

2021 Water Testing Report

Lakes Environmental Association



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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!**

2021 Volunteer Monitors and Lake Partners

Richard and Andy Buck
Papoose Pond Campground

Steve Cavicchi
Jeff and Susan Chormann

Janet Coulter
Joe and Carolee Garcia
Carol Gestwicki

Bill Ames and Paulina Knibbe
Bob Mahanor

Amy March
Julie and Dan McQueen

Bob Mercier
Barry and Donna Patrie
Nancy Pike
Shelley Hall

Jean Preis
Jean Schilling

Linda and Orrin Shane
Foster and Marcella Shibles

Bob Simmons
Tom Straub
Don and Pat Sutherland

Five Kezar Ponds Watershed
Association

Hancock and Sand Ponds
Association
Island Pond Association

Keoka Lake Association

Keyes Pond Environmental
Protection Association
McWain Pond Association

Moose Pond Association

Peabody Pond Protective
Association
Trickey Pond Environmental
Protection Association

Woods Pond Water Association

2021 Water Testing Crew

Shannon Nelligan

Erin Antosh

Hanna Holden





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

LEA's Milfoil Control Team successfully eradicated invasive Variable Leaf Milfoil from Brandy Pond and the Songo River in 2015, after over a decade of hard work. The focus shifted to Sebago Cove in 2016, where a dense infestation threatens nearby waterbodies, and in 2017 they began work on Long Lake after an infestation was found there. LEA's program has been a model for the entire state.

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

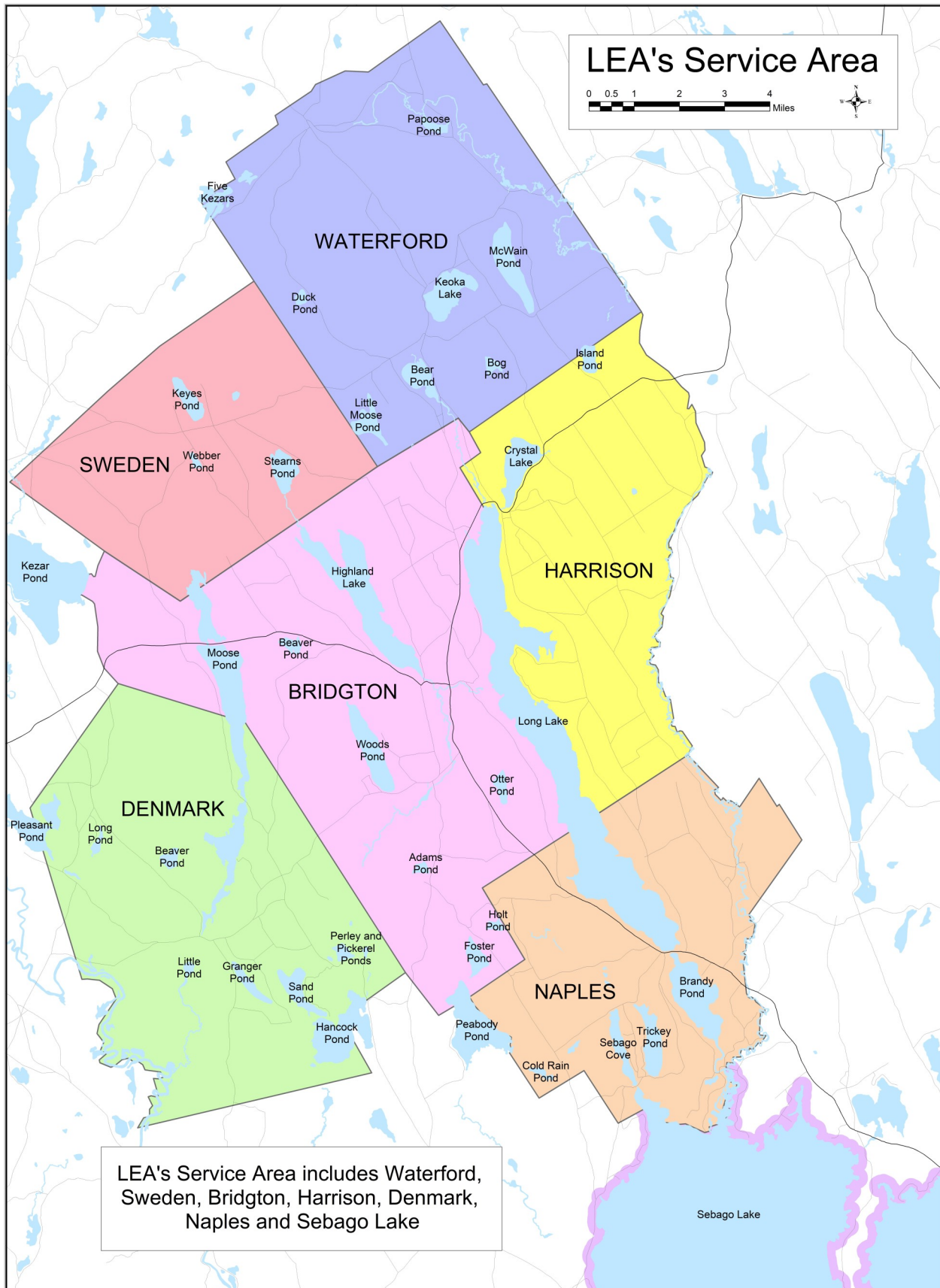
Every summer, LEA hires over 30 courtesy boat inspectors to educate boaters at public boat launches about invasive plants and help them perform inspections on their watercraft. This program, begun by LEA, has been adopted across the state.

Maine Lake Science Center

Opened in 2015, LEA's Maine Lake Science Center is a hub for lake research in the state. The center regularly hosts researcher retreats and other events at its remodeled and renovated energy-efficient headquarters located 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.minelakes.org.**



Key to Water Quality at a Glance Table

Chlorophyll-a and Phosphorus Trends: Available data from 1996-2021 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).

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 1996-2021 were analyzed to determine if water clarity is changing over time. Clarity is measured in meters (m). Higher numbers indicate clearer water.

Increasing = higher clarity readings over time

Stable = clarity readings are neither higher nor lower over time

Decreasing = lower clarity readings over time

2021 Average Chlorophyll-a concentrations, Phosphorus concentrations, Color and Clarity readings: Chlorophyll-a and phosphorus concentrations throughout the 2021 monitoring season were averaged and classified according to LEA's water quality index outlined below.

Clarity in meters (m)		Phosphorus in parts per billion (ppb)		Chlorophyll-a in parts		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

Water Quality at a Glance — Biweekly Monitoring

Lake	2021 Average			1996—2021 Trend		
	Clarity	Phosphorus	Chlorophyll-a	Clarity	Phosphorus	Chlorophyll-a
ADAMS POND	High	Low	Low	Increasing	Stable	Stable
BACK POND	Moderate	Moderate	Low	Increasing	Stable	Stable
BEAR POND	Moderate	Moderate	Moderate	Stable	Decreasing	Stable
BRANDY POND	Moderate	Moderate	Low	Stable	Stable	Stable
CRYSTAL LAKE	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
FOSTER POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
GRANGER POND	Moderate	Moderate	Moderate	Increasing	Decreasing	Stable
HANCOCK POND	High	Moderate	Moderate	Increasing	Decreasing	Decreasing
HIGHLAND LAKE	High	Moderate	Moderate	Increasing	Decreasing	Decreasing
ISLAND POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
KEOKA LAKE	Moderate	Moderate	Moderate	Increasing	Decreasing	Stable
KEYES POND	Moderate	Moderate	Moderate	Increasing	Decreasing	Stable
LITTLE MOOSE POND	High	Moderate	Low	Stable	Stable	Stable
LONG LAKE (North)	Moderate	Moderate	Moderate	Stable	Stable	Decreasing
LONG LAKE (Middle)	Moderate	Moderate	Low	Stable	Stable	Decreasing
LONG LAKE (South)	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
McWAIN POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
MIDDLE POND	Moderate	Moderate	Moderate	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	Stable	Increasing	Stable
PEABODY POND	High	Moderate	Moderate	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	Decreasing	Increasing
WOODS POND	Moderate	Moderate	Moderate	Stable	Increasing	Stable

Water Quality at a Glance — Annual Monitoring

Lake	August 2021 Result			Trend Analysis Result		
	Clarity	Phosphorus	Chlorophyll-a	Clarity	Phosphorus	Chlorophyll –a
BEAVER POND (Bridgton)	Moderate	Low	Low	Increasing	Decreasing	Stable
BEAVER POND (Denmark)	*	Moderate	Low	Not Reported	Stable	Stable
BOG POND	*	Moderate	Moderate	Not Reported	Stable	Stable
COLD RAIN POND	Moderate	Moderate	Moderate	Stable	Stable	Increasing
DUCK POND	Low	Very high	Moderate	Stable	Increasing	Stable
HOLT POND	Low	High	Moderate	Stable	Stable	Stable
JEWETT POND	Moderate	Moderate	Low	Stable	Stable	Stable
KEZAR POND	Low	High	Low	Stable	Stable	Stable
LITTLE POND	*	Moderate	Moderate	Not Reported	Stable	Stable
LITTLE MUD POND	Low	High	Moderate	Decreasing	Stable	Stable
LONG POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
MUD POND	Moderate	Moderate	Low	Stable	Stable	Decreasing
OTTER POND	Moderate	Moderate	Moderate	Increasing	Stable	Decreasing
PAPOOSE POND	Moderate	High	Moderate	Increasing	Stable	Stable
PERLEY POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
PICKEREL POND	*	Moderate	Moderate	Not Reported	Increasing	Stable
PLEASANT POND	Low	High	Moderate	Decreasing	Stable	Stable
SEBAGO COVE	*	High	Moderate	Not Reported	Stable	Stable
WEBBER POND	*	High	Moderate	Not Reported	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 Stratification 101

To understand much of LEA's water quality data, it is helpful to be familiar with the concept of lake stratification.

Lake stratification is when lake water separates into distinct layers. This layering is caused by density differences in water at different temperatures. Stratification happens in both the summer and winter and breaks down in the spring and fall, allowing for "turnover" — full mixing throughout the water column. Wind plays a key role in maintaining and breaking down stratification.

In Maine, three layers often form: the epilimnion, metalimnion (aka thermocline), and the hypolimnion.

The epilimnion is the warm surface 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. The exact depths of each layer change over the course of the summer and from lake to lake and year to year.

Due to the nature of stratification, which does not allow for oxygen exchange between the top and bottom layers, oxygen and nutrient concentrations often differ significantly between the upper and lower portions of a stratified lake. This is especially true in late summer.

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.

Oxygen levels in the epilimnion are constantly replenished through wind mixing, but the hypolimnion is cut off from the atmosphere, leaving it with a fixed volume of oxygen, which is slowly used up over the summer. This can affect coldwater fish species in some lakes.

Phosphorus, the limiting element controlling algae growth in our lakes, is often more abundant in the hypolimnion because it is stored in sediments.

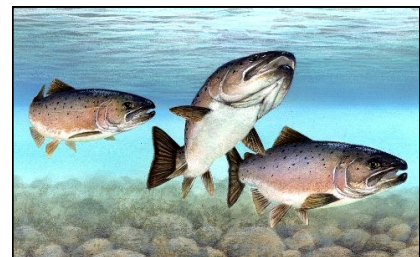
When oxygen levels are low at the bottom of the lake, as often happens later in the summer, a chemical reaction occurs that releases stored phosphorus from sediments. However, due to the density barrier at the metalimnion, these nutrients do not move easily into the epilimnion. This often causes a buildup of phosphorus in the hypolimnion.



Smallmouth Bass

Epilimnion

The warm upper waters are sunlit, wind-mixed, and oxygen-rich.



Landlocked salmon

Metalimnion

This layer in the water column, also known as the thermocline, acts as a thermal barrier that prevents the interchange of nutrients between the warm upper waters and the cold bottom waters.



Lake trout, also known as togue

Hypolimnion

In the cold water at the bottom of lakes, food for most creatures is in short supply, and the reduced temperatures and light penetration prevent plants from growing.

A Year in the Life of a Lake

Winter is a quiet time. Ice blocks out the sunlight and also prevents oxygen from being replenished in lake waters because there is no wind mixing. With little light below the ice and gradually diminishing oxygen levels, plants stop growing. Most animals greatly slow their metabolism or go into hibernation.



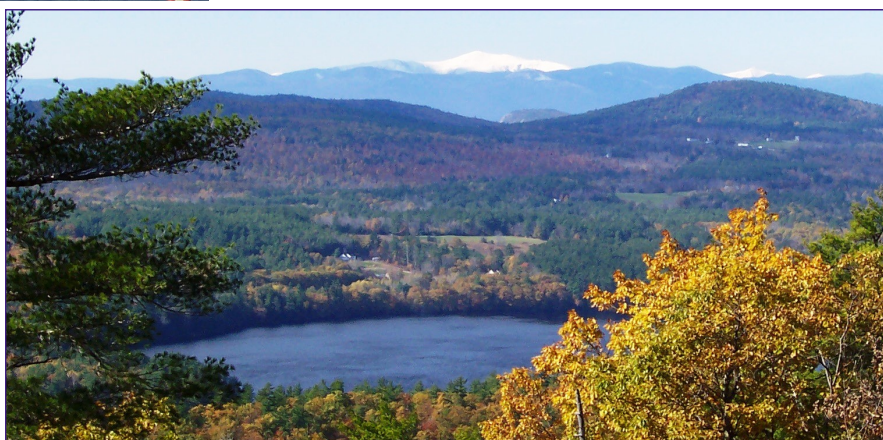
Spring is a period of rejuvenation for the lake. After the ice melts, all of the water is nearly the same temperature from top to bottom. During this period, strong winds can thoroughly mix the water column allowing for oxygen to be replenished throughout the entire lake.

This period is called spring turnover. Heavy rains, combined with snow melt and saturated soils are a big concern in the spring. Water-logged soils are very prone to erosion and can contribute a significant amount of phosphorus to the lake. Almost all soil particles that reach the lake have attached phosphorus.



Summer arrives and deeper lakes will gradually stratify into a warm top layer and a cold bottom layer, separated by a thermocline zone where temperature and oxygen levels change rapidly. The upper, warm layers are constantly mixed by winds, which “blend in” oxygen. The cold, bottom waters are essentially cut off from oxygen at the onset of stratification. Coldwater fish, such as trout and landlocked salmon, need this thermal layering to survive in the warm summer months, and they also need a healthy supply of oxygen in these deep waters to grow and reproduce.

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.



Lakes Environmental Association
2021 Water Testing Report



Chapter 1 — Water Quality Monitoring

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 recorded in degrees Celsius.

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

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 using a grab sampler. 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 algae blooms.

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. Phosphorus release is inhibited in lakes with high sediment aluminum levels. Oxygen depletion can be a natural occurrence in some lakes. It is a special concern in lakes that support coldwater fish because they are an important part of lake food webs. In this report, "oxygen depletion" refers to dissolved oxygen levels below 4 ppm.

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.

2021 as a Year

Our 2021 summer water testing interns continued to embrace coronavirus safety protocols while they diligently collected: 278 Secchi readings; 227 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, 124 deep water total phosphorus samples; and deployed 17 high resolution temperature monitoring buoys containing 120 individual temperature sensors. Our data collection efforts provide water quality information from 44 basins on 41 waterbodies within the LEA service area. What an accomplishment during times that continue to be marked by public health crisis!

2021 began with shallow snow pack and dry conditions. As a result, the water testing season began during mild drought conditions. The National Weather Service reported record high air temperatures in June, which resulted in a few of LEA's lakes recording their warmest surface water temperatures in June. The National Weather Service also reported record low temperatures and record high precipitation levels in July. July's high rainfall saw the end of drought conditions for our area. Air temperatures (and water temperatures) rose again in August and persisted through the end of the testing season in late September.

In 2021, 85% of the lakes we monitor bi-weekly had either stable or increasing clarity trends, 92% had either stable or decreasing total phosphorus trends, and 96% had either stable or decreasing chlorophyll-a trends. Of the lakes we monitor once annually, 84% had either stable or increasing clarity trends, 90% had either stable or decreasing total phosphorus trends, and 95% had either stable or decreasing chlorophyll trends. In 2021, periods of high rain were often followed by lower Secchi readings and higher phosphorus concentrations. This is likely due, in large part, to nutrients and sediments washed into lakes by the rainfall events. Nevertheless, water testing results for 2021 show a great year for water quality in the Lakes Region.

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



Interpreting Data Summaries

Water Quality Classification

Each lake's clarity, chlorophyll, and phosphorus results will be discussed in the following lake summaries. These three measurements are the basis for determining water quality classification. Most lakes in LEA's service area are in the moderate range for all three parameters. The following table shows the range of values in each category for each parameter. Water color is also included in the table because it affects clarity.

Table 1. Numeric values used to determine water quality in waterbodies monitored by LEA

Clarity in meters (m)		Phosphorus in parts per billion (ppb)		Chlorophyll-a in parts per		Color in Standard Platinum Units (SPU)	
10.0 +	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

Trends and Long-term Averages

Lake summaries include a summary of clarity, chlorophyll, and phosphorus trend analysis. Trends are determined for each lake that has been visited bi-weekly for multiple years in a row and includes data from 1996—2021. 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.

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.

Coldwater Fish Habitat

Suitable habitat is defined as being below 15.5 °C and above 5 ppm dissolved oxygen. Marginal habitat is between 15.5 and 20° C and above 4 ppm oxygen. Coldwater fish habitat is considered a water quality issue in lakes with coldwater fisheries that do not have at least 2 meters' worth of suitable habitat at all times during the testing season. Suitability of coldwater fish habitat is estimated by using temperature and oxygen data collected during bi-weekly visits. Temperature and oxygen data are analyzed at each depth and categorized as either: suitable, marginal, or unsuitable based on the parameters discussed above.

Interpreting Data Graphics

The following pages present 2021 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.

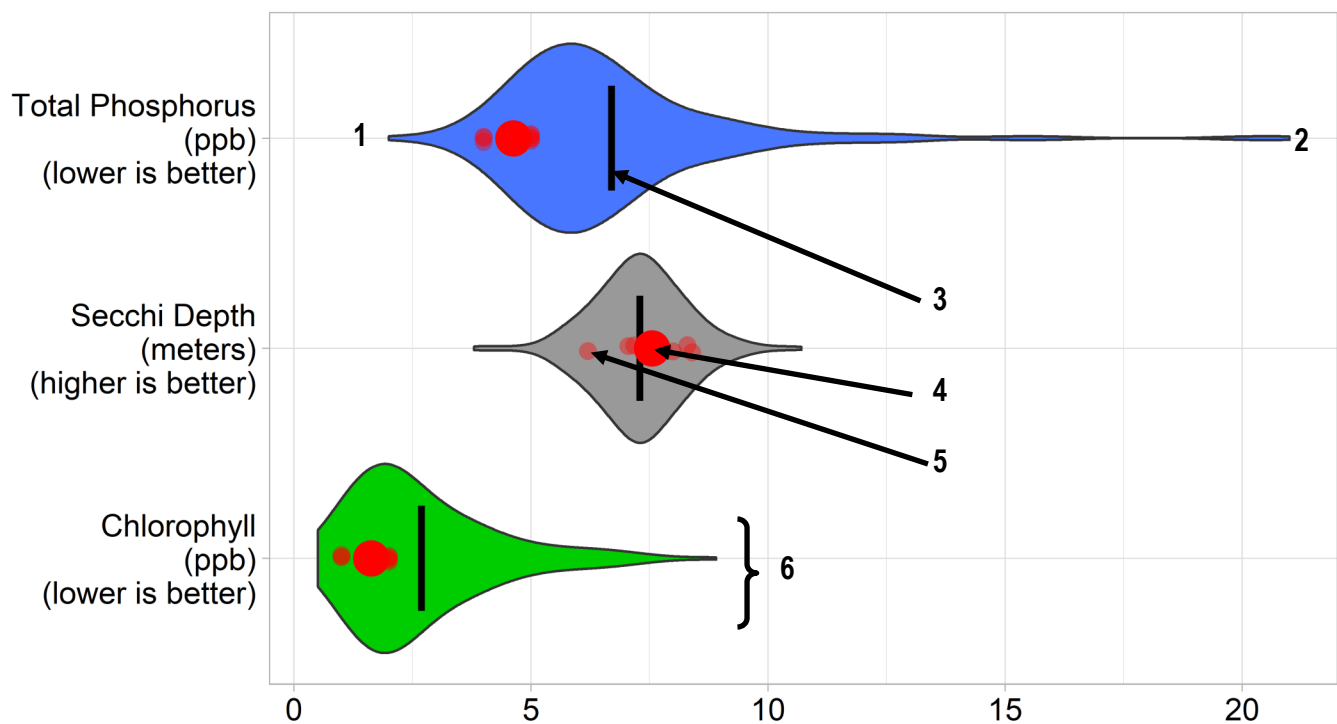


This symbol indicates that high resolution temperature sensors were deployed in the lake in 2021. More information is available in Chapter 3.



