

**MINUTES OF THE SPECIAL MEETING
OF THE
COMFORT LAKE–FOREST LAKE
WATERSHED DISTRICT
Wednesday, November 6, 2019**

1. Call to Order

President Spence called the November 6, 2019 special board meeting to order at 6:30 p.m. in the offices of the Comfort Lake-Forest Lake Watershed District, 44 Lake Street South, Suite A, Forest Lake, MN.

Present: President Jon Spence, Vice President Jackie Anderson, Treasurer Steve Schmaltz, Manager Jim Dibble.

Absent: Secretary Jen Oknich

Others: Mike Kinney, Jessica Lindemyer (CLFLWD staff); Meghan Funke (Emmons & Olivier Resources); Curt Sparks (Citizen Advisory Committee); Erik Anderson (Washington Conservation District)

Watershed Assistant Jessica Lindemyer administered the oath of office to Jim Dibble, who was appointed to the Board of Managers by the Washington County Board of Commissioners. Manager Dibble was welcomed to the Board.

2. Comprehensive Data Review

Administrator Kinney summarized some of the types of monitoring in which the District engages including ongoing baseline monitoring as contracted with the Washington Conservation District (WCD), the volunteer-based Citizen Assisted Monitoring Program (CAMP), and more targeted diagnostic or effectiveness monitoring as contracted with the District Engineer, Emmons & Olivier Resources (EOR). Curt Sparks, Citizen Advisory Committee (CAC) member and CAMP volunteer, introduced himself and provided some background on his history with the District including engineering work, employment with the MN Pollution Control Agency (MPCA), and 41 years of monitoring on Lake Keewahtin.

Dr. Meghan Funke noted that this workshop is a continuation of the September 26, 2019 Regular Board meeting discussion on the Comprehensive Data Review update, and that no revisions have been made to the memo nor changes made to the presentation. Dr. Funke recapped the presentation given at the September 25, 2019 Regular Board meeting to re-familiarize the Board and audience with the information originally presented on September 26, 2019. Dr. Funke noted that the update incorporates two more years of data that were collected since the initial review was completed (years 2017 and 2018). This update will help the District decide needs and priorities for its current 10-year Watershed Management Plan (WMP) update. As the District is implementing more projects and making progress

toward goals, what will the next ten years look like? In some cases, the District's water quality goals are more stringent than state standards; are these goals still appropriate?

Dr. Funke presented stream monitoring data and described how the phosphorus flow weighted mean concentration (FWMC) is an important indicator for water quality. The FWMC puts a phosphorus reading into the context of the flow occurring; if a phosphorus load appears high, it may be because the concentration is unnaturally high, or could just be occurring because there has been a lot of runoff in a given year and flows are generally very high. High FWMCs can indicate a potential hotspot where projects could be targeted. Having a consistent stream monitoring program is key to having good data to use for planning. Dr. Funke recommended that the District could be more strategic with its long-term monitoring program planning by maintaining the six long-term legacy sites and then rotating the targeted tributary monitoring through the LMDs. She described how remote monitoring stations and do-it-yourself (DIY) monitoring kits can be useful in future monitoring.

Manager Anderson indicated that there are some data gaps in the District's monitoring history; how do we address these? Dr. Funke explained that long-term monitoring and trend analysis is different from the targeted monitoring that is occurring with the help of the remote data loggers and DIY kits. There was discussion about rotating targeted tributary monitoring locations through the lake management districts. While the District keeps its "legacy" sites the same over time for trend monitoring, it adds more locations for targeted monitoring that shift on a shorter timescale. Mr. Kinney explained that the DIY monitoring methods can help the District gather more data without spending too much money. He indicated that we want to gather as much data as possible, but funding limitations restrict this. The DIY monitoring is a low-cost alternative to traditional contracting methods.

There was further discussion about trend monitoring (i.e. steady, long-term monitoring of the same legacy sites over many years) versus targeted monitoring (i.e. short-term "snap shots" of loading from tributaries in order to target those areas that have the highest loads). Mr. Sparks noted that a third type of monitoring is effectiveness monitoring which shows a quick change (e.g. a big improvement that occurs once a project has been installed). A fourth type of monitoring, Mr. Sparks indicated, is the index of biological integrity (IBI) which occurs in streams. If a stream is impaired, it may be missing certain types of organisms that a healthy stream would have. Mr. Sparks indicated that monitoring methods should not be changed frequently but may change over time as the science develops. It is important to retain the ability to compare data across multiple years. Changes to monitoring methods can result in a loss of data comparability and inability to analyze long-term trends. Mr. Sparks expressed support for the District's low-cost DIY monitoring methods for quick targeted monitoring and stressed the importance of still retaining steady long-term monitoring for trend analysis purposes. Dr. Funke described how the District is in fact retaining its long-term legacy sites while still being able to monitor short-term targeted tributary sites.

Dr. Funke presented lake monitoring data including the latest 10-year average phosphorus concentrations (years 2009-2018). State water quality standards are based on the latest 10-year average, while the District's water quality goals are based on the latest 5-year average.

