



Three Lakes Development Association

Water Sampling Results

August 11th, 2025

We resampled our lakes for **Chlorophyll** and **Phosphorus** on July 20, 2025. Thanks again to Bill Lowry (Elora), Elizabeth Simonson (Rose), Jim Burho (Strand), John Barrett (Winkle), Chris Peterson (Schisler), and Peter Jongewaard (Dodo) for doing the collecting and/or allowing the use of their pontoons/boats/ canoes.

Pace Analytical Laboratories, at 4730 Oneota Street in West Duluth, is the lab we contract to both analyze the samples *and* report results directly to the Minnesota Pollution Control Agency (MPCA). Our Pace contact person is Karenzha Schemmer, karenzha.schemmer@pacelabs.com, 218-241-4011.

We have good data going back to 1995. Some of those sampling campaigns were done in cooperation with the North St Louis County Soil and Water Conservation District office in Virginia. We sample the **top-2-meters-depth** for nutrient levels (phosphorus and chlorophyll) today. There were several years prior to 2011 where sampling was done monthly on all the lakes. The data displayed on the graphs below are using average values for those years where multiple samples were taken per lake. Since 2011, **one sample** has been taken **per lake, per year**.

The MPCA is the keeper of these data, and their complete information that they have accumulated can be accessed thru the Minnesota Department of Natural Resources (MNDNR) **LakeFinder** webpage. Links to these pages for our lakes can be found on our **Three Lakes website**, under the Government Links tab - MNDNR page, then click on the water quality tab in the left margin of that page.

All our lakes have unique identifier numbers that are used by the MPCA and the MNDNR (and everyone else who collects information from these lakes). They are listed below, in numerical order, for handy reference in case you want to look for lake data elsewhere:

69-0521 – Lake Elora – sample location number is **69-0521-00-201**

69-0522 – Winkle Lake – sample location number is **69-0522-00-201**

69-0523 – Dodo Lake – sample location number is **69-0523-00-202**

69-0525 – Rose Lake – sample location number is **69-0525-00-201**

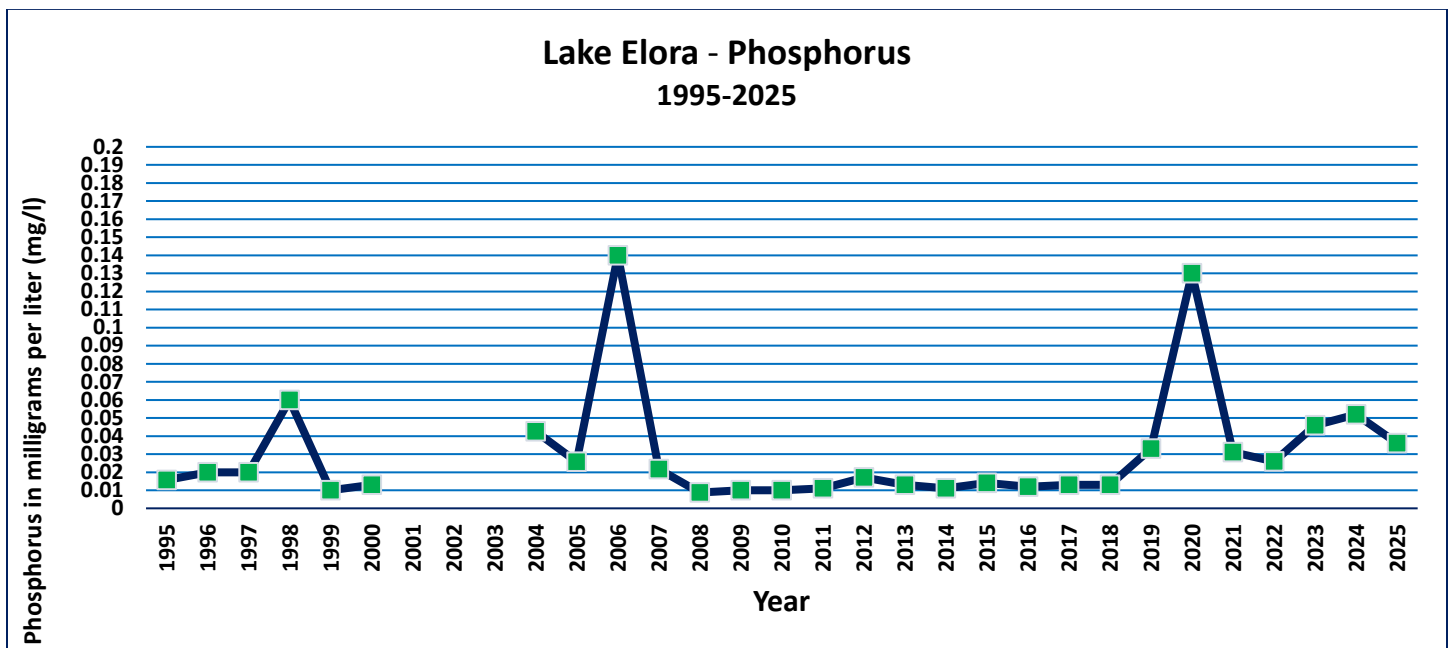
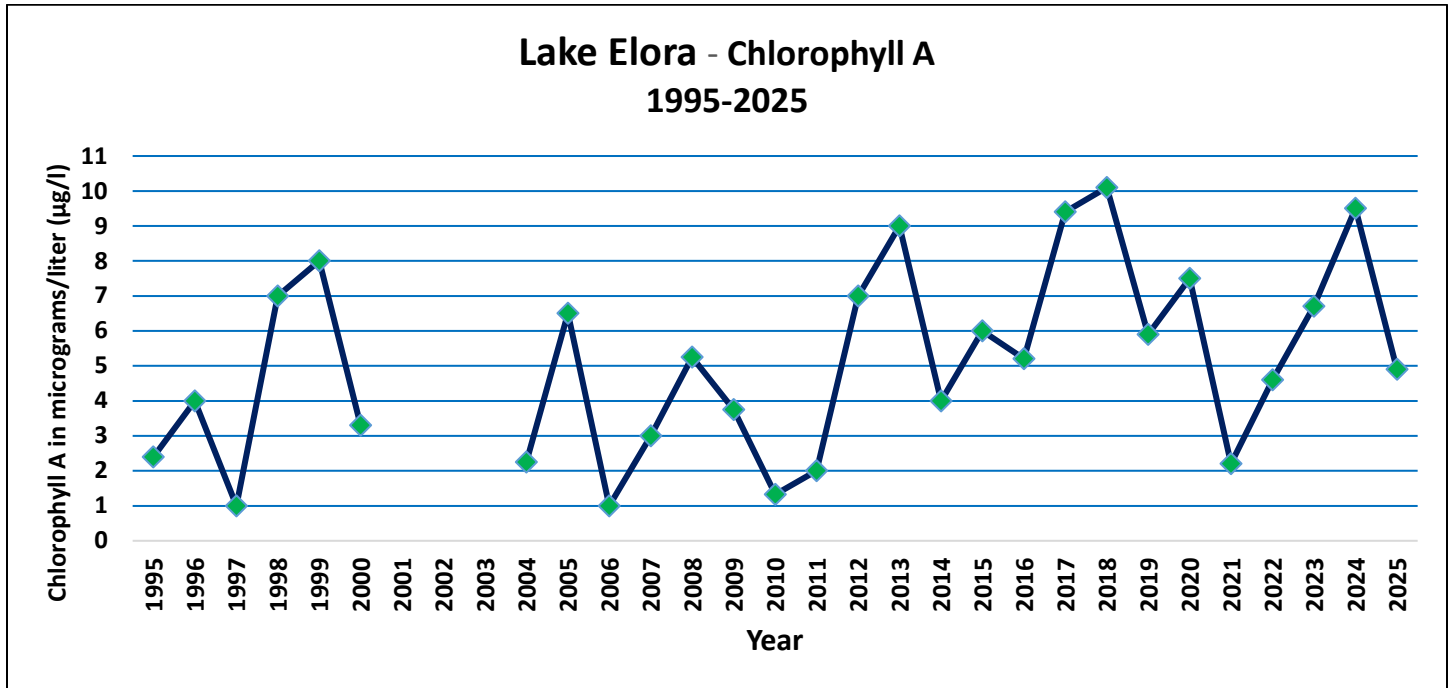
69-0529 – Strand Lake – sample location number is **69-0529-00-201**