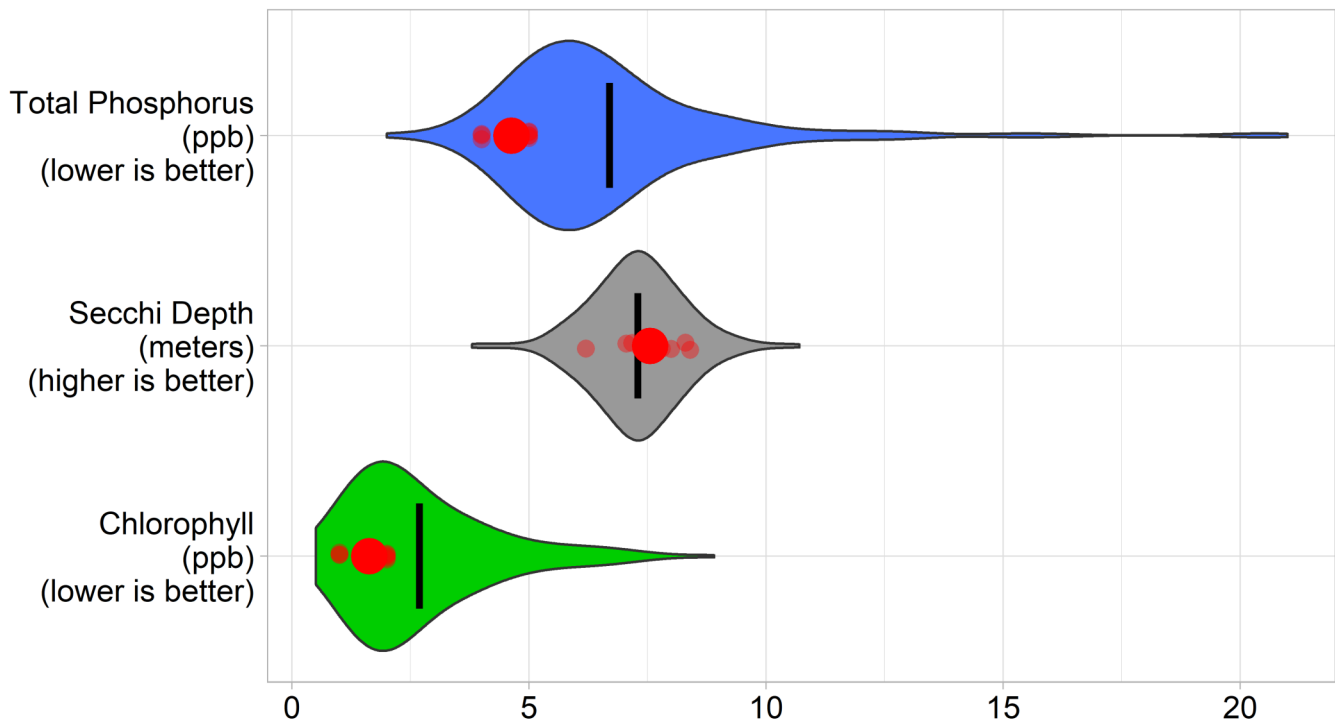
This symbol indicates that fluorometer data were taken from the lake in 2021. Fluorometer results are discussed in Chapter 4.

Graphs have been included for each test site to visually compare 2021 data to historic data (1996—2020). 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 2021's average value. The small red dots represent individual readings taken in 2021.

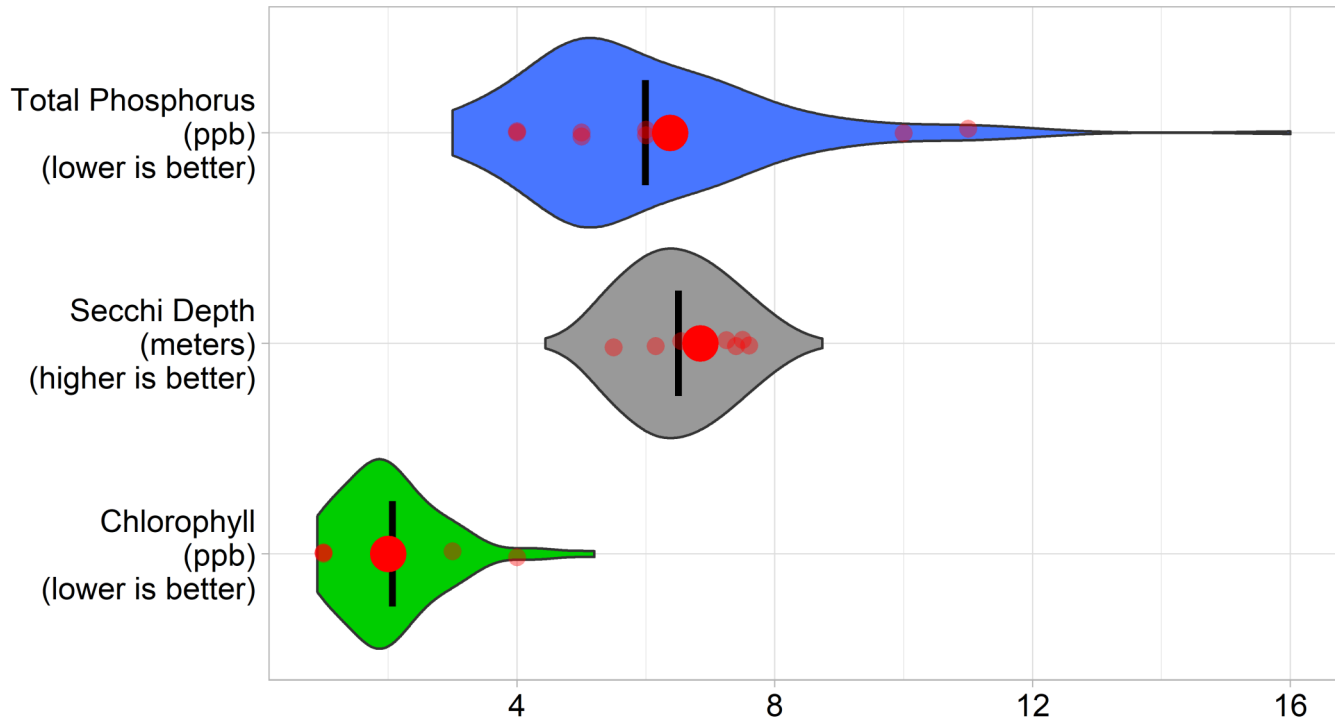
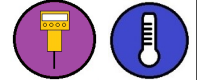
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.6 meters which falls into the high clarity range. The average total phosphorus reading was 4.6 ppb, which falls into the low range. The average deep water phosphorus value is not significantly above surface water phosphorus values, which indicates phosphorus recycling is not problematic. The chlorophyll-a average of 1.6 ppb 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 2021 was 22.5 SPU, indicating that water in Adams Pond is moderately colored. Suitable coldwater fish habitat was present through July and became marginal for the duration of the season. Low oxygen conditions were present in deep waters from June through September.

Adams Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.8	22.5	Increasing	Stable	Stable
Interpretation	Within acceptable range	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 2021's average value. The small red dots represent individual readings taken in 2021.

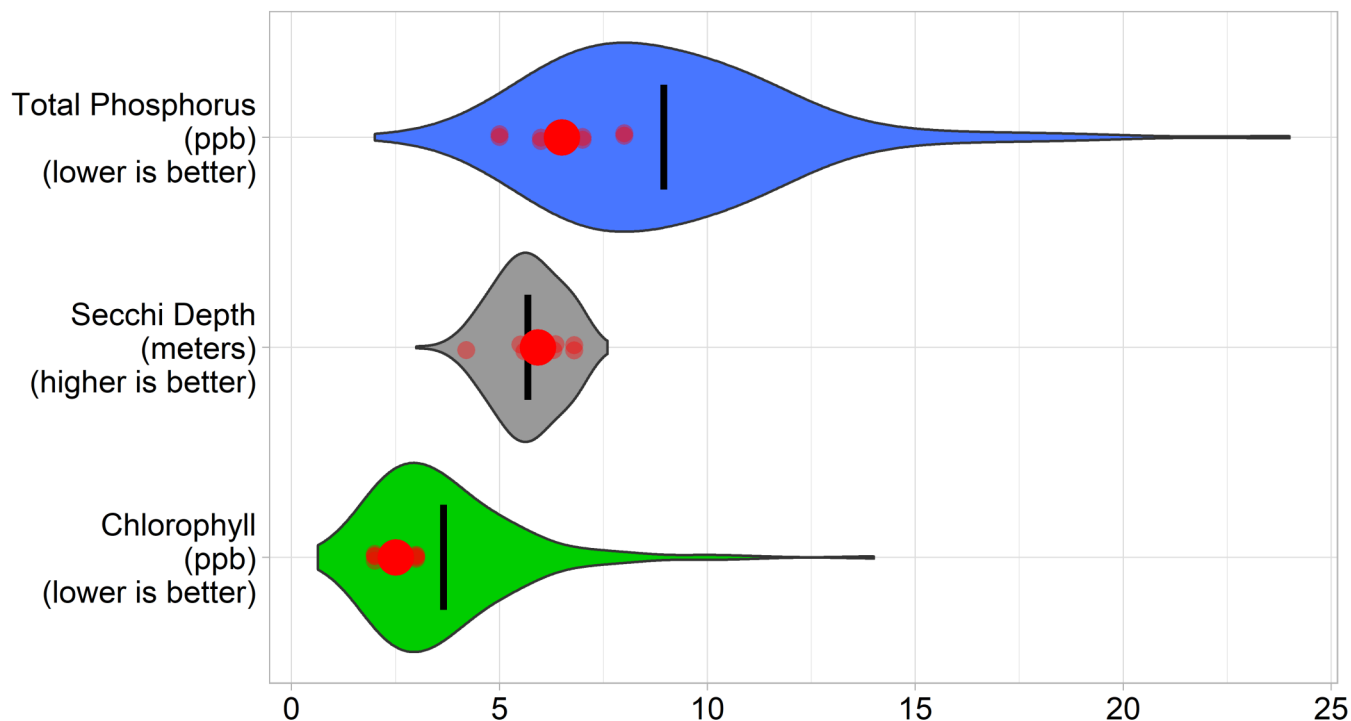
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.9 meters, which is in the moderately clear range. The average total phosphorus reading of 6.4 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Back Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2021 was 18.0 SPU, indicating that water in Back Pond is moderately colored. Low oxygen conditions were present in deep water from June through September. However, suitable coldwater fish habitat was present from May through mid-August.

Back Pond's Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.5	18.0	Increasing	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper Secchi 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 2021's average value. The small red dots represent individual readings taken in 2021.

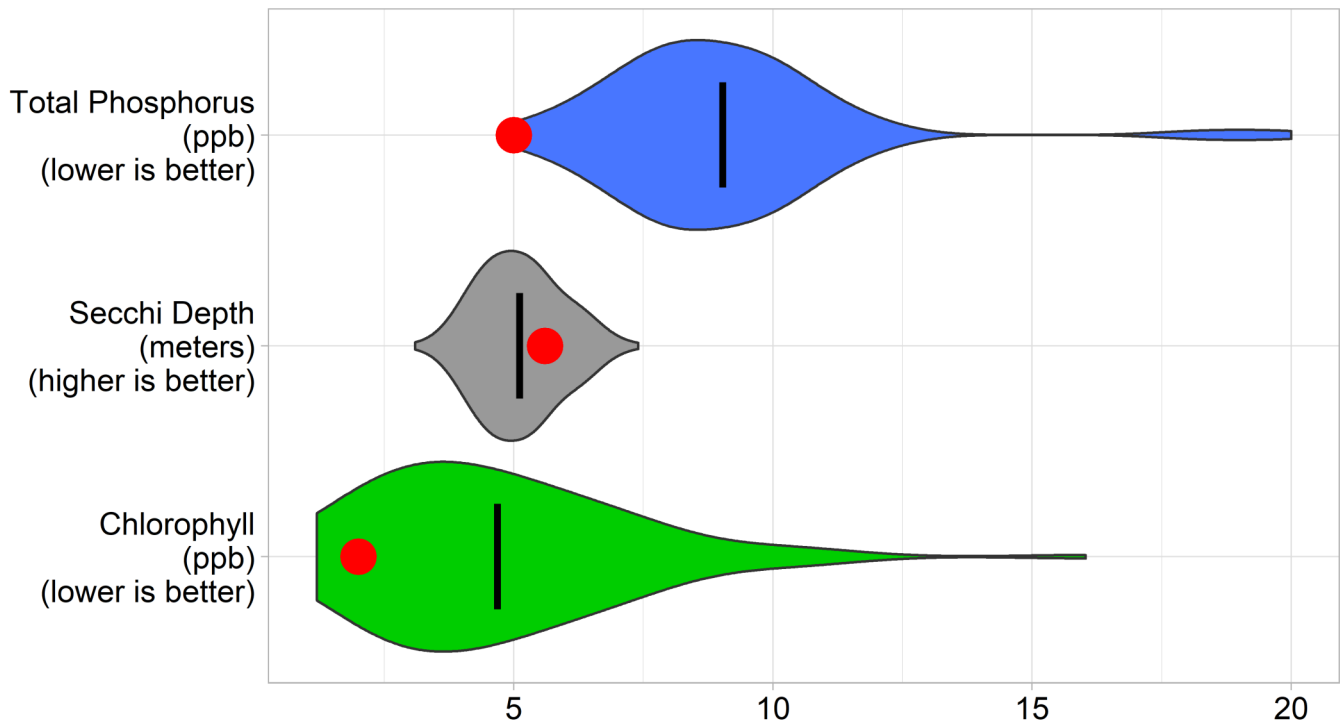
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 5.9 meters which falls into the moderately clear range. The average total phosphorus reading of 6.5 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Bear Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2021 was 29.4 SPU, indicating that water in Bear Pond is highly colored. Suitable coldwater fish habitat was present through September; however, low oxygen conditions were present in deep water from June through September.

Bear Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.1	29.4	Stable	Decreasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower Secchi readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water over time

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 2021's average value.

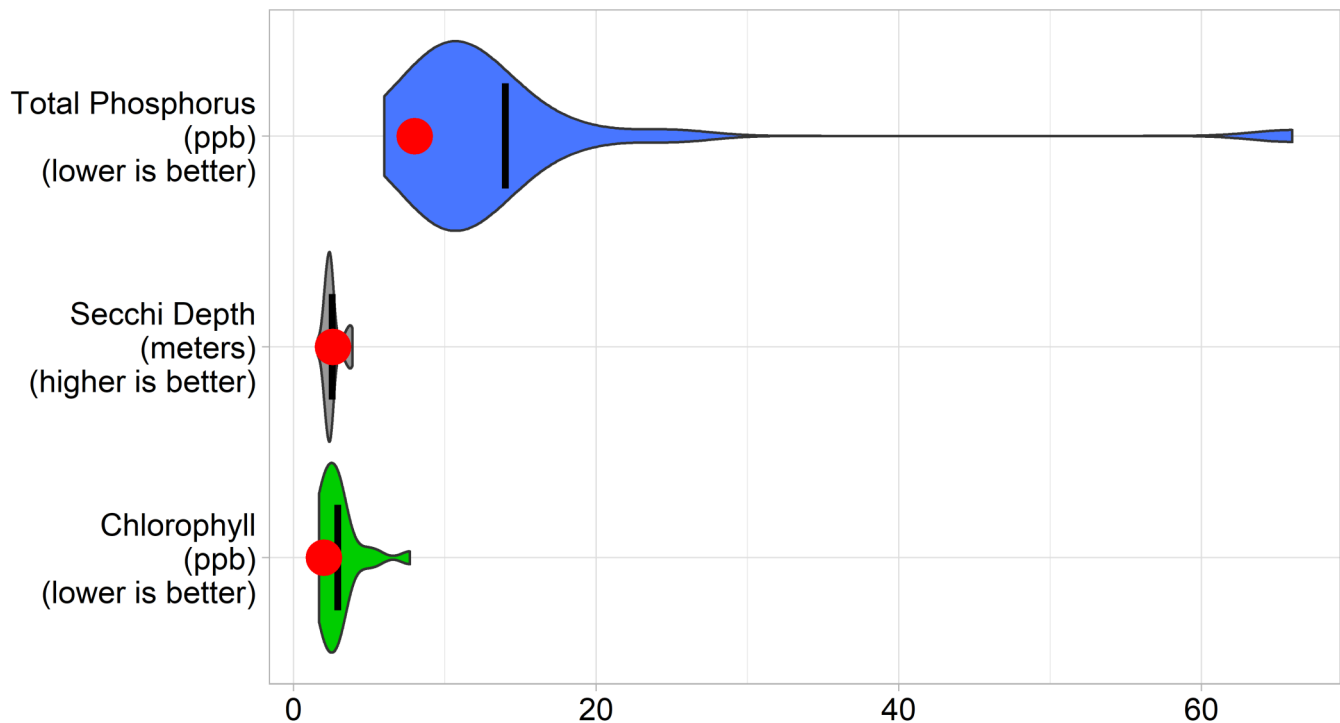
2021 Water Quality Highlights

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 2021. The Secchi disk reading for 2021 was 5.6 meters, which falls into the moderately clear range. The total phosphorus reading of 5.0 ppb falls into the low range. The average deep water phosphorus value was significantly higher than surface water phosphorus values, which suggests phosphorus recycling may be an issue. 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 2021 was 35.0 SPU, indicating that water in Bridgton's Beaver Pond is highly colored.

Bridgton's Beaver Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	20.0	35.0	Increasing	Decreasing	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

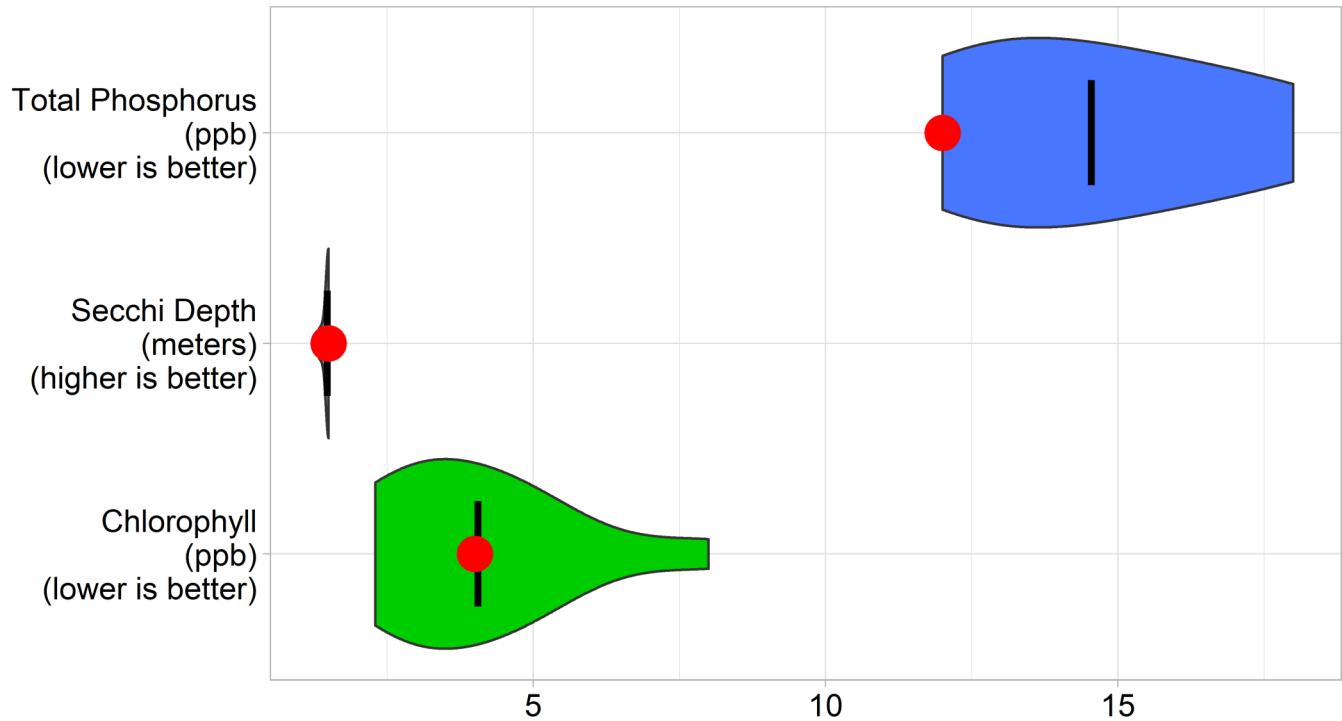
2021 Water Quality Highlights

Denmark's Beaver Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 2.6 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 8.0 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 Beaver Pond are stable and total phosphorus concentrations are stable. The color reading for 2021 was 25.0 SPU, indicating that water in Denmark's Beaver Pond is moderately colored.

Beaver Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	25	Not reported	Stable	Stable
Interpretation	Water was moderately	Secchi disk hit bottom making clarity trend	Neither less nor more phosphorus in water	Neither more nor less chlorophyll in water 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 2021's average value.

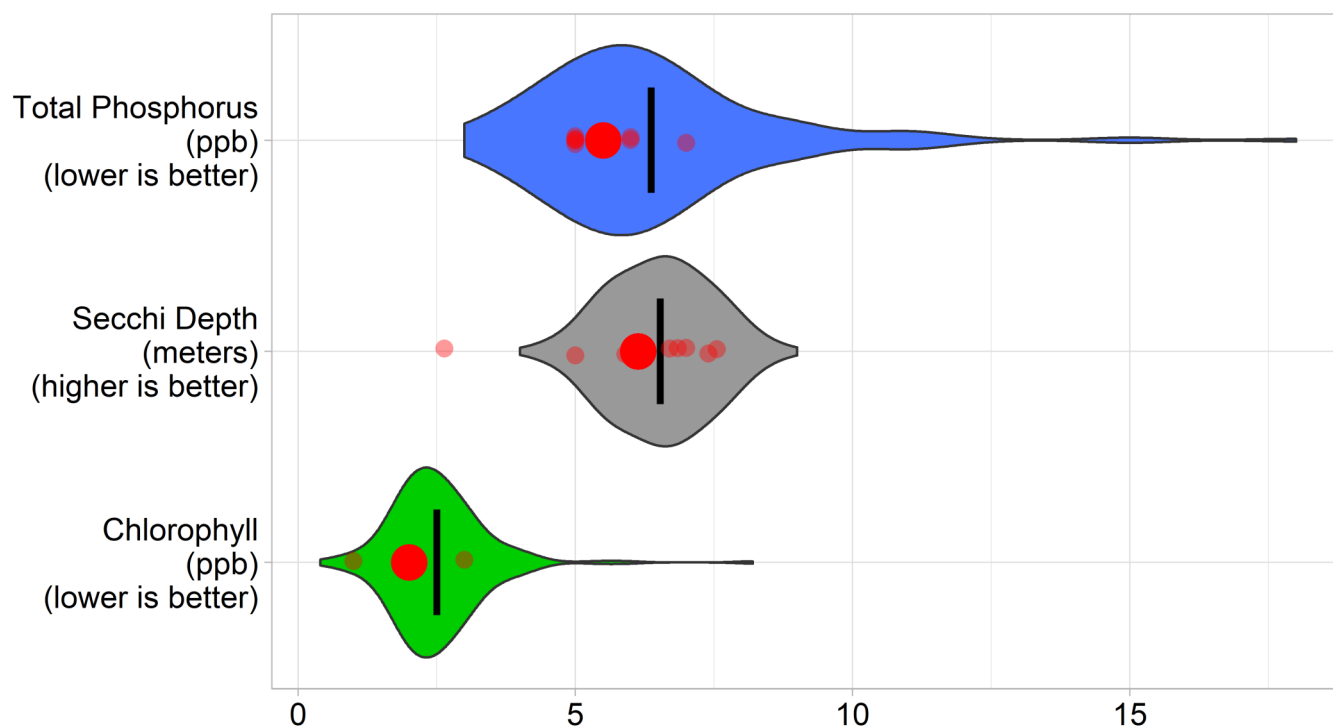
2021 Water Quality Highlights

Bog Pond is sampled by LEA once per year in August. The long-term average reflects data from 2009 to 2021. The Secchi disk reading for 2021 was 1.5 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 12.0 ppb falls into the moderate range. The chlorophyll-a reading of 4.0 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 2021 was 38.0 SPU, indicating that water in Bog Pond is highly colored.

