

Measuring Water Quality

Oliver, Olin and Martin Lakes

LaGrange County Indiana



- Water Quality Monitoring Background
- View of historical data 1993-2021
 - Water Clarity
 - Chlorophyll
 - Phosphorous
 - Nitrogen

Background

- **The Indiana Clean Lakes Program (INCLP)**
 - A multifaceted water monitoring and education program
 - Developed in partnership with the Indiana Department of Environmental Management (IDEM) Office of Water Quality
 - Administered by Indiana University's O'Neill School of Public and Environmental Affairs.

- **Objectives:**
 - Lake Water Quality Assessment
 - Citizen Science – Volunteer Lake Monitoring
 - Outreach and Education

- **The Oliver-Martin Lakes Conservation and Improvement Association and now the Greater Olin Lake Conservancy have participated in INCLP since 1993.**



Background



Lake Water Quality Assessment:

- **General observations noted about weather and appearance of lake water are recorded.**
- **Water samples taken from each lake by INCLP staff and students from April through September**
- **Samples are tested onsite or in a lab and results collected and published annually**

Volunteer Lake Monitoring:

- **A volunteer on the lakes uses a Secchi Disk to observe the clarity of the water in each lake from May through September, records the results and reports them to INCLP for inclusion in their reports.**



Background



Earlier this year a volunteer for GOLC requested a detailed copy of all testing data for the period 1993 – 2021 from the Indiana Clean Lakes Program.

The following charts illustrate the data collected over nearly 30 years for all three lakes for:

Water Clarity – visual observation of submerged secchi disk

Chlorophyll - measurement and distribution of microscopic living plant matter

Total Phosphorous – a common nutrient that can be a pollutant in excess

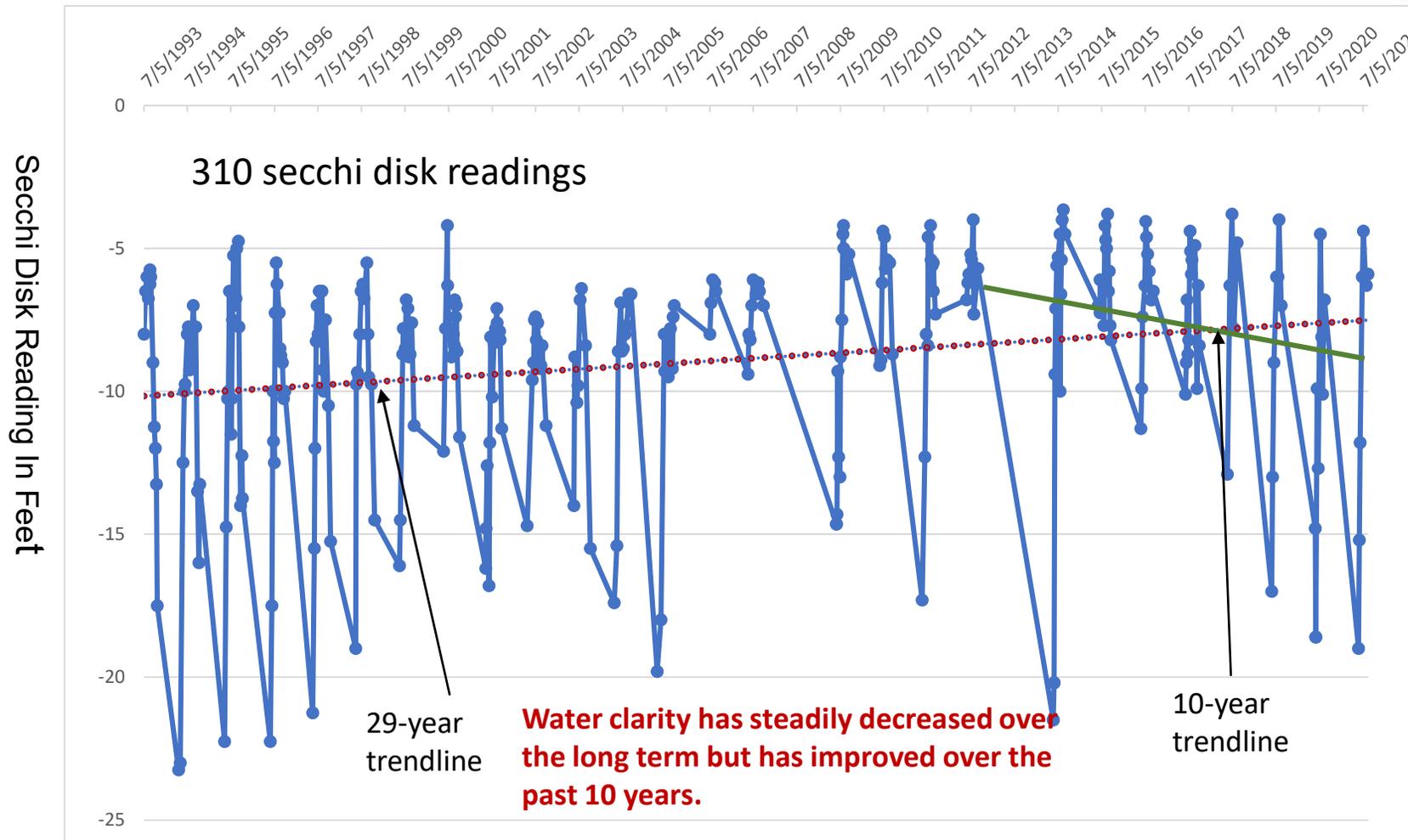
Nitrogen* - – another common nutrient that can be a pollutant in excess

