--	1.76	0.98	0.91
E. coli (#/mL)	93	236	>2420**	5	3	130	4	91	24	34	29	19	50	134	--	35	--	--	--	--	--	30	20	48
TSS (mg/L)	11.6	5.6	44.8	2	5.2	3.6	0.4	3.6	1.6	1.2	1.2	0.8	1.2	0.4	--	0.4	--	--	--	--	--	2.4	4	1.2
TP (mg/L)	<.02	0.19	0.16	<.02	<.02	0.06	<.02	<.02	<.02	<.02	0.02	<.02	<.02	<.02	--	<.02	--	--	--	--	--	0.06	<.02	<.02
Nitrate (mg/L)	0.36	0.2	--	0.267	0.599	0.798	0.346	<.23	<.23	<.23	<.23	<.23	<.23	0.249	--	0.93	--	--	--	--	--	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	6/2
Time	1:30	10:30
Turbidity	28.4	9.42
E. coli	66	291
TSS	3.5	4
TP	0.06	0.07
Nitrate	--	1.3

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Coburg Downstream Sampling Site Results

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CBDW	Date																							
	10/08	11/08	12/08	1/09	2/09	3/09	4/09	5/09	6/09	7/09	8/09	9/09	10/09	11/09	12/09	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
Time	--	8:06	7:48	1:00	1:50	12:15	11:45	2:00	1:15	1:55	1:55	1:00	1:30 1:30	12:55	--	12:30	--	--	--	--	--	2:15	1:35	1:50
Air Temp (°F)	50	--	39	53	41	46	45	52	72	73	88	76	68 68	66	--	44	--	--	--	--	--	71	83	62
Water Temp (°C)	11.1	12.2	5.3	8.8	6.4	8	10.8	10.1	13.9	14.7	17.4	13.9	11.7 11.7	9.8	--	9.1	--	--	--	--	--	16.6	16.5	13.2
Conductivity (µS/cm)	176	197.1	225.5	150.0	162.0	208.1	168.0	67.3	71.9	73.0	70.3	64.8	67.1 67.1	130.4	--	121.3	--	--	--	--	--	65.5	68.4	70.1
DO (mg/L)	5.5*	6.83	--	--	--	--	12.57	11.04	10.33	10.57	10.30	10.57	10.91 10.78	9.82	--	--	--	--	--	--	--	9.93	9.97	10.10
Turbidity (NTU)	2.82	18.6	4.11	7.93	8.89	14.3	3.87	11.8	2.6	1.4	1.42	1.3	2.57 2.59	13.2	--	8.54	--	--	--	--	--	5.06	1.5	3.65
E. coli (#/mL)	4	517**	71	20	38	4	154	99	18	166	46	50	59 61	73	--	26	--	--	--	--	--	184	33	115
TSS (mg/L)	7.8	--	1.6	1.2	4.8	3.6	1.6	3.6	5.2	3.6	1.6	0.4	3.6 3.6	0.4	--	1.2	--	--	--	--	--	7.2	2	5.2
TP (mg/L)	0.04	0.09	<.02	<.02	<.02	0.06	<.02	0.02	0.05	<.02	0.03	<.02	<.02 <.02	0.05	--	0.03	--	--	--	--	--	<.02	0.03	0.03
Nitrate (mg/L)	0.37	0.64	--	0.768	0.612	1.05	0.62	<.23	<.23	<.23	<.23	<.23	<.23 <.23	0.572	--	1.32	--	--	--	--	--	<.23	<.23	<.23

Parameter	1st Storm 08-09	1st Storm 09-10
Date	1/8	6/2
Time	1:15	10:50
Turbidity	30.6	20.2
E. coli	185	>2420
TSS	5	9.2
TP	0.08	0.14
Nitrate	--	0.765

Key:

- = months where DEQ benchmarks are applied
- = fair water quality according to summer DEQ benchmarks
- = poor water quality according to summer DEQ benchmarks
- = exceeded State Standard

\*exceeded the threshold value but there were not enough occurrences for the SITE to actually exceed the standard

\*\*if in italicized type it means that the value was excluded from the analysis as an anomaly