

2020 Water Testing Report

Lakes Environmental Association



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Chapter 2 – High-resolution Automated Monitoring Buoys

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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!**

2020 Volunteer Monitors and Lake Partners

Richard and Andy Buck	Ethan Judd	Nancy Pike
Papoose Pond Campground	Bill Ames and Paulina Knibbe	Jean Preis
Steve Cavicchi	Bob Mahanor	Jean Schilling
Jeff and Susan Chormann	Amy March	Linda and Orrin Shane
Janet Coulter	Julie and Dan McQueen	Foster and Marcella Shibles
Joe and Carolee Garcia	Bob Mercier	Bob Simmons
Carol Gestwicki	Michael Neilson	Tom Straub
Shelley Hall	Barry and Donna Patrie	Don and Pat Sutherland
Five Kezar Ponds Watershed Association	Keoka Lake Association	Moose Pond Association
Hancock and Sand Ponds Association	Keyes Pond Environmental Protection Association	Peabody Pond Protective Association
Island Pond Association	McWain Pond Association	Trickey Pond Environmental Protection Association
	Woods Pond Water Association	

2020 Water Testing Crew

Shannon Nelligan Addie Casali Garrett Higgins





About LEA

The Lakes Environmental Association (LEA) is a non-profit organization founded in 1970 with the goal of preserving and restoring high water quality and traditional character of Maine's lakes, watersheds and related natural resources. 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

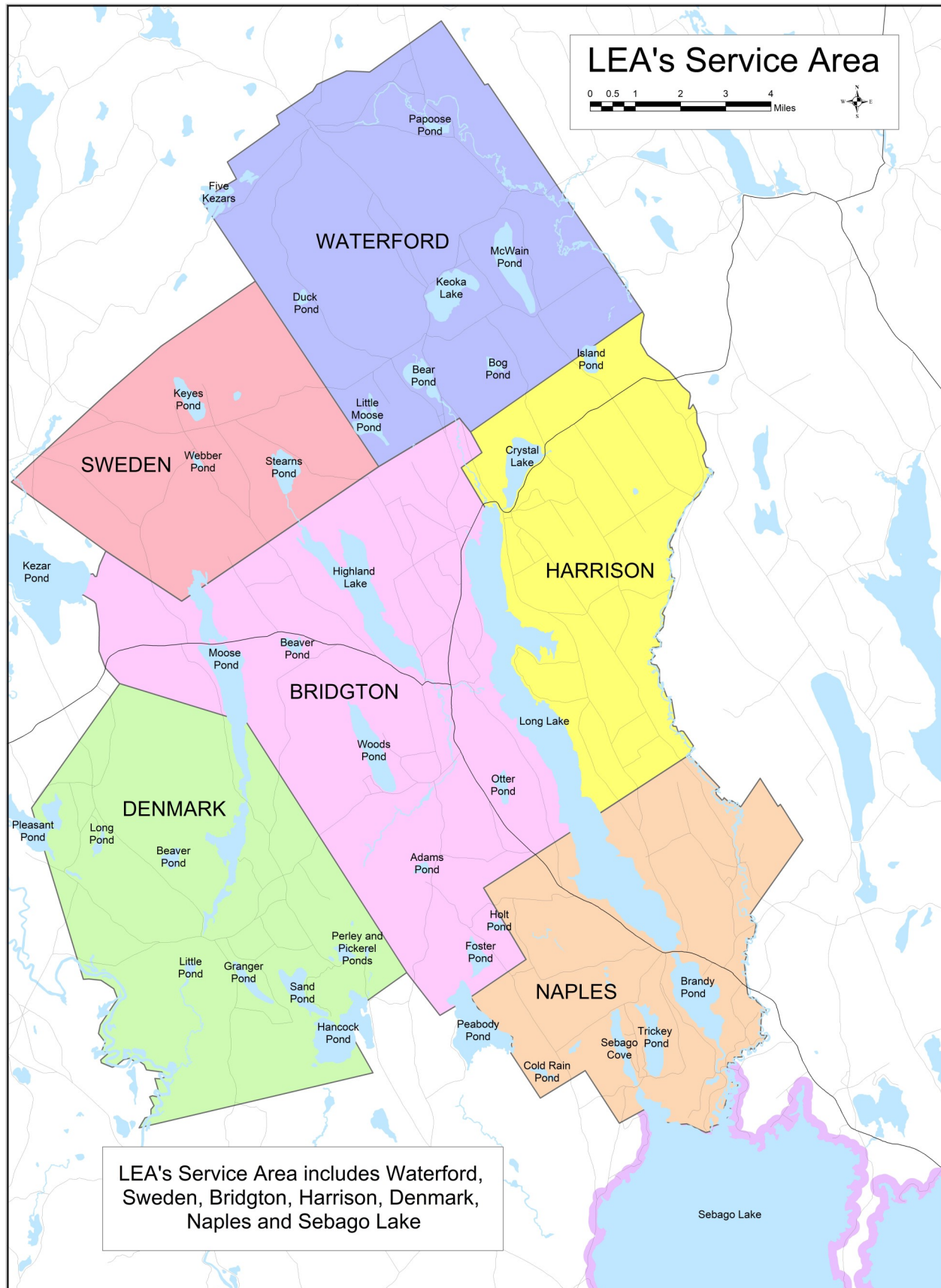
Every summer, LEA hires over 30 courtesy boat inspectors to educate boaters at public boat launches about invasive plants and help them perform inspections on their watercraft. This program, begun by LEA, has been adopted across the state.

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.



Water Quality at a Glance — Biweekly Monitoring

Lake	2020 Avg . Clarity	2020 Avg. Phosphorus	2020 Avg. Chlorophyll-a	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
ADAMS POND	High	Moderate	Low	Increasing	Stable	Stable
BACK POND	Moderate	Moderate	Low	Increasing	Decreasing	Stable
BEAR POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
BRANDY POND	Moderate	Low	Moderate	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	Moderate	Low	Moderate	Increasing	Stable	Decreasing
HIGHLAND LAKE	Moderate	Moderate	Moderate	Increasing	Stable	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	Moderate	Moderate	Moderate	Stable	Stable	Stable
LONG LAKE (North)	Moderate	Moderate	Moderate	Stable	Stable	Decreasing
LONG LAKE (Middle)	Moderate	Moderate	Moderate	Stable	Stable	Stable
LONG LAKE (South)	Moderate	Low	Moderate	Stable	Decreasing	Stable
McWAIN POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
MIDDLE POND	Moderate	Moderate	Moderate	Increasing	Stable	Decreasing
MOOSE POND (Main)	High	Low	Moderate	Stable	Decreasing	Decreasing
MOOSE POND (North)	Moderate	Moderate	Moderate	Stable	Stable	Stable
MOOSE POND (South)	Moderate	Moderate	Moderate	Stable	Stable	Stable
PEABODY POND	High	Low	Moderate	Increasing	Stable	Stable
SAND POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
STEARNS POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
TRICKEY POND	High	Low	Low	Decreasing	Decreasing	Increasing
WOODS POND	Moderate	Moderate	Moderate	Stable	Increasing	Stable

Water Quality at a Glance – Annual Monitoring

Lake	2020 Clarity	2020 Phosphorus	2020 Chlorophyll	Long Tem Clarity Trend	Long-term Phosphorus Trend	Long-term Chlorophyll Trend
BEAVER POND (Bridgton)	Moderate	Moderate	Moderate	Increasing	Stable	Stable
BEAVER POND (Denmark)	*	Moderate	Moderate	Decreasing	Stable	Stable
BOG POND	*	High	High	Stable	Stable	Stable
COLD RAIN POND	Moderate	Moderate	Moderate	Stable	Stable	Increasing
DUCK POND	Low	Very high	Very high	Stable	Increasing	Stable
HOLT POND	Low	High	Moderate	Stable	Stable	Stable
JEWETT POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
KEZAR POND	*	High	Moderate	Stable	Stable	Stable
LITTLE POND	*	High	Moderate	Stable	Stable	Stable
LITTLE MUD POND	Low	High	Moderate	Decreasing	Stable	Stable
LONG POND	Moderate	Moderate	Moderate	Decreasing	Stable	Stable
MUD POND	Moderate	Moderate	Moderate	Stable	Stable	Stable
OTTER POND	Moderate	Moderate	Moderate	Increasing	Stable	Decreasing
PAPOOSE POND	Moderate	High	High	Increasing	Stable	Stable
PERLEY POND	Moderate	Moderate	Moderate	Stable	Decreasing	Decreasing
PICKEREL POND	*	Low	Moderate	Stable	Increasing	Stable
PLEASANT POND	Low	High	Moderate	Decreasing	Stable	Stable
SEBAGO COVE	*	Very high	Very high	Stable	Stable	Stable
WEBBER POND	*	Moderate	Moderate	Stable	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.

Key to Water Quality at a Glance Table

Chlorophyll-a and Phosphorus Trends: Available data from 1996-2020 were analyzed to determine if chlorophyll-a and phosphorus trends indicate increasing, decreasing, or stable concentrations 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 1996-2020 were analyzed to determine if clarity trends indicate increasing, decreasing, or stable depth trends over time. Clarity is measured in meters (m). Higher numbers indicate clearer water.

Increasing = deeper clarity readings over time

Stable = clarity readings are neither deeper nor shallower over time

Decreasing = shallower clarity readings over time

2020 Average Chlorophyll-a concentrations, Phosphorus concentrations, Color and Clarity readings: Chlorophyll-a and phosphorus concentrations throughout the 2020 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 per billion (ppb)		Color in Standard Platinum Units (SPU)	
10.0 +	Very high	less than 5.0	Low	less than 2.0	Low	Less than 10.0	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 3.0	Low	20.1 +	Very high	12.1 +	Very high	60.1+	Very high

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

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.

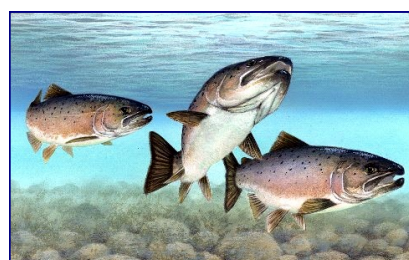
When oxygen levels are low at the bottom of the lake, as often happens later in the summer, a chemical reaction occurs that releases stored phosphorus from sediments. However, due to the density barrier at the metalimnion, these nutrients do not move easily into the epilimnion.



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.



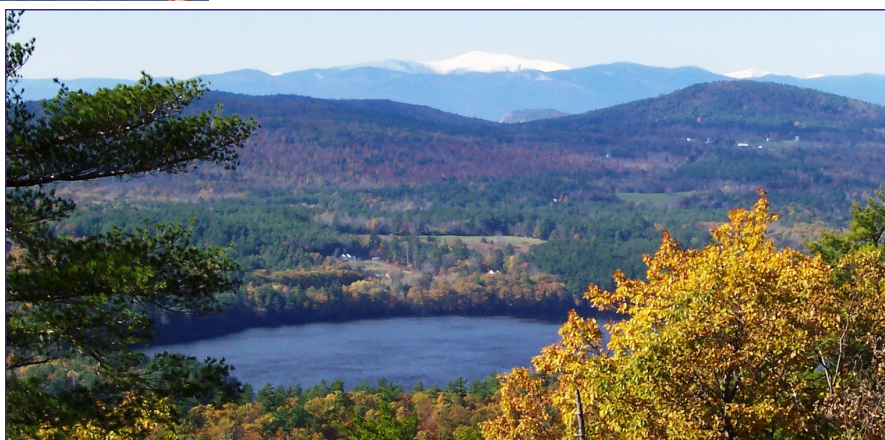
Spring is a period of rejuvenation for the lake. After the ice melts, all of the water is nearly the same temperature from top to bottom. During this period, strong winds can thoroughly mix the water column allowing for oxygen to be replenished throughout the entire lake.



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 2020 Water Testing Report



Chapter 1 – Routine Monitoring Results

Water Quality Testing Parameters

LEA's testing program is based on parameters that provide a comprehensive indication of overall lake health. Tests are conducted for transparency, temperature, oxygen, phosphorus, chlorophyll-*a*, color, conductivity, pH, and alkalinity.

Clarity is a measure of water transparency. It is determined with a Secchi disk and measured in meters. Clarity is affected by water color and the presence of algae and suspended particles.

Temperature is measured at one-meter intervals from the surface to the bottom of the lake. This data is used to assess thermal stratification. Lakes deep enough to stratify will divide into three distinct layers: the epilimnion, metalimnion, and hypolimnion. The epilimnion (upper layer) is comprised of the warm surface waters. The hypolimnion is made up of the deep, colder waters. The metalimnion, also known as the thermocline, is a thin transition zone of rapidly decreasing temperature between the upper and lower layers. Temperature is recorded in degrees Celsius.

Chlorophyll-*a* is a pigment found in all algae. Chlorophyll (the *-a* is dropped for simplicity) sampling in a lake 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 with a core tube and are made up of water 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). Surface-layer phosphorus samples are collected with a core tube, while deep-water phosphorus samples are taken at individual depths using a grab sampler. Surface-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 average core phosphorus), 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.

Color is a measure of tannic or humic acids in the water.

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.

2020 as a Year

Despite an array of challenges presented by the COVID-19 crisis, our 2020 summer water testing interns embraced coronavirus safety protocols and diligently collected: 292 secchi readings; 231 oxygen and temperature profiles; 231 hypolimnetic core samples (all of which were analyzed for color, pH, conductivity, alkalinity, total phosphorus concentration, and chlorophyll concentration); 64 fluorometer profiles, 149 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 marked by social distance and public health crisis!

COVID aside, 2020 saw warmer than average air temperature, highly variable wind patterns, with stronger winds coming from the NW and SE. The 2020 water testing season began after a low-snowfall winter, which contributed to early season drought conditions. We did receive substantial rainfall and stormy weather in June, July, and August, which helped ease drought conditions in mid-summer; however, dry conditions returned in September.

In 2020, 85% of the lakes we monitor bi-weekly had either stable or increasing (deeper) clarity trends, 96% 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 (deeper) clarity trends, 89% had either stable or decreasing total phosphorus trends, and 95% had either stable or decreasing chlorophyll-*a* trends.

The water testing results for 2020 show a great year for water quality in the Lakes Region. This is likely due, in large part, to the drought. Rainfall and storm events bring nutrients and sediments into lakes so water quality often improves in dry periods.

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



Interpreting the Summaries

Water Quality Classification

Each lake's clarity, chlorophyll, and phosphorus readings will be discussed in the 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.

Clarity in meters (m)		Phosphorus in parts per billion (ppb)		Chlorophyll-a in parts per billion (ppb)		Color in Standard Platinum Units (SPU)	
10.0 +	Very high	less than 5.0	Low	less than 2.0	Low	Less than 10.0	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 3.0	Low	20.1 +	Very high	12.1 +	Very high	60.1+	Very high

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

Trends and Long-Term Averages

Lake summaries include an explanation of clarity, chlorophyll, and phosphorus trends. Trends are determined for each lake that has been visited bi-weekly for multiple years in a row. These trends are a regression analysis of all data that has been collected by LEA on that lake or pond since 1996 (or later if data is unavailable for earlier years). If the p-value of the regression is less than 0.05, it is an increasing or decreasing trend (depending on the direction of the trend). If the p-value is above 0.05, there is no significant trend and that parameter is considered stable. These trends show water quality changes over time.

On lakes that are only visited once annually, the long term average is compared to current water quality conditions. The long-term average is a simple mean of all the data we have on record for each 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. A t-test was used to compare 2020 average values against long-term average values. This shows us if 2020 data is significantly different than historic data. If the p-value is above 0.05, there is no significant difference between 2020 averages and long-term averages. If the p-value is below 0.05, there is a significant difference between 2020 averages and long-term averages.

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.

Individual Lake Summaries

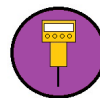
The following pages present 2020 routine monitoring data by lake. Graphs or charts have been included in the individual summary information to help show particular conditions or trends. You will also see the following symbols in the top right corner of some pages. These symbols indicate that additional data for that lake is available in chapters 2–4.



This symbol indicates that the lake has a high-resolution monitoring buoy. Further information is available in Chapter 2.

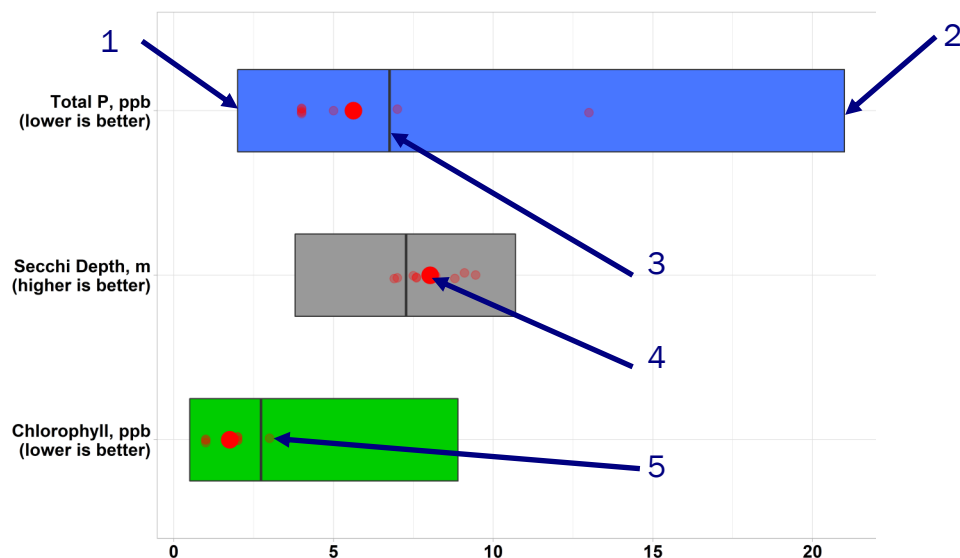


This symbol indicates that a series of temperature sensors was deployed in the lake in 2020. More information is available in Chapter 3.



