

DEHAVAN LAKE SANITARY DISTRICT

MINUTES

Regular Meeting & Closed Session

April 17, 2019

9:00 A.M.

CALL TO ORDER.

President Miller, called the meeting to order at 9:00 A.M. at the Delavan Lake Sanitary District located at 2990 County Rd F South, Delavan, Wisconsin.

ROLL CALL. Present: Thomas Miller, President
Kim O'Keefe, Commissioner
Thomas Johnson, Commissioner
David Reider, Commissioner
Richard Beers, Commissioner

Absent: none

Other: Administrator Jim DeLuca
Charlie Handel
Roy Carlson (Lake & Ponds Solutions)
Kyle Bennwitz (Baker Tilly)

Visitors: Mary Knipper
Mike Bishoff
Don Huntington
Adam Lasch

DECLARATION OF A QUORUM.

President Miller declared a quorum present for doing business.

**APPROVAL OF MINUTES OF REGULAR MEETING OF JANUARY 16, 2019,
REGULAR MEETING OF MARCH 13, 2019**

After reviewing the minutes of January 16, 2019, Commissioner Beers made a motion to approve the minutes as written. A brief discussion took place. Commissioner O'Keefe seconded the motion which passed unanimously.

After reviewing the minutes of March 13, 2019, Commissioner Beers made a motion to approve the minutes as written. Commissioner O'Keefe seconded the motion which passed unanimously.

FINANCIAL

After discussion and review of the bills, Commissioner O'Keefe made a motion to approve payment of bills represented by check numbers 26407 through 26461. President Miller seconded the motion which carried unanimously.

The Allocation of Funds through March 31, 2019 were reviewed and discussed. Commissioner O'Keefe commended the use of red ink notations on the report.

The Financial Statements for periods ending December 31, 2018, January 31, 2019, February 28, 2019 and March 31, 2019 were discussed. Commissioner O'Keefe noted the increase in Lake Monitoring Expense and Total Lake Expense on the Statement of Income Reports for February and March compared to the previous year. Administrator DeLuca explained that in previous years, USGS didn't bill for the contracted work until it was completed. Now USGS is billing in increments. Commissioner Johnson requested an explanation of the increase in Total Operation and Maintenance regarding the Collection System on the year-end financial statement. Although we budgeted for an increase, he requested an explanation of the reasoning. The reason for the wage increase this past year is likely to an employee leaving the previous year and coming back this past year. Health insurance changes could also be part of that increase. The increase in maintenance and repairs for the collection system is due to quite a few repairs to pumps. Another increase on the year-end financials that called for an explanation was the increase under Total Lake Management and Weed Harvesting. The new harvester that was purchased required additional crew and incurred extra expenses such as fuel and regular maintenance. It's possible that Brown's Channel expenses as well as the pellet project could be part of that increase as well. As the report being looked at is a summary, detail will need to be pulled to get a definitive explanation. President Miller made a motion to accept the Allocation of Funds and Financials through March 31, 2019. Commissioner Beers seconded the motion which passed unanimously.

ADMINISTRATOR'S MONTHLY REPORT

Administrator DeLuca shared that the WIN911 update was completed. There are a few adjustments that need to be made to allow mobile friendly access to

our SCADA for observations. There is a way to text in and receive lake elevations as well with this new system.

Harvesters are being worked on as we get ready for the season. Commissioner Beers shared we received a 35% grant from the Waterways Commission to rebuild harvester #81. Charlie shared we received 16 grants in total when including the Healthy Lakes Initiative grants.

Administrator DeLuca explained the spikes that can occur in the Wastewater Flow/Precipitation Chart that is included in his report. The ground water table may jump up a day later after it rains. Leaks in pipes, illegally connected sump pumps may be working at that time, plus there is a lag to the lift station as well. This is why after a rain event the crew is out with the camera trying to identify leaks and sump pump issues. We're turning the illegally connected sump pump issues we find over to the attorney for prosecution.

Administrator DeLuca also confirmed the lake draw down that Whitewater is planning to do. Heidi from the DNR is supposed to let us know when they are doing this, however, he has not heard anything in regard to the extent or the timeline as of yet. Their objective is to do something with the sediment buildup, letting it dry out and decompose naturally over a two year period.

