

Lake Redstone

PROTECTION CONNECTION

SPRING 2018

NEWS FROM THE LAKE REDSTONE PROTECTION DISTRICT

In this issue

Dredging	1
Boating Law Enforcement	4
Fishing Club	4
Lake Management Plan	5
Public Survey Results	6
Annual Meeting - VOTE	6
Water Quality	7



Efforts to protect and improve Lake Redstone are carried out so children like Jordan, Liam and their friends can enjoy our lake for many years to come.

The Lake Redstone Dredging Project: Prepare for Big Decisions Ahead

By Brad Horner, Dredging Committee, and Tom Walters, Chairman, LRPD

As you read about our Lake Redstone Dredging Study, be aware that some aspects of the proposed dredging project are not yet known as they depend upon DNR approval of the permit, bidding the project, financing, and most importantly voter approval. More information is available on our website at lakeredstonepd.org, LRPD Facebook, and a recent flyer mailed to your residence. Providing you with information is our goal!

What is dredging?

Dredging is the removal of sediment from the bottom of the lake for improved navigation, swimming, and recreational uses. Dredging can be done mechanically or hydraulically. Mechanical dredging involves heavy equipment scooping out sediment and hauling it away. Hydraulic dredging involves vacuum like machines that suck up sediment and pump it to an off site location. We agree with our engineering consultants, that hydraulic method is logistically desirable and cost efficient. Both methods involve DNR permitting. Where to deposit spoils is

Continued on next page

“
If you're lucky
enough to live
at the lake,
you're lucky
enough.
”



Dredging from page 1

another major consideration with DNR and county restrictions.

Why dredge in Lake Redstone?

Lake Redstone is a man made recreational impoundment with a 19,200 acre agricultural watershed in a valley. The five mile lake is 607 acres fed mainly by two branches of Big Creek. The land in the watershed erodes naturally, especially during heavy rain events, depositing sediment, runoff, soil, chemicals, and anything else that water takes downstream. Dredging has been considered since the year 2000 and most recently in 2014.

Twenty property owners wrote a letter to the Lake Redstone Protection District (LRPD) board regarding the condition of the lake. Those property owners were discouraged by difficulties they and others experienced in some bays for boating, swimming and using the lake. They claimed certain bays had become shallow and weedy due to sediment and runoff. Those bays were either not dredged as a part of the 1983 dredging project, or have filled in considerably since the lake was constructed in the 1960's. Owners were also concerned about the impact of the shallow/weedy bays on lake property values. Lakefront property values which are not part of the dredging plan might be negatively affected as well.

In 2016 the LRPD board contracted with Ayres Associates, LLC of Eau Claire to conduct a lake survey to determine the amount of sediment and conduct sediment analysis to give us an understanding of the scope of the project. They sampled 29 bays in the survey and determined 106,000 cubic yards of sediment had accumulated on the original lake bed in the twenty nine bays. Testing of the sediment determined there was no significant amount of contaminants.

Near unanimous taxpayer support



During big rains, water and sediment drains into the lake via stream and culverts as shown here by Winnebago Ct.

at the 2016 and 2017 annual meetings, and the online survey of LRPD taxpayers in spring 2017 directed the board to investigate dredging the lake. The LRPD organized a dredging committee and contracted with Ayers to advise and assist the LRPD board regarding the process. We have reached the time to report our findings.

What are the key dates?

Saturday, June 9, 2018 at 9:00 a.m.
Cal Center at Reedsburg High School

① SPECIAL DREDGING INFORMATION MEETING

All households in the LRPD are strongly encouraged to attend so you can make an informed decision for the vote on dredging in August. All your questions will be answered at this meeting. This will be a key informational meeting! Please attend!!!

Saturday, Aug. 4, 2018 at 8:00 a.m.
Location to be announced

② LAKE REDSTONE PROTECTION DISTRICT ANNUAL MEETING

This most important meeting will include a vote on dredging. All **eligible** electors will be able to vote on whether or not to proceed with the dredging. It is strongly urged that you attend this meeting to vote.