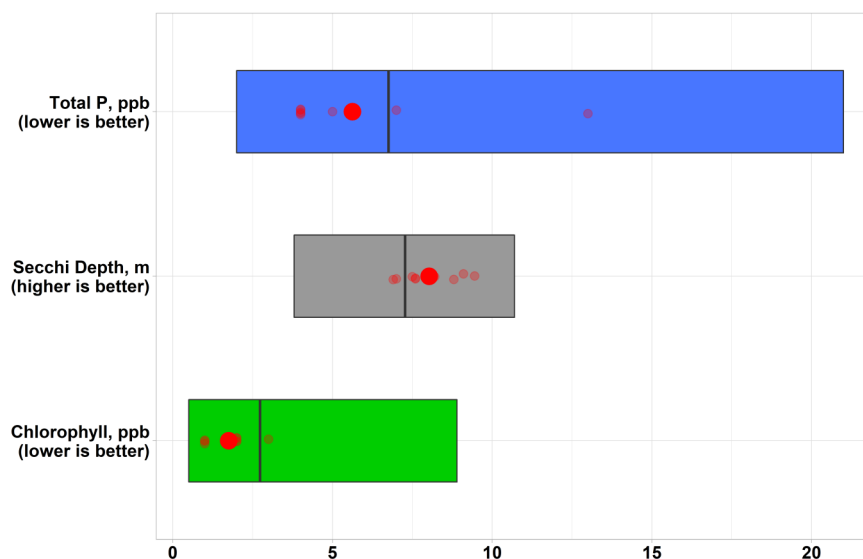
This symbol indicates that fluorometer profiles were taken from the lake in 2020. Fluorometer results are discussed in Chapter 4.

Reading and Interpreting Graphs



1. lowest value in the data set—far left edge of colored rectangle
2. Highest value in the data set—far right edge of colored rectangle
3. Average value in the data set—black bar bisecting rectangle
4. Current year's average value—large red dot
5. Past year's average values—smaller red dots

Adams Pond



Surface Area:	43 acres
Maximum Depth :	51 feet
Mean Depth:	27 feet
Volume:	955 acre-feet
Watershed Area:	196 acres
Flushing Rate:	0.54 flushes per year
Elevation:	640 feet

Adams Pond surface water chlorophyll, phosphorus, and Secchi depth data summary
Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Adams Pond. The line represents the long-term average value obtained and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

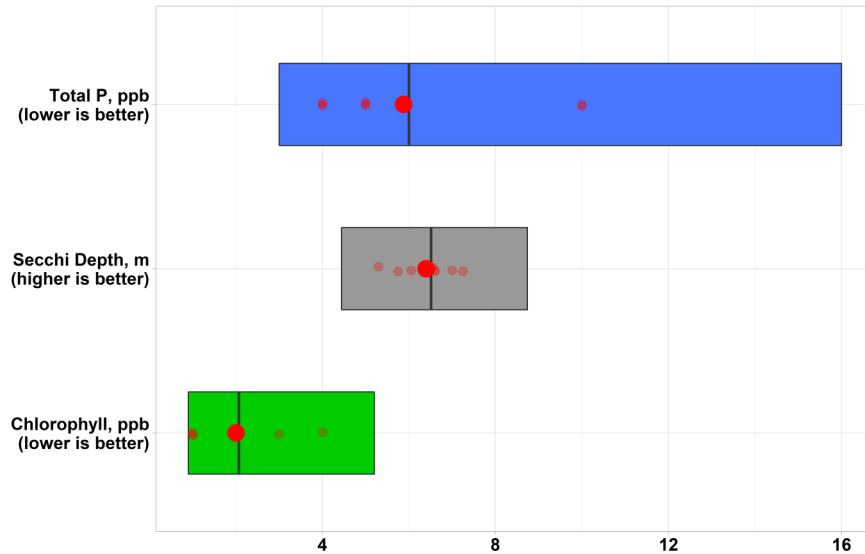
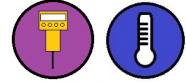
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 8.03 meters, fell into the high clarity range, and was deeper than the long-term average of 7.23 meters. The average total phosphorus reading of 5.63 ppb fell into the moderate range and was less than the long-term average of 6.75 ppb. 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 1.80 ppb fell into the low range and was less than the long-term average of 2.78 ppb. 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 2020 was 12.1 SPU, indicating that water in Adams Pond is moderately colored. Suitable coldwater fish habitat was present through mid-August and became marginal for the duration of the season. Low oxygen conditions were present in deep water from June through September.

Adams Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	13.00	12.1	Increasing	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper Secchi readings over time	Neither less nor more phosphorus in water over time	Neither less nor more chlorophyll in water over time

Back Pond



Surface Area:	62 acres
Maximum Depth:	33 feet
Watershed Area:	584 acres
Elevation:	572 feet

Back Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Back Pond. The line represents the long-term average value obtained and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

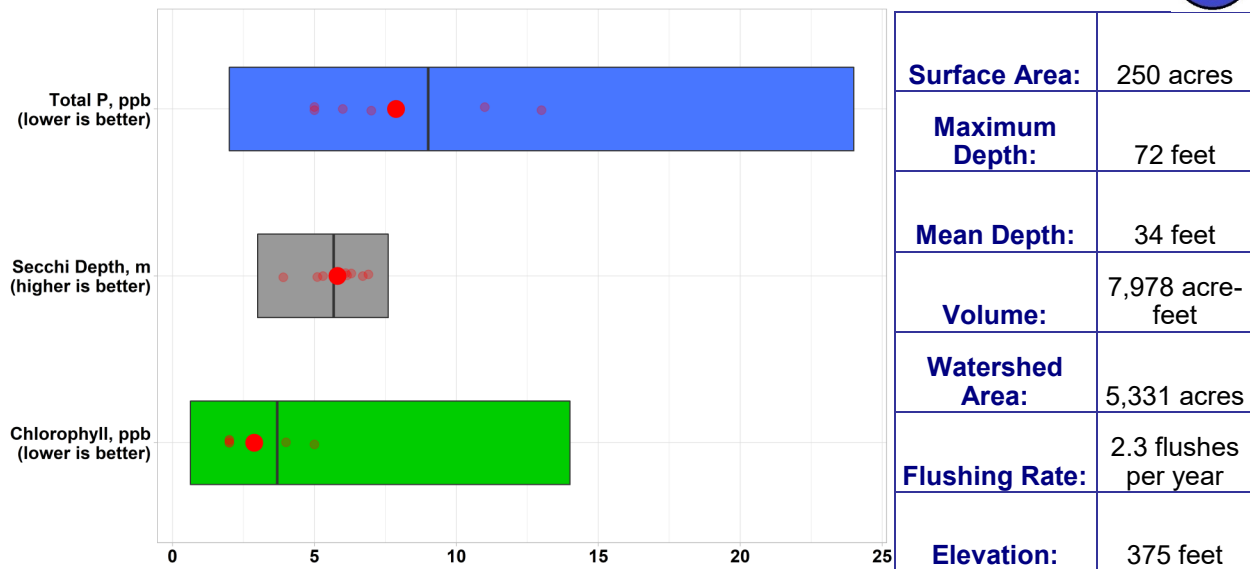
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.40 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.51 meters. The average total phosphorus reading of 5.88 ppb fell into the moderate range and was less than the long-term average of 6.00 ppb. 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 2.00 ppb fell into the low range and was less than the long-term average of 2.10 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Back Pond are stable, total phosphorus concentrations are decreasing, and clarity readings are increasing. The average color reading for 2020 was 19.00 SPU, indicating that water in Back Pond is moderately colored. Low oxygen conditions were present in deep water from July through September. However, suitable coldwater fish habitat throughout the season.

Back Pond's Quick Stats

	Deep Water Phosphorus (average in PPB)	Water Color	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.25	19.00	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper Secchi readings over time	Less phosphorus over time	Neither more nor less chlorophyll over time

Bear Pond



Bear Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Bear Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

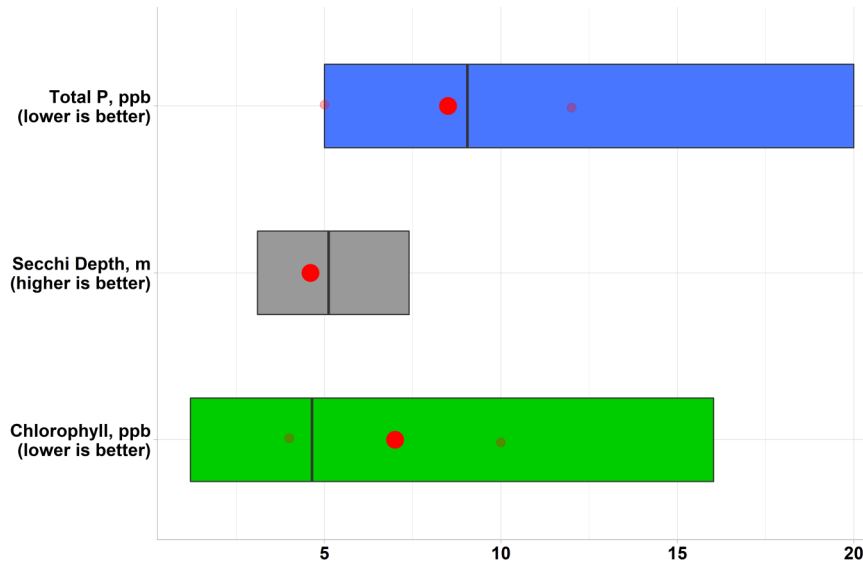
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.81 meters, fell into the moderately clear range, and was deeper than the long-term average of 5.68 meters. The average total phosphorus reading of 7.88 ppb fell into the moderate range and was less than the long-term average of 9.01 ppb. 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 2.88 ppb fell into the low range and was less than the long-term average of 3.61 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Bear Pond are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2020 was 18.13 SPU, indicating that water in Bear Pond is moderately colored. Suitable coldwater fish habitat was present through September; however, low oxygen conditions were present in deep water from July through September.

Bear Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.88	18.13	Stable	Stable	Stable
Interpretation	Within acceptable range.	Water was moderately 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

Beaver Pond – Bridgton



Surface Area:	69 acres
Maximum Depth:	35 feet
Watershed Area:	1,648 acres
Flushing Rate:	3.7 flushes per year
Elevation:	473 feet

Beaver Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Beaver Pond. The line represents the long-term average value and the dot represents 2020's value.

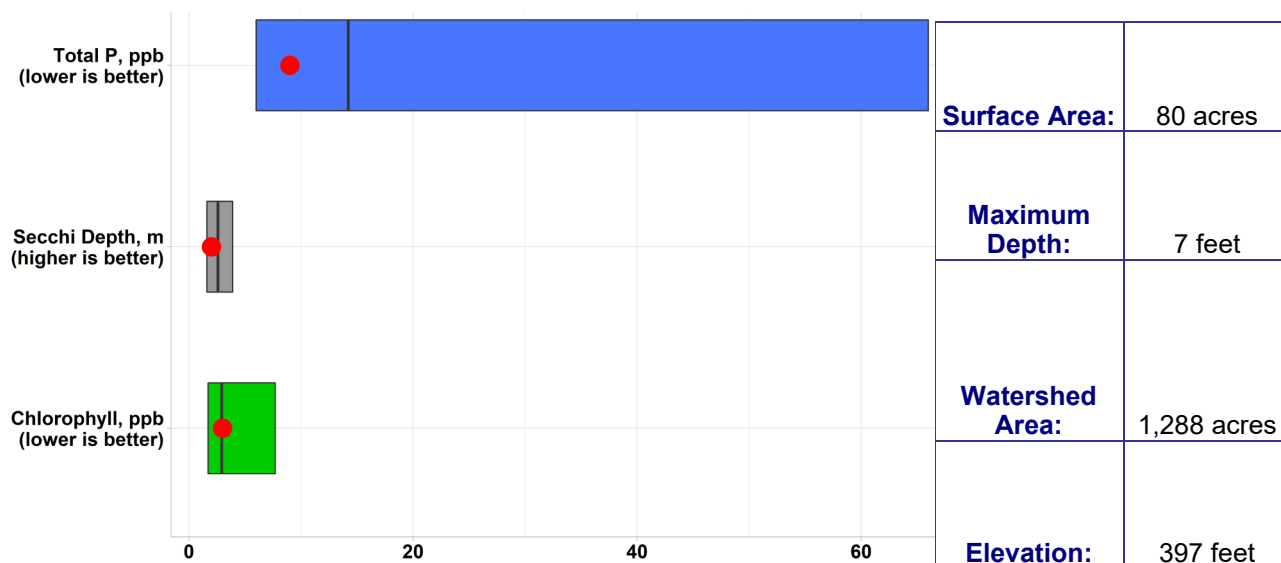
2020 Water Quality Highlights

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 2020. The Secchi disk reading for 2020 was 4.60 meters, fell into the moderately clear range, and was less than the long-term average of 5.09 meters. The total phosphorus reading of 8.50 ppb fell into the moderate range and was lower than the long-term average of 9.05 ppb. 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 7.00 ppb fell into the moderate range and was greater than the long-term average of 4.70 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Beaver Pond are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2020 was 30 SPU, indicating that water in Bridgton's Beaver Pond is highly colored.

Bridgton's Beaver Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	19	30	Increasing	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	Water was highly colored	Deeper clarity readings over time	Neither less nor more phosphorus in water over time	Neither more nor less chlorophyll in water over time

Beaver Pond – Denmark



Beaver Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Beaver Pond. The line represents the long-term average value and the dot represents 2020's average value.

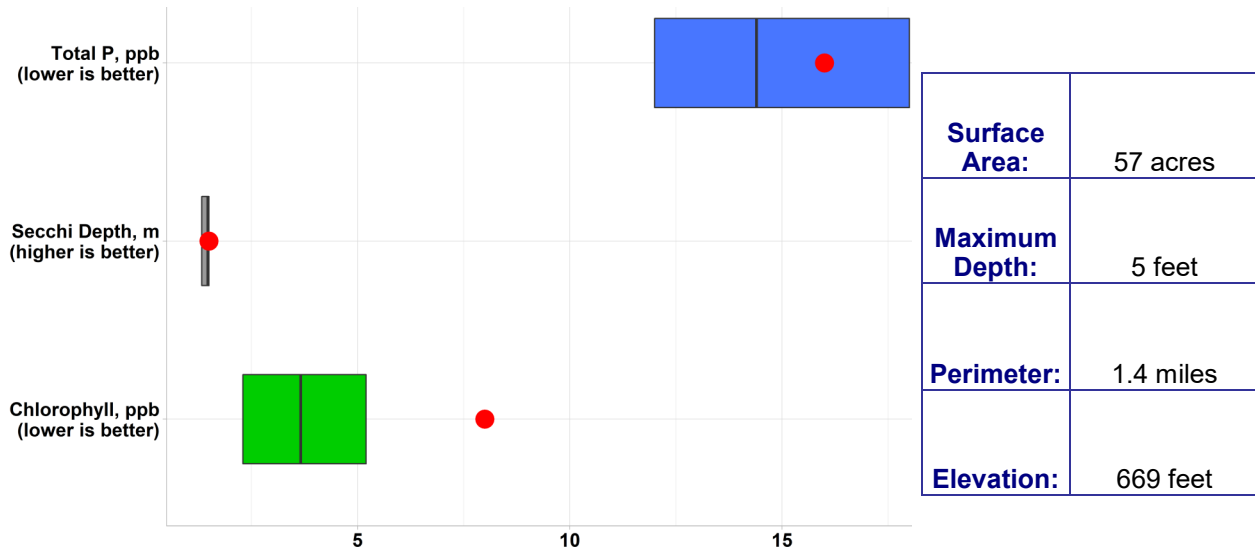
2020 Water Quality Highlights

Denmark's Beaver Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 2.00 meters and was less than the long-term average of 2.58 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 9.00 ppb fell into the moderate range and was less than the long-term average of 11.96 ppb. The chlorophyll-a reading of 3.00 ppb fell into the moderate range and was higher than the long-term average of 2.92 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Beaver Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 20 SPU, indicating that water in Denmark's Beaver Pond is moderately colored.

Beaver Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	20	Not reported	Stable	Stable
Interpretation	Water was moderately colored	Secchi disk hits bottom	Neither less nor more phosphorus in water over time	Neither more nor less chlorophyll in water over time

Bog Pond



Bog Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Bog Pond. The line represents the long-term average value and the dot represents 2020's average value.