69-0533 – Schisler Lake – sample location number is **69-0533-00-201**

Below find the graphs per lake with the data we have collected, since 1995, for the two principal nutrient variables, **Chlorophyll A** and **Phosphorus**. Sampling takes place in the same location each year above the deepest point known in each lake. Also see the sample submittal forms for each lake.

Lake Elora – 69-0521

Sampling takes place about where the ice-fishing houses appear every winter, where maximum depth is ~35'. Surface area is 276 acres. Lake Elora is within the Cloquet River watershed. This year 2025 both the chlorophyll value and the phosphorus value stayed relatively low.





Minnesota Pollution Control Agency

MPCA Chain-of-Custody Form

revision 2017.0228

* Indicates a required field

PROJECT/CLIENT INFO

Program Code

(MDH Lab Only)

Lab Name:

Address:

Work Order Number:

Turnaround Time:

COC Type:

COC ID:

Page:

2 of 6

LABORATORY

MDH Lab Only

Lab Code

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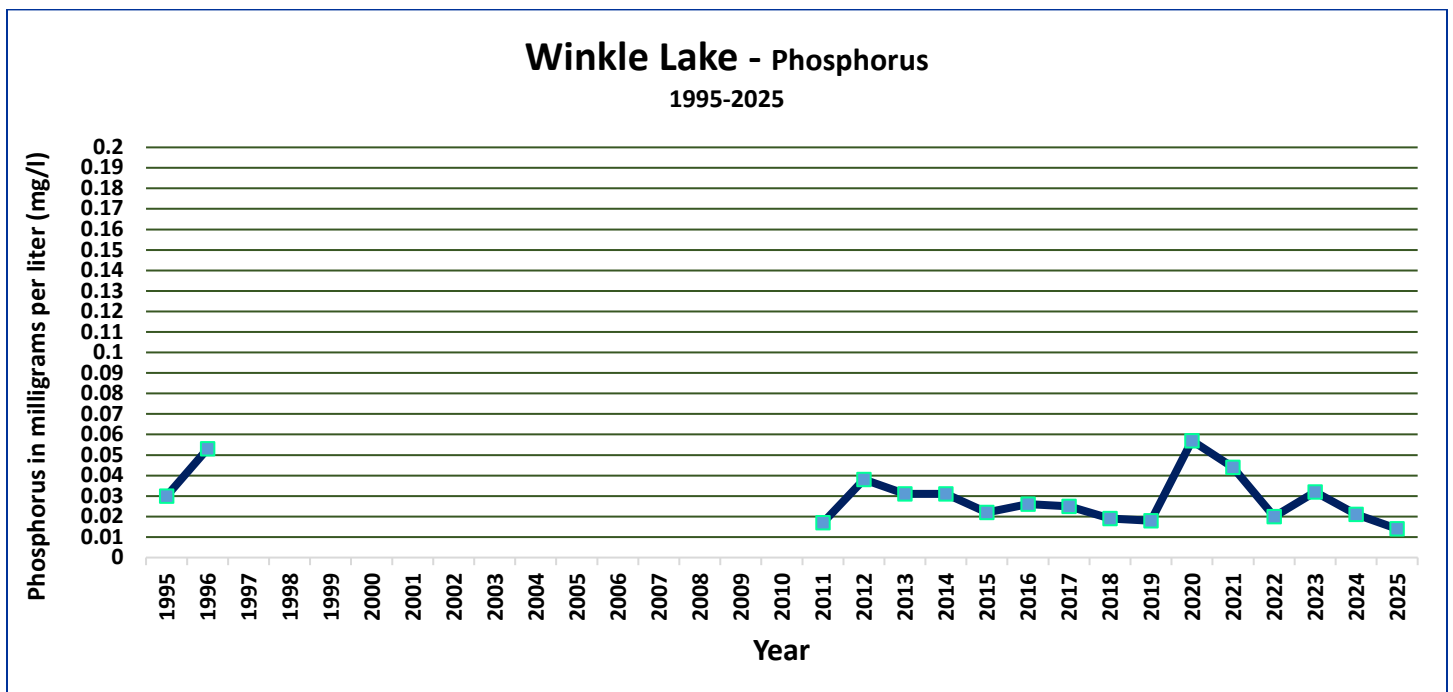
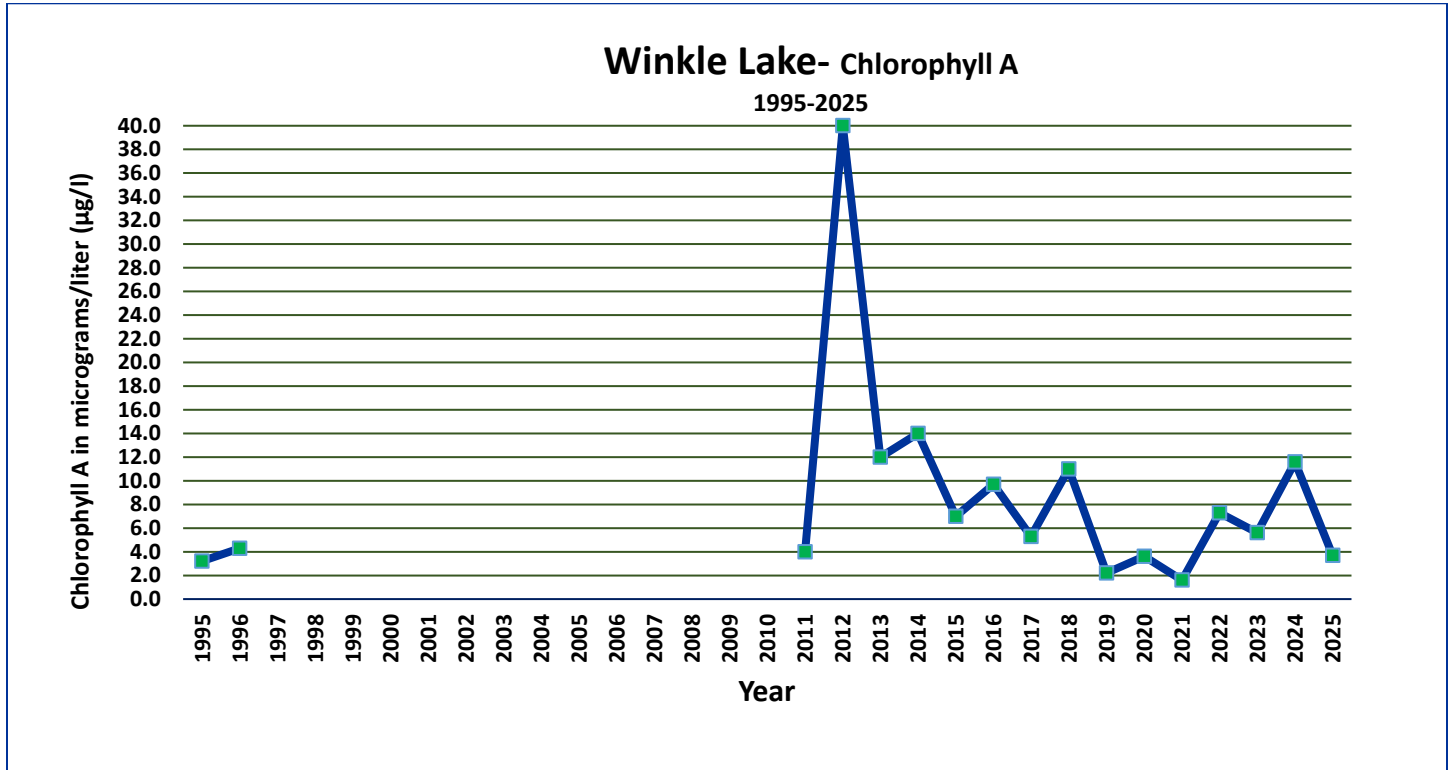
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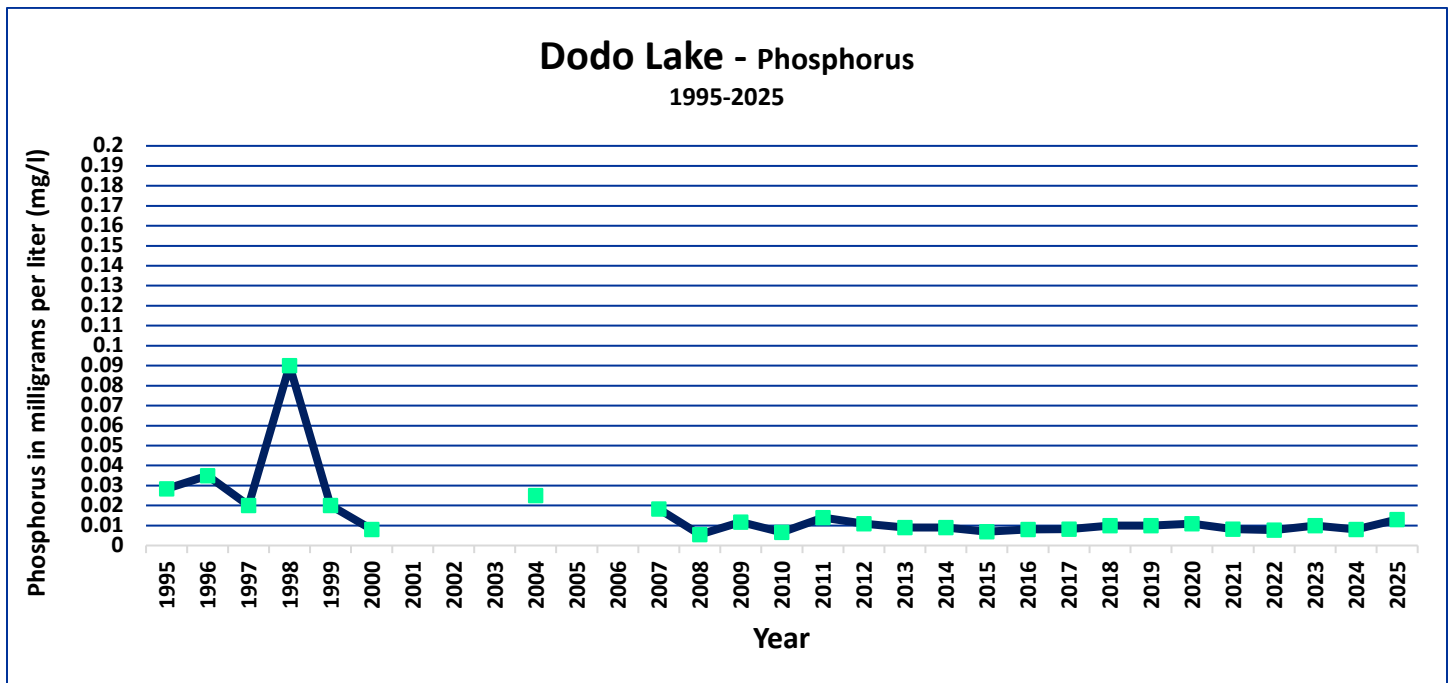
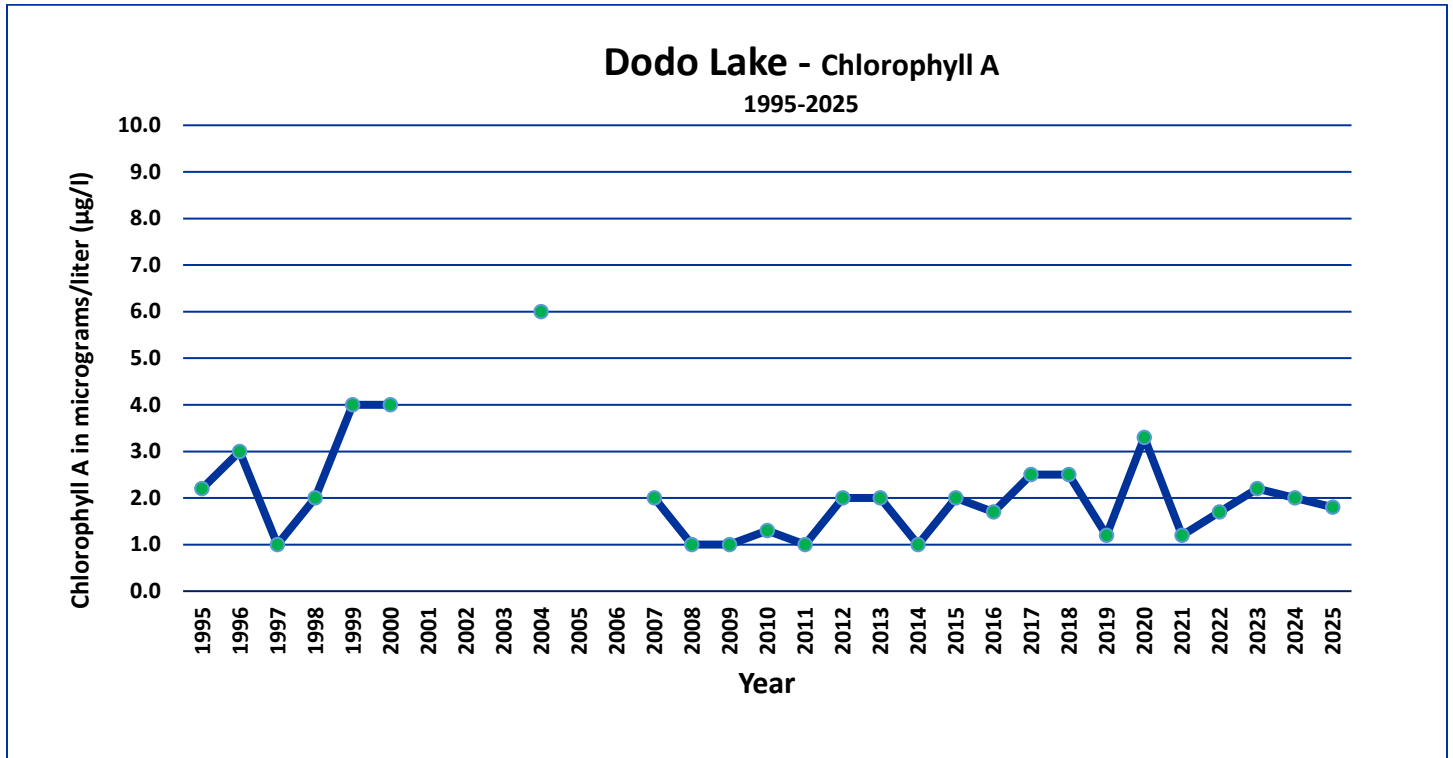
Winkle Lake – 69-0522