You must be a property owner or full time resident and be **present** to vote. No absentee or proxy ballots!

Out-of-state property owners will have a vote.

September to December 2018

EXPECTED DURATION OF DREDGING

It is understood that dredging will have short term impacts to lake use. A schedule, with the sequence of bays to be dredged will be developed in collaboration with the selected dredging company. The schedule will be communicated to property owners, by the August 4th meeting after the dredging company has been selected.

How will dredging be done?

Most of the bays will be dredged by the hydraulic method. The DNR requires that the dredging be no closer than 10 feet from each shoreline with a 3'/1' horizontal to vertical slope. Dredging is planned to make each bay up to six feet deep conforming to DNR guidelines. Due to location several bays may need to be dredged mechanically.

The sediment pumped out of the lake will go through a pipeline to an offshore site on the southside of Heidrich Rd. The owner of the property, and the owners of the land through which the pipe will run, have given permission for this. Land use contracts are being finalized.

Who are the parties involved with dredging of Lake Redstone?

This complex project involves many stakeholders:

AYRES ASSOCIATES: Water management consultants and experts on dredging, with HQ in Eau Claire. Ayres has been under contract with the LRPD since 2016 to help guide the process. They are lead preparers of the DNR permit and the RFP (Request for Proposal) to the dredging bidders. Ayres will also facilitate the operations process.

WDNR (STATE OF WISCONSIN): They have been involved to help guide the project. A preliminary meeting with

Continued

SPRING 2018



DNR representatives was conducted in La Valle, additionally they came with us on a tour of the lake. They have also participated in two “partners” meetings in Baraboo with all parties who help us manage the lake. The DNR needs to approve the dredging permit which was submitted on March 16, 2018.

DREDGING COMMITTEE: A group of eight property owners meet monthly and perform the detailed work to design the project with guidance and feedback from all parties, and then reports to the Board. The Committee leads communication, financing, and administration efforts with all stakeholders.

DREDGING COMPANY: The winning bidder will resurvey the bays for depth of sediment before and after the dredging, and will dredge the lake according design specifications, costs, and timeline.

LAWYERS: Provide legal counsel contracting the landowners of the spoils site, consult with LRPD to interpret Wisconsin statutes that apply to the levy of taxes and financing for the project. Also they will interpret and advise as to voting restrictions and eligible voters.

LENDER(S): Negotiations with local financial institutions are underway to lend the LRPD the money to pay the dredging company.

LRPD BOARD: Your elected Commissioners provide research, guidance, feedback, direction, and approvals regarding dredging. The Board is responsible for maintenance of the LRPD website and Facebook page and will run the June and August meetings.

LAKE REDSTONE PROPERTY OWNERS ASSOCIATION (LRPOA): Will assist communicating key dredging points on a regular basis in the Redstone Notes emails, and in the May newsletter. You need to be a LRPOA member to receive this.

PROPERTY OWNERS: Will need to understand the dredging project and vote on it in August. They will need to be sure their pier/lift/rafts are out of the way when/if dredging is scheduled in their bay.

MARINE SERVICES: Will need to remove some piers and lifts earlier than usual. They have been contacted.

SAUK COUNTY: Will be involved in administration of the levy and communicating it to property owners in their tax bill.

JUNEAU COUNTY: We are identifying ways to slow sediment flow into the lake with them. This is a main component of our recently approved grant from the State of WI.

TOWN OF LA VALLE: The Chair of the Town Board is also on the LRPD Board and will be communicating information to Town of La Valle. The Town is repairing the Section 11 boat landing in June.

Which bays are to be dredged and how were they selected?

They were selected based on a sedimentation study performed of all bays by Ayres in November of 2016. A copy of the study is on the LRPD website at lakeredstonepd.org.

How much is this going to cost you?

The current estimate, from Ayres, would cost property owners approximately \$1.59 per \$1,000 of assessed value, per year, for ten years. The

exact amount property owners might pay is not known at this time. There are many factors that will go in to determining the levy for each property owner. The final cost of the dredging will not be known until the project is approved by the DNR and LRPD voters. The project will be let for bids upon DNR approval which will give us more accurate costs. The detailed terms of the loan that the LRPD needs to pay the dredger are similarly not known at this time. We expect to know much more in the next few months. We will keep you informed.