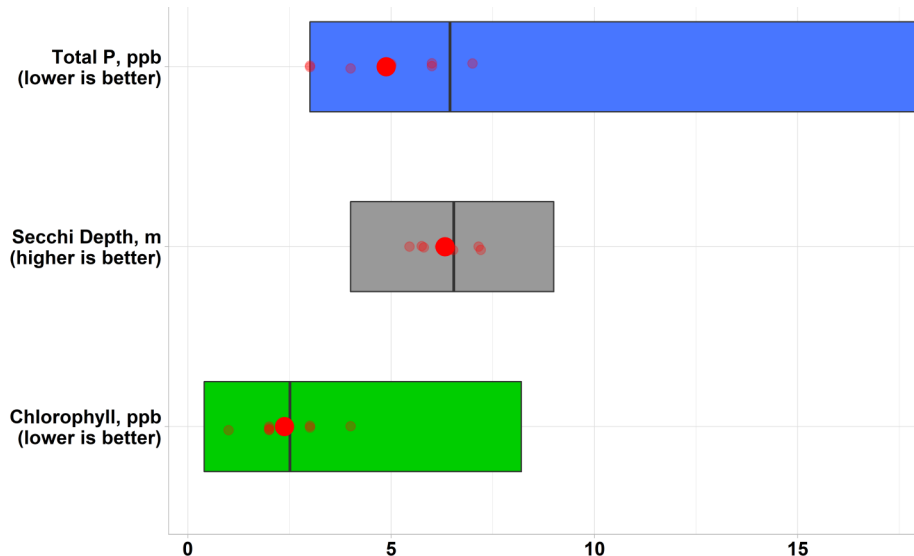
2020 Water Quality Highlights

Bog Pond is sampled by LEA once per year in August. The long-term average reflects data from 2009 to 2020. The Secchi disk reading for 2020 was 1.5 meters and was deeper than the long-term average of 1.47 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 16.00 ppb fell into the high range and was higher than the long-term average of 14.40 ppb. The chlorophyll-a reading of 8.00 ppb fell into the moderate range and was higher than the long-term average of 3.66. Long-term trend analysis indicates chlorophyll-a concentrations in Bog Pond are stable and total phosphorus concentrations are stable. The average color reading for 2020 was 60 SPU, indicating that water in Bog Pond is highly colored.

Bog Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	60	Not reported	Stable	Stable
Interpretation	Water was highly colored	Secchi disk hits bottom	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Brandy Pond



Surface Area:	733 acres
Maximum Depth:	44 feet
Mean Depth:	16 feet
Volume:	11,789 acre-feet
Watershed Area:	2,300 acres
Flushing Rate:	10 flushes per year
Elevation:	267 feet

Brandy Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Brandy Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

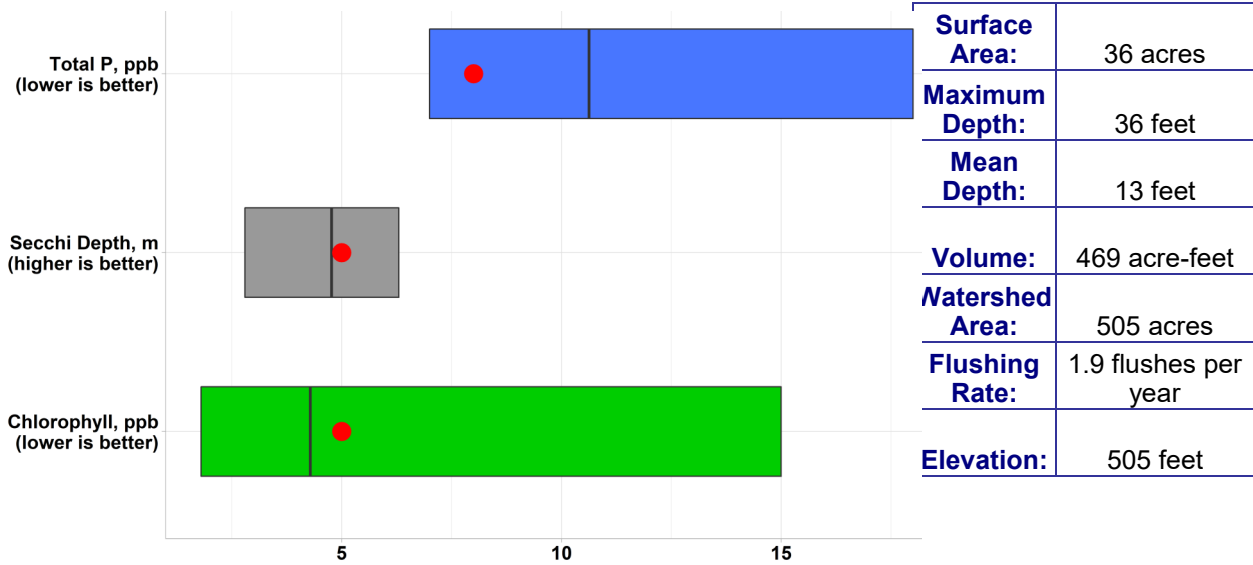
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.32 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.56 meters. The average total phosphorus reading of 4.88 ppb fell into the low range and was lower than the long-term average of 6.45 ppb. 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 2.38 ppb fell into the moderate range and was less than the long-term average of 2.56 ppb. 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 2020 was 17.00 SPU, indicating that water in Brandy Pond is moderately 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	8.67	17	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

Cold Rain Pond



Cold Rain Pond surface water chlorophyll, phosphorus, and Secchi depth data summary
Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Cold Rain Pond. The line represents the long-term average value and the dot

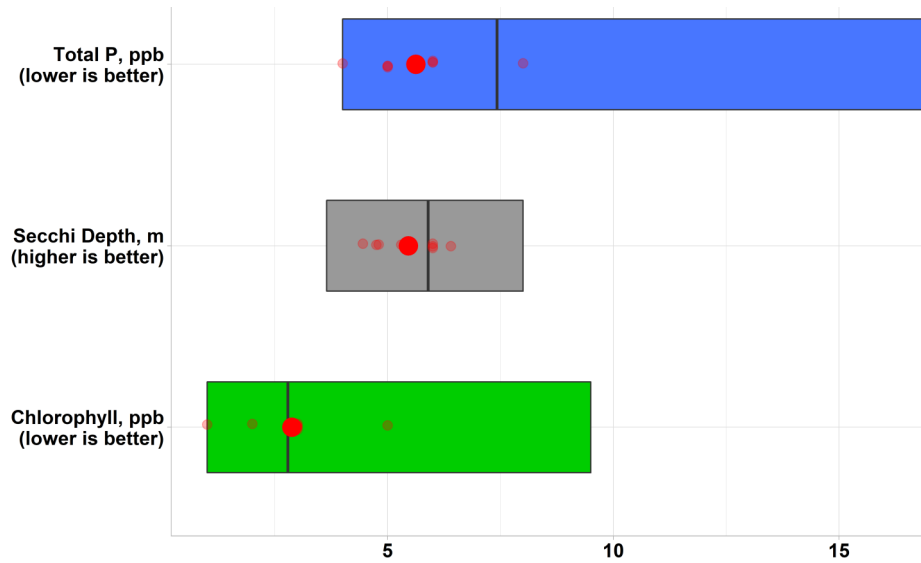
2020 Water Quality Highlights

Cold Rain Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 5.00 meters, fell into the moderately clear range, and was deeper than the long-term average of 4.73 meters. The total phosphorus reading of 8.00 ppb fell into the moderate range and was less than the long-term average of 10.56 ppb. 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 5.00 ppb fell into the moderate range and was higher than the long-term average of 4.38. 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 2020 was 28 SPU, indicating that water in Cold Rain Pond is highly colored.

Cold Rain Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	13.5	28	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



Surface Area:	446 acres
Maximum Depth:	65 feet
Mean Depth:	33 feet
Volume:	14,253 acre-feet
Watershed Area:	5,345 acres
Flushing Rate:	0.65 flushes per year
Elevation:	294 feet

Crystal Lake surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Crystal Lake. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

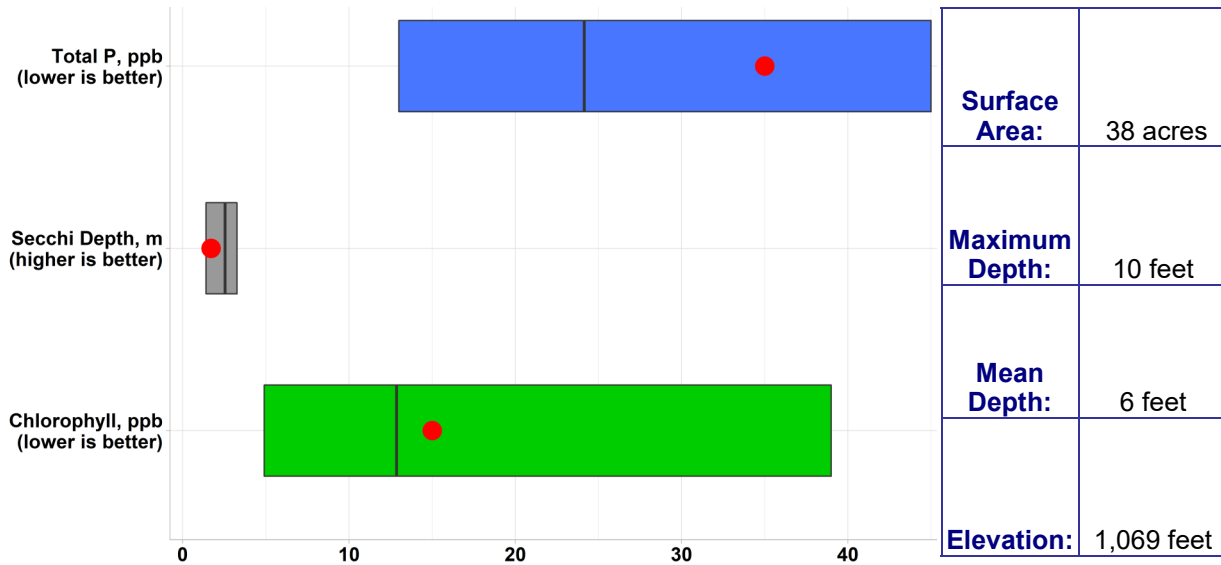
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.46 meters, fell into the moderately clear range, and was shallower than the long-term average of 5.84 meters. The average total phosphorus reading of 5.63 ppb fell into the moderate range and was lower than the long-term average of 7.42 ppb. 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 2.88 ppb fell into the moderate range and was higher than the long-term average of 2.85 ppb. 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 2020 was 19.14 SPU, indicating that water in Crystal Lake is moderately colored. Although low oxygen conditions were observed in deep water, suitable coldwater fish habitat was present through the testing season.

Crystal Lake's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll Trend
Analysis Result	8.33	19.14	Decreasing	Stable	Stable
Interpretation	Within acceptable range	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

Duck Pond



Duck Pond surface water chlorophyll, phosphorus, and Secchi depth data summary
Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Duck Pond. The line represents the long-term average value and the dot represents 2020's average value.

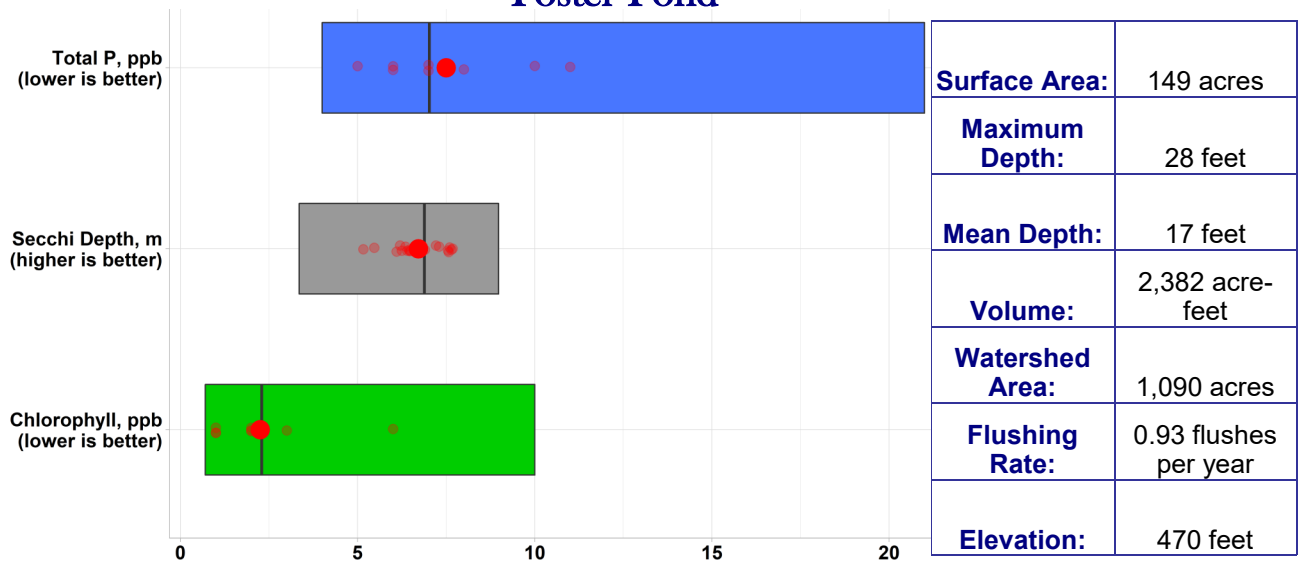
2020 Water Quality Highlights

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 2020 was 1.70 meters, fell into the low clarity range, and was shallower than the long-term average of 2.55 meters. 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 35.00 ppb fell into the very high range and was higher than the long-term average of 24.14 ppb. The chlorophyll-a reading of 15.00 ppb fell into the very high range and was higher than the long-term average of 12.86 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Duck Pond are stable and total phosphorus concentrations are increasing. The color reading for 2020 was 40 SPU, indicating that water in Duck Pond is highly colored.

Duck Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	40	Increasing	Stable
Interpretation	Water was highly colored	More phosphorus in water over time	Neither more nor less chlorophyll in water over time

Foster Pond



Foster Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Foster Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

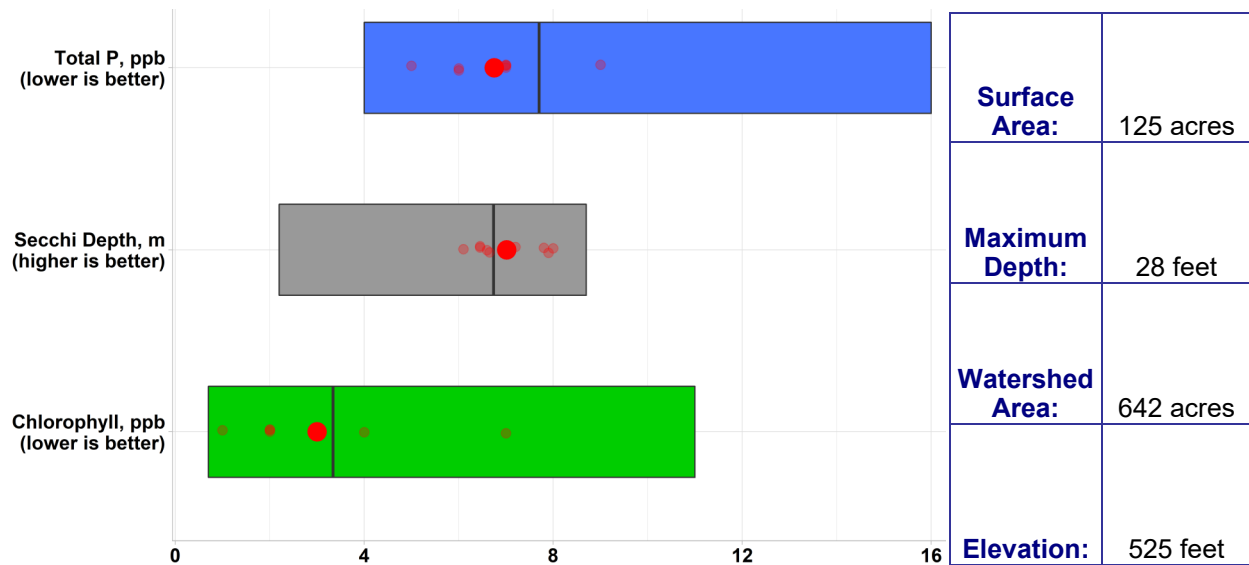
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.72 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.99 meters. The average total phosphorus reading of 7.50 ppb fell into the moderate range and was higher than the long-term average of 7.03 ppb. The chlorophyll-a average of 2.25 ppb fell into the moderate range and was less than the long-term average of 2.28 ppb. 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 2020 was 13.38 SPU, indicating that water in Foster Pond is moderately colored. Suitable coldwater fish habitat was present through June and transitioned to marginal during the months of July and August. Coldwater fish habitat became unsuitable in September.

Foster Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	13.38	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



Granger Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Granger Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

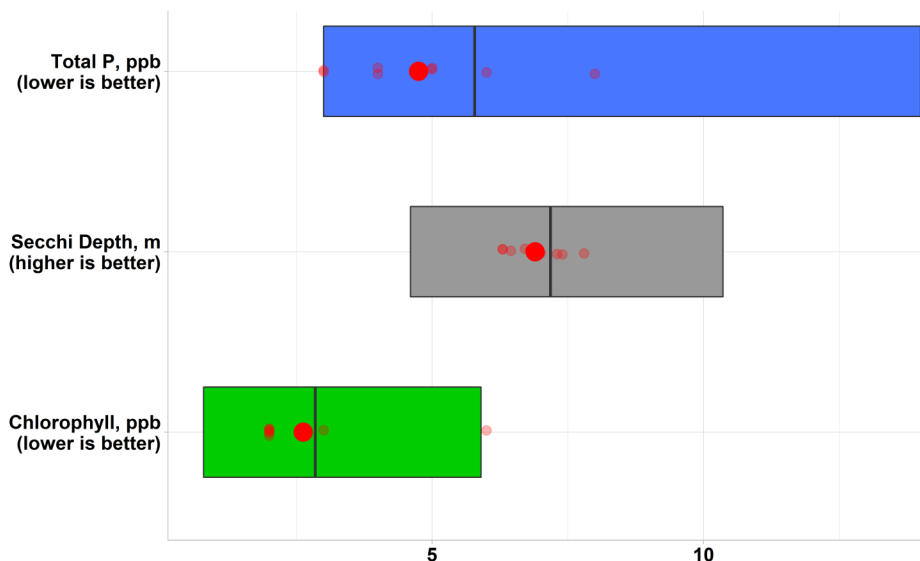
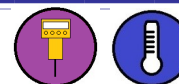
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.94 meters, fell into the moderately clear range, and was deeper than the long-term average of 6.72 meters. The average total phosphorus reading of 6.75 ppb fell into the moderate range and was lower than the long-term average of 7.64 ppb. The chlorophyll-a average of 3.00 ppb fell into the moderate range and was lower than the long-term average of 3.34 ppb. 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 2020 was 13.14 SPU, indicating that water in Granger Pond is moderately colored.