Water Clarity

May-Sept 1993-2021



Oliver Lake



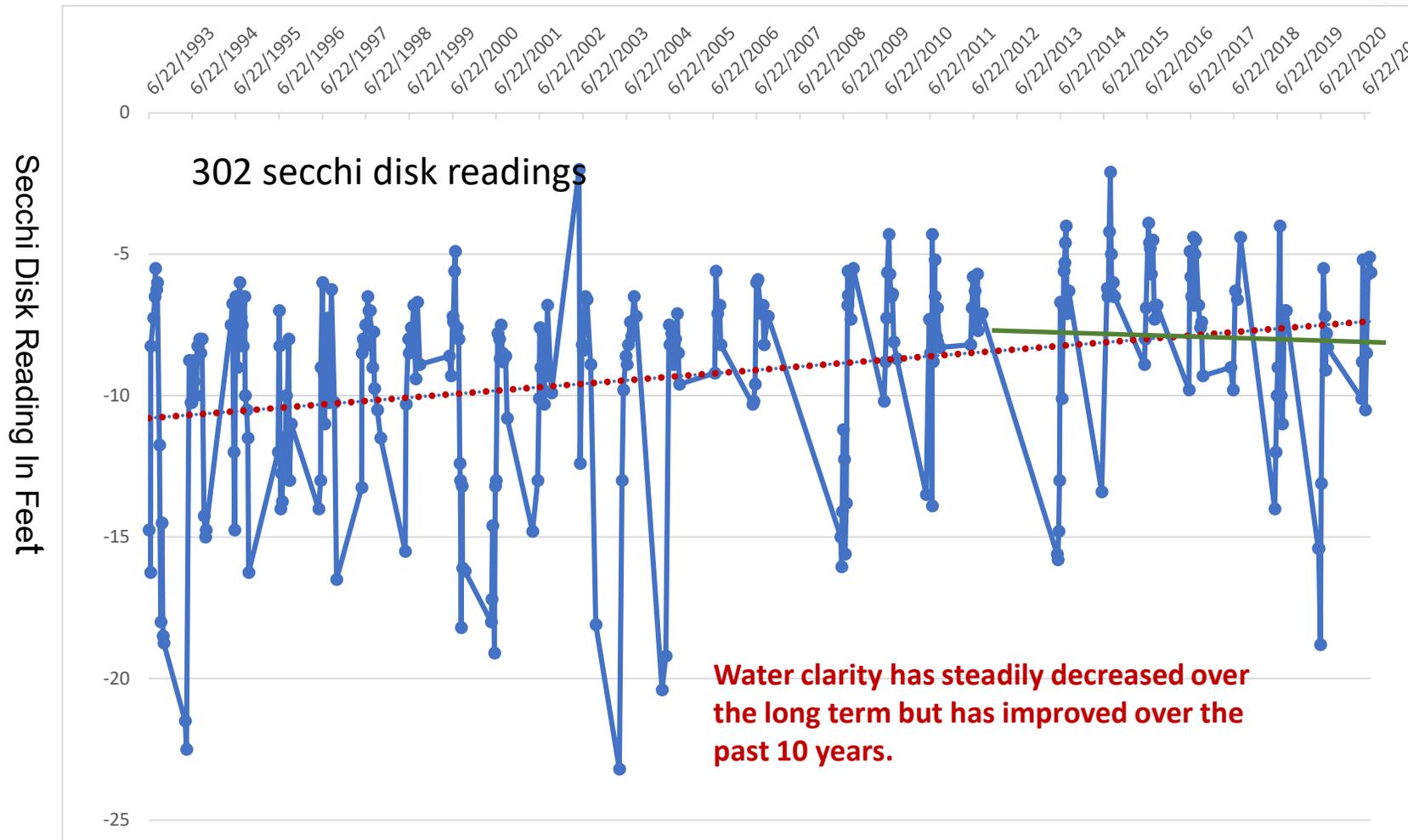
Prepared by Patrick Wiltshire May 17, 2022

