2022 Water Testing Report
Lakes Environmental Association

Table of Content

Chapter 1 — Routine Monitoring Results

Chapter 2 — High-resolution Automated Monitoring Buoys

Chapter 3 — High-resolution Temperature Monitoring

Chapter 4 — Algae Monitoring via Fluorometer Profiles

LEA would not be able to test the 41 lakes and ponds of this area without strong support from our surrounding community. Every year, we rely on volunteer monitors, lakefront landowners, summer interns, and financial support from lake associations and the towns of Bridgton, Denmark, Harrison, Naples, Sweden, and Waterford to continue to monitor and analyze lake water quality. **Thank you for all your help!**

2022 Volunteer Monitors and Lake Partners

Richard and Andy Buck Papoose Pond Campground	Bill Ames and Paulina Knibbe Bob Mahanor	Jean Preis Jean Schilling
Steve Cavicchi Jeff and Susan Chormann	Amy March Julie and Dan McQueen	Linda and Orrin Shane Foster and Marcella Shibles
Janet Coulter Joe and Carolee Garcia	Bob Mercier Barry and Donna Patrie	Bob Simmons Tom Straub
Carol Gestwicki	Nancy Pike	Shelley Hall

Island Pond Association Hancock and Sand Ponds Association Five Kezar Ponds Watershed Association	Keoka Lake Association McWain Pond Association Woods Pond Association Keyes Pond Environmental Protection Association	Moose Pond Association Peabody Pond Protective Association Trickey Pond Environmental Protection Association

2022 Water Testing Crew

Hanna Holden   Abby Mahoney   Rachel Davis

About LEA

The Lakes Environmental Association (LEA) is a non-profit organization founded in 1970. LEA's mission is to preserve and restore the exceptional water quality of Maine's lakes, ponds, rivers, streams, and wetlands and the integrity of their watersheds. Headquartered in Bridgton, Maine, LEA's service area includes six towns in the western Maine Lakes Region, although its reach and influence extends across the whole state.

Lake Water Testing

Water testing on 41 lakes and ponds in LEA's service area occurs every year through traditional and advanced testing initiatives. Data collected and presented in this report contributes to our long-term understanding of lake/pond behavior and health. Our data are available to the public through Maine's Department of Environmental Protection and on LEA's website.

Invasive Plant Program

Controlling Milfoil and other invasive aquatic plants requires a strong and persistent blend of prevention and removal programs. LEA spearheads the statewide Courtesy Boat Inspection program, which educates boaters and helps control the spread of invasives. Our Milfoil Control Team removes plants from the state's busiest waterway, the Songo River, as well as Long Lake, Brandy Pond, Sebago Lake, and Sebago Cove.

Environmental Education

LEA offers environmental education programs to local elementary, middle, and high schools, reaching over 1,000 students annually. LEA also hosts educational programs for all ages at the Holt Pond Preserve, Highland Research Forest, and Pondicherry Park, all of which LEA played a key role in establishing.

Landowner and Municipal Assistance

LEA provides technical assistance to residents interested in preventing erosion on their property. This service helps educate landowners about simple erosion control techniques and existing land use regulations. LEA also works with municipalities on comprehensive planning, natural resources inventories, and ordinance development.
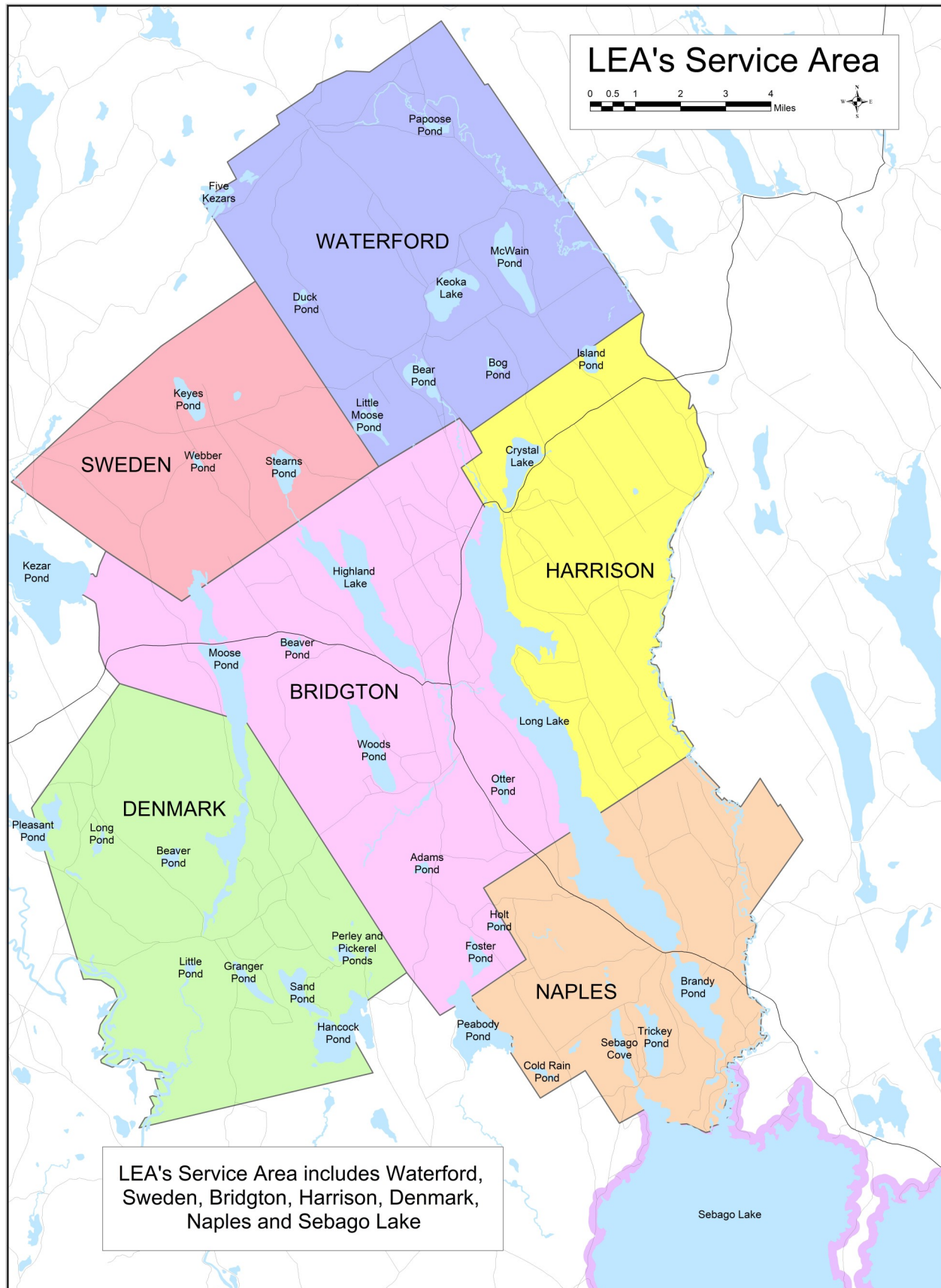
Courtesy Boat Inspections

Every summer, LEA hires over 30 courtesy boat inspectors to educate boaters at public boat launches about invasive plants and help them perform inspections on their watercraft. This program, begun by LEA, has been adopted across the state.

Maine Lake Science Center

LEA's Maine Lake Science Center has a fully functional water lab and is a hub for lake research in the state. The center regularly hosts researcher retreats, trainings, and other events at its remodeled energy-efficient building which abuts wooded Pondicherry Park in Bridgton.

Please join LEA!

You can become an LEA member with a donation of any amount. Just mail a check to LEA, 230 Main St., Bridgton, ME 04009 or join online at www.mainelakes.org.

LEA's Service Area

0 0.5 1   2   3   4
Miles

WATERFORD

Papoose Pond

Five Kezars

McWain Pond

Keoka Lake

Duck Pond

Bog Pond

Island Pond

SWEDEN

Keyes Pond

Webber Pond

Stearns Pond

Bear Pond

Little Moose Pond

Crystal Lake

HARRISON

Kezar Pond

Highland Lake

Moose Pond

Beaver Pond

BRIDGTON

Long Lake

Woods Pond

Otter Pond

DENMARK

Pleasant Pond

Long Pond

Beaver Pond

Adams Pond

Holt Pond

Foster Pond

Little Pond

Granger Pond

Perley and Pickerel Ponds

NAPLES

Brandy Pond

Sand Pond

Hancock Pond

Peabody Pond

Trickey Pond

Sebago Cove

Cold Rain Pond

LEA's Service Area includes Waterford, Sweden, Bridgton, Harrison, Denmark, Naples and Sebago Lake

Sebago Lake

3

Water Quality at a Glance — Biweekly Monitoring
See page 10 for interpretation guide

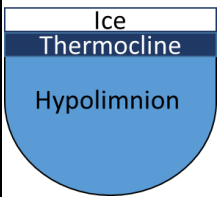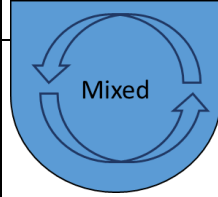| Lake	2022 Average			Trend Analysis Results		
	Clarity	**Phosphorus**	**Chlorophyll-*a***	**Clarity**	**Phosphorus**	**Chlorophyll-*a***
ADAMS POND	High	Moderate	Low	Increasing	Stable	Stable
BACK POND	Moderate	Moderate	Moderate	Increasing	Stable	Stable
BEAR POND	Moderate	Moderate	Moderate	Stable	Decreasing	Stable
BRANDY POND	Moderate	Moderate	Moderate	Stable	Decreasing	Stable
CRYSTAL LAKE	Moderate	Moderate	Low	Decreasing	Stable	Decreasing
FOSTER POND	Moderate	Moderate	Moderate	Decreasing	Stable	Increasing
GRANGER POND	High	Moderate	Moderate	Increasing	Decreasing	Stable
HANCOCK POND	High	Moderate	Moderate	Increasing	Decreasing	Decreasing
HIGHLAND LAKE	High	Moderate	Low	Increasing	Decreasing	Decreasing
ISLAND POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
KEOKA LAKE	Moderate	Moderate	Moderate	Increasing	Decreasing	Stable
KEYES POND	Moderate	Moderate	Moderate	Increasing	Decreasing	Stable
LITTLE MOOSE POND	Moderate	Moderate	Low	Decreasing	Stable	Stable
LONG LAKE (North)	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
LONG LAKE (Middle)	Moderate	Moderate	Moderate	Stable	Stable	Decreasing
LONG LAKE (South)	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
McWAIN POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
MIDDLE POND	Moderate	Moderate	Low	Increasing	Decreasing	Decreasing
MOOSE POND (Main)	High	Moderate	Moderate	Stable	Stable	Decreasing
MOOSE POND (North)	Moderate	Moderate	Moderate	Stable	Stable	Stable
MOOSE POND (South)	Moderate	Moderate	Moderate	Decreasing	Increasing	Stable
PEABODY POND	High	Low	Low	Increasing	Stable	Stable
SAND POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
STEARNS POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
TRICKEY POND	High	Moderate	Low	Decreasing	Stable	Increasing
WOODS POND	Moderate	Moderate	Moderate	Stable	Stable	Stable

Water Quality at a Glance — Annual Monitoring
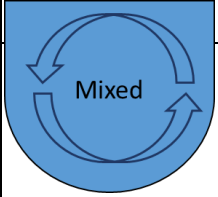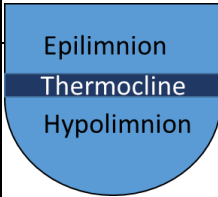
See page 10 for interpretation guide

Lake	August 2022 Result			Trend Analysis Result		
	Clarity	Phosphorus	Chlorophyll-*a*	Clarity	Phosphorus	Chlorophyll –*a*
BEAVER POND (Bridgton)	Moderate	Moderate	Low	Increasing	Decreasing	Stable
BEAVER POND (Denmark)	*	High	Moderate	*	Stable	Stable
BOG POND	Low	Very High	Moderate	*	Stable	Stable
COLD RAIN POND	Moderate	Moderate	Moderate	Stable	Stable	Increasing
DUCK POND	Low	Very High	High	*	Stable	Stable
HOLT POND	Low	High	Moderate	*	Stable	Stable
JEWETT POND	Moderate	Moderate	Low	Stable	Stable	Stable
KEZAR POND	Low	High	Low	*	Stable	Stable
LITTLE POND	Moderate	Moderate	Low	*	Stable	Stable
LITTLE MUD POND	Low	Moderate	Moderate	Decreasing	Decreasing	Decreasing
LONG POND	Moderate	Moderate	Moderate	*	Stable	Increasing
MUD POND	Moderate	Moderate	Low	Stable	Stable	Decreasing
OTTER POND	Moderate	Moderate	Moderate	Increasing	Stable	Decreasing
PAPOOSE POND	Moderate	High	Low	Increasing	Stable	Stable
PERLEY POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
PICKEREL POND	Moderate	Moderate	Low	Stable	Increasing	Stable
PLEASANT POND	Low	High	Moderate	*	Stable	Stable
SEBAGO COVE	Low	Very High	Moderate	*	Stable	Stable
WEBBER POND	Low	High	Moderate	*	Stable	Stable

* Indicates that the Secchi disk touched the pond bottom but was still visible during sampling. When the Secchi disk touches the bottom but is still visible, the resulting reading does not represent an accurate water clarity measurement. Clarity trends are not reported when the Secchi disk hits bottom.

Lake Science 101

Annually, many lakes undergo seasonal shifts between having a uniform temperature from top to bottom, to being separated into distinct, temperature-dependent layers to form the epilimnion, the thermocline (aka metalimnion), and the hypolimnion. The epilimnion is the warm upper layer of the lake and the hypolimnion is the cold bottom layer. The thermocline is a narrow zone in between these layers where temperature and oxygen levels change rapidly. This layering, also called stratification, occurs because water density is dependent on water temperature. Warm water will not mix with cold water because the density difference between cold water and warm water prevents it. Lakes stratify in both the summer and winter. Stratification breaks down in the spring and fall, allowing for "turnover" — full mixing throughout the water column. Stratification prevents oxygen exchange between upper and bottom layers, which often results in significant differences in oxygen and nutrient concentrations. This is especially true in late summer when the warm, well-oxygenated epilimnion and the cold hypolimnion are cut off from each other by the thermocline.

Ice / Thermocline / Hypolimnion	**Winter -** Ice blocks out sunlight and prevents winds from mixing oxygen into upper waters. With little light below the ice and gradually diminishing oxygen levels, plants stop growing. Most animals greatly slow their metabolism or go into hibernation. There is only a light temperature gradation, but deep waters are warmer than shallower waters. Despite limited light availability, because of ice and particularly snow, there can be a healthy, actively growing population of algae and zooplankton under the ice. The water does stratify, though the temperature difference is small and the warmest water is at the bottom.
Mixed	**Spring -** After the ice melts, rising air temperatures warm shallower waters until they are nearly the same temperature as deeper waters. When water temperature is similar from top to bottom, aided by strong winds, shallow and deep waters mix together, redistributing nutrient and oxygen concentrations throughout the water column. This period is called spring turnover.
Epilimnion / Thermocline / Hypolimnion	**Summer -** As air temperature increases, deeper lakes will gradually stratify into a warm upper layer and a cold bottom layer, separated by a zone of rapid temperature and oxygen levels change. This zone is often called the thermocline. The upper, warm layers are constantly mixed by winds, which "blend in" oxygen. The cold, deeper waters are cut off from oxygen at the onset of stratification. This can result in deep water oxygen depletion, which may negatively affect coldwater fisheries. When oxygen levels are low at the bottom of the lake, a chemical reaction occurs that releases stored phosphorus from sediments. However, due to the density barrier at the thermocline, these nutrients do not move easily into the epilimnion. This often causes a buildup of phosphorus in the deep waters.
Mixed	**Fall -** comes and so do the cooler winds that chill the warm upper waters until the temperature differential weakens and stratification breaks down. As in Spring, strong winds cause the lake to turn over, which allows oxygen to be replenished throughout the water column.

Lack of nutrient and oxygen exchange has several consequences for the lake. Light penetration is greatest near the top of the lake, meaning that algae growth primarily occurs in the epilimnion. Algae growth will sometimes peak near the thermocline, often in lakes with deep light penetration and higher hypolimnetic phosphorus levels. Phosphorus, the limiting element controlling algae growth in our lakes, is often more abundant in the hypolimnion because it is stored in sediments.

Lakes Environmental Association
2022 Water Testing Report

Chapter 1 — Water Quality Monitoring

2022 as a Year

The 2022 water monitoring season began with the arrival of our summer interns, Abby Mahoney and Rachel Davis. Together, they were instrumental in LEA's efforts to collect data: 290 Secchi readings; 253 oxygen and temperature profiles; 227 hypolimnetic core samples (all of which were analyzed for color, pH, conductivity, alkalinity, total phosphorus concentration, and chlorophyll concentration); 64 fluorometer profiles; 96 deep water total phosphorus samples; and deployed 16 high-resolution temperature monitoring buoys containing 120 individual temperature sensors. Our data collection efforts provide water quality information from 45 basins on 41 waterbodies within the LEA service area.

In 2022, 73% of the lakes we monitor bi-weekly had either stable or increasing clarity trends, 96% had either stable or decreasing total phosphorus trends, and 92% had either stable or decreasing chlorophyll-*a* trends. Of the lakes we monitor once annually, 74% had either stable or increasing clarity trends, 95% had either stable or decreasing total phosphorus trends, and 90% had either stable or decreasing chlorophyll-*a* trends. Water testing results for 2022 show a great year for water quality in the Lake Region.

Thanks to those who facilitate our work by providing lake access and/or boat access to LEA staff!

Water Quality Testing Parameters

LEA's testing program provides a comprehensive assessment of general lake health. Tests are conducted for clarity, color, temperature, chlorophyll-*a,* phosphorus, dissolved oxygen, conductivity, pH, and alkalinity.

Clarity is a measure of water transparency. Clarity is measured with a Secchi disk and is reported in meters. Higher Secchi values indicate clearer water. Clarity is affected by water color and the presence of algae and suspended particles.

Color is a measure of tannic or humic acids in the water. Color affects water clarity and is reported in Standard Platinum Units (SPU). Higher values indicate darker water.

Temperature is measured at one-meter intervals from the surface to the bottom of the lake. Temperature data are used to assess thermal stratification. Temperature is reported in degrees Celsius.

Chlorophyll-*a* is a pigment found in all plants, including algae. Chlorophyll (the *–a* is dropped for simplicity) is used to estimate the amount of algae present in the water column. Samples are collected from the top layer (epilimnion) of a lake. Chlorophyll concentrations are measured in parts per billion (ppb).

Total Phosphorus is a nutrient needed by algae to grow. It is measured in order to determine the potential for algae growth in a lake. Phosphorus is measured in parts per billion (ppb). Phosphorus samples are collected from the lake's upper layer (epilimnion), while deep water phosphorus samples are collected at individual depths in late August. Upper layer samples tell us how much phosphorus is available for algae in the sunlit portion of a lake, where the algae grow. If deep water samples show high phosphorus (10 ppb or higher than upper layer phosphorus samples), this is an indication that sediments are releasing phosphorus and that the lake is potentially susceptible to future algal blooms.

***Gloeotrichia echinulata* density** is a visual estimate of the number of individual *Gloeotrichia echinulata* (Gloeo) colonies floating in surface waters. Gloeo is a type of cyanobacteria (blue-green algae) commonly found in low-nutrient waters. Gloeo density is reported as a value ranging from 0 - 6, based on the number of Gloeo colonies seen through a Secchi scope. Higher values indicate more Gloeo colonies.

Dissolved oxygen is measured at one-meter intervals from the surface to the bottom of the lake. It is measured in parts per million (ppm). Over the course of the summer, oxygen in the bottom waters is consumed through organic matter decomposition. If dissolved oxygen concentrations reach zero at the bottom of the lake, phosphorus can be released into the water column from bottom sediments, which can cause increased algal growth that could fuel further oxygen depletion. Oxygen depletion can be a natural occurrence in many lakes, but the process can be enhanced ay additional algal growth in the surface waters. It is a special concern in lakes that support coldwater fish because these species need cold, oxygenated water to survive and reproduce.

Other measurements: We collect data on these parameters, but they tend to remain stable over long periods of time. They are not reported on unless unusual conditions were observed.

> **Conductivity** measures the ability of water to carry electrical current. Pollutants and minerals in the water will generally increase lake conductivity.
>
> **pH** is used to measure the level of acidity in lake water, which affects the species' makeup and availability of micronutrients in a lake.
>
> **Alkalinity** measures the capacity of lake water to buffer changes in pH.

Interpreting Water Quality Data Summaries

Chlorophyll-*a* and Phosphorus Trends: Available data from 1996-2022 were analyzed to determine if chlorophyll-*a* and phosphorus concentrations are changing over time. Both chlorophyll-*a* and phosphorus are measured in parts per billion (ppb). These trends help us estimate the relationship between a water quality variable and time. For example, on any given lake we plot all of the clarity readings we have collected for that lake since 1996 and plot each of them on a graph with time on the horizontal axis and Secchi depth on the vertical axis. We then fit a 'best fit' line through the data. If the direction of the line trends up, it is a positive trend, while a flat line or a downward line indicate either stable trend or a decreasing trend, respectively. This shows us how water clarity readings are changing over time on that lake.

Increasing = more chlorophyll-*a* or phosphorus in lake water samples over time

Stable = neither more nor less chlorophyll-*a* or phosphorus in lake water samples over time

Decreasing = less chlorophyll-*a* or phosphorus in lake water samples over time

Clarity Trends: Available data from 1996-2022 were analyzed to determine if water clarity is changing over time. Clarity is measured in meters (m). Higher numbers indicate clearer water.

Increasing = deeper clarity readings over time

Stable = clarity readings are neither higher nor lower over time

Decreasing = shallower clarity readings over time

2022 Average Chlorophyll-*a* concentrations, Phosphorus concentrations, Color, and Clarity readings: Chlorophyll-*a* and phosphorus concentrations throughout the 2022 monitoring season were averaged and classified according to LEA's water quality index outlined below. Water color is also included in the table because it affects clarity. The long-term average is compared to current water quality conditions for all lakes visited. The long-term average is a simple mean of all the data we have on record for each reported parameter (clarity, chlorophyll, and phosphorus). The long-term average uses all the data available rather than just data collected in or after 1996. The long-term average doesn't tell us specifically how each parameter changes over time; it is instead used to see how the current year's data compares to historical values.

LEA's Water Quality Index

Clarity in meters (m)		Phosphorus in parts per billion (ppb)		Chlorophyll-*a* in parts per billion (ppb)		Color in Standard Platinum Units (SPU)	
10.1 +	Very high	less than 5.1	Low	less than 2.1	Low	Less than 10.1	Low
7.1 – 10.0	High	5.1 – 12.0	Moderate	2.1 – 7.0	Moderate	10.1 - 25.0	Moderate
3.1 – 7.0	Moderate	12.1 – 20.0	High	7.1 – 12.0	High	25.1 - 60	High
less than 3.1	Low	20.1 +	Very high	12.1 +	Very high	60.1+	Very high

2022 Gloeo density readings: *Gloeotrichia echinulata* (Gloeo) densities were estimated throughout the 2022 monitoring season using a visual scale ranging from 0 - 6. Lower values indicate less Gloeo presence and higher values represent more Gloeo presence.
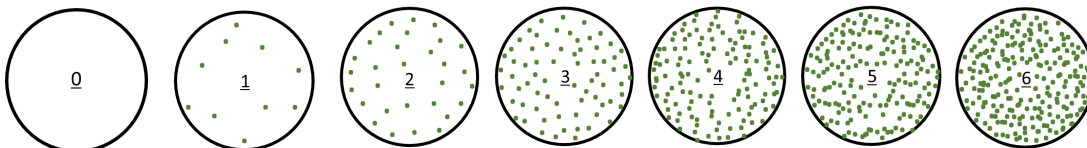
Interpreting Data Graphics

The following pages present 2022 routine monitoring data by lake. The following symbols in the top right corner of some pages indicate that additional data for that lake is available in chapters 2 - 4.

This symbol indicates that the lake has an automated monitoring buoy. Further information is available in Chapter 2.

This symbol indicates that high-resolution temperature sensors were deployed in the lake in 2022. More information is available in Chapter 3.