Winkle Lake – 2025 - chlorophyll was up a bit, and phosphorus was our lowest ever recorded. Winkle Lake is the shallowest lake we sample, maximum depth is 14 feet, with smallest surface area of 27+ acres. Winkle is within the Cloquet River watershed.



Dodo Lake – 69-0523

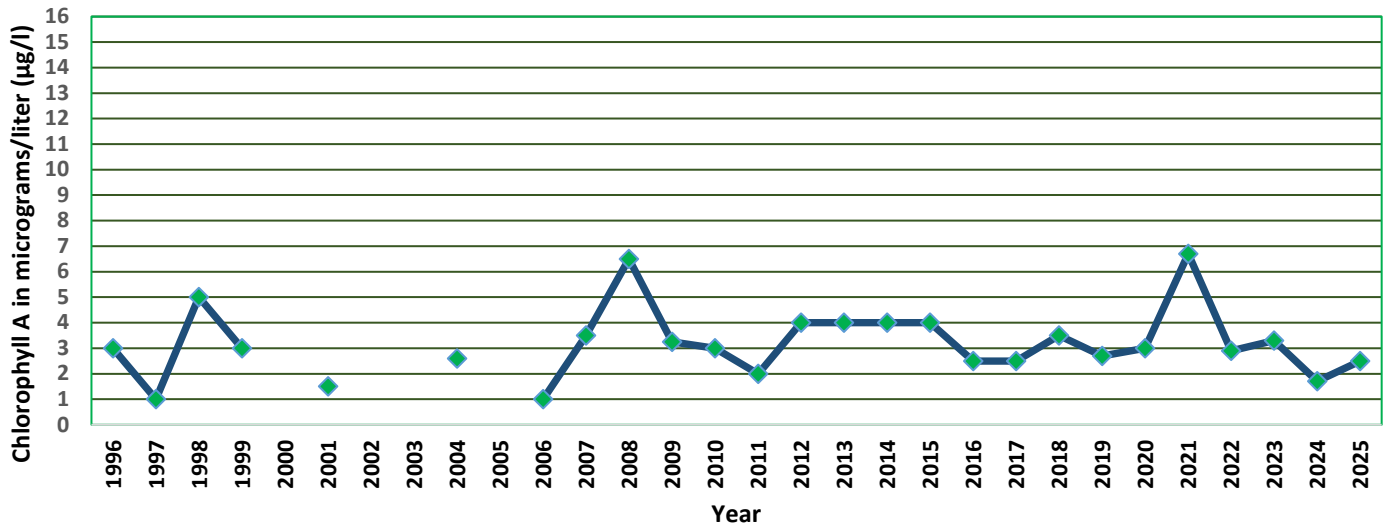
Dodo Lake is the deepest lake we sample, listed at 53' on the DNR lake-bottom-contour map. Surface area is approx. 90 acres. Low levels of chlorophyll and very low phosphorus levels continue in 2025. Dodo is within the Cloquet River watershed.