Water Clarity

May-Sept 1993-2021



Olin Lake



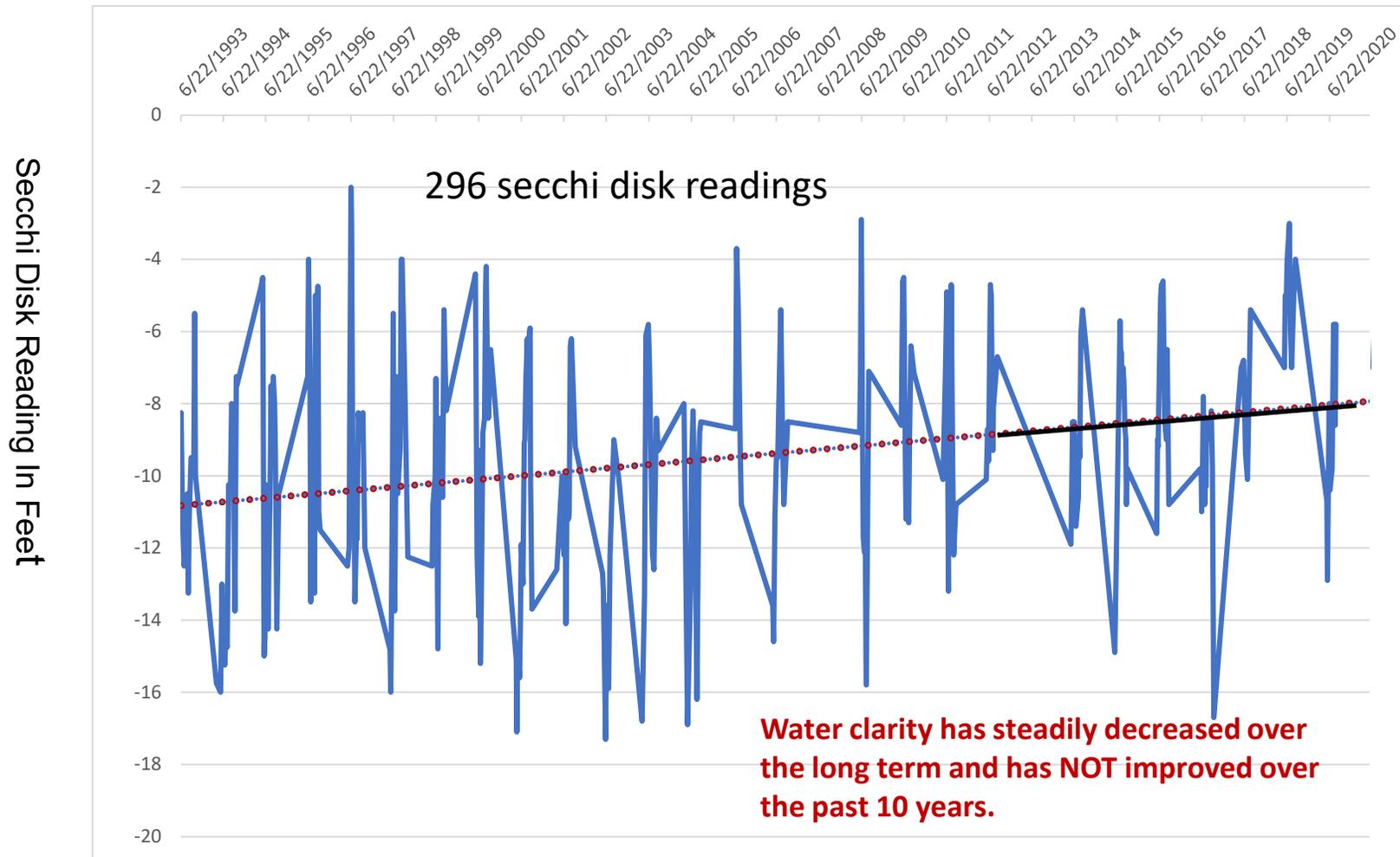
Prepared by Patrick Wiltshire May 17, 2022

Water Clarity

May-Sept 1993-2021



Martin Lake



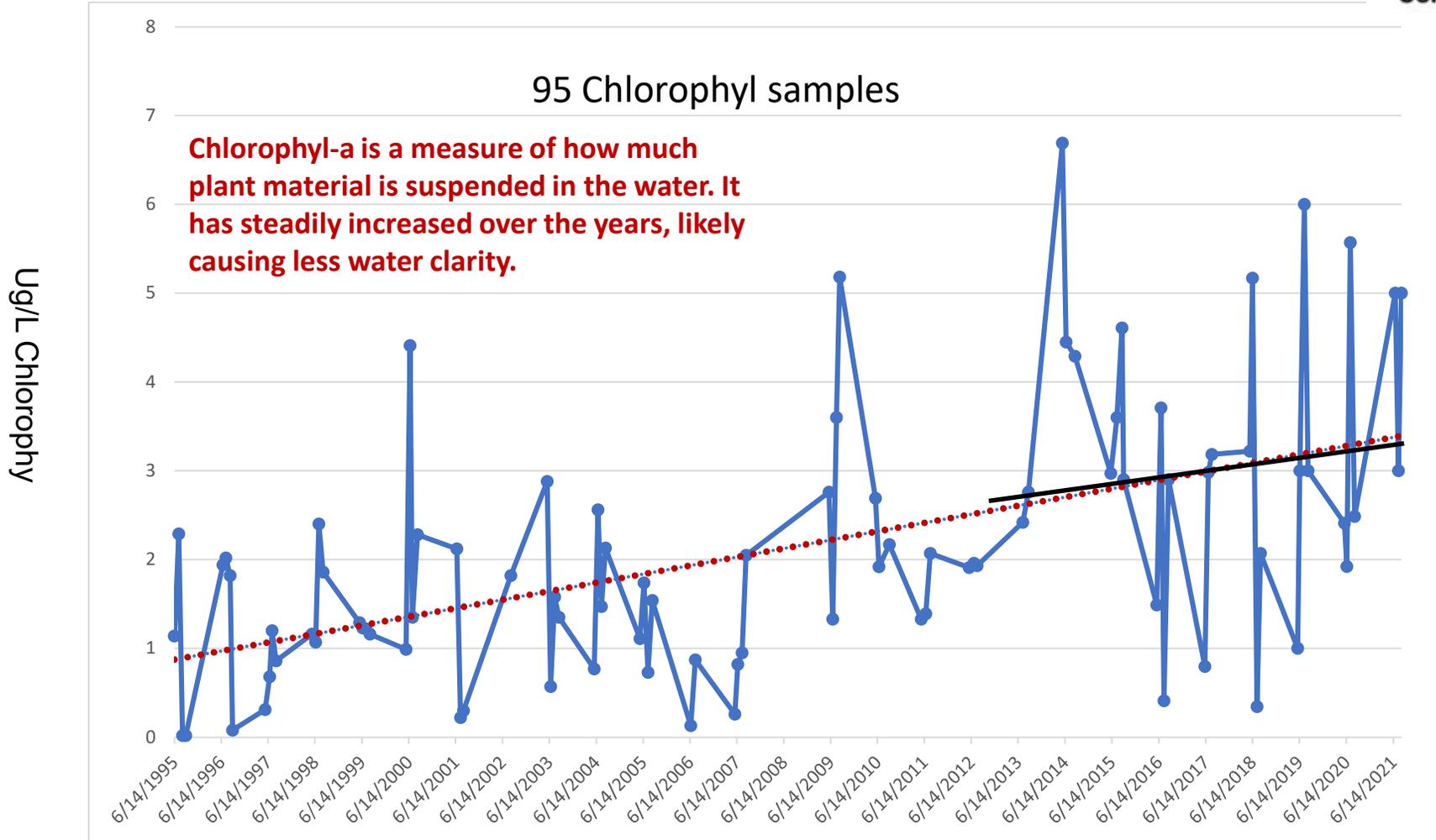
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Chlorophyll

