# LAKE REDSTONE PROTECTION DISTRICT (LRPD) 2022 SURVEY SUMMARIZED RESULTS

The 2022 survey of households in the Lake Redstone Protection District closed on July  $1^{st}$ . The summarized results are below. The detailed survey answers/raw data are available on the Protection District website, along with the survey results from 2017.

https://www.lakeredstonepd.org/survey-2022.

Most of the survey topics have been covered in annual LRPD newsletters (The Protection Connection) and will again be covered in spring LRPD newsletter. The topics in the survey are on-going. Results of future surveys and work to address them, will continue to be communicated via future newsletters and posted on the LRPD website.

212 people responded to the survey (approx. 25% of the households in the district)

# 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.

More than 2/3 of the respondents have owned property for more than 10 years

# Q2 Please describe how you use your Lake Redstone property.

Almost 60% of respondents use their property as a vacation home. Approximately 40% use their property as their primary residence for at least part of the year. (20% are year-around residents)

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

Just over 40% rated it very good or good. Nearly 40% rated it neither good nor poor. Just under 20% rated it as poor.

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

Issue	% Respondents <u>Very Concerned</u> or
	Concerned
Pollutants from runoff from agricultural	92%
farmlands	
Water clarity	89%
Pollutants from runoff from roads, culverts,	88%
ditches	
Pollutants from runoff from west and east	85%
creeks	
Algal blooms	82%
Accumulation of sediment	82%

Pollutants from runoff from lakeshore	81%
properties	
Aquatic plants near shoreline	67%
Aquatic plants away from shoreline	65%

Runoff from the four major sources, including sediment accumulation, is much more of a concern than about aquatic plants. Water clarity is a major concern.

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

About half said Somewhat. 20% said A Lot. Just over 30% said Not at All.

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

60% are Very Concerned or Concerned.

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?

Almost 90% are respondents are familiar or very familiar with nutrients from fertilizers can cause excessive algae and plant growth.

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 and reducing plant growth. Does your property have a buffer strip along the shoreline?

Almost 50% of respondents said that they have a buffer strip along their shoreline. Almost 40% do not with the remainder being N/A.

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

Just over 50% said Yes. Just under 50% said No.

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.

80% refrain from using fertilizer on their lawn. Approximately 63% have a rock diversion for runoff. About 27% maintain a rain garden.

# Q11 How is wastewater handled on your property?

Almost 60% have respondents have a holding tank. Almost 40% have a septic fields that are equally split between more than 15 years old and less than 15 years old.

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 DNR approved chemicals for plant management in targeted areas?

Almost 84% of respondents either strongly support use of DNR approved chemicals or support in some instances. 1.5% strongly oppose use of chemicals.

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

40% of respondents said Yes.

Q14 Would you be interested in attending a workshop to learn ways you can improve your shoreline for the lake?

Almost 50% said Yes.

# Q15 How important to you are each of the following communication tools from Lake Redstone Protection District?

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

Question #16: What topics/subjects do you want to hear more about regarding LRPD? (See also many similar comments in question 17.)



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There were 15 comments regarding water quality. There were also 11 comments in question 17 for total of 26 comments on this subject):

Many general comments about wanting to hear more about water quality especially water clarity. Is the water safe for swimming and for fish? What is being done about water clarity, internal phosphorus loading, and aquatic plants?

RESPONSE: Water quality is the main focus of the Lake Redstone Protection District, and probably has been since it was formed in the 70's. The LRPD has a standing Water Quality Committee.

Water quality issues are generally more serious in man-made lakes, such as Lake Redstone, than in natural lakes. Lake Redstone sits in a large, hilly, agricultural watershed thereby increasing the complexity of dealing with water quality issues.

The major nutrient causing water quality issues in Lake Redstone is phosphorus. In addition to soluble phosphate present in the water, phosphorus is bound to soil particles that settle to the bottom of the lake. Every year some of the phosphorus is released from the soil particles contributing to phosphorus that can be used for the growth of plants and algae. The release of bound phosphorus, called internal loading, is enhanced when bottom sediment is stirred up by wave action and propellors from powerful boats. As the LRPD strives to limit phosphorus entry from the watershed, we also need to devise strategies to limit internal loading.

We are fortunate that the majority of farmers in the watershed are committed to reduce and eliminate runoff from the property in to the streams that feed Lake Redstone. It is in their financial best interests to do so, not just to help Lake Redstone. We are fortunate that for three years now there is an organization called Producers of Lake Redstone Watershed that shares best farming/field management practices amongst producers (farmers).

The water in Lake Redstone is safe for swimming. Most fresh water fish species thrive in Lake Redstone waters. Some reproduce naturally and some are stocked.