Granger Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	13.14	Increasing	Decreasing	Stable
Interpretation	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Hancock Pond



Surface Area:	858 acres
Maximum Depth:	59 feet
Watershed Area:	2,222 acres
Elevation:	502 feet

Hancock Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Hancock Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

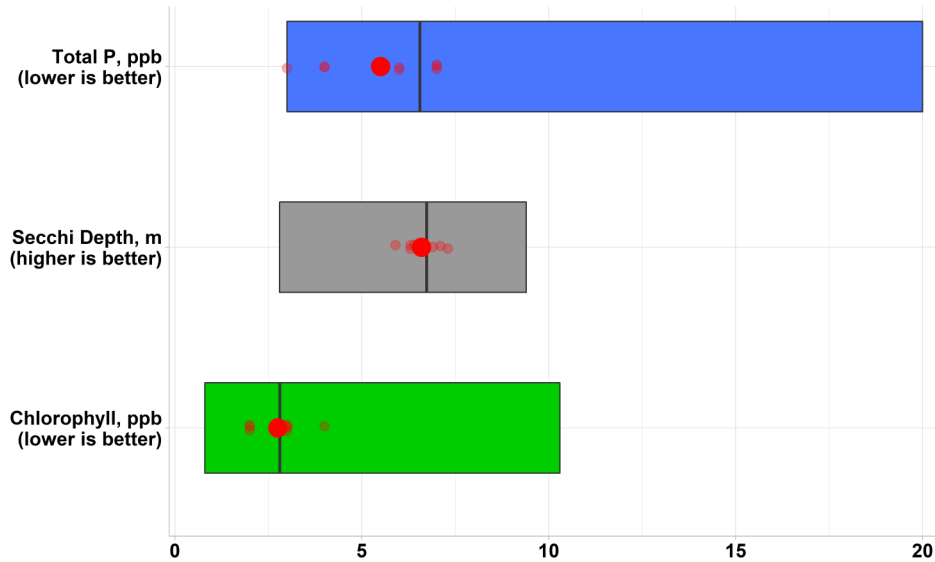
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.90 meters, fell into the moderately clear range, and was shallower than the long-term average of 7.15 meters. The average total phosphorus reading of 4.75 ppb fell into the low range and was less than the long-term average of 5.79 ppb. 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 2.63 ppb fell into the moderate range and was lower than the long-term average of 2.86 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Hancock Pond are decreasing, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2020 was 11.13 SPU, indicating that water in Hancock Pond is moderately 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.17	11.13	Increasing	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water over time

Highland Lake



Surface Area:	1,334 acres
Maximum Depth:	50 feet
Mean Depth:	20 feet
Volume:	44,030 acre-feet
Watershed Area:	5,178 acres
Flushing Rate:	0.94 flushes per year
Elevation:	426 feet

Highland Lake surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Highland Lake. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

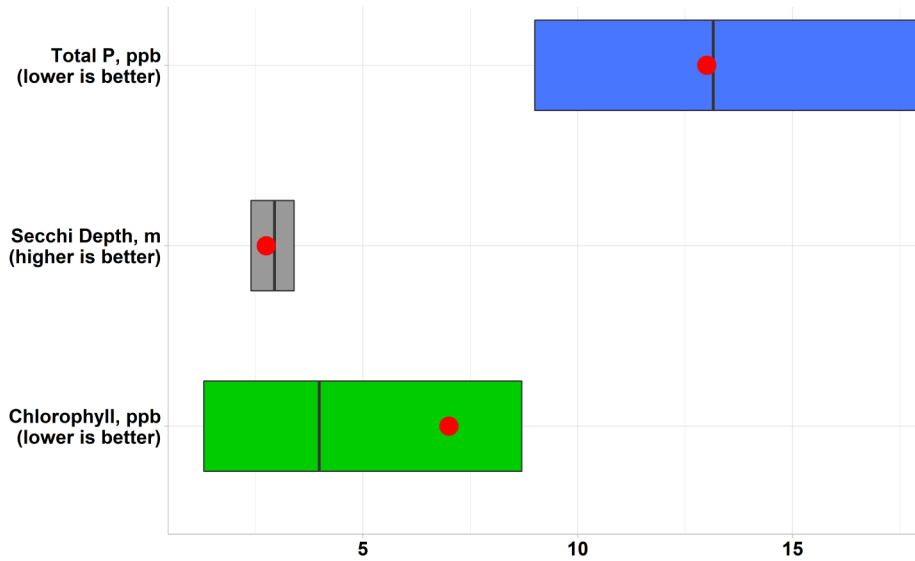
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.60 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.82 meters. The average total phosphorus reading of 5.50 ppb fell into the moderate range and was lower than the long-term average of 6.57 ppb. 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 3.00 ppb fell into the moderate range and was higher than the long-term average of 2.85 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Highland Lake are decreasing, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2020 was 15.00 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.33	15.00	Increasing	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water over time

Holt Pond



Surface Area:	41 acres
Maximum Depth:	10 feet
Mean Depth:	7 feet
Watershed Area:	2,118 acres
Flushing Rate:	46 flushes per year
Elevation:	455 feet

Holt Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Holt Pond. The line represents the long-term average value and the dot represents 2020's average value.

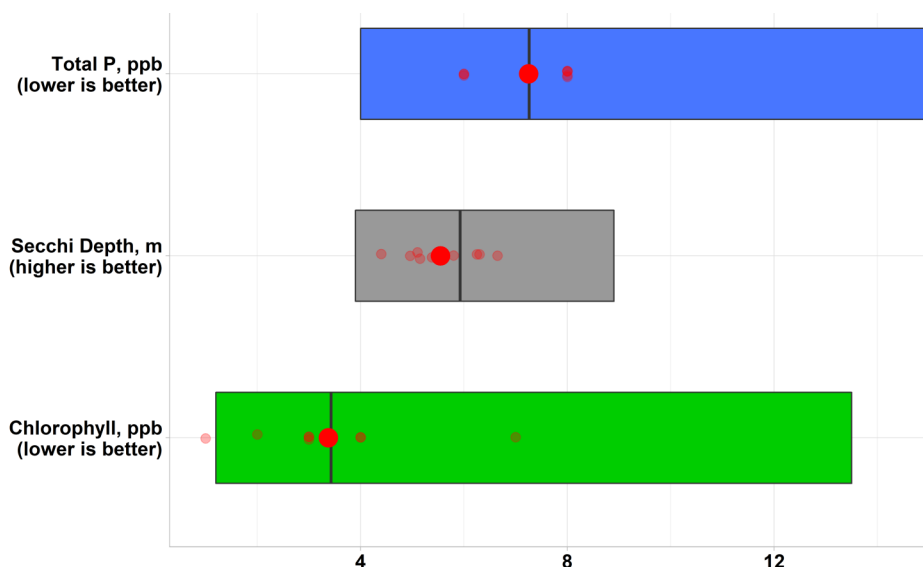
2020 Water Quality Highlights

Holt Pond is sampled by LEA once per year in August. The long-term average reflects data from 2000 to 2020. The Secchi disk reading for 2020 was 2.75 meters, fell into the low clarity range, and was less than the long-term average of 2.94 meters. The Secchi disk did not hit the bottom in 2020 but has in years past, indicating that average Secchi Depth may not be a reliable indicator of historic water clarity. The total phosphorus reading of 13.00 ppb fell into the high range and was less than the long-term average of 13.15 ppb. 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 7.00 ppb fell into the moderate range and was higher than the long-term average of 3.99 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Holt Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 70 SPU, indicating that water in Holt Pond is very highly colored.

Holt Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	16	70	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



Surface Area:	115 acres
Maximum Depth:	48 feet
Mean Depth:	16 feet
Volume:	1,626 acre-feet
Watershed Area:	1,128 acres
Flushing Rate:	1.3 flushes per year
Elevation:	448 feet

Island Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Island Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

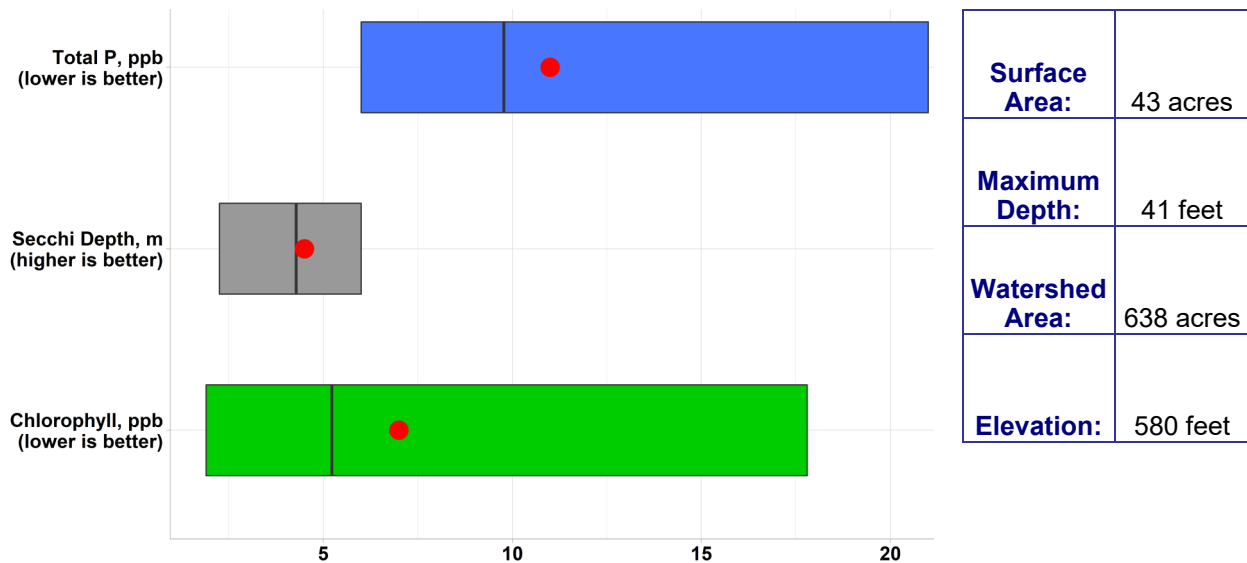
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.54 meters, fell into the moderately clear range, and was shallower than the long-term average of 5.88 meters. The average total phosphorus reading of 7.25 ppb fell into the moderate range and was slightly higher than the long-term average of 7.24 ppb. 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 3.38 ppb fell into the moderate range and was lower than the long-term average of 3.45 ppb. 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 2020 was 17.00 SPU, indicating that water in Island Pond is moderately colored. Suitable coldwater fish habitat was present into July. However, as water temperatures increased and deep water oxygen was consumed, conditions became moderate in mid-July and unacceptable in August through September. Low oxygen conditions were present in deep water from June through September.

Island Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12	17.00	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was moderately 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



Jewett Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Jewett Pond. The line represents the long-term average value and the dot represents 2020's average value.

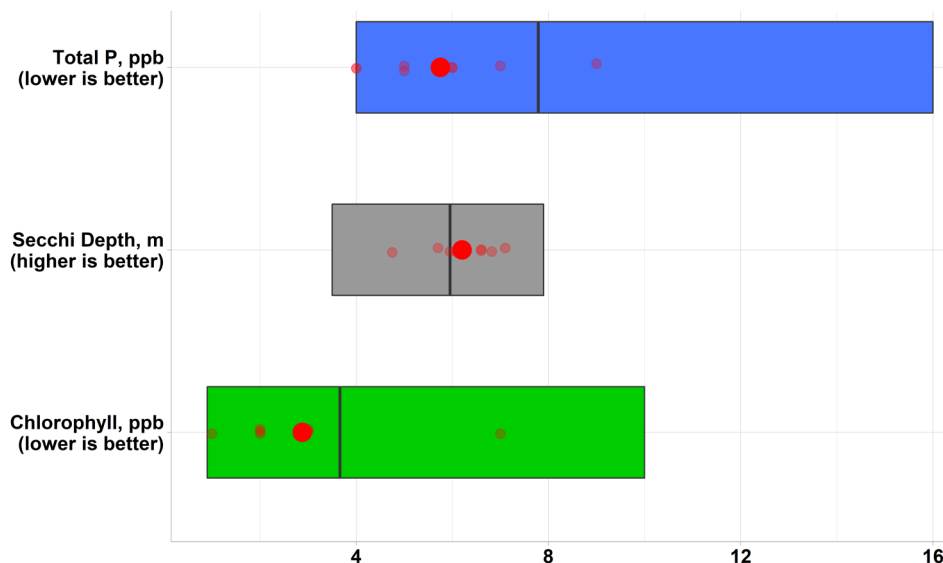
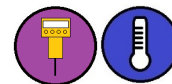
2020 Water Quality Highlights

Jewett Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 4.50 meters, fell into the moderately clear range, and was deeper than the long-term average of 4.28 meters. The total phosphorus reading of 11.00 ppb fell into the moderate range and was higher than the long-term average of 9.78 ppb. The chlorophyll-a reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 5.23 ppb. 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 2020 was 50.00 SPU, indicating that water in Jewett Pond is highly colored.

Jewett Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	50	Stable	Stable	Stable
Interpretation	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



Surface Area:	460 acres
Maximum Depth:	42 feet
Mean Depth:	25 feet
Volume:	10,569 acre-feet
Watershed Area:	3,808 acres
Flushing Rate:	0.7 flushes per year
Elevation:	492 feet

Keoka Lake surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Keoka Lake. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

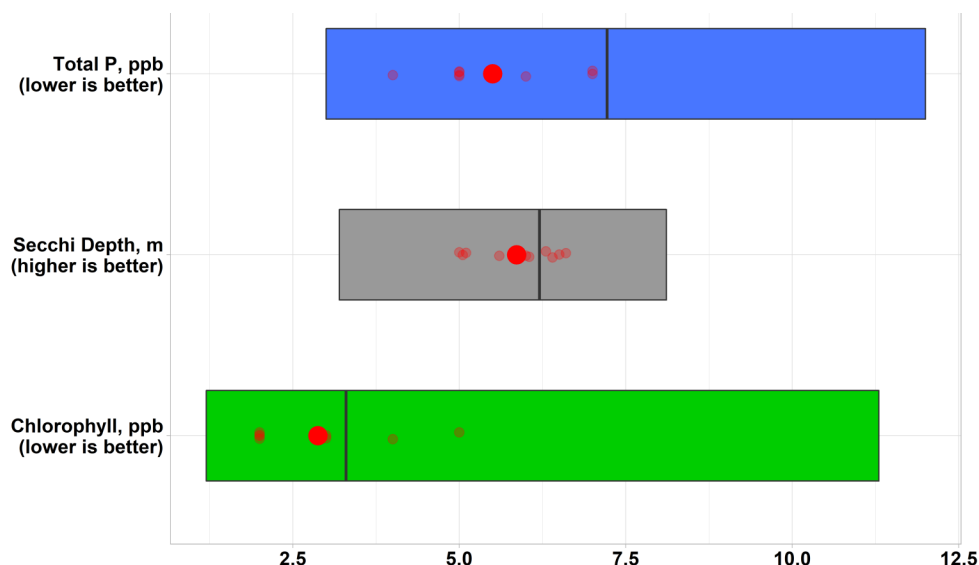
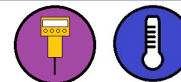
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.20 meters, fell into the moderately clear range, and was deeper than the long-term average of 5.97 meters. The average total phosphorus reading of 6.00 ppb fell into the moderate range and was less than the long-term average of 8.00 ppb. The chlorophyll-a average of 2.90 ppb fell into the moderate range and was lower than the long-term average of 3.66 ppb. 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 2020 was 19.00 SPU, indicating that water in Keoka Lake is moderately 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.

Keoka Lake's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	19.00	Increasing	Decreasing	Stable
Interpretation	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll over time

Keyes Pond



Surface Area:	191 acres
Maximum Depth:	42 feet
Mean Depth:	17 feet
Volume:	3,333 acre-feet
Watershed Area:	1,213 acres
Flushing Rate:	0.8 flushes per year
Elevation:	508 feet

Keyes Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Keyes Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

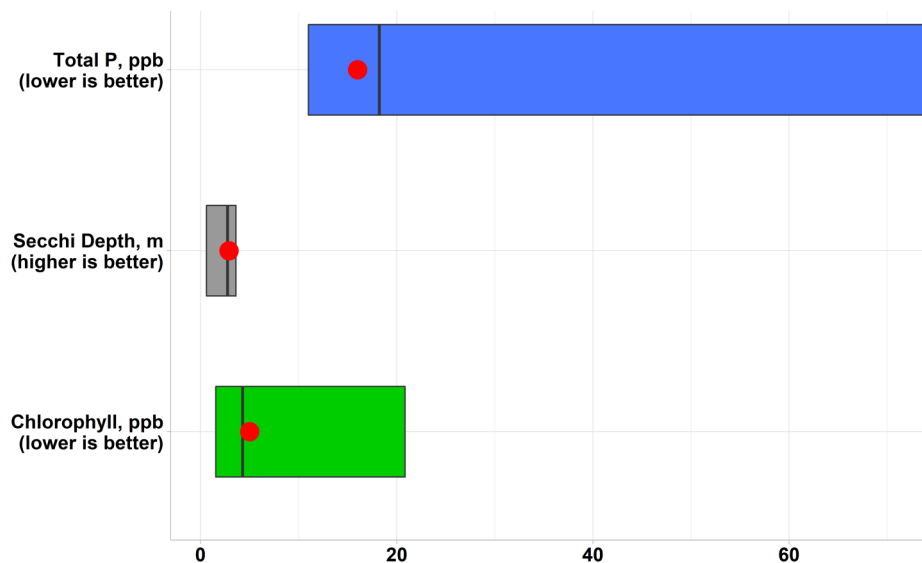
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.86 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.26 meters. The average total phosphorus reading of 5.50 ppb fell into the moderate range and was lower than the long-term average of 7.22 ppb. 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 2.88 ppb fell into the moderate range and was less than the long-term average of 3.33 ppb. 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 2020 was 16.75 SPU, indicating that water in Keyes Pond is moderately colored. Suitable coldwater fish habitat was present through July. As water temperatures increased and deep water oxygen was consumed, coldwater fish habitat became marginal in August and unsuitable in September.