What is known is according to state statutes the levy must consider the value of the land and structures. The levy must be consistent throughout the district. The levy for each property will be amortized on a 10 year basis if approved. Guidelines for estimating the amount for each taxpayer will be available at the June meeting, and detailed further at the August meeting. The members of LRPD Board and the Dredging Committee are property owners and concerned about the cost.

How will dredging affect the lake?

The LRPD Dredging Committee and Board contend dredging will provide many years of lake improvements. Navigation will be improved as well as recreational use. The DNR is requiring us to be compliant and respectful of the environment and wildlife. Fishing and natural beauty will be protected during the project. We expect some reduction of phosphorous as it is in the sediment and will be pumped out of the lake. Phosphorous contributes to algae and weed growth. This effort should provide perhaps 50 years of sediment relief if not more. We urge you to be informed and involved so the District can make the right decision with the vote in August.

Lake Redstone Protection District Board and Lake Redstone Dredging Committee ■

PHOTO: TOM WALTERS



Runoff at Fox Ct. landing after a big rain event in the fall of 2016.



Survey Reveals Different Takes on Enforcement of Boating Laws

By Ken Keegstra, LRPD Board Secretary

During the spring of 2017, the Lake Redstone Protection District (LRPD) board conducted a survey to gather opinions on what issues concern district residents. About 40% of the respondents to the survey thought that violations of boating laws were a serious or a moderate problem on Lake Redstone. The comments section of the survey provided insight into the disagreements among district residents. One resident asked for "More police patrols of dangerous activity..." while another resident stated, "There is far too much police presence on summer weekends." Complete results from the survey, including all resident comments, are available on the district website



**One resident asked for
"More police patrols
of dangerous activity..."
while another resident stated,
"There is far too much
police presence on
summer weekends."**

(lakeredstonepd.org/survey-2017).

While we value opinions about boating problems, it is not within our authority to act on these concerns. Thus, we passed along resident concerns to the La Valle Town Board and the La Valle Police Department.

In return, the La Valle Police De-

partment has provided us with information about patrolling activity on Lake Redstone. In the summer of 2017, they spent 538 hours patrolling Lake Redstone, down slightly from 571 hours in 2016 and down significantly from 846 hours in 2010. During their 2017 patrolling, they issued 82 citations and 164 warnings, up considerably from 2016, when 31 citations and 55 warnings were issued, but down considerably from 2010, when 131 citations and 178 warnings were issued.

The LRPD board wants to thank the La Valle Police Department for their efforts to maintain boating safety on Lake Redstone while not interfering with the desire of residents to have fun. ■

Fishing Club Plans to Stock More Walleyes

By Bruce Vermilyea, Fishing Club member

The Lake Redstone Fishing Club (LRFC) has been working to improve and sustain the walleye population and fishing in Lake Redstone. Currently the DNR stocks walleye fingerlings every other year. In cooperation with the DNR, our walleye project plan is to stock larger walleyes (6-8 inches) opposite years of the DNR. Larger walleyes are costlier but the survival rate is much greater. Nathan Nye, DNR fish biologist, attended our March 24th LRFC meeting to discuss the appropriate number of walleyes to stock in the fall of 2018.

We have explored different avenues for fundraising to cover this cost:

- Direct donations
- Lake Redstone Fisheree-successfully held Jan 20th. Jointly sponsored by the Reedsburg Outdoor Club and the LRFC.

PHOTO: TOM WALTERS



The fishing club is working with the DNR to make Redstone a better walleye fishery. More walleyes like this one would make anglers happy.

- Sale of Lake Redstone Fishing Shirts
- The North End Tavern meat raffle

All interested anglers, new or experienced, are always invited to join us at our monthly Saturday meetings.

For meeting dates or more information about the LRFC, contact Secretary Paul Burke at paul.burke@sbcglobal.net. ■

LOVE YOUR LAKE

Go Mobile

Check out our NEW APP
for the Lake Redstone
Protection District.