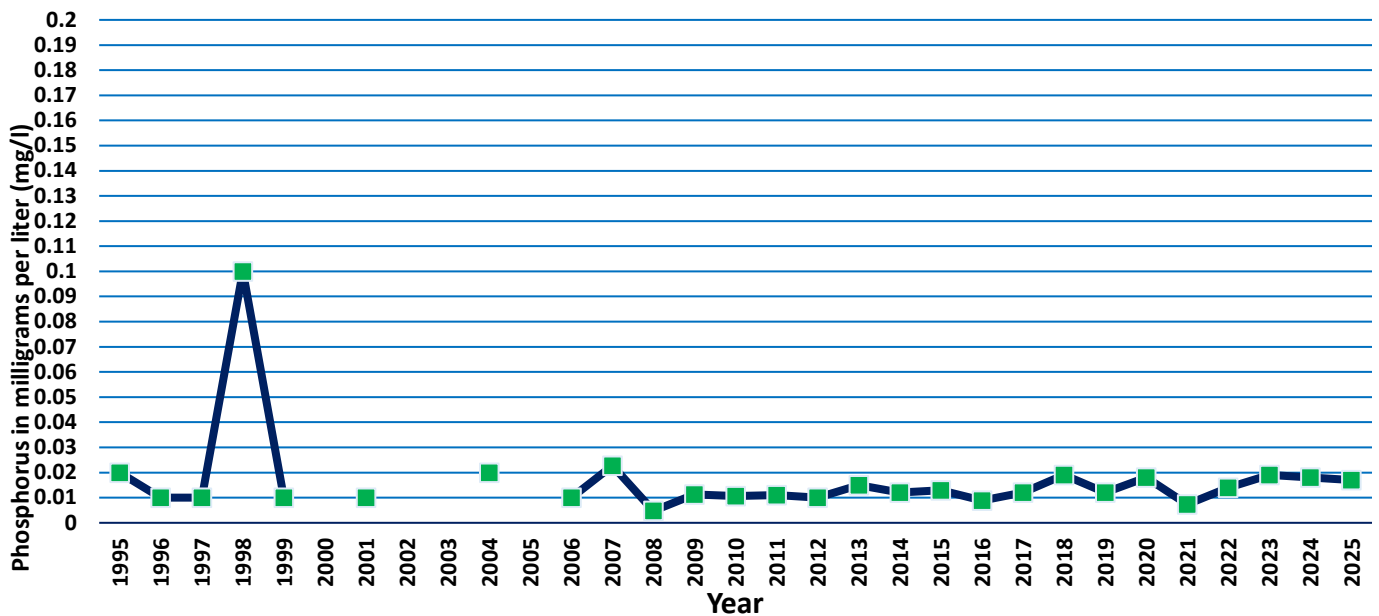
Rose Lake – 69-0525

Rose Lake's deepest spot is between 35'-40', with a total surface area of about 60 acres. Rose Lake is within the Cloquet River