May-Sept 1994-2021



Oliver Lake



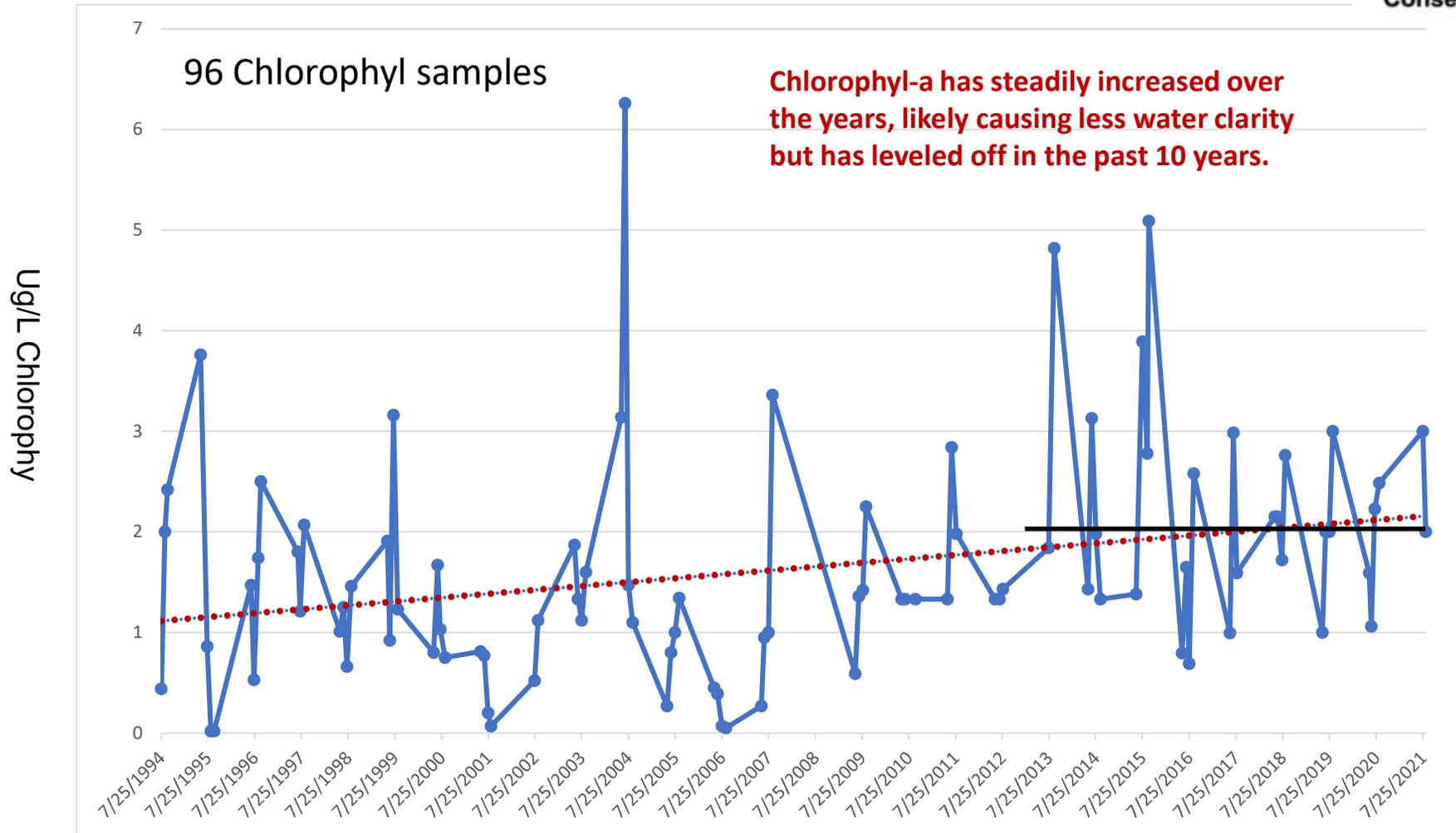
Prepared by Patrick Wiltshire May 17,
2022