LAKE COMMITTEE REPORT

Commissioner Beers shared that Dale Robertson was at the Lake Committee meeting and gave the same report that was given at the last DLSD meeting. Adam Lasch who gave a presentation at the Fox River Summit was also present at the Lake Committee Meeting. He is a farmer who is investigating how to contain run-off through different processes. Dale felt that the most effective use of funds is in changing the run-off as that is what is coming in to the lake. Adam has information we should hear about in regard to run-off as he represents the farmers' view. An area in Green Bay is experimenting with an inter-seeding technique to help prevent run-off and is seeing positive results. This may be something the DLIA should look into.

There was no discussion in regard to dredging the ponds at the meeting other than the DLIA said they are in favor of dredging. Commissioner O'Keefe requested Commissioner Beers specifically ask what the Town's intent is in regards to dredging the ponds at the next meeting. Commissioner O'Keefe is also looking into different types of pumps for dredging the ponds. The challenge is finding what type of head is needed based on the sediment/soil type

in the different ponds. Commissioner Beers also shared that the Town was made aware of the DLSD Commission's decision not to share in the pellet project this year.

PRESENTATION ON DELAVAN LAKE TREATMENTS, RESULTS, CONCLUSIONS AND RECOMMENDATIONS BY ROY CARLSON OF LAKE AND POND SOLUTIONS CO.

Roy Carlson of Lake and Pond Solutions presented a power point based on testing results from the pellet project. The results from Jackson Creek at Petrie Road (going into the ponds) and the results from Jackson Creek at Mound Road (going out of the ponds) showed a reduction in the amount of phosphorus which he stated is opposite of what the bucket tests showed.

Roy shared presentations that Dale Robertson gave to the Gazette in 2007 where Dale expressed that the filtering ponds trapped only 30% of the phosphorus which is less than half of what was anticipated and that the alum treatment that was done in 1992 has been covered by new sediment and phosphorus is again coming up from the lake bottom. Dale mentioned in that same article that there will always be ongoing costs to keep the water quality up. These ongoing costs are why we need to consider spending our money wisely.

Giving attention to the watershed is key and paramount. Roy also acknowledged the sediment ponds need to be dredged. One option for dredging the ponds might be to construct a way to divert Jackson Creek so that in a short period of time the ponds can be dried to get in there with earth moving equipment instead of the expensive hydraulic dredging equipment.

There are other sources contributing to phosphorus in the lake such as goose droppings and oak tree leaf litter. These two factors contribute significantly to algae production, approximately 680 lbs. per year per goose and 675 lbs. per year per mature oak leaf tree. While these two things are part of the watershed, they are also things we can't control within the watershed.

Where is the phosphorus going? Some is getting bound in the lake sediment and some is going into fish flesh. If we could channel it into fish flesh, for every 50 lbs. of fish flesh we could get rid of approximately 400 to 500 lbs. of algae. Encouraging a healthy fishery would be a good way to remediate the phosphorus.

Lake and Pond Solutions is trying, through the use of pellets, to take the phosphorus and bring it up through this microbial loop using bacteria as the vector to get that started, ultimately leading to zooplankton and fish production. The true benefit of the pellets is in the channeling of nutrients into something that's productive and helpful to us. Browns Channel shows us that the pellets promote a healthy well timed release for phosphorus use. Viewcrest Channel sediment depth in 2017 decreased by over one foot. Brown's Channel hasn't had to be treated for algae since we started using the pellets. Roy believes this is showing that the phosphorus is being channeled into a more useful form.

Ray shared some of Lake and Pond Solutions' new projects. One of them is Lake Lorraine, they are going to target the hard and soft sediments with sludge pellets in a project with the UW Whitewater System. This will be a completely University led project. The study is going to be used in conjunction with a cap stone project that has already been completed out there looking at soil cores for phosphorus and percent organic matter. This project will get started in May with final readings for this project being taken in October. Meaningful data should be received from this project.

Another area Lake and Pond Solutions is working on is local agriculture. Calcine is a product that's been used especially out west and improves soil structure. Its ability to hold more water could help stop the flash run-off events. Also, the manufacturer of this product said that after use of this product over time, the need for anhydrous ammonia and other nitrogen sources becomes obsolete. Commissioner Reider as well as Don Huntington are helping with this project.

A discussion took place in regard to whether the use of pellets is affecting the ecosystem populations in relation to the copepods and fish. The importance of a balanced fishery was expressed. The thermal inversion of the lake water that takes place twice a year which pulls the high concentration of phosphorus was also mentioned. Commissioner Johnson stated the results from Jackson Creek at Petrie Road and the results from Jackson Creek at Mound Road indicate that the pellets are doing a lot. Roy did state that an increase in algae sucking up the phosphorus could cause a reduction in phosphorus levels, however, there was no indication in the ponds of an increase in algae any different from other seasons, indicating the phosphorus was consumed by bacteria and sending it through copepods and other zooplankton ultimately bound up the phosphorus in the food chain.

