Tug Lake District Board of Commissioners Meeting Minutes - May 17, 2025

A Tug Lake District Board of Commissioners Meeting was called to order on May 17, 2025, and lasted from 10 am to Noon at the Merrill Incredible Bank.

Attendees: Todd Nicklaus, Don Olson, Reid Badeau, Dan Marzu, Scott VanEreren, Jean Greenwod, Jim Koltes, and John Greenwood

Lake Water Quality Action Steps Update

- Water quality research by the DNR and Dr. Todd Miller from 2023 and 2024 will be collated and summarized to reflect the history of blue green algae toxins during that time period. These findings will then be compared with the data collected in 2025 to help determine the degree of blue green algae toxicity caused by internal nutrient loading within Tug Lake.
- On May 13, 2025, Dr. Todd Miller and members of the Tug Lake Citizen Lake Monitoring Network installed a water analysis buoy just north of the large middle island in Tug Lake. The buoy will provide continuous water quality data from May through September of 2025.
- This data is recorded every 2-10 minutes and includes: water temperature profiles, Dissolved Oxygen at 20 feet, Chlorophyll levels (presence of Algae), Phycocyanin levels (found in Blue Green Algae), conductivity (represents total dissolved solids), wind velocity and direction, wave pitch and rill (trickle), and air temperature. This real-time data can be the key to discovering what triggers Blue-Green Algae blooms or when to anticipate a possible bloom.
- Additional hand samples will be collected and analyzed by Dr. Miller focusing on the nutrient status of the lake and algal toxins. Nutrients such as Total Nitrogen, Total Phosphorus, Soluble Phosphorus, and Ammonium are best done with hand samples. Additional information will also be used to verify buoy accuracy.
- The Citizen Lake Monitoring Network, besides their normal testing and sampling, will absorb these initial biweekly hand samples at the deep hole near where the buoy is located. Water samples will be frozen and shipped to Dr. Todd Miller in October of 2025 for blue green algae toxin analysis. As this process goes on it will be good to keep everyone on the Water Science Team apprised of each person's work.
- The Citizen Lake Monitoring Network's public website provides data on every lake in Wisconsin, including Tug Lake. Thus, the public can access our water monitoring data by googling "Citizen Lake Monitoring Network website". Another source of information will be to put the current Tug Lake buoy data on the Tug Lake District Website.
- The Snap Plus Program measures the amount of nutrient loading caused by external nutrient sources such as water runoff from farmlands north of the lake. Steady progress is being made to complete this process by the end of October of 2025.

- A water toxin analysis report will be completed by December of 2025 describing how much internal and external nutrient loading is occurring, and what interventions are recommended to achieve a healthy water quality level for recreational use by lake residents and visitors.
- These findings will then be used to create and submit a Comprehensive Lake Planning Grant proposal to the DNR for 2027 and beyond.

Lake Management Plan Committee Update

- Our 2024 DNR Surface Water Grant has been extended to the end of 2026 and our 2025 DNR Lake Planning Grant also concludes at the end of 2026. The new data from these grants will help define the goals, objectives, and action plan steps for a DNR Comprehensive Lake Management Grant proposal that would help fund long-term interventions to improve the ecological health of Tug Lake.
- To manage this process, the Tug Lake District will hold a Board of Commissioners meeting in July of 2025 to discuss on-going water quality research.
- In addition, a Tug Lake Board of Commissioners Succession Plan will be discussed. A key question is how to build community at Tug Lake over time. Jean Greenwood suggested that the district pay for UWSP lake waters students and young people who live on the lake to attend the UWSP Citizens Lake Monitoring Network conference if they agree to work on our lake.
- The next Tug Lake District Annual Meeting is tentatively planned for August 30, 2025, at the Merrill Incredible Bank.

Finance Review - 2025 Budget

- \$600 Administration
- \$1,500 Insurance the Tug Lake District will explore having insurance for the buoy which is now deployed in the middle of the lake from May through October of 2025.
- \$5,000 Professional Services
- \$20,000 Continuous Monitoring and Reporting of Tug Lake Water Quality
- \$200 Training and Conferences Reid Badeau highly recommended attending a Lakes and Rivers Convention on July 11, 2025, in Rhinelander.
- \$500 Contingency
- Total Budget = \$27,800

Motion to Adjourn

A motion was made by Todd Nichlaus, seconded by Don Olson, motion passed.

Respectfully submitted,

John Greenwood
Tug Lake District Secretary