Twice per year, a survey of aquatic plants in the lake is performed by a consultant employed by the LRPD. Through the years the primary methods of aquatic plant control has been herbicides applied by contractors to the LRPD with permit approved by the DNR. There is an Aquatic Plant Management Plan that is in place and updated regularly. It is being managed by the LRPD with the assistance of a consultant.

#### 7 comments regarding the **Shoreline and Invasive Plant Workshops**

Almost all asked if the workshops can be recorded so that they can viewed/listened to anytime.

RESPONSE: 68 people attended the in-person Shoreline Improvement Workshop during 2021 and 2022. This workshop contains information on the various methods of shoreline improvement and potential reimbursement as presented by representatives from the DNR and Sauk County. It also contains details of improvement as provided by a landscaper.

A recording of the Shoreline Improvement Workshop has been posted on the LRPD website for anytime listening and viewing. <a href="https://www.lakeredstonepd.org/shorelineimprovementworkshop">https://www.lakeredstonepd.org/shorelineimprovementworkshop</a> The plan is to continue with the in-person workshops, possibly on an every-other-year basis.

In Sept 2022 a workshop was held regarding Invasive Plants.

<u>6 comments regarding shoreline erosion (There were also 8 comments in question 17 for total of 14)</u>: Many comments regarding need for erosion control.

RESPONSE: The Shoreline Improvement Workshop provides details on what can be done regarding erosion control and runoff from properties. Included in the workshop is information on government reimbursement programs. Here is the link to the LRPD website where the Workshop presentation can be found. <a href="https://www.lakeredstonepd.org/">https://www.lakeredstonepd.org/</a>

The buoys that are placed in Lake Redstone are primarily for navigation and safety however inside those buoys are slow no wake zones which helps in shoreline erosion control. The Town of La Valle Police Department gives tickets for violators.

The LRPD has a standing Sediment Control Committee in its ByLaws. The committee has led many projects to reduce runoff in to the lake from culverts and ditches, typically working with the Town of La Valle. It currently has a prioritized list of culverts and ditches with budget allocated to those with top priority.

<u>5 comments regarding culverts, roads, and ditches</u> (There were also 4 comments in question 17 for total of 9):

Most of them regarding need for better control of farm runoff through and over roads, culverts, and ditches.

RESPONSE: As mentioned above, the LRPD Sediment Control Committee has long worked with the Town of La Valle to get problem culverts and ditches addressed. People on the committee personally tour problem areas which helps in setting priorities and determining next steps. For the list of prioritized culverts and ditches, contact the Chair of the Sediment Control Committee via the LRPD website. https://www.lakeredstonepd.org/ In 2022 and 2023 this is Pat Sullivan.

3 comments regarding dredging: (There were also 2 comments in question 17 for total of 5)

RESPONSE: In 2019, 104,000 cubic yards of sediment were removed from 26 bays. Previously, many of those bays were considered unnavigable (boats bottom out) and were continuing to fill in. It had been the early 80's since parts of the lake were last dredged. All bays are now navigable meaning min. of 5 ft of dept) 10 feet away from shore.

Due to not using contingency funds, combined with a re-negotiated interest rate on the dredging loan (1.39%), the cost to property owners in the district is significantly reduced from the original terms of the loan.

In the year following dredging, aquatic plants particularly most-prevalent Eurasian Milfoil, increased in volume per consultant measurements. This is probably because dredging broke off leaves and stems and enabled the spread of seeds. Since then however, the volume of aquatic plants has returned to historical averages.

# 2 comments regarding flooding

RESPONSE: In 2008 and 2018 the Lake Redstone watershed received "500 year" rainfalls. This resulted in dramatic rises in water levels in the lake impacting, basements, piers, lifts, and other property. It also resulted in tons of sediment/nutrients coming in to the lake. It is a goal of LRPD to reduce the impacts of large rainfalls. See other responses regarding sediment control in Question 16.

Q17 Are there concerns that you would like to have LRPD address in the future?

11 comments regarding water quality and clarity (in addition to the 15 in question 16 for total of 26)
RESPONSE: See question 16

8 comments regarding shoreline erosion (in addition to the 6 in question 16 for total of 14) RESPONSE: See question 16

4 comments regarding culverts, roads, and ditches runoff (in addition to the 5 in question 16 for total of 9)

RESPONSE: See question 16

2 comments regarding dredging (in addition to the 3 in question 16 for total of 5).

**RESPONSE:** See question 16

2 comments regarding Shoreline/Invasive Plant Workshops (in addition to the 7 in question 16 for total of 9)

**RESPONSE:** See question 16

<u>Topics mentioned that are not in LRPD jurisdiction.</u> Will pass on to proper authorities as <u>appropriate.</u>

Rentals

Excessive tree removal on property

**Fishery** 

**Beach Clubs and Property Concerns** 

Wake Boats

Rules for Boats

Community

Homeowner Responsibilities