ESTUARY SAMPLING SITES

Jenner Boat Ramp	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/14/2013	0940	18.2	7.8	ND	0.18	0.0030	1.3	ND	0.24	1.5	0.054	0.14	1.35	1.27	8600	3.8	0.00023	>2419.6	19.5	12.5	177
5/21/2013	1000	17.2	8.2	0.21	0.10	0.00040	0.14	ND	0.32	0.45	0.063	0.049	1.57	1.53	5700	16	0.0021	>2419.6	112.6	66.9	131
5/28/2013	0915	16.1	8.2	0.21	0.14	0.0051	ND	ND	0.32	0.32	0.050	0.090	2.16	2.21	1100	1.6	0.0033	>2419.6	1986.3	145.0	142
5/30/2013	0940	17.0	8.3	ND	0.14	0.0068	ND	ND	0.24	0.24	0.047	0.072	2.06	2.06	1900	2.4	0.0021	>2419.6	>2419.6	214.3	136
6/4/2013	0930	19.2	7.9	0.210	0.14	0.0032	ND	ND	0.35	0.35	0.053	0.11	1.83	1.79	2600	3.1	0.0023	>2419.6	70.3	18.9	95
6/11/2013	0940	17.5	8.5	ND	0.21	0.017	0.11	ND	0.24	0.36	0.056	0.10	1.98	2.00	1300	1.4	0.0036	>2419.6	16.4	14.4	109
6/13/2013	0930	17.7	8.4	0.21	ND	ND	ND	ND	0.28	0.28	0.053	0.083	1.72	1.81	2800	2.2	0.0020	>2419.6	73.3	104.3	92
6/18/2013	0910	17.8	8.5	ND	ND	ND	ND	ND	0.24	0.24	0.043	0.076	1.74	1.54	6200	2.2	0.0025	>2419.6	3.0	31.8	83
6/25/2013	0940	17.8	8.4	ND	0.18	ND	0.15	ND	0.21	0.36	0.050	0.098	2.01	2.06	3200	4.4	0.0039	>2419.6	95.7	1413.6	141
7/2/2013	1020	22.2	8.2	ND	0.18	ND	0.13	ND	0.35	0.48	0.044	0.074	2.40	2.48	1900	2.1	0.0019	>2419.6	63.8	73.3	110
7/9/2013	0930	17.7	8.0	0.24	0.10	ND	ND	ND	0.35	0.35	0.043	0.11	1.16	1.26	11000	1.8	0.0036	>2419.6	6.3	579.6	115
7/11/2013	0950	18.2	8.5	ND	0.18	ND	ND	ND	0.21	0.21	0.051	0.13	1.26	1.23	12000	2.0	0.0023	2419.6	2.0	136.7	99
7/16/2013	0930	16.5	8.0	ND	0.14	ND	ND	ND	0.21	0.21	0.051	0.12	1.08	1.14	11000	2.1	0.0016	>2419.6	6.1	110.6	77
7/23/2013	0940	17.6	8.1	0.24	ND	ND	ND	ND	0.24	0.24	0.040	0.093	0.921	0.840	18000	2.1	0.0049	>2419.6	<1.0	53.7	82
7/30/2013	0920	15.4	7.9	ND	0.14	ND	ND	ND	0.24	0.24	0.036	0.094	0.905	0.905	14000	0.9	0.0020	>2419.6	29.6	42.8	100
8/6/2013	0910	15.8	7.9	ND	0.18	ND	ND	ND	0.24	0.24	0.037	0.079	1.00	0.919	12000	1.4	0.0042	>2419.6	7.3	21.1	104
8/13/2013	0910																	>2419.6	3.1	<1.0	98
8/20/2013	0920																	>2419.6	3.1	55.4	107