Chlorophyll

May-Sept 1994-2021



Olin Lake



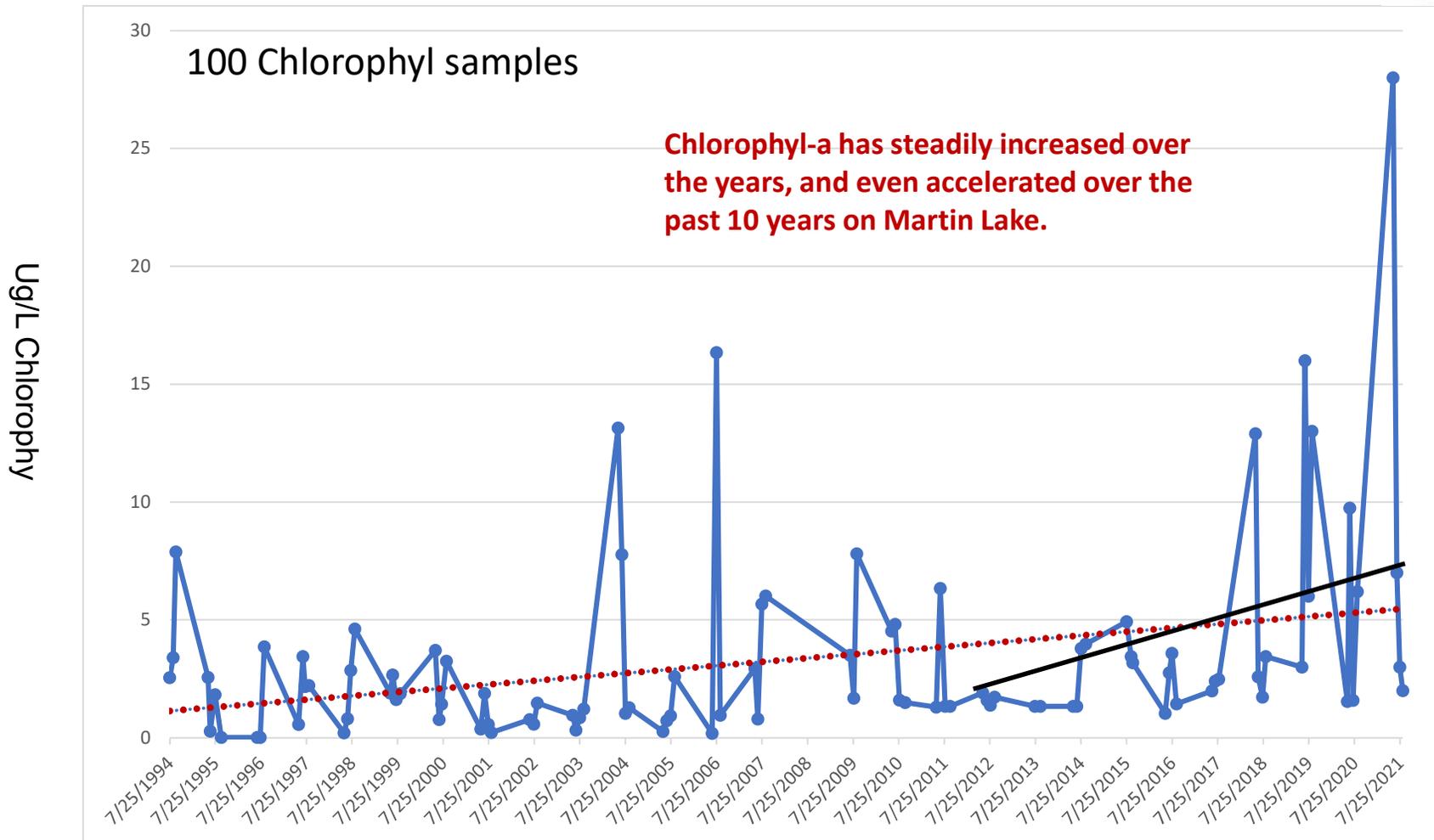
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Chlorophyll

May-Sept 1994-2021



Martin Lake



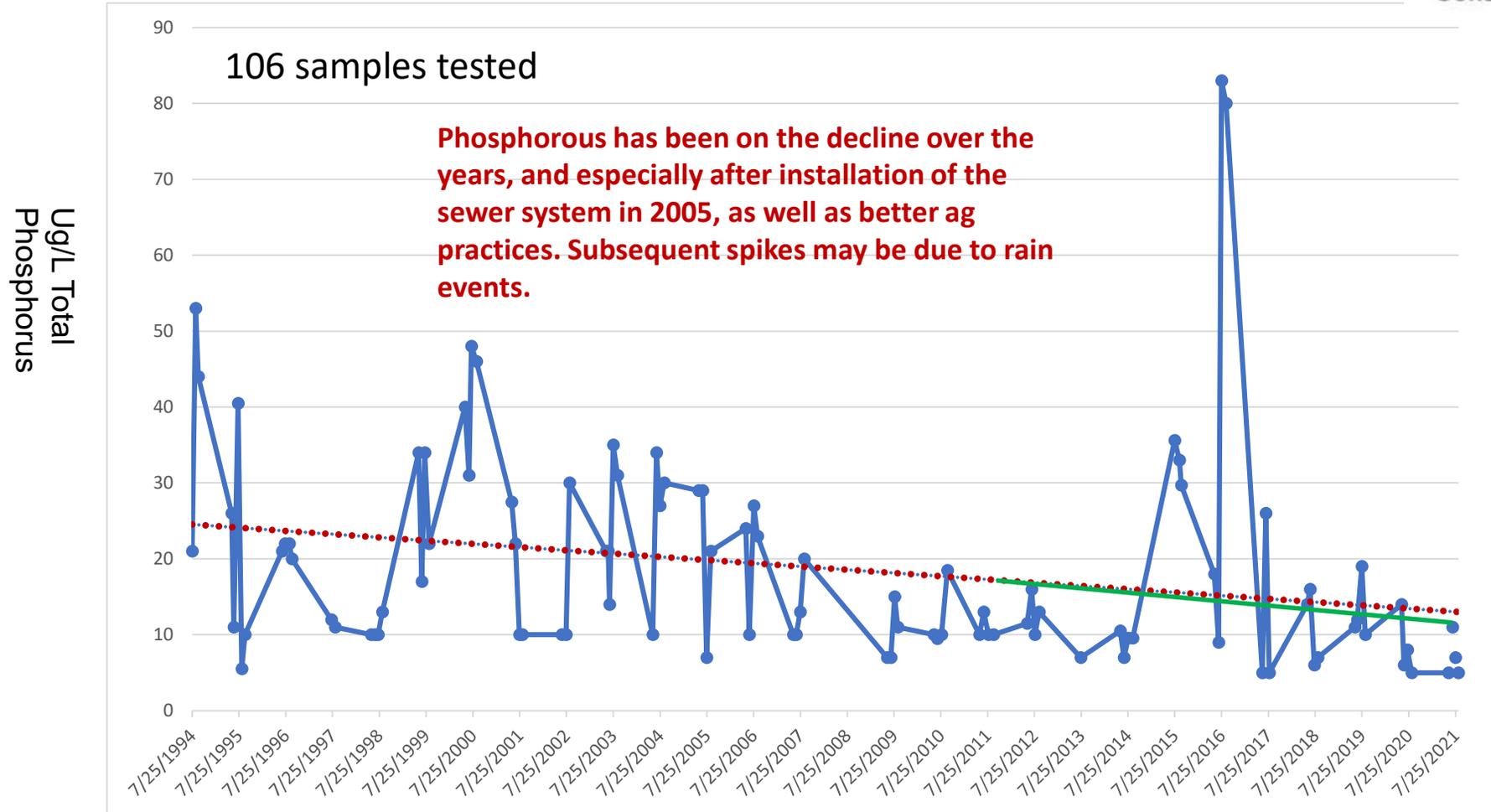
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Phosphorous