Lake Keewahtin is currently meeting its 2040 phosphorus concentration goal. Comfort Lake is meeting its 2030 phosphorus concentration goal. Forest Lake (all basins) and Bone Lake are meeting their 2020 phosphorus concentration goals. Dr. Funke explained that the District will be reevaluating these goals as part of the WMP update using the latest information including monitoring data and paleolimnological deep sediment cores. There was discussion about the relationship between phosphorus concentration, Secchi depth (i.e. clarity), and chlorophyll-a. Sometimes the phosphorus concentration can be low, but the Secchi depth won't be as high as expected, and vice versa. Dr. Funke explained that there are a lot of variables involved in each of these measurements due to the type of algae present, so variability is expected. Dr. Funke also explained that the District goals for TP and Secchi are based on regional relationships between TP and clarity in lakes that were developed as part of the State water quality standard. Manager Schmaltz suggested that an article on this topic would be helpful for the Board.

Manager Anderson indicated that Comfort Lake and Little Comfort Lake have declining Secchi depth trends. Dr. Funke explained that the sediment core data for Comfort Lake indicates that from 1830's-1980's the phosphorus concentration range was 47-67 parts per billion, meaning it was more eutrophic. President Spence and Manager Anderson agreed that, for some lakes, phosphorus may be less of an issue than other factors like total suspended solids; the 10-year Watershed Management Plan update should look at these new issues and guide how the District should act on them. For Comfort Lake, phosphorus doesn't seem to be the main problem anymore; something else is causing the Secchi depth to decline. Dr. Funke indicated there is more to the relationship between algae, zooplankton, fish, aquatic plants, and total suspended solids as well. Erik Anderson indicated that, while the Secchi trends may be declining, they may still be better than previous readings. He indicated that WCD calculates trend strength, and he can look into this for Comfort Lake and Little Comfort Lake. Mr. Sparks indicated temperature has an effect as well, and new boats such as wakeboard boats can affect suspended solids by mixing the water column. There was discussion about development in the watershed and associated regulations and requirements for stormwater treatment basins, erosion control, etc. Manager Anderson indicated that the District still hasn't addressed the legacy issues that are still present in the Comfort Lake watershed. She indicated that stormwater discharge from the City of Forest Lake was the number one cause of water quantity and quality issues. She expressed that the District needs to take the lead on increasing native shoreline buffers and preventing impacts from activities like tree removal and grading. Mr. Sparks noted the importance of having trees and reducing lawn size in preventing adverse impacts from storm runoff. With regional storm severity increasing over the years, this becomes more and more important. Manager Schmaltz indicated that shoreline restoration projects typically have a cost-benefit of over \$1,000 per pound of phosphorus removed, which is relatively low. Manager Anderson indicated that those projects are more manicured landscaping, and true native buffers are more beneficial. Mr. Sparks indicated that those who benefit most from a high quality lake are those that live on the lake. Therefore, lakeshore residents should take responsibility for things such as septic system maintenance, lakeshore buffers, etc.

There was discussion about District goals and the Watershed Management Plan update. Manager Schmaltz suggested increasing the Forest Lake Secchi depth goals since the 2030

goals are mostly already being met. There was general agreement that the Comprehensive Data Review report will be key in reevaluating the District's goals for the next ten years.

Dr. Funke reviewed the future monitoring recommendations from the report. Heims Lake is recommended to be removed from the goal table due to its current high water quality, low potential for increasing phosphorus loads in the future, and general lack of monitoring data. Bottom water phosphorus concentration data should be collected from lakes with completed/planned alum treatments (currently Moody and Shields Lakes) to determine the magnitude of internal loading and long-term effectiveness of the alum treatment. At least two years of water quality data should be collected every 10 years in Comfort, Bone, Little Comfort, Moody, School, Shields, and Second Lakes to support future de-listing as impaired due to eutrophication and excess nutrients. It was noted that there are several options for delisting a waterbody. Dr. Funke noted that the policy indicates a requirement for at least two years of data in a 10-year period, though in practice, MN Pollution Control Agency may require more.

Manager Schmaltz asked which elements may be removed from the monitoring plan in order to keep costs down. It was noted that stream monitoring comprises about half of the monitoring budget. Mr. Anderson explained that WCD has achieved some efficiencies with monitoring that should be discussed when discussing the budget. Dr. Funke indicated that some lakes should be monitored more often and have more variables monitored than others. There was discussion about monitoring methods and differences between CAMP volunteers and WCD staff. Mr. Anderson indicated WCD uses a composite water sampling method, while most CAMP volunteers probably do not. Manager Schmaltz expressed that the sampling should be done in the same way so that the data is comparable. Mr. Sparks shared that long-term (40 years) MPCA monitoring staff have found that composite water samples and grab samples collected below the lake surface do not yield significantly different results. Mr. Sparks expressed that consistency is very important (i.e. taking samples under the same conditions throughout the season).

Mr. Sparks asked about trends in WCD's actual monitoring costs versus budgeted; do the costs tend to be higher than budgeted or lower? Mr. Anderson indicated that hourly rates tend to go up about one dollar per year each year.

