

## Lake Redstone Protection District-2024 Year in Review

The most important activities since the 2023 Annual Meeting focused on implementation of the Lake Management Plan (LMP), also known as a 9-key element plan. After several years of work preparing the plan, the Lake Redstone Protection District (LRPD) received final approval from the Wisconsin Department of Natural Resources (WDNR) and the US Environmental Protection Agency in February of 2022. The LMP will be used to guide management activities over 10 years, with the long-range goal of improving water quality in Lake Redstone. The LMP is a large document with more than 100 pages of text, figures, and tables plus another 100 pages of appendices. The complete plan, including all 9 appendices, is available on the LRPD website at <https://www.lakeredstonepd.org/>. While we don't expect people to read the entire plan, we recommend reviewing the executive summary.

To implement the LMP, the LRPD board has assigned the various tasks described in it to one of 4 committees-- two standing committees described in our by-laws and two *ad hoc* committees created for this purpose. The two existing committees are the **Water Quality Projects Committee** and the **Sediment Control Committee**. The two new committees are the *ad hoc* **Education & Outreach Committee** (E&O) and the *ad hoc* **Plan Integration Committee**. Each of the committees is headed by a member of the LRPD board but all consist primarily of volunteers who are essential to implementation of each committee's activities. Some of the activities performed during the past year are summarized below.

The **Water Quality Projects Committee** is charged with issues related to aquatic plant management, lake monitoring and other projects intended to monitor and improve water quality. The current chair is Ken Keegstra.

A new Aquatic Plant Management Plan (APMP) was approved by the WDNR in May 2023 and is now available on the LRPD website. Because the abundance of aquatic plants in Lake Redstone is declining, one of the goals of the new plan is to protect native aquatic plants because of their importance to a healthy lake. Surveys of aquatic plant abundance are performed by consultants each year. The results of the most recent surveys are available on our website and will be summarized orally at the 2024 Annual Meeting.

Volunteers continue to monitor various parameters associated with water quality in Lake Redstone. Monthly from April thru October, volunteers measure water clarity with a Secchi disk, measure oxygen levels throughout the water column, and collect water samples for laboratory analysis of total phosphorus and chlorophyll (summer months only). Details of some of the recent results and long-term trends will be presented orally at the 2024 Annual Meeting.

The **Sediment Control Committee** is charged with monitoring and reducing sediment entry into the lake and maintenance of previous sediment control projects. The current chair is Pat Sullivan. One activity that began before the LMP was approved was to create a system to inspect, and maintain as needed, the existing sediment control devices, e.g., the stone gabions and rock chute that was installed at Meronek Meadows in 2020. The system involves annual inspection of each existing device including taking photos that are entered into an electronic database so that trends in device health can be identified.

Another activity carried out during the past two years was to secure funding to implement repairs to a weir above Martin-Meadowlark Bay that was damaged by the 2018 floods. The LRPD applied to the surface water grants program of the WDNR in the fall of 2022 and in the spring of 2023 received notice of an award. Because of the size and cost of this project, additional funding was secured from the Sauk County grants program. Because of the scope of the project, the actual repairs were postponed until the summer of 2024. During the past year, design plans were prepared, and the project was released for bids. A successful bid was accepted in February of 2024. The contractor and Jewell Engineering have worked with Sauk County and WDNR officials to secure the required permits. The new sediment control device, consisting of stone gabions like those used at Meronek Meadows, is scheduled to be installed in late summer of 2024.

Finally, the sediment control committee has coordinated with the E&O committee on various activities. In one activity, they have cooperated on programs aimed at encouraging property owners to improve their shorelines with the goal of reducing runoff into the lake. Such runoff often includes sediment and nutrients that damages water quality. The two committees have also cooperated on the “Conservation Event” that was held on Friday, July 26, 2024. A report on this activity will be presented orally at the 2024 Annual Meeting.

**Ad hoc Education & Outreach Committee:** The Education & Outreach Committee is responsible for planning and implementing education and outreach activities identified in the LMP. The current chair is Brad Horner.

One major activity planned and implemented jointly by the E&O committee and the sediment control committee was the “**Conservation**” workshop that was held on July 26, 2026. It was held on the McWilliams farm located on Section 11 road less than a mile from the Section 11 boat landing. The event was jointly sponsored by the LRPD along with the Sauk County Department of Land Resources & Environment and the Juneau County Department of Land & Water Resources. The event included demonstrations of conservation practices being employed by producers in the Lake Redstone Watershed. One popular exhibit was the rainfall simulator, which compares various ground cover regimes during a rain event and dramatically demonstrates the value of no-till agricultural practices as well as the use of native plants near the shoreline by property owners.

The E&O committee continues to join forces with Producers of the Lake Redstone Watershed (see the photos on the Facebook page of the *Producers of the Lake Redstone Watershed*). The producers in the watershed are increasing their use of conservation practices including cover crops, rotational grazing and no-till agricultural practices.

Finally, the E&O committee has taken over responsibility for preparation and production of the annual newsletter, The Protection Connection.

The *ad hoc* **Plan Integration Committee**: The Plan Integration Committee is responsible for planning, coordination, and monitoring tasks in the LMP that involve multiple committees. The current chair is Mike Mittelstadt. One of the first tasks was to establish a system for tracking progress toward meeting the milestones associated with implementation of the LMP. The LRPD board holds special meetings twice a year to monitor and discuss progress.

With the assistance of Mitch McCarthy from Sauk County Department of Land Resources and Environment, the LRPD has set up a system to perform transect surveys in the watershed. Twice each year, a team of volunteers spends a day following a specified route through the watershed to monitor agricultural practices in specific fields. They track progress in implementing sustainable agricultural practices such as the adoption no-till cropping systems, the use of cover crops, etc. The results of these surveys will allow county extension agents to encourage producers in the watershed to increasingly utilize sustainable agricultural practices over the next decade.

Over the past three years, the LRPD has partnered with staff from the US Geological Survey (USGS) to measure the quantities of phosphorus and sediment that enter Lake Redstone via the two major inlet streams. These efforts have been supported in large part with grant funds from Sauk County Department of Land Resources and Environment plus cost sharing from the USGS and from Juneau County Department of Land and Water Resources. During the current year, the USGS is cooperating with the LRPD, via the efforts of many volunteers, to measure the amount of sediment and nutrients entering Lake Redstone via three small tributaries that flow throughout the year. The results to date will be presented at the Annual Meeting along with strategies to seek improvement during the next 10 years of implementation of the LMP.

The activities summarized above were made possible via the involvement of more than 20 volunteers. **We thank them for their service.** The LRPD is always seeking additional volunteers to assist with the implementation of the LMP. Whether your skills and interests lie in lake biology, shoreline protection, electronic or written communications, or organizing paper or electronic files, we welcome anyone who is willing to help with District activities. If you are interested in joining one of the committees described above, or participating in other efforts, please contact any board member or email us at [lrpd.board@gmail.com](mailto:lrpd.board@gmail.com).

KK/7-19-2024