This symbol indicates that fluorometer data were taken from the lake in 2022. Fluorometer results are discussed in Chapter 4.

Graphs have been included for each test site to visually compare 2022 data to historical data (1996 - 2022). The vertical axis (y-axis) indicates the relative abundance of readings at that level, while the horizontal axis (x-axis) represents reported values. Three different parameters are being reported on the same graph, which results in the value units for the horizontal axis varying, based on result. Units are noted in parentheses under the vertical axis label. Area thickness increases as more measurements are reported at that value. Thus, thicker areas indicate that several measurements have been reported at that value, while thinner areas indicate that fewer measurements have been reported at that value.
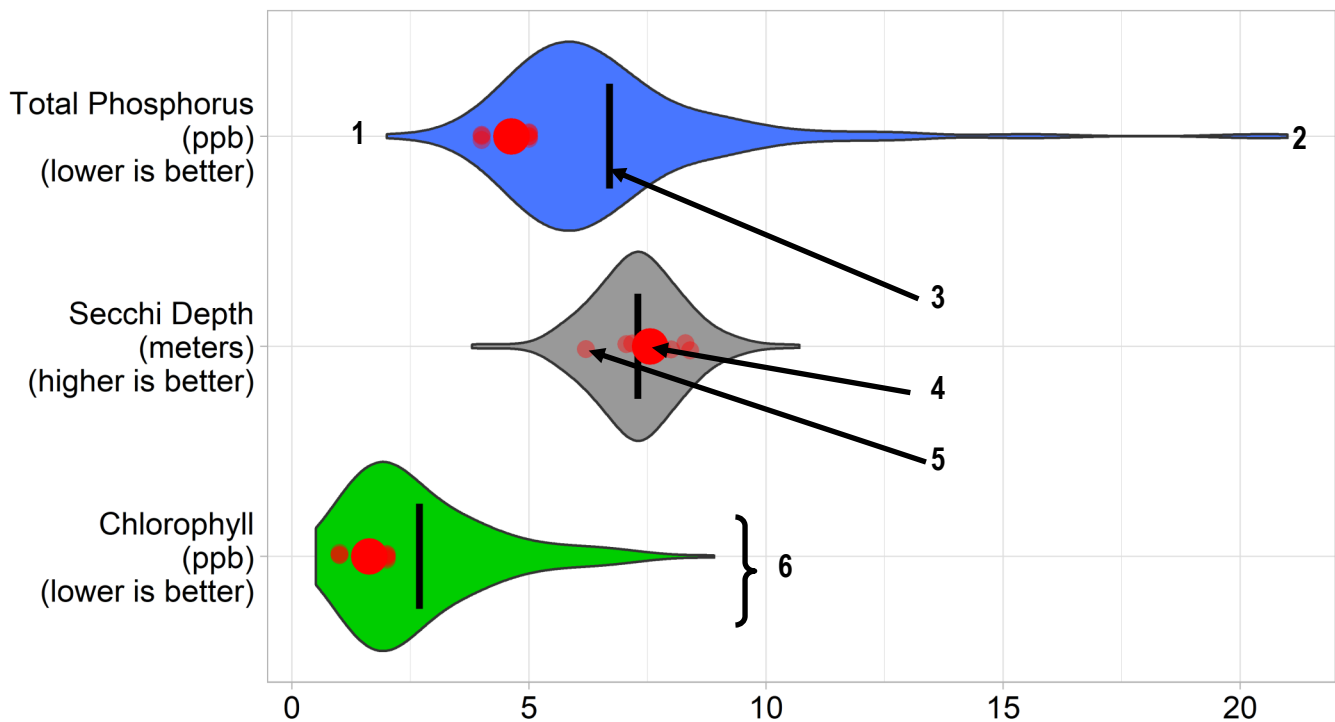
1. Long-term minimum value — far left edge of colored area

2. Long-term maximum value — far right edge of colored area

3. Long-term average value — vertical black bar bisecting colored area

4. Reporting year's average value — large red dot

5. Reporting year's raw values — smaller red dots

6. Thickness of colored area — frequency of past measurements at specific values

Adams Pond - MIDAS 3396
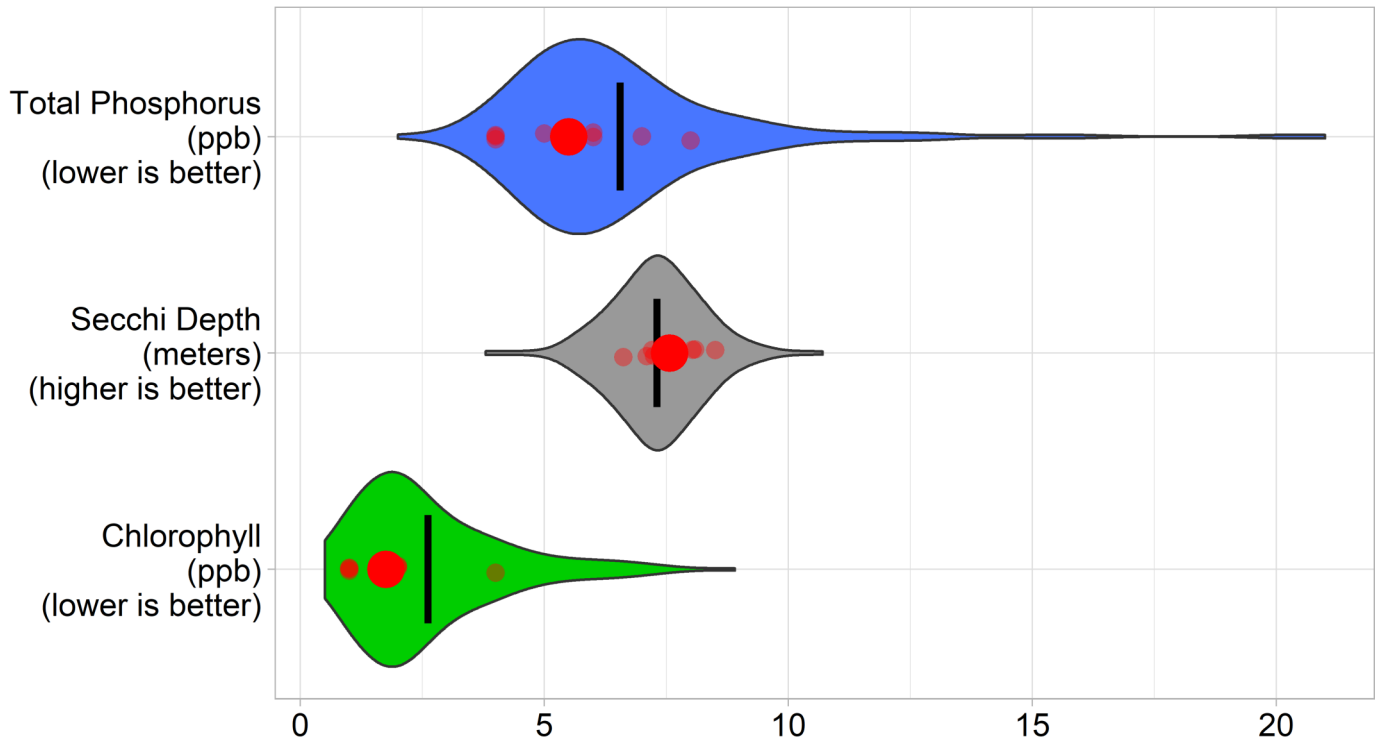
Adams Pond surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
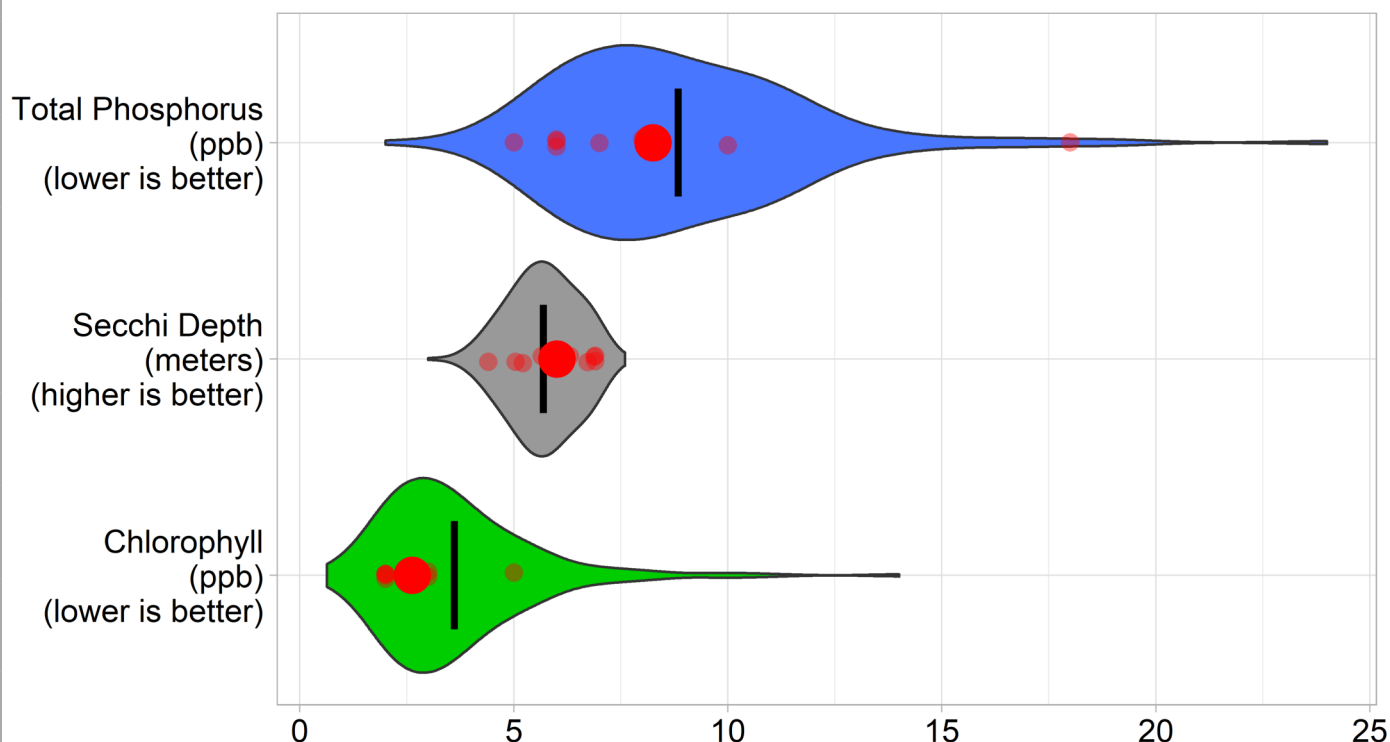
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.6 meters, which falls into the high clarity range. The average total phosphorus reading was 5.5 ppb, which falls into the moderate range. The average deep water phosphorus value is more than 10 ppb above average surface water phosphorus values, which indicates phosphorus recycling may be an issue. The chlorophyll-*a* average of 1.8 falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Adams Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2022 was 18.9 SPU, indicating that water in Adams Pond is moderately colored. *Gloeotrichia echenulata* colonies were seen at a density level of 1 in July and August.

Adams Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	34.0	18.9	Increasing	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was moderately colored	Deeper Secchi readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Back Pond - MIDAS 3199
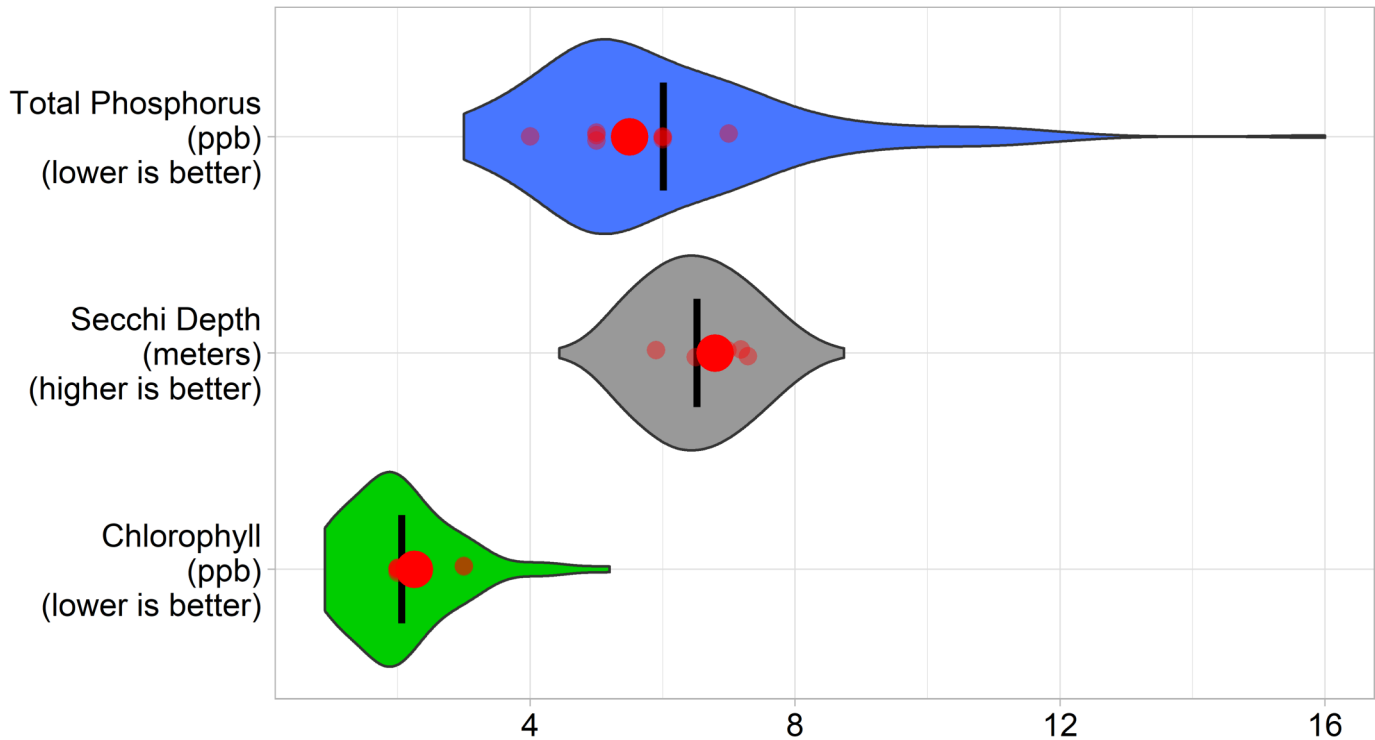
Back Pond surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.8 meters, which is in the moderate range. The average total phosphorus reading of 5.5 ppb falls into the moderate range. The average deep water phosphorus value was at least 10 ppb above surface water phosphorus values, which suggests phosphorus recycling may be an issue. The chlorophyll-*a* average of 2.3 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Back Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2022 was 24.9 SPU, indicating that water in Back Pond is moderately colored. *Gloeotrichia echinulata* colonies were seen at a density level of 1 in early August.

Back Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	16.5	24.9	Increasing	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was moderately colored	Deeper clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Bear Pond - MIDAS 3420

Bear Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.0 meters, which falls into the moderately clear range. The average total phosphorus reading of 8.3 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.6 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Bear Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 26.6 SPU, indicating that water in Bear Pond is highly colored. *Gloeotrichia echenulata* colonies were seen at a density level of 1 in July and at a density level of 2 in August.

Bear Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	10.6	26.6	Stable	Decreasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

14

Beaver Pond, Bridgton - MIDAS 5582
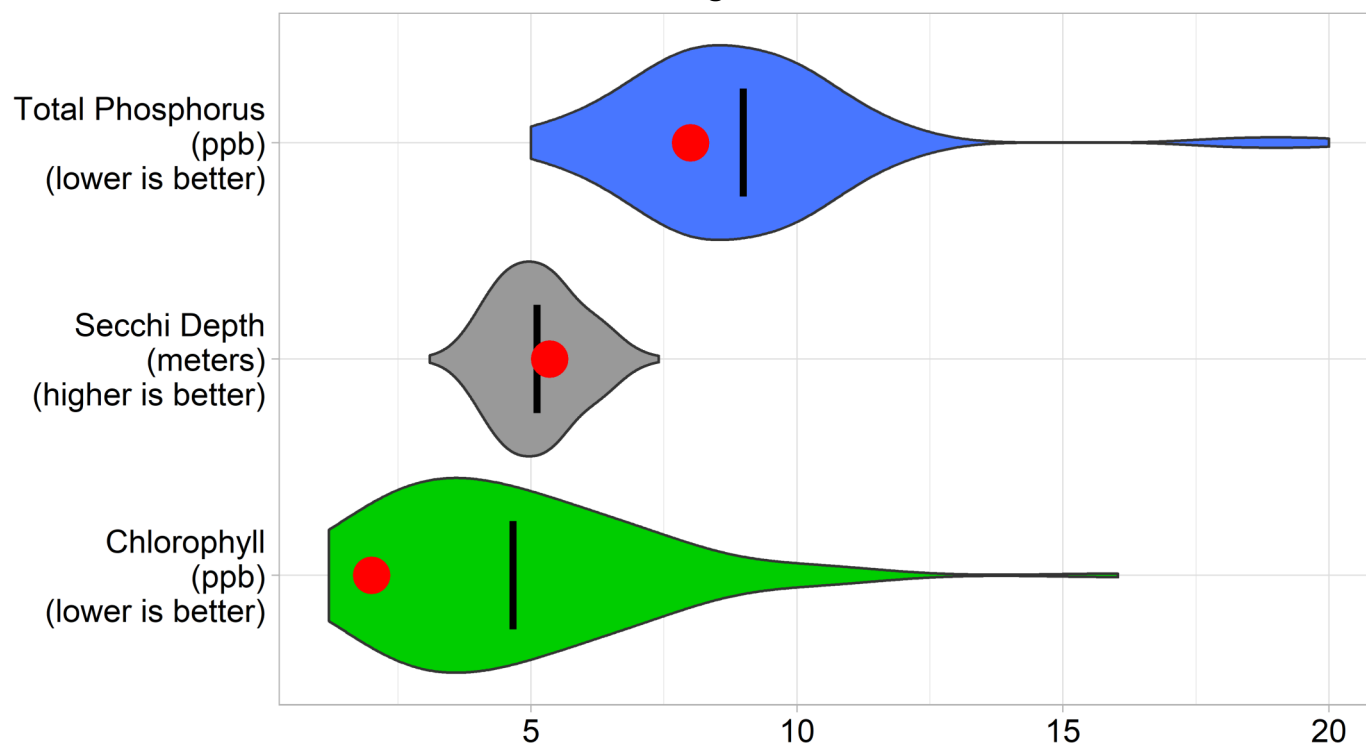
Beaver Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
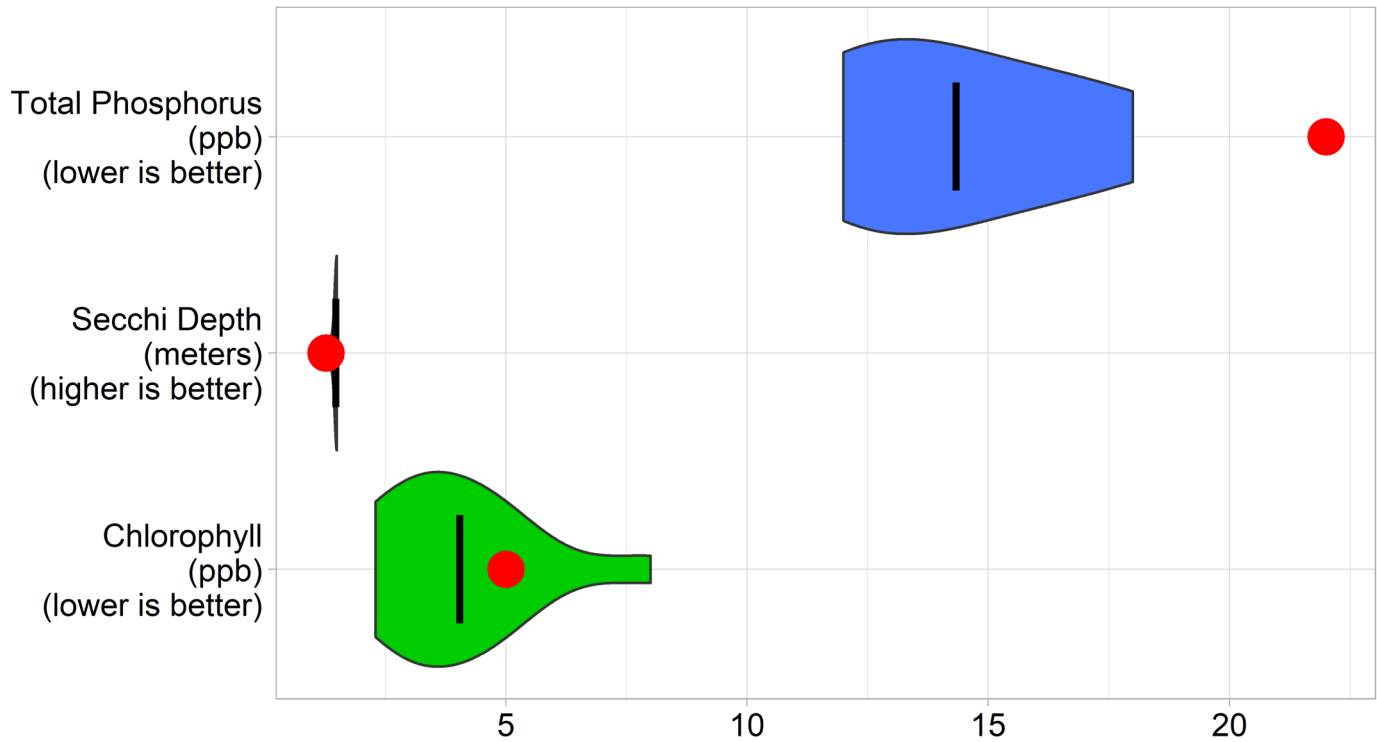
2022 Water Quality Highlights

Bridgton's Beaver Pond is sampled by LEA once per year in August. The long-term average and trend analysis reflect data from 1996 to 2022. The Secchi disk reading for 2022 was 5.4 meters, which falls into the moderately clear range. The total phosphorus reading of 8.0 ppb falls into the moderate range. The average deep water phosphorus value was greater than 10 ppb than surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* average of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Beaver Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 27.0 SPU, indicating that water in Bridgton's Beaver Pond is highly colored.