watershed. Chlorophyll and phosphorus both returned low values in 2025.

Rose Lake - Chlorophyll A
1995-2025

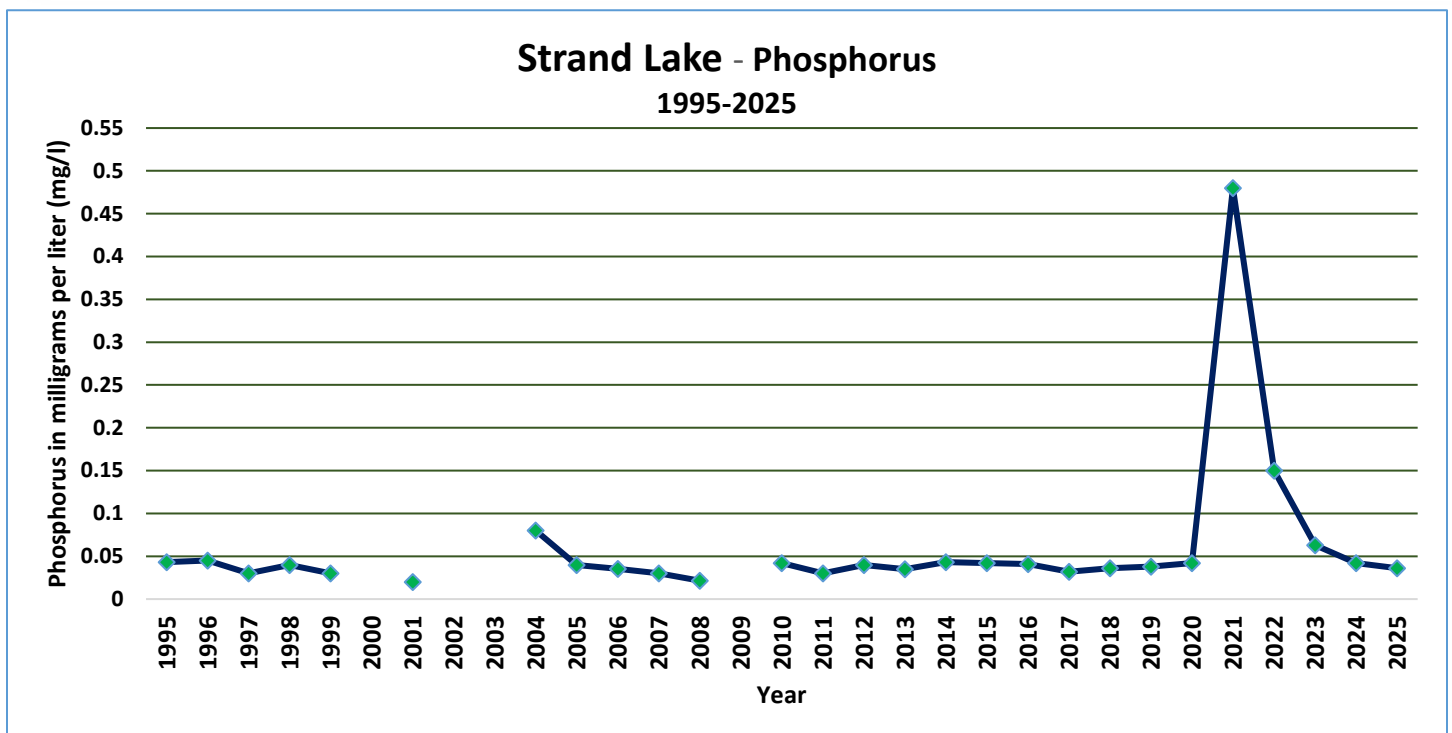
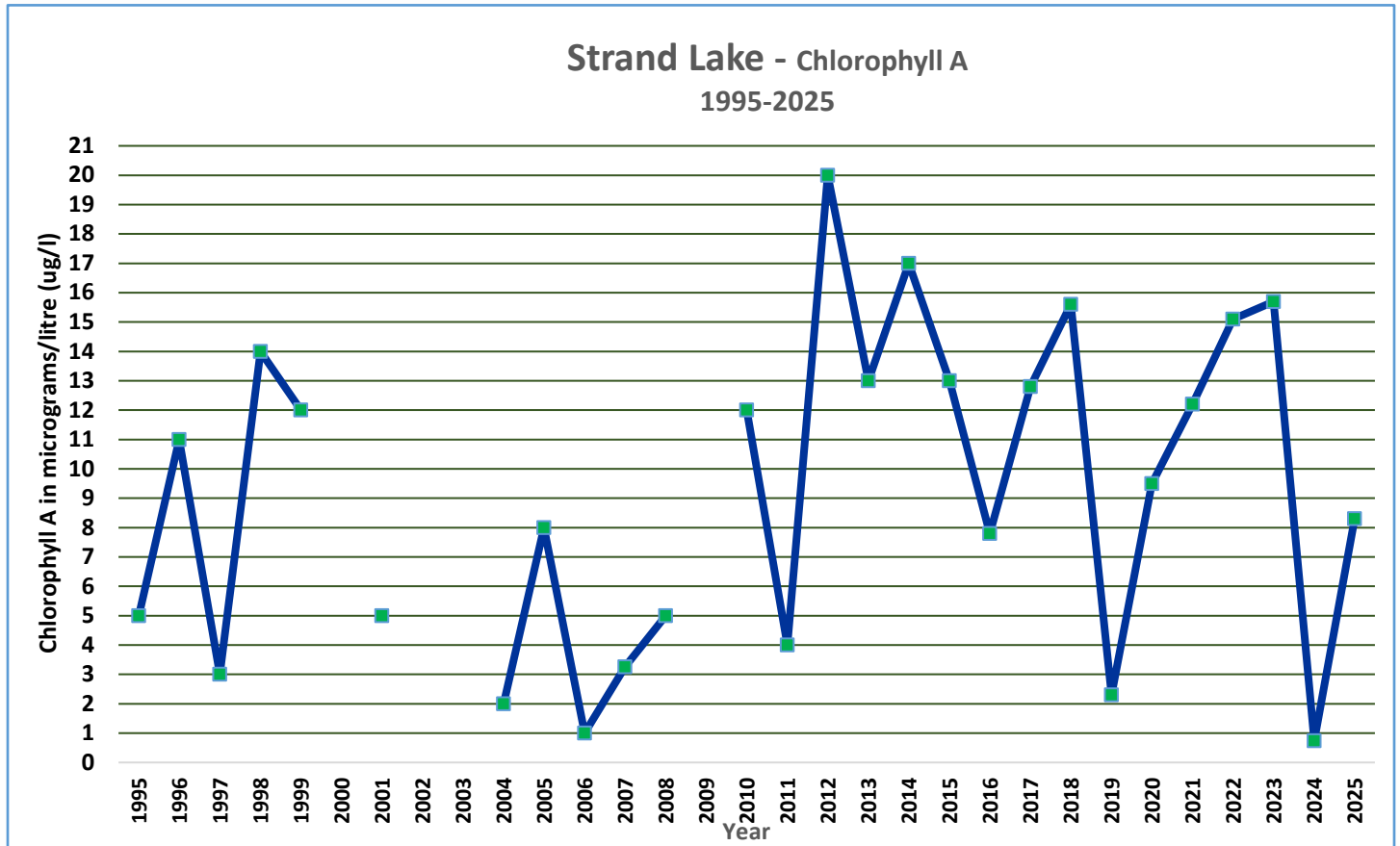


