

Boerne City Lake Water Quality Monitoring Program - Data Summary

Site	Date	Pheophytin	Chlorophyll a	Total Phosphorus (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Nitrate as N (mg/L)	E.coli (MPN/100ml)	Dissolved Oxygen (mg/L)	Temp (C)	Temp (F)	pH (SU)	Conductivity (Us/cm)	Transparency (m)	Days since last rainfall (≥0.1 in)
BCL 1	5/15/2019			< 0.02	0.541		1		23.9	75.0	8.03	375.8	>1.2	6
BCL 1	6/18/2019			< 0.02	0.538		6	4.4	27.9	82.2	8.03	376.5	>1.2	1
BCL 1	7/30/2019			< 0.02	0.328		10	5.1	29.3	84.7	8.05	377.9	>1.2	20
BCL 1	8/29/2019	<1	2	< 0.02	0.289		<1	4.3	30.4	86.7	8.40	403.8	>1.2	7
BCL 1	10/31/2019	<1	5	< 0.02	0.391		88	8.1	17.5	63.5	8.24	304.9	>1.2	1
BCL 1	11/19/2019	<1	4	< 0.02	0.478		13	8.1	15.0	59.0	8.23	288.2	>1.2	6
BCL 1	12/18/2019	<1	3	< 0.02	0.444		6	7.9	13.3	55.9	7.96	283.2	0.98	9
BCL 1	1/29/2020	<1	3	< 0.02	0.575		9	9.3	13.2	55.8	8.13	284.6	0.73	2
BCL 1	2/18/2020	<1	11	0.092	1.900	0.113	5	7.0	14.6	58.3	8.12	367.2	1.11	7
BCL 1	6/17/2020	<1	2	< 0.02	< 0.2	< 0.05	<1	5.7	27.2	81.0	8.31	339.8	>1.2	16
BCL 1	7/20/2020	<1	2	< 0.02	0.346	< 0.05	38	review	29.3	84.7	8.18	347.1	>1.2	28
BCL 1	8/20/2020	<1	3	< 0.02	0.266	< 0.05	2	4.8	28.3	82.9	8.13	346.8	>1.2	2
BCL 1	9/23/2020	<1	4	< 0.02	0.392	< 0.05	3	5.4	24.5	76.1	8.0	335.1	>1.2	14
BCL 1	10/22/2020	<1	5	< 0.02	0.469	< 0.05	42	5.1	23.4	74.1	7.9	332.3	>1.2	44
BCL 1	11/18/2020	<1	13	0.023	0.705	< 0.05	32	7.4	17.1	62.8	7.9	285.3	>1.2	22
BCL 1	12/10/2020	<1	4	0.022	0.510	0.053	2	8.7	12.7	54.9	7.9	341.6	>1.2	13
BCL 1	1/25/2021	2	7	0.122	1.950	0.063	37	10.2	12.5	54.5	8.2	272.1	>1.2	6

BCL 2	5/15/2019			< 0.02	0.359		1		24.6	76.3	8.02	381.1	>1.2	6
BCL 2	6/18/2019			< 0.02	0.548		11	5.8	28.6	83.5	8.27	391.9	>1.2	1
BCL 2	7/30/2019			< 0.02	< 0.2		19	5.1	29.3	84.7	8.05	377.9	>1.2	20
BCL 2	8/29/2019	<1	2	< 0.02	0.477		<1	5.5	30.7	87.3	8.38	398.9	>1.2	7
BCL 2	10/31/2019	<1	5	< 0.02	0.335		49	7.6	18.1	64.6	8.24	304.9	>1.2	1
BCL 2	11/19/2019	<1	5	< 0.02	0.349		18	8.0	15.3	59.5	8.34	289.5	0.95	6
BCL 2	12/18/2019	<1	2	< 0.02	0.368		6	7.5	13.5	56.3	8.24	283.2	0.87	9
BCL 2	1/29/2020	<1	2	< 0.02	0.499		8	10.0	13.9	57.0	8.22	288.3	0.64	2
BCL 2	2/18/2020	<1	10	0.049	0.503	0.11	12	7.8	14.5	58.1	8.26	293.3	>1.2	7
BCL 2	6/17/2020	<1	3	< 0.02	0.382	< 0.05	<1	6.8	27.9	82.2	8.23	323.7	>1.2	16
BCL 2	7/20/2020	<1	3	< 0.02	0.409	< 0.05	1	5.3	30.3	86.5	8.22	346.3	>1.2	28
BCL 2	8/20/2020	<1	4	< 0.02	0.374	< 0.05	<1	6.1	28.8	83.8	8.20	327.3	>1.2	2
BCL 2	9/23/2020	<1	4	< 0.02	0.376	< 0.05	9.0	4.7	24.5	76.1	7.97	337.6	>1.2	14
BCL 2	10/22/2020	<1	5	< 0.02	0.483	< 0.05	110.0	5.5	23.7	74.7	8.01	331.6	>1.2	44
BCL 2	11/18/2020	<1	5	0.023	0.828	< 0.05	48.0	9.3	17.8	64.0	8.08	291.3	>1.2	22
BCL 2	12/10/2020	<1	7	< 0.02	0.417	0.052	4.0	8.6	13.9	57.0	7.93	341.7	>1.2	13
BCL 2	1/25/2021	<1	4	0.023	0.518	0.062	36.0	10.2	13.2	55.8	8.27	277.4	>1.2	6

