

Lake Redstone

PROTECTION CONNECTION

SPRING 2023

NEWS FROM THE LAKE REDSTONE PROTECTION DISTRICT

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PHOTO: CARY DUDZAKI

This large amount of sediment was deposited in Lake Redstone during the rain deluge of 2018. It is an excellent example of the erosion from the watershed that found its way through the underground culvert and into the lake. This resulted in a successful DNR grant to repair the water flow in the watershed above the culvert.

Multiple grants funded sediment control improvements, making our lake healthier

By Pat Sullivan, LRPD Sediment Control Committee Chair

In the past year, the sediment control efforts continued to follow the 10-Year Plan, which includes milestones and responsibilities in the interest of reducing sediment (and therefore phosphorus) in our lake. In 2023 this effort to reduce sediment will continue with some new methods that will help prioritize activities of the LRPD and other involved parties such as Sauk and Juneau Counties and producers/farmers.

Last year Lake Redstone Protection District began a new program regarding producers/farmers, with the direction of our partners in Sauk county. The Cropland Roadside Transect Survey is designed to gather information on tillage and crop residue within the watershed. This consists of a full day of following a designed driving route established by Sauk County and stopping at 95 points

Continued on next page

“
Skip a stone.
Take a hike.
Sit a spell.
Listen.
Daydream.
Just breathe.
This is lake living.

”

~

Sediment Control *from page 1*

along the way within the watershed that represents crop production and farm practices. The survey team checks designated field and crop conditions to ensure correct estimates are made for different tillage and residue conditions. This will be done in early spring and in late fall. The purpose of the effort is to establish long term priorities for education of producers in best practices in soil conservation, to evaluate progress in reaching plan goals, to provide accurate data on the adoption of conservation systems, and to the raise level of long-term confidence in soil conservation methods.

Also in 2022, the Sediment Control Committee improved our annual review of the maintenance of various devices positioned around the Lake to monitor flow. There is now a library of photos that will be reviewed every spring in the interest of determining if a device is showing signs of aging or the need for repair or replacement. Currently this is very important as it relates to the recent Swallow Bay and Meronek Meadows improvements, and it will continue with new projects in the future. With the significance of County and DNR grant availability, it is important to know well in advance where our repair priorities exist.

Also, this past year LRPD was able to submit the design plans for the address of Chickadee South and Martin Meadowlark issues and apply for a State of Wisconsin grant for each location as part of the DNR's surface water restoration program. In March of this year, we were honored to receive grant approval for both locations which includes dollars of grant funds to be applied towards the repair jobs necessary to complete these two projects. The funds would provide funding for 65-75percent of the total cost and bids will be



PHOTO: MITCH MCCARTHY

PHOTO: VERSA-LOK-MIDWEST.COM



solicited ASAP with the objective to begin repair work this summer. The objective of both projects is the same as other LRPD projects, which is to improve the water flow and reduce sediment (and phosphorus) entering the lake. The Sauk County grants will be available again this spring. In the past these grants have really helped LRPD to address many areas of need.

In addition, the Sediment Control Committee will continue surveying gullies above bays, which helps us create a priority list of projects where sediment and nutrients are at a higher-than-average level. To support this prioritization effort, we are now applying the DNR's Stream Power Index (SPI) which reflects upstream drainage areas and a particular slope on a map. The higher the SPI the greater the potential for gully formation. This is accomplished with very detailed topographic information to support the calculation of the SPI.

We will also continue to partner with the LRPD Education and

Above: A Lake Redstone property which used Envirolok bags (similar to the ones in the photo to the left) to create a vegetated slope above the lakeshore planted with native plants to capture sediment. The property owners received on-site advising from Mitch McCarthy of Sauk County Land Resources and Environment and received a \$2500 reimbursement. Estimated annual pollutant reductions from this property alone: 5.6 tons of sediment and nine pounds of phosphorus.

Outreach committee to support shoreline education and landowner efforts to improve watershed and shoreline activity. Thanks to the many landowners who have brought attention to their problems because of rain events, primarily large ones. This information helps define priority areas. As we have mentioned in the past, and as can be seen in other articles in this newsletter, the execution of the 10-Year Lake Management Plan requires assistance from our Lake Redstone property owners due to the significant amounts of sediment and phosphorus flowing into the lake from properties. ■

Producers (farmers) of Lake Redstone Group committed to helping Lake Redstone

By Dustin Ladd, Juneau County Conservationist

Established in 2018, the Producers of Lake Redstone group just wrapped up their 4th year as a grant funded Producer-Led Watershed group. In 2022, 36 such groups in Wisconsin with grant funding of \$1,000,000 worked collaboratively towards goals of water quality and soil health. Between Sauk and Juneau Counties we have three producer-led groups (Producers of Lake Redstone, Farmers of the Lemonweir Valley, and Sauk Soil and Water Improvement Group) working together to improve water quality, build soil health, and educate farmers and the public on conservation farming practices.