Rose Lake - Phosphorus
1995-2025



Strand Lake – 69-0529

Strand Lake is the largest in surface area (334 acres) and has a max depth of 16'. Strand Lake is in the Whiteface River watershed (the other four lakes we sample are within the Cloquet River watershed). The large surface area and shallow depth allow for storm disturbance of sediments, reflected in high variability in the results (normal). Chlorophyll jumped a little this year. Phosphorus sampled very low.



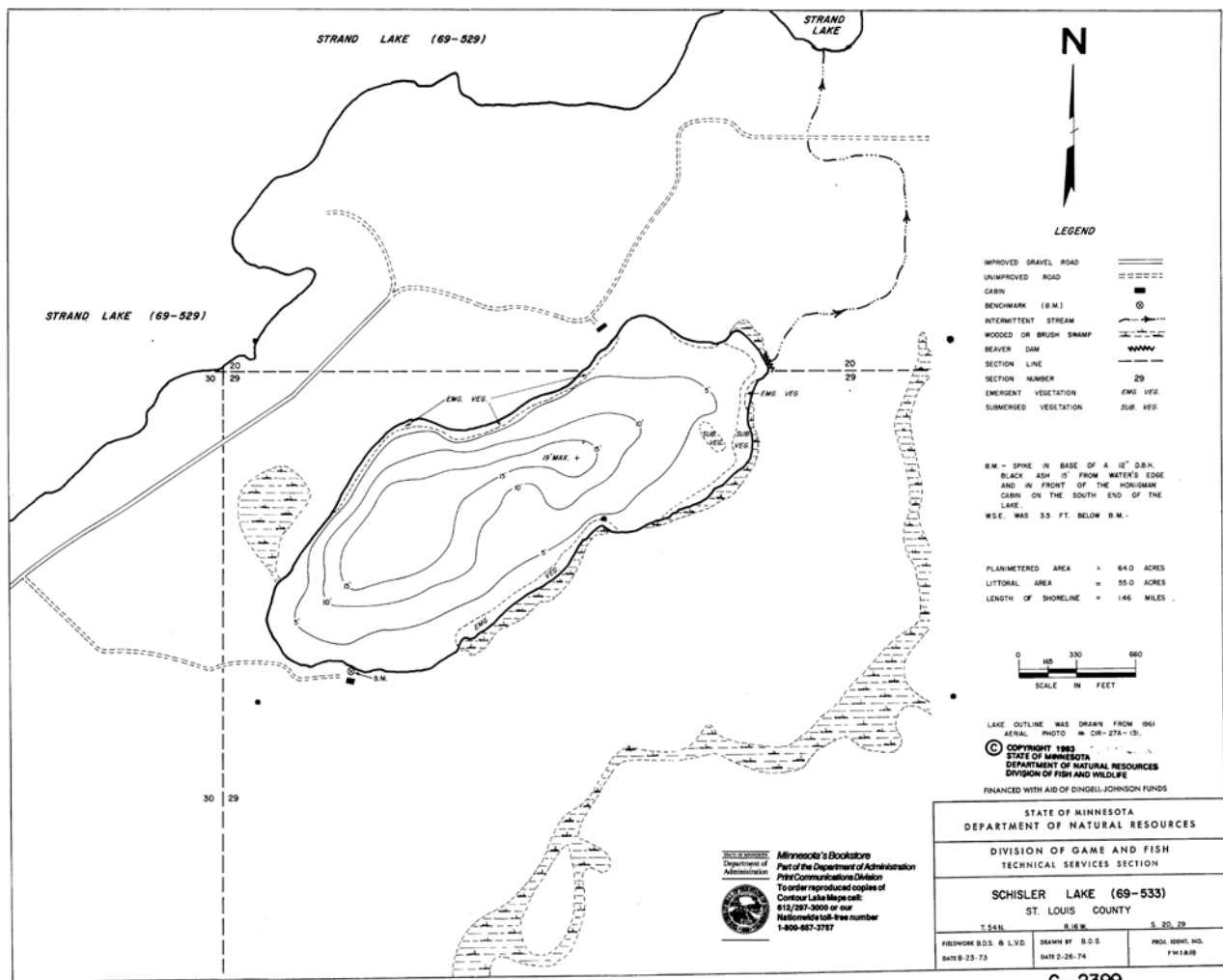
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Schisler Lake – 69-0533

