

**MINUTES OF THE REGULAR MEETING
OF THE
COMFORT LAKE–FOREST LAKE
WATERSHED DISTRICT
Thursday, July 9, 2020**

1. Call to Order

President Spence called the July 9, 2020 regular board meeting to order at 6:30 p.m. via online video conference.

Present: President Jon Spence, Vice President Jackie Anderson, Secretary Jen Oknich, Treasurer Steve Schmaltz, Assistant Treasurer Jim Dibble.

Others: Mike Kinney, Jessica Lindemyer, Emily Heinz, Abigail Ernst (CLFLWD staff); Meghan Funke, Greg Graske, Cecilio Olivier, Paul Fritton (Emmons & Olivier Resources); Chuck Holtman (Smith Partners); Denise Martin (Chisago County Press).

2. Setting of Meeting Agenda

Item 4c – Comfort Lakes Diagnostic Study Scope of Work was moved to 5c, and Item 5a – Approved Bank Signers was removed from the agenda. Administrator Kinney noted the Approved Bank Signers item will be included on the July 23rd agenda. Mr. Kinney explained next week the Lower St. Croix (LSC) One Watershed, One Plan (1W1P) Steering Committee will discuss two topics pertaining to the plan: options for calculating annualized project costs and addressing impacts of discharging landlocked basins to the St. Croix River. LSC 1W1P was added to Old Business.

Manager Schmaltz moved to approve the agenda as amended. Seconded by Manager Oknich. Upon a roll call vote, the motion carried 5-0.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich	X		
Jim Dibble	X		

3. Public Open Forum

There were no comments.

4. New Business

- a) **Approved Bank Signers [postponed to July 23rd meeting]**

b) Wyoming Impervious Surface Ordinance

Engineer Graske explained the City of Wyoming has been issuing many impervious surface variances and wants to simplify its process to avoid issuing so many variances. He explained for the shoreland district, the City is considering issuing a conditional use permit (CUP) for projects between 25%-75% imperviousness; previously projects exceeding 25% would require a variance. Mr. Graske explained that a residential development project would trigger the District's stormwater rule and/or the lake/stream/wetland buffer rule if it requires a variance from the City for impervious surface percentage. If the impervious limit increases and variances are not issued, CLFLWD rules won't be triggered in certain cases. Single family homes, especially in the shoreland district, are key areas of concern. Multi-residential and commercial projects often trigger District rules regardless of receiving a variance from the City. Mr. Graske's recommendations include:

- Request the City keep single family residential ordinances as is.
- Request the City provide clarity to the CUP requirements regarding increased setbacks from the ordinary highwater level and limitations on vegetation removal and /or riparian vegetation restoration.
- Request that the CLFLWD be added to the official notification list for CUPs or variance requests, so that the District can comment and be coordinate in a timely manner.

Mr. Graske clarified that the shoreland district is defined by the MN Department of Natural Resources (DNR) and is generally 1,000 feet from public water lakes and 300 feet from major streams like the Sunrise River. The shoreland district comprises a significant portion in this section of the city. Manager Anderson asked if the City ordinance differentiates commercial vs residential development within the shoreland district. Mr. Graske explained it does not differentiate – the ordinance applies to any land use in shoreland district. Part of Mr. Graske's recommendation is that the single family residential not exceed 25% without a variance. He also noted his understanding that the chief concern prompting the City is commercial and not residential development. Manager Anderson suggested an alternative would be to have the CUP apply to commercial properties only. Manager Anderson suggested that, if the City does not wish to implement the District's recommendations, an alternative could be to require incorporation of pervious material (e.g. permeable pavers) to replace some of the imperviousness. Manager Anderson referenced an Environmental Protection Agency handout on managing urban runoff which could be used to illustrate how increased impervious coverage has a significant impact on stormwater runoff and groundwater infiltration. There is also some material from University of MN Extension that can be utilized to illustrate best management practices for shoreland properties and steep bluffs. Manager Schmaltz supported the effort to communicate this information to the City. Permitting Coordinator Ernst clarified that the City issues significantly more variances outside of CLFLWD boundaries.

Manager Oknich indicated University of MN's Nonpoint Education for Municipal Officials (NEMO) guidelines note that a watershed with 25% impervious coverage is a

degraded watershed. The maximum impervious surface threshold should be set by the community in accordance with its goals for watershed protection. Based on scientific research, NEMO recommends high priority watersheds be less than 10% impervious surfaces, moderate priority watersheds be 10%–25% impervious surfaces, and low priority watersheds be 25% or greater with the adoption of best management practices and restoration projects, if possible. Manager Oknich shared the following link <https://www.pca.state.mn.us/sites/default/files/wq-strm2-16a.pdf>.