Keyes Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.86	16.75	Increasing	Decreasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Kezar Pond



Surface Area:	1,851 acres
Maximum Depth:	12 feet
Watershed Area:	10,779 acres
Elevation:	369 feet

Kezar Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Kezar Pond. The line represents the long-term average value and the dot represents 2020's average value.

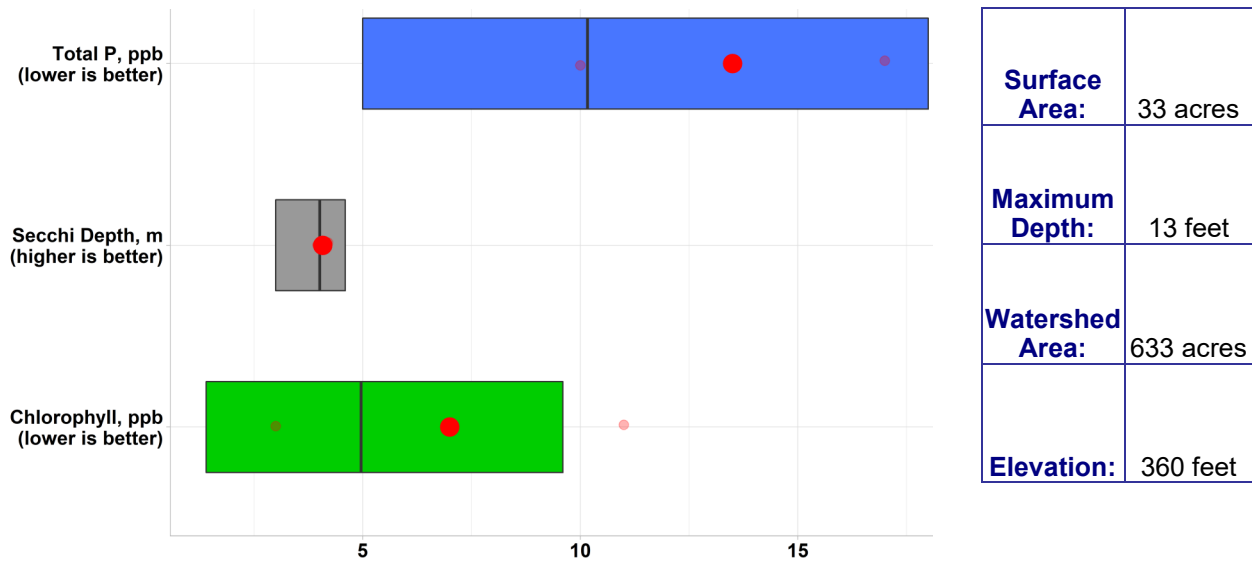
2020 Water Quality Highlights

Kezar Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 2.90 meters, fell into the low clarity range, and was deeper than the long-term average of 2.75 meters. The Secchi disk did hit the bottom this year, indicating that average Secchi depth may not be a reliable indicator of water clarity. The total phosphorus reading of 16 ppb fell into the high range and was less than the long-term average of 18.22 ppb. The chlorophyll-a reading of 5.00 ppb fell into the moderate range and was higher than the long-term average of 4.27. Long-term trend analysis indicates chlorophyll-a concentrations in Kezar Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 20 SPU, indicating that water in Kezar Pond is moderately colored.

Kezar Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	20	Stable	Stable
Interpretation	Water was moderately colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Little Pond



Little Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Little Pond. The line represents the long-term average value and the dot represents 2020's average value.

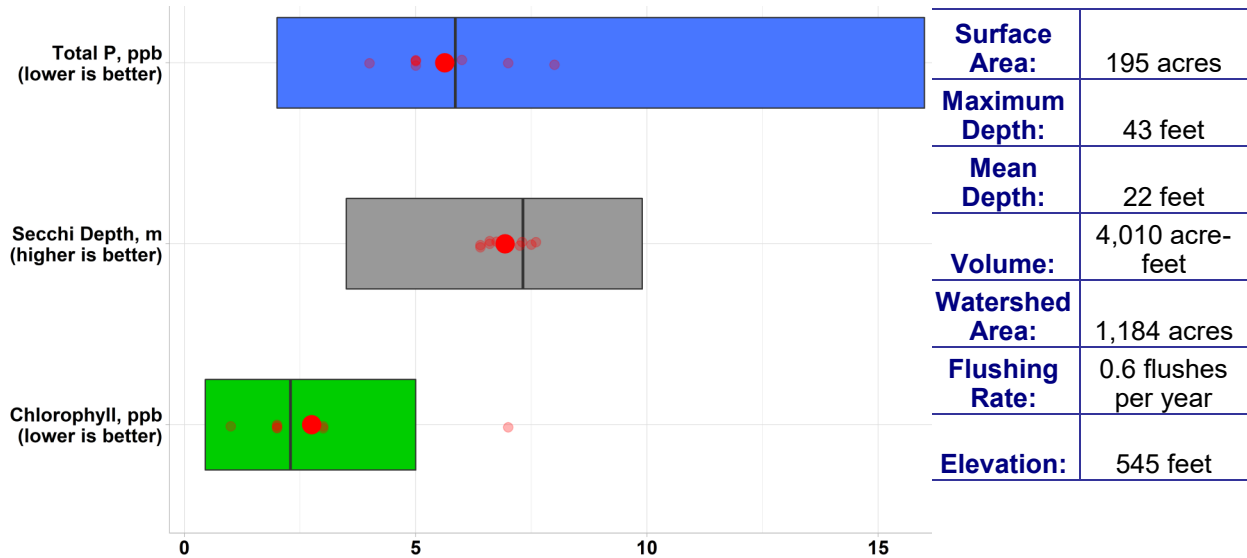
2020 Water Quality Highlights

Little Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 4.08 meters and was deeper than the long-term average of 4.01 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 13.50 ppb fell into the high range and was higher than the long-term average of 10.44 ppb. The chlorophyll-a reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 4.88 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Little Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 20.00 SPU, indicating that water in Little Pond is moderately colored.

Little Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	20.00	Stable	Stable
Interpretation	Water was moderately colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Little Moose Pond



Little Moose Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Little Moose Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

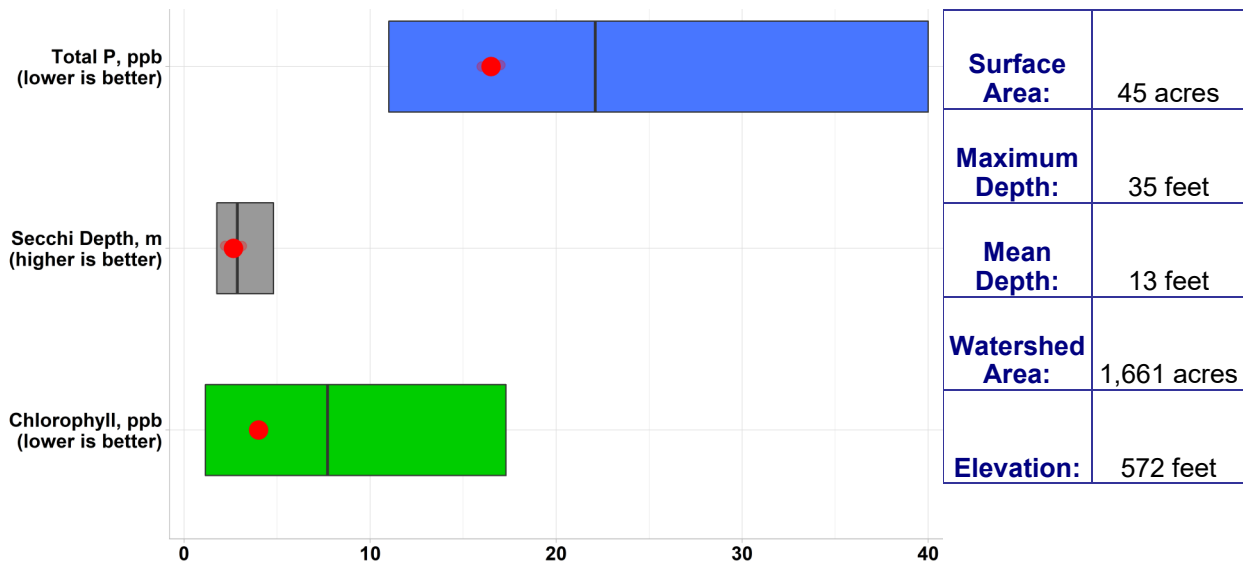
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.93 meters, fell into the moderately clear range, and was shallower than the long-term average of 7.31 meters. The average total phosphorus reading of 5.60 ppb fell into the moderate range and was less than the long-term average of 5.85 ppb. 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 2.75 ppb fell into the moderate range and was higher than the long-term average of 2.31 ppb. 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 2020 was 11.50 SPU, indicating that water in Little Moose Pond is moderately 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	12.00	11.50	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was moderately 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



Little Mud Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Little Mud Pond. The line represents the long-term average value and the dot represents 2020's average value.

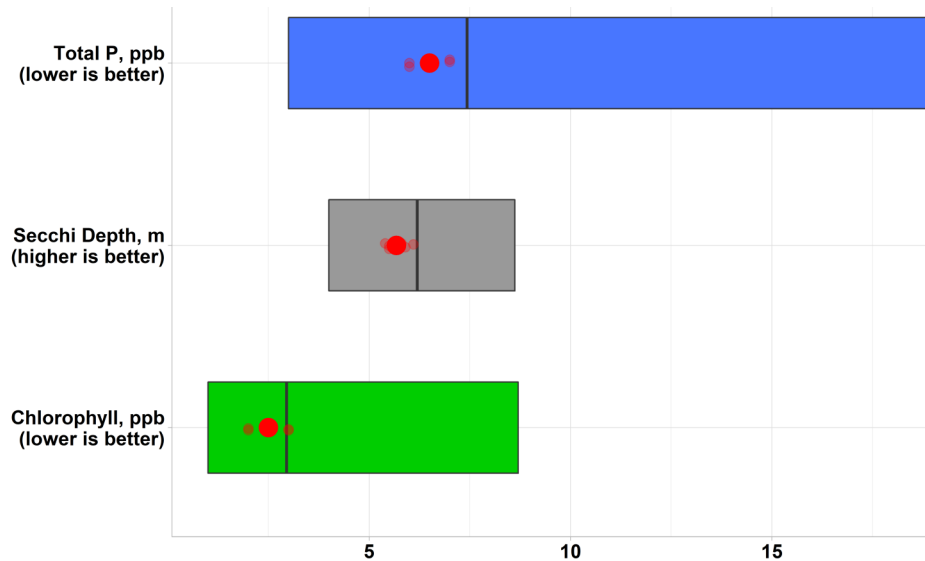
2020 Water Quality Highlights

Little Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 2.7 meters, fell into the low clarity range, and was shallower than the long-term average of 2.85 meters. The total phosphorus reading of 16.50 ppb fell into the high range and was less than the long-term average of 22.10 ppb. 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 4.00 ppb fell into the moderate range and less than the long-term average of 7.71 ppb. 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 2020 was 75 SPU, indicating that water in Little Mud Pond is very highly colored.

Little Mud Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	24.33	75	Decreasing	Stable	Stable
Interpretation	Within acceptable range	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



Surface Area:	4,935 acres
Maximum Depth:	59 feet
Mean Depth:	34 feet
Volume:	165,500 acre-feet
Watershed Area:	33,871 acres
Flushing Rate:	0.94 flushes per year
Elevation:	267 feet

Long Lake north basin surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Long Lakes north basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

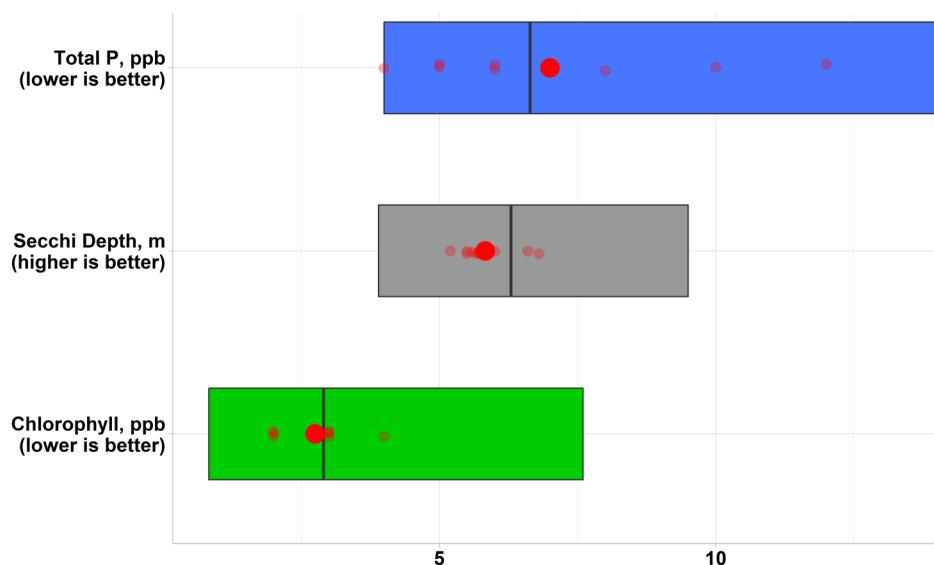
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.70 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.20 meters. The average total phosphorus reading of 6.38 ppb fell into the moderate range and was less than the long-term average of 7.43 ppb. 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 2.88 ppb fell into the moderate range and was less than the long-term average of 3.03 ppb. 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 2020 was 17.50 SPU, indicating that water in Long Lake's north basin is moderately 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 through September.

Long Lake North Basin's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.75	17.50	Stable	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately 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



Surface Area:	4,935 acres
Maximum Depth:	59 feet
Mean Depth:	34 feet
Volume:	165,500 acre-feet
Watershed Area:	33,871 acres
Flushing Rate:	0.94 flushes per year
Elevation:	267 feet

Long Lake middle basin surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Long Lakes middle basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

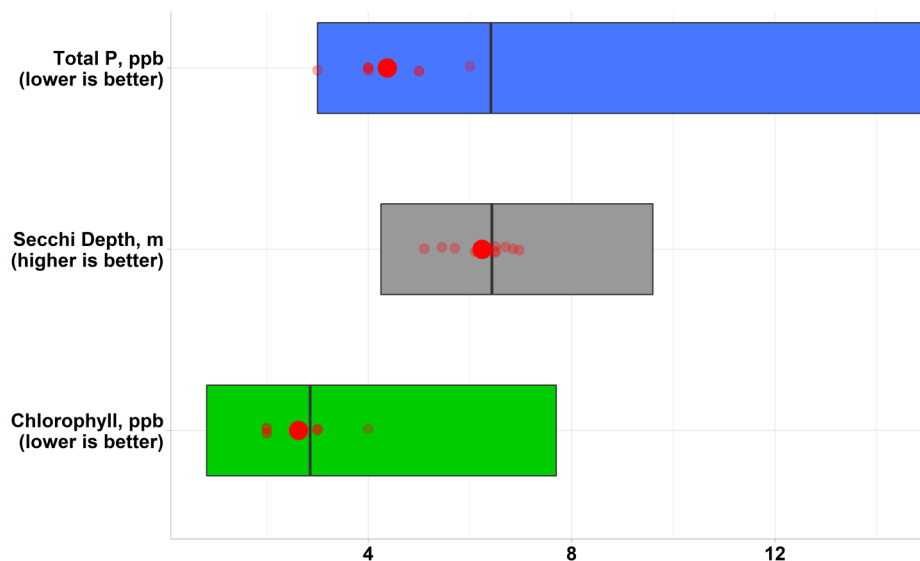
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.83 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.35 meters. The average total phosphorus reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 6.66 ppb. 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 2.75 ppb fell into the moderate range and was less than the long-term average of 2.95 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Long Lake's middle basin are stable, total phosphorus concentrations are stable, and clarity readings are stable. The average color reading for 2020 was 15.25 SPU, indicating that water in Long Lake's middle basin is moderately colored. Suitable coldwater fish habitat was present through 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.75	15.25	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over	Neither more nor less phosphorus in water over	Neither more nor less chlorophyll in water over time

Long Lake - South Basin



Surface Area:	4,935 acres
Maximum Depth:	59 feet
Mean Depth:	34 feet
Volume:	165,500 acre-feet
Watershed Area:	33,871 acres
Flushing Rate:	0.94 flushes per year
Elevation:	267 feet

Long Lake's south basin surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Long Lake's south basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

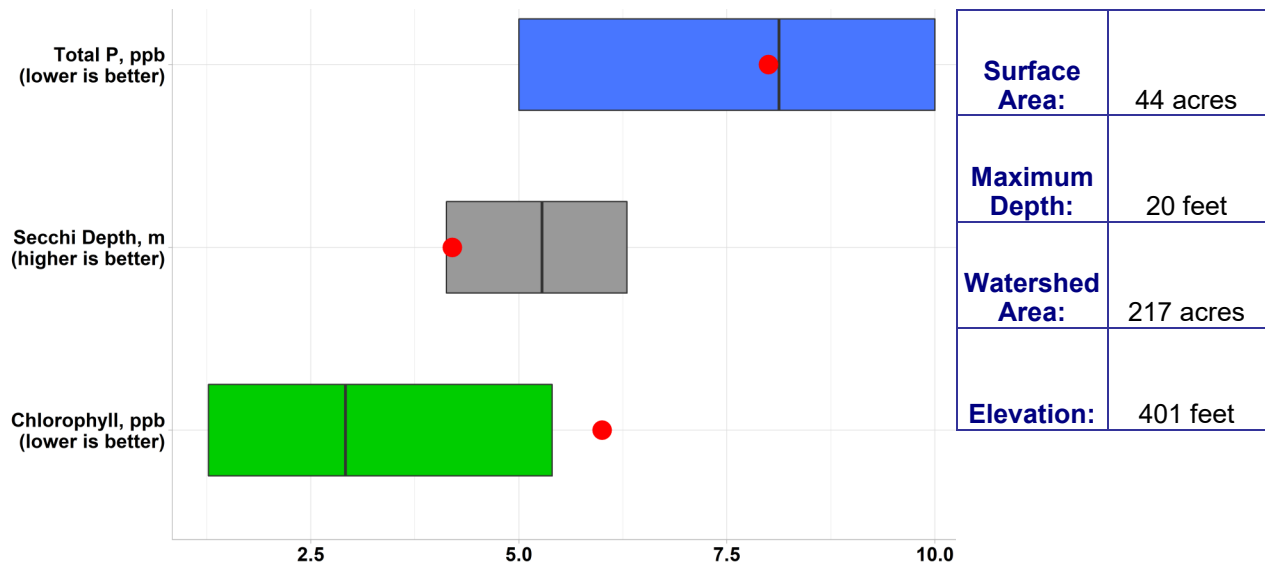
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.24 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.51 meters. The average total phosphorus reading of 4.38 ppb fell into the moderate range and was less than the long-term average of 6.35 ppb. 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 2.60 ppb fell into the moderate range and was less than the long-term average of 2.89 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Long Lake's south basin are stable, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2020 was 18.00 SPU, indicating that water in Long Lake's south basin is moderately colored. Suitable coldwater fish habitat was present through 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	5.75	18.00	Stable	Decreasing	Stable
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Long Pond



Long Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Long Pond. The line represents the long-term average value and the dot represents 2020's average value.