Bridgton's Beaver Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	25.5	27.0	Increasing	Decreasing	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Deeper Secchi readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

Beaver Pond, Denmark - MIDAS 3124
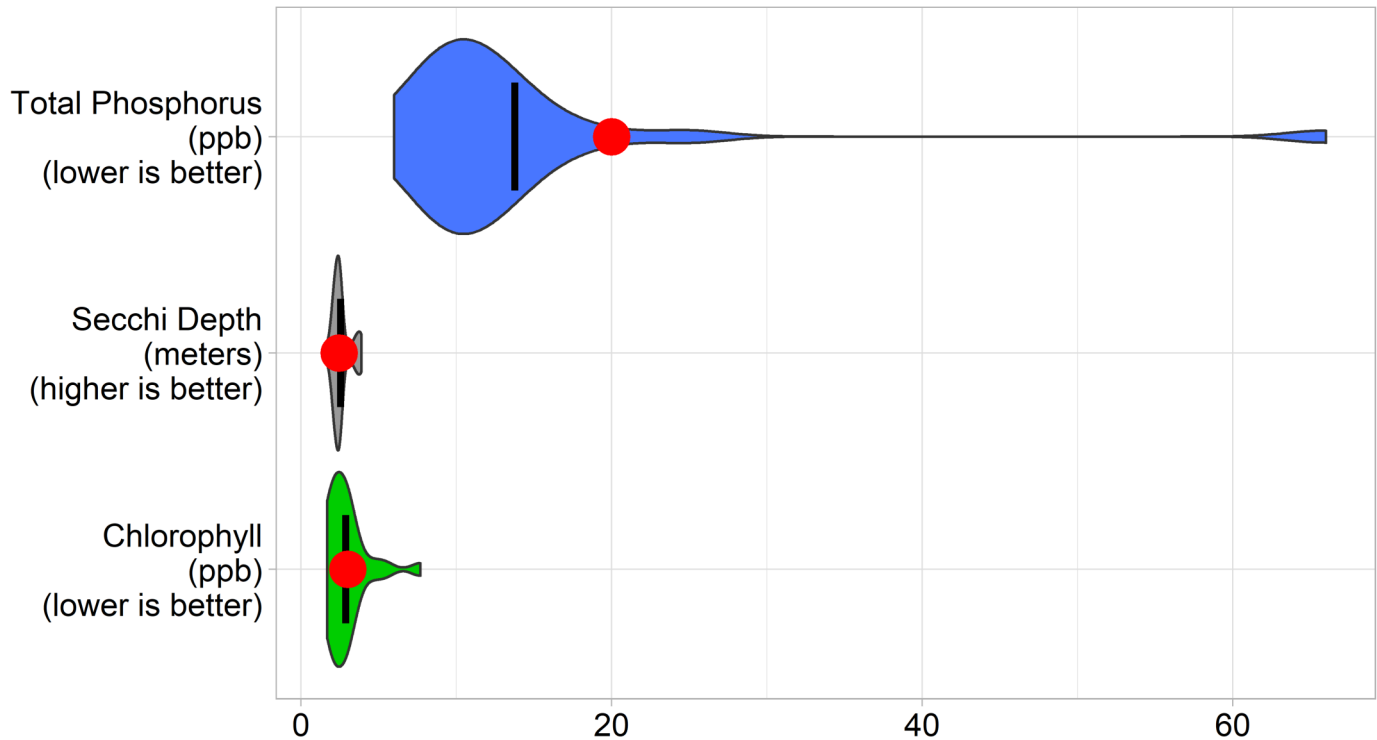
Beaver Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
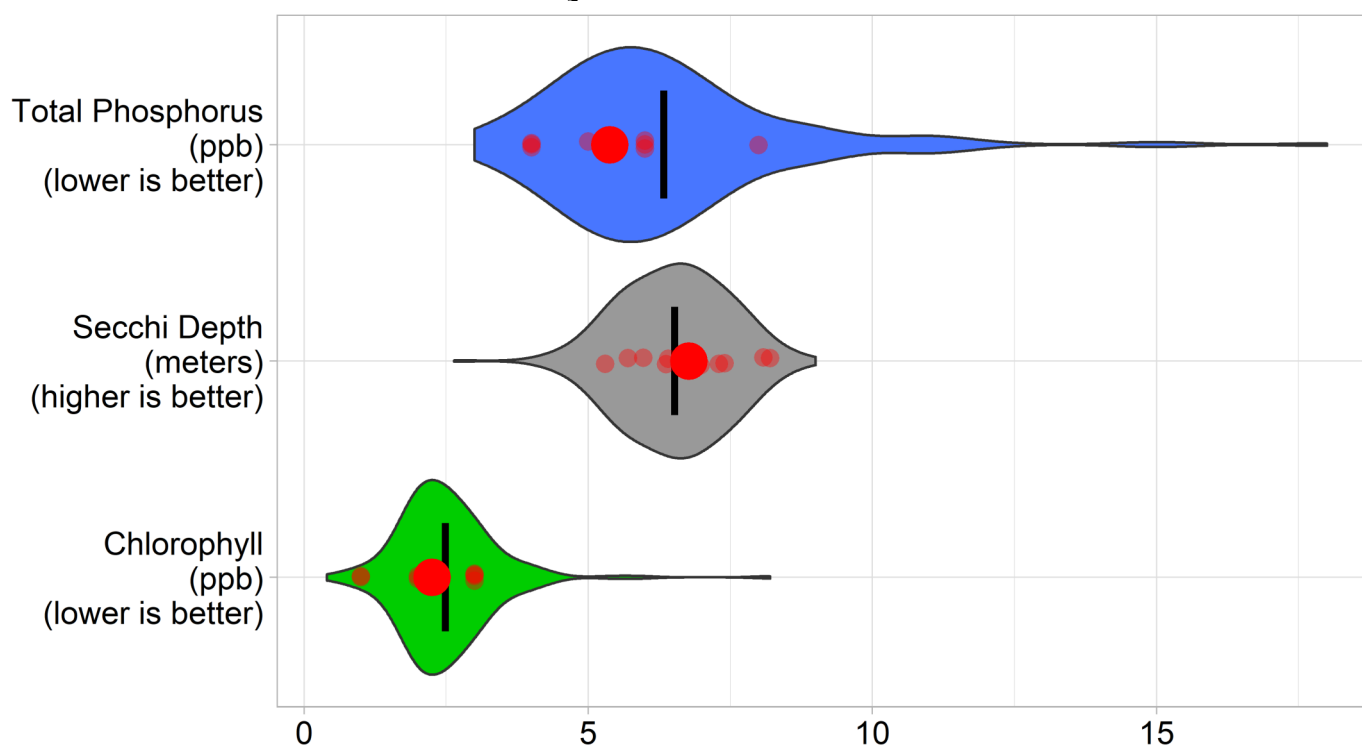
2022 Water Quality Highlights

Denmark's Beaver Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 2.5 meters. The Secchi disk did hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 20.0 ppb falls into the high range. The chlorophyll-*a* reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Beaver Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 41.0 SPU, indicating that water in Denmark's Beaver Pond is highly colored.

Denmark's Beaver Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	41.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Bog Pond - MIDAS 3450

Bog Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Bog Pond is sampled by LEA once per year in August. The long-term average reflects data from 2009 to 2022. The Secchi disk reading for 2022 was 1.3 meters. The Secchi disk did hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 22.0 ppb falls into the very high range. The chlorophyll-*a* reading of 5.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Bog Pond are stable and total phosphorus concentrations are stable. The average color reading for 2022 was 60.0 SPU, indicating that water in Bog Pond is highly colored.

Bog Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	60.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

17

Brandy Pond - MIDAS 9685

Brandy Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
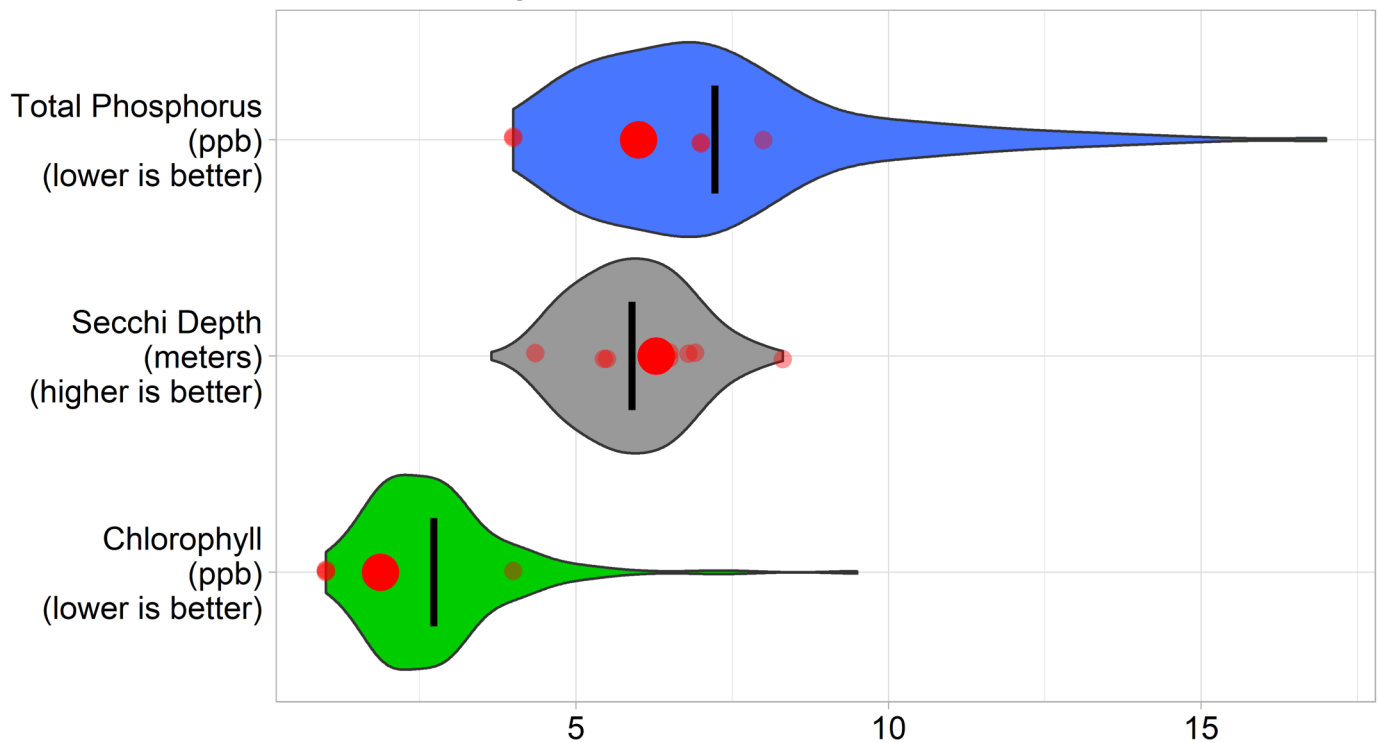
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.8 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.4 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.3 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Brandy Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 21.8 SPU, indicating that water in Brandy Pond is moderately colored. *Gloeotrichia echenulata* colonies were seen at a density level of 1 in July and August.

Brandy Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	10.0	21.8	Stable	Decreasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

Cold Rain Pond - MIDAS 3376
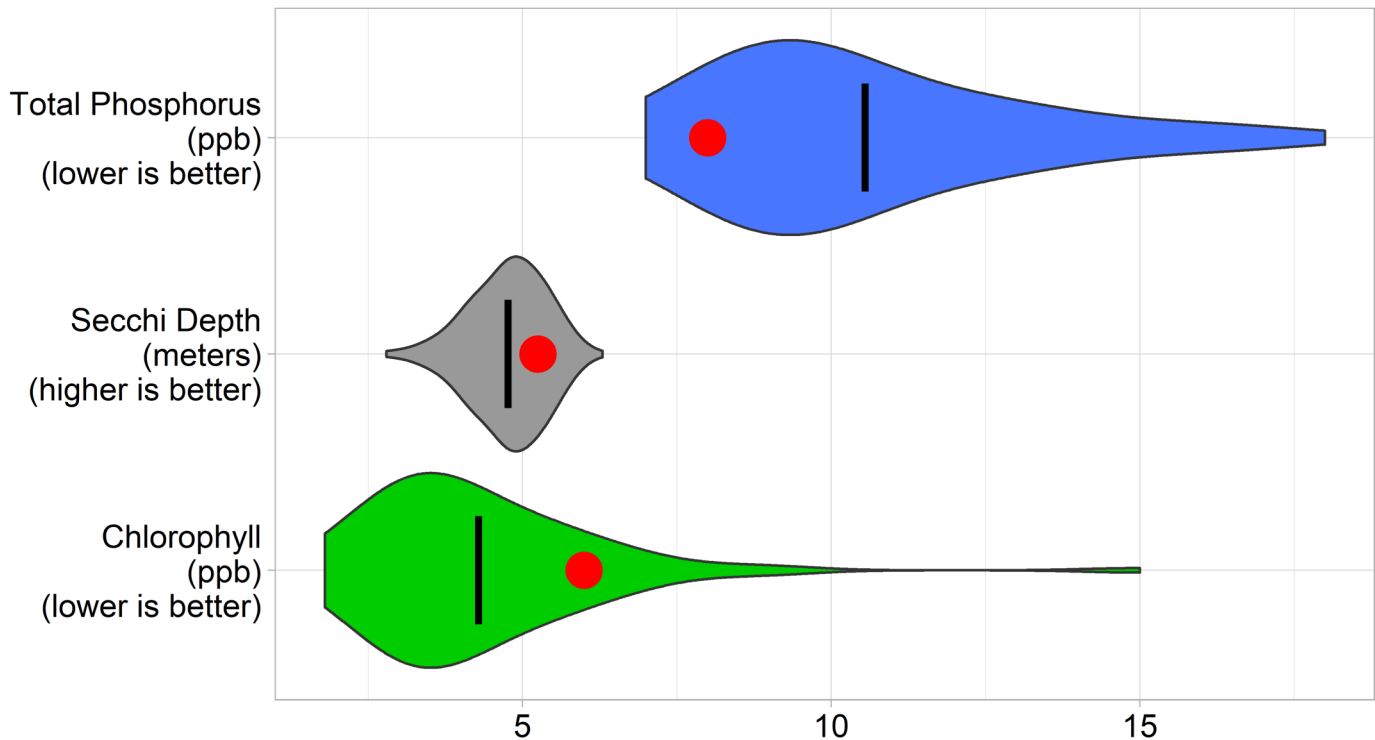
Cold Rain Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Cold Rain Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 5.3 meters, which falls into the moderately clear range. The total phosphorus reading of 8.0 ppb falls into the moderate range. The average deep water phosphorus value was more than 10 ppb above surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 6.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Cold Rain Pond are increasing, total phosphorus concentrations are stable, and clarity readings are stable. The color reading for 2022 was 29.0 SPU, indicating that water in Cold Rain Pond is highly colored.

Cold Rain Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	18.5	29.0	Stable	Stable	Increasing
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	More chlorophyll over time

Crystal Lake - MIDAS 3452

Crystal Lake's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
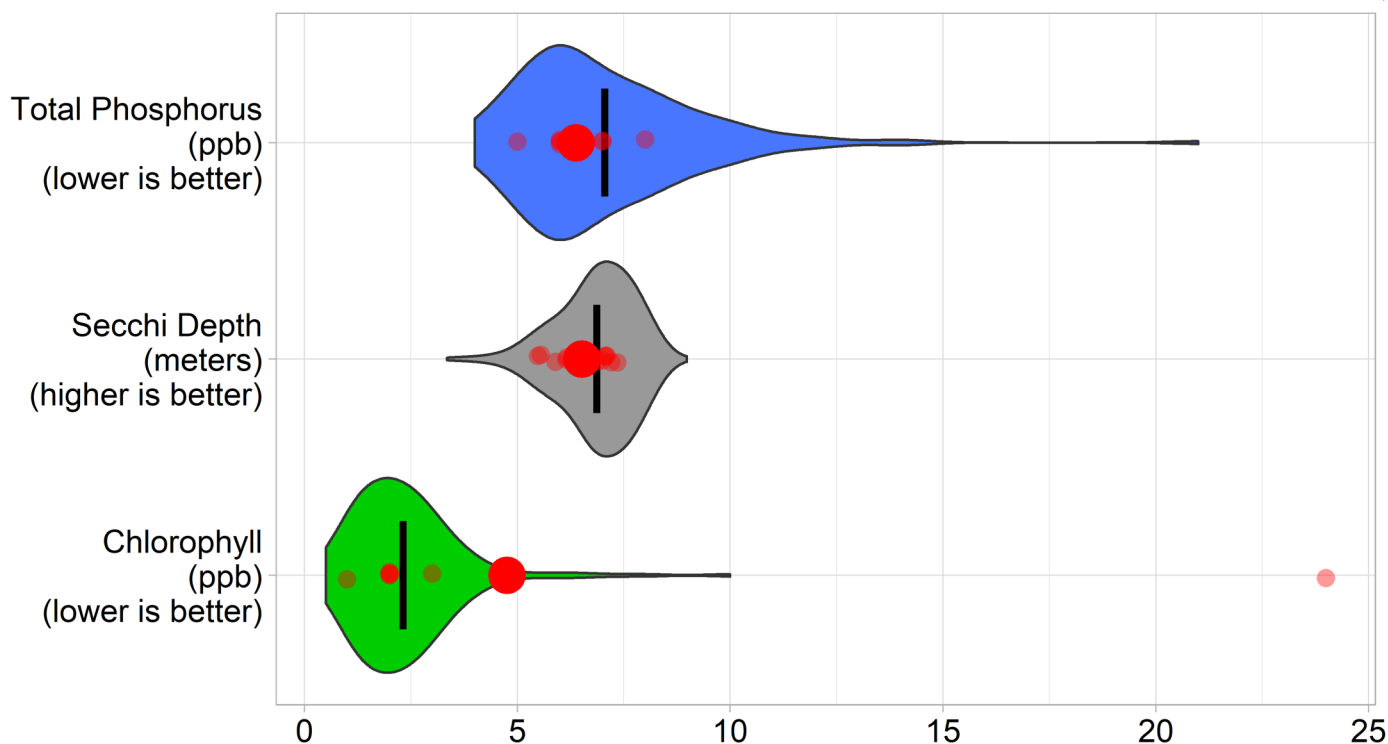
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.3 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.0 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 1.9 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Crystal Lake are decreasing, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 29.0 SPU, indicating that water in Crystal Lake is highly colored. *Gloeotrichia echenulata* colonies minimum density was 1 in July and maximum density was 4.5 in early August.

Crystal Lake's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	10.2	29.0	Decreasing	Stable	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	Less chlorophyll over time

Duck Pond - MIDAS 3228
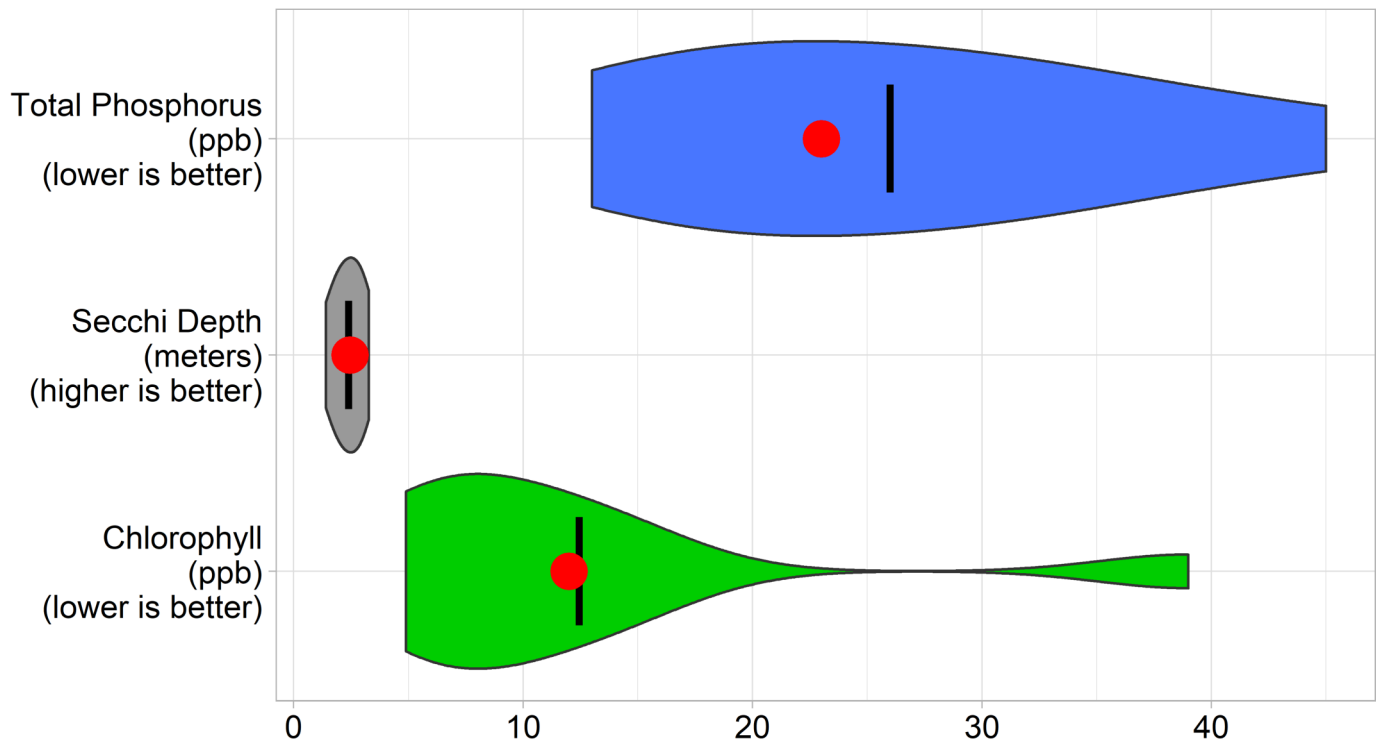
Duck Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Duck Pond is sampled by LEA once per year in August. The long-term average reflects data from 2013 to 2022. The Secchi disk reading for 2022 was 2.5 meters, which falls into the low clarity range. The Secchi disk did not hit bottom this year but has in years past, indicating that long-term average Secchi depth may not be a reliable indicator of historical water clarity. The total phosphorus reading of 23.0 ppb falls into the very high range. The chlorophyll-*a* reading of 12.0 ppb falls into the high range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Duck Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 41.0 SPU, indicating that water in Duck Pond is highly colored.

Duck Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	41.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk often hits bottom making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Foster Pond - MIDAS 3188

Foster Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
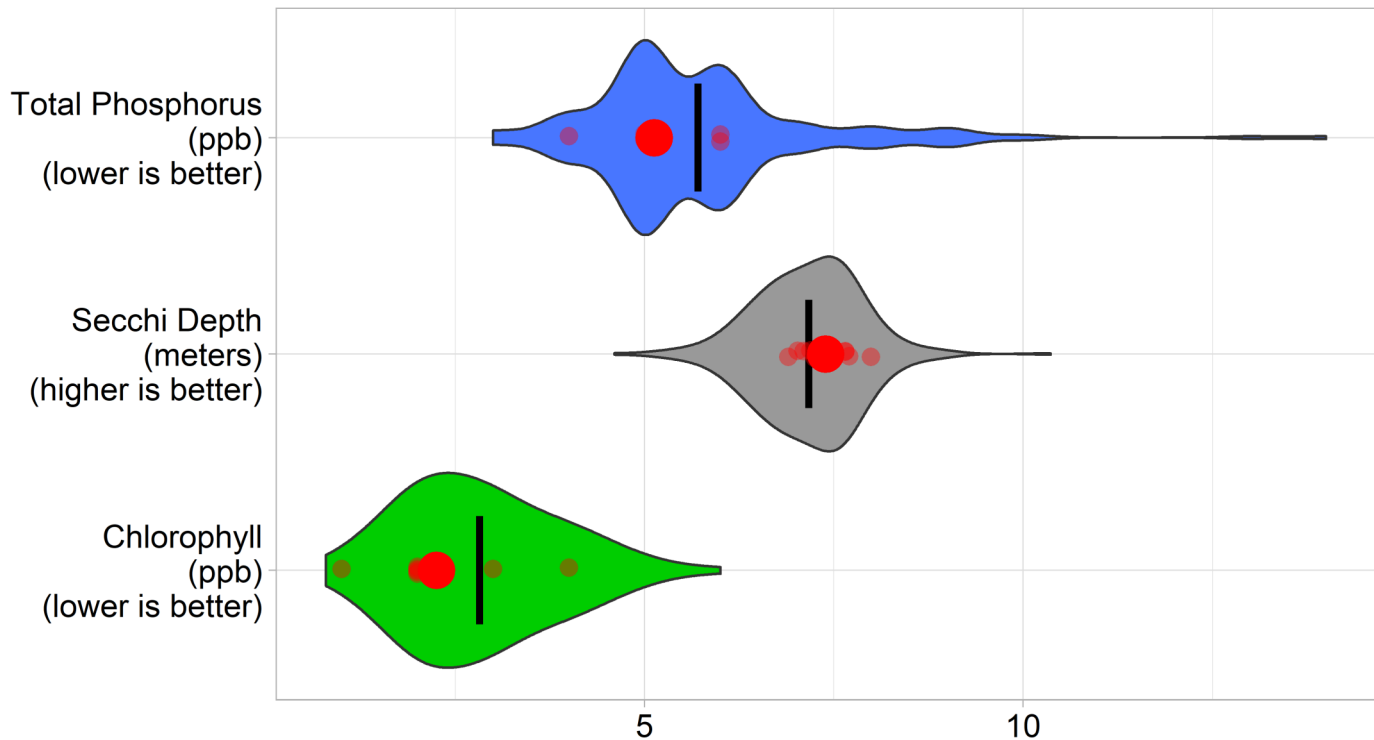
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.5 meters, which falls into the moderate clarity range. The average total phosphorus reading of 6.4 ppb falls into the moderate range. The chlorophyll-*a* average of 4.8 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Foster Pond are increasing, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 17.9 SPU, indicating that water in Foster Pond is moderately colored.