To meet our goals of improving water quality and soil health in the Lake Redstone watershed, in 2022 the Producers of Lake Redstone planted

seven acres of harvestable buffers and over 1,000 acres of crops in the watershed. The producers have also continued to experiment with new conservation practices, testing out drone seeding in the watershed for the first time in 2022. One of the producers in the watershed purchased the newest model drone after seeing our field day drone demonstration! This practice not only reduces compaction on the field by keeping equipment off, but also gives the producers more time to interseed cover crops, reducing erosion and fertilizer use.

Focusing on education, the Lake Redstone Producers partnered with the Farmers of the Lemonweir Valley, Sauk Soil & Water improvement Group, Lake Wisconsin Farmer Watershed Council, and the Farmers of the Roche-A-Cri, to host an event on soil health and conservation practices. Regenerative agriculture pioneer Gabe Brown along with local farmers from each of the watershed groups, spoke about regenerative agriculture and implementing conservation practices in the watersheds. The event drew in a crowd of over 150 people from the farm and non-farm community.

The Producers of Lake Redstone Annual Field Day was held on September 28th, 2022. The event started at the Discovery Farms edge-of-field monitoring site where John Exo from UW Extension Discovery Farms spoke about the two edge-of-field sites located in Juneau and Sauk County. While at the site, a live demonstration was held of a drone interseeding cover crop into standing soybeans. After leaving the edge-of-the-field site, the group stopped at a



PHOTO: SARAH FLECK

Keegan Johnson, along with Ryan Ennis from the U.S. Geological Survey, gave a presentation about stream gauging sites in the Lake Redstone watershed and the types of data collected. They also shared how this data is being used to calculate sediment and phosphorous entering Lake Redstone.



PHOTO: SARAH FLECK

Ken Keegstra of the Lake Redstone Protection District demonstrating water monitoring equipment at the annual Field Days.

stream gauging location on the East Branch of Big Creek which flows in to Lake Redstone. Keegan Johnson and Ryan Ennis from US Geological Survey presented on stream gauging sites in the Lake Redstone watershed, the types of data collected, as well as how this data is being used to calculate sediment and phosphorus entering Lake Redstone. The field day ended with a pontoon tour to one of the water testing sites on Lake Redstone where members of the LRPD showed the attendees how lake volunteers monitor water clarity, water quality and the types of monitoring equipment used by the LRPD. The continued collaboration between the Lake Redstone Protection District and the watershed farmers was definitely showcased at the Field Day event.

In a very noteworthy move, the Juneau County Land and Water Department, The Lake Redstone Protection District, Guardians of Lake Decorah, Outdoors Forever, and Petenwell and Castle Rock Stewards, all partnered to purchase a 10 foot John Deere no-till drill for use by producers of Juneau and Sauk County to seed cover crops and small grains. The use of this drill will be important to meet the goals established in the 9-key element plan (aka 10-Year Plan) for Lake Redstone. ■

Phosphorus in Lake Redstone: Everything you want to know (and more)

By Ken Keegstra, *Water Quality Committee Chair*

The level of phosphorus in our lake is reducing water clarity because higher levels increase algal growth. Hot summer days stimulate algae growth, giving the water a green tint. Consequently, the water quality committee spends a great deal of effort measuring how much phosphorus is in the lake water and how much enters and exits the lake each year.

Our volunteers have been measuring phosphorus levels for more than 30 years. They collect data about phosphorus levels and chlorophyll levels, and measure water clarity via Secchi disk readings at each monitoring location. The data is entered in a Wisconsin Department of Natural Resources (WDNR) database that is available on the WDNR website. Phosphorus levels have remained nearly constant and consistently above desirable levels despite numerous efforts of the LRPD and its partners. The 10-year goal of our new Lake Management Plan is to reduce phosphorus levels sufficiently that the trophic state index (TSI) – a measure of the nutrient status of a lake, moves below the eutrophic region. More details about the status of lake water quality and our long-range goals are available in the Lake Management Plan.