Bog Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	38.0	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

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 2021's average value. The small red dots represent individual readings taken in 2021.

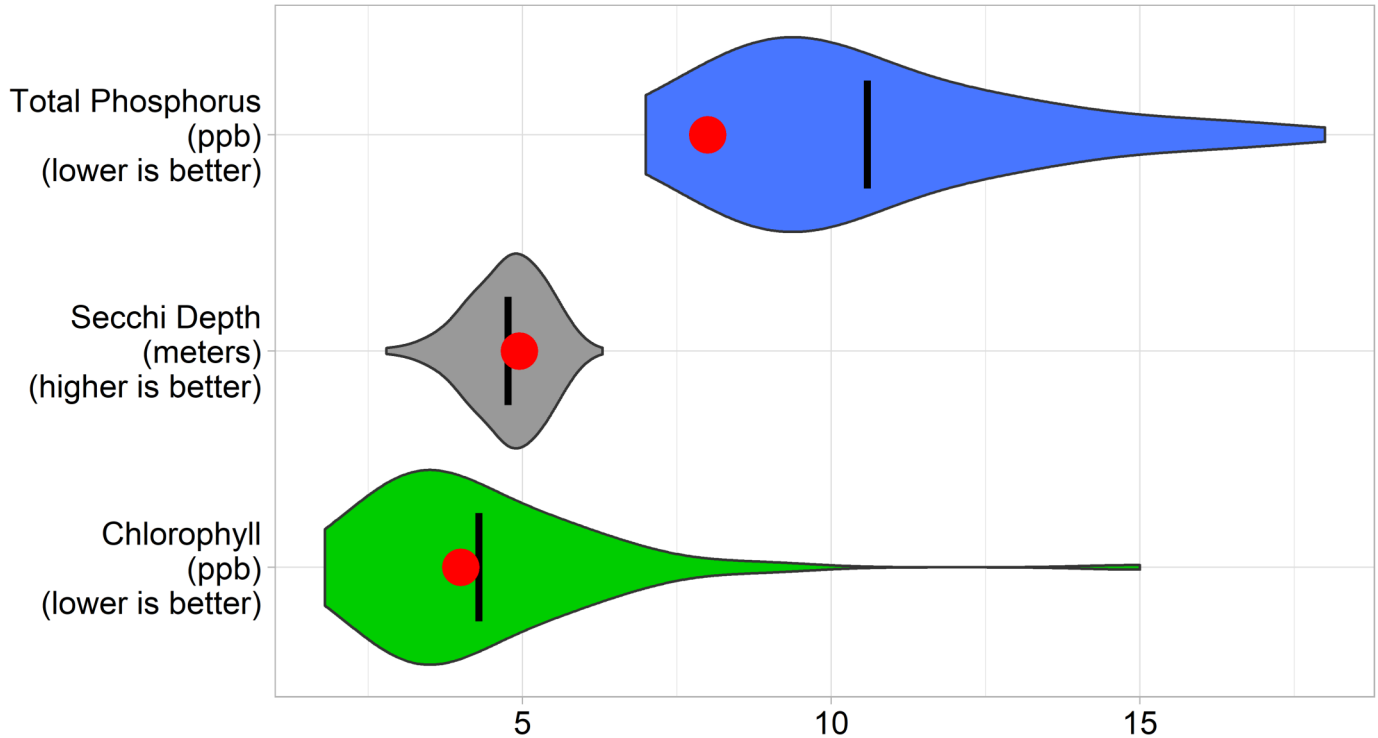
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.31 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.5 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Brandy Pond are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2021 was 25.6 SPU, indicating that water in Brandy Pond is highly colored. Suitable coldwater fish habitat was present through June. In July, coldwater fish habitat became unsuitable as water temperature increased and deep water oxygen was consumed. Unsuitable coldwater fish habitat persisted through September.

Brandy Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.0	25.6	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

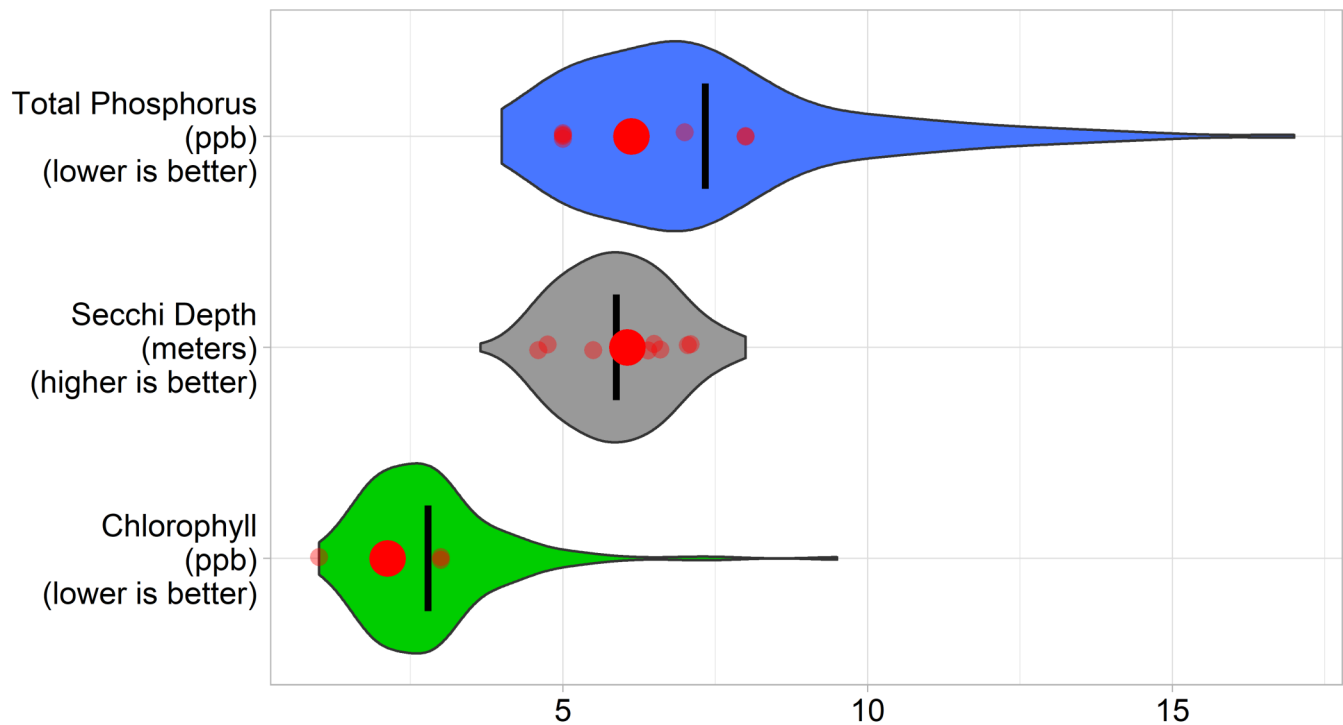
2021 Water Quality Highlights

Cold Rain Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 5.0 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 not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. 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 2021 was 34 SPU, indicating that water in Cold Rain Pond is highly colored.

Cold Rain Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.0	34	Stable	Stable	Increasing
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	More chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

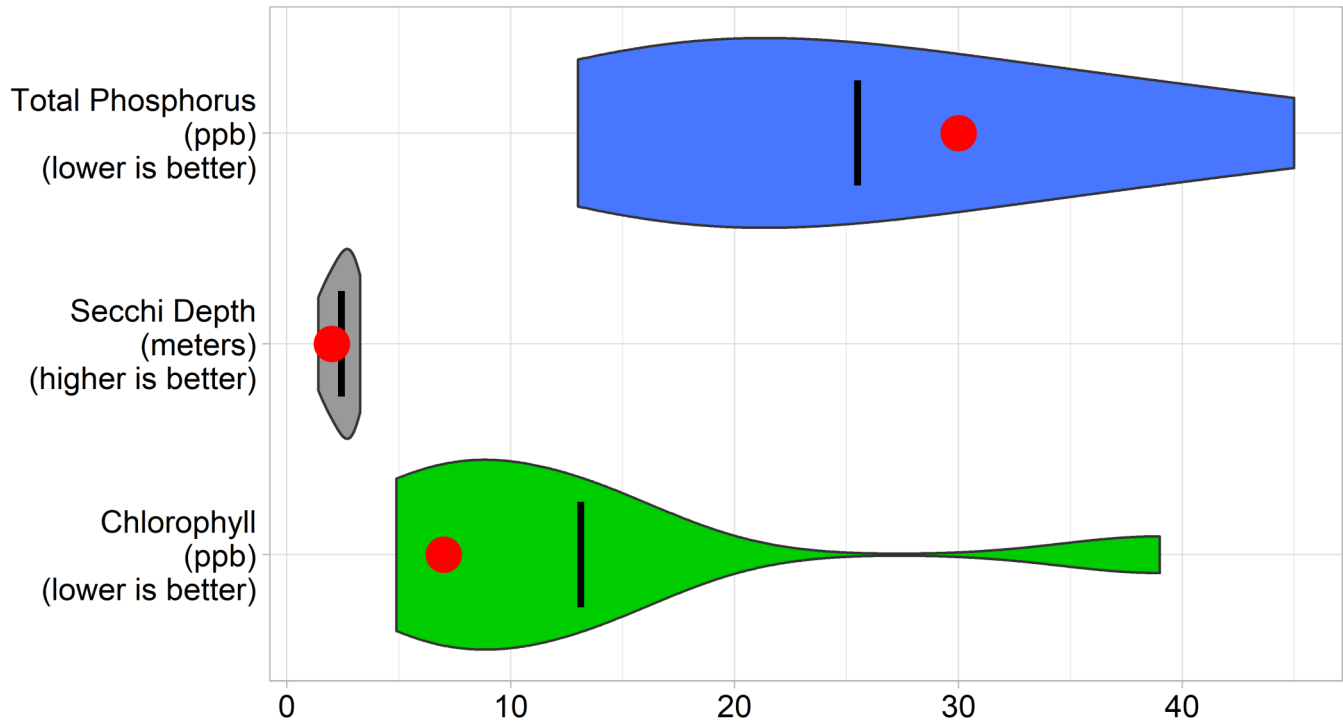
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.1 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 not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 2.1 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations in Crystal Lake are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2021 was 27.3 SPU, indicating that water in Crystal Lake is highly colored. Although low oxygen conditions were observed in deep water, suitable coldwater fish habitat was present throughout the testing season.

Crystal Lake's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll Trend
Analysis Result	7.8	27.3	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

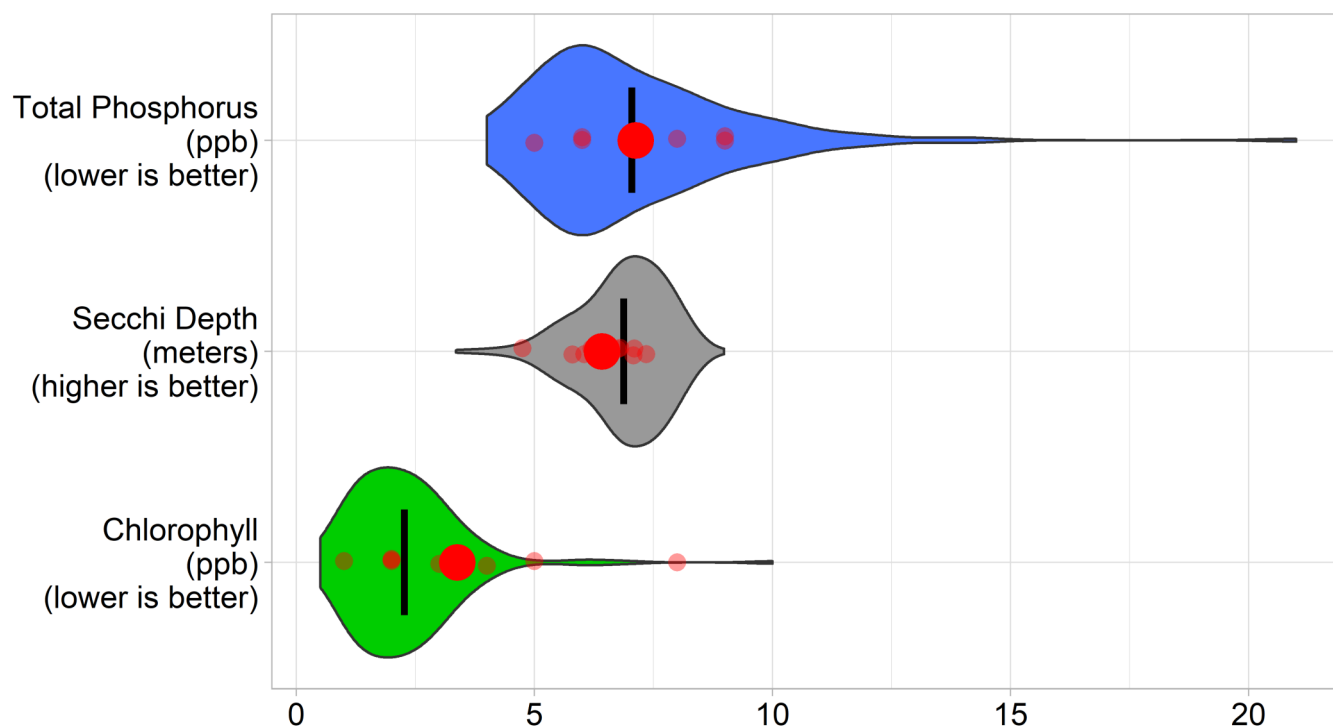
2021 Water Quality Highlights

Duck Pond is sampled by LEA once per year in August. The long-term average reflects data from 2013 to 2020. The Secchi disk reading for 2021 was 2.0 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 long-term average Secchi depth may not be a reliable indicator of historic water clarity. The total phosphorus reading of 30.0 ppb falls into the very high range. The chlorophyll-a reading of 7.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations in Duck Pond are stable and total phosphorus concentrations are increasing. The color reading for 2021 was 40 SPU, indicating that water in Duck Pond is highly colored.

Duck Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	40	Not reported	Increasing	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom making clarity trend unreliable	More phosphorus in water over time	Neither more nor less chlorophyll in water over time

Foster Pond - MIDAS 3188



Foster 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 2021's average value. The small red dots represent individual readings taken in 2021.

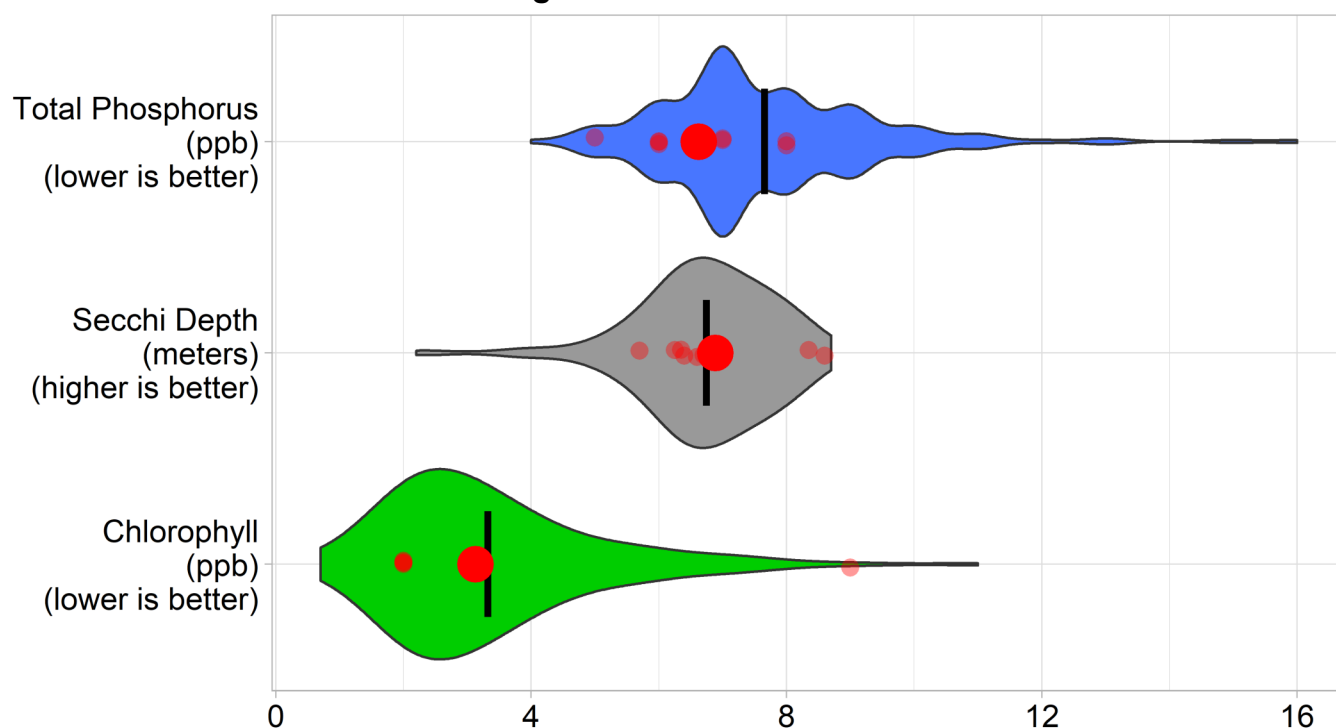
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.4 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.1 ppb falls into the moderate range. The chlorophyll-a average of 3.4 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations in Foster Pond are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2021 was 19.8 SPU, indicating that water in Foster Pond is moderately colored.

Foster Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	19.8	Decreasing	Stable	Stable
Interpretation	Water was moderately colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Granger Pond - MIDAS 3126



Granger 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 2021's average value. The small red dots represent individual readings taken in 2021.

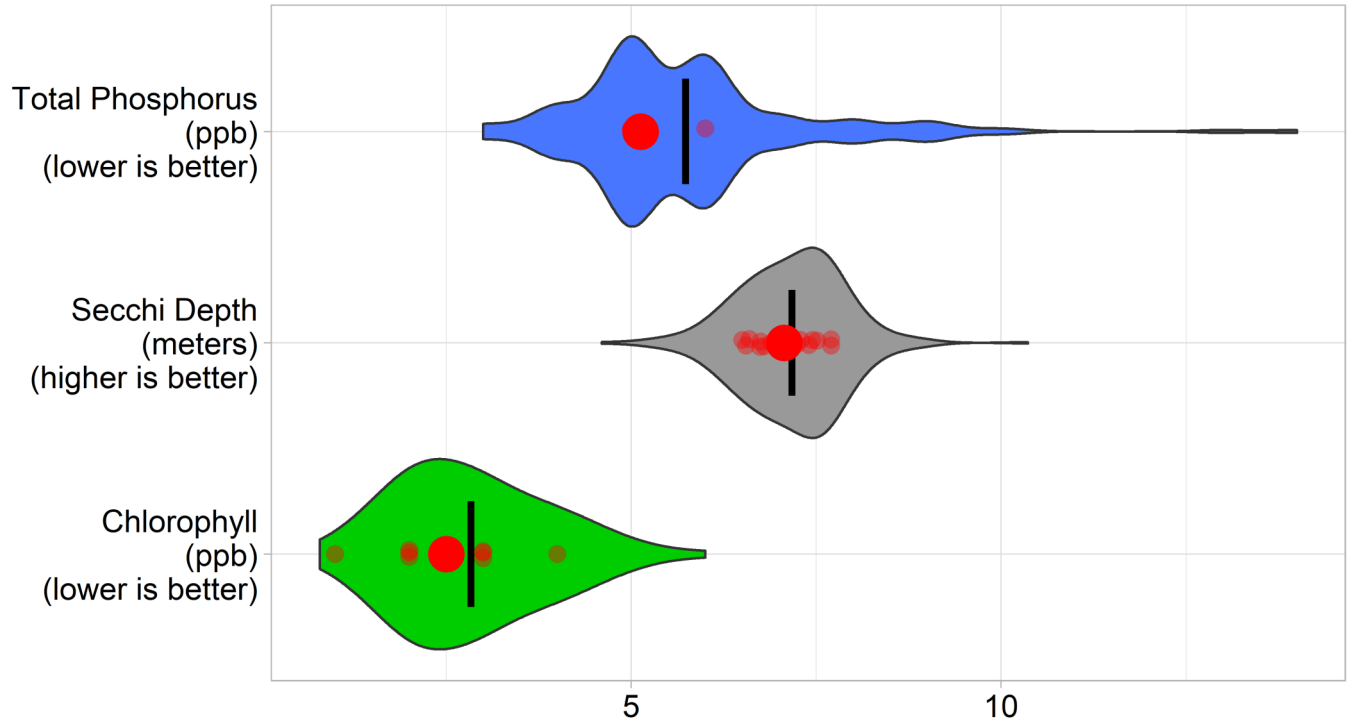
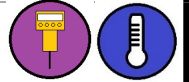
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.9 meters, which falls into the moderately clear range. The Secchi disk did hit the bottom twice this year, indicating that average Secchi depth may not be a reliable indicator of water clarity. The average total phosphorus reading of 6.6 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 in Granger Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2021 was 25.9 SPU, indicating that water in Granger Pond is highly colored.