Bridgehaven	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/14/2013	1010	20.0	8.1	ND	0.10	0.0041	0.28	ND	0.28	0.56	0.056	0.14	1.91	1.93	2100	2.9	0.00023	1986.3	9.7	6.0	177
5/21/2013	1020	19.2	8.4	0.38	0.14	0.010	ND	ND	0.52	0.52	0.11	0.057	2.29	2.43	1100	12	0.011	1732.9	12	19.7	131
5/28/2013	1005	17.6	8.2	0.28	0.14	0.0060	ND	ND	0.42	0.42	0.054	0.11	1.99	2.15	380	2.0	0.0035	2419.6	71.4	20.1	142
5/30/2013	1000	18.6	8.4	ND	0.21	0.016	ND	ND	0.28	0.28	0.042	0.084	2.09	2.14	720	2.3	0.0024	1986.3	248.1	73.3	136
6/4/2013	0950	18.5	7.8	0.28	0.14	0.0027	0.13	ND	0.42	0.55	0.058	0.13	1.99	2.26	1500	2.9	0.0012	>2419.6	32.7	365.4	95
6/11/2013	1000	18.8	8.4	ND	0.18	0.015	ND	ND	ND	0.18	0.051	0.12	1.80	1.93	590	2.0	0.0047	>2419.6	26.2	9.6	109
6/13/2013	0950	19.3	8.5	ND	0.14	0.012	ND	ND	0.28	0.28	0.049	0.087	1.92	2.03	1500	1.6	0.0037	2419.6	63.1	6.2	92
6/18/2013	0930	18.5	8.4	ND	0.14	ND	ND	ND	0.24	0.24	0.042	0.084	2.06	2.05	3000	1.4	0.0014	>2419.6	34.5	95.9	83
6/25/2013	0950	17.2	7.9	ND	0.21	0.0041	ND	ND	0.21	0.21	0.058	0.10	2.23	2.33	3300	2.4	0.0033	>2419.6	1046.2	387.3	141
7/2/2013	1040	22.3	8.2	0.21	ND	ND	0.13	ND	0.28	0.41	0.046	0.091	1.97	2.58	730	1.9	0.0032	>2419.6	63.8	3.1	110
7/9/2013	0950	17.6	7.9	0.24	0.10	ND	ND	ND	0.35	0.35	0.043	0.097	3.98	3.79	3300	1.5	0.00079	>2419.6	121.1	45.0	115
7/11/2013	1030	19.0	7.9	ND	0.21	0.0047	ND	ND	0.24	0.24	0.045	0.10	3.26	3.32	3900	1.3	0.00076	>2419.6	23.5	48.9	99
7/16/2013	0950	17.3	8.0	ND	0.10	ND	ND	ND	0.24	0.24	0.066	0.14	1.52	1.55	4800	1.6	0.0032	>2419.6	3.0	62.4	77
7/23/2013	0950	17.8	7.9	ND	0.18	ND	ND	ND	0.24	0.24	0.044	0.093	1.18	1.12	8400	1.7	0.0030	>2419.6	24.3	32.3	82
7/30/2013	0940	16.0	7.6	0.24	ND	ND	ND	ND	0.24	0.24	0.038	0.090	1.08	1.09	9700	1.4	0.0024	>2419.6	3.0	82.3	100
8/6/2013	0940	17.4	8.1	ND	0.14	ND	ND	ND	0.21	0.21	0.033	0.079	1.33	1.13	4600	1.4	0.0016	>2419.6	4.1	6.3	104
8/13/2013	0930																	>2419.6	5.2	6.2	98
8/20/2013	0930																	>2419.6	13.4	42.2	107

Duncans Mills	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/14/2013	1030	20.8	8.0	0.21	0.10	0.0041	0.14	ND	0.32	0.46	0.057	0.12	1.63	2.15	180	1.7	0.0022	1732.9	10.7	1.0	177
5/21/2013	1040	21.6	8.0	ND	0.10	0.0044	0.12	ND	0.24	0.37	0.044	0.036	1.70	1.94	180	1.7	0.0033	1732.9	12	3.1	131
5/28/2013	1025	19.5	8.0	ND	0.10	0.0039	0.13	ND	0.21	0.34	0.044	0.090	1.58	1.96	120	1.4	0.0063	1299.7	21.6	60.2	142
5/30/2013	1030	21.2	8.2	ND	0.25	0.014	ND	ND	0.28	0.18	0.043	0.076	1.51	1.83	150	1.8	0.0068	1203.3	46.4	37.9	136
6/4/2013	1010	20.5	7.8	0.32	ND	ND	0.13	ND	0.38	0.51	0.059	0.12	1.48	1.79	180	1.8	0.0052	1732.9	34.5	12.1	95
6/11/2013	1020	20.4	7.9	ND	0.18	0.0054	ND	ND	0.24	0.24	0.048	0.12	1.51	1.97	160	1.6	0.0080	2419.6	29.9	30.5	109
6/13/2013	1020	21.3	8.0	ND	0.14	0.0055	ND	ND	ND	0.18	0.053	0.11	1.59	2.18	180	1.5	0.0048	1986.3	199.6	28.5	92
6/18/2013	0950	20.9	8.3	ND	0.10	ND	ND	ND	ND	0.18	0.054	0.12	1.73	2.02	170	1.2	0.0043	>2419.6	11	18.7	83
6/25/2013	1010	19.7	8.0	ND	0.14	ND	ND	ND	0.21	0.21	0.066	0.13	1.57	1.93	160	1.5	0.0067	>2419.6	47.3	12.1	141
7/2/2013	1120	24.1	8.0	ND	0.18	ND	0.12	ND	0.28	0.40	0.040	0.090	1.03	2.00	130	2.2	0.0035	>2419.6	78.5	178.9	110
7/9/2013	1010	22.2	8.0	0.24	ND	ND	0.11	ND	0.28	0.39	0.077	0.20	2.19	2.60	160	1.4	0.0028	>2419.6	20.3	3.0	115
7/11/2013	1110	22.4	8.1	ND	0.14	ND	ND	ND	0.21	0.21	0.075	0.21	2.11	2.66	150	1.3	0.0025	>2419.6	9.7	8.4	99
7/16/2013	1020	20.3	8.0	ND	0.14	ND	ND	ND	ND	0.18	0.057	0.14	1.65	2.18	150	1.2	0.0036	>2419.6	10.9	14.2	77
7/23/2013	1010	21.9	8.3	ND	ND	ND	ND	ND	0.21	0.21	0.043	0.12	1.58	1.86	150	1.4	0.0020	>2419.6	21.3	48.2	82
7/30/2013	1000	19.5	8.1	0.21	ND	ND	ND	ND	0.21	0.21	0.036	0.098	1.39	2.03	160	1.1	0.0012	2419.6	5.2	41.7	100
8/6/2013	1010	20.3	8.2	ND	0.14	ND	0.12	ND	0.21	0.33	0.033	0.071	1.46	1.76	140	1.5	0.0012	2419.6	3.1	39.3	104
8/13/2013	0950																	1413.6	2.0	25.0	98
8/20/2013	0950																	1986.3	18.7	62.7	107