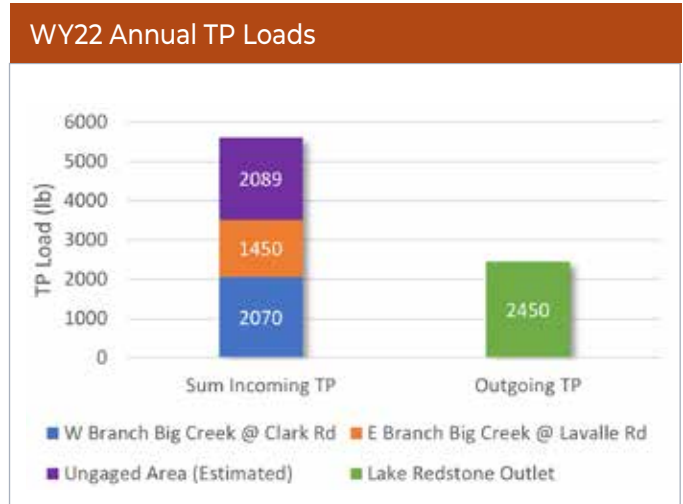
We know most of the phosphorus in our lake comes from our watershed, but it helps to know where it originates so we can find effective strategies to reduce it. To collect this information, the LRPD has partnered with staff at the US Geological Survey (USGS). We are in the third year of a study to determine how much phosphorus and sediment enters Lake Redstone via the two major streams that flow into the lake.

The results in the chart show that despite many efforts to reduce

phosphorus, more is coming into the lake each year than is leaving. So, we have more work to do in all areas of the watershed. The largest single contributor to phosphorus entering the lake is the ungaged area which includes three minor inlet streams plus the lawns and properties surrounding the lake. Lake property owners have an important role to play in improving our lake's water quality.

It is discouraging that phosphorus levels have remained unchanged over the past 30 years, despite numerous efforts by the farmers to adopt conservation practices to limit sediment and phosphorus entry into the lake (See page 3). One possible explanation for that is the reservoir that has accumulated over the years and

is attached to sediment at the bottom of the lake. In a process known as internal loading, phosphorus attached to sediment can be released during the growing season. The water quality committee is working to evaluate the level of internal loading and will report on these activities in future years. ■



Total Phosphorus (TP) that entered and left Lake Redstone during WY22 (10/1/21 to 9/30/22). The values shown for the two inlet streams and the outlet stream are based on measurements during the year. The value for the ungaged area was estimated by USGS staff, making reasonable assumptions. The results for WY22 were very similar to those obtained in WY21—for the WY21 data, see page 7 of the 2022 newsletter.

HOW LAKE PROPERTY OWNERS CAN REDUCE PHOSPHOROUS

Here are some DNR and Sauk County prescribed methods:

- **Plant shoreline buffers of native plants.**
- **Divert streams of water that go into the lake.**
- **Create a rain garden.**
- **Keep organic matter such as leaves, grass and pet poo out of the lake.**
- **Use low-P or no-P fertilizers.** Use no-phosphorus or low-phosphorus on lawns. Formulas of nitrate-phosphorus-potassium with zero (or low) phosphorous. For example, 22-0-15 indicates no phosphorus.
- **Inspect your septic system regularly** to ensure it is not leaking into groundwater or into our lake.

Managing aquatic plants in Lake Redstone

By Ken Keegstra, LRPD Secretary and Sara Hatlelli, Consultant, Aquatic Plant & Habitat Services

The LRPD's last Aquatic Plant Management Plan (APMP) was created in 2015. It's guided plant management activities including efforts to monitor, survey, and control Eurasian water milfoil (EWM), a prominent invasive plant in our lake. Aquatic plant surveys for EWM control have been done where needed every year since then.

The LRPD is in the process of updating the APMP, with assistance from Sara Hatleli, our consultant with aquatic plant expertise. The updates to the APMP are being supported, in part, by a grant from the Wisconsin Department of Natural Resources (DNR). One of the first steps in creating the updated APMP is to perform a whole-lake point intercept survey.

Because a healthy population of native plants is essential to the ecological health of a lake, this survey includes both native as well as invasive species. The occurrence of all aquatic plant species (native and non-native) in the lake is extremely low with plants found at only 25 sample points (502 points were sampled!). Few plants are found below 6.5 feet due to low water clarity. Some of the species found in Lake Redstone are pictured below.