BCL 3	5/15/2019			< 0.02	0.563		< 1		24.7	76.5	8.24	386.8	>1.2	6
BCL 3	6/18/2019			< 0.02	0.511		1	5.2	28.0	82.4	8.33	379.1	>1.2	1
BCL 3	7/30/2019			< 0.02	0.481		4	5.5	29.1	84.4	8.18	379.7	>1.2	20
BCL 3	8/29/2019	<1	2	< 0.02	0.229		1	4.8	30.4	86.7	8.34	409.6	>1.2	7
BCL 3	10/31/2019	<1	5	0.095	0.39		60	5.9	18.0	64.4	8.26	309.6	>1.2	1
BCL 3	11/19/2019	<1	5	< 0.02	0.495		14	9.0	15.2	59.4	8.37	289	0.95	6
BCL 3	12/18/2019	<1	2	< 0.02	0.396		2	8.5	13.0	55.4	8.22	278.8	0.86	9
BCL 3	1/29/2020	<1	2	< 0.02	0.475		10	8.3	13.6	56.5	8.18	286.7	0.82	2
BCL 3	2/18/2020	<1	3	< 0.02	< 0.2	0.101	5	8.6	13.9	57.0	8.31	368	>1.2	7
BCL 3	6/17/2020	<1	2	< 0.02	0.323	< 0.05	2	7.0	27.2	81.0	8.27	339	>1.2	16
BCL 3	7/20/2020	<1	2	< 0.02	0.229	< 0.05	2	5.7	29.8	85.6	8.26	321.9	>1.2	28
BCL 3	8/20/2020	<1	2	< 0.02	0.291	< 0.05	1	6.9	28.7	83.7	8.18	328.1	>1.2	2
BCL 3	9/23/2020	<1	4	0.09	0.323	< 0.05	<1	5.9	24.8	76.6	8.05	335.5	>1.2	14
BCL 3	10/22/2020	<1	5	< 0.02	0.494	< 0.05	6.0	6.9	23.7	74.7	8.22	332.8	>1.2	44
BCL 3	11/18/2020	<1	4	< 0.02	0.515	< 0.05	13.0	8.5	17.7	63.9	8.08	293.6	>1.2	22
BCL 3	12/10/2020	<1	5	0.022	0.794	0.053	2.0	9.9	13.3	55.9	8.13	340.9	>1.2	13
BCL 3	1/25/2021	<1	4	< 0.02	0.443	0.064	3.0	10.6	12.5	54.5	8.36	270.7	>1.2	6

20830	5/15/2019			< 0.02	0.294		59		24.8	76.6	8.04	406.7	>1.2	6
20830	6/18/2019			0.073	0.531		580	4.4	26.7	80.1	8.03	373.9	>1.2	1
20830	7/30/2019			< 0.02	0.358		28	7.6	30.2	86.4	7.96	344.1	0.80	20
20830	8/29/2019	<1	2	0.024	0.411		12	4.2	30.8	87.4	8.13	358.1	0.60	7
20830	10/31/2019	<1	<1	< 0.02	< 0.2		100	7.8	13.2	55.8	8.17	232.4	>1.2	1
20830	11/19/2019	<1	<1	< 0.02	< 0.2		8	8.3	14.6	58.3	8.19	274.6	>1.2	6
20830	12/18/2019	<1	<1	< 0.02	< 0.2		2	9.7	10.4	50.7	7.95	258.3	>1.2	9
20830	1/29/2020	<1	<1	< 0.02	0.252		14	8.4	14.0	57.2	8.08	292.8	>1.2	2
20830	2/18/2020	<1	<1	< 0.02	< 0.2	0.064	17	7.2	15.3	59.5	8.05	310.1	>1.2	7
20830	6/17/2020	<1	4	< 0.02	0.271	< 0.05	10	5.0	28.0	82.4	8.13	311.3	>1.2	16
20830	7/20/2020	<1	2	< 0.02	0.369	< 0.05	11	3.5	30.0	86.0	8.02	311.7	>1.2	28
20830	8/20/2020	<1	3	< 0.02	0.558	< 0.05	28	4.3	28.3	82.9	8.03	317.3	>1.2	2
20830	9/23/2020	<1	1	< 0.02	< 0.2	< 0.05	55	5.27	23.2	73.8	7.74	337.9	>1.2	14
20830	10/22/2020	<1	4	< 0.02	0.412	< 0.05	26	5.37	24.2	75.6	8.07	337.1	>1.2	44
20830	11/18/2020	<1	<1	< 0.02	0.364	< 0.05	11	8.49	15.5	59.9	8	291.2	>1.2	22
20830	12/10/2020	<1	<1	< 0.02	< 0.2	< 0.05	11	9.27	11	51.8	7.91	365.5	>1.2	13
20830	1/25/2021	<1	<1	< 0.02	< 0.2	< 0.05	59	7.24	15.7	60.3	7.95	319	>1.2	6

Meets TCEQ Standard
Does Not Meet TCEQ standard

Texas Surface Water Quality Standards, Numeric Criteria for Upper Cibolo Creek (Segment 1908)

**E.coli Bacteria:** The geometric mean of E. coli should not exceed 126 per 100 ml. Single samples of E. coli should not exceed 394 per 100 ml.  
**Dissolved Oxygen:** 5.0 mg/L  
**Temperature:** 90°F (32.2°C)  
**pH Range (SU):** 6.5 - 9 mg/L

Freshwater Stream Nutrient Screening Criteria:

**Nitrate Nitrogen:** TCEQ freshwater screening criteria for Nitrate Nitrogen (NO3-N): 1.95 mg/L  
**Total Phosphorus:** TCEQ freshwater screening criteria for Total Phosphorus (TP): 0.69 mg/L  
**Chlorophyll-a:** TCEQ freshwater screening criteria for Chlorophyll-a: 14.1 micrograms per liter (µg/L)