There was consensus to direct staff and Emmons & Olivier Resources (EOR) to prepare a comment letter consistent with the discussion and the recommendations provided. Manager Schmaltz suggested it might be helpful to compare percent impervious around Forest Lake's west basin, which has a lot of urban and suburban development surrounding it, to the City of Wyoming. Mr. Grasko agreed this would be interesting information to have, and there are data layers available which can be analyzed. He suggested the District may want to do this for the whole District boundary. President Spence advised that if this type of activity is within the Administrator's contracting authority, he could proceed. Dr. Funke noted EOR has already pulled a lot of these data for the Watershed Management Plan update process and could work with Mr. Kinney to do this work for one area as within the District budget. Manager Anderson added that she would like assessment of the Forest Lake commercial area that drains to Comfort Lake to be incorporated into the Comfort Lakes diagnostic study.

c) Comfort Lakes Diagnostic Study Scope of Work [moved to 5c]

d) MN Association of Watershed Districts Update

Mr. Kinney explained the MN Association of Watershed Districts (MAWD) sent out a notice that the Clean Water Council is recruiting for a representative. MAWD also published its annual request for watershed districts to submit proposed resolutions. The deadline is September 1st. He suggested if the managers have any ideas, to start outlining them so that they can be discussed at the next few board meetings.

5. Old Business

a) H&H Model Update Scope of Work

Cecilio Olivier introduced Paul Fritton who is an engineer at EOR. Mr. Olivier explained how modeling is a crucial part of watershed management but it is not as obvious in terms of return on investment. Mr. Fritton explained models can help prioritize projects to maximize benefits with limited funding. Models can help review impacts of other projects and changes such as roadway improvements, climate change, etc. Models also provide a deeper understanding of a watershed, especially since on-the-ground monitoring is limited by equipment and personnel resources Mr. Fritton explained how the model was built for the Comfort Lake Management District. The model is as good as the data you put into it; higher data resolution gives us a higher

confidence in model results. Model components include hydrology (delineated subwatersheds) and hydraulics (storage nodes such as stormwater ponds and conduits such as pipes, culverts, and streams). Mr. Fritton displayed an aerial video of the Heims Lake drainage area showing the outlet channel running from Heims Lake, under Highway 61 and through the District's tax forfeit property. Next, he displayed aerial footage of the Shallow Pond wetland complex in the Comfort Lake Management District and the wetland complex east of Heath Avenue in the Little Comfort Lake Management District.

Mr. Fritton displayed an animation illustrating flowage from Forest Lake to Comfort Lake. Manager Schmaltz asked what the elevation drop is between Forest Lake and Comfort Lake. Mr. Fritton indicated it is about 20 feet, and most of the drop occurs near the connection to the Sunrise River. Mr. Fritton described the model calibration process which includes rainfall data, water monitoring at critical locations, and adjustment of uncertain parameters to match modeled values to observed values at monitoring sites. He explained how models help inform the design of projects, identify potential project locations, confirm District hydrologic boundaries, and assist in the District's permitting program.

Manager Anderson asked if EOR is looking at the natural state of the systems and whether it has accurate information on the flow rates for the MnDOT Highway 8 project. Mr. Fritton indicated EOR does, as it worked with MnDOT to get that information and then supplemented with some culvert field visits. EOR focused on the major ditch systems, the Sunrise River, the Forest Lake outlet, the ditch from downtown Forest Lake and from Heims Lake. EOR surveyed culvert crossings last summer. Manager Anderson asked how different this is from a subwatershed assessment (SWA) or a Soil and Water Assessment Tool (SWAT) model that a Soil and Water Conservation District (SWCD) would perform. Mr. Olivier indicated the short answer is they are completely different. He explained EOR's model is significantly more detailed and calibrated. Mr. Kinney added that the Lower St. Croix SWAT model, while it was a major effort and uses some of the same layers, is not nearly as detailed when it comes to obtaining the survey data. Mr. Kinney explained he worked with EOR to proactively reach out to local partners to understand what they want to see from this effort (e.g. how the District can be a resource for partners and hopefully help avoid errors in designs for culvert replacement projects). Manager Anderson indicated this is similar to the model Houston Engineering Inc. presented at the MAWD conference a couple years ago. She supported offering the model as a resource to the District's partners and communities.

Dr. Funke presented the long-term vision of the District-wide model update. Comfort Lake Management District (LMD) was completed in 2019, Bone LMD will occur in 2020, and Little Comfort LMD and Forest LMD is proposed in 2021 and beyond. She noted portions of the Forest LMD have already had models updated.