Although EWM is generally a plant that is targeted for removal and control due to its potential for negative impacts to fishing, swimming, boating, etc., it's important to also take the

Management of Eurasian Water Milfoil (EWM) over the years		
2015-18	LRPD hired a contractor to perform herbicide treatments to control the levels of EWM each year	This involved early spring treatments of several different bays, usually doing two or three different bays each spring. Summer-time spot treatments were done as needed also.
2019	Dredging	
2019-20	Because of the 2019 dredging, no control activities were needed in 2019 or 2020.	However, plant surveys were performed in 13 bays to evaluate the impact of dredging on plant life in Lake Redstone.
2020	Plant surveys showed small increases in EWM in many bays; 5 bays had significant increases in EWM.	Increases were unexpected because dredging removes sediment including roots and seeds of aquatic plants. However, EWM and non-native/invasive species generally thrive in disturbed environments so the dredging may have opened a niche for EWM to recolonize more quickly than native species.
2021	No herbicide treatments. LRPD contracted with divers to manually harvest EWM.	The quantity of EWM removed by these methods was disappointing. Although many reasons may account for the low yields of EWM, the main contributing factor is the low water clarity in Lake Redstone which prevented divers from easily seeing the EWM plants. The increase in EWM following dredging appears to have leveled off, suggesting that the sharp increase in 2020 was a short-lived phenomenon, although time and continued surveys will tell.
2022	LRPD hired contractor to remove EWM using DASH, Diver Assisted Suction Harvesting.	

extremely low plant occurrence into consideration while making EWM control/management decisions. Having some plants in the lake, even if they are non-native, is better than no plants at all. LRPD continues to work to find the right balance with Lake Redstone's ecological wellness as the priority.

Another important aspect of the process to update the APMP is to gather input from lake property

owners. That is why we included plant related questions in the electronic survey in the summer of 2022. This was followed by a public information meeting held at the La Valle Town Hall last fall. The updated plan will be reviewed by the LRPD board and by the DNR before final approval this spring. The final plan should be available on the LRPD website about the same time this newsletter arrives in your mailboxes. ■

White Water Lily ■ Native



Eurasian Watermilfoil ■ Non-native



Sago Pondweed ■ Native



PHOTO: SARA HATLELI

PHOTO: SARA HATLELI

2022 Fishery survey

By Nathan Nye, WDNR Senior Fisheries Biologist

The DNR fisheries crew began a comprehensive fishery survey of Lake Redstone last spring, the first since 2010-2011. The 2022 survey included two spring netting surveys, two spring electrofishing surveys, and a fall electrofishing survey.

Overall, Lake Redstone's fish populations are robust and healthy. Gizzard shad and other abundant prey fish help fuel good growth of predator species. However, gizzard shad are a double-edged sword as they also compete for resources with bluegills and young largemouth bass which may hinder growth and recruitment of those species. Gizzard shad may also contribute to internal phosphorous loading in small lakes like Redstone, contributing to algal blooms and degraded water quality.

During the fish survey, 17,439 fish representing 22 species and hybrids were collected. Bluegills were the most abundant species collected at 63 percent of the total catch.

The size of bluegills wasn't great with relatively few fish over eight inches, and only one fish over nine inches was collected. Bluegill growth lags the area average. For reference, the statewide average for bluegill growth is 8 inches and in most area lakes bluegills average eight inches.

Crappies were abundant, with white crappies slightly more numerous than black crappies. The size structure for both species was good with the proportion of fish over 10 inches comparing favorably against other area lakes. The largest crappie recorded in the 2022 survey was a 17.4-inch whopper!

Yellow perch abundance was similar to the last survey in 2010 and



PHOTO: WISCONSIN DNR

DNR Fisheries Technician Casey Weber holds a female walleye collected during the spring survey of Lake Redstone in April 2022.

about average compared to other area lakes. Size structure was just below the middle of the pack compared to other area lakes. Yellow perch growth was on par with area and state averages.

The walleye population in 2010 was excellent, with an estimated 4.4 adult walleyes \geq 15 inches per acre. The 2022 population estimate was much lower at 0.75 adults/acre.

Overall, Lake Redstone's fish populations are robust and healthy.

The 2010 population was produced almost entirely through the stocking rates of small fingerlings above recommended levels as part of an experimental study. Since then, stocking rates have returned to lower, recommended levels. It has been found that survival of small fingerlings from spring to fall was not what it used to be and reflected in fewer adult fish in the lake. However in 2022 the two most abundant year classes were when large fingerlings were purchased from a private producer for stocking by the Lake Redstone Fishing Club. The DNR will be switching to stocking large fingerlings. Better survival of the large fingerlings to adulthood should increase adult

abundance remarkably over the next several years.

Muskies are stocked every other year at the rate of one large fingerling (~12 inches) per acre in the fall, and the population is entirely sustained through stocking. The musky population in 2010-2011 of fish \geq 30 inches per acre was right where it should be for a trophy fishery. Data collected in 2022 indicated that musky size structure was excellent. The average length of muskies in 2022 was 39.2 inches, nearly four inches longer than 2010. The largest fish sampled was a 48.4-inch female. We anticipate the population will be similar numbers-wise to 2010 once the final part of the survey is completed in 2023.