This year 2025 we added neighboring Schisler Lake to our sampling campaign for the first time, thanks to Christian Peterson for access. Schisler Lake has a maximum depth of 19 feet, and is about 64 acres in area. It drains into the east end of Strand Lake and is also in the Whiteface River watershed. Chlorophyll and phosphorus values returned near identical values to those from Strand Lake this year.

Schisler Lake Water sampling results

Lake	Year	Chlorophyll A	Phosphorus
Schisler	2025	8.3	0.032



C-2399



Minnesota Pollution
Control Agency

MPCA Chain-of-Custody Form

replaces DPT 0038

Work Order Number:

COC Type:

Page:

6 of 6

PROJECT/CLIENT INFO

Program Code
(MDH Lab Only)

Turnaround Time:

LABORATORY

FOR LAB USE
ONLY

Facility Code:*

Project Name:*

Project Task Code:*

Lab Name:

Address:

Project Manager:

Potential Hazard?

If yes, add information to Sampler Comments field

EPA Lab ID:*

Lab Work Order
Number

SAMPLE DETAILS

SAMPLING METHODS

SC-1B-Field Sample
OC-1B-Field Blank Sample
OC-1B-Field Duplicate Sample
OC-1B-Trip Blank Sample
OC-1B-Equipment Blank
Treated-Multi-Treatment system sample
Treated-Her-Treatment system sample

LAB MATRICES
W-Drinking Water
W-Composite w/AS
SD-Sediment
AS-Air

BI-Biological Material
OT-Other
TS-Tissue

FIELD MATRICES
W-Groundwater
W-Surface Water
W-Stream-Drinking Water
QC-Sub-Surface Blank Water
Air-Indoor/Outdoor Air
Gas-Soil-Soil Gas

ANALYSIS REQUESTED

FE PRESERV

ANALYSIS

Phosphorus

Chlorophyll

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MIN Location
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Sample Type*

Start Date*
(mm/dd/yyyy)

Start Time*
24 hr (hh:mm)

Start

End

Units (m or ft.)

Sampling Method*

End Date
(mm/dd/yyyy)

End Time
24 hr (hh:mm)

Lab Matrix*

Field Matrix*

Sampler Comments
(filter volume, special handling, etc.)

of Cont

ANALYSIS*

Phosphorus

Chlorophyll

Lab Sample No.

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Sampler's Name:

CHRISTIAN M. LESTER

Phone#: 218-721-7261

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

Sampler's Signature:

[Signature]

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

Sampler's Organization: Three Lakes Development Assoc.

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

Receiving Comments: Please log the sample under one workorder. There should be a total of six samples in separate coolers.

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

Relinquished By/Signature

[Signature]

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

(Sampler)

Peter Jorgensen

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

(Sample)

Peter Jorgensen

Address: 134 Cottonwood Ave.

Acct#: 218-341-4017

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Our annual water sampling campaigns have been providing water quality data to the MPCA since 1995, a very good record for lakes in our region of the state. We report directly to the MPCA under MPCA **PRJ # 07135**, and our MPCA contact person in St Paul is:

Mary Knight
Environmental Analysis & Outcomes Division
Minnesota Pollution Control Agency
(651) 757-2424
mary.knight@state.mn.us

The analytical laboratory we deal with is Pace Analytical Services located in West Duluth, they are very familiar with what we need. Each year we pick up from them the prepared sample containers a week or two before the decided sampling date. Our new Pace contact person this year (2025) has been very helpful.

Karenzha Schemmer
Project Manager, MN
Pace Analytical Services
4730 Oneota St, Duluth, MN 55807
218-241-4011 | www.pacelabs.com
karenzha.schemmer@pacelabs.com

If there are any questions in the community about this report, please feel free to contact your local lake director or TLDA board member, or me (PKJ) personally.

Peter Jongewaard
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Canyon MN 55717
218-341-4017
pkjongewaard@gmail.com

Please keep doing the good work of keeping our lakes clean!