Casini Ranch	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/14/2013	1100	21.3	7.6	ND	0.14	0.0022	0.15	ND	0.32	0.46	0.057	0.13	1.74	2.24	170	2.8	0.0028	1732.9	7.4	3.1	177
5/21/2013	1100	21.4	7.9	ND	0.14	0.0044	0.13	ND	ND	0.30	0.048	0.042	1.62	2.16	180	2.3	0.0042	1732.9	8.5	<1.0	131
5/28/2013	1045	20.0	7.9	ND	0.14	0.0043	ND	ND	0.28	0.28	0.044	0.098	1.72	1.91	160	2.5	0.0055	>2419.6	55.7	98.5	142
5/30/2013	1110	21.5	8.0	ND	0.14	0.0059	ND	ND	0.21	0.21	0.045	0.076	1.48	1.79	160	2.6	0.0053	2419.6	45	101.4	136
6/4/2013	1030	20.7	7.9	ND	0.10	0.0033	0.12	ND	0.24	0.37	0.053	0.12	1.51	1.87	170	2.0	0.0049	1413.6	17.5	4.1	95
6/11/2013	1050	20.8	7.8	ND	0.14	0.0035	ND	ND	ND	0.14	0.049	0.14	1.52	2.02	160	0.95	0.0047	2419.6	22.8	36.4	109
6/13/2013	1100	21.8	7.8	ND	0.14	0.0038	ND	ND	0.21	0.21	0.061	0.13	1.66	2.18	160	1.9	0.0043	1299.7	24.1	18.3	92
6/18/2013	1010	21.6	8.1	ND	0.18	ND	ND	ND	ND	0.18	0.058	0.13	1.86	2.06	140	1.4	0.0027	1732.9	16	24.1	83
6/25/2013	1030	20.2	8.0	ND	ND	ND	ND	ND	0.21	0.21	0.054	0.12	1.48	2.07	140	1.7	0.0058	>2419.6	29.5	146.7	141
7/2/2013	1150	24.8	7.9	0.21	0.14	ND	ND	ND	0.35	0.35	0.059	0.16	1.80	2.52	150	2.4	0.0030	>2419.6	35.9	34.5	110
7/9/2013	1030	22.1	7.9	ND	0.10	ND	0.11	ND	0.28	0.39	0.080	0.22	2.22	2.78	150	2.3	0.0033	>2419.6	6.3	13.0	115
7/11/2013	1150	22.6	8.0	ND	0.18	ND	ND	ND	ND	0.18	0.082	0.21	2.16	2.73	150	1.5	0.0028	>2419.6	5.1	20.3	99
7/16/2013	1050	20.3	7.9	ND	0.24	0.0072	ND	ND	ND	0.18	0.058	0.084	1.84	2.25	140	1.2	0.0025	>2419.6	2.0	80.5	77
7/23/2013	1020	22.5	8.2	ND	ND	ND	0.13	ND	0.21	0.34	0.050	0.11	1.78	1.90	150	1.5	0.0014	2419.6	25.9	30.7	82
7/30/2013	1020	19.6	8.0	ND	ND	ND	ND	ND	ND	0.18	0.039	0.12	1.44	1.99	140	0.85	0.0014	1732.9	4.1	53.7	100
8/6/2013	1040	20.1	8.0	ND	0.14	ND	0.12	ND	ND	0.22	0.033	0.083	1.44	1.73	140	1.2	0.00065	204.6	3.1	20.9	104
8/13/2013	1010																	613.1	3.1	16.1	98
8/20/2013	1010																	686.7	9.6	47.1	107