It's easy to use -- and FREE!



app.lakeredstonepd.org



LRPD Awarded Grant to Create Research-based Lake Management Plan

By Ken Keegstra, *Secretary, LRPD* and Tom Walters, *Chair, LRPD*

In the 2017 newsletter, we reported on plans to prepare a Comprehensive Lake Management Plan (see our web site at lakeredstonepd.org/newsletters to see the full article). Since then, the LRPD board, with major assistance from our consultant, Dave Blumer, prepared a grant application to provide financial support for preparation of a management plan and we recently were informed that the grant has been funded. The grant has three phases; the first two will begin in the spring/summer of 2018 with phase three beginning in 2019. The overall goal is to have a comprehensive lake management plan completed by the time the grant expires near the end of 2020. The Wisconsin DNR will provide about \$25,000 in funding for each phase of the project, with the LRPD providing additional support, mainly as donations in the form of volunteer time and boat use. Staff members from Juneau and Sauk counties will also participate in the project. What follows is a brief summary of the activities that will occur over the next three years to collect additional data regarding Lake Redstone and to prepare a comprehensive lake management plan.

Funding to support new efforts

Grant funding will support a number of new activities aimed at understanding the factors that influence water quality in Lake Redstone, with the eventual goal of addressing those that negatively influence the lake, thereby improving water quality. Some activities will examine the watershed while others will focus on areas immediately around the lake.

One new activity will be to perform a shoreland habitat assessment. This survey will provide information on the areas immediately around the lake



PHOTO: JAN THYBERG

The shoreline habitat assessment will identify opportunities to create shorelines like the one shown here that are both attractive and limit runoff into the lake.

yielding information on those areas that contribute nutrients and sediment to the lake. This information will be used to improve the shoreline, with help from the Healthy Lakes Program.

Another new activity will be to analyze the flow and nutrient content of tributary waters coming into Lake Redstone. Several stream sites within the larger area of land that drains to Lake Redstone (known as the watershed) will be sampled for two years. The outlet of Lake Redstone by the dam will also be sampled to develop nutrient and water budgets. Like any budget, this activity will determine what is coming in, what is staying, and what is going out of Lake Redstone. It will also identify areas of the watershed that are potentially more problematic than others.

Funding for ongoing efforts

Some ongoing activities will now receive financial support from the grant. Included in this category are the efforts to control aquatic invasive plant species, especially Eurasian Watermilfoil. Another is continued monitoring of lake water quality. For years, teams of volunteers have collected water samples. This historic data, along with more comprehensive data to be collected in the next three years will be analyzed to identify long-term trends in the water quality.

A comprehensive plan

The data compiled from all of these efforts will be used to develop a 9-Key Element Plan for Lake Redstone:

1. Identify causes and sources of pollution;
2. Estimate pollutant loading into the watershed and the expected load reduction;
3. Describe management measures that will achieve load reductions and targeted critical areas;
4. Estimate amounts of technical and financial assistance and the relevant authorities needed to implement the plan;
5. Develop an information/education component;
6. Develop a project schedule;
7. Describe the interim measurable milestones;
8. Identify indicators to measure success; and
9. Develop a monitoring component.

Those interested in participating in this effort can see descriptions of many volunteer opportunities at lakeredstonepd.org or contact a board member. Information regarding the grant activities and progress toward the development of the 9-Key Element Plan will be on the LRPD web site. ■



2006 vs 2017: A Survey Comparison

By Al Baade, Consultant LRPD

The District has done surveys of its electors in 2006 and 2017. Some things have changed, others have not. In 2006 there were 340 respondents out of a total of approximately 1074 surveys mailed. In 2017 there were 227 responses to the online survey. Because there could have been more than one response per property parcel owned, there is not enough information to estimate a 2017 response percentage.

One question we were particularly interested in is why you chose Lake Redstone to purchase property. In 2006 the top answers were natural beauty, recreational activities and serenity. The 2017 survey had these same top answers in addition to choosing water quality as an important reason.