Foster Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	17.9	Decreasing	Stable	Increasing
Interpretation	Water was moderately colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	More chlorophyll over time

Granger Pond - MIDAS 3126
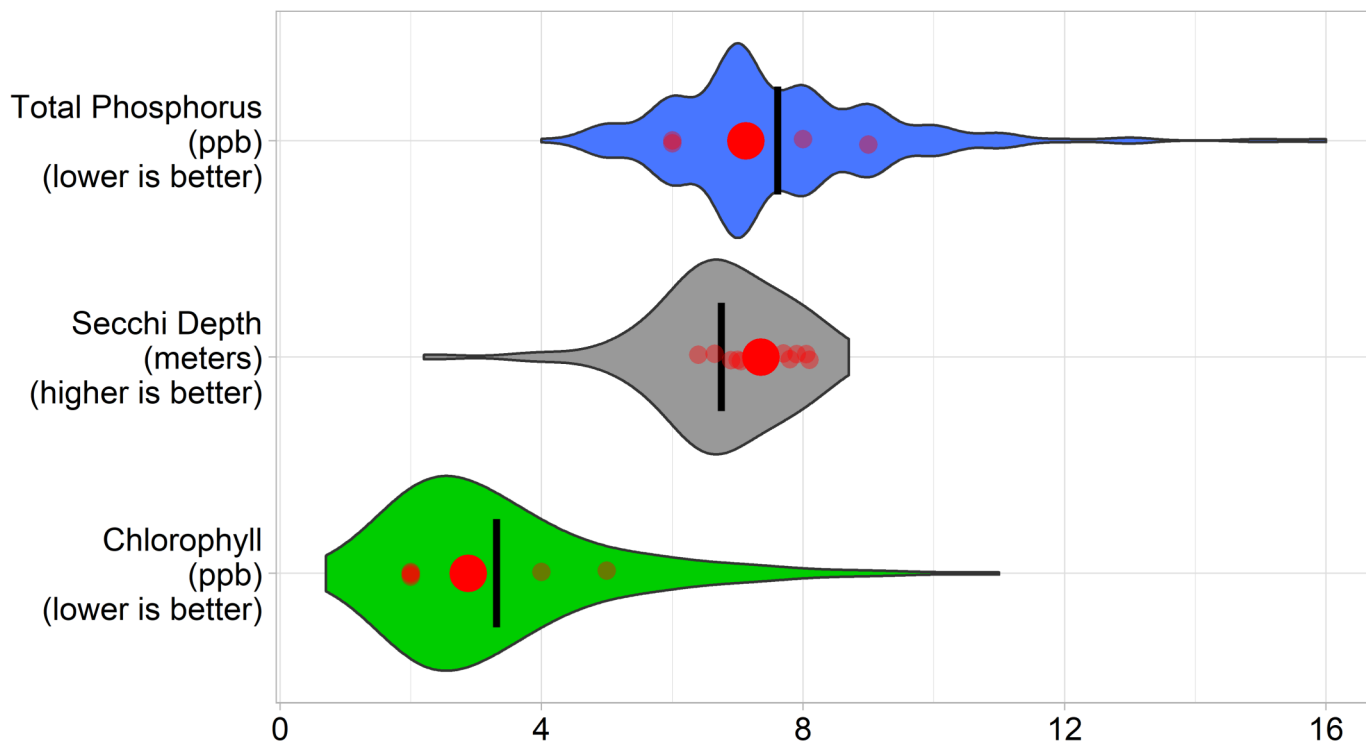
Granger Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
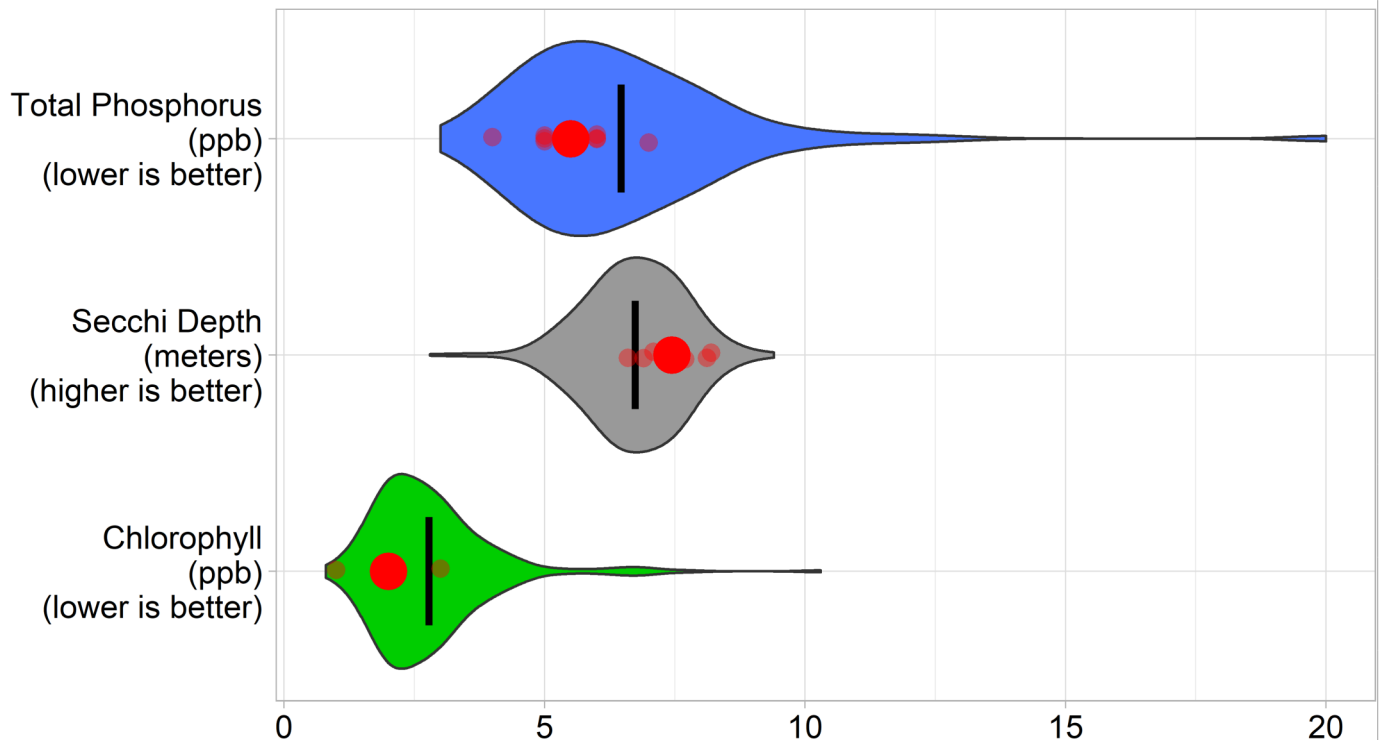
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.4 meters, which falls into the high clarity range. The Secchi disk did hit the bottom once this year, indicating that average Secchi depth may not be a reliable indicator of water clarity; however, the clarity trend is still reported because the majority of Secchi measures did not hit bottom. The average total phosphorus reading of 7.1 ppb falls into the moderate range. The chlorophyll-*a* average of 2.9 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Granger Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 24.6 SPU, indicating that water in Granger Pond is moderately colored.

Granger Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	24.9	Increasing	Decreasing	Stable
Interpretation	Water was moderately colored	Deeper clarity readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

Hancock Pond - MIDAS 3132

Hancock Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
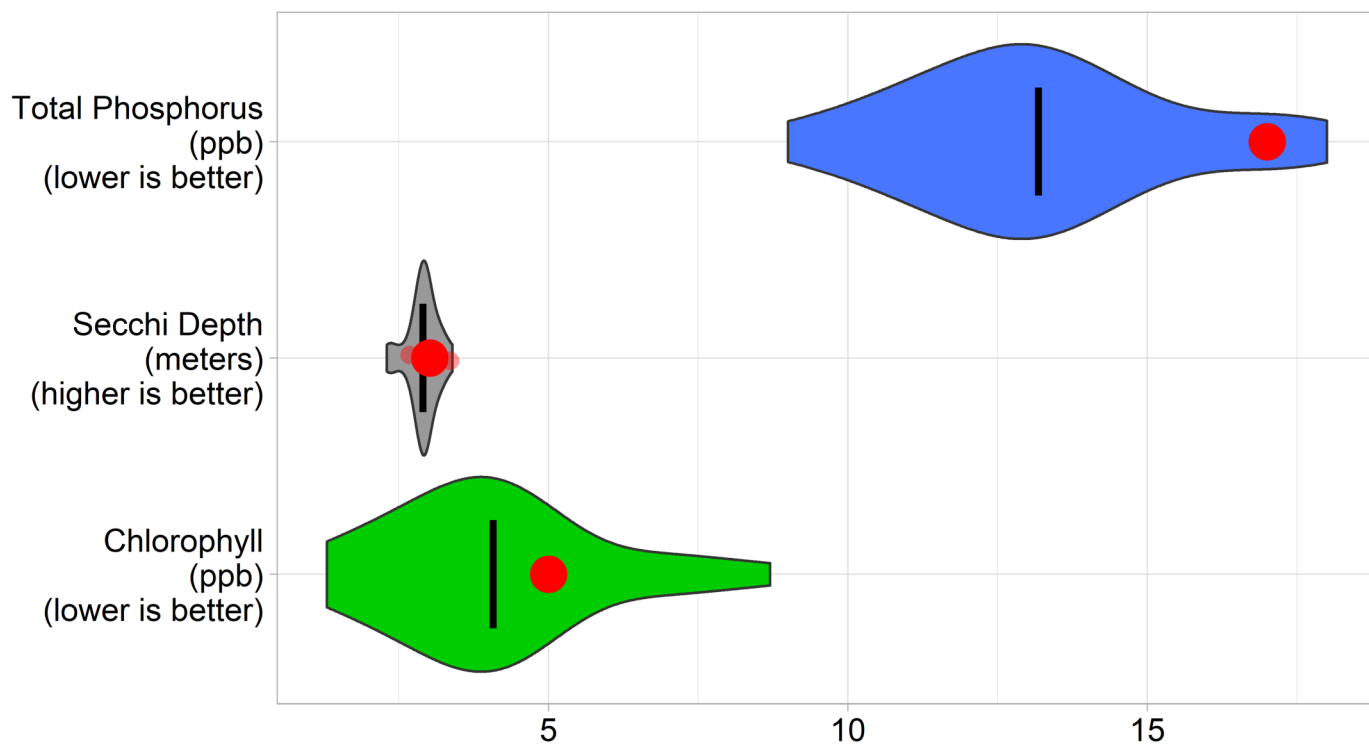
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.4 meters, which falls into the high clarity range. The average total phosphorus reading of 5.1 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.3 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Hancock Pond are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 27.9 SPU, indicating that water in Hancock Pond is highly colored.

Hancock Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	9.6	27.9	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Highland Lake - MIDAS 3454

Highland Lake's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-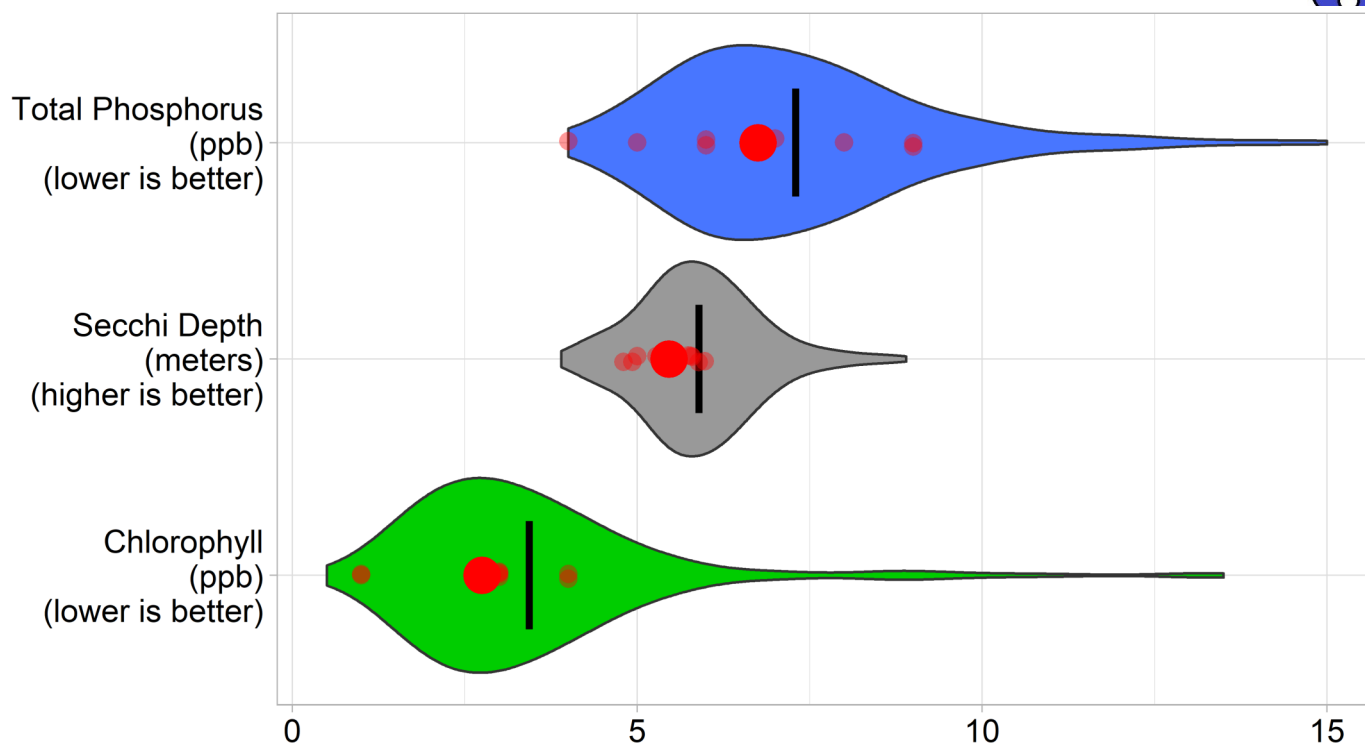term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.4 meters, which falls into the high clarity range. The average total phosphorus reading of 5.5 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Highland Lake are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 26.8 SPU, indicating that water in Highland Lake is highly colored.

Highland Lake's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	12.5	26.8	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus over time	Less chlorophyll over time

25

Holt Pond - MIDAS 3370

Holt Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's

2022 Water Quality Highlights

Holt Pond is sampled by LEA once per year in August. The long-term average reflects data from 2000 to 2022. The average Secchi disk reading for 2022 was 3.0 meters, which falls into the low clarity range. The Secchi disk did hit bottom in 2022, indicating that long-term Secchi depth may not be a reliable indicator of historical water clarity. The total phosphorus reading of 17.0 ppb falls into the high range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* reading of 5.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Holt Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 100 SPU, indicating that water in Holt Pond is very highly colored. *Gloeotrichia echenulata* colonies were seen at a density level of 1 in August.

Holt Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	20.0	100	Not reported	Stable	Stable
Interpretation	Within acceptable range	Water was very highly colored	Secchi disk hit bottom making clarity trend	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Island Pond - MIDAS 3448

Island Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
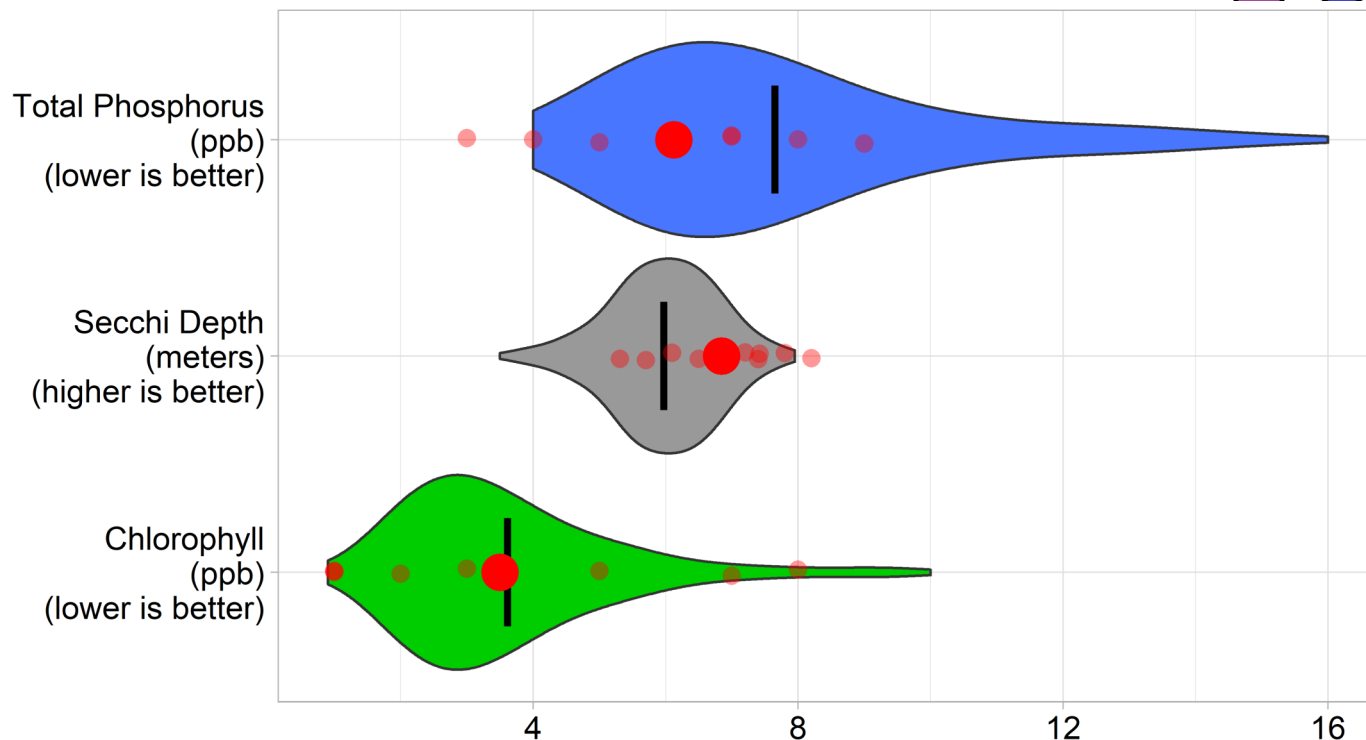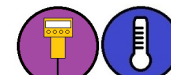
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 5.5 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.8 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.8 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Island Pond are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 32.0 SPU, indicating that water in Island Pond is highly colored.

Island Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	15.0	32.0	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Jewett Pond - MIDAS 3198
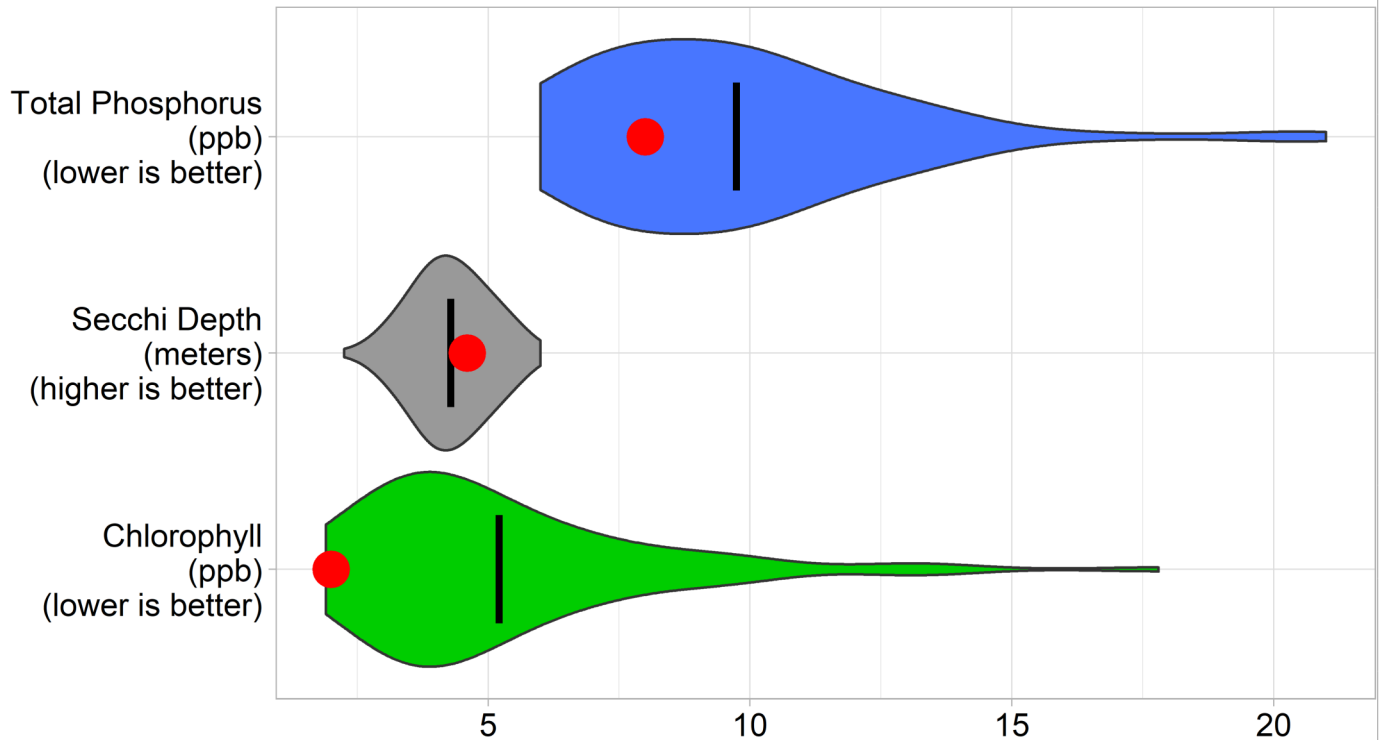
Jewett Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Jewett Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 4.6 meters, which falls into the moderately clear range. The total phosphorus reading of 8.0 ppb falls into the moderate range. The average deep water phosphorus value was greater than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Jewett Pond are stable, total phosphorus concentrations are stable, and clarity readings are stable. The color reading for 2022 was 20.0 SPU, indicating that water in Jewett Pond is moderately colored.

Jewett Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	41.0	20.0	Stable	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Keoka Lake - MIDAS 3416

Keoka Lake's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.8 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.1 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 3.5 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Keoka Lake are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 23.4 SPU, indicating that water in Keoka Lake is moderately colored. Keoka Lake's *Gloeotrichia echenulata* density ranged from 0 through 5 with the highest density occurring in late July.

Keoka Lake's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	15.5	23.4	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

29

Keyes Pond - MIDAS 3232

Keyes Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.1 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.9 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.5 ppb falls in the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Keyes Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 26.4 SPU, indicating that water in Keyes Pond is highly colored.