Mr. Olivier explained the level of detail being added to the model. Updated parameters will include landlocked basins and Chisago County/Scandia areas of concern. He noted EOR received some GIS data from the City of Scandia and Chisago County, but both

entities indicated the data may have gaps. Mr. Olivier explained the data include culvert locations but not inverts. Chisago County may have an intern in the fall who can help with a culvert invert surveying effort. Manager Schmaltz asked if EOR received anything from Washington County. Mr. Olivier indicated they have not received anything yet and are trying alternative contact methods. Mr. Olivier described the boundary verification area between CLFLWD and Carnelian-Marine-St. Croix Watershed District (CMSCWD), around German Lake. German Lake has historically been a landlocked lake and is currently located in the CMSCWD political boundary. However, overflows may flow to CLFLWD and it may be sound to incorporate that basin into the CLFLWD political boundary. Mr. Olivier noted CMSCWD is updating its hydrologic & hydraulic (H&H) model as well. Mr. Kinney added CMSCWD is also in the process of updating its 10-year watershed management plan.

Manager Schmaltz urged that when the District meets with Forest Lake regarding the watershed management plan, it should advance a partnership effort on modeling update work.

Manager Anderson moved to authorize the administrator, on advice of counsel, to enter into an agreement with EOR in accordance with the June 30, 2020 scope of work and in an amount not to exceed \$81,399, which includes \$7,713 for the boundary investigation between CLFLWD and CMSCWD, and to transfer the necessary balance of funds from the reserve fund. Seconded by Manager Schmaltz. Upon a roll call vote, the motion carried 5-0.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich	X		
Jim Dibble	X		

b) Heath Avenue Investigation Summary

Dr. Funke explained this task was part of the Comfort LMD H&H model update. The investigation looked at drainage area characteristics including land cover wetland type, soil type, altered watercourses, and H&H modeled flows. The phosphorus load primarily comes from a sheep pasture, developed land covers, a residential area, and ditched wetlands. Currently, most of the landcover is undeveloped wetland and forested. The Liberty Ponds development appears to be treating its wastewater adequately. The District can be in contact with the MN Pollution Control Agency (MPCA) to ensure this continues long-term. Dr. Funke explained the biggest phosphorus loading sources are the large ditched wetland complexes. Recommendations include:

- Establish buffer between pasture area and ditch
- Regular coordination with MPCA regarding wastewater treatment plant monitoring and maintenance
- Wetland soil testing to identify legacy loads

- Feasibility of ditch plugs to increase wetland storage (this will overlap with the Comfort Lakes diagnostic study update project)
- Meet with Chisago County regarding incorporating a stormwater treatment basin as part of Highway 8 redesign project (this may overlap with the regional stormwater treatment project and permitting)

Manager Anderson asked about drainage coming from developments near North Shore Trail. Dr. Funke explained the boundary between Forest LMD and Little Comfort LMD has always been in question. A lot of this developed area is drained by roadside swales. Manager Anderson asked about reviewing historic aerial photos and wetland soil testing for legacy loadings, which seem like important data. Dr. Funke indicated this is something she and District staff will coordinate on. Dr. Funke explained the intent of ditch plugs is to restore wetlands to their natural function. President Spence asked about loading from either side of the inlet structure. Dr. Funke indicated sampling by EOR revealed consistent phosphorus concentration from both sides. That supported the conclusion that the ditched wetlands on the east and west both contribute to high phosphorus runoff. Dr. Funke indicated there is greater opportunity for projects in the east because there is more separation from homes. Manager Anderson noted the need to be mindful of future higher density development in sizing regional storage. She suggested the District consider existing infrastructure and upland properties in relation to potential storage. President Spence noted Applewood Nursery is moving, which may present opportunities for projects. Dr. Funke explained that the Heath Avenue outlet may be one of the last big projects for the Little Comfort LMD. After that, the District may consider an alum treatment on Little Comfort Lake. Little Comfort Lake reaching its long-term water quality goals will be one of the big remaining phosphorus reductions needed for Comfort Lake. Dr. Funke explained the main impact of the ditch plugs would be reduced volume at the Heath Avenue outlet; as of now there is too much flow to adequately treat stormwater.. Mr. Kinney added that treating the source of the problem will have long term benefits. He noted Little Comfort Lake is an impaired waterbody and there is a load allocation designated for the City of Forest Lake.

