

LAKE REDSTONE PROTECTION DISTRICT PARTNERS MEETING
Monday, October 17, 2022
Room 213 West Square Building, 505 Broadway, Baraboo, WI

Minutes

1. Call meeting to order, verify compliance with the Open Meeting Law

Board chair Mike Mittelstadt called the meeting to order at 1 pm. He verified compliance with open meeting laws.

2. Approval of agenda

Keegstra made a motion to approve the agenda, second by Sullivan. The motion carried.

3. Introductions

Those in the room included: Mike Mittelstadt, Peter Kinsman, Chuck Ecklund, Ken Keegstra, Melissa Schlupp, Dustin Ladd, Jon Field, Pat Oldenburg, Pat Sullivan, Justine Bula, and Mitch McCarthy.

Those who joined virtually included: Paul Burke, Al Baade, Nathan Nye, Arthur Watkinson, Andrew Craig, Mike Sorge, Kurt Rasmussen, and Keegan Johnson.

4. Discussion with representatives from LRPD, WDNR, USGS, Juneau Co., and Sauk Co. regarding the following issues (but not limited to them):

A. Current status of 9-key Element Plan Implementation

Mittelstadt provided a brief review of the status of the 9-key element plan. He mentioned that development of the plan was a 3-year process that involved many partners. The final plan was approved in February of 2022. Since that time the LRPD board has begun implementation of the plan. The first step was the formation of committees responsible for implementation of the milestones spelled out in the plan and assigning implementation of various milestones to each committee. He indicated that the milestones were divided into three temporal groups: first three years, second three years, and final four years. The milestones were also assigned priorities by the LRPD board. The committees are now working on high priority activities from the first three years.

B. Discussion of activities proposed during plan implementation

1. Activities in the watershed to reduce sediment and nutrient entry
 - a. Increase acres with cover crops or no-till practices
 - b. Increase acres converted to pastureland (grazing)
 - c. Increase other BMPs in the watershed
 - d. Possible TRM grant to support watershed activities

Mittelstadt began the discussion of BMPs in the watershed with some questions. His first question focused on the status of the discussions to apply for a TRM grant. Dustin Ladd and Melissa Schlupp reported that they had met recently to discuss the process. They identified several issues that need to be resolved before they move forward with the application. They hope to get answers for these questions before January of 2023 when the new application forms and instructions will become available. The application deadline is April 15, 2023, but if awarded, the funds will not be available until 2024. Because the grant will involve two counties, they identified several questions that need to be resolved via a detailed MOU (Memorandum of Understanding) between the two counties.

Both Dustin Ladd and Melissa Schlupp commented that TRM grants have become very competitive in recent years and that securing an award is not guaranteed. Pat Oldenburg noted that it is possible to get support for an additional county staff member from DNR surface water grants. He mentioned that this was done by the Tri-Lakes Management District in Adams County. However, the earliest an application could be submitted is November of 2023.

Another issue related to the TRM grant was the limited size of the watershed. It will be difficult or impossible to request the maximum level of funding given the number of farmland acres in the watershed. Dustin asked whether the LRPD board would be willing to consider joining forces with an adjacent watershed. The board members present indicated a willingness to consider this option if the details can be worked out. If funded, the grant would provide subsidies for adopting several best management practices on farmland in the watershed, including cover crops and no-till practices.

2. Monitoring activities in the watershed

a. Transect surveys to monitor cropping practices in watershed

Keegstra reported that Mitch McCarthy had established a route for performing transect surveys in the Lake Redstone watershed. The LRPD had identified a team of 5 volunteers who are being trained on performing transect surveys. The district also purchased a new laptop computer for storing and analyzing the data from the surveys. A survey was performed in the spring of 2022 and a fall survey was scheduled for November.

Mitch McCarthy commented that the data gathered from these surveys can be used by many different programs to analyze the data and generate reports on practice trends in the watershed. He will be working the district volunteers to help them analyze the data.

b. Stream monitoring to measure sediment and nutrient entry from the watershed

The LRPD continues a stream monitoring program in collaboration with Keegan Johnson from the US Geological Survey. Financial support for the program continues to be provided by USGS, Sauk County, Juneau County and the LRPD. The program just entered the third, and probably the final, year of activity on October 1, 2022.