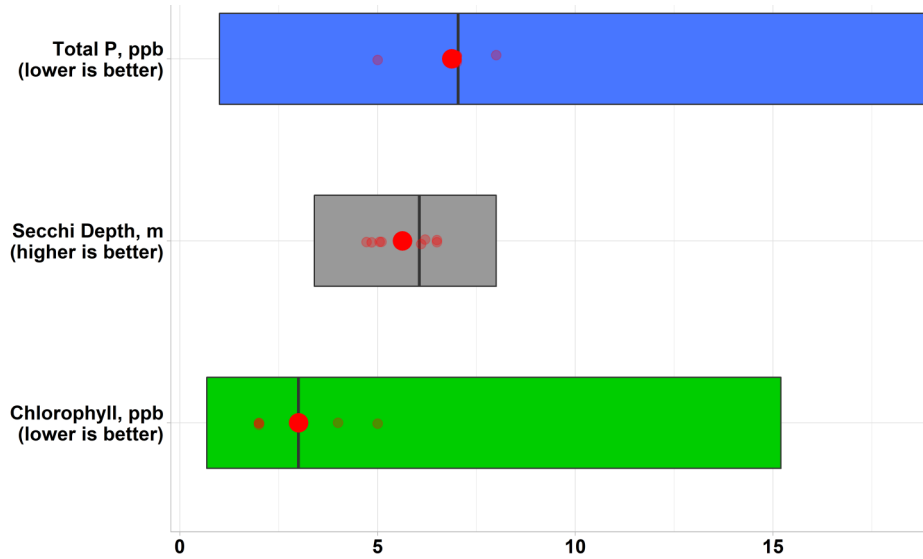
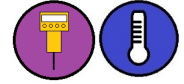
2020 Water Quality Highlights

Long Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 4.20 meters, fell into the moderate clarity range, and was less than the long-term average of 5.28 meters. 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 8.00 ppb fell into the moderate range and was less than the long-term average of 8.13 ppb. The chlorophyll-a reading of 6.00 ppb fell into the moderate range and was higher than the long-term average of 2.92 ppb. Long-term trend analysis indicates chlorophyll -a concentrations in Long Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 20.00 SPU, indicating that water in Long Pond is moderately colored.

Long Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	20.00	Stable	Stable
Interpretation	Water was moderately colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

McWain Pond



Surface Area:	445 acres
Maximum Depth:	42 feet
Mean Depth:	23 feet
Volume:	9,756 acre-feet
Watershed Area:	2,505 acres
Flushing Rate:	0.5 flushes per year
Elevation:	533 feet

McWain Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on McWain Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

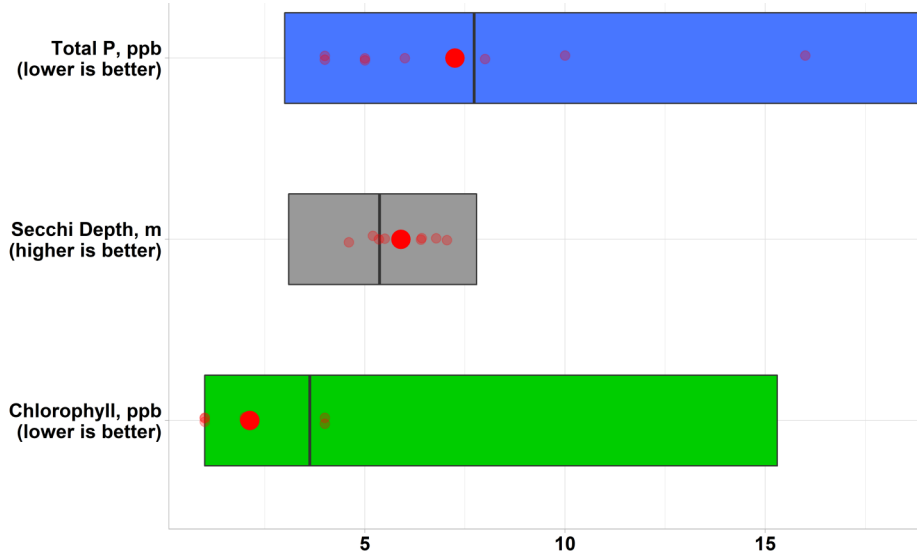
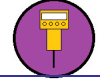
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.63 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.03 meters. The average total phosphorus reading of 6.88 ppb fell into the moderate range and was less than the long-term average of 7.04 ppb. 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 3.00 ppb fell into the moderate range and was higher than the long-term average of 2.88 ppb. 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 2020 was 16.63 SPU, indicating that water in McWain Pond is moderately 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	7.67	16.63	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

Middle Pond



Surface Area:	72 acres
Maximum Depth:	50 feet
Watershed Area:	231 acres
Elevation:	572 feet

Middle Pond Surface surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Middle Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

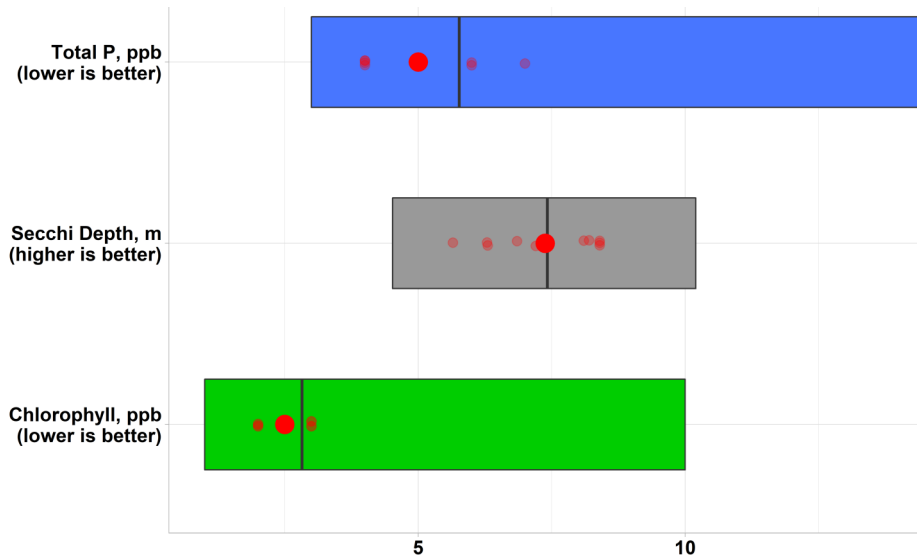
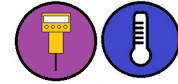
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.90 meters, fell into the moderately clear range, and was deeper than the long-term average of 5.37 meters. The average total phosphorus reading of 7.25 ppb fell into the moderate range and was less than the long-term average of 7.73 ppb. 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 2.10 ppb fell into the moderate range and was less than the long-term average of 3.63 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Middle Pond are decreasing, total phosphorus concentrations are stable, and clarity readings are increasing. The average color reading for 2020 was 16.38 SPU, indicating that water in Middle Pond is moderately colored. Suitable coldwater fish habitat was present from June through September.

Middle Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.18	16.38	Increasing	Stable	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Deeper clarity readings over time	Neither more nor less phosphorus in water over time	Less chlorophyll in water over time

Moose Pond - Main Basin



Surface Area:	941 acres
Maximum Depth:	77 feet
Mean Depth:	32.8 feet
Volume:	23,423 acre-
Watershed Area:	2,061 acres
Flushing Rate (whole)	3.69/ year
Elevation:	418 feet

Moose Pond main basin surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Moose Pond's main basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

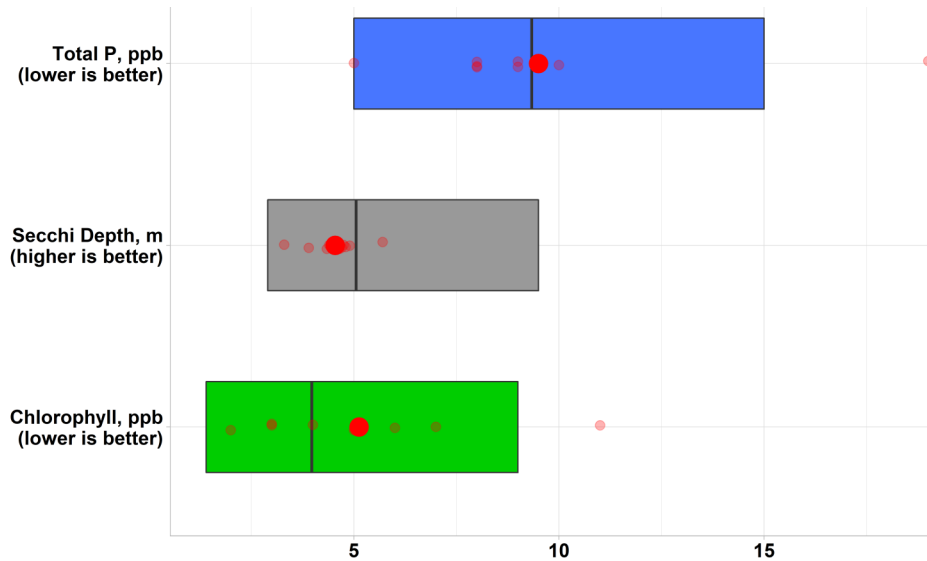
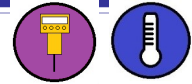
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 7.38 meters, fell into the high clarity range and was shallower than the long-term average of 7.44 meters. The average total phosphorus reading of 5.00 ppb fell into the moderate range and was slightly less than the long-term average of 5.72 ppb. 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 fell into the moderate range and was less than the long-term average of 2.90 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Moose Pond's main basin are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The average color reading for 2020 was 14.63 SPU, indicating that water in Moose Pond's main basin is moderately colored. Suitable coldwater fish habitat was present from June through August. As water temperatures warmed and deep water oxygen was consumed, coldwater fish habitat transitioned into marginal habitat in September.

Moose Pond main basin's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	6.14	14.63	Stable	Decreasing	Decreasing
Interpretation	Within acceptable range	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

Moose Pond – North Basin



Surface Area:	365 acres
Maximum Depth:	20 feet
Mean Depth:	8.5 feet
Volume:	3,151 acre-feet
Watershed Area:	1,182 acres
Flushing Rate (whole)	3.69/ year
Elevation:	418 feet

Moose Pond's north basin surface water chlorophyll, phosphorus, and Secchi depth data summary
Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Moose Pond's north basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

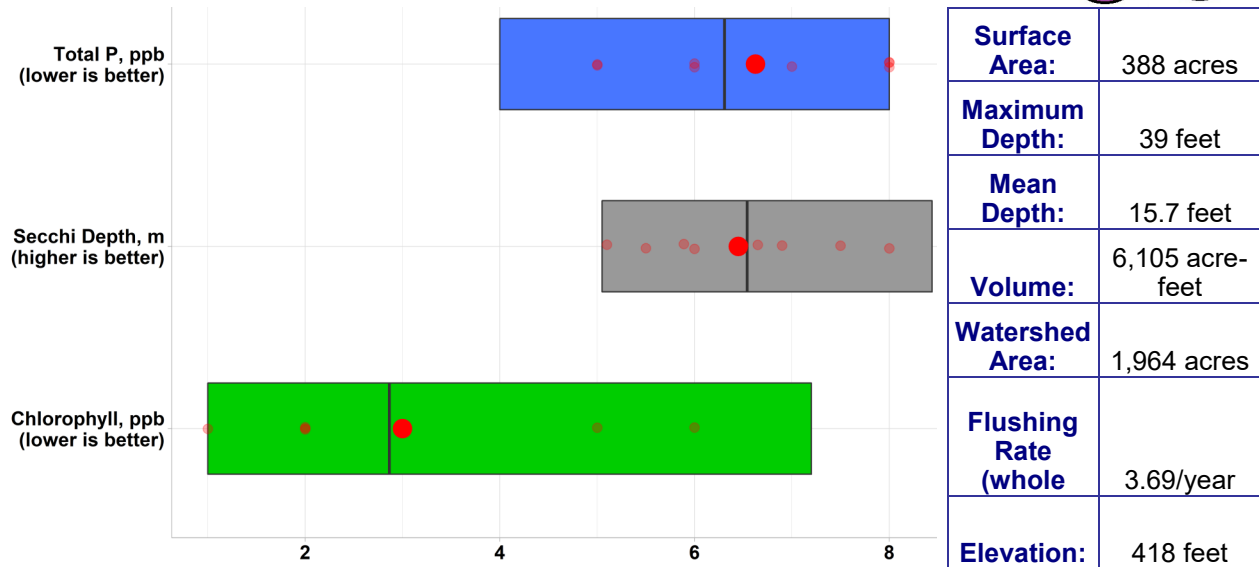
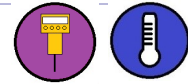
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 4.54 meters, fell into the moderately clear range, and was shallower than the long-term average of 5.05 meters. The average total phosphorus reading of 9.50 ppb fell into the moderate range and was higher than the long-term average of 9.32 ppb. 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 5.10 ppb fell into the moderate range and was higher than the long-term average of 3.97 ppb. 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 2020 was 17.50 SPU, indicating that water in Moose Pond's north basin is moderately colored. Suitable coldwater fish habitat was present for a few weeks in June but became unsuitable by July and remained that way through September.

Moose Pond north basin's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	23.00	17.50	Stable	Stable	Stable
Interpretation	Deep water phosphorus higher than expected; potential phosphorus recycling	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



Moose Pond's south basin surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Moose Pond's south basin. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

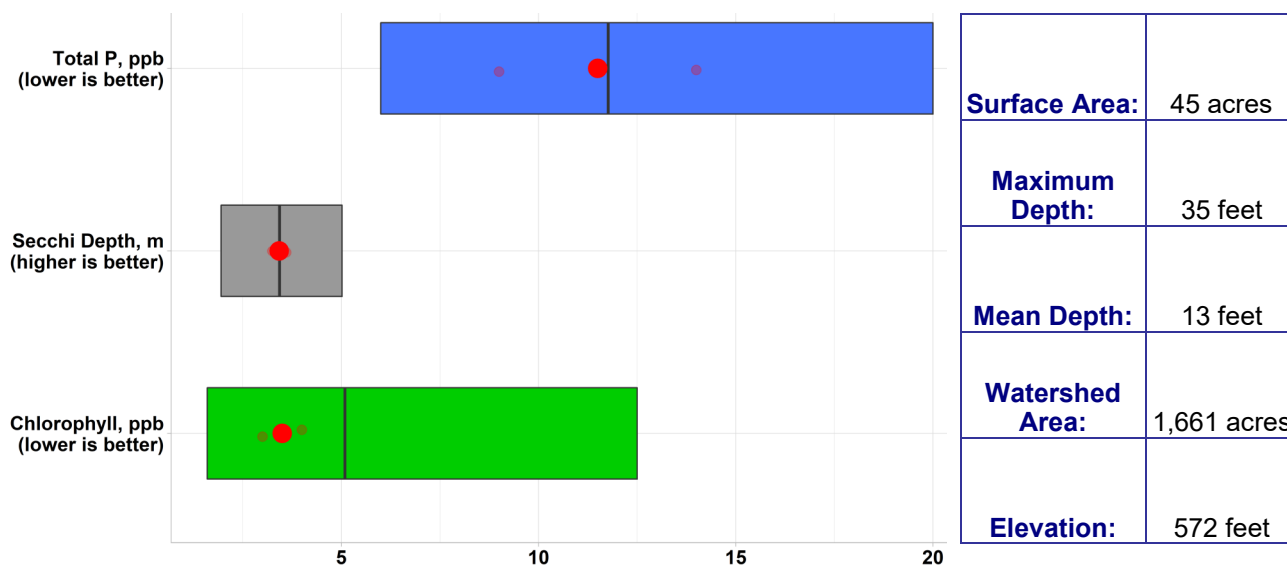
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 6.45 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.54 meters. The average total phosphorus reading of 6.63 ppb fell into the moderate range and was higher than the long-term average of 6.31 ppb. 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 3.00 ppb fell into the moderate range and was higher than the long-term average of 2.86 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are stable, total phosphorus concentrations are stable, and clarity readings are stable. This trend analysis is based on our 6-year long dataset and may not accurately represent long-term trends; however, trend analysis will be more precise as our dataset grows. The average color reading for 2020 was 14.13 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.00	14.13	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

Mud Pond



Mud Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Mud Pond. The line represents the long-term average value and the dot represents 2020's average value.