May-Sept 1994-2021



Oliver Lake



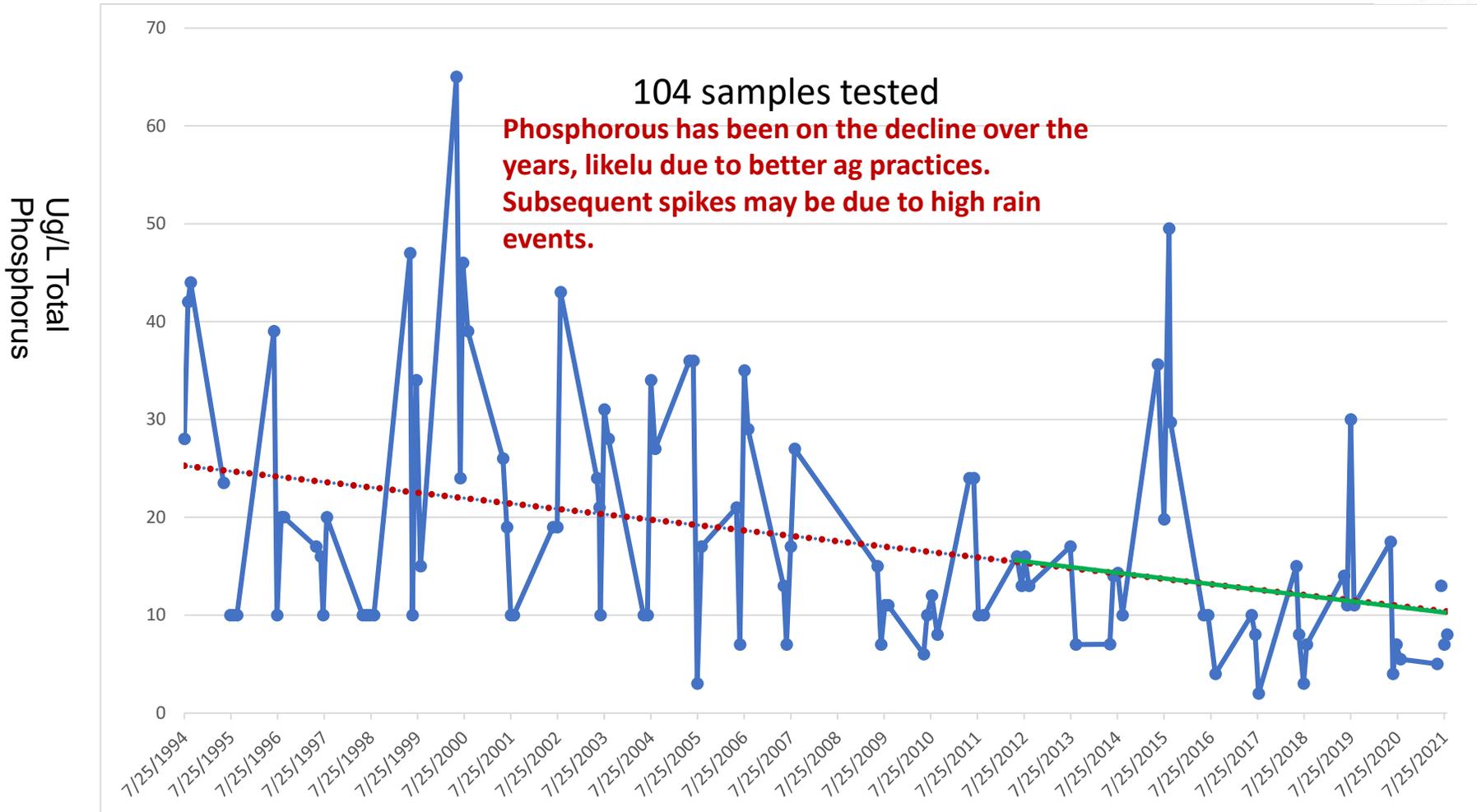
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Phosphorous

