

Project Site: White Meadow Lake**Date:** 8/11/2022**Weather:** Mostly sunny, wind from South/Southwest**Secchi Depth (meters/feet):** 0.8/2.62**Total Depth (meters/feet):** 2.1/6.89**Project number:** 0007.063**Field Team:** WK, PR**Water Color:** brown, cloudy**GENERAL OBSERVATIONS:**

Watercolor throughout the lake was noted as a cloudy brown color. Secchi depth readings were consistently 0.8 meters at all stations. Water level in the lake was lower than in previous monitoring events this year. Sparse-to-moderate-density southern naiad (*Najas guadalupensis*) was still the dominant species observed and was most dense at the Dam monitoring station. No filamentous algae mats were observed around the shoreline or in any portion of the lake. The water column at each station exhibited minimal changes in temperature and dissolved oxygen reduction. Once again, the bottom of the water column was not measured to be anoxic. Surface water temperatures were very warm, with the highest recorded value of 29.68 Celsius at the Dam station (Table 1). Warm water temperatures are likely a result of the recent hot air temperatures and brown coloration of the water column.

IN-SITU DATA RESULTS**Table 1: In-Situ Data****In-Situ Monitoring for White Meadow Lake 8/11/22**

Station	DEPTH (meters)		Sample	Temperature	Conductivity	Dissolved Oxygen	Dissolved Oxygen	pH
	Total	Secchi		(°C)	(µS/cm)	(mg/L)	(%)	(Standard Units)
Mid-Lake	2.10	0.80	Surface	29.10	438.4	7.76	104.3	8.14
			1.0	28.38	438.0	7.05	93.3	7.94
			1.9	28.01	438.7	6.10	80.1	7.66
Dam	2.20	1.20	Surface	29.68	437.6	9.20	124.2	8.62
			1.0	29.56	437.8	9.00	122.1	8.59
			2.0	28.58	438.1	7.24	96.5	8.10
Boat Launch	1.00	0.80	Surface	29.28	440.7	8.06	108.8	8.06
			0.7	28.67	439.7	7.43	98.7	7.92
Beach 3	1.20	0.80	Surface	29.18	437.0	8.75	117.3	8.39
			1.0	28.60	437.1	7.80	102.0	8.70
Clubhouse	2.10	0.80	Surface	29.46	440.2	8.85	119.1	8.46
			1.0	29.43	437.8	8.70	117.8	8.44
			1.9	28.91	437.6	7.30	97.3	8.00