Keegan Johnson provided a preliminary report on the results from the second year of sampling. Water year 22 (WY22), from October 1, 2021 to September 30, 2022, was again a dry year with less than average amount of rainfall (32.3 inches of rain compared to average of 38.4 inches of rain). A total of 24 rain events were sampled in WY22. One major change from WY21 was a rain and snow melt event in March which brought significant amounts of water, phosphorus and sediment into the lake. When summed over the year, the total phosphorus entry and exit from the lake was very similar to WY21, with the west and east branches of Big Creek bringing in 2070 and 1450 pounds of phosphorus into the lake while the exit flow removed 2450 pounds of phosphorus from Lake Redstone in WY22. Sediment entry into the lake in WY22 was also similar to WY21, with the west and east branches of Big Creek depositing 380 and 437 tons of sediment respectively. Keegan emphasized that these values were preliminary and that he will continue to analyze the data and will present a final report in the coming weeks.

The district expects that the 3 years of sampling will provide a good baseline for determining the levels of nutrients and sediment coming from the watershed at the beginning of the plan. The plan is to discontinue sampling over the next few years but then to begin stream sampling again in the final years of the 9-key element plan to evaluate progress on reducing nutrient and sediment entry from the watershed.

3. Activities close to the lake to reduce sediment and nutrient entry

- a. Reduce sediment and nutrient entry from gullies around the lake

Sullivan reviewed activities of the sediment control committee to prioritize and act upon problem areas in gullies around the lake. He summarized the plans described in two preapplications for surface water grants to the DNR. One to repair a damaged weir above Martin-Meadowlark Bay and another to address erosion issues above Chickadee South Bay.

He also described the process that the committee used to identify and prioritize areas around the lake that needed attention. The area above Eagle Bay was one such area. Sullivan asked partners for advice and assistance with identifying strategies and funding sources to implement fixes for the problems that are being identified.

- b. Strategies for improving shorelines around the lake

Sullivan described the workshops that Brad Horner held, with participation from Mitch McCarthy-Sauk County, Arthur Watkinson-DNR, and a local landscaping firm. They recently recorded the presentations and posted them on the LRPD website, so that lake property owners can watch them on their schedule. The plan is to hold similar workshops periodically, as the need arises.

4. Activities in the lake

- a. Monitoring phosphorus levels in lake

Keegstra reported briefly on the lake monitoring activities that have been performed for many years. The DNR has monitored the deep hole for more than 40 years while the LRPD has monitored other sites for more than 20 years. They monitor chlorophyll levels in the summer months, and measure total phosphorus, record Secchi readings, and measure temperature and dissolved oxygen levels at various depths during months when the lake does not have ice cover.

- b. Methods to lower phosphorus levels in the lake

- i. Process for investigating hypolimnetic withdrawal?

Phosphorus levels in Lake Redstone have remained relatively constant for the last 20 to 30 years. But one of the goals of the 9-key element plan is to lower the phosphorus levels in the lake over the next 10 years. One way to do this is to reduce the amount of phosphorus entering the lake, which is the goal of the activities on the properties around the lake and of the activities in the watershed. Another way is to increase the amount of phosphorus leaving the lake.

This idea was explored more than 20 years ago and resulted in a 2002 report entitled "Feasibility of releasing hypolimnetic water to reduce internal phosphorus loading in Lake Redstone". A copy of the report is available on the LRPD website.

Because of the availability of a bottom withdrawal valve, this possibility might be inexpensive to implement. The question is whether conditions have changed sufficiently in the last 20 years to reinvestigate the idea. If so, what process would need to be followed to study the question again? It was suggested that both the DNR and Sauk County would need to be involved in the study, as they were 20 years ago. The first step will be to review the report from the last study and see if conditions have sufficiently changed to justify reinvestigating the idea.

- c. Strategies for controlling aquatic invasive plants

The LRPD has a grant from the DNR to update the aquatic plant management plan. The last plan was generated in 2015, but now needs to be revised and updated. This process is underway, and the new plan should be available by the summer of 2023.

5. Education and Outreach activities

- a. Joint field days with producer-led cooperative
- b. Educational workshops for owners of shoreline properties
- c. Lake fairs jointly with other lakes in Sauk County

Because Brad Horner was not at the meeting, Mittelstadt gave a brief report of the recent meeting of the Education and Outreach committee. The LRPD held a joint field day with the Producers of the Lake Redstone Watershed. It was held on September 28th and was well attended. The educational workshop for lake shoreline property owners was described earlier by Sullivan. Mittelstadt reported that holding a Lake Fair was under consideration. It was mentioned that the LRPD has done this in the past jointly with Dutch Hollow, with the most recent event being in 2017. Both the LRPD and the Dutch Hollow group felt the events were a success, so maybe it is time to consider repeating it. Justine Bula indicated a willingness to participate in the planning. She also offered other outreach activities that the district might consider.

C. Other topics of mutual interest

None were raised because of the time.

5. Next LRPD board meeting: November 9, 2022, 6 pm at La Valle Town Hall

6. Adjourn

The meeting was adjourned at 3:05 pm when all business was completed.

KK 10/27/22