Granger Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	25.9	Increasing	Decreasing	Stable
Interpretation	Water was highly colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

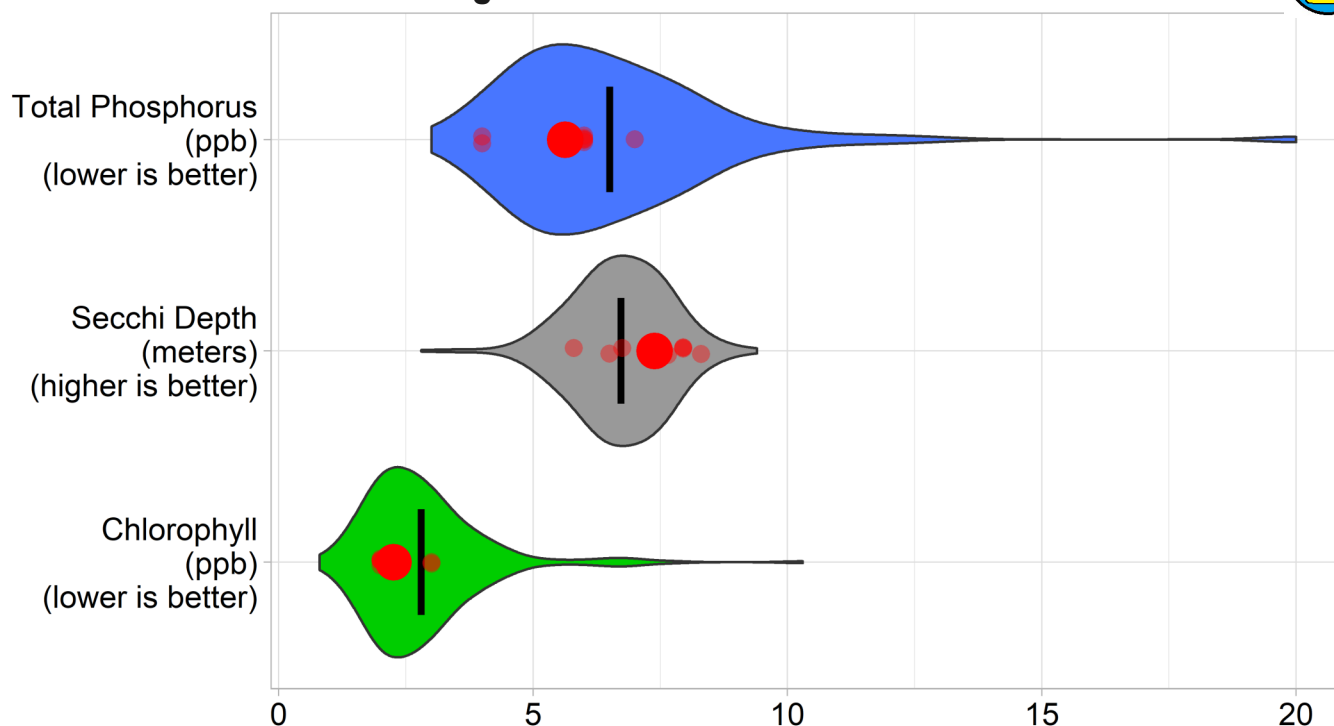
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.1 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.1 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Hancock Pond are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2021 was 25.3 SPU, indicating that water in Hancock Pond is highly colored. Suitable coldwater fish habitat was present from June through July. Coldwater fish habitat became marginal in August and unsuitable in September.

Hancock Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	8.6	25.3	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

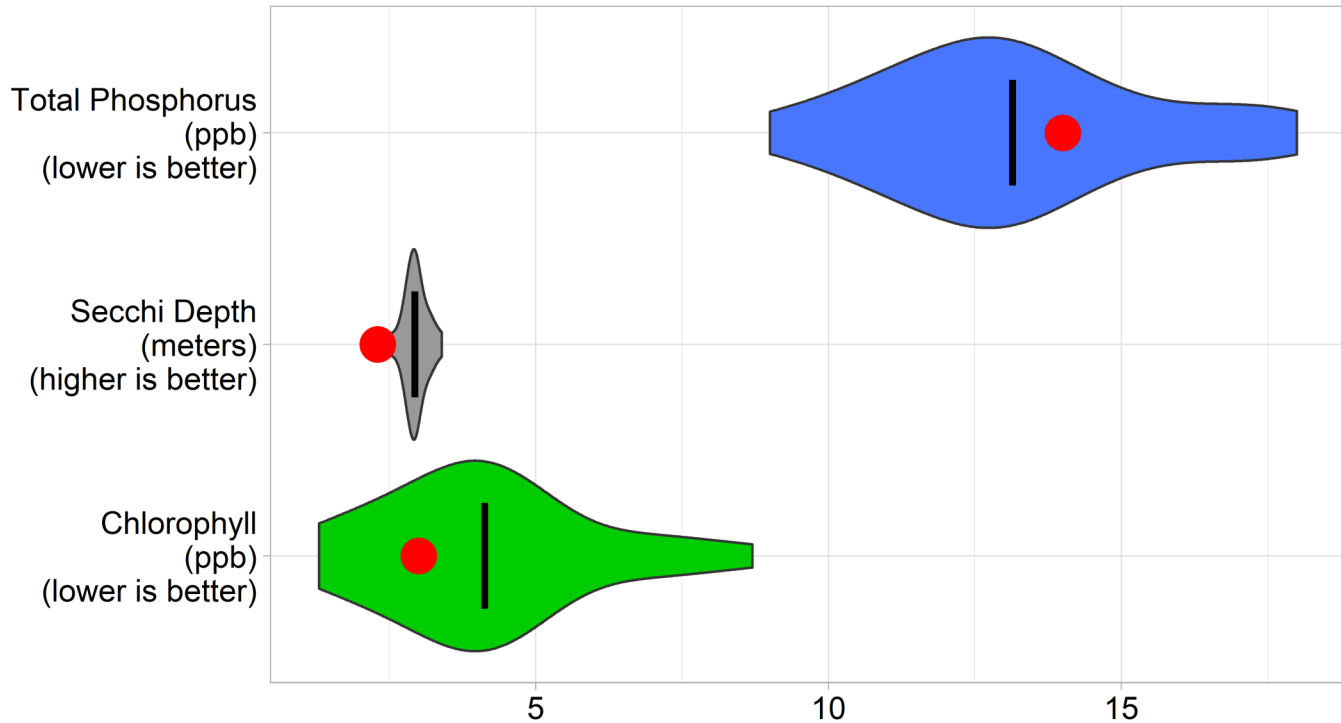
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.4 meters, which falls into the high clarity range. The average total phosphorus reading of 5.6 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Highland Lake are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2021 was 19.4 SPU, indicating that water in Highland Lake is moderately colored. Suitable coldwater fish habitat was present through June before transitioning to marginal and then unsuitable habitat in July through September.

Highland Lake's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.0	19.4	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

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 2021's average value.

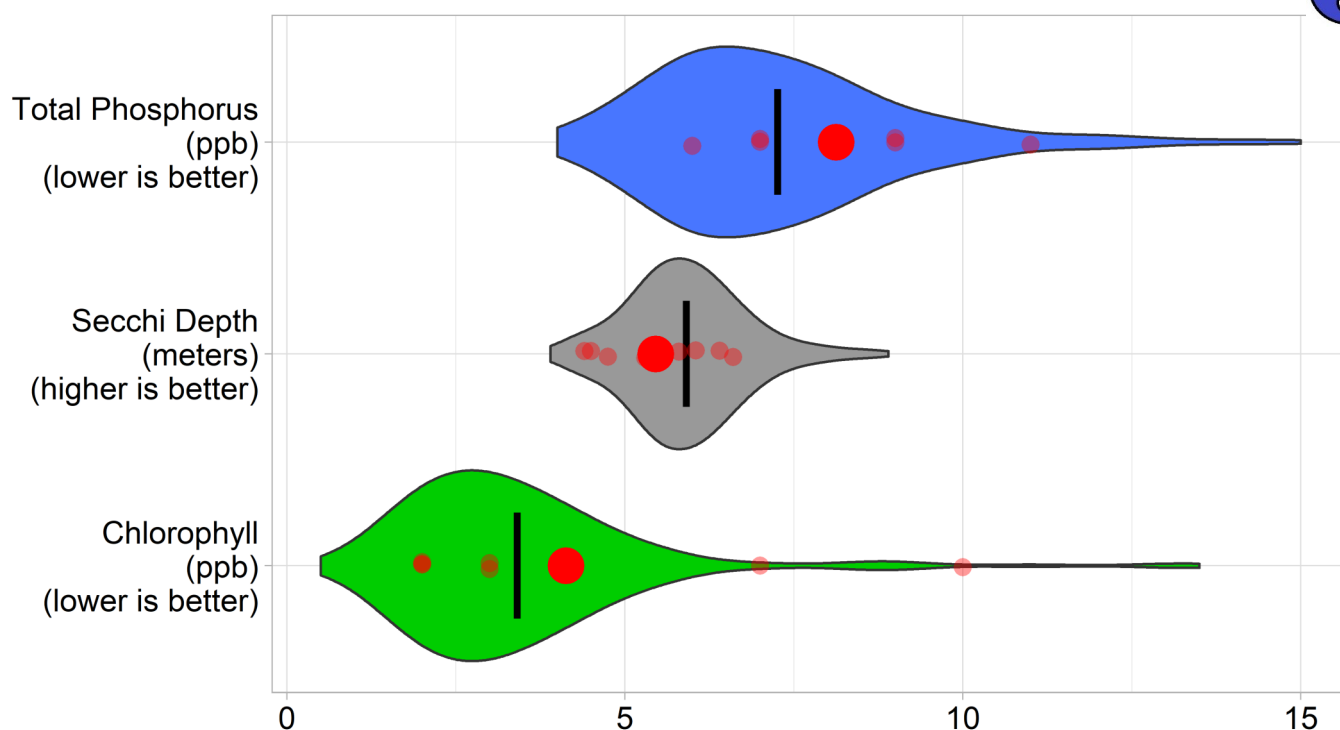
2021 Water Quality Highlights

Holt Pond is sampled by LEA once per year in August. The long-term average reflects data from 2000 to 2021. The Secchi disk reading for 2021 was 2.3 meters, which falls into the low clarity range. The Secchi disk did not hit the bottom in 2021 but has in years past, indicating that long-term Secchi depth may not be a reliable indicator of historic water clarity. The total phosphorus reading of 14.0 ppb falls into the high range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a reading of 3.0 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 2021 was 100 SPU, indicating that water in Holt Pond is very highly colored.

Holt Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	23.0	100	Stable	Stable
Interpretation	Within acceptable range	Water was very highly colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

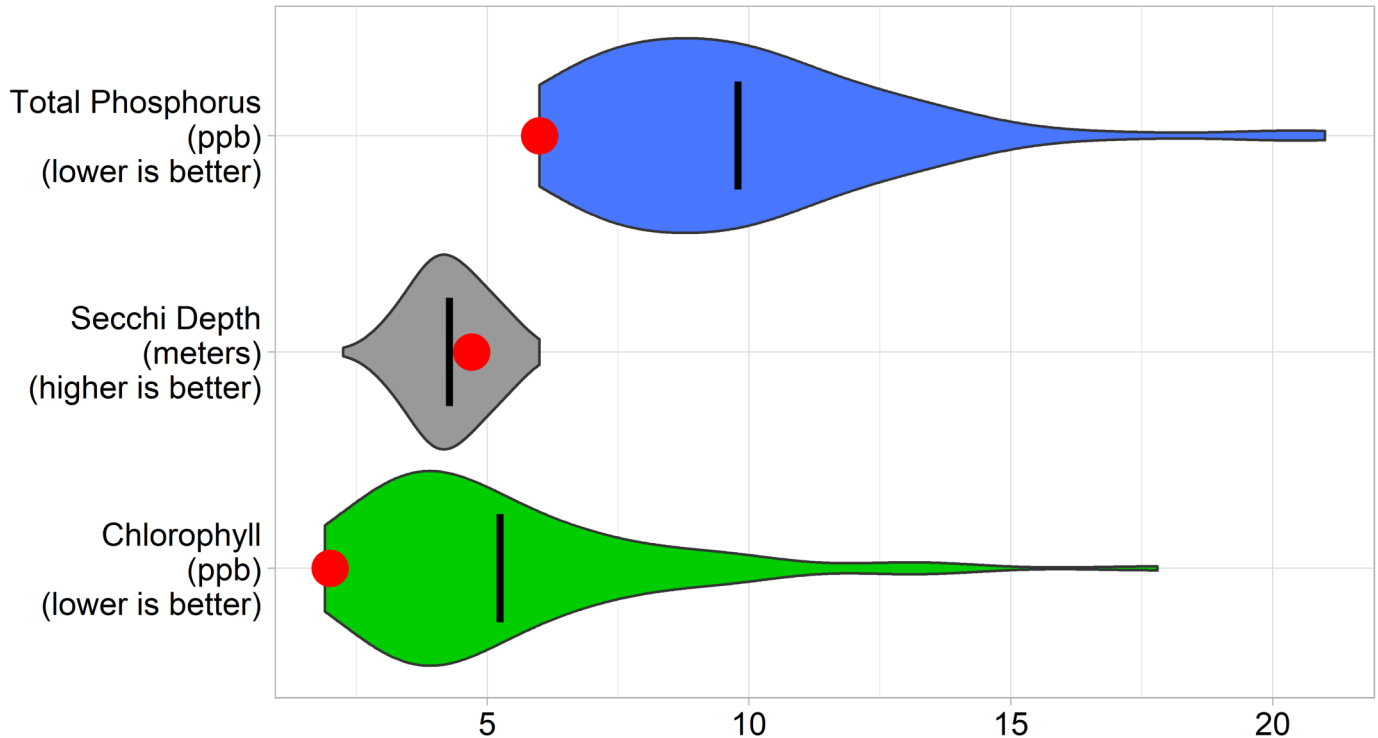
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 5.5 meters, which falls into the moderately clear range. The average total phosphorus reading of 8.1 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 4.1 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 stable. The average color reading for 2021 was 27.9 SPU, indicating that water in Island Pond is highly colored. Suitable coldwater fish habitat was present through June. However, as water temperatures increased and deep water oxygen was consumed, conditions became moderate in July and unacceptable in August through September. Low oxygen conditions were present in deep water from June through September.

Island Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.0	27.9	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

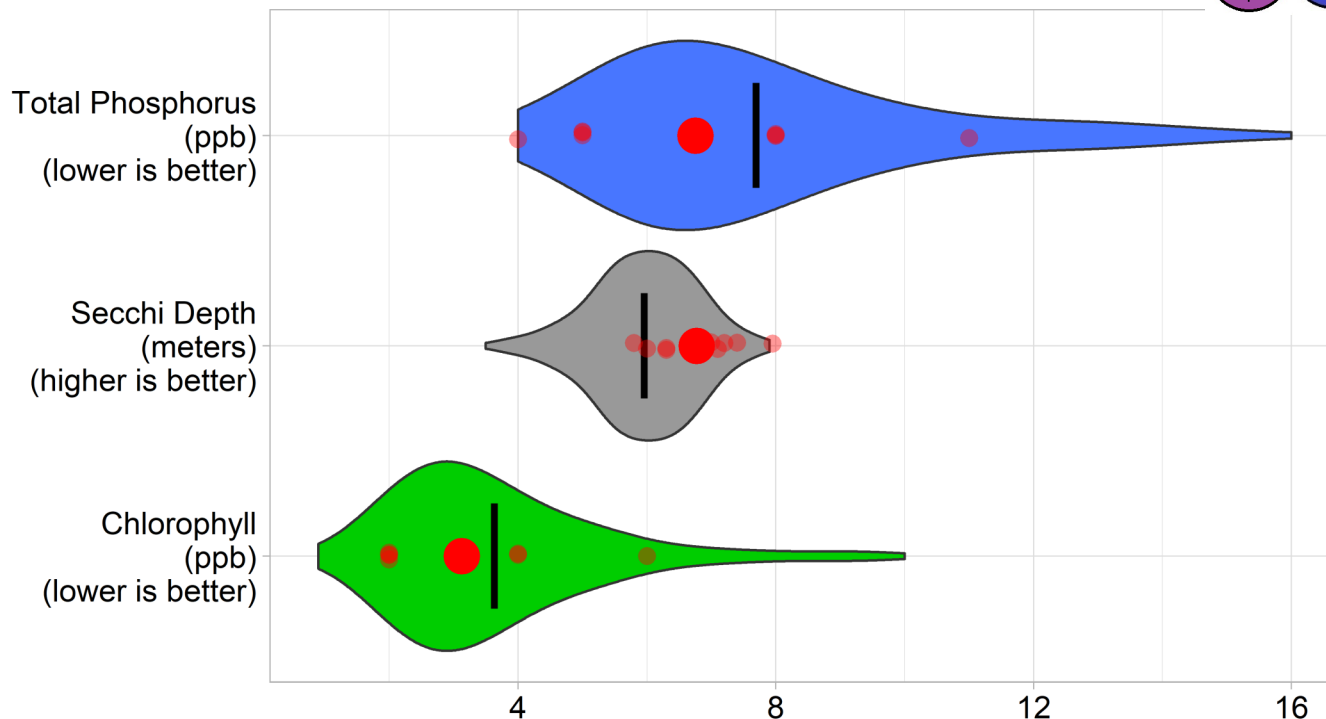
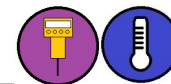
2021 Water Quality Highlights

Jewett Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 4.7 meters, which falls into the moderately clear range. The total phosphorus reading of 6.0 ppb falls into the moderate range. The average deep water phosphorus value was significantly higher than surface water phosphorus values, which suggests phosphorus recycling may be an issue. 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 2021 was 45.0 SPU, indicating that water in Jewett Pond is highly colored.

Jewett Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	23.8	45	Stable	Stable	Stable
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 in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

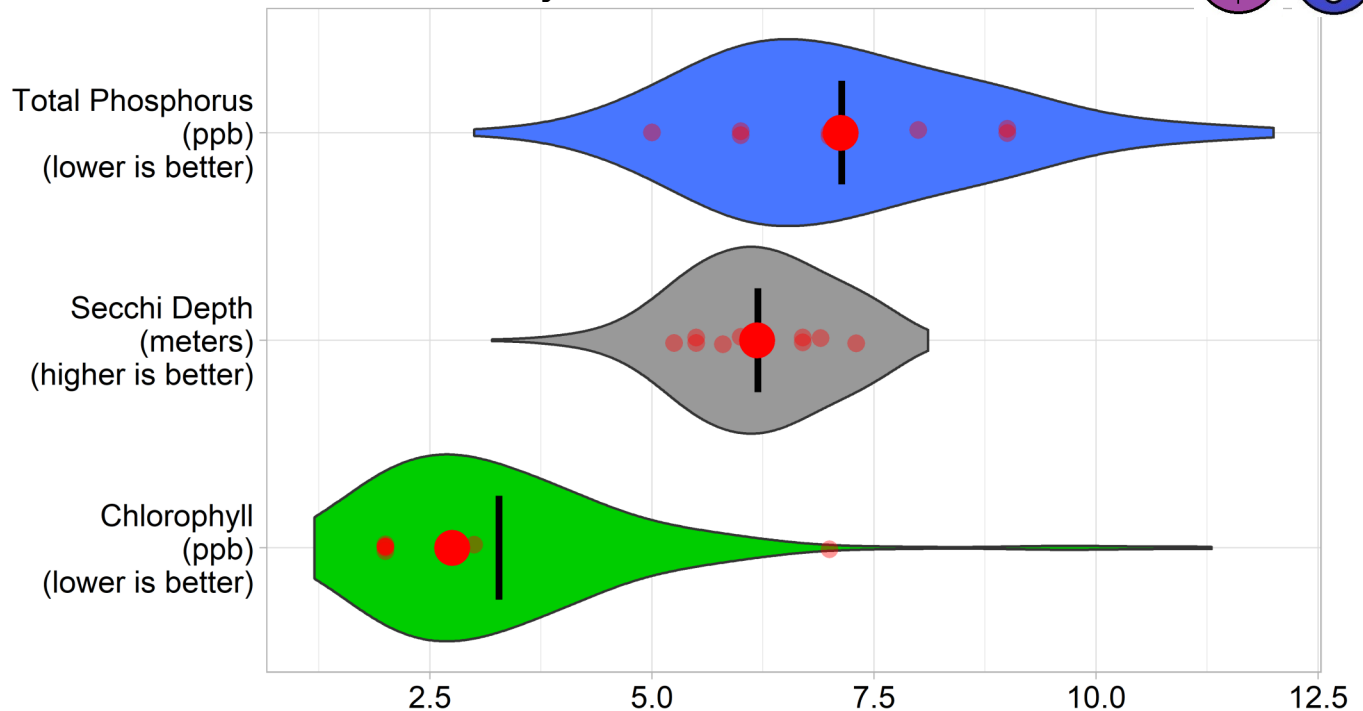
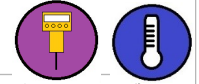
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.8 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 not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 3.1 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 2021 was 25.9 SPU, indicating that water in Keoka Lake is highly colored. Suitable coldwater fish habitat was present through June. As water temperatures increased and deep water oxygen was consumed, coldwater fish habitat became moderate in July and became unsuitable from August through September. Low oxygen conditions were present in deep water from June through September.

Keoka Lake's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.8	25.9	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water over time

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 2021's average value. The small red dots represent individual readings taken in 2021.

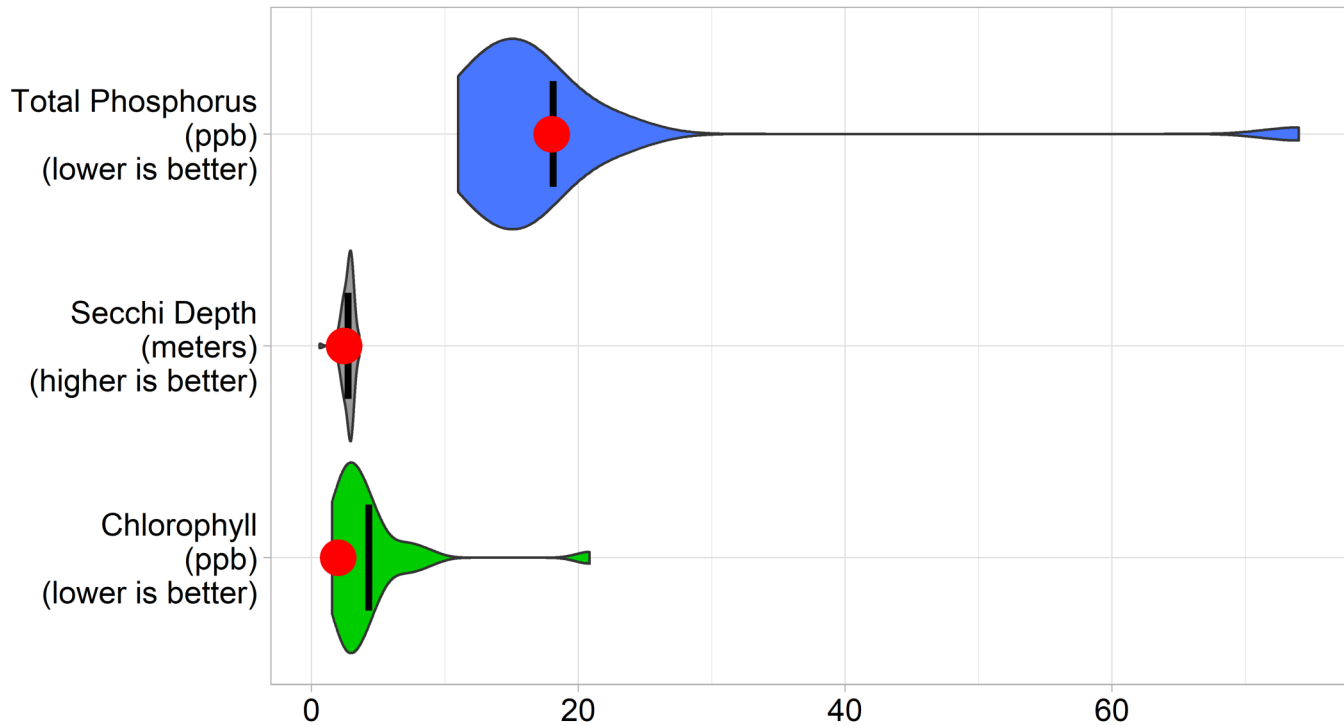
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.2 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.1 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 2.3 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 2021 was 29.0 SPU, indicating that water in Keyes Pond is highly colored. Suitable coldwater fish habitat was present through June. As water temperatures increased and deep water oxygen was consumed, coldwater fish habitat became marginal in July and unsuitable in August and September.