Monte Rio	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/14/2013	1140	21.5	7.7	ND	0.10	0.0023	0.12	ND	0.21	0.33	0.047	0.097	1.61	2.19	170	3.0	0.0028	1553.1	7.5	5.2	177
5/21/2013	1130	21.5	7.8	ND	0.18	0.0049	0.12	ND	0.21	0.34	0.051	0.043	1.58	2.02	160	3.6	0.0035	1986.3	6.3	6.2	131
5/28/2013	1110	19.4	7.8	ND	ND	ND	0.12	ND	0.24	0.37	0.050	0.10	1.44	1.82	42	2.7	0.0038	>2419.6	33.1	45.9	142
5/30/2013	1150	21.4	8.0	ND	0.14	0.0055	ND	ND	0.21	0.21	0.043	0.088	1.53	1.78	160	2.8	0.0048	1203.1	62.0	51.2	136
6/4/2013	1100	21.7	7.8	0.21	0.14	0.0038	ND	ND	0.35	0.35	0.057	0.12	1.38	1.77	170	4.0	0.0052	1732.9	25.6	21.1	95
6/11/2013	1115	21.0	7.8	ND	0.10	0.0026	ND	ND	ND	0.18	0.056	0.14	1.60	2.07	160	2.3	0.0025	1986.3	31.8	18.9	109
6/13/2013	1140	21.8	7.7	ND	0.14	0.0030	ND	ND	ND	0.18	0.056	0.12	1.83	2.12	180	2.7	0.0019	2419.6	37.4	32.8	92
6/18/2013	1040	22.1	7.9	ND	0.14	ND	ND	ND	0.24	0.24	0.054	0.13	1.66	5.18	170	2.4	0.0048	1986.3	20.9	45.4	83
6/25/2013	1050	21.0	7.8	ND	0.14	ND	ND	ND	ND	0.14	0.052	0.12	1.40	1.91	150	2.3	0.0064	2419.6	64.5	158.5	141
7/2/2013	1220	25.9	7.9	ND	0.14	ND	0.14	ND	0.32	0.45	0.066	0.16	1.74	3.51	140	1.9	0.0032	>2419.6	79.8	70.8	110
7/9/2013	1100	23.3	7.7	ND	0.14	ND	ND	ND	0.24	0.24	0.088	0.24	2.40	2.76	150	2.6	0.0025	>2419.6	8.6	2419.6	115
7/11/2013	1220	23.7	7.9	ND	0.24	0.0095	0.10	ND	ND	0.28	0.073	0.19	1.92	2.37	150	1.8	0.0019	1732.9	5.2	920.8	99
7/16/2013	1110	21.7	8.0	ND	0.21	0.0089	ND	ND	ND	0.18	0.050	0.26	1.77	2.12	150	1.6	0.0017	2419.6	4.1	517.2	77
7/23/2013	1050	22.6	7.9	ND	0.10	ND	ND	ND	0.28	0.28	0.038	0.10	1.29	1.78	140	1.30	0.0014	1203.3	9.7	11.8	82
7/30/0213	1050	20.5	7.9	ND	ND	ND	ND	ND	ND	0.18	0.025	0.098	1.34	1.87	150	1.4	0.0018	980.4	7.5	13.5	100
8/6/2013	1120	21.1	7.9	ND	0.14	ND	ND	ND	ND	0.14	0.028	0.071	1.39	1.68	140	1.2	0.00091	365.4	3.1	4.1	104
8/13/2013	1040																	770.1	10.9	17.1	98
8/20/2013	1030																	1299.7	8.4	9.6	107