Keyes Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	12.5	26.4	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

Kezar Pond - MIDAS 9709
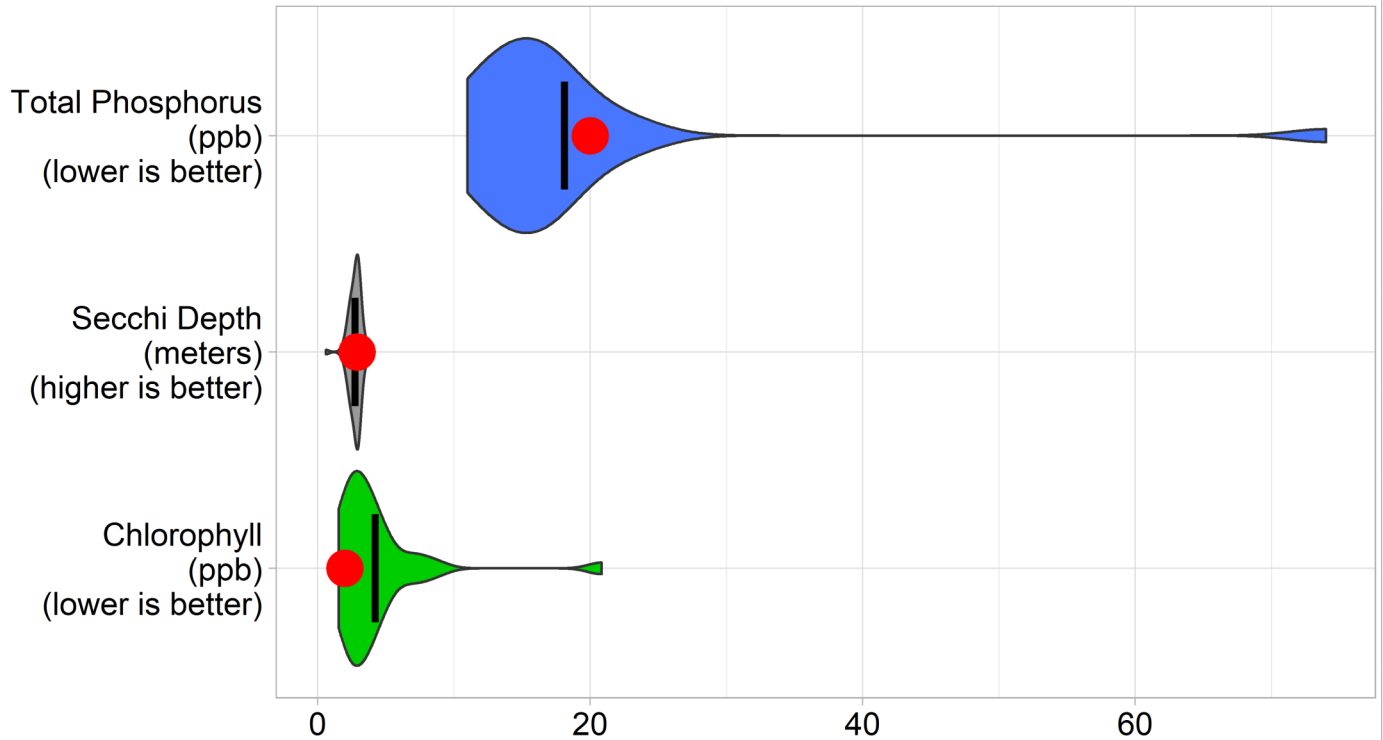
Kezar Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Kezar Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 2.9 meters, which falls into the low clarity range. The Secchi disk did not hit the bottom this year but has in years past, indicating that average Secchi depth may not be a reliable indicator of water clarity. The total phosphorus reading of 20.0 ppb falls into the high range. The chlorophyll-*a* reading of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Kezar Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 40.0 SPU, indicating that water in Kezar Pond is highly colored.

Kezar Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	40.0	Not Reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk often hits bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Little Pond - MIDAS 3128
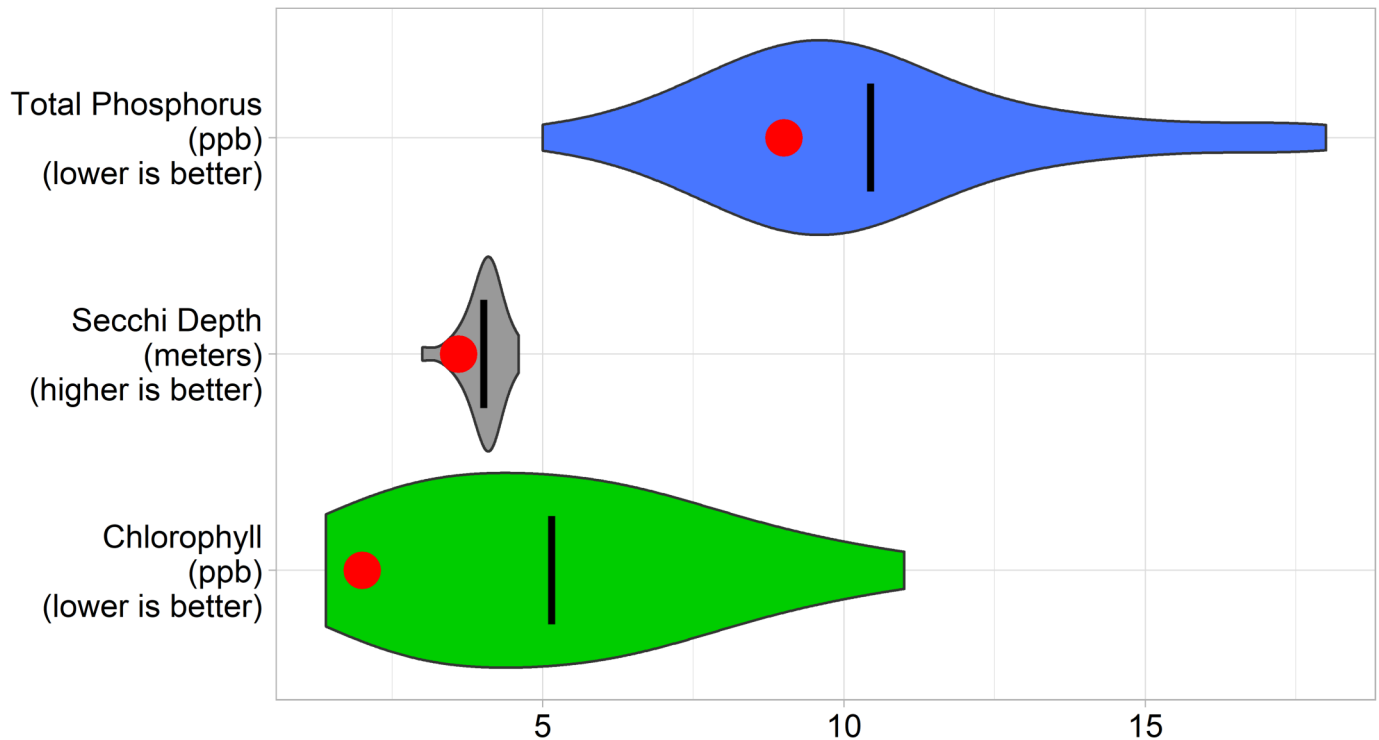
Little Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Little Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 3.6 meters, which falls in the moderate range. The Secchi disk did not hit bottom this year but has in years past, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 9.0 ppb falls into the moderate range. The chlorophyll-*a* reading of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Little Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 31.0 SPU, indicating that water in Little Pond is highly colored.

Little Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	31.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk often hits bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Little Moose Pond - MIDAS 3424
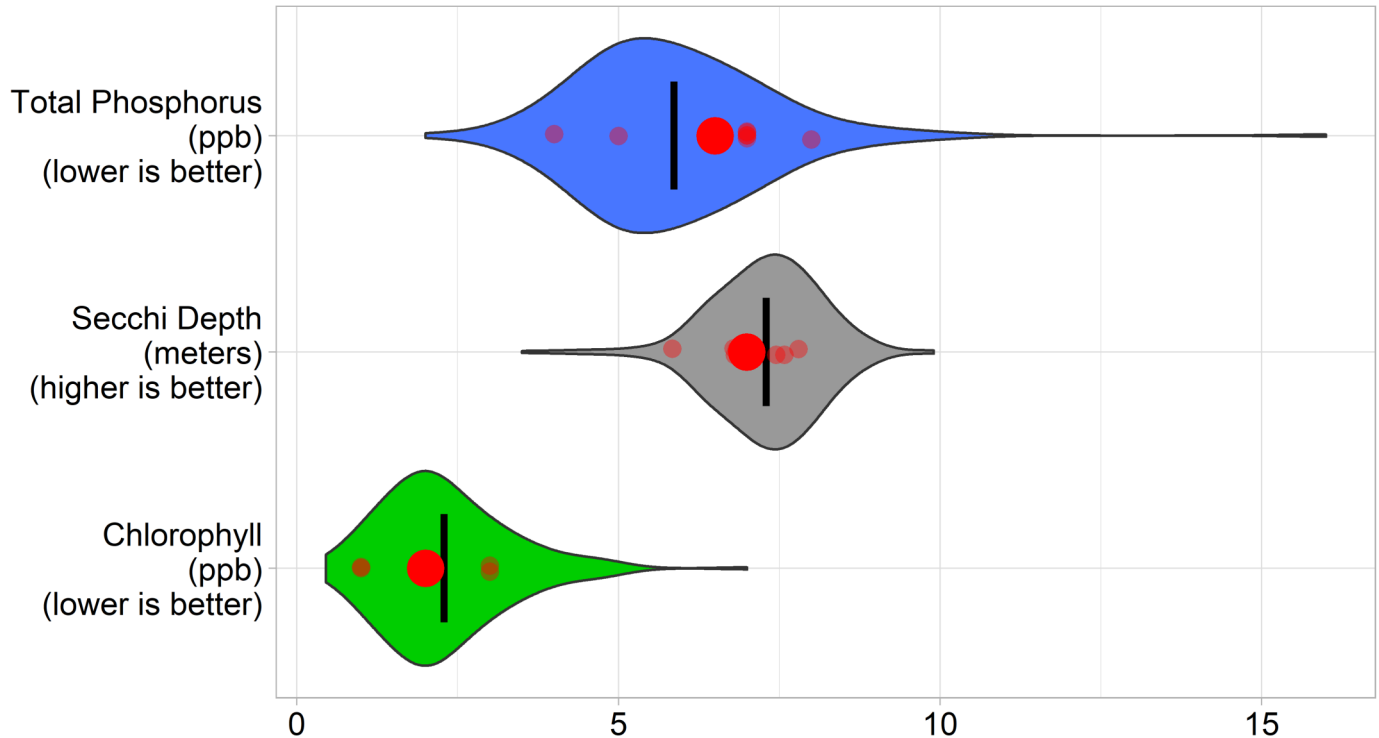
Little Moose Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
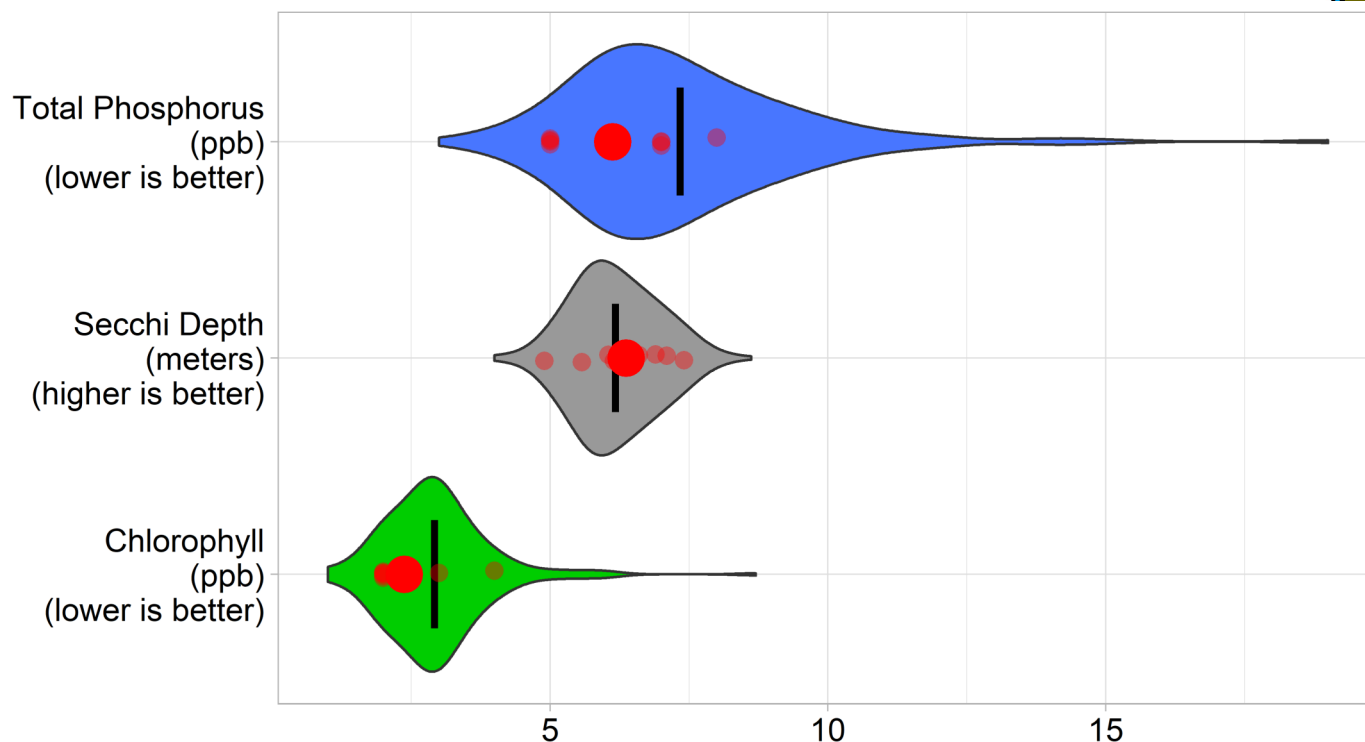
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.0 meters, which falls into the moderate clarity range. The average total phosphorus reading of 6.5 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Little Moose Pond are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 22.9 SPU, indicating that water in Little Moose Pond is moderately colored. Little Moose Pond's *Gloeotrichia echenulata* density ranged from 0 through 1, with the highest density occurring in July and August.

Little Moose Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	10.0	22.9	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Little Mud Pond - MIDAS 3422
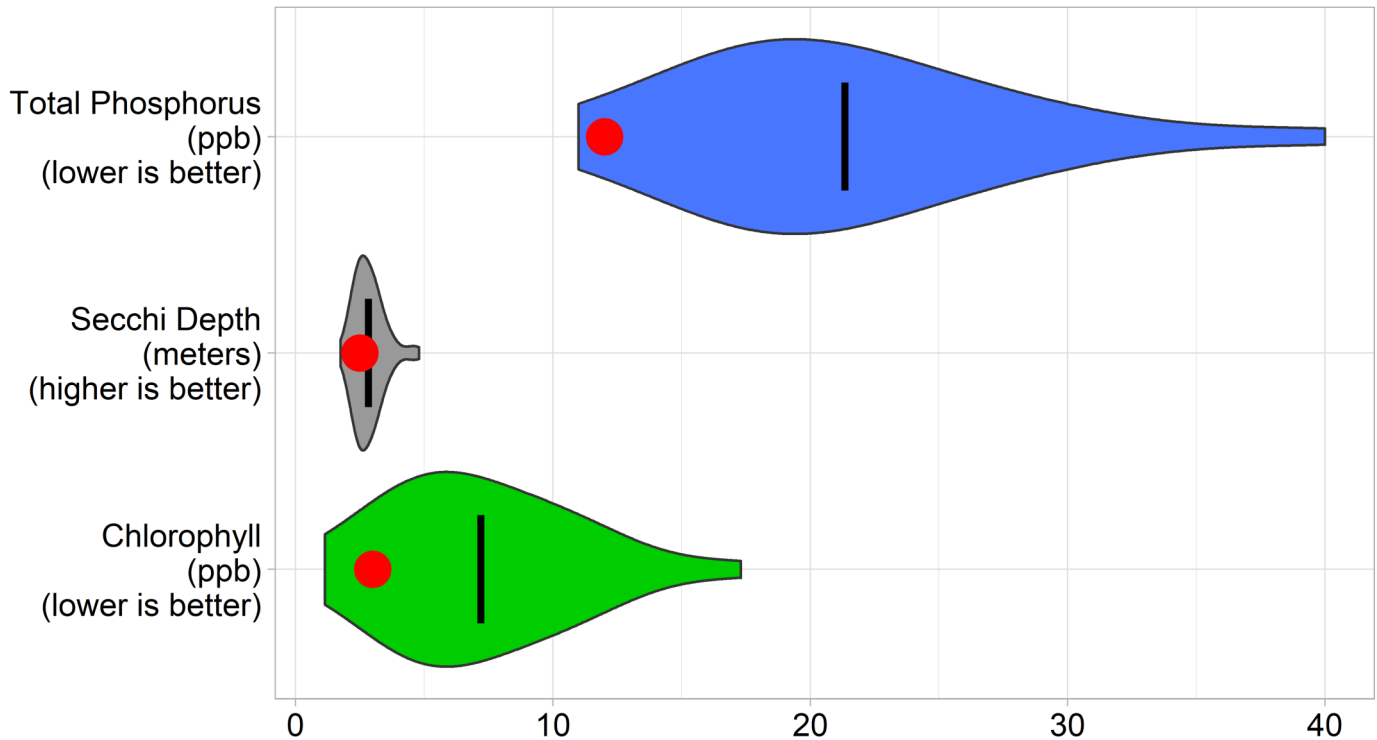
Little Mud Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Little Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 2.5 meters, which falls into the low clarity range. The total phosphorus reading of 12.0 ppb falls into the moderate range. The deep water phosphorus value was greater than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Little Mud Pond are decreasing, total phosphorus concentrations are decreasing, and clarity readings are decreasing. The color reading for 2022 was 50.0 SPU, indicating that water in Little Mud Pond is highly colored.

Little Mud Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	35.0	50.0	Decreasing	Decreasing	Decreasing
Interpretation	Deep water phosphorus higher than expected; potential phosphorus	Water was highly colored	Shallower clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Long Lake, North Basin - MIDAS 5780

Long Lake north basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
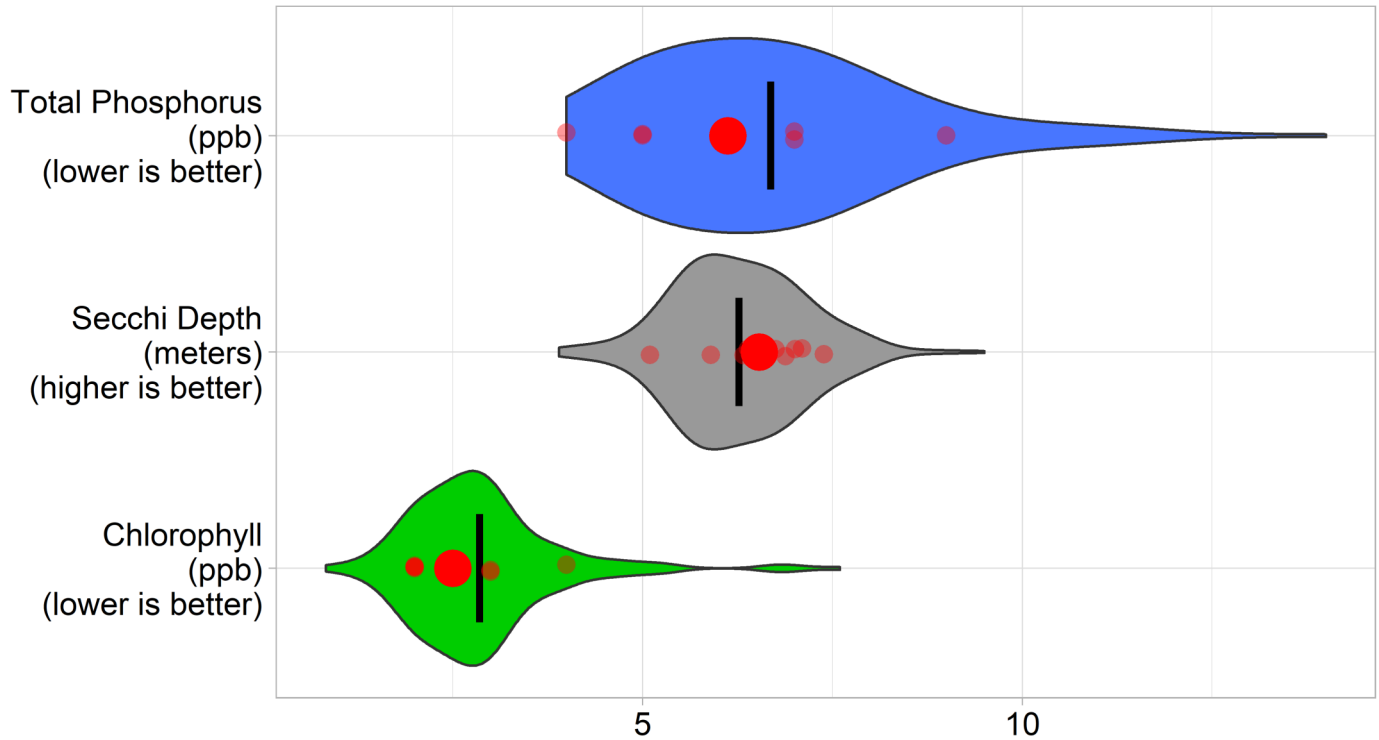
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.4 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.1 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.4 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Long Lake's north basin are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 21.8 SPU, indicating that water in Long Lake's north basin is moderately colored. *Gloeotrichia echenulata* density ranged from 0 through 5, with the highest density occurring in early August.

Long Lake North Basin's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis	8.8	21.8	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Long Lake, Middle Basin - MIDAS 5780

Long Lake middle basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
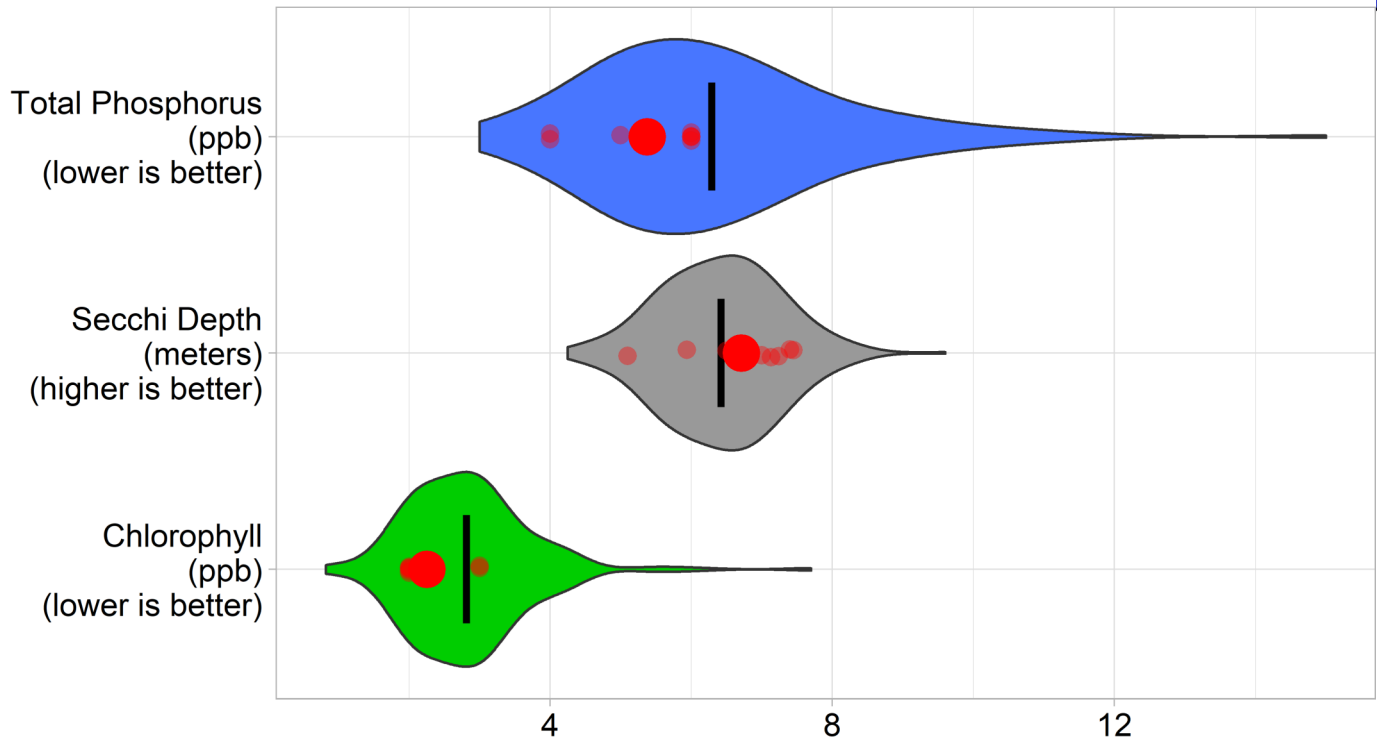
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.5 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.1 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.5 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Long Lake's middle basin are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2022 was 23.3 SPU, indicating that water in Long Lake's middle basin is moderately colored. *Gloeotrichia echenulata* density ranged from 0 through 2, with the highest density occurring in late July.