Keyes Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.8	29.0	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was highly	Deeper clarity readings over	Less phosphorus in water over time	Neither more nor less chlorophyll in

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 2021's average value.

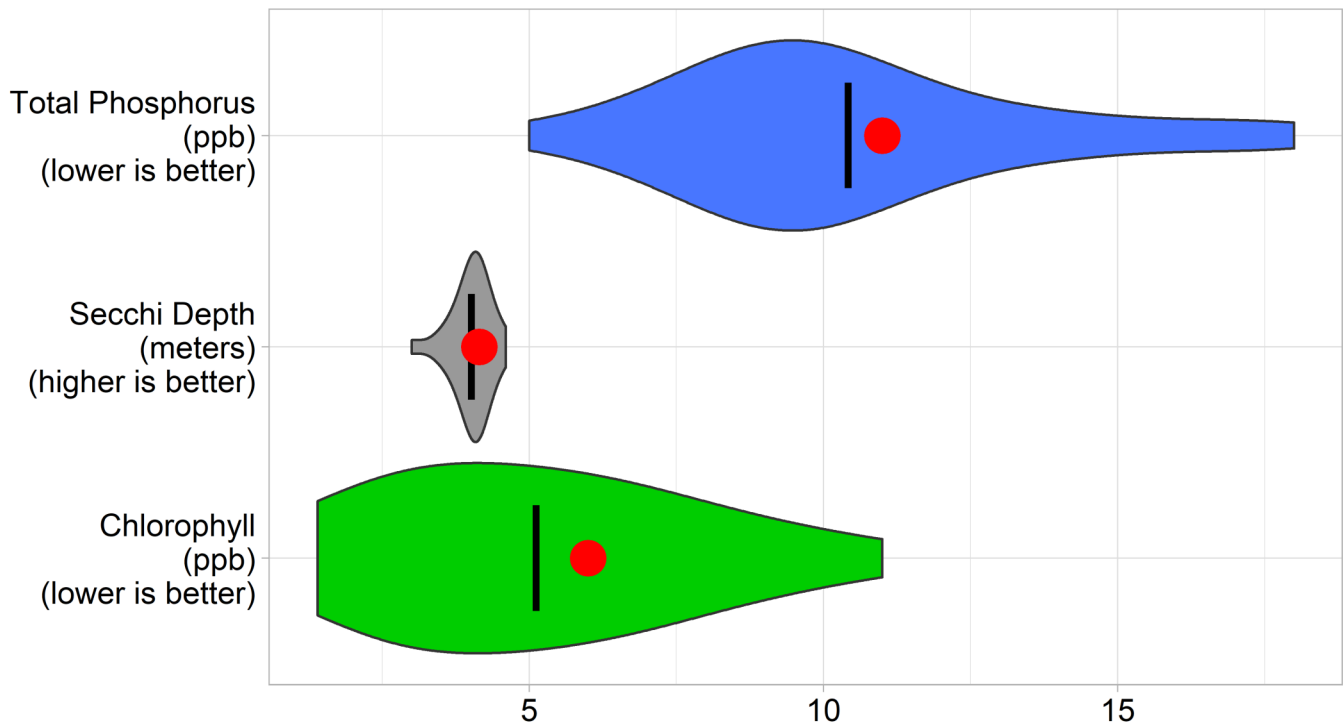
2021 Water Quality Highlights

Kezar Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 2.5 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 18.0 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 2021 was 40 SPU, indicating that water in Kezar Pond is highly colored.

Kezar Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	40	Not Reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hit bottom making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

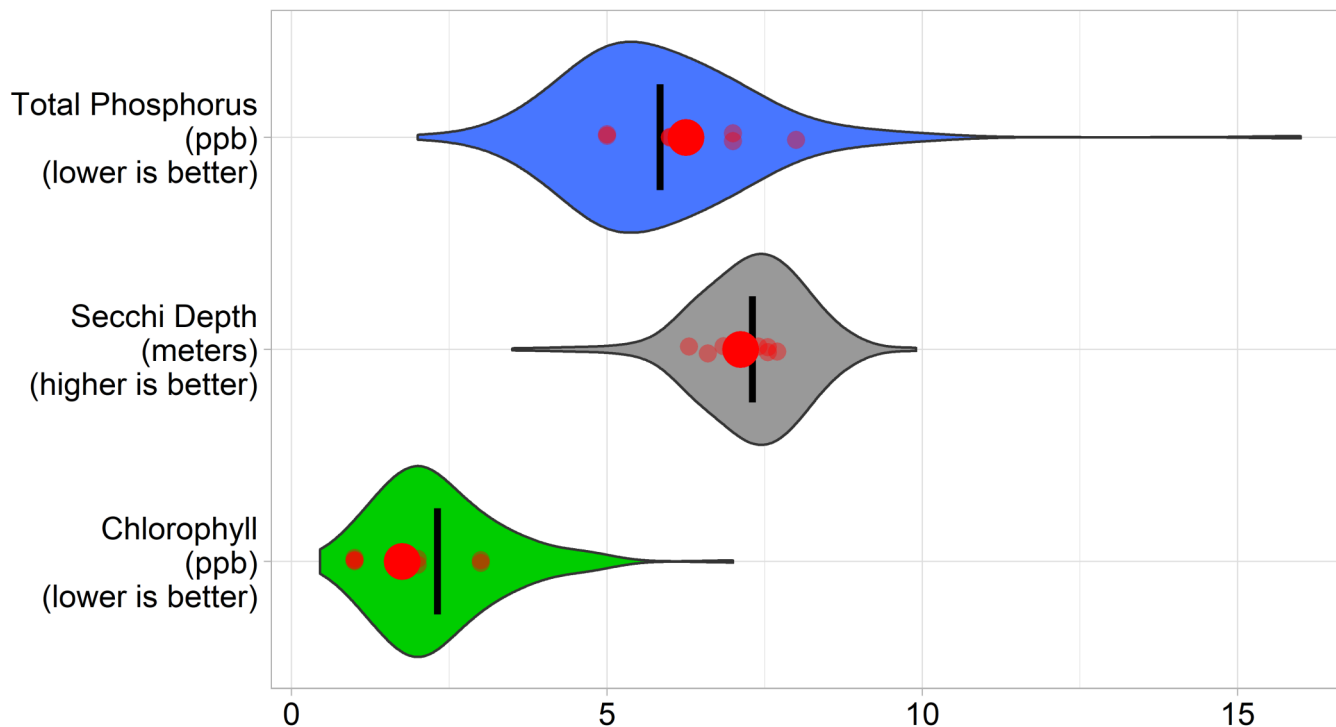
2021 Water Quality Highlights

Little Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 4.2 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 11.0 ppb falls into the moderate range. The deep water phosphorus value was significantly higher than surface water phosphorus values, which suggests phosphorus recycling may be an issue. The chlorophyll-a reading of 6.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations in Little Pond are stable and total phosphorus concentrations are stable. The color reading for 2021 was 30.0 SPU, indicating that water in Little Pond is highly colored.

Little Pond's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	40	30	Not Reported	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Secchi disk hit bottom making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

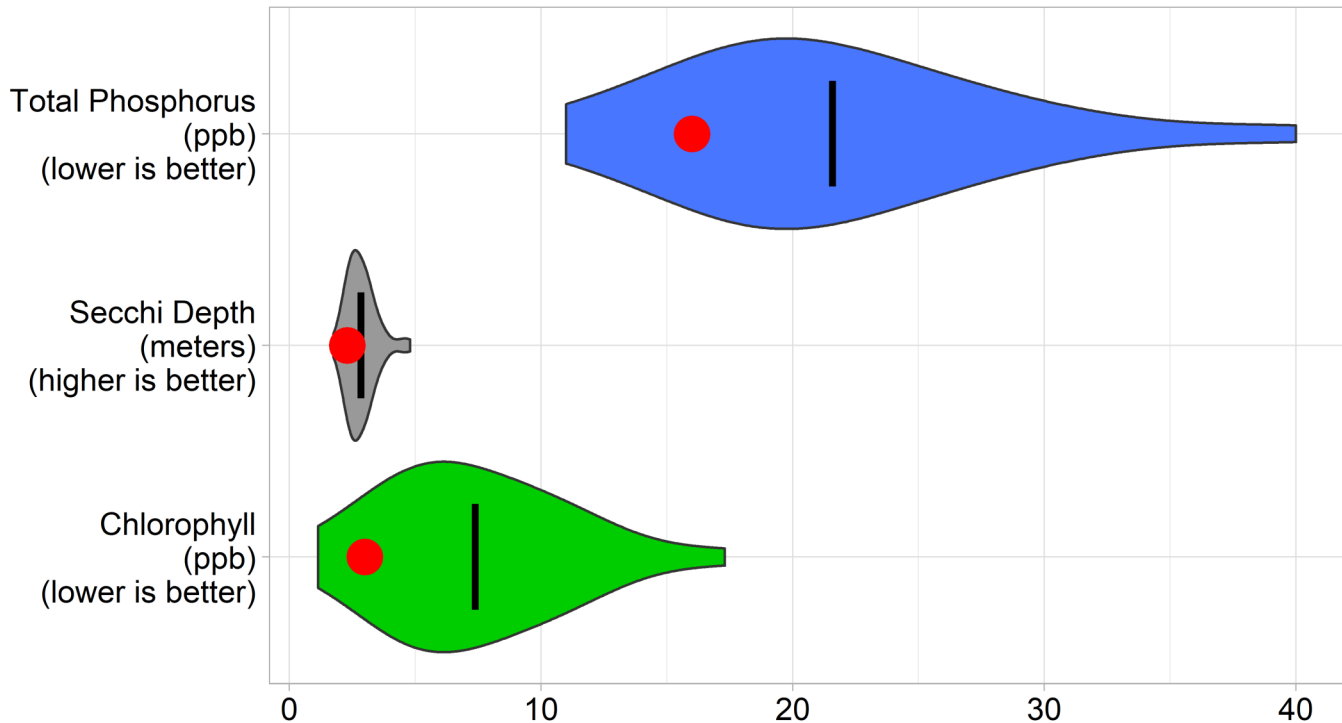
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.1 meters, which falls into the high clarity range. The average total phosphorus reading of 6.3 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 1.8 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 stable. The average color reading for 2021 was 26.4 SPU, indicating that water in Little Moose Pond is highly colored. Suitable coldwater fish habitat was present from June through July. As water temperatures increased and deep water oxygen was consumed, fish habitat transitioned to marginal in August and unsuitable in September.

Little Moose Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.3	26.4	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower Secchi readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

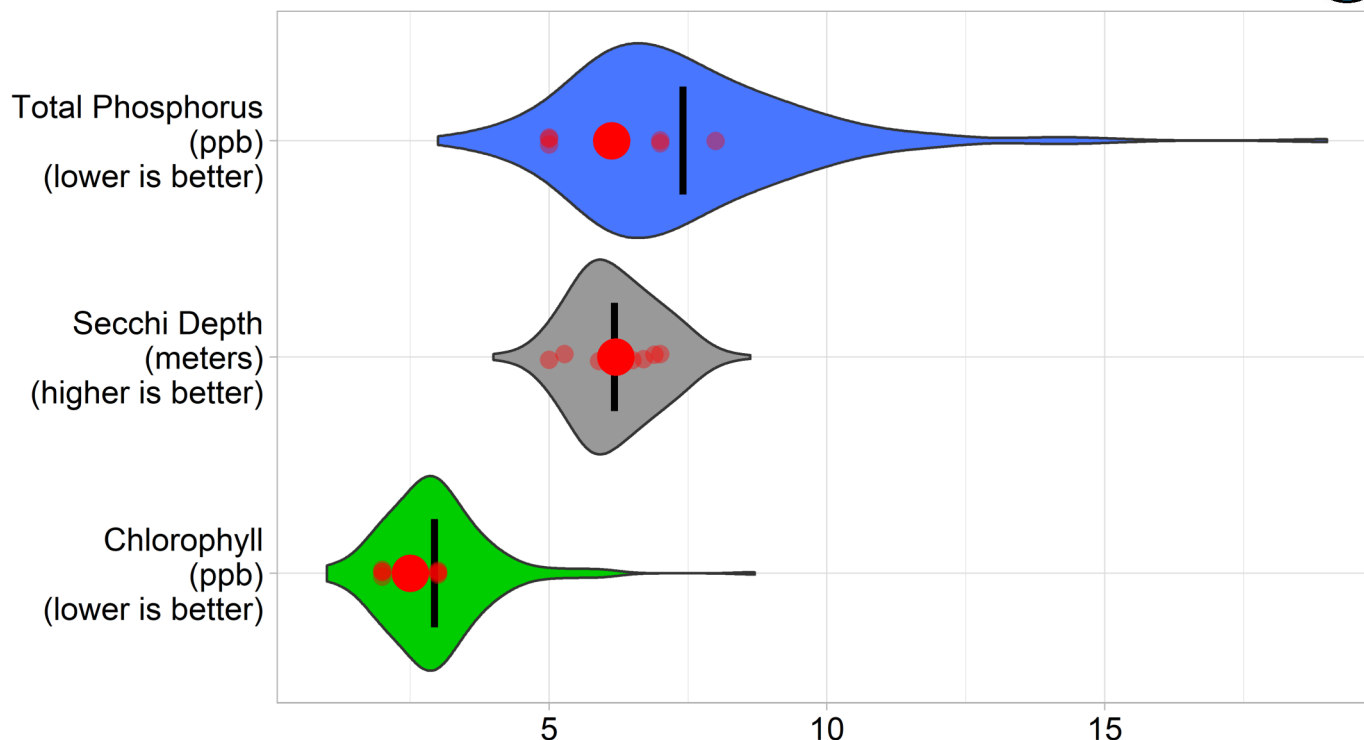
2021 Water Quality Highlights

Little Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 2.3 meters, which falls into the low clarity range. The total phosphorus reading of 16.0 ppb falls into the high range. The deep water phosphorus value was significantly higher than surface water phosphorus values, which suggests phosphorus recycling may be an issue. 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 stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The color reading for 2021 was 85 SPU, indicating that water in Little Mud Pond is very highly colored.

Little Mud Pond's 2021 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	37.0	85	Decreasing	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was very highly colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

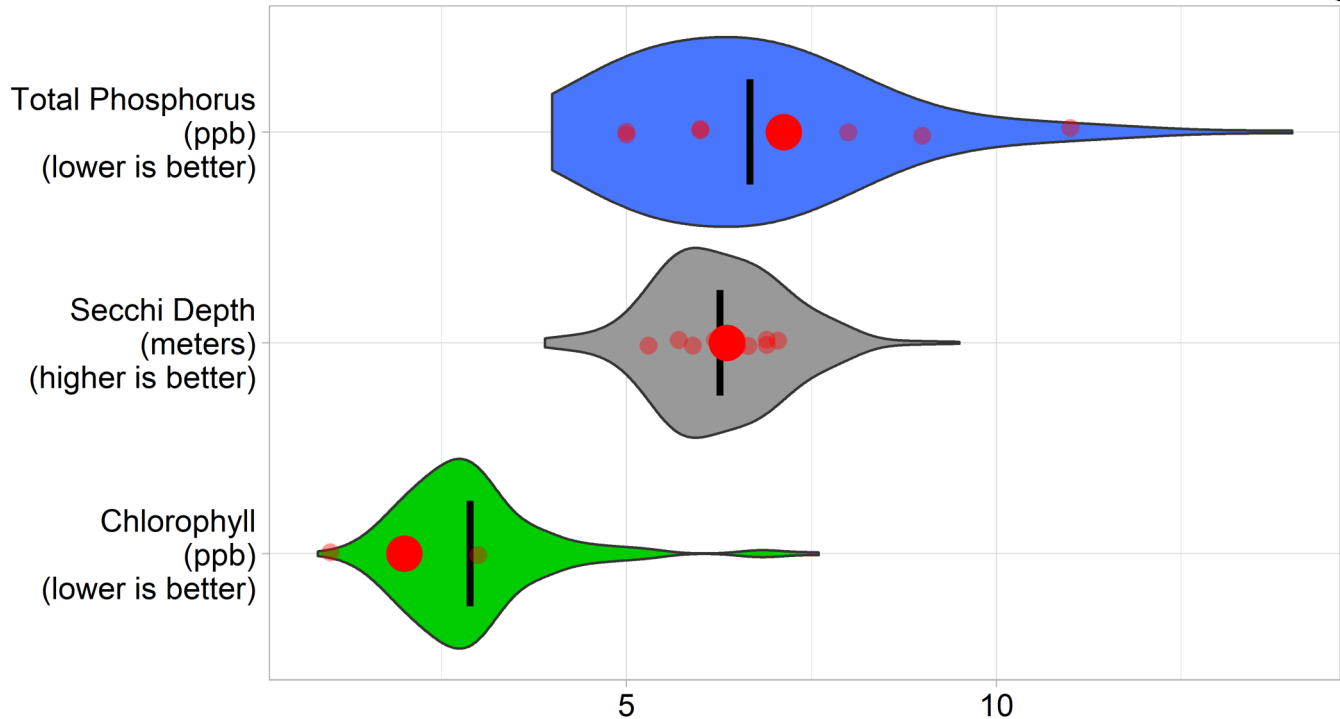
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.2 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 not significantly above 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 north basin are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2021 was 26.3 SPU, indicating that water in Long Lake's north basin is highly colored. Suitable coldwater fish habitat was present through June. As water temperatures increased and deep water oxygen was consumed, coldwater fish habitat became unsuitable in July.

Long Lake North Basin's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.6	26.3	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower Secchi readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

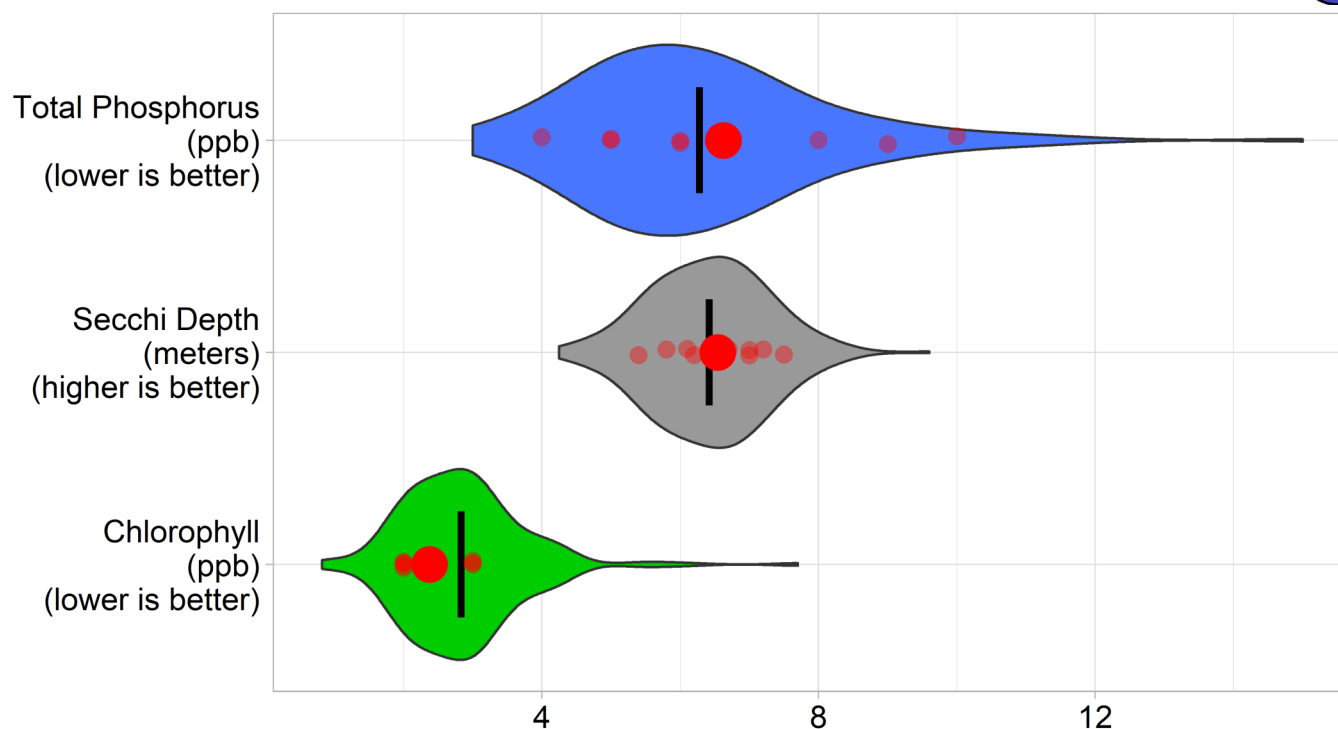
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.4 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.1 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Long Lake's middle basin are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2021 was 25.1 SPU, indicating that water in Long Lake's middle basin is highly colored. Suitable coldwater fish habitat was present through mid-June. As water temperature increased and deep water oxygen was consumed, coldwater fish habitat transitioned to marginal and then unsuitable habitat in July. Unsuitable coldwater fish habitat persisted through September.