MAINSTEM SAMPLING SITES

Hacienda	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11467000 RR near Guerneville (Hacienda)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	1240	19.6	7.8	ND	0.18	0.0042	0.14	ND	0.28	0.42	0.042	0.071	1.50	1.99	160	2.1	0.00058	1413.6	2.0	3.1	156
5/23/2013	1230	17.7	7.6	ND	0.21	0.0025	0.14	ND	ND	0.31	0.039	0.077	1.45	1.83	160	2.0	0.00069	816.4	214.3	2.0	123
5/30/2013	1230	20.2	7.8	ND	0.10	0.0022	0.14	ND	ND	0.28	0.047	0.10	1.42	1.80	160	2.3	0.00076	648.8	6.3	5.2	136
6/6/2013	1240	20.1	7.8	ND	0.14	0.0033	0.12	ND	ND	0.12	0.054	0.14	1.70	1.93	150	2.2	0.0012	866.4	45.0	12.1	94
6/13/2013	1150	19.6	7.9	ND	0.18	0.088	0.11	ND	0.21	0.32	0.059	0.13	1.71	2.09	180	1.7	0.0011	866.7	17.1	13.4	92
6/20/2013	1210	19.8	7.3	ND	0.10	0.0020	0.11	ND	ND	0.28	0.037	0.092	1.46	1.79	130	2.6	0.00065	1553.1	29.5	6.3	87
6/27/2013	1350	21.3	7.5	ND	0.14	ND	0.17	ND	0.28	0.44	0.096	0.25	2.76	3.63	130	3.4	0.0018	2419.6	159.7	95.9	167
7/3/2013	1200	23.5	7.5	ND	0.14	ND	ND	ND	0.21	0.21	0.11	0.34	2.34	2.89	150	2.5	0.0021	1732.9	18.7	8.6	95
7/11/2013	1150	20.6	7.8	ND	0.10	ND	ND	ND	ND	0.14	0.047	0.11	1.55	2.04	150	2.1	0.0010	1119.9	7.3	14.6	99
7/18/2013	1230	20.2	7.8	ND	0.14	ND	0.11	ND	ND	0.29	0.032	0.077	1.34	1.77	150	1.6	0.00069	980.4	1.0	8.5	94
7/25/2013	1240	21.2	7.8	ND	ND	ND	ND	ND	ND	0.18	0.024	0.067	1.44	1.76	140	1.7	0.00039	980.4	18.3	57.3	98
8/1/2013	1240	19.3	7.8	ND	ND	ND	0.10	ND	ND	0.28	0.044	0.058	1.38	1.67	140	1.6	0.0018	727	8.6	14.6	110
8/8/2013	1220	18.0	7.7	ND	ND	ND	ND	ND	0.21	0.21	0.025	0.059	1.26	1.62	120	1.7	0.00026	488.4	8.6	12.2	112
8/15/2013	1220																	980.4	3.1	3.1	94
8/22/2013	1240																	1553.1	2.0	4.1	105

Riverfront Park	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11465390 RR near Windsor (Riverfront Park)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	1200	17.7	7.5	ND	0.25	0.0026	0.16	ND	ND	0.30	0.020	0.028	1.17	1.64	150	1.8	0.0012	1299.7	4.1	9.6	231
5/23/2013	1150	15.4	7.5	ND	0.10	0.00086	0.16	ND	ND	0.33	ND	ND	1.16	1.59	150	1.5	0.00083	613.1	18.9	8.5	205
5/30/2013	1200	17.3	7.7	ND	0.10	0.0017	0.14	ND	ND	0.28	0.024	0.033	1.20	1.55	140	1.5	0.0011	980.4	19.9	13.4	202
6/6/2013	1210	18.0	7.7	ND	0.10	0.0017	0.13	ND	ND	0.24	0.023	0.044	1.14	1.42	140	1.9	0.0013	980.4	21.6	12.2	-----
6/13/2013	1115	17.3	7.8	ND	0.10	0.0053	0.13	ND	ND	0.27	0.025	0.036	1.14	1.53	160	1.2	0.00047	517.2	32.7	13.5	147
6/20/2013	1140	16.9	7.7	ND	0.10	0.0015	0.12	ND	ND	0.19	0.025	0.033	1.28	1.62	120	1.2	ND	>2419.6	51.2	47.1	176
6/27/2013	1320	19.9	7.7	ND	0.10	ND	ND	ND	ND	0.18	0.022	0.034	1.25	1.71	130	1.1	0.0015	1119.9	23.7	19.9	222
7/3/2013	1130	19.9	7.4	ND	0.10	ND	ND	ND	ND	0.18	ND	0.067	1.30	1.63	130	1.8	0.00050	1732.9	21.6	31.1	188
7/11/2013	1110	17.8	7.6	ND	0.18	ND	ND	ND	ND	0.14	ND	0.041	1.28	1.76	150	2.0	0.00064	1299.7	29.5	20.3	203
7/18/2013	1200	18.5	7.6	ND	0.21	0.0028	0.11	ND	0.21	0.32	ND	0.034	1.13	1.64	75	1.4	0.00069	920.8	12.0	17.3	196
7/25/2013	1200	18.5	7.6	ND	0.10	ND	ND	ND	0.28	0.28	ND	0.035	1.28	1.67	140	1.5	0.00039	920.8	38.9	19.9	206
8/1/2013	1200	17.2	7.6	ND	ND	ND	0.12	ND	ND	0.29	0.026	0.039	1.29	1.60	120	1.3	0.00065	920.8	14.5	7.3	233
8/8/2013	1150	16.7	7.5	ND	0.10	ND	ND	ND	ND	0.18	0.021	0.039	1.30	1.69	120	1.3	0.00052	866.4	32.3	9.7	232
8/15/2013	1150																	980.4	52.1	12.2	218
8/22/2013	1200																	1986.3	8.5	6.3	222