The abundance of both large and smallmouth bass was in the middle of the pack compared to other area lakes. Largemouth bass up to 19.5 inches were collected, and population size was in the middle of the pack compared to other area lakes. Smallmouth bass up to 17.4 inches were collected and like largemouth bass, the population size was middle of the road compared to other area lakes. ■

Fishing Club year in review: Lots of walleye, lots of fun

By Nick Hewitt, Chair, Lake Redstone Fishing Club

The Lake Redstone Fishing Club had another productive, successful year. For those of you unfamiliar with the Lake Redstone Fishing Club, we are a not-for-profit group made up of all kinds of anglers (novices and experts), pursuing all kinds of fish. The Fishing Club works closely with the Lake Redstone Protection District and our DNR Fisheries Biologist, Nate Nye. We meet monthly on Saturdays at the North End and have several activities and events. Join us to learn more about Lake Redstone Fishing!

Lake Redstone was stocked with a generous amount of walleyes in 2022, with the Fishing Club contributing 6,000 large fingerling walleyes. These were paid for entirely by the Fishing Club (via fundraising events, membership dues and donations). As a bonus, there was a significant surplus at the DNR's Black River Falls rearing ponds, so Redstone was blessed with an additional 2000+ large fingerling walleye.

In the wintertime we hosted a very fun and lively 2023 Fisheree and later placed six more fish cribs in the lake to improve habitat. This past summer's Carp-a-Thon at North End Tavern had record harvest numbers



PHOTO: TOM MCGLADE

Top: Tom McClade's musky, one of the 2022 Bragging Board winners.

Bottom: Tom Wagner's smallmouth bass, one of the 2022 Bragging Board winners.



PHOTO: BRUCE THORNQUIST

as of this writing, which is a flattering level of involvement. Our organization's mission is to enable positive fishing experiences by promoting conservation, education, recreation and safety. If you or someone you know suffers from the same

(52 fish, over 523 lbs). The Whiskers Tournament had another healthy turnout and the Bragging Board posted at the North End featured some of the biggest fish turned in yet.

We have started a \$500 scholarship for a graduating senior from an area high school who will be pursuing a career in the outdoors or conservation. Applications are being reviewed presently.

We have over 120 paid members

kind of obsession with fishing as us, you can join us by signing up at North End Tavern, messaging us on Facebook, or simply attending a meeting. ■

LRPD ANNUAL MEETING

Saturday, Aug. 5 ■ Time and location to be announced



We hope you'll come to our annual meeting that will last about an hour and a half. We'll talk about many successes and plans for this year.

LOVE THE LAKE AND WANT TO HELP IMPROVE IT?

Please consider running for one of the two commissioner seats open this year. These are very part-time, paid positions with occasional virtual meetings. You can work full time, live out of the area, and be a commissioner. Contact any board member for more information. To become a candidate, you will need to send a short biography to the LRPD Board Secretary at P.O. Box 313 in La Valle or ken.keegstra@gmail.com.

A meeting reminder and agenda, proposed budget, and biographies of board candidates will be mailed in early July. ■

New committee focused on education and outreach

By Brad Horner, Chair, and Sue Walters, Volunteer, LRPD Education and Outreach Committee

Education and outreach to the LRPD taxpayers, producers (farmers), government partners, and others has long been a major part of what the protection district does. This year the game has been upped with education and outreach having its own committee – as outlined in the LRPD 10-year plan. In addition to many standing events and activities such as this newsletter, board and partner meetings, a producers field day, website and Facebook updates, this year they're hosting two new events.

PHOTO: MITCH MCCARTHY



A pending shoreline improvement

This classic “before” picture shows grass going right up to the lake. After improvements recommended by Sauk County (which they will partially reimburse) there will be an estimated reduction of 9 tons of sediment and 14 lbs. of phosphorus annually.

THIS SUMMER Join us for two NEW events

TAKE A STAKE IN OUR LAKE

June 3rd from 9:00-11:30 a.m.

Lake Redstone Property Owners Clubhouse on Pierce Road

Learn more about Lake Redstone and our community while enjoying root beer floats, door prizes, and Culvers giveaways!

Family-friendly exhibits and activities

- Sauk County rainfall simulator
- Enviroscape watershed model for youth
- Gytaku/Fish Stamps for youth

Information tables/presentations:

- Wisconsin Department of Natural Resources (DNR)
- Lake Redstone Property Owners Association
- Lake Redstone Protection District
- Town of La Valle Police and/or a Town of La Valle Board Member
- Fishing Club
- Aquatic Invasive Species
- Pollinator Habitats
- Conservation Farming

SHORELINE IMPROVEMENT SHOWCASE

Date and details will be posted on the LRPD website, Facebook as well as via Lake Redstone Property Owners Association emails.