The Redstone population is becoming more stable. The electors are transitioning to becoming full time, year-round residents within increase from 22% in 2006 to 28% in

2017. Back in 2006, 47% had owned their homes more than 10 years. That increased to 62% in 2017. A similar trend can also be seen on the other end of the spectrum. In 2006, 1 in 3 people had owned for less than 5 years. In other words, in 2006 on average, either you or one of your neighbors would have been gone in 5 years. In 2017 that percentage dropped to 1 in 5 being gone in 5 years.

Popular lake activities didn't see much change. Common answers in each survey were swimming, boating, fishing and tubing/inflatables. In 2017 canoeing and kayaking were added to the list.

Clarity, aquatic plants and watershed runoff were common

water-quality concerns in each survey. In 2017 accumulation of sediment and shoreline erosion were

added to the top concerns.

This may reflect the potential dredging covered elsewhere in this issue. In the 2017 survey, 72% of the respondents felt dredging was necessary with 51% feeling it was needed near their property.

The 2006 survey did not address dredging.

The District conducts periodic surveys to learn more about our electors and what is important to them. We will continue to conduct them in the future. Future issues of Protection Connection will highlight some of the responses where viewers answered the questions with text to express their opinion. ■

Clarity,
aquatic plants
and watershed runoff
were common
water-quality concerns
in each survey.

Join Us for Our Annual Meeting August 4, 2018

Cast your vote on dredging

By Tom Walters, LRPD Board Chair

Please join us for the LRPD Annual Meeting on Saturday, August 4. Our annual meeting is usually held at the La Valle Town, but we are looking for a larger venue to accommodate a high turnout for the dredging vote. Residents will be mailed a notice with the time and place in early July.

There is one Commissioner's position up for election this year on

the LRPD Board. If you are interested in becoming a candidate, submit a brief biography to Secretary, Ken Keegstra at P.O. Box 313, La Valle, WI 53941 by July 1, 2018. Email applications will also be accepted by Secretary Keegstra at ken.keegstra@gmail.com. As always, nominations for Commissioner will be accepted from the floor. ■



LOVE YOUR LAKE

Volunteer!

Your valuable skills are needed to help make our lake a better place for boating, fishing, and recreation and to maintain water quality for all to enjoy. Volunteers are needed for many important activities, including: stream sampling, water sampling, shoreline habitat assessment, record keeping, Facebook page maintenance. Regardless of your interests or expertise, or whether you can spare an hour now and then or several hours a month, we welcome your help!

Visit lakeredstonepd.org and check out the Volunteer Opportunities tab for more details or speak with a board member. ■



Delaying Future Dredging and Improving Water Quality

By Serge Koenig, Sauk County Soil Conservation Technician and Chuck Ecklund, LRPD commissioner

The LRPD is pursuing many activities to slow soil erosion and improve water quality. One important area is cooperation with the Sauk County Conservation, Planning and Zoning (CPZ) Department, the Juneau County Land & Water Resources (LWR) Department, and the Juneau and Sauk County Natural Resources Conservation Service (NRCS). These groups have been working closely with producers in the watershed and lake shore owners to reduce soil erosion and improve water quality through educational events and the installation of conservation practices: planting cover crops, creating grassed waterways, implementing gully erosion control projects, performing nutrient management, lake shore plantings and locating rain gardens. For example, Sauk County CPZ staff members have given presentations to the Lake Redstone Garden Club about land use and environmental topics.

Sauk County CPZ also purchased a new rainfall simulator, with some of the funds coming from the LRPD. The rainfall simulator demonstrates the effect of various land uses on soil erosion, water runoff and water infiltration. The simulator provided demonstrations

to area producers and LRPD property owners last summer. We'll replicate this at other farms in the watershed in 2018.

There have been multiple meetings organized by the LRPD with producers and lake owners to discuss water quality issues facing both the lake and farmers. There is work underway to establish a producer-led Lake Redstone watershed group. It is an innovative way for producers, governmental agencies and lake owners to join forces to improve the bottom line for farmers while at the same time improve the health of our soils, streams and lake. The group is in its infancy and hopes to grow over time. The farmers in the watershed are to be commended for taking this step.