Long Lake Middle Basin's 2021 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.8	25.1	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

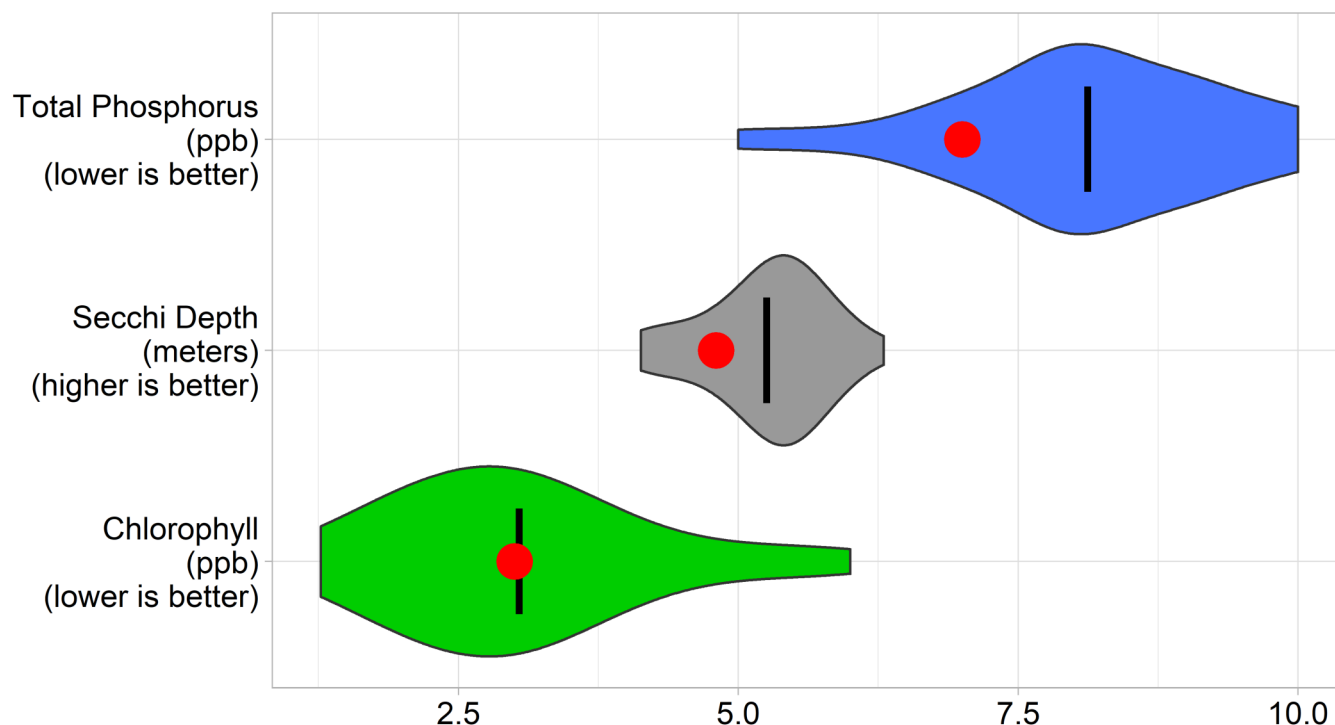
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.5 meters, which falls into the moderately clear range. The average total phosphorus reading of 6.3 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 south basin are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2021 was 26.8 SPU, indicating that water in Long Lake's south basin is highly colored. Suitable coldwater fish habitat was present through late June. As water temperatures warmed and deep water oxygen was consumed, coldwater fish habitat transitioned to marginal in July and became unsuitable in August through September.

Long Lake South Basin's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	5.4	26.8	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water 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 2021's average value.

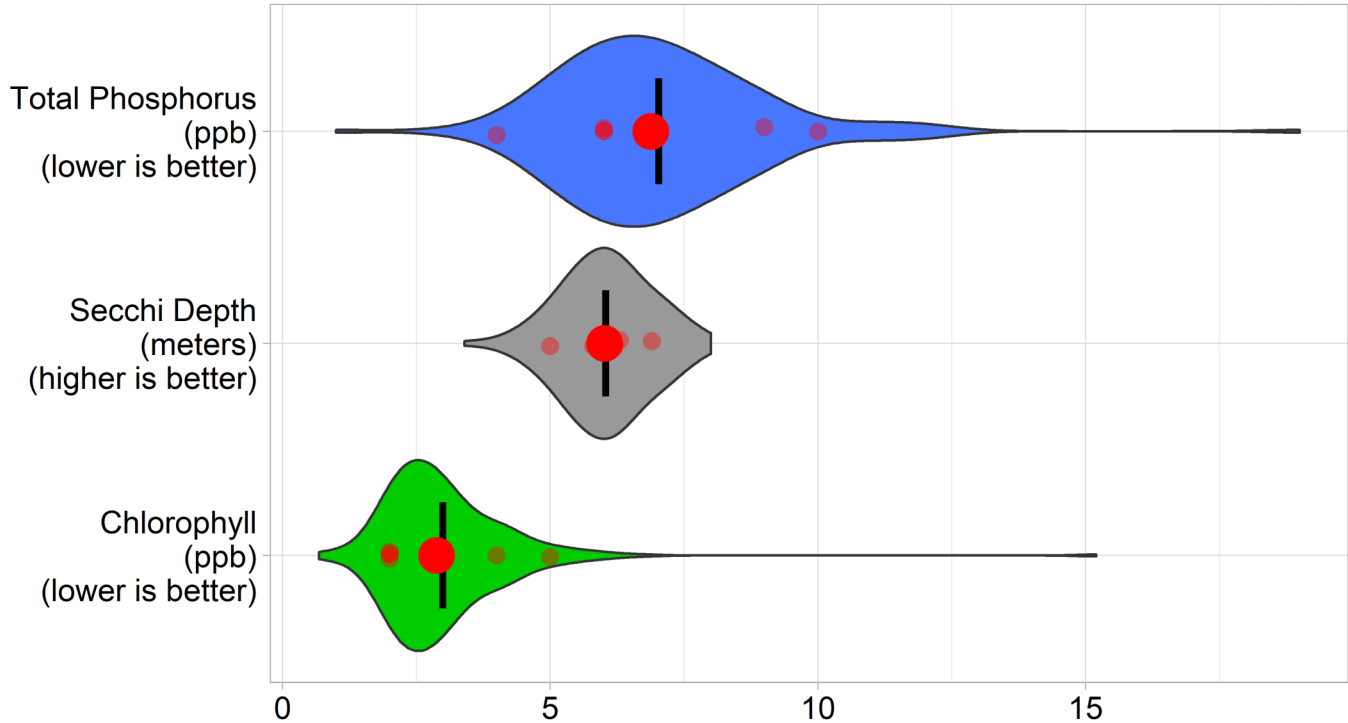
2021 Water Quality Highlights

Long Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 4.8 meters, which falls into the moderate clarity range. The Secchi disk did not hit the bottom this year but has in years past, indicating that Secchi depth may not be a reliable indicator of historic water clarity. The total phosphorus reading of 7.0 ppb falls into the moderate range. The deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations in Long Pond are stable and total phosphorus concentrations are stable. The color reading for 2021 was 10.0 SPU, indicating that water in Long Pond is falls into the low color range.

Long Pond's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.0	10.0	Not Reported	Stable	Stable
Interpretation	Within acceptable range	Water color falls in low range	Secchi disk has hit bottom in past making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

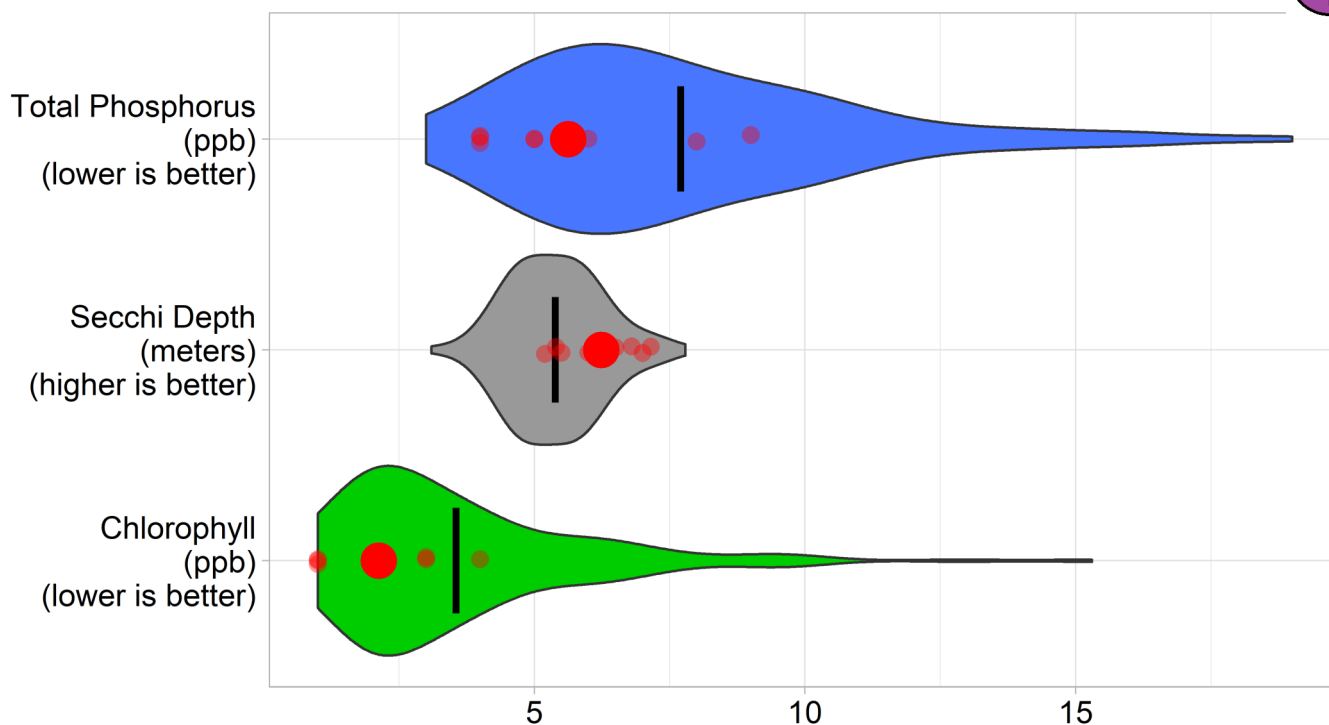
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.0 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 not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 2.9 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 2021 was 30.5 SPU, indicating that water in McWain Pond is highly colored. Suitable coldwater fish habitat was present through June. As water temperatures increased and deep water oxygen was consumed, coldwater fish habitat transitioned to marginal in July and became unsuitable in August through September.

McWain Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	8.7	30.5	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

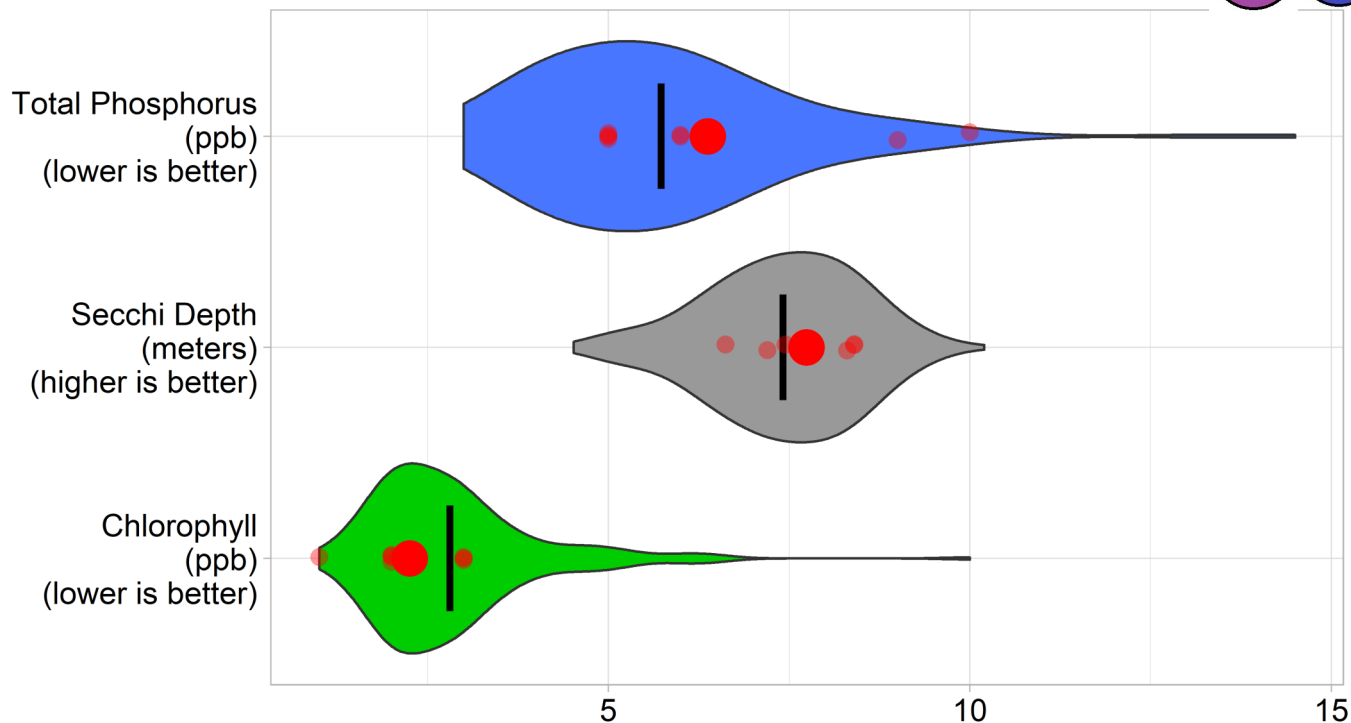
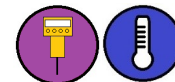
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.2 meters, which falls into the moderately clear range. The average total phosphorus reading of 5.6 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 2.1 ppb falls into the moderate 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 2021 was 24.3 SPU, indicating that water in Middle Pond is moderately colored. Suitable coldwater fish habitat was present from June through September.

Middle Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	14.4	24.3	Increasing	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

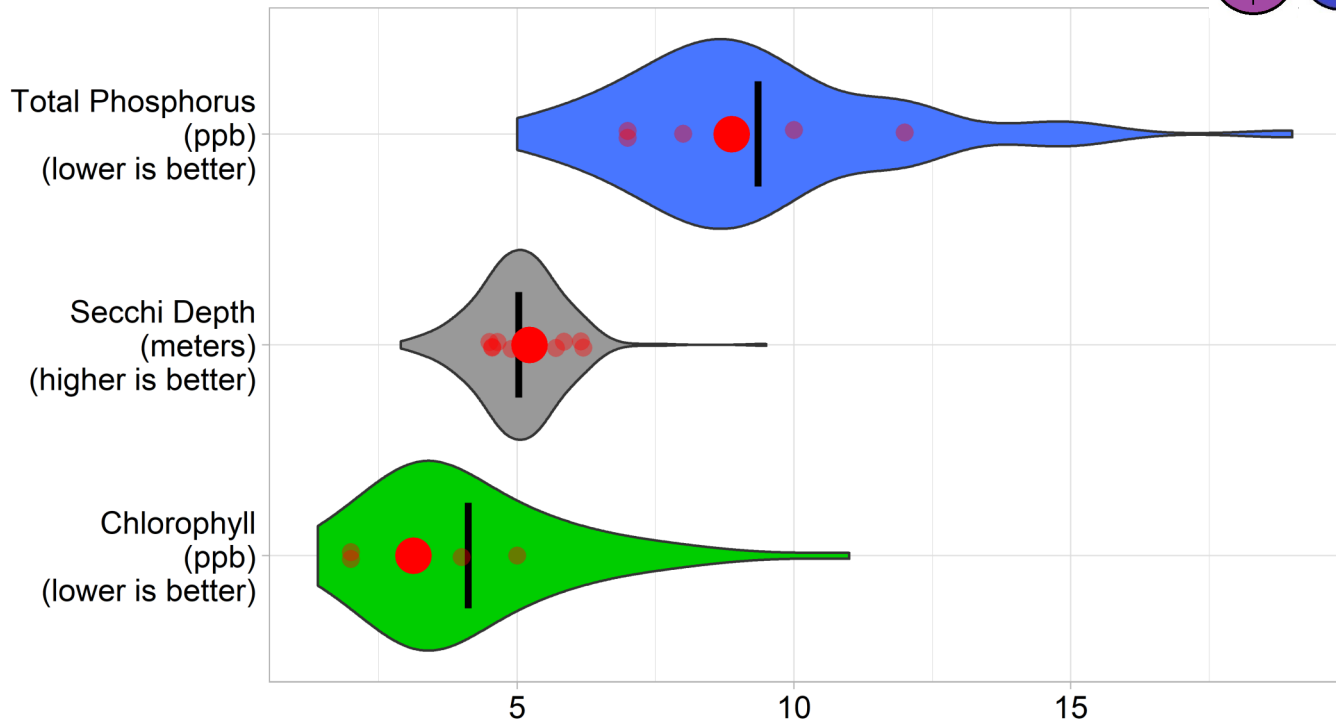
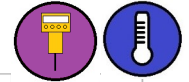
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.7 meters, which falls into the high clarity range. The average total phosphorus reading of 6.4 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above 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 Moose Pond's main basin are decreasing, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2021 was 21.9 SPU, indicating that water in Moose Pond's main basin is moderately colored. Suitable coldwater fish habitat was present from June through mid-August. As water temperatures warmed and deep water oxygen was consumed, coldwater fish habitat transitioned into marginal and then unsuitable habitat in late August through September.

Moose Pond middle basin's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	7.4	21.9	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

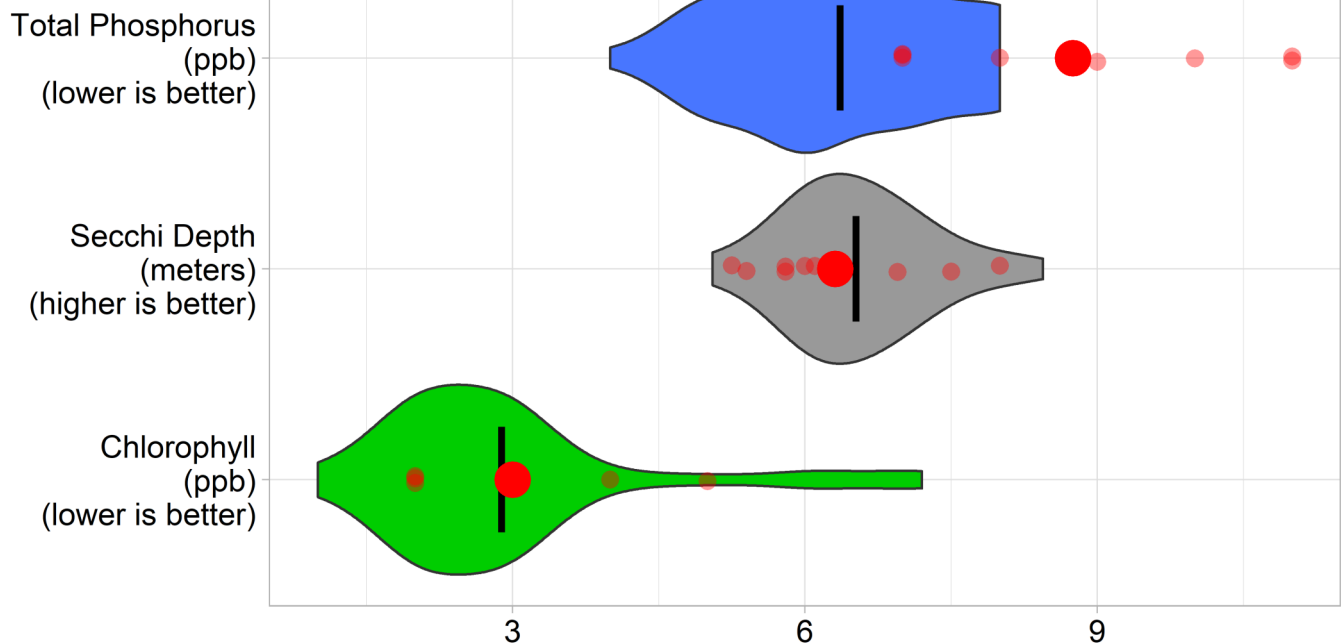
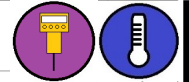
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 5.2 meters, which falls into the moderately clear range. The average total phosphorus reading of 8.9 ppb falls into the moderate range. The deep water phosphorus value was not significantly higher than surface water phosphorus values, which suggests phosphorus recycling was not problematic. 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 2021 was 24.3 SPU, indicating that water in Moose Pond's north basin is moderately colored. Coldwater fish habitat was marginal for a few weeks in June but became unsuitable by July and remained that way through September.

Moose Pond north basin's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.0	24.3	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

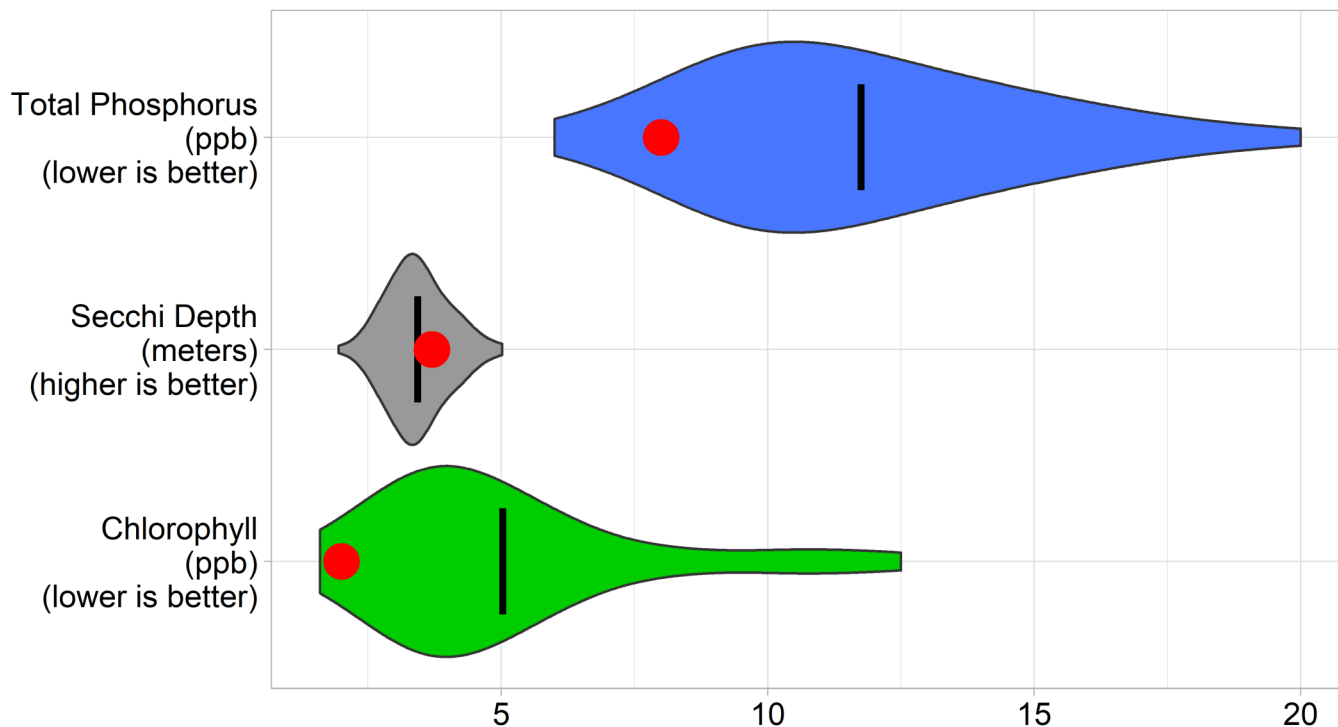
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.3 meters, which falls into the moderately clear range. The average total phosphorus reading of 8.8 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 3.0 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 stable. This trend analysis is based on our 7-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 2021 was 23.4 SPU, indicating that water in Moose Pond's south basin is moderately colored. Suitable coldwater fish habitat was present for a few weeks in June, but warming water temperatures and decreasing deep water oxygen concentrations resulted in unsuitable coldwater fish habitat during July through September.