Long Lake Middle Basin's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	9.0	23.3	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Less chlorophyll over time

Long Lake, South Basin - MIDAS 5780

Long Lake south basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
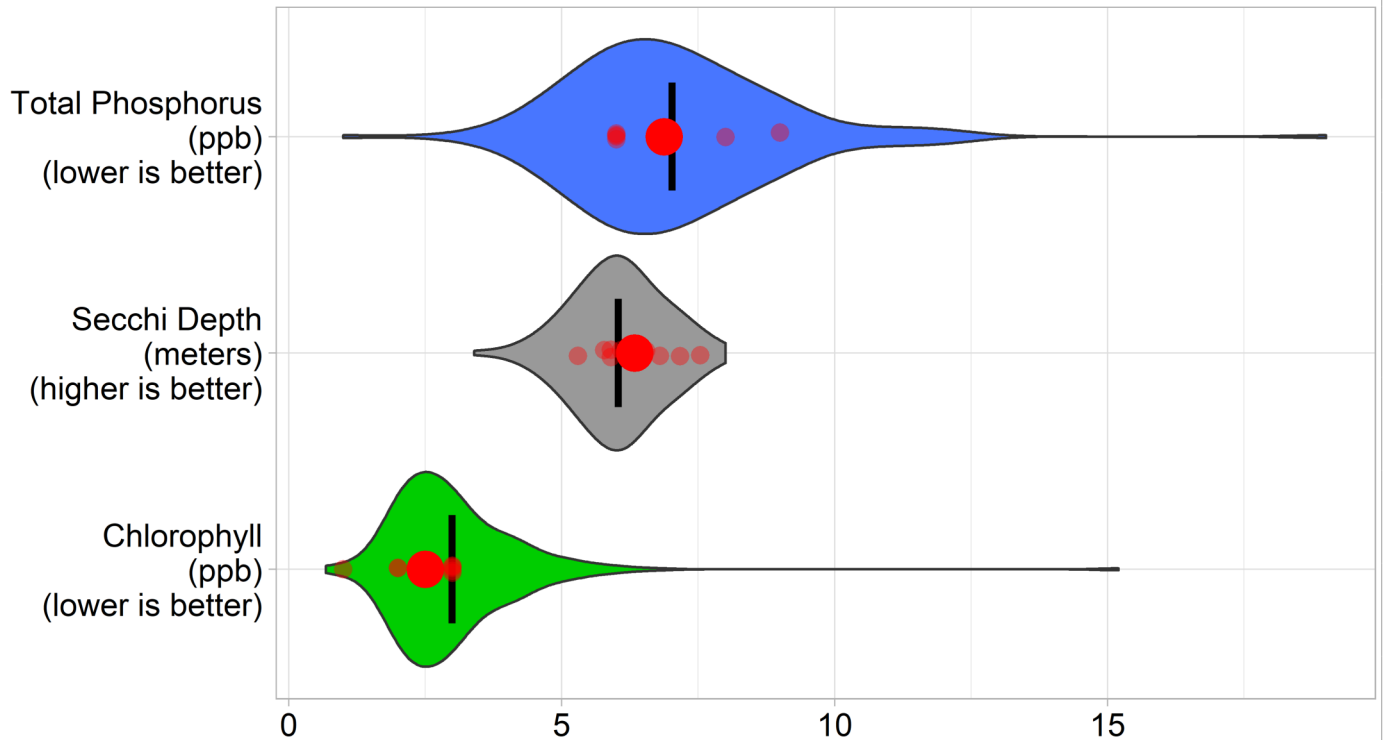
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.7 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.4 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.3 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Long Lake's south basin are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 21.3 SPU, indicating that water in Long Lake's south basin is moderately colored. *Gloeotrichia echenulata* density ranged from 0 through 2, with the highest density occurring in late July.

Long Lake South Basin's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	8.7	21.3	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Long Pond - MIDAS 3084
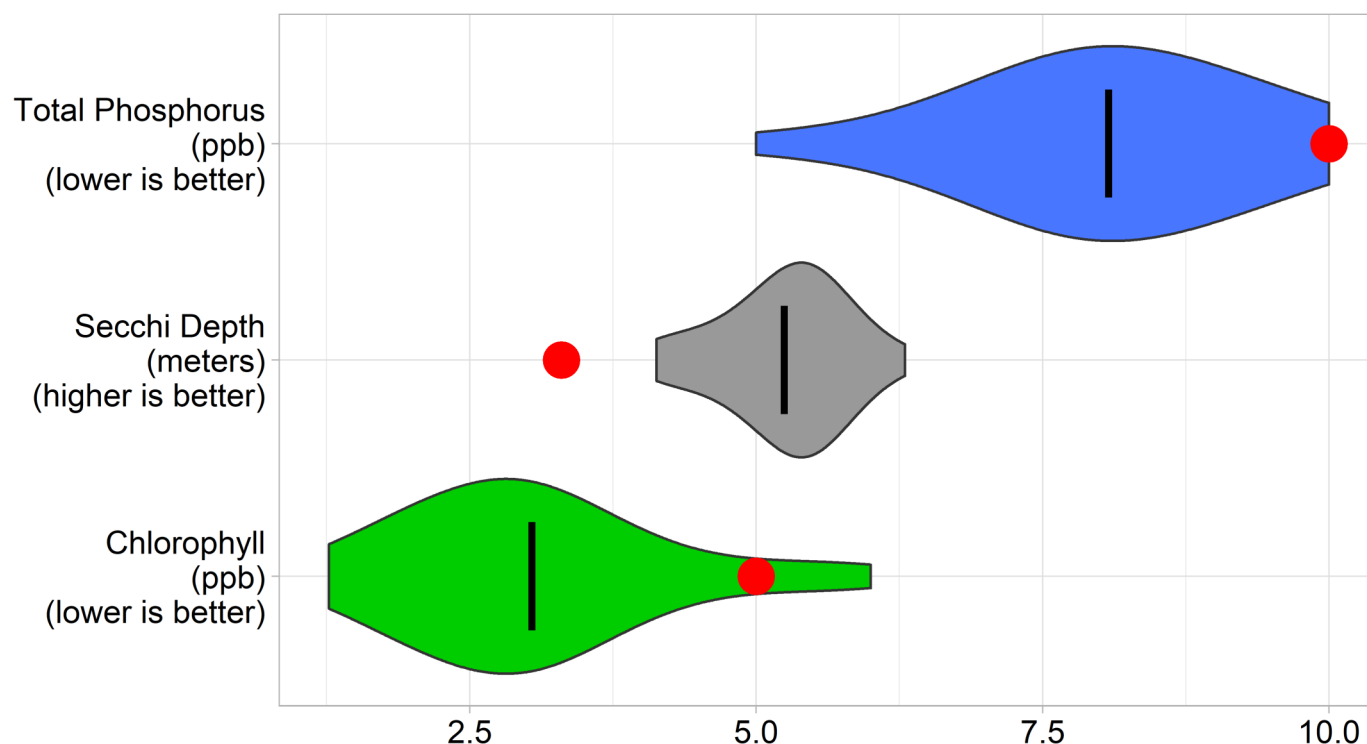
Long Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Long Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 3.3 meters, which falls into the moderate clarity range. The Secchi disk did not hit bottom this year but has in years past, indicating that Secchi depth may not be a reliable indicator of historical water clarity. The total phosphorus reading of 10.0 ppb falls into the moderate range. The chlorophyll-*a* reading of 5.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Long Pond are increasing and total phosphorus concentrations are stable. The color reading for 2022 was 51.0 SPU, indicating that water in Long Pond falls into the high color range.

Long Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	51.0	Not reported	Stable	Increasing
Interpretation	Water was highly colored	Secchi disk often hits bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	More chlorophyll over time

McWain Pond - MIDAS 3418

McWain Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
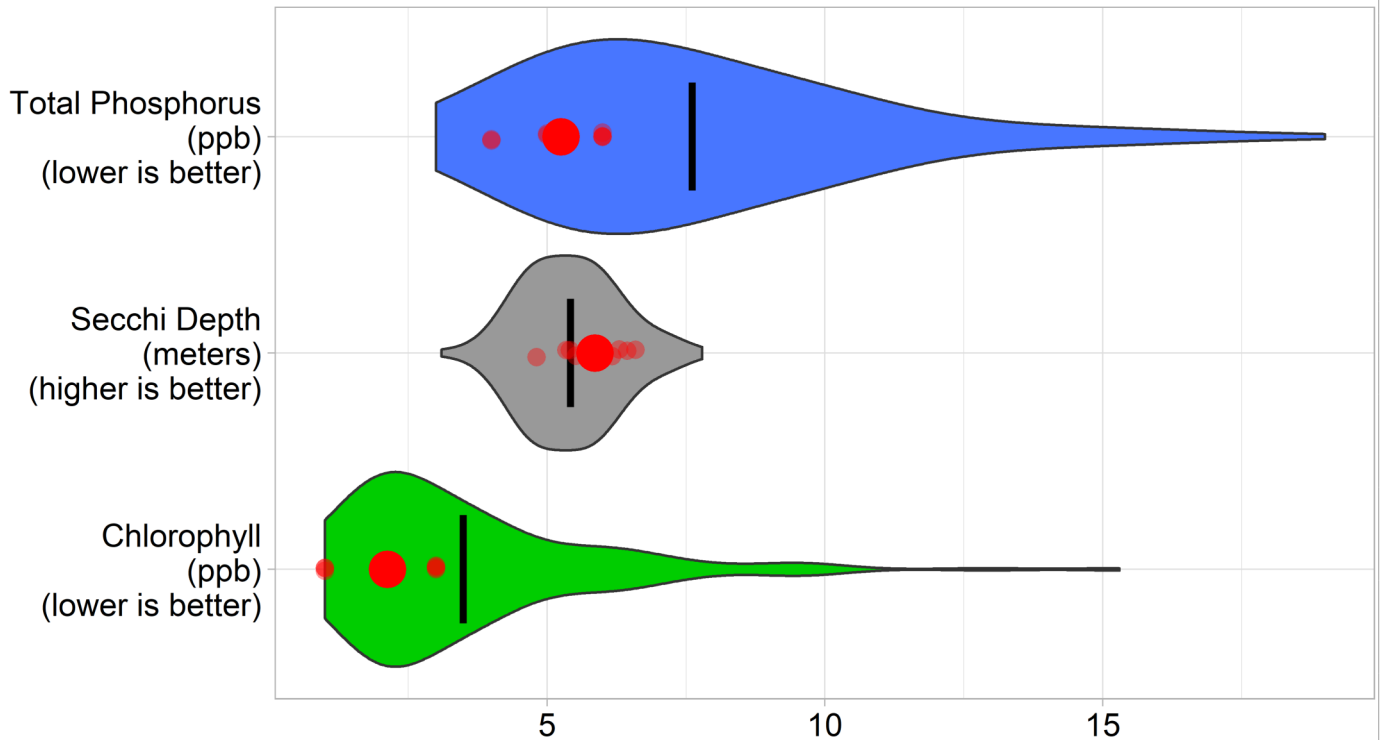
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.3 meters, which falls into the moderate clarity range. The average total phosphorus reading of 6.9 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.5 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in McWain Pond are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 22.5 SPU, indicating that water in McWain Pond is moderately colored. *Gloeotrichia echenulata* density ranged from 0 through 2, with the highest density occurring in late September.

McWain Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	11.3	22.5	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Middle Pond - MIDAS 3201

Middle Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
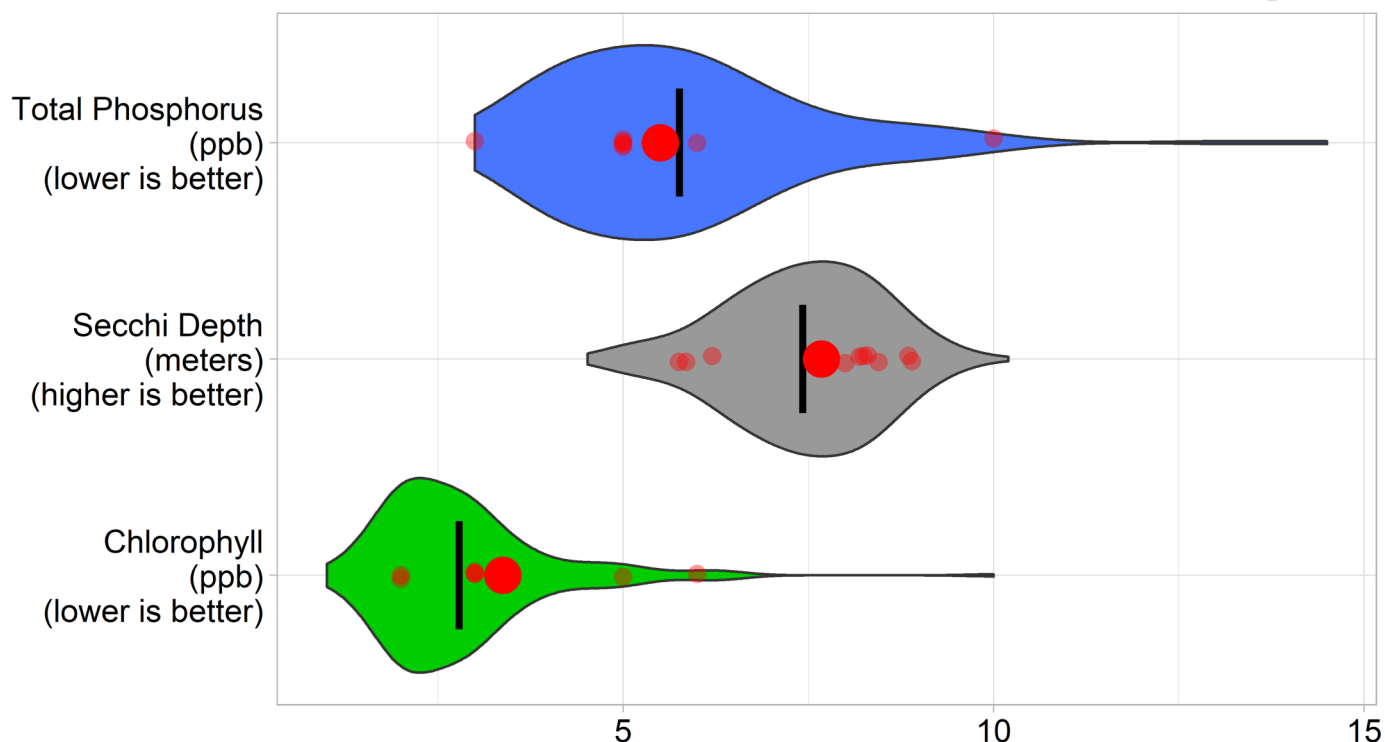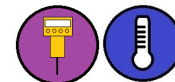
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 5.9 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.3 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.1 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Middle Pond are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2022 was 29.9 SPU, indicating that water in Middle Pond is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 1, with the highest density occurring in early August.

Middle Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	14.6	29.9	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus over time	Less chlorophyll over time

Moose Pond, Middle Basin - MIDAS 3134

Moose Pond middle basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
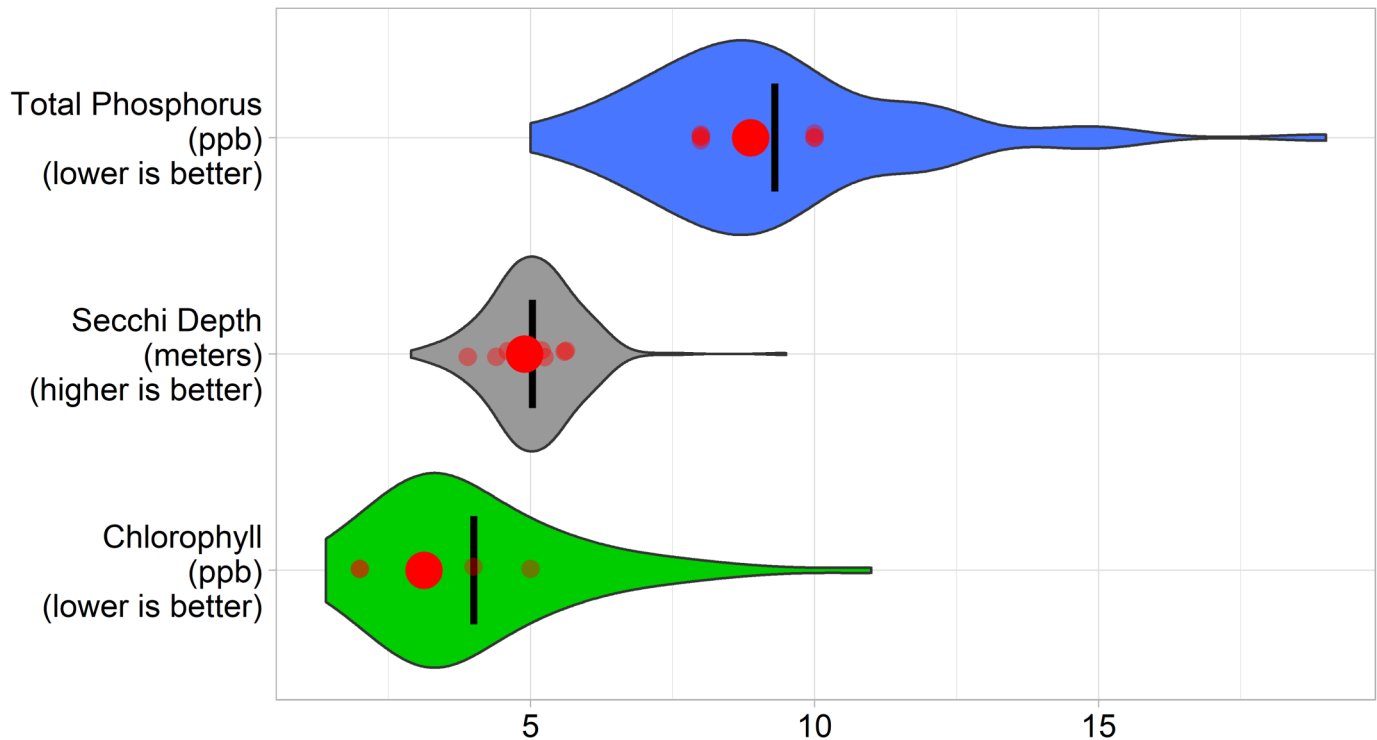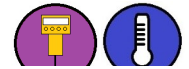
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 7.7 meters, which falls into the high clarity range. The average total phosphorus reading of 5.5 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 3.4 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Moose Pond's main basin are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2022 was 26.9 SPU, indicating that water in Moose Pond's main basin is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 5, with the highest density occurring in early August.

Moose Pond middle basin's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	7.5	26.9	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Less chlorophyll over time

Moose Pond, North Basin - MIDAS 3134

Moose Pond north basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
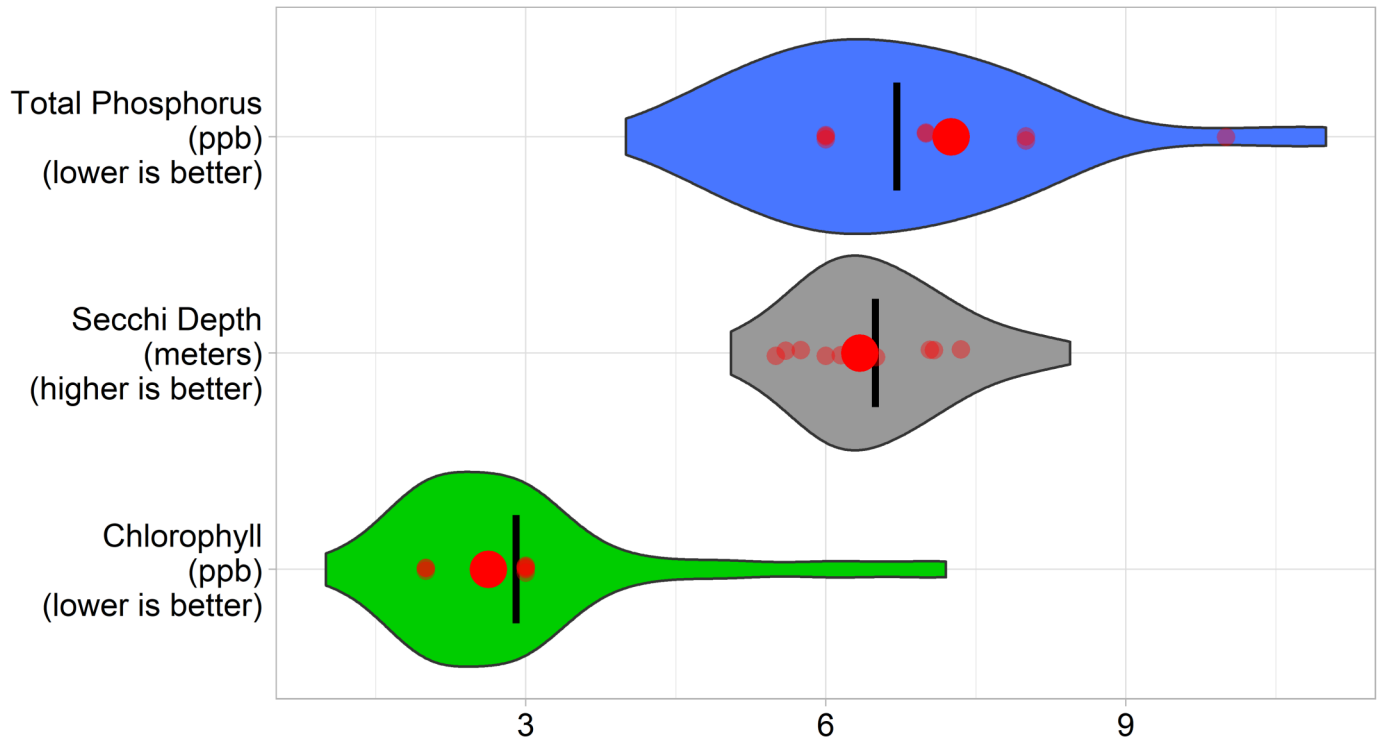
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 4.9 meters, which falls into the moderately clear range. The average total phosphorus reading of 8.9 ppb falls into the moderate range. The chlorophyll-*a* average of 3.1 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2022 was 31.8 SPU, indicating that water in Moose Pond's north basin is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 2, with the highest density occurring in mid July.

Moose Pond north basin's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	31.8	Stable	Stable	Stable
Interpretation	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Moose Pond, South Basin - MIDAS 3134

Moose Pond south basin's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
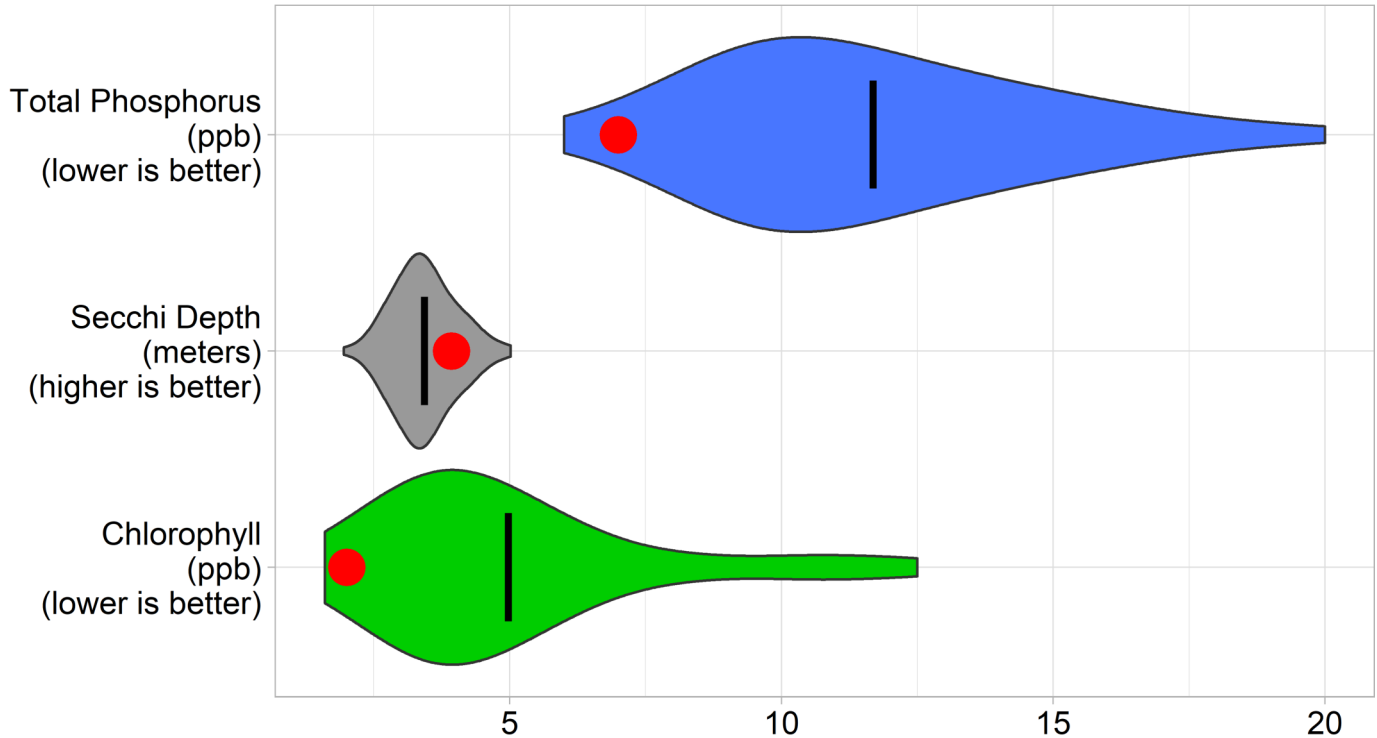
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.9 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.3 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.6 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations are stable, total phosphorus concentrations are increasing, and clarity readings are decreasing. This trend analysis is based on our 8-year long dataset and may not accurately represent long-term trends; however, trend analysis will be more precise as our dataset grows. The average color reading for 2022 was 23.3 SPU, indicating that water in Moose Pond's south basin is moderately colored. *Gloeotrichia echenulata* density ranged from 0 through 3, with the highest density occurring in early August.