There was discussion about total annual stream flow. Dr. Funke indicated that historic precipitation data could be compared with historic flow to see the relationship between precipitation and runoff; watershed composition and land use can affect this relationship.

Dr. Funke indicated she would revise the memo, adding in comments and discussion topics from the workshop and the September 26, 2019 Regular Board meeting. Manager Schmaltz noted the use of DIY monitoring equipment to monitor tributaries.

3. Lower St. Croix One Watershed One Plan

Manager Anderson indicated that she met with Manager Schmaltz and Administrator Kinney after the most recent Policy Committee meeting. Manager Schmaltz and Manager

Anderson provided a summary of the Lower St. Croix (LSC) One Watershed One Plan (1W1P) effort. Multiple entities within the LSC watershed are working together to create a plan on the scale of the LSC watershed. The goal is to increase coordination and achieve watershed goals faster and more efficiently. Manager Anderson indicated that, after reviewing applicable statutes, she recommends moving forward with a Watershed Management Organization (WMO) Joint Powers Agreement (JPA). She explained that watershed districts under statute 103B have taxing authority. If the WMO JPA has taxing authority, it will be able to get more done. Manager Anderson indicated that Dr. Funke was asked to review the watershed studies that have been done on the Sunrise River and develop an action plan that can be transferred into an implementation plan very quickly.

Administrator Kinney explained that the Planning Team recently met with Board of Water and Soil Resources (BWSR) staff to review the current status of the plan. BWSR staff indicated that the plan, in its current state, is not acceptable and that further refinement of goals and implementation items must occur. Mr. Kinney indicated that the outcome of the meeting was an understanding that SWCDs have a need for their own type of plan which are fundamentally different than the focused CLFLWD watershed plan as know to the CLFLWD. SWCDs are governed under statute 103C.

Manager Schmaltz explained that the purpose of the 1W1P is to improve impaired waters and the St. Croix River and comply with its Total Maximum Daily Load (TMDL). He expressed that, in order to achieve this, the plan should be driven by watershed focused efforts. Staff and managers are in communication with District legal counsel to propose an agreement format for this. Manager Anderson explained that the idea to create a WMO that has the taxing authority of a watershed district would serve the most cost-effective outcome for the LSC. The watershed districts in Washington County would operate independently, but their outflow to the St. Croix would be coordinated. Areas outside of an existing watershed district would be managed by the WMO, or they could form another district themselves on a more local level and do what CLFLWD does. The Joint Powers WMO would serve as the coordinator, making sure the goals for the St. Croix are being achieved, applying for funding and managing the distribution of funds. Manager Anderson explained that the goal is not to expand into existing organizations, but to create an umbrella organization that accomplishes what BWSR has laid out. She indicated that BWSR wants these projects to be run in a format like how watershed districts do them under the Prioritized, Targeted and Measurable (PTM) model. Manager Schmaltz agreed that this system would be more efficient in getting projects done and that the alternative system would require more steps and longer timeframes for approval of projects, slowing things down. He indicated that this is the goal of working on the legal document with counsel – to create a system that gets projects done efficiently and has some level of taxing authority. Manager Anderson recommended that the District either get this system in place, or back out of 1W1P. She further explained that county plans are general statements of what they want to do and SWCD plans are more reactive than prescriptive; both of which are not as prioritized/targeted/measurable as a watershed district plan.

There was discussion about competition among partners for funding. Manager Anderson indicated there will still be a separate program for competitive grants, which has been in

place for years. Mr. Sparks recommended that the initiative needs to have stable funding and mandates to participate. It was noted that Wisconsin is not going through the same 1W1P process on the other side of the St. Croix River; 1W1P applies to watersheds throughout Minnesota.

Mr. Kinney explained that the SWCDs perform subwatershed analyses (SWAs), but generally do not conduct diagnostic monitoring for project identification. He indicated the SWCDs have expressed that they are not interested in project identification monitoring because they feel that they cannot afford it. Mr. Kinney explained that it's his experience and observation that they can't afford *not* to do monitoring because it is a crucial element to identifying cost-effective projects that will achieve watershed goals with limited time and funding. BWSR has indicated that the LSC group needs to establish some level of prioritization in order to have an approvable plan. President Spence and Manager Anderson indicated that, based on the conversations over the past months, it appears that some entities want the funding associated with 1W1P, but aren't interested in exploring more efficient ways of implementing PTM.

There was agreement that Manager Anderson, Manager Schmaltz, Administrator Kinney, and legal counsel would coordinate further on the WMO JPA document.

4. Adjourn

- a) WMP Small Group Listening Session #1 – November 13, 2019**
- b) WMP Small Group Listening Session #2 – November 16, 2019**
- c) Next regular board meeting – November 21, 2019**

Manager Schmaltz moved to adjourn the meeting. Seconded by Manager Anderson. Upon vote, the motion carried 4-0, and the meeting was adjourned at 8:52 p.m.

Jen Oknich, Secretary _____