Moose Pond south basin's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.7	23.4	Stable	Increasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	More phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

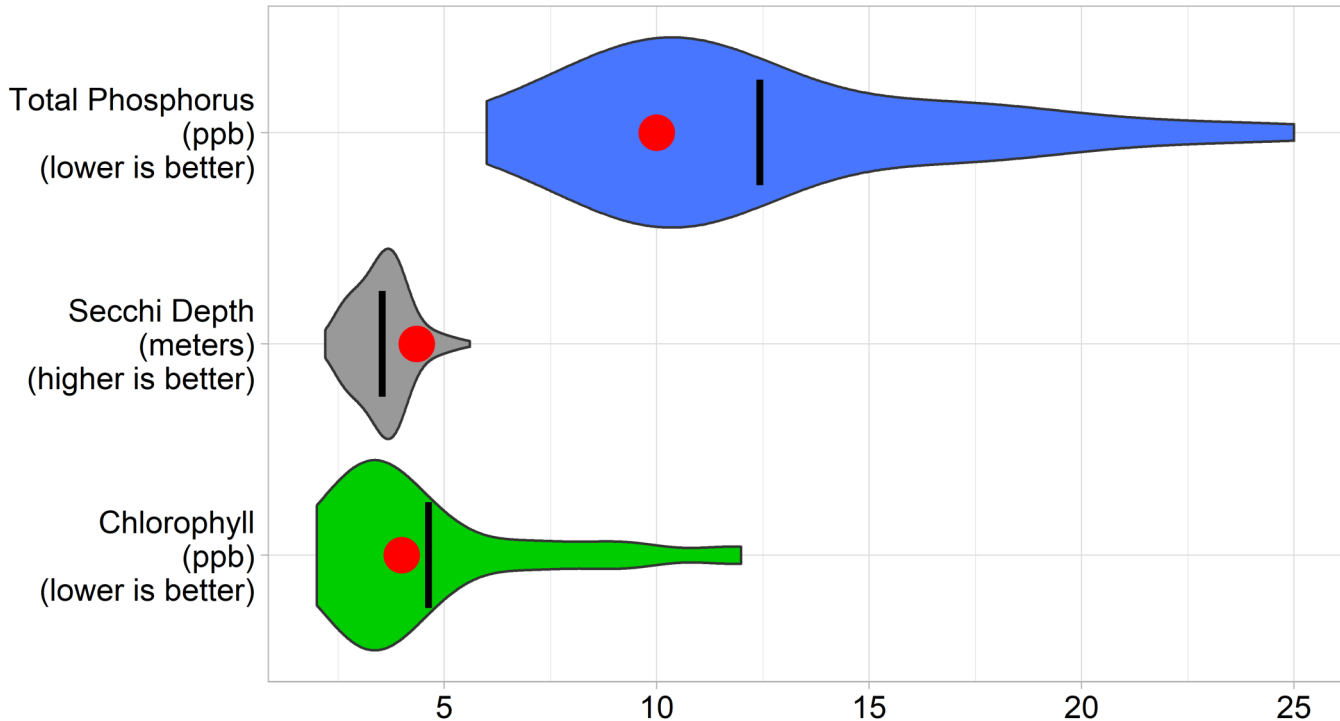
2021 Water Quality Highlights

Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 3.7 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 not significantly above surface water phosphorus values, which suggests phosphorus recycling is not 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 2021 was 48.0 SPU, indicating that water in Mud Pond is highly colored.

Mud Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	13.7	48.0	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water over time

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 2021's average value.

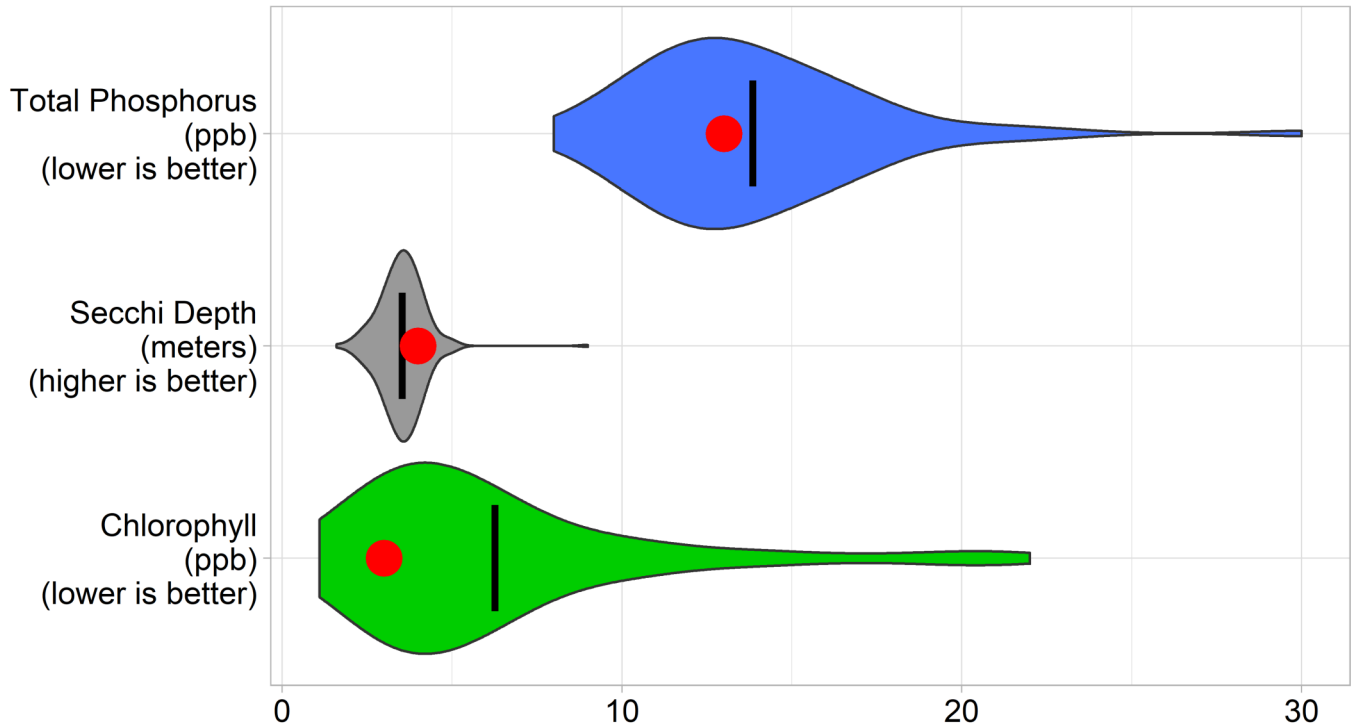
2021 Water Quality Highlights

Otter Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 4.4 meters, which falls into the moderate clarity range. The total phosphorus reading of 10.0 ppb falls into the moderate range. The deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a reading of 4.0 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 2021 was 40 SPU, indicating that water in Otter Pond is highly colored.

Otter Pond's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.0	40.0	Increasing	Stable	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water 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 2021's average value.

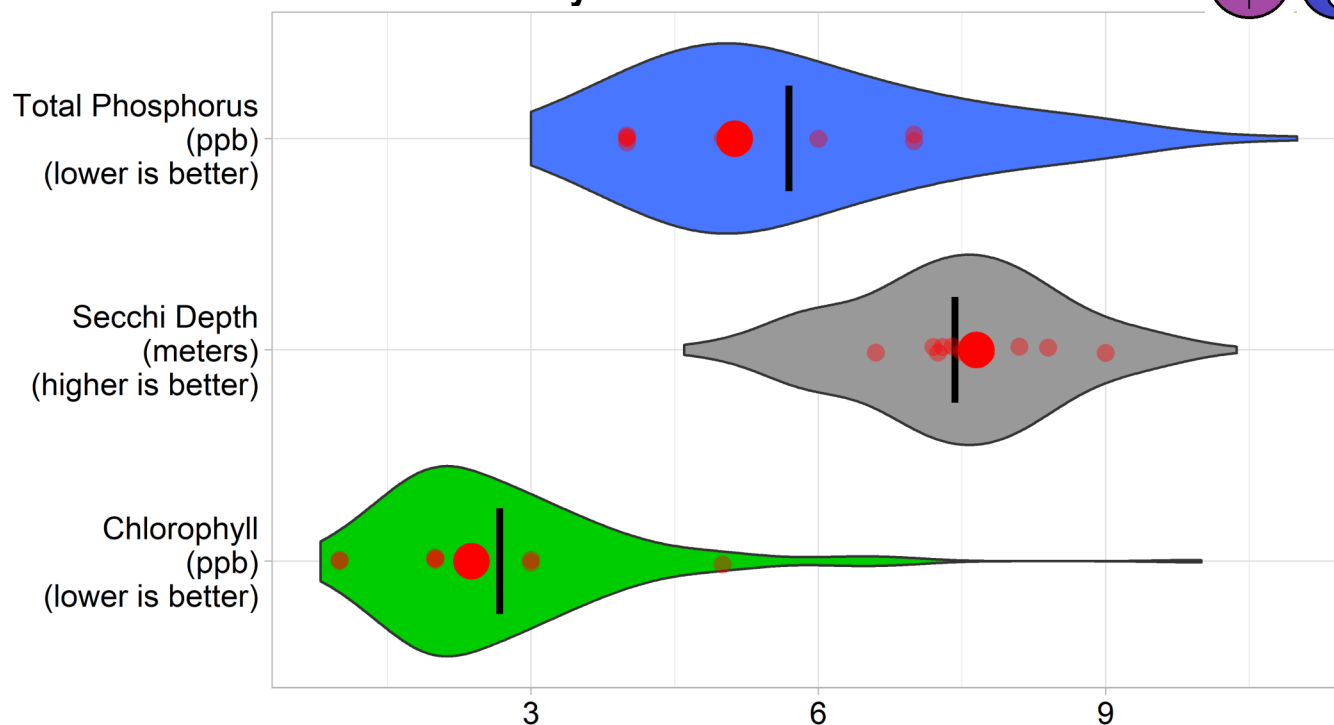
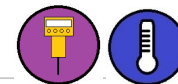
2021 Water Quality Highlights

Papoose Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 4.0 meters, which falls into the moderate range. The Secchi disk did not hit the bottom this year but has infrequently in the past. The total phosphorus reading of 13.0 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 are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The color reading for 2021 was 37.0 SPU, indicating that water in Papoose Pond is highly colored.

Papoose Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	37.0	Increasing	Stable	Stable
Interpretation	Water was moderately colored	Deeper clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

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 2021's average value. The small red dots represent individual readings taken in 2021.

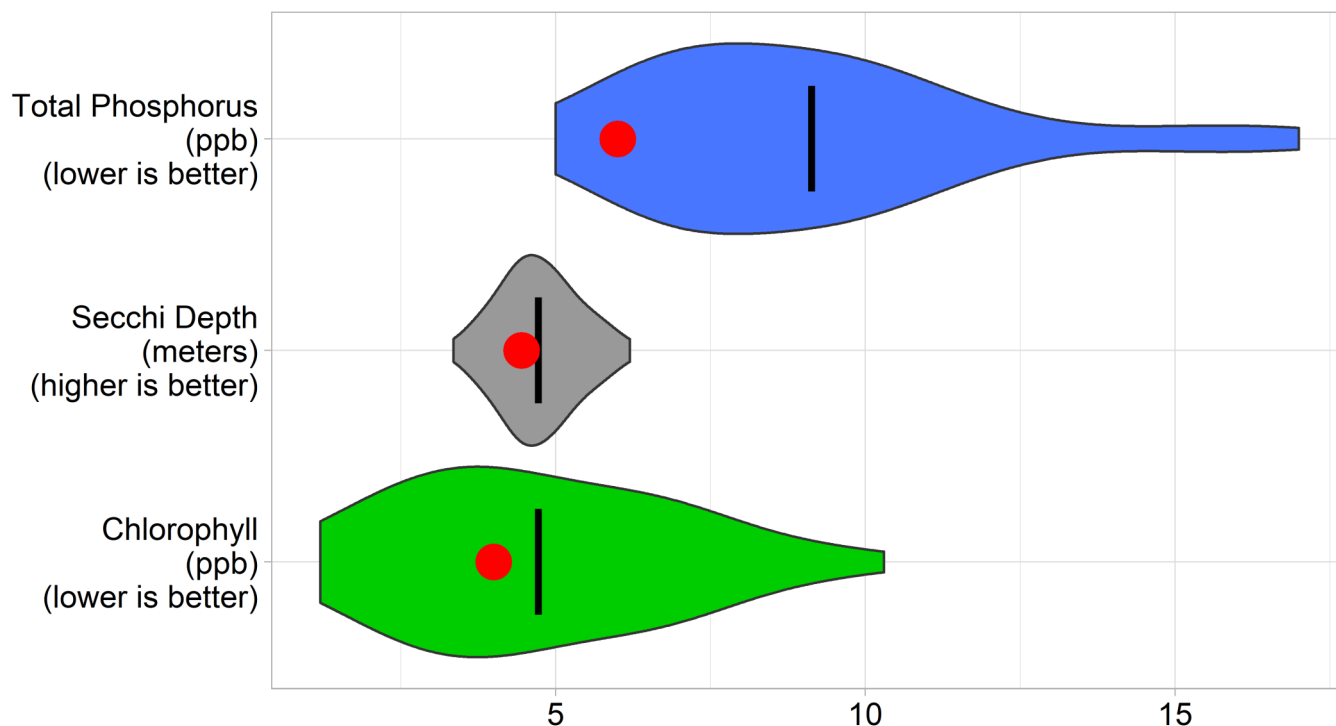
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 7.7 meters, which falls into the high clarity range. The average total phosphorus reading of 5.1 ppb falls in the moderate range. The average deep water phosphorus value was not significantly above 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 Peabody Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2021 was 23.3 SPU, indicating that water in Peabody Pond is moderately colored. Suitable coldwater fish habitat was present from June through September.

Peabody Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.8	23.3	Increasing	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper Secchi readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

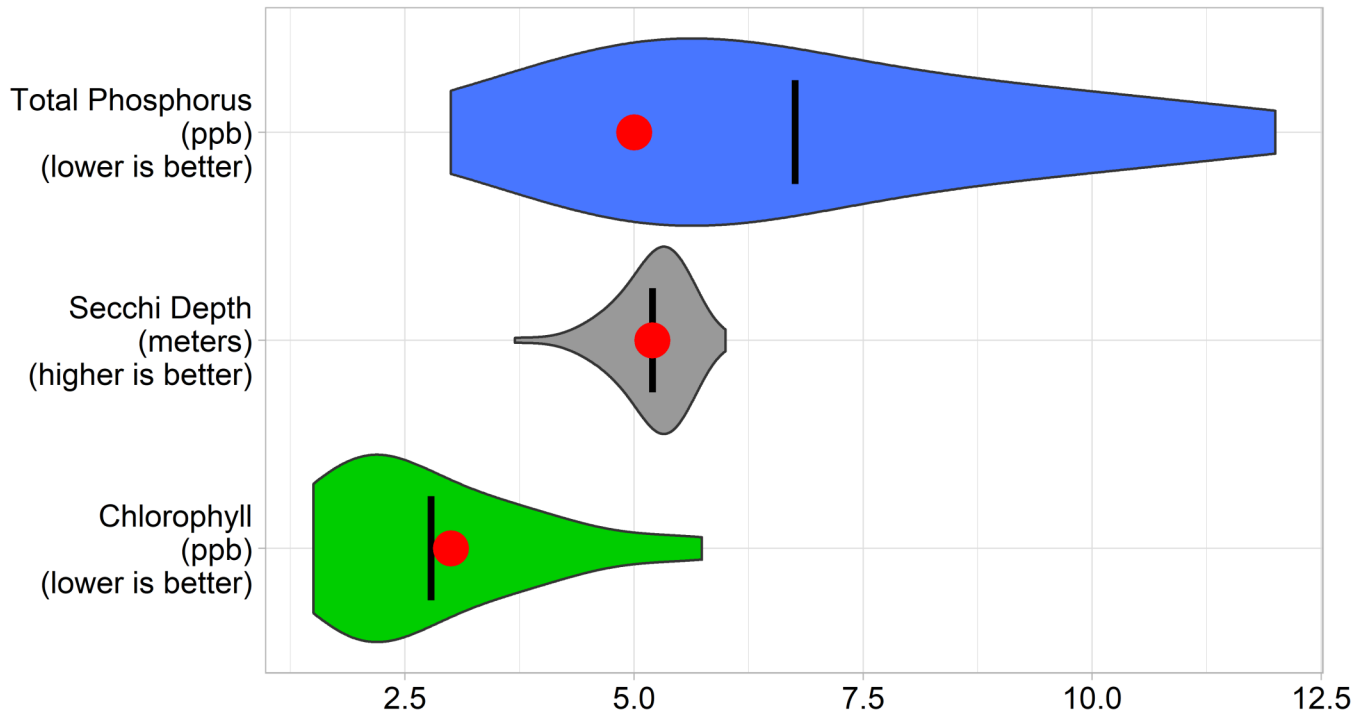
2021 Water Quality Highlights

Perley Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 4.5 meters, which falls into the moderate clarity range. The total phosphorus reading of 6.0 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a reading of 4.0 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 color reading for 2021 was 30.0 SPU, indicating that water in Perley Pond is highly colored.

Perley Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	14.5	30.0	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was highly colored	Neither deeper nor shallower Secchi readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

Pickrel Pond — MIDAS 9687



Pickrel 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 2021's average value.

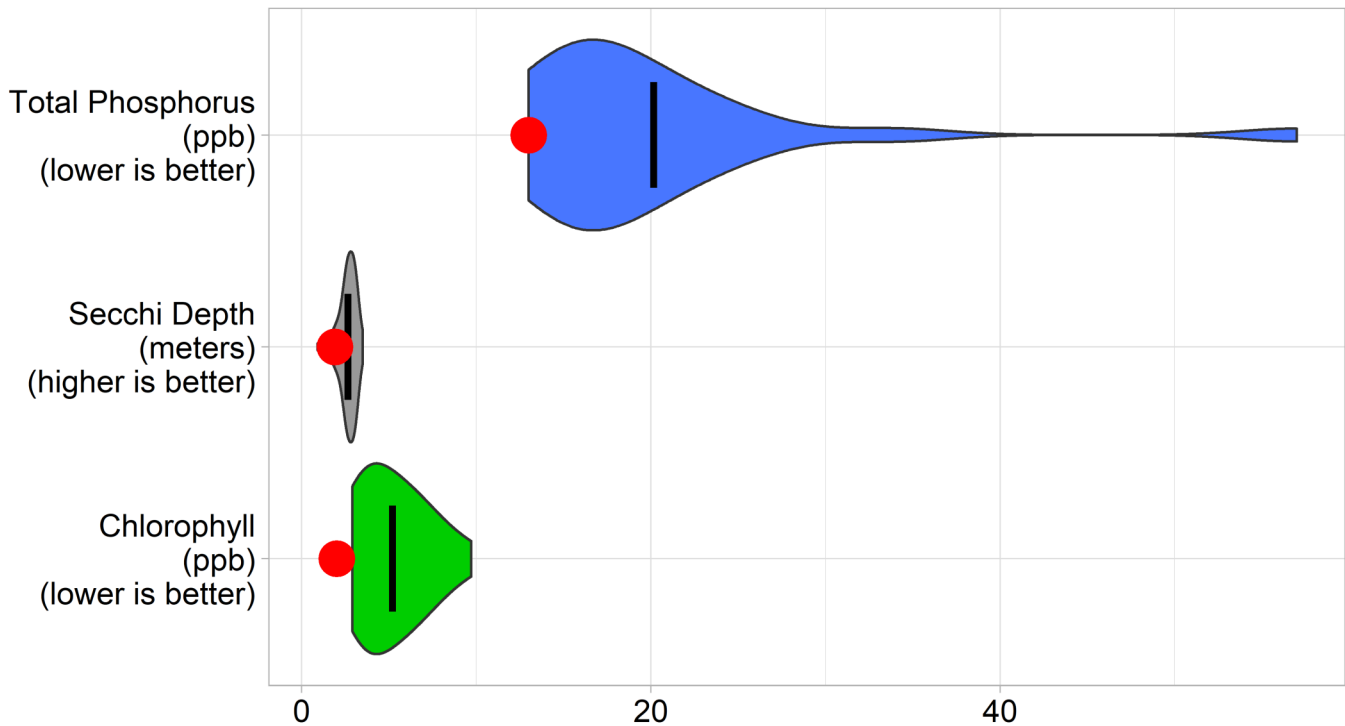
2021 Water Quality Highlights

Pickrel Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2021. The Secchi disk reading for 2021 was 5.2 meters, which falls into the moderate clarity range. The Secchi disk did hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 5.0 ppb falls into the moderate range. The deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a reading of 3.0 ppb falls into the moderate range. Long-term trend analysis indicates chlorophyll-a concentrations are stable and total phosphorus concentrations are increasing. The color reading for 2021 was 40.0 SPU, indicating that water in Pickrel Pond is highly colored.