Join us for a “tour” of lake properties using best practices in sediment and phosphorus control such as native plant barriers, water diversion systems such as berms, rock infiltration, and rain gardens.

Could we share YOUR shoreline improvement story?

If you think that your property might be a good example for others to learn from, you can do a great service by allowing your property to be viewed from the land and/or the lake. Tour method(s) are TBD as we will want to discuss it with participating property owners. We will need a minimum of three properties to have the showcase.

Interested? Please send an email containing a brief description of the improvement, your address, and a photo, if possible, to lrpd.board@gmail.com. We'll be in touch. ■

LOVE YOUR LAKE Volunteer to help the Lake Redstone Protection District

The LRPD volunteer needs will keep changing with new initiatives and grant requirements. Whether you can donate a few hours per week, month, or year – in person or virtually – we'd love your help doing this rewarding, important work:

ORGANIZE PAPER RECORDS

Help the LRPD continue to sort volumes of studies, legal opinions, agendas, and minutes. You will learn a lot about our activities and our history. Records are at the La Valle

Town Hall. One volunteer who got a great start on this project has moved, but may be available to train new volunteers.

ORGANIZE DIGITAL RECORDS

Recent records of the LRPD are electronic files. We need volunteers to organize digital files and get them into a searchable format that will allow current and future board members and interested residents, to find the many studies and electronic records of district activities.

WRITE OR MANAGE GRANTS

The LRPD's Lake Management Plan will require applying for grants to complete the work. Could you help?

HELP WITH EVENTS

The annual meeting and other special meetings and events called by the board need organizers and set up people. We especially need help with our annual meeting this August.

INTERESTED? Contact any board member at lrpd.board@gmail.com. ■

Comprehensive lake management plan helps ensure health of our lake

By Mike Mittelstadt, *Chair, LRPD Board*

Last year, on February 2, the Lake Redstone Protection District received Wisconsin DNR and United States EPA approval for a comprehensive lake management plan that has been several years in the making.

The proper description of the management plan is that it is a 9-key element plan for the Lake Redstone Watershed. The plan is a massive 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 lakeredstonepd.org/lake-management-plan. While we don't expect people to read the entire plan, the executive summary, which is only a single page, is a great overview.

Key elements of the lake management plan are:

- Implement best management practices (BMP) throughout the watershed to reduce sediment and phosphorus loading into Lake Redstone
- Improve the riparian area by implementing BMPs to increase quality habitat for wildlife and mitigate the effects of development on Lake Redstone
- Use BMPs within Lake Redstone to reduce negative impacts from pollution, aquatic invasive species, and shoreline erosion
- Build and maintain partnerships with outside resources – state, university, county, lake groups, and other local entities to guide the implementation of BMPs

The key stakeholders identified in the plan are:

- Lake Redstone Protection District
- Sauk County Land Resources and Environment Department

- Juneau County Land and Water Resources Department
- Producers of the Lake Redstone Watershed, a produce-led cooperative
- Discovery Farms, a program of UW-Madison Division of Extension
- Lake Redstone Property Owners' Association
- Wisconsin Department of Natural Resources
- United States Geological Survey (USGS)
- Town of LaValle
- Property owners on Lake Redstone
- General lake users

What has been done the first year of the plan?

After the plan was approved, the board prioritized the tasks and assigned the tasks to committees. Reviewing the tasks required creating two new committees:

1. The Plan Integration committee to oversee tasks that require multiple committees to implement.
2. The Education & Outreach Committee is responsible for the education and outreach tasks.

The remaining tasks were assigned to our existing Water Quality Projects Committee and Sediment Control Committee. They are now working on implementing high priority tasks.

A key success factor from talking to other lake districts implementing 9-key plans was getting the commitment of county resources. Sauk and Juneau counties began work on a Targeted Runoff Management (TRM) grant to provide funding to add an additional staff person. After reviewing the requirements of the grant, it was decided that a preferable option was

to dedicate 50 percent of an existing Sauk County Land Resource and Environment department employee to the implementation of the LRPD management plan.

Successful implementation of this plan will require many volunteers. If you are interested in participating in this effort, please contact any board member or email us at lrpd.board@gmail.com.



Initiatives of the Plan Integration Committee

- Staffing the committee with highly qualified and enthusiastic people
- Working with the Town of La Valle to review and update boating ordinances. A new ordinance prohibits operating a boat in displacement mode for more than 1000 feet within 200 feet of shore.
- USGS stream monitoring will be done for the 2023 water year.
- Producers of the Lake Redstone Watershed will continue to operate two edge-of-field monitors to improve runoff management.
- Review and update of plan monitoring and reporting. ■

Learn what your neighbors think about issues related to water quality

Check out this summary of the LRPD Taxpayers Survey

By Brad Horner, LRPD Commissioner

Last summer, the Lake Redstone Protection District, in coordination with the DNR and Sauk County, conducted a survey of Protection District taxpayers. There were 15 multiple choice questions and two open ended questions.

