

Big Swan Lake Improvement Association of Todd County 2025 Spring Meeting Minutes

President Joan Ganley called the meeting to order at 10 a.m. on Saturday, May 17, 2025 at the Hub Supper Club. A roomful of 40-plus lakeshore owners and neighbors attended, interested in hearing from Deja Anton, district manager of Todd County Soil and Water, about plans to suppress and reduce phosphorus in Big Swan.

To allow plenty of time for the presentation and questions, Ganley expedited the main meeting agenda. Members approved 2024 meeting minutes after motions by Ryan Ganley and Sue Krippner. The treasurer's report submitted by Jan Lind, who has resigned for health reasons, showed a fund balance of \$72,744.63 including a money market balance of \$69,142.53 and a checking account balance of \$3,567.02 plus a share account balance of \$35.08. After members approved the report, the president asked for volunteers to fill the treasurer's position and ended the meeting asking again.

Chuck Macy reported on this year's offshore curlyleaf treatment for Steve Baker, who leads the effort. The DNR allowed our supplier Aquatic Solutions of Little Falls to only treat 17.5 acres of curlyleaf pondweed on May 6 although our 2025 permit renewal requested spraying of 34.27 acres. Saying it needed to confirm curlyleaf still existed in areas treated for the last six years, the DNR found the invasive species in only three isolated areas. RMB Labs did a full-lake survey as required every five years, but it was done in early April after a warm winter and it found little active curlyleaf.

Macy said another whole-lake survey to identify other potential infected areas would cost \$5,000. That should be done in June while mature curlyleaf is still present. Macy recommended waiting until the fall Lake Improvement District (LID) meeting to learn more and to see if the vendor would do a followup study at lower cost.

Macy also reported he had obtained a bog removal permit from the DNR again this year. It allows bogs no larger than 8-feet by 8-feet to be removed from the lake. Larger bogs should be anchored with long wooden stakes on undeveloped shoreline.

In updating Emerald Trail runoff problems, Vice President Mike Legatt had nothing to report with no heavy rainfalls this spring. The adjacent farm field causing runoff problems was planted in alfalfa last year instead of corn, which will put off most problems for the next four or five years. The county and township also have done road and ditch work to contain runoff.

Board member Al Leinen reported that supplier Jim Bozek stocked the lake with 600 pounds of walleye fingerlings last fall. Members approved the \$6,000 cost at a previous meeting. Big Swan has been alternating years with the DNR, which stocks smaller fry every other year including this year. The topic will be raised at the fall LID meeting, where approval will be needed to do more fingerling stocking in 2026. Leinen says smaller walleyes started showing up this winter.

Guest speaker:

Next on the agenda was the Todd County Soil and Water district manager, who gave an overview of Big Swan phosphorus reduction projects and the state Clean Water grant to help fund the much-anticipated alum treatment discussed at previous meetings. Lee Daly and his committee spearheaded the project that aims to suppress

phosphorus on the lake bottom. Big Swan Lake's cost share is \$62,500 over three years, 10% of the \$625,000 overall cost. Additional county-driven projects will seek to limit more phosphorus runoff.

These projects are part of a Mississippi Watershed plan for five counties, including Todd, to improve the region's water quality. The focus is on Big Swan and four other lake watersheds in the broader watershed because of their "impaired waters" status. Also considered is the impact of Big Swan and its Swan River outlet on the Mississippi and downriver municipal water supplies, including St. Cloud and the Twin Cities. The state classified Big Swan Lake "restorable" in 2023.

Anton noted Big Swan's main deterrent for water quality is phosphorus. Sources include Schwanke Creek and other inlets, expanding farms and feedlots in the lake watershed, fertilizer runoff from fields and lawns, nutrient profile of area's soil, atmosphere in general, and various other levels of nutrient runoff from septic systems, wildlife, pets, as well as grass clippings and leaves.

The combined nutrient load of these sources pales in comparison to the phosphorus that has accumulated over many years in sediment on the lake bottom, she said. Adding to the problem is Big Swan's unusually high turnover cycle, mixing phosphorus throughout the water where it feeds excessive algae and weed growth.

This occurs in addition to the lake's late-stage Eutrophic aging process, when a body of water becomes overly enriched with nutrients, naturally causing more algae blooms and denser plant growth. Humans accelerate this lake aging cycle, she said.

Anton reported alum application will start this October and continue next fall. A total of 95 acres in the deepest part of the lake, generally in the "rock island" area, will be treated in the first year. Those acres will be treated again in the second year.

Alum is a safe material used in various applications from baking goods to drinking water treatment. In lake management, alum deactivates the internal load, or cycling, of phosphorus in lake sediment. Several Minnesota lakes have used it. There are no restrictions on lake water use following applications, she said. Fish typically swim away from the treatment area.

She pointed out reducing algae-feeding phosphorus will improve water clarity. But that allows more sunlight to affect rooted plant growth. It does not fix weed problems but won't make them worse, she said.

So, alum treatment is just step one in a process — Anton called it stalling for time. Over the last 10 years, Todd County Soil and Water has done 34 conservation projects in the lake watershed, and more shoreline best management practices are planned to limit future nutrient runoff. The 10-year plan involves projects such as shoreline rain gardens to collect runoff, shoreline restoration using native plant buffers, enforcing construction ordinances and rules, and protecting selected property with conservation easements. A separate project involves renovating Schwanke Creek to reduce runoff before it reaches the lake. Anton said the goal is to remove Big Swan from the state's "impaired waters" list in 10 years.

Why does it matter to lakeshore property owners? Minnesota lake studies show that lake property values are directly tied to water quality. Fishing and other recreational activities are also improved. And improved water quality and surrounding habitat add to enjoyment of loons, eagles and other birds and wildlife. This depends on the involvement of property owners, Anton said. The meeting adjourned at 11:45 a.m.