Commissioner O'Keefe stated there are a lot of moving parts as well as data to absorb. This is why the Commission last year authorized the expenditure to have controlled testing done on the pellets as there was no science to go on in regard to them. The controlled tests showed the pellets release phosphorus. DLSD is responsible for the lake and we're trying to get the phosphorus out of the lake. Keeping the influx of material out of the lake is the best use of district monies. A lot of money was spent to develop the holding ponds.

Commissioner Beers shared that these pellets can be purchased by any individual or group to be used in the lake. Currently Viewcrest, Ravenswood and Brown's Channel are using them. Unfortunately, there is no data available from their use of the pellets.

The negative results we received from the pellets came from the buckets. We do see positive results when the pellets have been used in Viewcrest, Ravenswood, Brown's Channel, and before and after the ponds. The Lake Lorraine study being done by UW Whitewater will give us a good opportunity to gather additional data to draw some analogies as to what's possible for Delavan Lake. Commissioner O'Keefe felt DLSD should wait to see the study results from that project. Commissioner Reider made a motion to authorize funding for pellets for the Channel which would give DLSD more data for next year, to go 50/50 in conjunction with the Town of Delavan who said they would do it if DLSD would go in part on them. With no second on the motion, the motion died. A request for Commissioner Beers to find out what the Town of Delavan decided was made as well as for Commissioner Reider to obtain the current pellet proposal information. Once this happens, a special meeting can be scheduled.

DISCUSSION/POSSIBLE ACTION REGARDING 2018 AUDIT PERFORMED BY BAKER TILLY VIRCHOW KRAUSE, LLP

Kyle from Baker Tilly Virchow Krause, LLP discussed the results of the audit. He shared there were two material weaknesses this year relating to financial reporting and the control environment. This is a result of the District being small so there will be segregation of duties issues. Also, there were two adjusting journal entries that were material. The first journal entry was a WRS pension adjustment. In prior years it wasn't fully funded so it was a liability, this year it is fully funded so it is an asset. The second entry was to accrue for taxes levied in 2018 that will be collected in 2019.

Going over the balance sheet, the District has a strong cash position. The capital assets are at approximately 65% of depreciation. Based on this, in a few years,

there should be some replacements coming up. In regard to budget to actual, capital expenditures were higher than what was budgeted. Over all, the District is in a strong financial position. A thank you was given to Administrator DeLuca, Kim and Shelly as they were very prepared for the audit which enabled just one day of field work at the District.

COMMENTS AND SUGGESTIONS OF CITIZENS PRESENT REGARDING AGENDA ITEMS

Commissioner O'Keefe had a communication from the DLIA President requesting matching funds in the amount of \$500 to be used for prize money for the Carp Fishing Derby being held in May. The DLIA is contributing \$500 and would like both DLSD and the Town of Delavan to contribute that same amount to attract a greater number of participants. Administrator DeLuca and President Miller will discuss this after the meeting as it is not an item on the agenda.

Adam Lasch will be giving a presentation on reducing phosphorus in our lakes at the Keeping It Blue Seminar on May 31, 2019.

Mike Bishoff came to the meeting in hopes of learning about future lift station work that is going to be happening. Administrator DeLuca will meet with him after the meeting to show him the plans.

DISCUSSION/POSSIBLE ACTION REGARDING OLD BUSINESS

None

DISCUSSION/POSSIBLE ACTION REGARDING CD FUNDS

As the money market is earning a good rate, no action was taken.

CONSIDERATION OF FUTURE AGENDA ITEMS

Commissioner Beers suggested putting Adam Lasch on the agenda to inform us on information he has. Adam agreed to this.

Commissioner Reider requested a continuation of the pellet discussion be placed on the agenda if there wasn't a special meeting held before then.

DISCUSSION/POSSIBLE ACTION OR CONFIRMATION OF NEXT MEETING DATE

The next regular meeting date is scheduled to be held on May 13, 2019 at 9:00 a.m.

ADJOURNMENT

There being no further items to discuss, President Miller made a motion to adjourn the meeting. Commissioner O'Keefe seconded the motion which carried unanimously. The meeting adjourned at 11:30 a.m.

Kim O'Keefe, Secretary

Date Approved: 5/13/2019