A reminder that the LRPD focus is only water quality. Topics such as boating rules, housing/property use, and fishing are not part of the mission of the LRPD. However, the survey results were shared with the DNR, Town of La Valle, Fishing Club, and Sauk County representatives who were very interested in them.

A summary of the survey results is below. The raw data can be found at the LRPD website at lakeredstonepd.org/survey-2022. If you have comments or questions you can send an email to the LRPD Board at lrpd.board@gmail.com.

Summary of Survey Results

There were 212 responses (approx. 25 percent of tax payers in the LRPD)

Q1 How long have you owned property in the Lake Redstone Protection District? If you own more than one property in the district, please answer for the property you have owned the longest.

Owned property > ten years 66+%

Q2 Please describe how you use your Lake Redstone property.

Vacation home Almost 60%

Primary residence* 40%

*at least part of the year

Q3 How would you rate the overall water quality of Lake Redstone?

Very good or good Just over 40%

Neither good nor poor Nearly 40 %

Poor Just under 20%

Q4 How concerned are you about the following issues related to water quality?

Pollutants from runoff from agri-cultural lands 92%

Water Clarity 89%

Pollutants from roads, culverts, and ditches 88%

Pollutants from West and East Creeks 85%

Algal blooms 82%

Accumulation of sediment 82%

Pollutants from runoff from lakeshore properties 81%

Aquatic plants near shoreline 67%

Aquatic plants away from shoreline 65%



Q5 To what extent does the presence of aquatic plants impact your enjoyment of the lake?

Somewhat About 50%

A Lot 20%

Not at All Just over 30%

Q6 How concerned are you about aquatic plant growth in front of your property?

Very Concerned/Concerned 60%

Q7 Fertilizers used improperly on lawns can end up in the lake. Nutrients from fertilizers can cause excessive algae and plant growth. How

familiar are you with this concern?

Familiar or Very Familiar Almost 90%

Q8 A buffer strip is a strip of land along the water's edge that contains native plants such as wildflowers and grasses. Buffer strips reduce nutrient runoff into the lake, thereby improving water clarity, reducing sediment flowing into the lake, and reducing plant growth. Does your property have a buffer strip along the shoreline?

Have shoreline buffer Almost 50%

No shoreline buffer Nearly 40%

N/A 10%

Q9 If you answered "No" to Question 8, would you consider creating a buffer strip?

Yes Just over 50%

No Just under 50%

Q10 Landowners can take other steps to prevent sediment and excessive nutrients from entering the lake. Please let us know if you do any of the following.

Refrain from lawn fertilizers 80%

Have a rock diversion for runoff 63 %

Maintain a rain garden About 27 %

Q11 How is wastewater handled on your property?

Have a septic field such as a mound system Almost 40%

Have a holding tank* Almost 60%

*Half of tanks are > 15 years old. Have

Q12 No one technique for controlling invasive aquatic plants like Eurasian Watermilfoil or Curly-leaf Pondweed is perfect. LRPD is continually evaluating the various techniques that we have tried in the past which include chemical treatments, manual harvesting, and diver assisted harvesting. To what extent do you support or oppose the use of

TREES! Glorious trees!

So important to the health of Lake Redstone

By Sue Walters, Volunteer, Education and Outreach Committee

DNR approved chemicals for plant management in targeted areas?

Strongly support use of DNR approved chemicals or support in some instances	Almost 84%
Strongly oppose use of chemicals	1.5%

Q13 Would you be interested in attending a workshop to learn how to manually harvest Eurasian watermilfoil?

Yes	40%
-----	-----

Q14 Would you be interested in attending a workshop to learn ways you can improve your shoreline for the lake? (Note that such workshops were held in 2021 and 2022. You can find a recording of the 2022 workshop on the LRPD website.)

Yes	Almost 50%
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Q15 How important to you are each of the following communication tools from Lake Redstone Protection District?

Annual Newsletter	92%
Email Notifications	88%
LRPD Website	81%
Annual LRPD Meeting	65%
LRPD Facebook Page	46%
Monthly LRPD Board Meeting	41%

Q16 and **Q17** were open ended:

Q16 What topics/subjects do you want to hear more about regarding LRPD? AND **Q17** Are there concerns that you would like to have LRPD address in the future?

