

Summary of water quality at the Coon Creek at Brewers Road and Striplin Road sites, Jan. - May 2012.

Field observations							Nutrients			Organophosphate Pesticides		Other Constituents		
Date and Location	Estimated Discharge	Water Temperature	Specific conductance	Dissolved Oxygen	Dissolved Oxygen	pH	Nitrate + Nitrite-N	Total Organic Carbon	Phosphate-P	Chlorpyrifos	Diazinon	Total Suspended Solids	Turbidity	E. Coli bacteria
	(cfs)	(°C)	(µS/cm @ 25°C)	(mg O ₂ /L)	(% saturation)		(mg/L)	(mg/L)	(mg/L)	(ng/L)	(ng/L)	(mg/L)	(NTU)	(MPN/100 ml)
Coon Creek at Brewers Road														
2/23/2012	21	12.5	198	11.02	103.0	ns	0.59	2.4	1.9	...	...	4.0	3.3	ND
3/14/2012	(ns) flooded	11.4	164	9.97	91.3	7.0	1.0	4.6	0.28	...	...	147	60	> 2400 (2x)
4/19/2012	130	19.3	190	8.13	86.0	7.3	0.65	4.5	0.065	...	...	10 (13)	10 (9.4)	100
5/17/2012	12.5	21.6	163	7.1	80.8	7.3	0.33	4.0	0.082	...	...	14	10	110
Coon Creek at Striplin Road														
1/24/2012	38	19.1	294	2.22	8.6	6.8	...	...	...	ND	6.3	...	...	...
3/14/2012	ns	12.6	301	4.06	38.4	6.8	...	...	...	...	...	...	...	...
5/17/2012	1.9	21.0	535	5.36	60.0	7.3	...	...	...	4.8	6.5	...	...	...
Basin Plan water quality objectives (Central Valley Water Board, 2009):														
- Aquatic acute toxicity: 1-hour average			--- ¹	--- ²	---	---	---	---	---	25.0	16.0	---	---	---
- Aquatic chronic toxicity: 4-day average			--- ¹	--- ²	---	---	---	---	---	15.0	10.0	---	---	---

Notes: ND = not detected ns = not sampled, ... = not measured or analyzed

- 1) The site-specific objective is 700 uS/cm to sustain beneficial uses of agricultural and municipal supply.
- 2) For waters designated as coldwater habitat (COLD) dissolved oxygen concentrations shall not fall below 7.0 mg O₂/L.
- 3) The pH shall not be depressed below 6.5 nor raised above 8.5.
- 4) Biostimulatory constituents should not be present in amounts that stimulate excessive aquatic growth.
- 5) The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- 6) Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses.
- 7) In all waters designated for contact recreation (REC-1), the E. coli concentration shall not exceed 235/100 ml in any single sample, nor exceed a geometric mean of 126/100 ml, based on a minimum of not less than five samples equally spaced over a 30-day period.

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	(cfs)	(°C)	(µS/cm @ 25°C)	(mg O2/L)	(% saturation)		(mg/L)	(mg/L)	(mg/L)	(ng/L)	(ng/L)	(mg/L)	(NTU)	(MPN/100 ml)	
Laboratory Reporting Limits: ²							1/24/2012	4.0
							2/23/2012	0.1	0.5	0.01	3.0	0.05	1.0
							3/14/2012	0.05	0.5	0.01	3.0	0.2	1.0
							4/19/2012	0.05	0.5	0.01	2.0	0.05	1.0
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- 1) All specific conductance, temperature, and pH measurements were made in the field.
Nitrate+nitrite-nitrogen and total phosphorus samples were preserved with sulfuric acid (H2SO4) to pH<2 upon collection.
Total organic carbon samples were preserved with hydrochloric acid (HCL) to pH<2 upon collection.
Diazinon, chlorpyrifos, and E. coli bacteria samples were iced but not acidified and were delivered to the laboratory within 24 hours of sample collection.
- 2) Laboratory reporting limits vary based on the need for dilution to bring samples into the analytical range.
- 3) The site-specific objective is 700 uS/cm to sustain beneficial uses of agricultural and municipal supply (RWQCB, 2009).
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