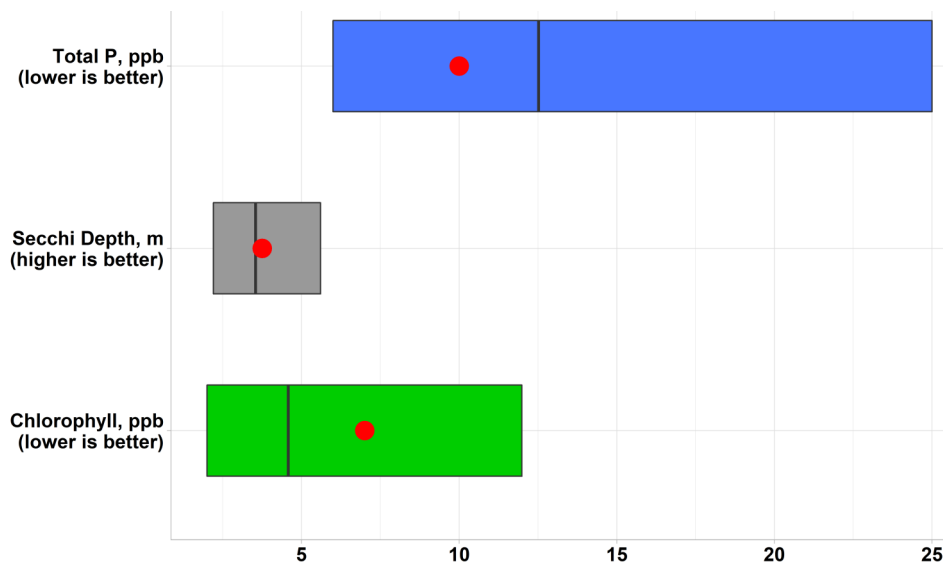
2020 Water Quality Highlights

Mud Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 3.43 meters, fell into the moderate clarity range, and was the same as the long-term average of 3.43 meters. The total phosphorus reading of 11.50 ppb fell into the moderate range and was less than the long-term average of 11.77 ppb. 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 3.50 ppb fell into the moderate range and was less than the long-term average of 5.14 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are stable, total phosphorus concentrations are stable, and clarity readings are stable. The color reading for 2020 was 70.00 SPU, indicating that water in Mud Pond is very highly colored.

Mud Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	15.57	70.00	Stable	Stable	Stable
Interpretation	Within acceptable range	Water was very 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

Otter Pond



Surface Area:	90 acres
Maximum Depth:	21 feet
Mean Depth:	10 feet
Volume:	814 acre-feet
Watershed Area:	790 acres
Flushing Rate:	0.7 flushes per year
Elevation:	392 feet

Otter Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Otter Pond. The line represents the long-term average value and the dot represents 2020's average value.

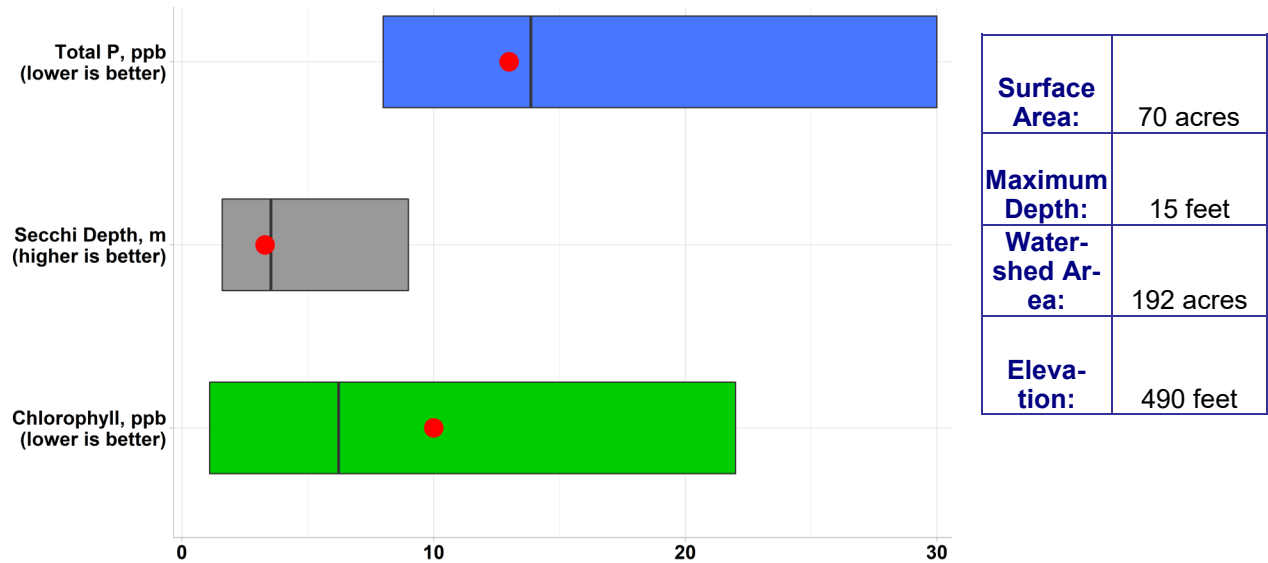
2020 Water Quality Highlights

Otter Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 3.75 meters, fell into the moderate clarity range, and was shallower than the long-term average of 3.82 meters. The total phosphorus reading of 10.00 ppb fell into the moderate range and was lower than the long-term average of 12.05 ppb. The chlorophyll-a reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 3.81 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are decreasing, total phosphorus concentrations are decreasing, and clarity readings are increasing. The color reading for 2020 was 50 SPU, indicating that water in Otter Pond is highly colored.

Otter Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	50.00	Increasing	Decreasing	Decreasing
Interpretation	Water was moderately colored	Deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

Papoose Pond



Papoose Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Papoose Pond. The line represents the long-term average value and the dot represents 2020's average value.

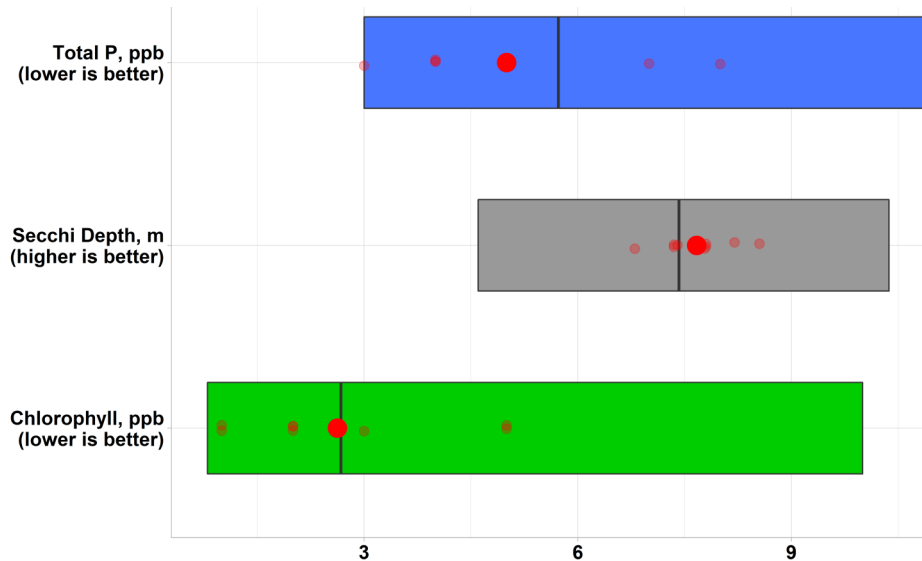
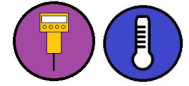
2020 Water Quality Highlights

Papoose Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 3.30 meters, fell into the moderate range, and was shallower than the long-term average of 3.51 meters. The Secchi disk did not hit the bottom this year but has infrequently in the past. The total phosphorus reading of 13.00 ppb fell into the high range and was less than the long-term average of 13.90 ppb. The chlorophyll-a of 10.00 ppb fell into the high range and was higher than the long-term average of 6.46 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are stable, total phosphorus concentrations are stable, and clarity readings are increasing. The color reading for 2020 was 50.00 SPU, indicating that water in Papoose Pond is highly colored.

Papoose Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	50.00	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



Surface Area:	740 acres
Maximum Depth:	64 feet
Mean Depth:	45 feet
Volume:	24,510 acre-feet
Watershed Area:	2,522 acres
Flushing Rate:	0.3 flushes per year
Elevation:	460 feet

Peabody Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Peabody Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

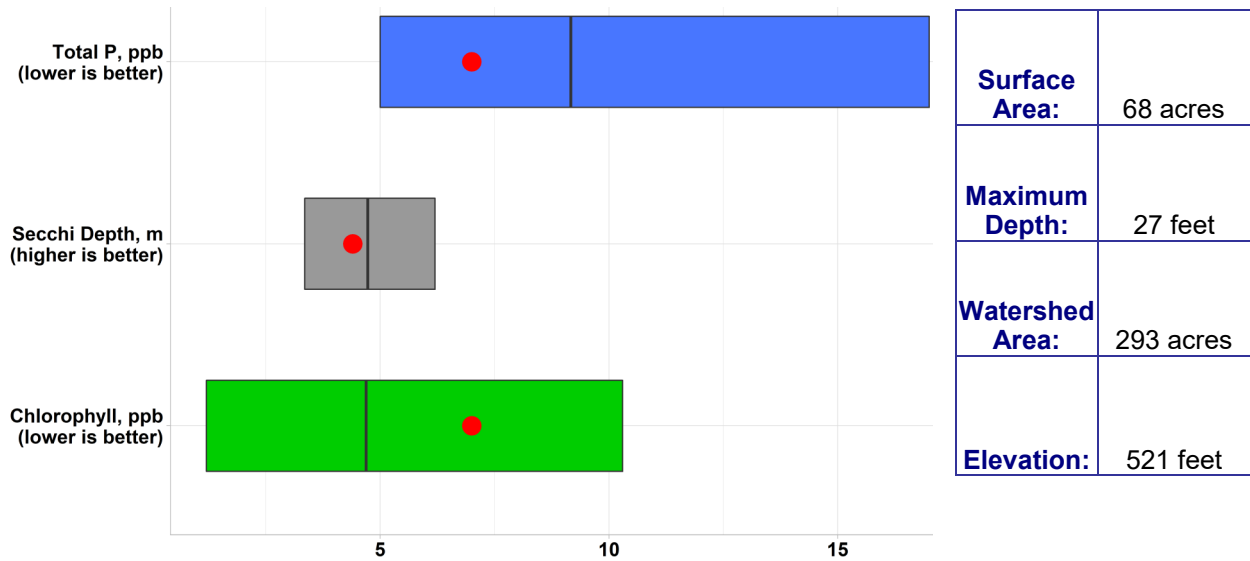
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 7.67 meters, fell into the high clarity range, and was deeper than the long-term average of 7.42 meters. The average total phosphorus reading of 5.00 ppb stayed within the moderate range and was less than the long-term average of 5.68 ppb. 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 2.63 ppb fell into the moderate range and was less than the long-term average of 2.67 ppb. 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 2020 was 13.38 SPU, indicating that water in Peabody Pond is moderately colored. Suitable coldwater fish habitat was present from June through August and became marginal in September.

Peabody Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	7.6	13.38	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



Perley Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Perley Pond. The line represents the long-term average value and the dot represents 2020's average value.

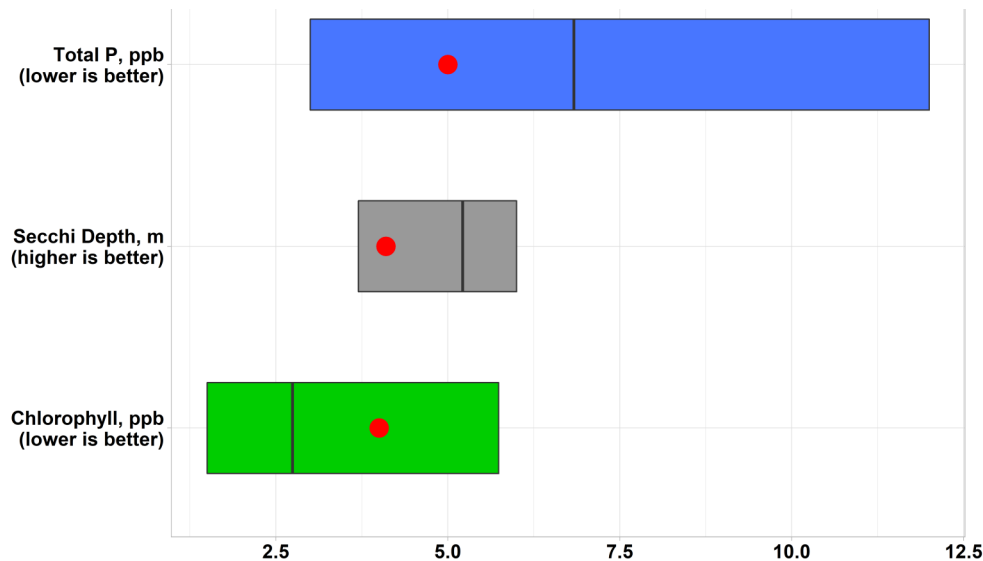
2020 Water Quality Highlights

Perley Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 4.40 meters, fell into the moderate clarity range, and was less than the long-term average of 4.68 meters. The total phosphorus reading of 7.00 ppb fell into the moderate range and was less than the long-term average of 9.17 ppb. The chlorophyll-a reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 4.78 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are decreasing, total phosphorus concentrations are decreasing, and clarity readings are stable. The color reading for 2020 was 30.00 SPU, indicating that water in Perley Pond is highly colored.

Perley Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	30.00	Stable	Decreasing	Decreasing
Interpretation	Water was moderately colored	Neither shallower nor deeper clarity readings over time	Less phosphorus in water over time	Less chlorophyll in water over time

Pickerel Pond



Surface Area:	17 acres
Maximum Depth:	18 feet
Watershed Area:	290 acres
Elevation:	515 feet

Pickerel Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Pickerel Pond. The line represents the long-term average value and the dot represents 2020's average value.

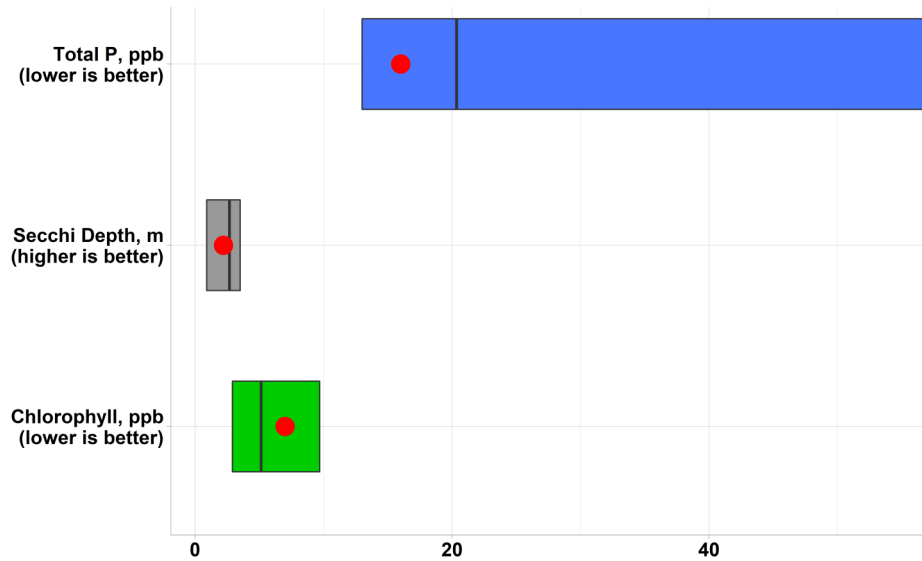
2020 Water Quality Highlights

Pickerel Pond is sampled by LEA once per year in August. The long-term average reflects data from 1996 to 2020. The Secchi disk reading for 2020 was 4.10 meters, fell into the moderate clarity range, and was shallower than the long-term average of 5.15 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 5.00 ppb fell into the moderate range and less than the long-term average of 6.83. The chlorophyll-a reading of 4.00 ppb fell into the moderate range and was higher than the long-term average of 2.75 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are stable and total phosphorus concentrations are increasing. The color reading for 2020 was 30.00 SPU, indicating that water in Pickerel Pond is highly colored.

Pickerel Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	30.00	Increasing	Stable
Interpretation	Water was moderately colored	More phosphorus in water over time	Neither more nor less chlorophyll in water over time

Pleasant Pond



Surface Area:	604 acres
Maximum Depth:	11 feet
Watershed Area:	4,624 acres
Elevation:	362 feet

Pleasant Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Pleasant Pond. The line represents the long-term average value and the dot represents 2020's average value.