Moose Pond south basin's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	12.0	23.3	Decreasing	Increasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Shallower clarity readings over time	More phosphorus over time	Neither more nor less chlorophyll over time

Mud Pond - MIDAS 3422

Mud Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
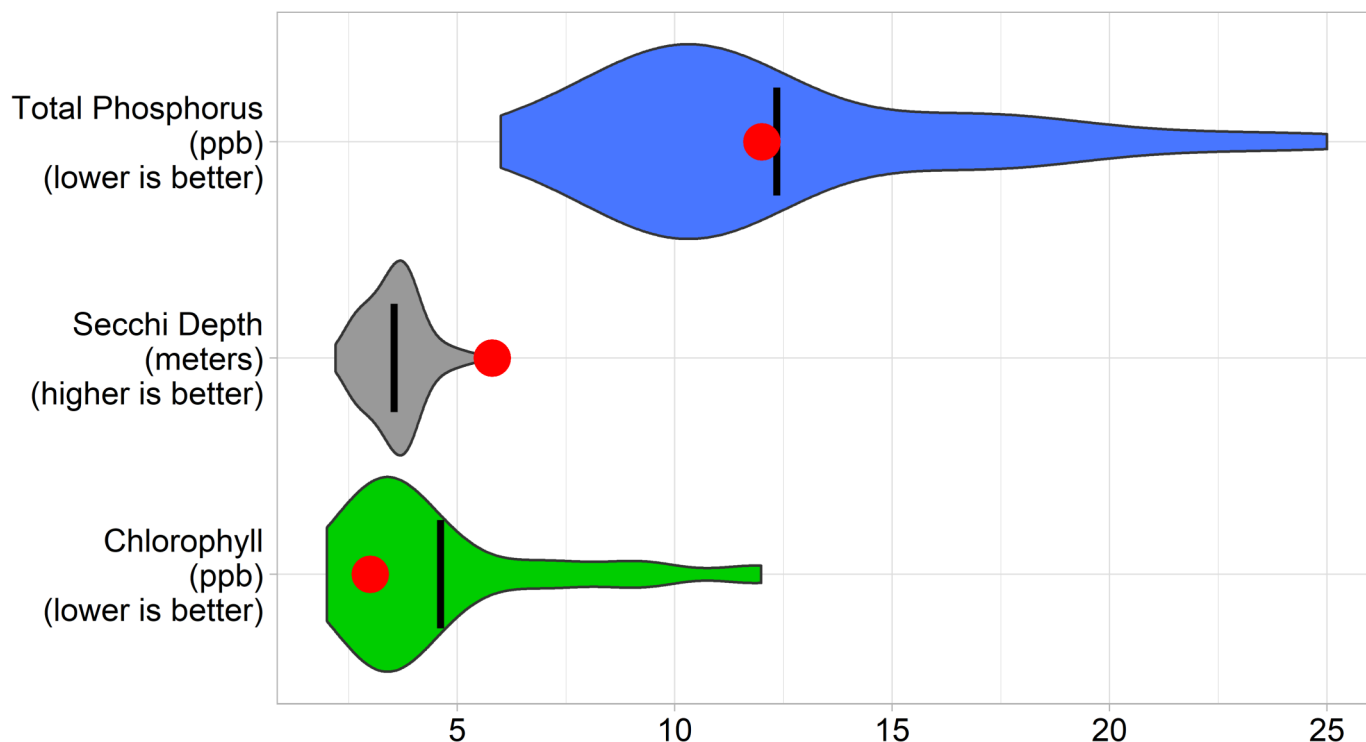
2022 Water Quality Highlights

Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 3.9 meters, which falls into the moderately clear range. The total phosphorus reading of 7.0 ppb falls into the moderate range. The average deep water phosphorus value was greater than 10 ppb above surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 2.0 ppb fell into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The color reading for 2022 was 29.0 SPU, indicating that water in Mud Pond is highly colored. *Gloeotrichia echenulata* colonies were seen at a density level of 1 in July and August.

Mud Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	19.3	29.0	Stable	Stable	Decreasing
Interpretation	Deep water phosphorus higher than expected; potential phosphorus	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Less chlorophyll over time

44

Otter Pond - MIDAS 3458

Otter Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
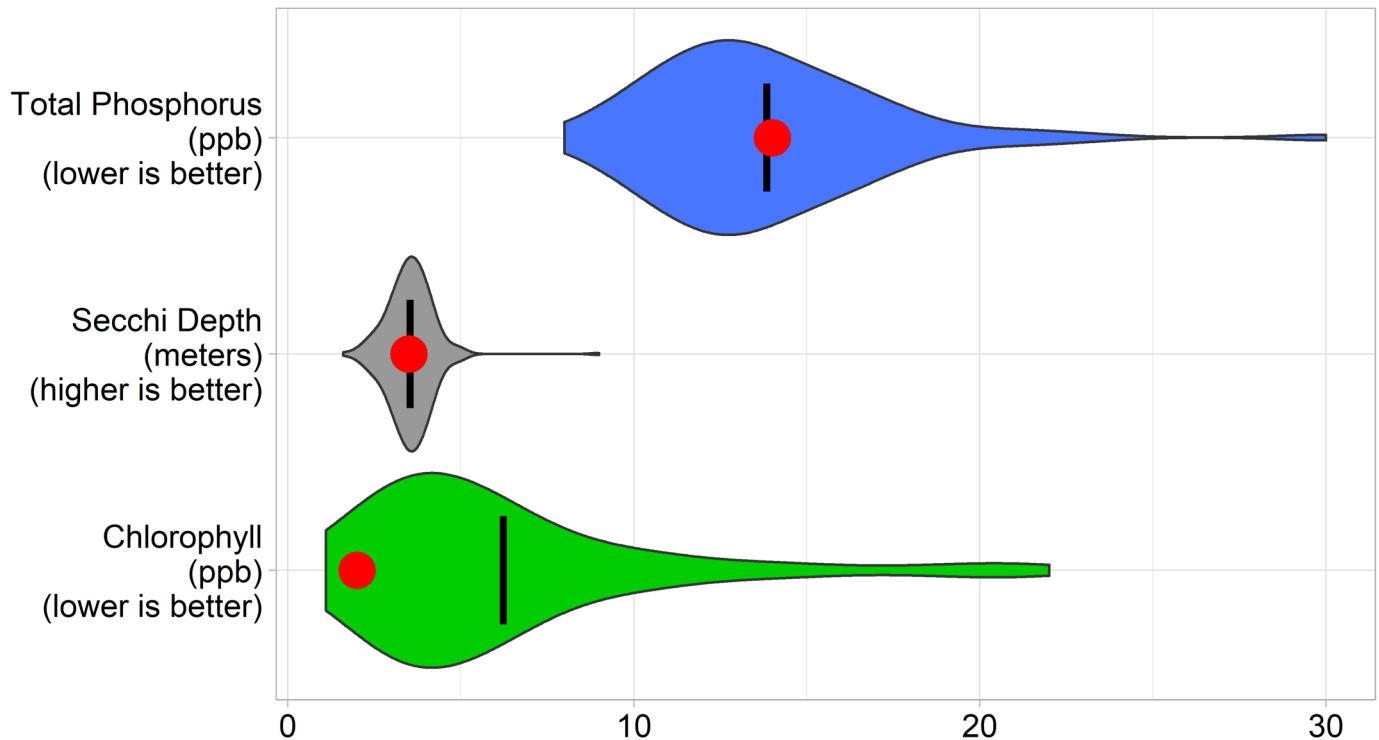
2022 Water Quality Highlights

Otter Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 5.8 meters, which falls into the moderate clarity range. The total phosphorus reading of 12.0 ppb falls into the moderate range. The deep water phosphorus value was greater than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations are decreasing, total phosphorus concentrations are stable, and clarity readings are increasing. The color reading for 2022 was 41.0 SPU, indicating that water in Otter Pond is highly colored.

Otter Pond's 2022 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	27.0	41.0	Increasing	Stable	Decreasing
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Deeper clarity readings over time	Neither more nor less phosphorus over time	Less chlorophyll over time

Papoose Pond - MIDAS 3414

Papoose Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Papoose Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 3.5 meters, which falls into the moderate clarity range. The Secchi disk did not hit bottom this year but has in years past, indicating that average Secchi depth may not be a reliable indicator of water clarity; however, the clarity trend is still reported because the majority of Secchi measures did not hit bottom. The total phosphorus reading of 14.0 ppb falls into the high range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* reading of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The color reading for 2022 was 36.0 SPU, indicating that water in Papoose Pond is highly colored.

Papoose Pond's 2022 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	18.0	36.0	Increasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

46

Peabody Pond - MIDAS 3374
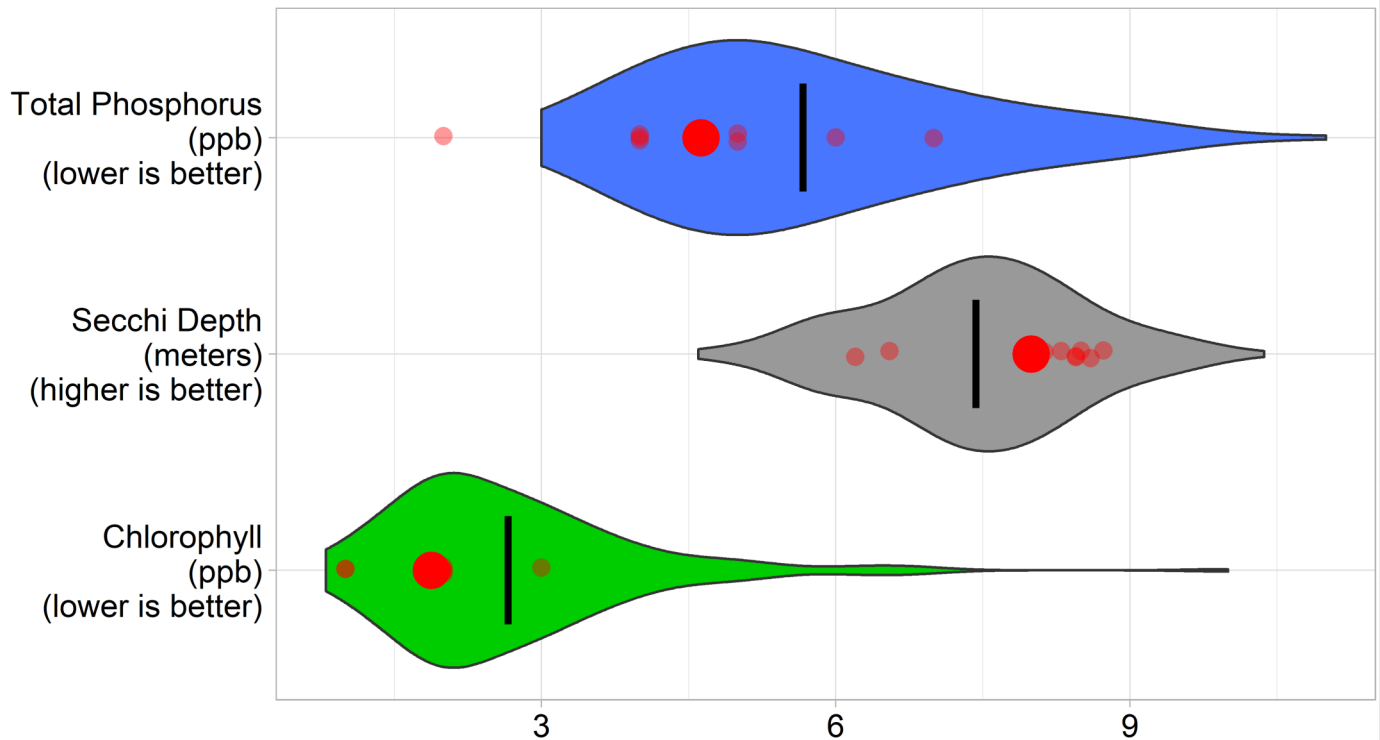
Peabody Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 8.0 meters, which falls into the high clarity range. The average total phosphorus reading of 4.6 ppb falls in the low range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 1.9 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Peabody Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2022 was 26.6 SPU, indicating that water in Peabody Pond is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 1, with the highest densities occurring in July and September.

Peabody Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis	7.8	26.6	Increasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Perley Pond - MIDAS 3140
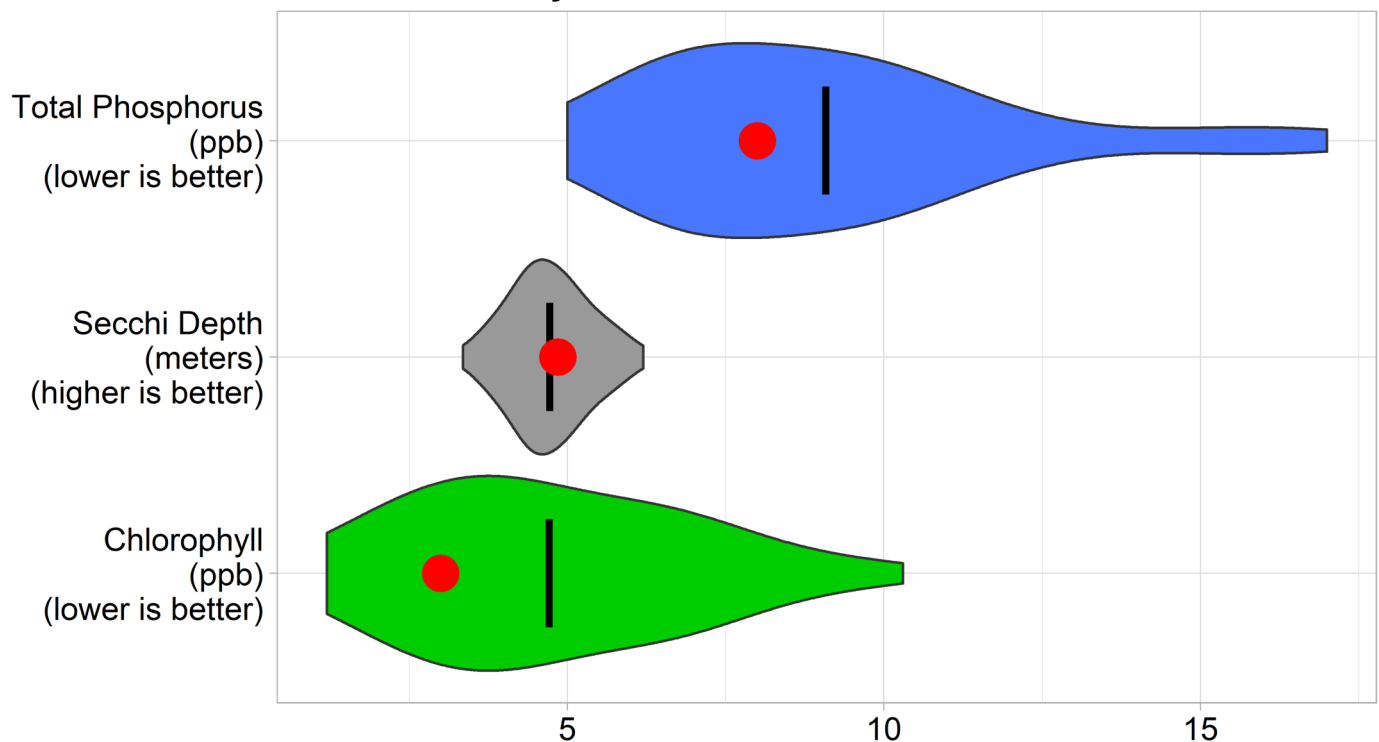
Perley Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
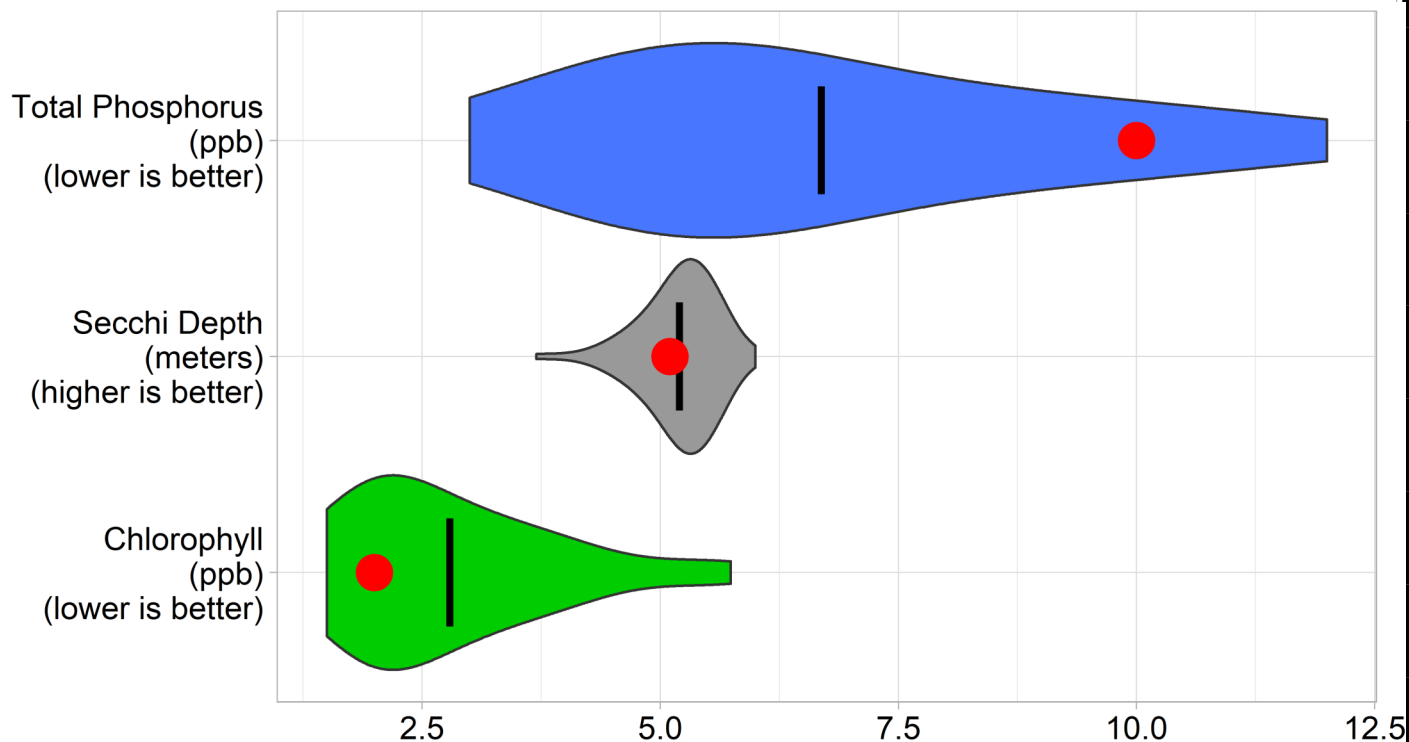
2022 Water Quality Highlights

Perley Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 4.9 meters, which falls into the moderate clarity range. The total phosphorus reading of 8.0 ppb falls into the moderate range. The average deep water phosphorus value was at least 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling may be problematic. The chlorophyll-*a* reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2022 was 31.0 SPU, indicating that water in Perley Pond is highly colored.

Perley Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	18.0	31.0	Stable	Decreasing	Decreasing
Interpretation	Deep water phosphorus higher than expected; potential phosphorus	Water was highly colored	Neither deeper nor shallower clarity readings over time	Less phosphorus over time	Less chlorophyll over time

48

Pickerel Pond - MIDAS 9687

Pickerel Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
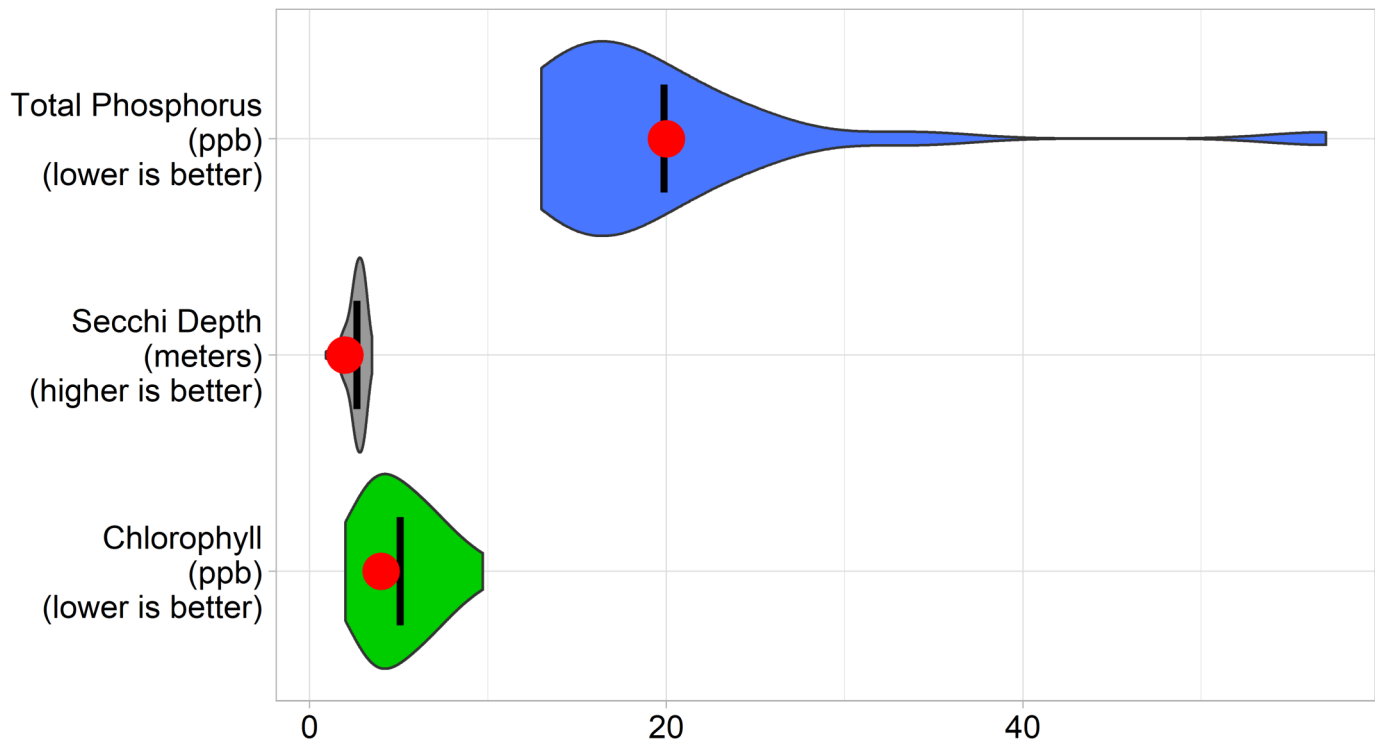
2022 Water Quality Highlights

Pickerel Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2022. The Secchi disk reading for 2022 was 5.1 meters, which falls into the moderate clarity range. The Secchi disk did not hit the bottom this year but has in the past, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 10.0 ppb falls into the moderate range. The chlorophyll-*a* reading of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations are stable and total phosphorus concentrations are increasing. The color reading for 2022 was 50.0 SPU, indicating that water in Pickerel Pond is highly colored.