Manager Anderson moved to accept the Heath Avenue Investigation Summary Report. Seconded Manager Oknich. Upon a roll call vote, the motion carried 5-0.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich	X		
Jim Dibble	X		

c) Comfort Lakes Diagnostic Study Scope of Work

Dr. Funke described key outcomes of the proposed diagnostic study including updated in-lake, shoreline and watershed characterization; updated lake water quality response models; measurable goals for phosphorus, sediment volume and land preservation;

H&H scenarios under future development and extreme rainfall; optional unmanned aerial vehicle (UAV) video; and 10-year budget and schedule for incorporation into the watershed management plan update. A lot has been summarized in other documents and this effort would compile that information into a single document.

Manager Anderson noted that the focus should not just be on phosphorus, as Comfort Lake is already meeting its 2030 phosphorus concentration goals. She indicated the District needs to look at excess sediment and stormwater volume. Manager Anderson indicated the District should understand the impacts that the I-35 and Highway 8 projects are having on flowage in the area. She referenced conveyances that move runoff from Forest Lake into Chisago County and an interest in mapping abandoned drainage systems JD 2 and JD 1. She agreed the UAV flight would be helpful in this effort, especially in identifying and documenting ditches. Dr. Funke said she would revise the scope of work to reflect the discussion and staff would re-post to the website. She explained the intention is aligned with what Manager Anderson described, so it is mostly of a matter of rewording. Excess sediment, volume, and habitat restoration are key components of the study. Mr. Kinney explained he has been in contact with a consultant experienced in aerial videography, which could be of assistance as well. President Spence clarified that the Board is approving the not-to-exceed amount but not necessarily who the UAV vendor is.

Manager Anderson moved to approve a fund transfer from 5-229-B to 5-229-A in the amount of \$20,000. Seconded by Manager Dibble. Upon a roll call vote, the motion carried 5-0.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich	X		
Jim Dibble	X		

Manager Anderson moved to authorize the administrator, on advice of counsel, to enter into an agreement with EOR in accordance with the June 30, 2020 scope of work and in an amount not to exceed \$45,549. Seconded by Manager Dibble. Upon a roll call vote, the motion carried 5-0.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich	X		
Jim Dibble	X		

d) Watershed Management Plan Update

Watershed Technician Heinz presented the proposed plan update drafting schedule, which includes an additional special board meeting on July 30th. Given the long duration of the current meeting, there was consensus to postpone discussion of the plan update until the next meeting. President Spence clarified that managers should send written comments on the plan content to staff via email prior to the next board meeting. Legal Counsel Holtman advised that managers should not copy the rest of the board on their submittals, per open meeting law requirements. If there is value in communicating the submittals to the whole board, staff can send that out as a one-way communication and then present the information at the next meeting for the record.

e) 2021 Draft Budget

Manager Schmaltz stated he would send comments on the Administration section of the draft budget to staff the following day.

f) Lower St. Croix One Watershed, One Plan

Mr. Kinney reiterated that the Steering Committee will meet next week to discuss two topics pertaining to the plan: options for calculating annualized project costs and addressing impacts of discharging landlocked basins to the St. Croix River. The calculation of annualized project costs relates direction to one of the comments CLFLWD submitted during the 60-day review period. Mr. Kinney indicated he would likely be unable to attend the meeting next week, so Ms. Heinz, Mr. Graske, and either Manager Anderson or Manager Schmaltz will attend instead. He will include a copy of the District's followup comments and Laura Jester's response to the meeting record.

6. Summary and Approval of Board Direction

Directives from the meeting were summarized.

- The information conveyed in the meeting chat window should be incorporated into the minutes.
- Dr. Funke will revise the Comfort Lakes Diagnostic Study scope of work to reflect the discussion, and staff will re-post to the District website.
- Manager Schmaltz requested EOR compare the City of Forest Lake impervious surface percentage to the City of Wyoming.
- Staff will post a copy of the email correspondence related to the LSC 1W1P project cost-benefit calculation to the District website.

Manager Anderson thanked staff for using the transfer form for the Comfort Lakes Diagnostic Study scope of work. She suggested having signatures on the forms. President Spence asked if this was a necessary step to add. Mr. Holtman noted it is not legally necessary, but he always recommends following the District Accountant's best practices.

7. Adjourn

a) Next regular board meeting – July 23, 2020

Manager Schmaltz moved to adjourn the meeting. Seconded by Manager Anderson. Upon vote, the motion carried 4-0, and the meeting was adjourned at 9:29 p.m.

Manager	Aye	Nay	Absent
Jon Spence	X		
Jackie Anderson	X		
Stephen Schmaltz	X		
Jen Oknich			X
Jim Dibble	X		

Jen Oknich, Secretary _____