Digger's Bend	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11463980 RR at Digger's Bend***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	1120	19.0	7.7	ND	0.21	0.0037	0.20	ND	ND	0.38	ND	0.021	0.991	1.45	170	1.7	0.0013	2419.6	3.1	8.4	112
5/23/2013	1110	16.3	7.7	ND	0.14	0.0020	0.19	ND	ND	0.33	ND	ND	1.01	1.25	180	1.0	0.00056	142.5	8.5	9.7	-----
5/30/2013	1050	19.1	7.9	ND	0.14	0.0036	0.18	ND	ND	0.36	ND	0.021	1.11	1.27	180	1.1	0.0018	1732.9	10.9	45.5	99
6/6/2013	1130	19.8	7.8	ND	0.14	0.0033	0.14	ND	ND	0.28	ND	0.032	0.991	1.08	170	0.79	0.0015	1533.1	16.0	5.2	84
6/13/2013	1030	19.1	7.9	ND	0.18	0.0018	0.13	ND	ND	0.27	ND	0.040	1.07	1.25	190	0.55	0.00094	1732.9	25.6	9.7	76
6/20/2013	1050	19.2	7.8	ND	ND	ND	0.11	ND	ND	0.25	ND	0.029	0.972	1.27	160	0.67	ND	2419.6	12.2	9.8	77
6/27/2013	1230	22.0	7.8	ND	0.10	ND	ND	ND	ND	0.18	ND	0.022	1.29	1.61	160	0.70	0.0039	1203.3	11	12.1	113
7/3/2013	1040	23.5	7.8	ND	0.14	ND	ND	ND	ND	0.14	ND	0.031	1.09	1.24	170	1.1	0.00087	>2419.6	12.2	5.2	75
7/11/2013	1040	20.8	8.0	ND	ND	ND	ND	ND	ND	0.14	ND	0.041	1.20	1.70	170	0.54	0.00038	2419.6	14.6	34.1	88
7/18/2013	1110	20.8	7.8	ND	0.21	0.0051	ND	ND	ND	0.18	ND	0.038	1.27	1.87	160	0.74	0.0010	>2419.6	4.1	24.1	102
7/25/2013	1110	21.5	7.9	ND	ND	ND	ND	ND	0.21	0.21	ND	0.028	1.39	1.80	160	0.80	0.00052	1986.3	4.1	18.1	88
8/1/2013	1110	19.9	7.9	0.21	ND	ND	ND	ND	ND	0.18	ND	0.035	1.35	1.58	160	0.75	ND	1986.3	9.7	15.6	97
8/8/2013	1100	19.2	7.9	ND	ND	ND	ND	ND	ND	0.18	0.020	0.035	1.45	1.75	170	0.99	0.00013	>2419.6	9.7	36.9	92
8/15/2013	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	83
8/22/2013	1110																	>2419.6	6.3	69.7	88