Pickerel Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	50.0	Not reported	Increasing	Stable
Interpretation	Water was highly colored	Secchi disk often hits bottom, making clarity trend unreliable	More phosphorus over time	Neither more nor less chlorophyll over time

Pleasant Pond - MIDAS 3252

Pleasant Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.
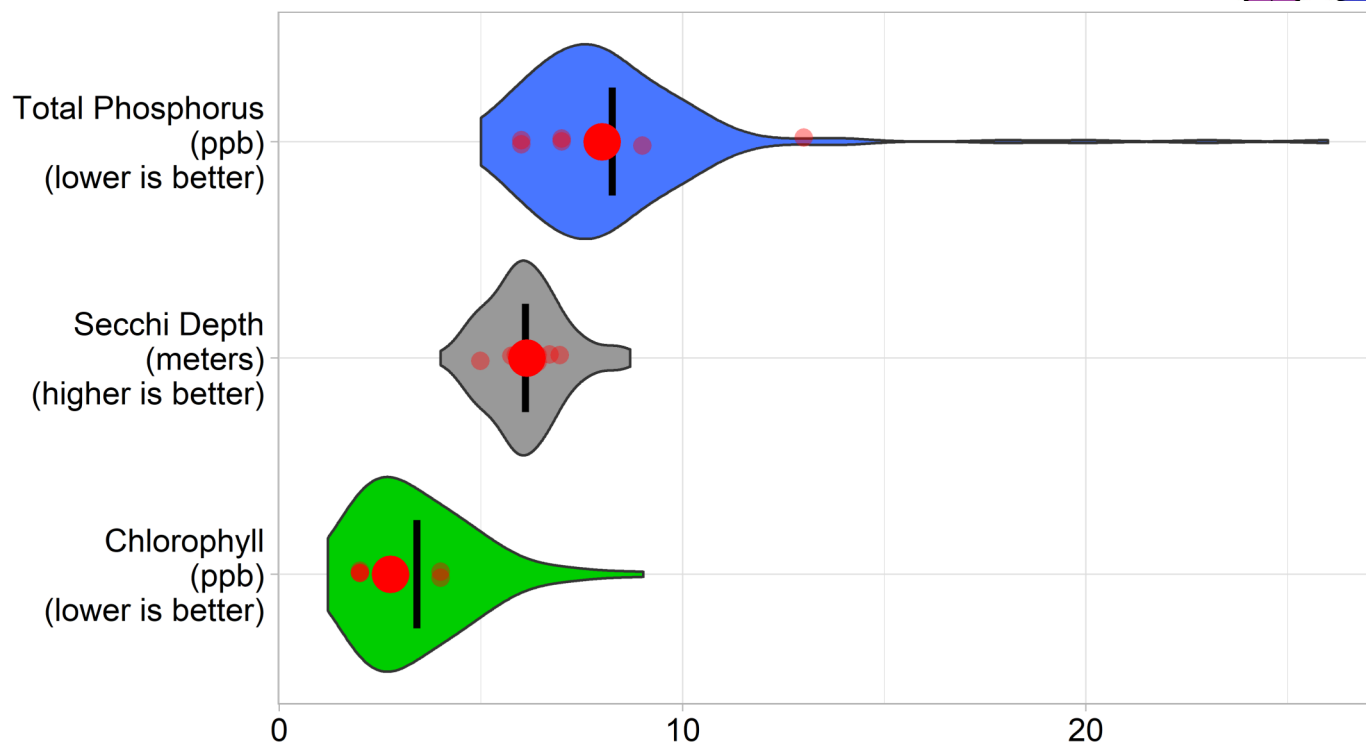
2022 Water Quality Highlights

Pleasant Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2022. The Secchi disk reading for 2022 was 2.0 meters, which falls into the low clarity range. The total phosphorus reading of 20.0 ppb falls into the high range. The chlorophyll-*a* reading of 4.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The color reading for 2022 was 49.0 SPU, indicating that water in Pleasant Pond is highly colored.

Pleasant Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	49.0	Decreasing	Stable	Stable
Interpretation	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Sand Pond - MIDAS 3130

Sand Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 6.1 meters, which falls into the moderate range. The average total phosphorus reading of 8.0 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.8 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Sand Pond are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 25.1 SPU, indicating that water in Sand Pond is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 3, with the highest density occurring in late August.

Sand Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	13.5	25.1	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Sebago Cove - MIDAS 5786
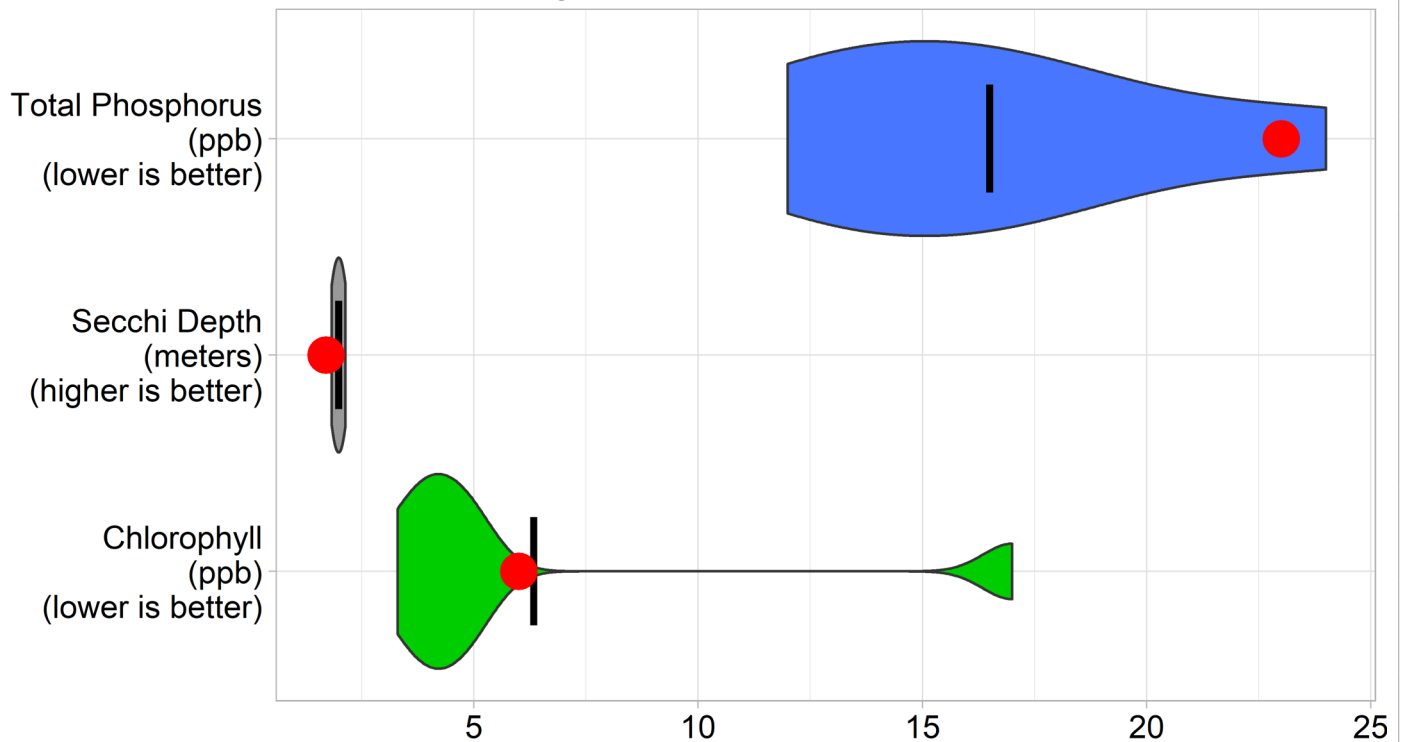
Sebago Cove's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Sebago Cove is sampled by LEA once per year in August. The long-term average reflects data from 2016 to 2022. The Secchi disk reading for 2022 was 1.7 meters. The Secchi disk did hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 23.0 ppb falls into the very high range. The chlorophyll-*a* reading of 6.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Sebago Cove are stable and total phosphorus concentrations are stable. This trend analysis is based on our 6-year-long dataset and may not accurately represent long-term trends; however, trend analysis will be more precise as our dataset grows. The color reading for 2022 was 30.0 SPU, indicating that water in Sebago Cove is highly colored.

Sebago Cove's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	30.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Stearns Pond - MIDAS 3234
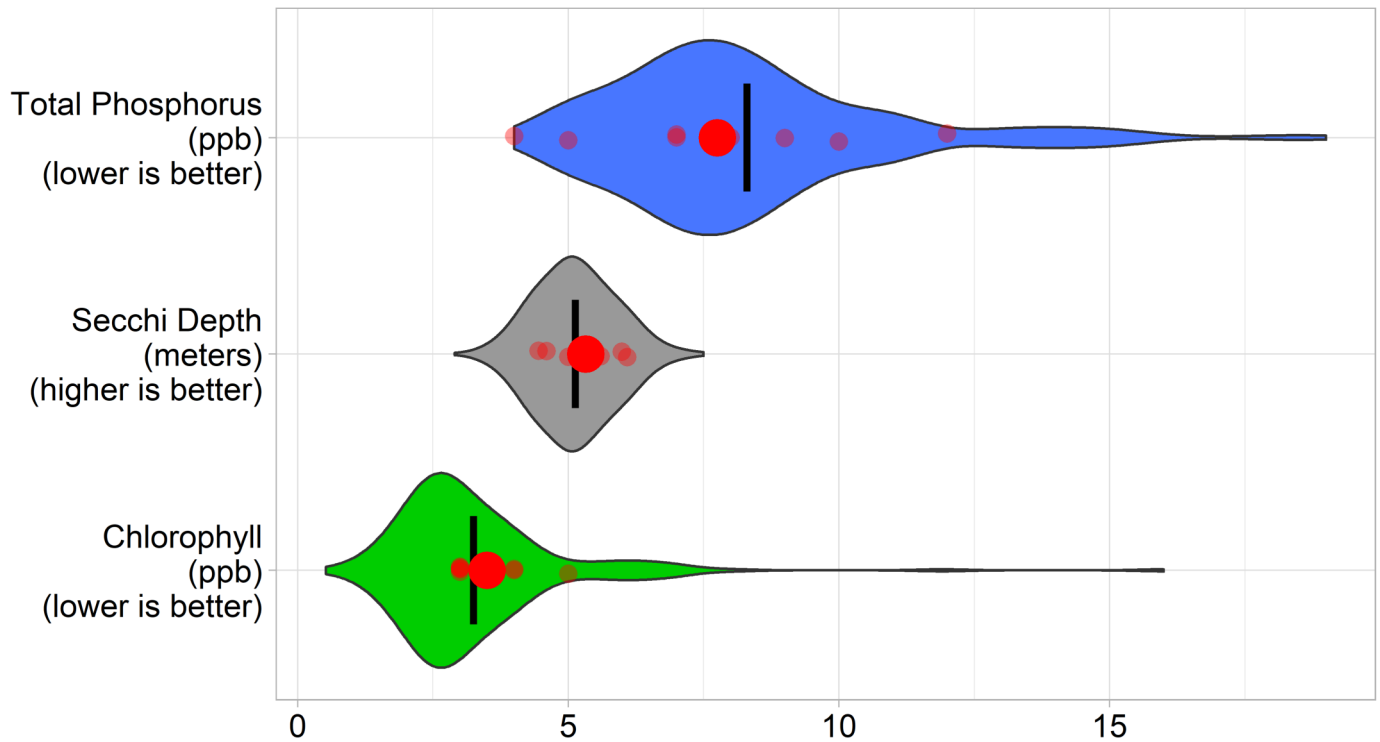
Stearns Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.
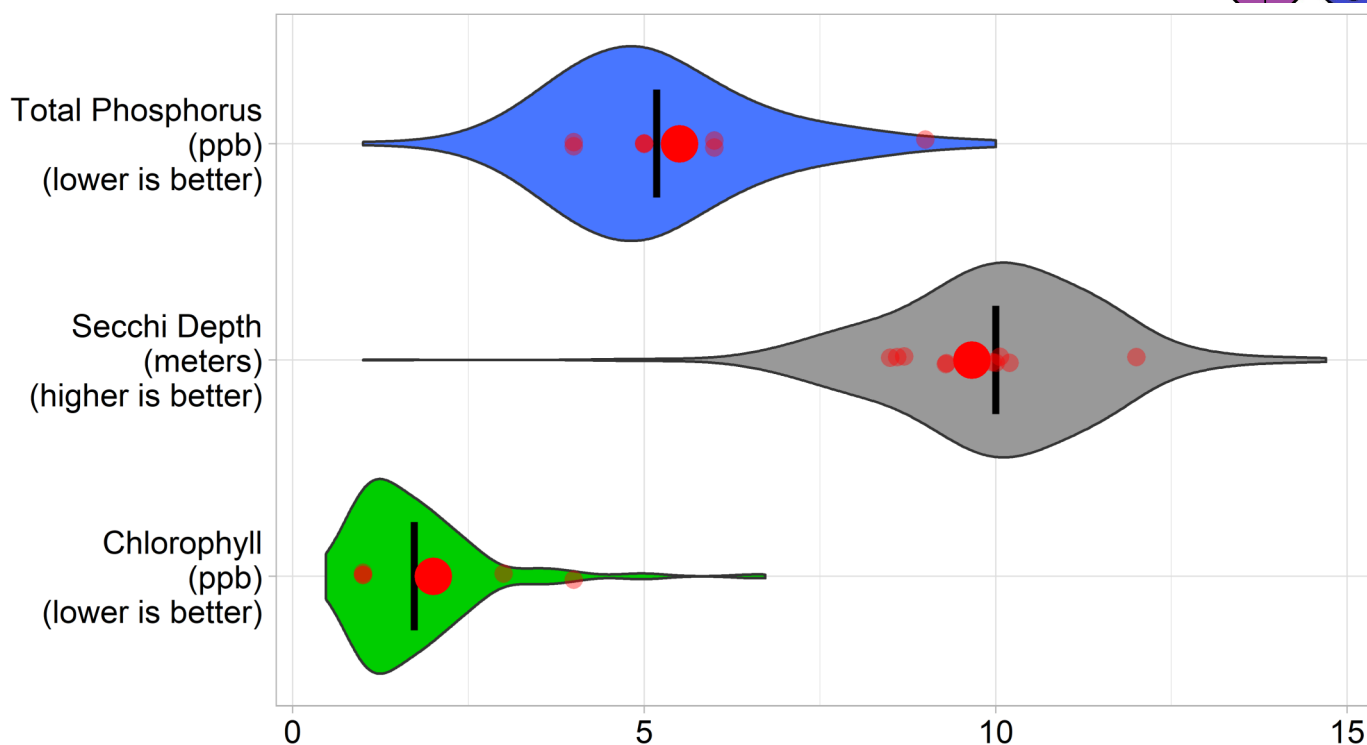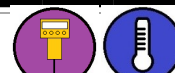
2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 5.3 meters, which falls into the moderate range. The average total phosphorus reading of 7.8 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 3.5 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Stearns Pond are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2022 was 33.4 SPU, indicating that water in Stearns Pond is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 1, with the highest density occurring in mid-July.

Stearns Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	12.8	33.4	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Trickey Pond - MIDAS 3382

Trickey Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 9.7 meters, which falls into the high clarity range. The average total phosphorus reading of 5.5 ppb falls into the moderate range. The average deep water phosphorus value was less than 10 ppb above average surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-*a* average of 2.0 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Trickey Pond are increasing, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2022 was 22.0 SPU, indicating that water in Trickey Pond is moderately colored.

Trickey Pond's 2022 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	10.7	22.0	Decreasing	Stable	Increasing
Interpretation	Within acceptable range	Water was moderately colored	Shallower clarity readings over time	Neither more nor less phosphorus over time	More chlorophyll over time

Webber Pond - MIDAS 3236
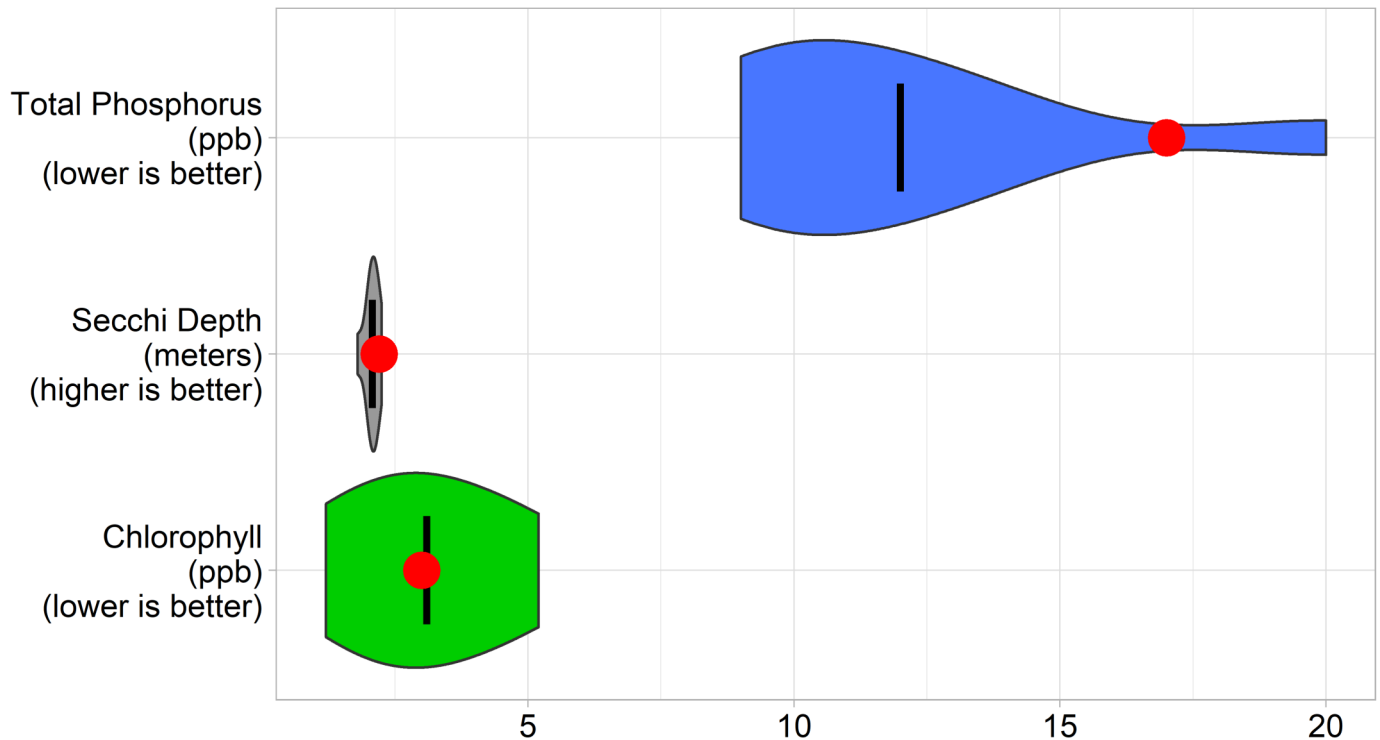
Webber Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value.

2022 Water Quality Highlights

Webber Pond is sampled by LEA once per year in August. The long-term average reflects data from 2013 to 2022. The Secchi disk reading for 2022 was 2.2 meters, which falls in the low clarity range; however, the Secchi disk did hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 17.0 ppb falls into the high range. The chlorophyll-*a* reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Webber Pond are stable and total phosphorus concentrations are stable. The color reading for 2022 was 49.0 SPU, indicating that water in Webber Pond is highly colored.

Webber Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	49.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom, making clarity trend unreliable	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time

Woods Pond - MIDAS 3456
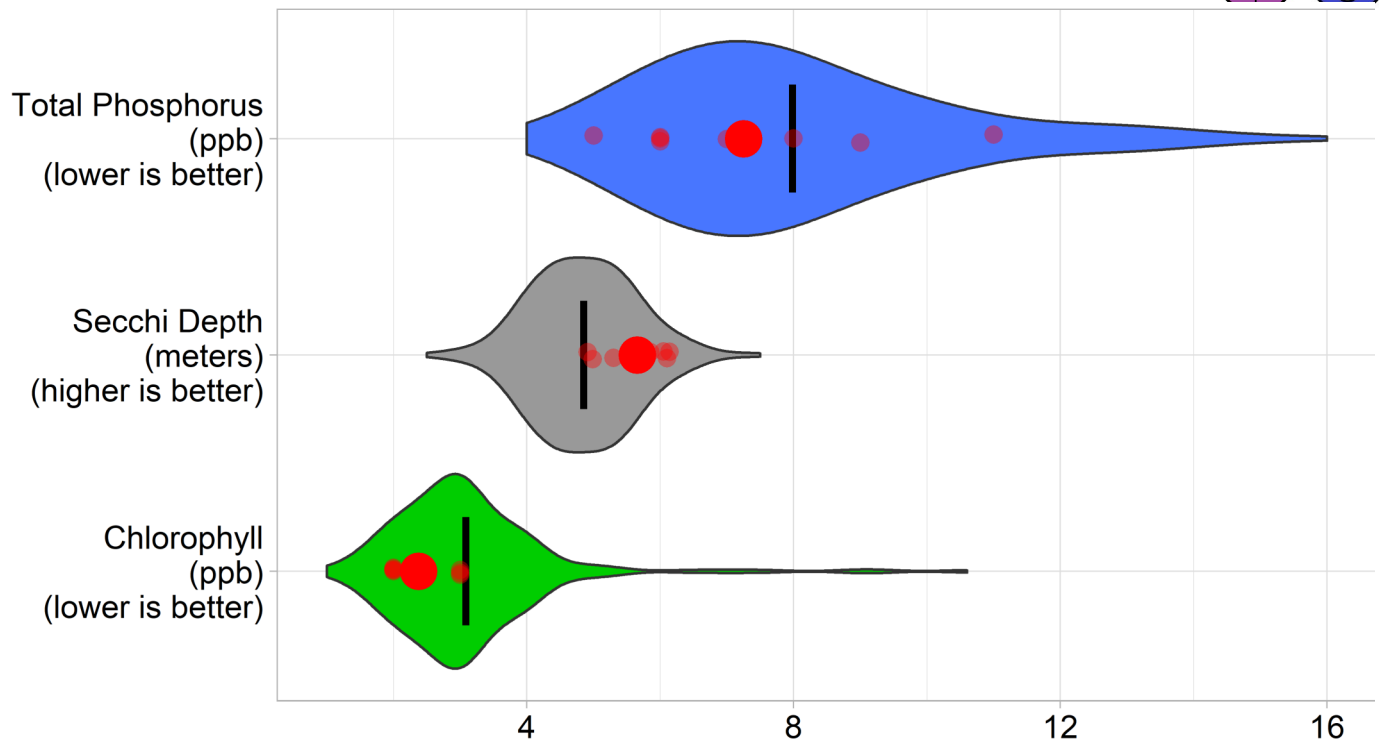
Woods Pond's surface water chlorophyll (ppb), phosphorus (ppb), and Secchi depth (meters) data comparison. Colored areas represent the long-term range of values, from minimum to maximum. Area thickness indicates frequency of measurements at that value. Area thickness increases as more measurements are reported at that value. The vertical black line represents the long-term average value. The large red dot represents 2022's average value. The small red dots represent individual readings taken in 2022.

2022 Water Quality Highlights

The average Secchi disk reading for 2022 was 5.7 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.3 ppb falls into the moderate range. The chlorophyll-*a* average of 2.7 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-*a* concentrations in Woods Pond are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2022 was 34.4 SPU, indicating that water in Woods Pond is highly colored. *Gloeotrichia echenulata* density ranged from 0 through 1, with the highest densities occurring in July and August.

Woods Pond's 2022 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-*a* Trend
Analysis Result	34.4	Stable	Stable	Stable
Interpretation	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus over time	Neither more nor less chlorophyll over time