

2023 Lakes Monitoring Annual Report

Campbell Pond Park (Campbell Pond)

Campbell Pond is within Campbell Pond Park, located off Shoreline Drive in south-eastern Tallahassee just off Woodville Highway and south portion of Capital Circle.

- Publicly Accessible: Yes
- Recreation: Fishing
- Surface Area: 23 acres
- Drainage Area: 210 acres
- Trophic Classification: [Mesotrophic](#)
- Drainage Basin: Closed
- Maximum Depth: 14 feet
- Average Depth: 5 feet



Campbell Pond Summary

Campbell Pond is a small, 23-acre pond located within Campbell Pond Park on the southeast side of Tallahassee, south of the Cody Escarpment in the Woodville Karst Plain Physiographic Province. It is located within a small neighborhood with a sand-pine flatwoods forest surrounding most of its perimeter.

Water quality data is available for Campbell Pond dating back to 1992. Data collected are used to determine relative trends over the preceding ten years and the trophic state of the individual water body. The following tables and charts provide water chemistry (annual geometric means) covering the time period of 2011-2022. **Figure 1.** displays the water quality monitoring location within Campbell Pond.

Figure 1. Water Quality Monitoring Location



Table 1. Water Quality Annual Geomeans

Yearly Geomeans of FLDEP Nutrient Criterion Parameters Campbell Pond					
Year	Chlorophyll *	Color	Alkalinity	TN *	TP*
2011	3	43	6	0.59	0.010
2012	4	65	10	0.66	0.020
2013	5	62	8	0.41	0.020
2014	7	53	6	0.74	0.010
2015	3	52	4	0.57	0.010
2016	0	0	0	0	0
2017	0	0	0	0	0
2018	0	0	0	0	0
2019	3	11	3	0.37	0.015
2020	0	0	0	0	0
2021	25	20	7	1.01	0.081
2022	6	27	6	0.55	0.018

*2021 data is based on only two collected sampling events within the last 6 months of the year. Year 2020 and first 6 month of 2021 was not collected due to drought conditions and vegetation overgrowth.
*2022 data based on two sampling events due to inconsistent water levels during the year.

Chart 1. Chlorophyll α

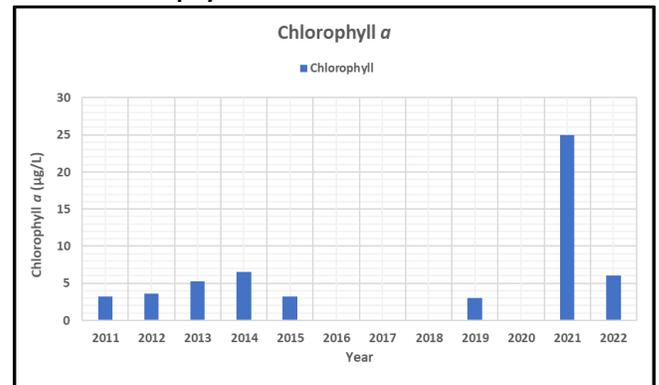


Chart 2. Total Nitrogen

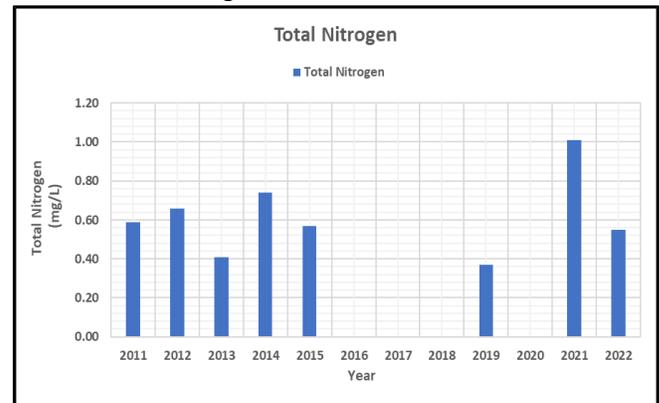
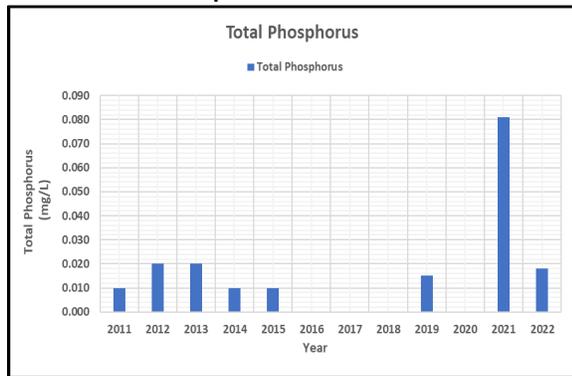


Chart 3. Total Phosphorus



Data Discussion

The data within the above charts and tables is used to determine the nutrient concentrations on the three most important parameters: Chlorophyll *a*, Total Nitrogen (which is the organic nitrogen plus nitrates and nitrites), and Total Phosphorus. The Lake Monitoring Program does utilize the Mann-Kendall Statistical Trend Analysis to determine if trends are statistically significant when enough consistent data is captured. Based on the data, Campbell Pond is a mesotrophic water body characterized by mean Chlorophyll concentrations of 7 µg/L, mean Total Nitrogen concentrations of 0.61 mg/L and mean Total Phosphorus concentrations of 0.023 mg/L. These values just exceed the FLDEP Numeric Nutrient Criterion (NNC) of Chlorophyll *a* 6 µg/L, 0.05 mg/L Total Nitrogen, and 0.01 mg/L of Total Phosphorus for Class III surface waters. There are no statistically significant trends that exist for these evaluated parameters due to the irregularity of being able to collect water samples. The unusually high Chlorophyll *a* (25 µg/L) and Total Phosphorus (0.08 mg/L) concentrations observed for 2021 are thought to be the result of a combination of low water levels and associated vegetative decomposition. Year 2022

water levels continued to be erratic, however nutrient values assimilated and appear to be receding to typical values found in Campbell Pond historically.

Pictures illustrate extreme aquatic vegetation within Campbell Pond. Due to this abundance of vegetation a biological plant survey (Lake Vegetation Survey) cannot be conducted because of the inability of operating a vessel within the pond. This over-abundance of vegetation growth has been observed within the pond for the last several years.

Figures 2 & 3 below visually display abundant vegetation at the water's surface consisting of Lily Pads (*Nymphaea odorata*) and Carolina Fanwort (*Cabomba caroliniana*) respectively.



Thank you for your interest in maintaining the water quality of City of Tallahassee area lakes. Visit the web-links below for more information on City of Tallahassee and State of Florida water resources.

City of Tallahassee Think About Personal Pollution (TAPP) Program
<https://tappwater.org/>

City of Tallahassee Stormwater Management
<https://www.talgov.com/you/stormwater>

City of Tallahassee Parks & Recreation
<https://www.talgov.com/parks/ParksHome>

Leon County Water Resources
<https://cms.leoncountyfl.gov/waterresource>

Best Management Practices for Protection for Water Resources
https://ffl.ifas.ufl.edu/media/fflifasufledu/docs/GIB_MP_Manual_Web_English.pdf

FWCC Aquatic Plant Management:
<http://myfwc.com/wildlifehabitats/habitat/invasive-plants/aquatic-plant/>

Freshwater Algal Bloom information:
<https://floridadep.gov/AlgalBloom>