Jimtown Bridge	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11463682 RR at Jimtown***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	1050	18.5	7.4	ND	0.18	0.0016	0.26	ND	ND	0.36	ND	0.025	1.00	1.35	170	0.82	0.0013	>2419.6	9.8	3.1	107
5/23/2013	1030	16.4	7.3	ND	0.10	0.00059	0.24	ND	ND	0.42	ND	ND	0.962	1.28	180	0.93	0.0011	120.7	32.9	47.9	98
5/30/2013	1000	18.0	7.5	ND	0.14	0.0013	0.23	ND	ND	0.40	ND	0.025	1.05	1.30	190	0.79	0.0014	737.0	224.7	18.5	97
6/6/2013	1050	20.1	7.5	ND	0.18	0.0021	0.21	ND	ND	0.35	0.022	0.036	0.860	1.08	180	0.90	0.0019	816.4	40.4	23.3	85
6/13/2013	1000	18.0	7.5	ND	0.14	0.0048	0.21	ND	ND	0.35	ND	0.028	0.842	1.26	200	0.46	0.00094	1413.6	23.3	34.1	78
6/20/2013	1010	18.4	7.6	ND	0.10	0.0013	0.19	ND	ND	0.33	ND	0.064	0.902	1.34	170	0.75	0.0016	1732.9	24.6	22.8	82
6/27/2013	1150	22.0	7.6	ND	0.14	ND	0.14	ND	ND	0.32	ND	0.026	1.16	1.65	150	0.90	0.0019	770.1	51.2	46.2	121
7/3/2013	1010	22.2	7.4	ND	0.14	ND	0.15	ND	ND	0.29	ND	0.035	1.08	1.36	160	0.96	0.0022	>2419.6	30.5	83.9	92
7/11/2013	1000	20.2	7.7	ND	0.14	ND	0.12	ND	ND	0.30	ND	0.025	0.746	1.62	170	0.49	0.0029	1732.9	10.9	45.7	91
7/18/2013	1030	20.5	7.6	ND	0.18	ND	0.15	ND	0.21	0.36	0.021	0.026	1.26	1.82	160	0.48	0.0030	870.4	5.2	50.4	104
7/25/2013	1030	21.0	7.6	ND	0.14	ND	0.15	ND	0.24	0.39	ND	0.024	1.32	1.68	160	0.63	0.0025	1413.6	10.8	19.9	96
8/1/2013	1030	19.5	7.7	0.21	ND	ND	0.14	ND	0.21	0.35	0.022	0.027	1.29	1.52	130	0.55	0.0017	1732.9	10.9	14.8	106
8/8/2013	1030	19.1	7.7	ND	ND	ND	0.14	ND	ND	0.32	ND	0.031	1.30	1.67	150	0.81	0.0036	2419.6	10.9	23.1	101
8/15/2013	1030																	1986.3	6.3	31.1	97
8/22/2013	1040																	>2419.6	3.0	47.3	97

Comminsky Station	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11463000 RR Near Cloverdale (Comminsky)***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	1010	17.1	7.7	ND	0.21	0.0032	0.56	ND	0.24	0.80	0.064	0.14	1.60	2.10	140	5.0	0.0016	1986.3	40.8	22.6	92
5/23/2013	0950	14.9	7.7	ND	0.14	0.0018	0.33	ND	0.21	0.54	0.037	0.060	1.65	2.12	140	3.2	0.0022	1203.3	77.6	30.9	99
5/30/2013	0920	16.6	7.9	ND	0.14	0.0033	0.28	ND	0.21	0.49	0.030	0.053	1.63	2.08	150	2.8	0.0040	1553.1	41.7	14.5	88
6/6/2013	1010	18.5	7.8	ND	0.18	0.0039	0.24	ND	0.28	0.52	0.041	0.071	1.76	2.10	130	3.5	0.0057	1553.1	44.8	24.6	89
6/13/2013	0930	17.0	7.9	ND	0.10	0.0023	0.28	ND	0.24	0.53	0.050	0.10	1.75	2.29	140	3.7	0.0011	1986.3	39.9	26.2	83
6/20/2013	0930	16.3	7.6	ND	0.14	0.0017	0.21	ND	ND	0.39	0.098	0.095	1.73	2.34	130	4.5	0.0060	>2419.6	43.9	43.3	106
6/27/2013	1100	17.9	7.8	ND	0.10	ND	0.19	ND	ND	0.36	0.039	0.089	2.16	2.33	130	3.6	0.0042	1119.7	26.2	10.9	104
7/3/2013	0930	20.0	7.9	ND	0.18	ND	0.12	ND	0.32	0.43	0.039	0.084	1.99	2.55	120	5.4	0.0093	>2419.6	81.6	39.3	116
7/11/2013	0930	17.8	7.8	ND	0.14	ND	ND	ND	0.28	0.28	0.040	0.069	1.91	2.64	130	4.8	0.0066	2419.6	28.8	33.1	105
7/18/2013	0950	17.8	7.8	ND	0.18	ND	0.12	ND	0.32	0.44	0.038	0.089	2.20	2.84	120	4.3	0.0076	1986.3	34.5	35.5	123
7/25/2013	0950	18.4	7.8	ND	0.10	ND	0.11	ND	0.3	0.39	0.034	0.075	2.20	2.59	120	7.0	0.0049	1119.9	187.2	43.7	118
8/1/2013	0950	17.1	7.8	0.24	ND	ND	0.11	ND	0.28	0.39	0.036	0.070	2.22	2.43	110	6.6	0.0029	>2419.6	69.7	35.5	120
8/8/2013	0950	17.5	7.8	ND	ND	ND	0.11	ND	ND	0.14	0.039	0.090	1.91	2.48	110	4.4	0.0019	1986.3	50.4	62.9	115
8/15/2013	0950																	-----	-----	67.6	118
8/22/2013	1000																	1986.3	36.8	45.2	108