There were almost 200 responses to the open ended questions. Some topics mentioned formed a pattern of comments, and there were 19 compliments of the LRPD. (Thank you.) You can read them on the LRPD website at lakeredstonepd.org/survey-2022. ■

We live on a beautiful lake, and it's more than a hole filled with water that makes it so. Rocky formations, hilly terrain, and mature pines and deciduous trees all contribute to the scenic beauty of Lake Redstone.

The University of Minnesota Extension outlines many benefits of trees as well as any resources I found:

- Trees and shrubs are an excellent, inexpensive and attractive way to control runoff and erosion. Roots hold soil and help stabilize slopes by trapping and using water that would otherwise runoff. Roots increase soil porosity, allowing water to infiltrate rather than runoff.
- Vegetation filters out nutrients and pesticides that could otherwise reach lake or stream and cause algal blooms or excessive plant growth
- Trees and shrubs improve air quality by taking in carbon dioxide and giving off oxygen
- Trees provide shade and moderate weather extremes such as hot sun or strong winds
- Trees and shrubs provide privacy for humans by screening adjacent property. In 2018, a shoreline habitat assessment was completed on our lake. One criterion that was used in evaluation of every property on the lake, was the amount of canopy coverage, or trees on the shoreline. "Trees reduce water run off by intercepting falling rain

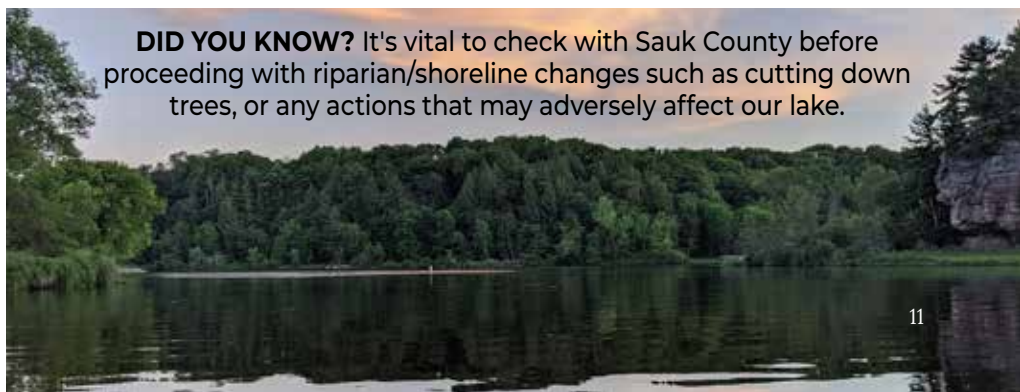
in their leafy canopies, slowing the force of rain that falls to the ground. The water is held in the bark and leaves, and absorbed through the roots, reducing erosion. Tree root systems reduce erosion by holding soil in place." (Shore Stewards, Washington State University).

According to the USDA, a healthy 100-foot-tall tree has about 200,000 leaves. A tree this size can take 11,000 gallons of water from the soil and release it into the air again, as oxygen and water vapor, in a single growing season.

In 2019, the LRPD managed a dredging project to remove 105,000 cubic yards of sediment from our lake at a cost of about \$3.5 million which is reflected on your annual tax bill. We can all help maintain the benefits of this project. There are Sauk County ordinances regulating cutting down trees on lake front property as well as any riparian/shoreline improvements. Please check with Sauk County before proceeding with riparian/shoreline changes, such as cutting down trees, or any actions that may adversely affect our lake.

An excellent publication, "Shoreline Stabilization: A Guide for Homeowners and Conservation in Inland Lakes and Flowages" is available online at wisconsinlandandwater.org or at the Sauk County Courthouse. ■

DID YOU KNOW? It's vital to check with Sauk County before proceeding with riparian/shoreline changes such as cutting down trees, or any actions that may adversely affect our lake.



Lake Redstone

**A Beautiful Lake in a
Progressive Community**

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LAKE REDSTONE PROTECTION DISTRICT

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lakeredstonepd.org

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our website:



*Protecting and rehabilitating the water quality of Lake Redstone
for its residents and the public.*

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Assistant Treasurer: Pat Sullivan ■ gsully8@comcast.net

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LaValle Town Rep: Ray Demaskie ■ raydemaskie@townoflavalle.us

Sauk County Rep: Peter Kinsman ■ peter.kinsman@co.sauk.wi.us

BOARD MEETINGS are monthly at 6 p.m. on the second Tuesday
at the La Valle Town Hall on 324 Highway 33

Agendas are posted at:

- The La Valle Post Office
- The Town of La Valle Hall
- Hartje's Travel Center, Market & Hardware in La Valle

NAMEPLATE AND MASTHEAD PHOTOS: TOM WALTERS