May-Sept 1994-2021



Olin Lake



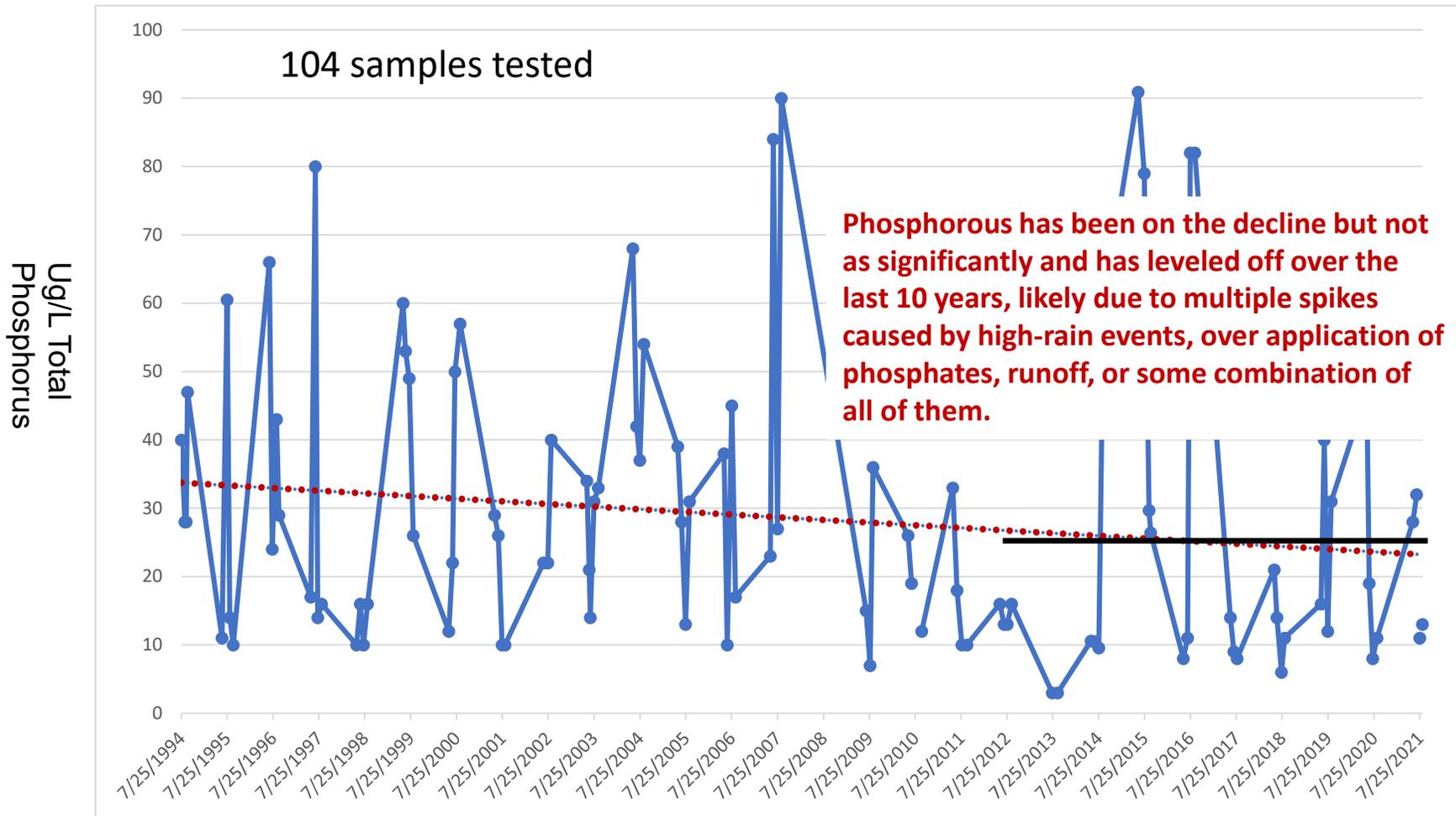
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Phosphorous

May-Sept 1994-2021



Martin Lake



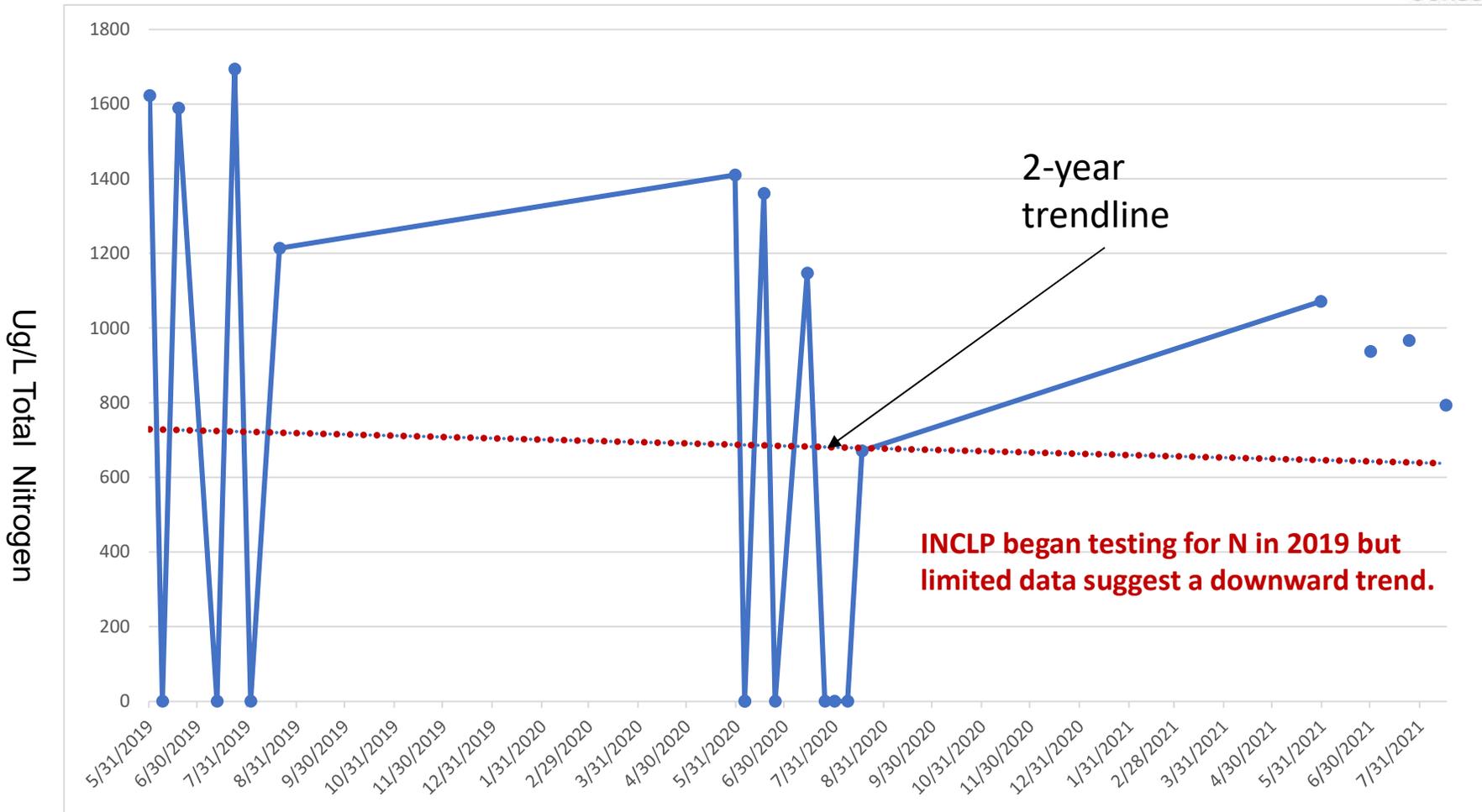
Prepared by Patrick Wiltshire May 17, 2022