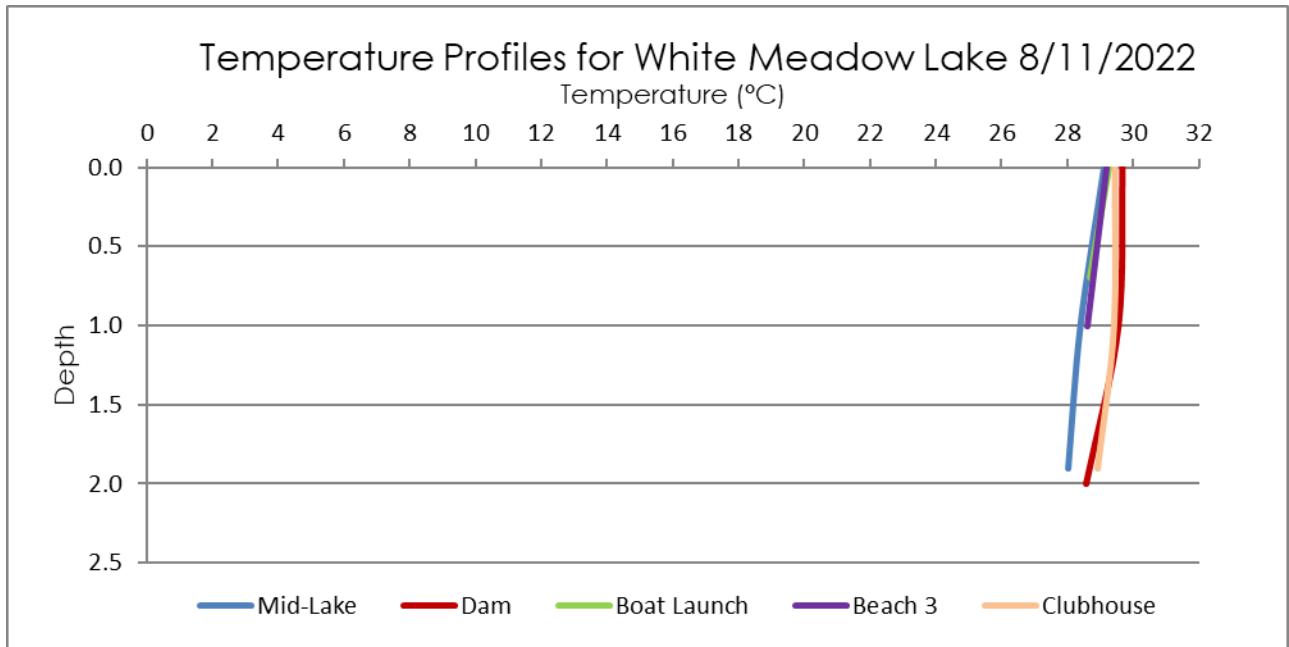


Figure 1: Temperature Profiles

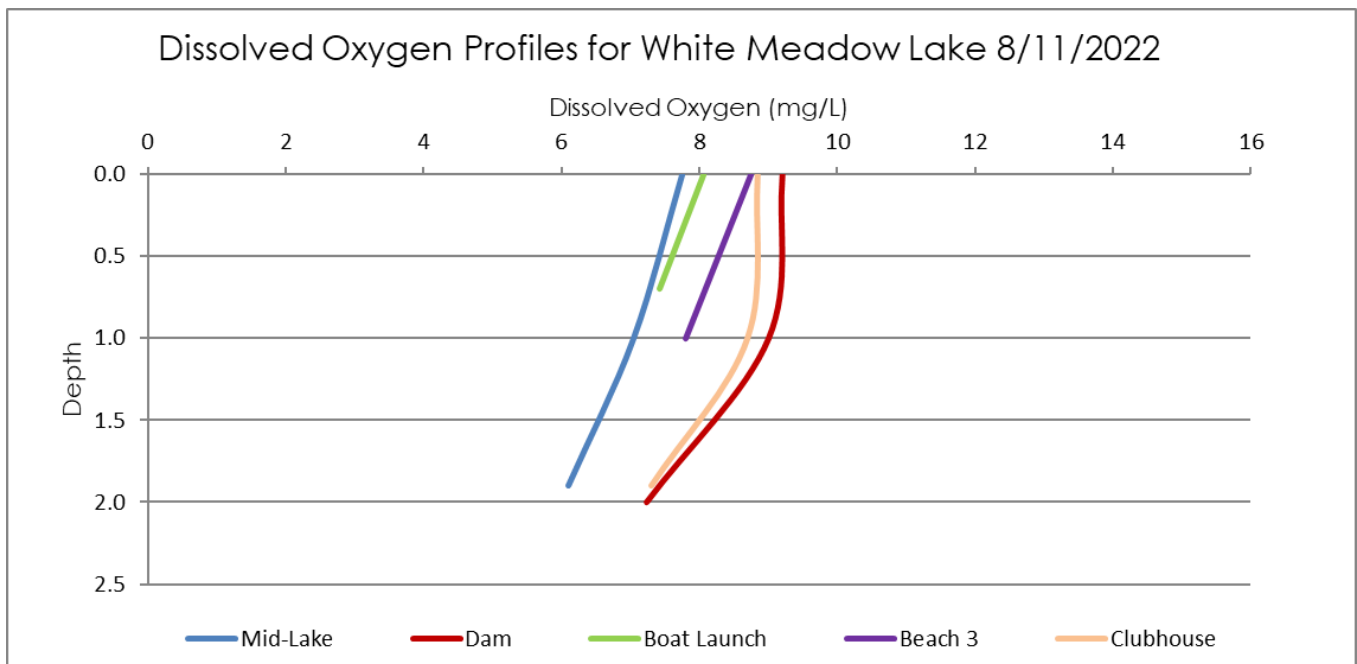


Figure 2: Dissolved Oxygen Profiles

PLANT GROWTH: Plant densities were sparse at most stations and were predominantly southern naiad. While being the most common plant observed, this species is not present in nuisance densities, and can provide benefits such as fish habitat, dissolved oxygen, sediment stability, and nutrient sequestration. The presence of invasive species was once again consolidated to brittle naiad (*Najas minor*) which was only observed in the southwest portion of the lake near the Boat Launch station.

ALGAL GROWTH: Overall, algal growth was minimal during this monitoring event. As noted previously mat algae was not observed at any location within the lake. Some of the plant-like algae genus *Chara* was obtained on the anchor at the Mid Lake station with a sparse density. Some planktonic particulate was present in the water column, contributing to the reduced Secchi Depth. The Mid Lake plankton sample will be analyzed to identify the genera present.

Photos



1) Dam Station, Facing East



2) Mid Lake Station, Facing Southwest