Hopland	Time	Temperature	pH	Total Organic Nitrogen	Ammonia as N	Ammonia as N Unionized	Nitrate as N	Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen**	Phosphorus, Total	Total Orthophosphate	Dissolved Organic Carbon	Total Organic Carbon	Total Dissolved Solids	Turbidity	Chlorophyll-a	Total Coliforms (Colilert)	E. coli (Colilert)	Enterococcus (Enterolert)	USGS 11462500 RR Near Hopland***
MDL*				0.200	0.10	0.00010	0.030	0.030	0.10		0.020	0.020	0.0400	0.0400	4.2	0.020	0.000050	20	20	2	Flow Rate****
Date		°C		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	mg/L	MPN/100mL	MPN/100mL	MPN/100mL	(cfs)
5/16/2013	0940	14.3	7.3	ND	0.14	0.00068	0.43	ND	0.28	0.71	0.055	0.21	1.81	2.56	120	5.7	0.0023	>2419.6	98.3	46.5	83
5/23/2013	0920	12.4	7.3	ND	0.14	0.00058	0.36	ND	0.24	0.60	0.042	0.081	1.90	2.58	120	5.3	0.0026	>2419.6	104.6	45.7	86
5/30/2013	0900	14.2	7.3	ND	0.14	0.00067	0.35	ND	ND	0.53	0.043	0.084	1.80	2.33	140	5.8	0.0033	>2419.6	95.7	47.1	82
6/6/2013	0940	15.1	7.4	ND	ND	ND	0.32	ND	0.24	0.56	0.052	0.13	2.12	2.56	120	6.8	0.0028	>2419.6	83.0	88.6	83
6/13/2013	0900	14.0	7.3	ND	0.10	0.00051	0.34	ND	0.24	0.58	0.077	0.19	1.99	2.67	140	6.1	0.00058	>2419.6	111.9	52.0	83
6/20/2013	0900	13.6	7.3	ND	0.10	0.00053	0.27	ND	0.21	0.48	0.062	0.15	2.02	2.77	120	7.3	0.0025	>2419.6	75.4	86	107
6/27/2013	1020	15.2	7.3	ND	ND	ND	0.28	ND	0.24	0.52	0.063	0.16	1.98	2.62	120	6.9	0.0022	1986.3	67	39.5	103
7/3/2013	0900	16.2	7.3	0.24	ND	ND	0.23	ND	0.32	0.54	0.054	0.14	2.15	2.80	110	7.7	0.0032	>2419.6	95.8	128.1	129
7/11/2013	0850	14.9	7.5	0.21	ND	ND	0.17	ND	0.28	0.45	0.052	0.14	2.06	2.87	120	8.0	0.0061	1553.1	67	79.4	122
7/18/2013	0920	15.1	7.4	0.28	ND	ND	0.20	ND	0.35	0.55	0.051	0.12	2.09	3.07	120	11	0.0033	2419.6	88.6	77.6	127
7/25/2013	0910	16.2	7.4	0.21	0.10	ND	0.16	ND	0.32	0.47	0.047	0.10	2.05	2.71	110	8.3	0.0044	1553.1	146.1	69.7	122
8/1/2013	0920	15.3	7.5	ND	0.10	ND	0.14	ND	0.24	0.39	0.050	0.10	2.28	2.66	110	10	0.0037	1046.2	99.1	41.0	123
8/8/2013	0920	16.1	7.4	ND	ND	ND	0.13	ND	0.21	0.34	0.060	0.14	1.95	2.65	120	7.0	0.0045	>2419.6	60.9	50.4	120
8/15/2013	0930																	1986.3	93.2	104.2	128
8/22/2013	0920																	>2419.6	70.3	52.1	114

* Method Detection Limit - limits can vary for individual samples depending on matrix interference and dilution factors, all results are preliminary and subject to final revision.

** Total nitrogen is calculated through the summation of the different components of total nitrogen: organic and ammoniacal nitrogen (together referred to as Total Kjeldahl Nitrogen or TKN) and nitrate/nitrite nitrogen.

*** United States Geological Survey (USGS) Continuous-Record Gaging Station

**** Flow rates are preliminary and subject to final revision by USGS.

Recommended EPA Criteria based on Aggregate Ecoregion III

Total Phosporus: 0.02188 mg/L (21.88 ug/L) ≈ 0.022 mg/L

Total Nitrogen: 0.38 mg/L

Chlorophyll *a* : 0.00178 mg/L (1.78 ug/L) ≈ 0.0018 mg/L

Turbidity: 2.34 FTU/NTU

CDPH Draft Guidance for Fresh Water Beaches - Single Sample Values:

Beach posting is recommended when indicator organisms exceed any of the following levels:

Total coliforms: 10,000 per 100 ml

E. coli: 235 per 100 ml

Enterococcus: 61 per 100 ml