Nitrogen

May-July 2019-2021



Oliver Lake

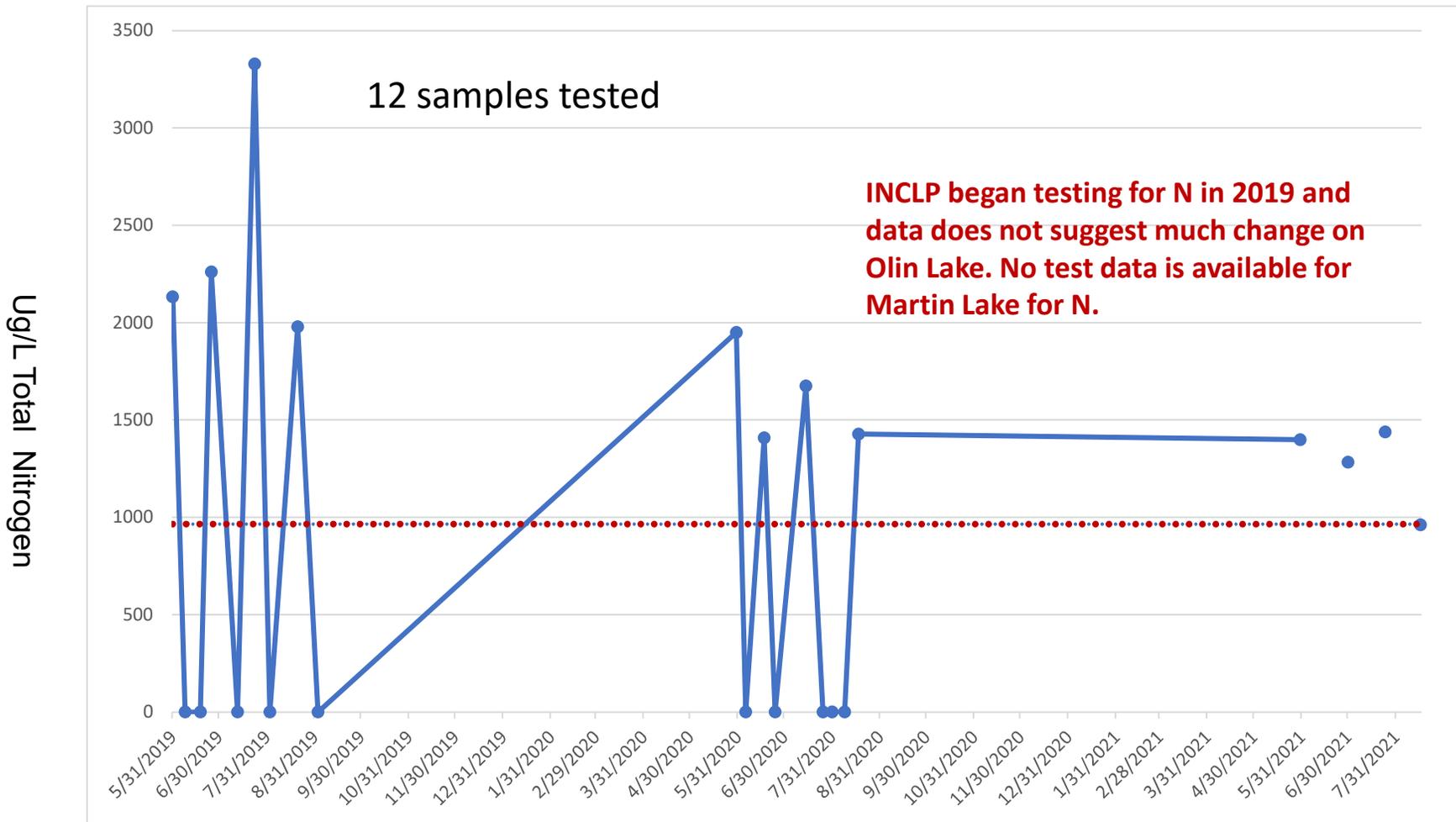


Nitrogen

May-July 2019-2021



Olin Lake



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