Pickrel Pond's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.0	40.0	Not Reported	Increasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Secchi disk has hit bottom in past making clarity trend unreliable	More phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

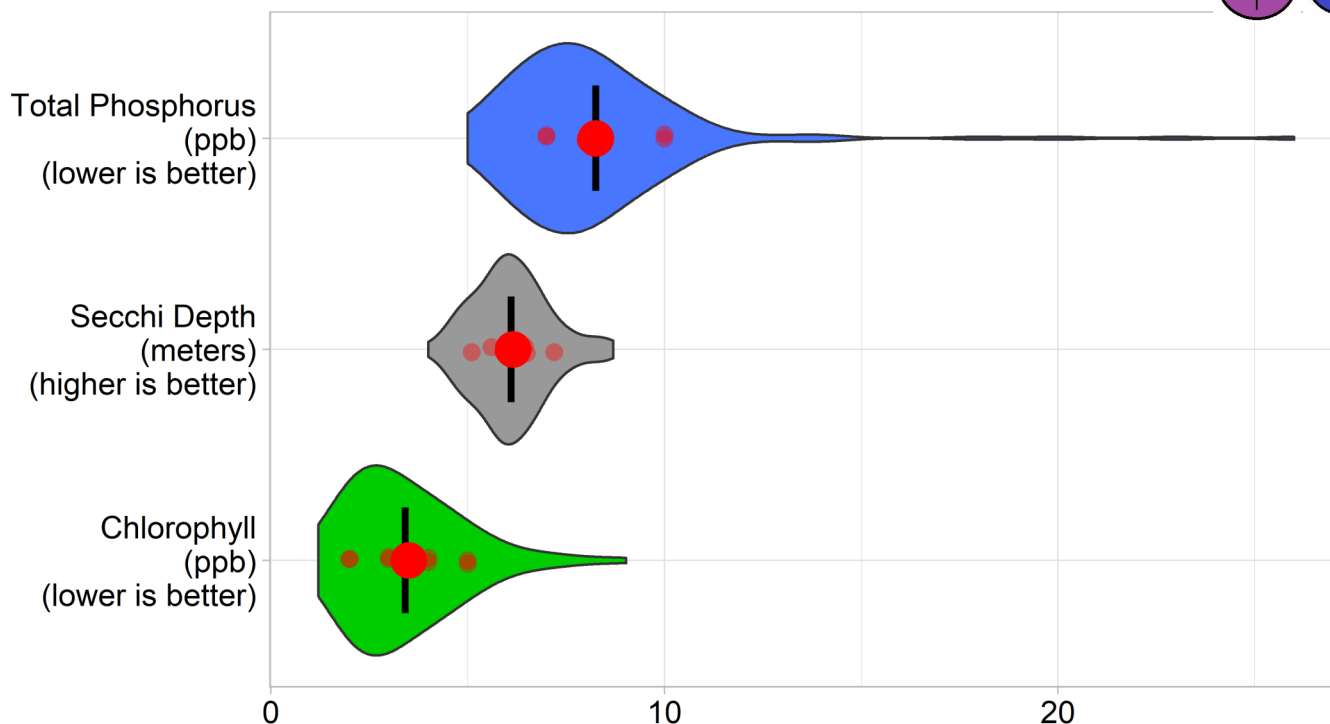
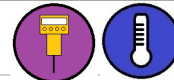
2021 Water Quality Highlights

Pleasant Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2021. The Secchi disk reading for 2021 was 1.9 meters, which falls into the low clarity range. The total phosphorus reading of 13.0 ppb falls into the high range. The chlorophyll-a reading of 2.0 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 2021 was 60.0 SPU, indicating that water in Pleasant Pond is highly colored.

Pleasant Pond's 2021 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	60.0	Decreasing	Stable	Stable
Interpretation	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

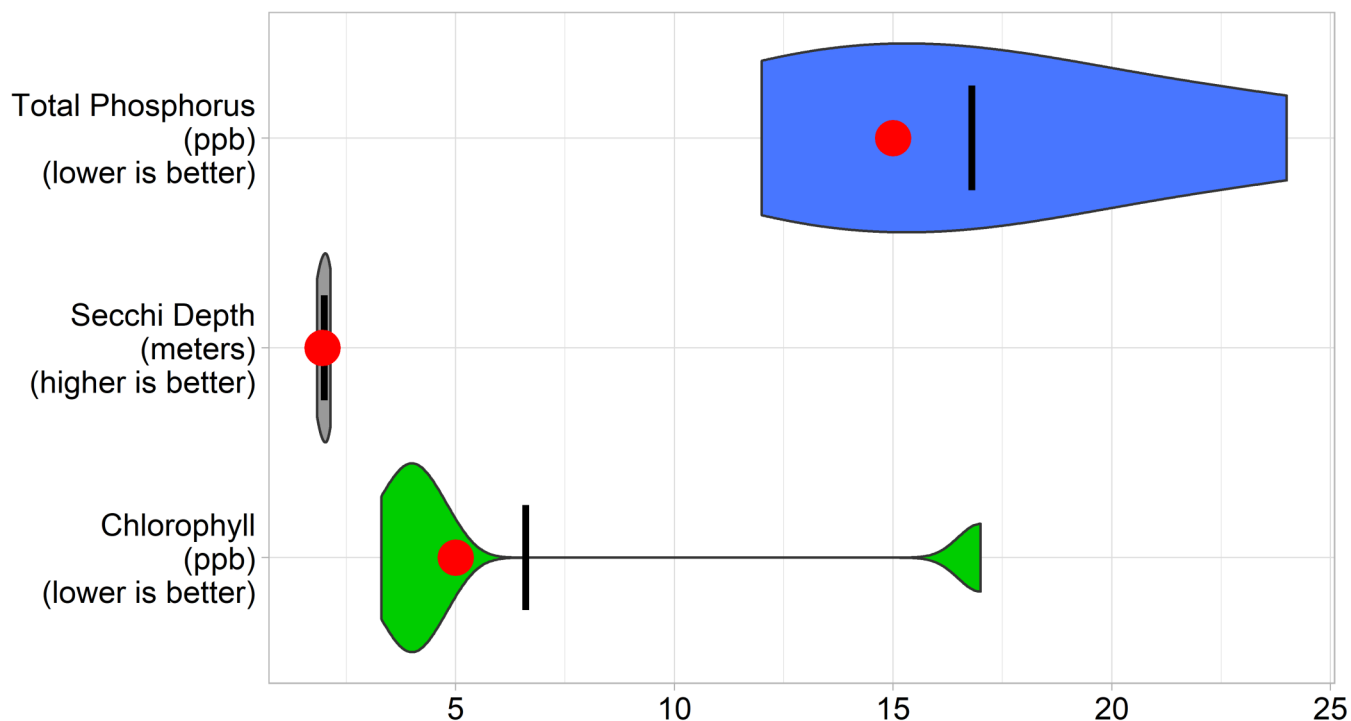
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 6.2 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 not significantly above 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 Sand Pond are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The average color reading for 2021 was 25.3 SPU, indicating that water in Sand Pond is highly colored. Suitable coldwater fish habitat was present through June. In July, warming water temperatures and decreasing deep water oxygen concentrations resulted in coldwater fish habitat becoming marginal and then unsuitable. Unsuitable conditions persisted through September.

Sand Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.0	25.3	Decreasing	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Shallower clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value.

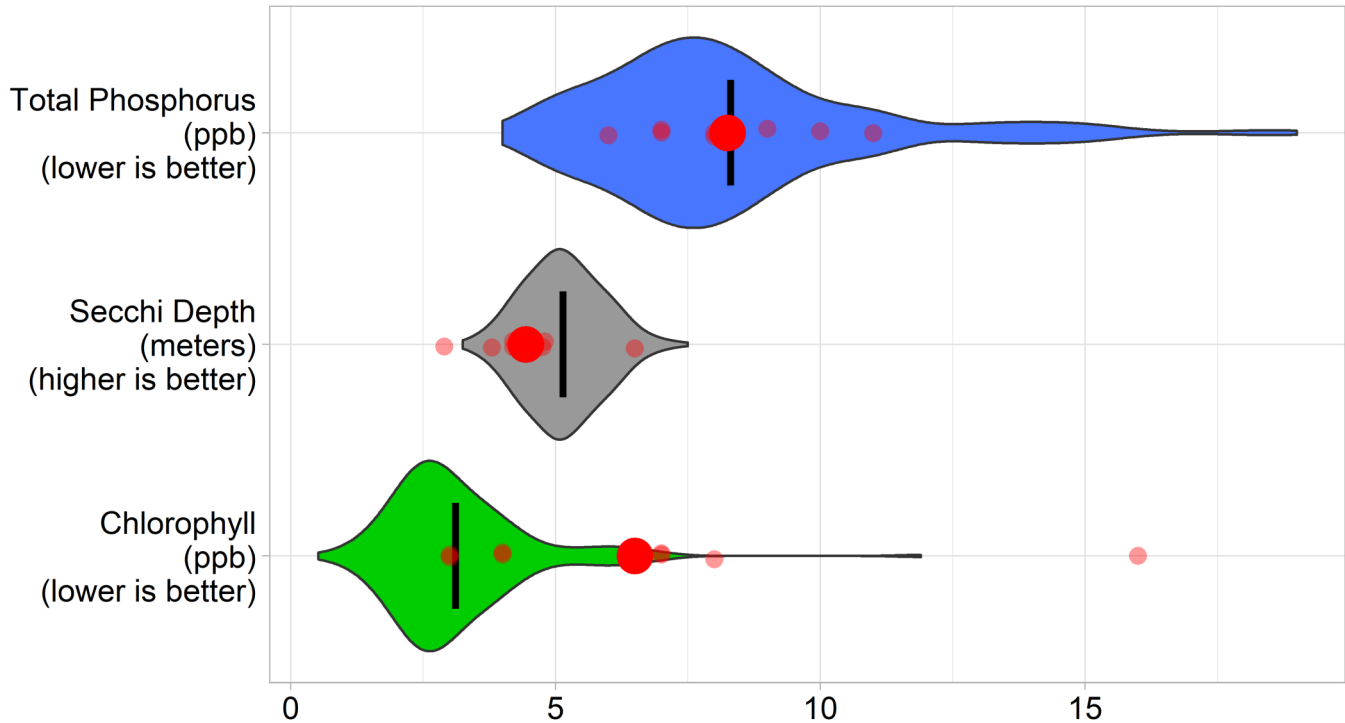
2021 Water Quality Highlights

Sebago Cove is sampled by LEA once per year in August. The long-term average reflects data from 2016 to 2021. The Secchi disk reading for 2021 was 2.0 meters. The Secchi disk hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 15.0 ppb falls into the high range. The chlorophyll-a reading of 5.0 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 5-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 2021 was 40.0 SPU, indicating that water in Sebago Cove is highly colored.

Sebago Cove's 2021 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 has hit bottom making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

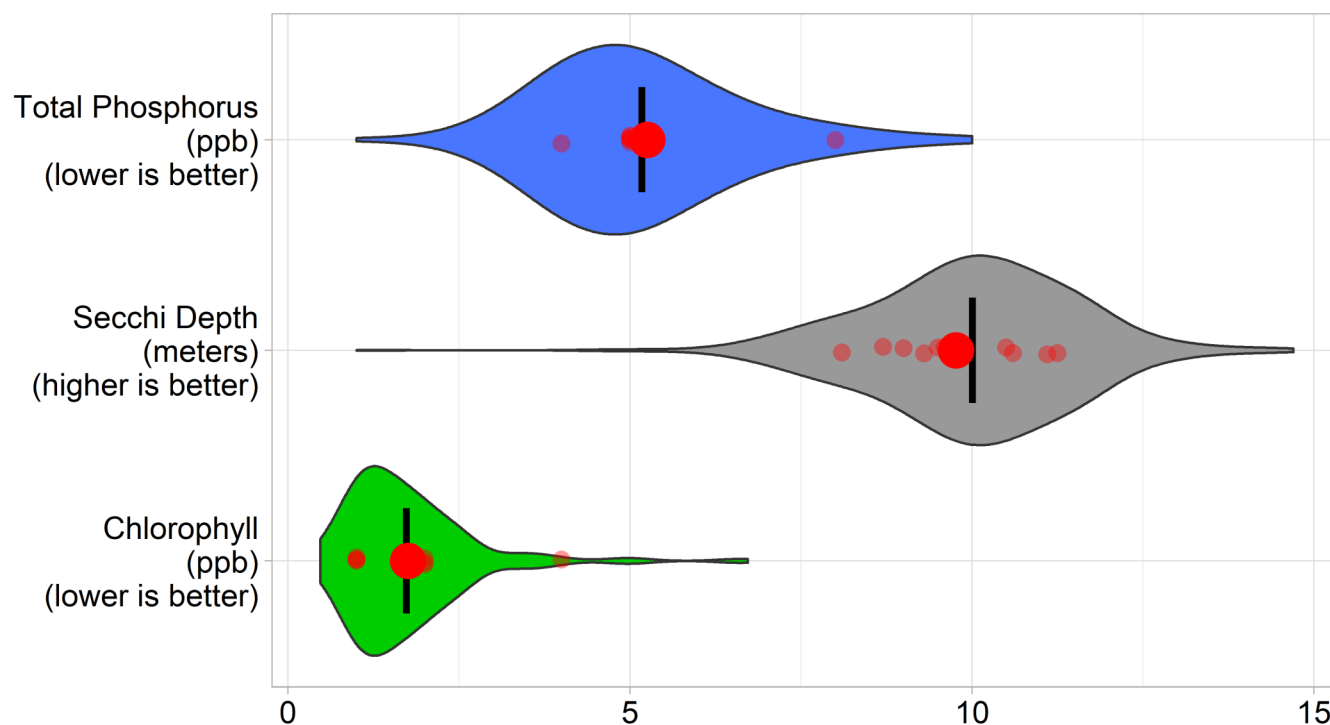
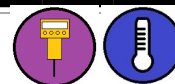
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 4.4 meters, which falls into the moderate range. The average total phosphorus reading of 8.3 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 6.5 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 2021 was 32.4 SPU, indicating that water in Stearns Pond is highly colored. Suitable coldwater fish habitat was present from June through July and became unsuitable in August through September.

Stearns Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.8	32.4	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

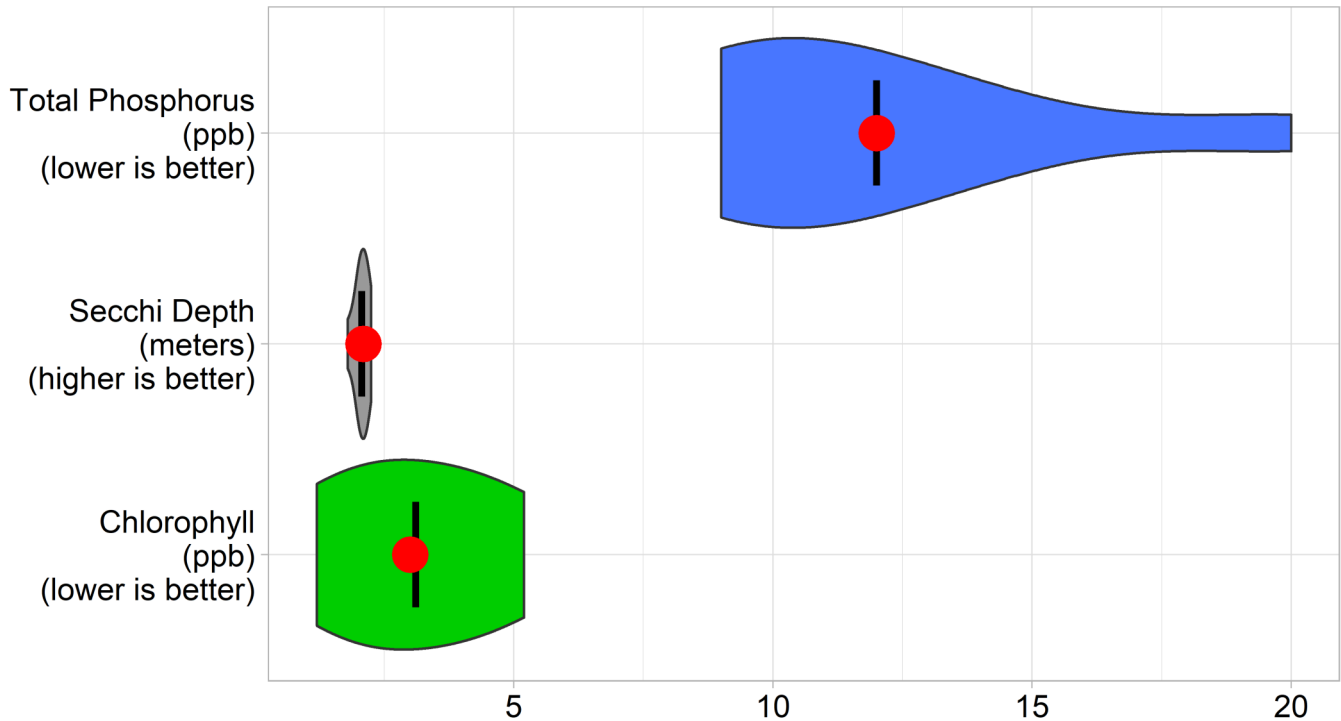
2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 9.8 meters, which falls into the high clarity range. The average total phosphorus reading of 5.3 ppb falls into the moderate range. The average deep water phosphorus value was not significantly above surface water phosphorus values, which suggests phosphorus recycling is not problematic. The chlorophyll-a average of 1.8 ppb falls into the low range. Long-term trend analysis indicates chlorophyll-a concentrations in Trickey Pond are increasing, total phosphorus concentrations are decreasing, and clarity readings are decreasing. The average color reading for 2021 was 24.0 SPU, indicating that water in Trickey Pond fell into the moderate color range. Suitable fish habitat was present from June through September.

Trickey Pond's 2021 Quick Stats

	Average Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	8.2	24.0	Decreasing	Decreasing	Increasing
Interpretation	Within acceptable range	Water color fell into the moderate	Shallower clarity readings over	Less phosphorus in	More chlorophyll in water 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 2021's average value.

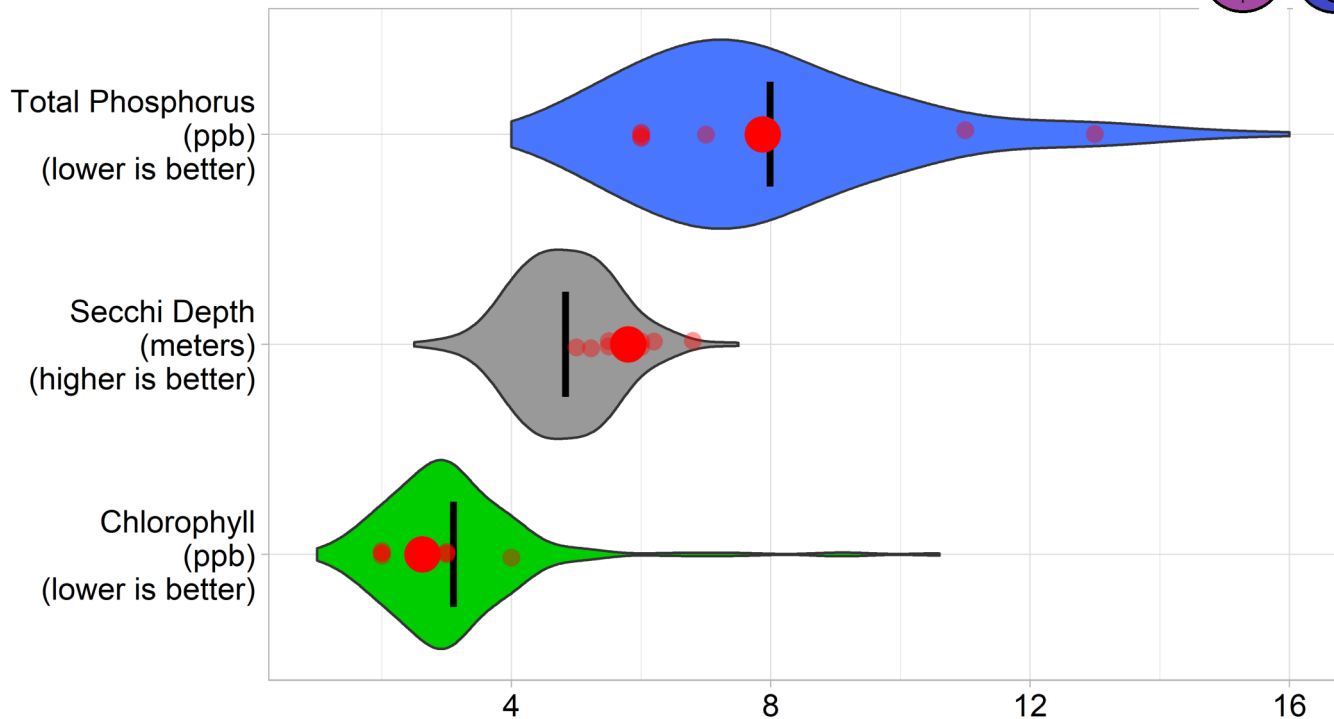
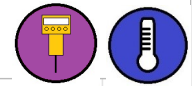
2021 Water Quality Highlights

Webber Pond is sampled by LEA once per year in August. The long-term average reflects data from 2013 to 2021. The Secchi disk reading for 2021 was 2.1 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 12.0 ppb falls into the moderate 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 2021 was 40.0 SPU, indicating that water in Webber Pond is highly colored.

Webber Pond's 2021 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 has hit bottom making clarity trend unreliable	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water 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 2021's average value. The small red dots represent individual readings taken in 2021.

2021 Water Quality Highlights

The average Secchi disk reading for 2021 was 5.8 meters, which falls into the moderately clear range. The average total phosphorus reading of 7.9 ppb falls into the moderate range. The deep water phosphorus value was not significantly 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 Woods Pond are stable, total phosphorus concentrations are increasing, and clarity readings are stable. The average color reading for 2021 was 30.4 SPU, indicating that water in Woods Pond is highly colored. Coldwater fish habitat was marginal for a few weeks in June but became unsuitable by July and remained that way through September.

Woods Pond's 2021 Quick Stats

	Deep Water Phosphorus (ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.0	30.4	Stable	Increasing	Stable
Interpretation	Within acceptable range	Water was highly colored	Neither shallower nor deeper clarity readings over time	More phosphorus in water over time	Neither more nor less chlorophyll in water over time