McWilliams farm conversion showing a big, positive impact

Staff from Sauk County CPZ are working with McWilliams Farm LLC now to convert their entire 61-acre farm to a rotational grazing system. The farm is currently in a corn, soybean and hay rotation system. When fully converted, the land will support a continuous living cover of clovers, alfalfa, and various grasses throughout the year with these benefits:

- The land will infiltrate nearly 4 million gallons of water per year that will no longer be running into the lake during rain events.

The rainfall simulator distributes water over five trays containing soil derived from locations under different agronomic practices. The runoff from different samples is collected in the jars. Bare soil produces the greatest amount of runoff, with the largest amount of sediment while no-till soils and those with cover crops produce much less runoff.



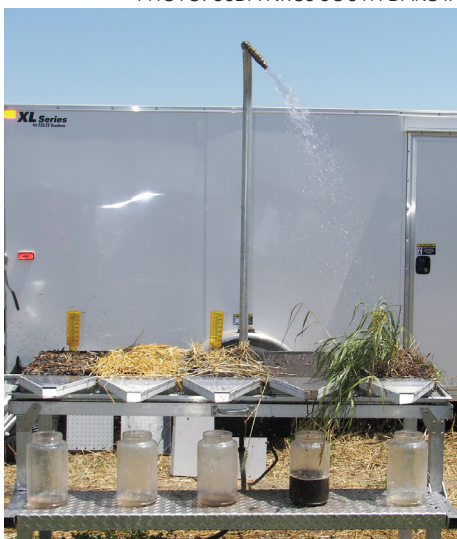
Land converted to a rotational grazing system produces significantly less runoff during rain events leading to less sediment deposition and fewer nutrients in the lake.

- It will decrease sediment loading into the lake by about 95 tons per year. This is the equivalent of 7 dump trucks full of soil EVERY year.
- Phosphorus loading will be curbed by nearly 550 pounds per year. Some of this phosphorus stays in the lake and fuels weed and algae growth while part flushes into the Baraboo River causing it to be impaired by excessive phosphorus.

The Protection District is providing financial assistance to help the McWilliams family install rotational grazing system.

Recently, Sauk & Juneau County staff are also participating in the lake management planning activities supported by the DNR grant (page 5). They are organizing water quality monitoring in Lake Redstone tributaries and assisting volunteers from the LRPD who are helping. These are just some of the projects that the Sauk County CPZ Department, Juneau County LWR Department, Sauk & Juneau County NRCS, and the LRPD are working on together to slow erosion and improve the water quality of Lake Redstone while being sensitive to the needs of producers within the watershed. ■

PHOTO: USDA NRCS SOUTH DAKOTA





**A Beautiful Lake in a
Progressive Community**

P.O. Box 313
La Valle, WI 53941
lakeredstonepd.org

To:

FIRST-CLASS MAIL
US POSTAGE
PAID
REEDSBURG, WI
PERMIT NO. 144

BOARD OF COMMISSIONERS

LAKE REDSTONE PROTECTION DISTRICT

Board Meetings

Monthly at 6 p.m.
on the second Tuesday
Town of La Valle Hall
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

Find agendas, minutes,
newsletters and other
information at:

lakeredstonepd.org

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

Chairman: Tom Walters

608-985-7030 or walterstom51@gmail.com

Secretary: Ken Keegstra

608-985-8259 or ken.keegstra@gmail.com

Treasurer: Glen Choroszy

608-963-8213 or ChoroszyG@firstweber.com

Commissioner: Chuck Ecklund

608-985-8280 or cecklund@mwt.net

Commissioner: Paul Burke

608-985-8267 or paul.burke@sbcglobal.net

LaValle Town Representative: Ray Demaskie

608-985-8033 or raydemaskie@townoflavalles.us

Sauk County Representative: John Dietz

(608) 393-1641 or JDietz@co.sauk.wi.us

NAMEPLATE AND MASTHEAD PHOTOS: TOM WALTERS