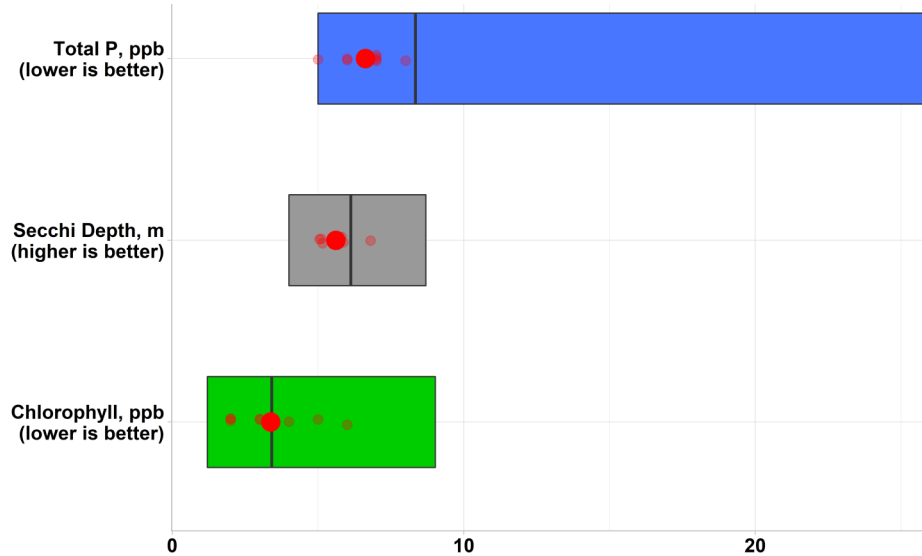
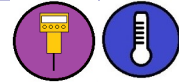
2020 Water Quality Highlights

Pleasant Pond is sampled by LEA once per year in August. The long-term average reflects data from 1997 to 2020. The Secchi disk reading for 2020 was 2.20 meters, fell into the moderately clear range, and was shallower than the long-term average of 2.67 meters. The total phosphorus reading of 16.00 ppb fell into the high range and was less than the long-term average of 20.35 ppb. The chlorophyll-a reading of 7.00 ppb fell into the moderate range and was higher than the long-term average of 5.13 ppb. Long-term trend analysis indicates chlorophyll-a concentrations are stable, total phosphorus concentrations are stable, and clarity readings are decreasing. The color reading for 2020 was 35 SPU, indicating that water in Pleasant Pond is highly colored.

Pleasant Pond's 2020 Quick Stats

	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	35.00	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

Sand Pond



Surface Area:	256 acres
Maximum Depth:	49 feet
Watershed Area:	1394 acres
Elevation:	502 feet

Sand Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Sand Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

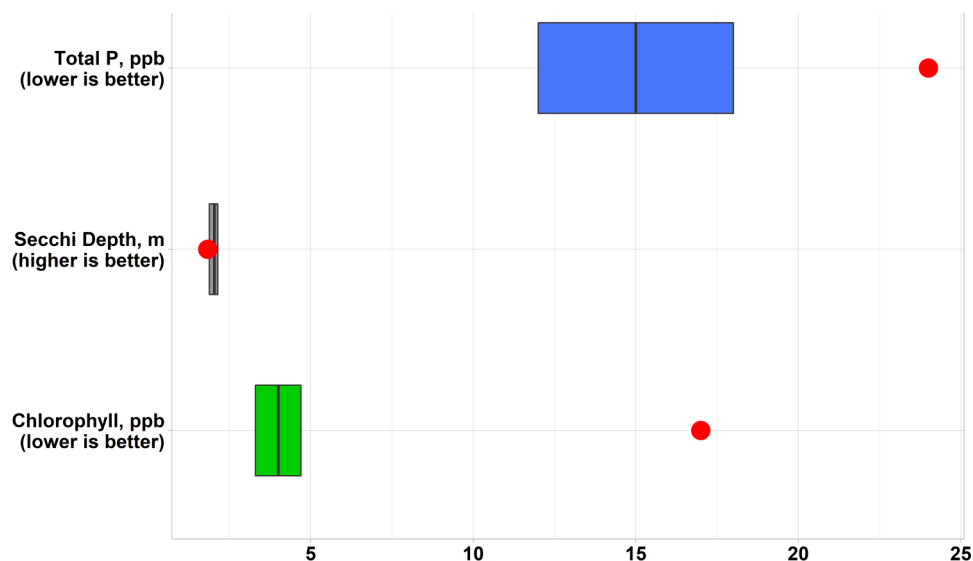
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 5.61 meters, fell into the moderately clear range, and was shallower than the long-term average of 6.22 meters. The average total phosphorus reading of 6.63 ppb fell into the moderate range and was less than the long-term average of 8.34 ppb. 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 3.40 ppb fell into the moderate range and was less than the long-term average of 3.44 ppb. 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 2020 was 18.63 SPU, indicating that water in Sand Pond is moderately 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 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.33	18.63	Decreasing	Stable	Stable
Interpretation	Within acceptable range	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

Sebago Cove



Sebago Cove surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Sebago Cove. The line represents the long-term average value and the dot represents 2020's average value.

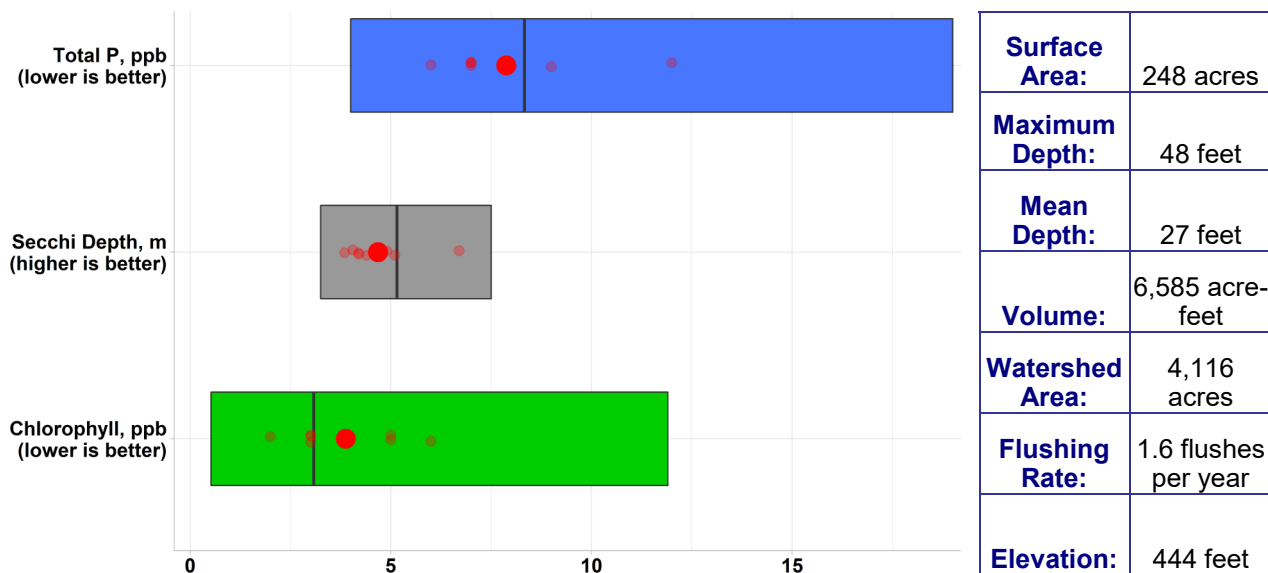
2020 Water Quality Highlights

Sebago Cove is sampled by LEA once per year in August. The long-term average reflects data from 2016 to 2020. The Secchi disk reading for 2020 was 1.83 meters and was less than the long-term average of 2.04 meters. The Secchi disk hit the bottom, indicating that Secchi depth is not a reliable indicator of water clarity. The total phosphorus reading of 24.00 ppb fell into the very high range and is higher than the long-term average of 15.00 ppb. The chlorophyll-a reading of 17.00 ppb fell into the moderate range and was higher than the long-term average of 4.00 ppb. 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 4-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 2020 was 35.00 SPU, indicating that water in Sebago Cove is highly colored.

Sebago Cove's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	35.00	Stable	Stable
Interpretation	Water was highly colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Stearns Pond



Stearns Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Stearns Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

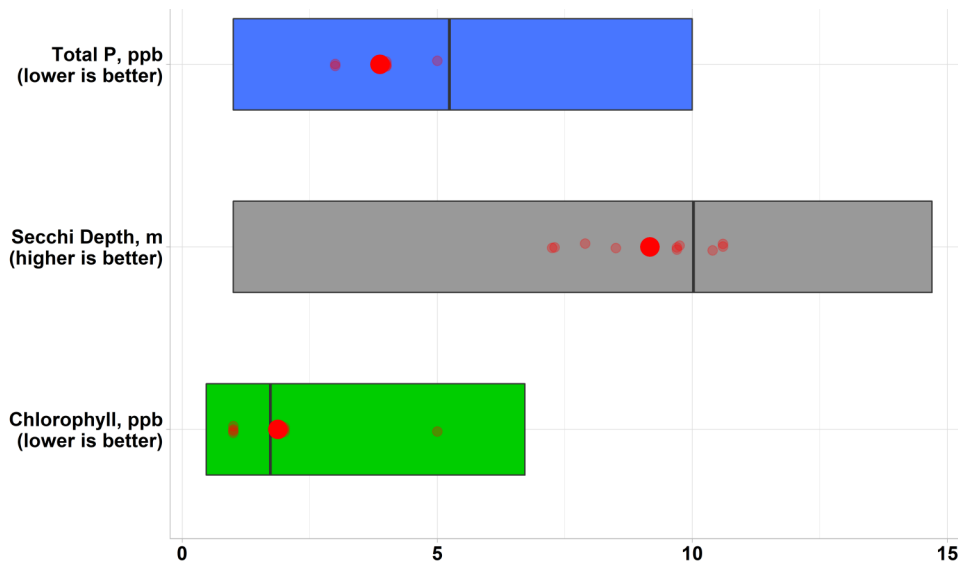
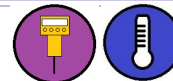
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 4.68 meters, fell into the moderate range, and was shallower than the long-term average of 5.24 meters. The average total phosphorus reading of 7.88 ppb fell into the moderate range and was less than the long-term average of 8.34 ppb. 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 3.90 ppb fell into the moderate range and was higher than the long-term average of 3.17 ppb. 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 2020 was 20.50 SPU, indicating that water in Stearns Pond is moderately colored. Suitable coldwater fish habitat was present from June through July, became marginal in August, and became unsuitable in September.

Stearns Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	11.22	20.50	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

Trickey Pond



Surface Area:	315 acres
Maximum Depth:	57 feet
Mean Depth:	34 feet
Volume:	10,108 acre-feet
Watershed Area:	555 acres
Flushing Rate:	0.1 flushes per year
Elevation:	360 feet

Trickey Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Trickey Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

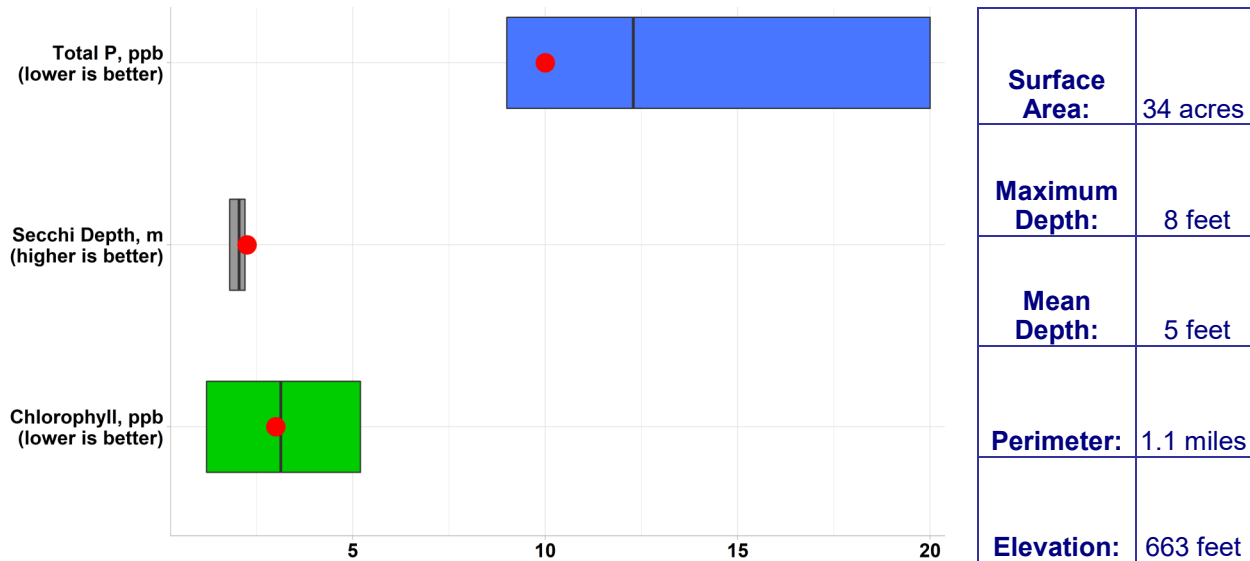
2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 9.17 meters, fell into the high clarity range, and was shallower than the long-term average of 10.06 meters. The average total phosphorus reading of 3.88 ppb fell into the low range and was less than the long-term average of 5.27 ppb. 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 1.90 ppb fell into the low range and was higher than the long-term average of 1.79 ppb. 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 2020 was 9.25 SPU, indicating that water in Trickey Pond fell into the low color range. Suitable fish habitat was present from June through September.

Trickey Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	9.67	9.25	Decreasing	Decreasing	Increasing
Interpretation	Within acceptable range	Water color fell into the low range	Shallower clarity readings over time	Less phosphorus in water over time	More chlorophyll in water over time

Webber Pond



Webber Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Webber Pond. The line represents the long-term average value and the dot represents 2020's average value.

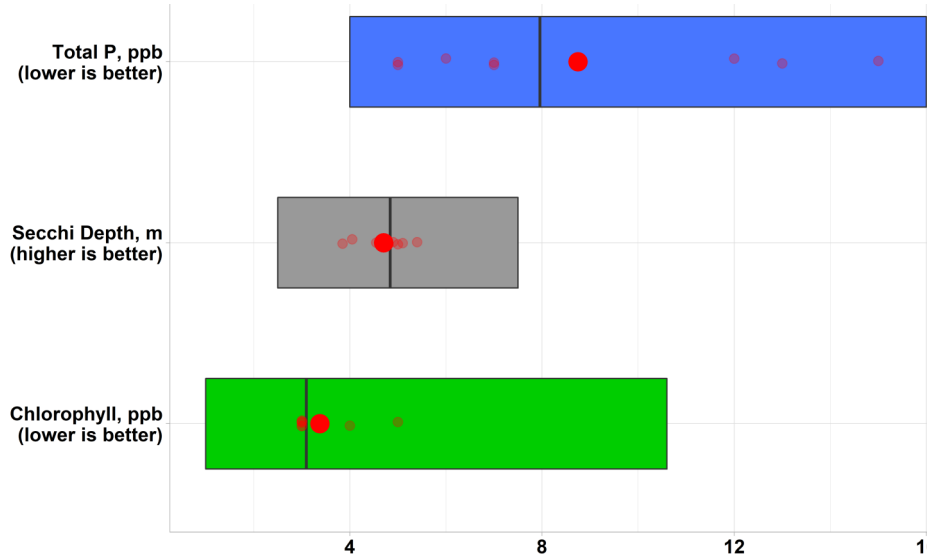
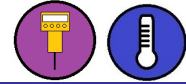
2020 Water Quality Highlights

Webber 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 2020 was 2.25 meters and was deeper than the long-term average of 2.04 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 10.00 ppb fell into the moderate range and was less than the long-term average of 12.83 ppb. The chlorophyll-a reading of 3.00 ppb fell into the moderate range and was less than the long-term average of 3.13 ppb. Long-term trend analysis indicates chlorophyll-a concentrations in Webber Pond are stable and total phosphorus concentrations are stable. The color reading for 2020 was 25.00 SPU, indicating that water in Webber Pond is moderately colored.

Webber Pond's 2020 Quick Stats

	Water Color (SPU)	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	25.00	Stable	Stable
Interpretation	Water was moderately colored	Neither more nor less phosphorus in water over time	Neither more nor less chlorophyll in water over time

Woods Pond



Surface Area:	462 acres
Maximum Depth:	29 feet
Mean Depth:	17.5 feet
Volume:	7,890 acre-feet
Watershed Area:	3,329 acres
Flushing Rate:	0.77 flushes per year
Elevation:	456 feet

Woods Pond surface water chlorophyll, phosphorus, and Secchi depth data summary

Colored boxes represent the long-term range of values, from minimum to maximum, obtained on Woods Pond. The line represents the long-term average value and the dot represents 2020's average value. The small red dots represent individual readings taken in 2020.

2020 Water Quality Highlights

The average Secchi disk reading for 2020 was 4.71 meters, fell into the moderately clear range, and was shallower than the long-term average of 4.94 meters. The average total phosphorus reading of 8.75 ppb fell into the moderate range and was higher than the long-term average of 8.06 ppb. 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 3.38 ppb fell into the moderate range and was higher than the long-term average of 3.08 ppb. 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 2020 was 24.75 SPU, indicating that water in Woods Pond is moderately colored. Suitable coldwater fish habitat was present through June, became marginal in July, and became unsuitable in August through September.

Woods Pond's 2020 Quick Stats

	Deep Water Phosphorus (average in ppb)	Water Color (SPU)	Clarity Trend	Phosphorus Trend	Chlorophyll-a Trend
Analysis Result	10.00	24.75	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