

**MINUTES OF THE WORKSHOP
OF THE
BOARD OF MANAGERS
OF THE
NINE MILE CREEK WATERSHED DISTRICT**

THURSDAY, JUNE 1, 2023

Call to Order of the Workshop

President Bob Cutshall called the Nine Mile Creek Watershed District Board of Managers workshop to order at 5:30 p.m. The meeting was held at the NMCWD office, Discovery Point, 12800 Gerard Drive, Eden Prairie, MN.

Managers Present: Grace Butler, Bob Cutshall, Erin Hunker, Peggy Kvam, and Larry Olson

Advisors Present: Janna Kieffer (Barr), Meg Rattei (Barr), and Michael Welch (Smith Partners)

Staff Present: Randy Anhorn (Administrator), Lizzy Boor (Watershed Specialist), Brett Eidem (Natural Resources Planning and Project Manager), Zach Stafslie* (Regulatory Program Manager), Erica Sniegowski* (Program and Project Manager), and Gael Zembal (Education and Outreach Coordinator)

Others Present: Mike Majeski (EOR)*

*Attended virtually

I. South Fork Nine Mile Creek Stabilization Project Update

Mike Majeski of EOR updated the managers on progress of the design of the South Fork stabilization project. He said that 140 trees, mostly box elder, will be removed along reaches 6 to 8 in Eden Prairie. He said all of the oak trees and most of the hardwoods will remain. Mr. Majeski said along reaches 16 and 17 in Bloomington, 77 trees will be removed and 69 of those are box elder.

Mr. Majeski said the engineer's opinion of the probable cost for construction is \$890,615, which includes a 5 percent contingency.

President Cutshall asked if the project will achieve an increase in flood storage. Mr. Majeski said yes. He described how the project will reconnect the floodplain along reaches 6 to 8. Brett Eidem explained the project will reconnect the stream bed with adjacent wetland.

Mr. Eidem reported staff continues to reach out to property owners and hopes to connect with LifeTime in the near future. Randy Anhorn said upcoming steps include getting temporary access license to go in and do the work and obtaining maintenance easements around the work area to be able go back in for maintenance work.

President Cutshall asked about the project timeline. Mr. Anhorn said there are landowners the district still needs to meet with and then the district needs to go out for quotes. Mr. Eidem said the goal is to do tree removal over the winter but the district will put an open window on the dates to get better prices.

II. NMCWD Water Resources Monitoring Program

Janna Kieffer reviewed the history of the district's monitoring program, pointing out that lake level monitoring started in 1960 and the groundwater observation program began in 1962. She said the district currently monitors monthly water levels in 29 waterbodies and six groundwater observation wells.

Ms. Kieffer said the data collected in the district's stream monitoring program include flow and water quality data. She explained the four Watershed Outlet Monitoring Program stations in the watershed provide automated stream monitoring.

Ms. Kieffer said the ecological use stream monitoring focuses on aquatic life data. Meg Rattei explained that by continuing to monitor the components essential to fish and macroinvertebrates, such as oxygen, conductivity, flow, the district has the information it needs to understand fish and macroinvertebrate impairments in streams. Ms. Kieffer further explained that the reasons for doing the ecological use stream monitoring are to evaluate the health of fish and macroinvertebrates, assess the adequacy of stream habitat for aquatic life, identify and track biological stressors for fish and other aquatic life, and to evaluate the attainment of state water quality standards for various stream reaches.

Ms. Kieffer said the district's lake monitoring program collects data on water quality, phytoplankton, zooplankton, and aquatic plants. She said the district typically monitors three to seven lakes per year and coordinates with cities and other entities such as the Three Rivers Park District to avoid redundancy.

President Cutshall noted the district spent about \$1.2 million constructing the Rosland Park filtration system. He asked how the district can look at the lake

monitoring data to evaluate if that project was effective. Mr. Anhorn said the purpose of the district's rotating lake monitoring program is to perform trend analysis. He said outside of that lake monitoring rotation, additional lakes can be monitored as part of water quality studies to get a more complete picture. Mr. Anhorn said the district also monitors water quality project effectiveness of its phased projects, such as Normandale and Cornelia.

Ms. Kieffer said the district could consider going to an automated continuous lake level monitoring system and using data reporting dashboards for the stream flow and lake level monitoring data.

Ms. Kieffer presented other ideas for the district to consider, such as re-evaluating portions of the ecological use stream monitoring program in consultation with the Minnesota Pollution Control Agency, considering use of machine learning and advanced data analysis techniques for the stream monitoring, considering a lake monitoring process of periodic check-ins and considering lake and stream monitoring of "forever chemicals" like per- and polyfluoroalkyl substances. She said the district could also consider its annual reporting needs and wants. Mr. Welch noted that there is state money available for PFAS monitoring.

Mr. Anhorn stated the staff is interested in the managers' thoughts on the lake monitoring process and how to change that process. He and Ms. Sniegowski have talked about having Barr Engineering draft a synopsis of the lake monitoring program and propose a plan.

Ms. Kieffer said the district is applying adaptive management and there needs to be a process in which after the first management steps are done and re-evaluation takes place, the district has a process for keeping an eye on that lake or project and identifying triggers that alert the district when more evaluation or management needs to take place.

Manager Grace Butler asked if the monitoring data can be stored in formats that would be more usable. She said the data is out of context without an overlay noting when conditions are wet or dry. Ms. Butler said the district should also consider where it wants to collect photo data and where the data files reside.

Mr. Anhorn said he and Ms. Sniegowski will talk with Ms. Kieffer about what it would take to come up with that plan for Normandale, which would be similar to a plan for other district projects that are phased, and will bring that information back to the board.

President Cutshall asked about using artificial intelligence to manage the district's monitoring data. Ms. Kieffer indicated that use of machine learning, a subset of artificial intelligence, and advanced data analysis for monitoring data analysis could be explored further if the district is interested. She said further

consideration should include whether the questions being answered by use of machine learning or other advanced data analysis techniques are providing actionable information for resource management. Ms. Kieffer noted she will reach out for the information presented recently by a professor to Barr regarding artificial intelligence related to hydrology and hydraulics.

Manager Butler asked regarding the macroinvertebrate monitoring if its value has been achieved. Ms. Rattei said she thinks there are greater uses of the data beyond what the district has used the data for. She said the data has been used to help determine problems. Ms. Rattei said the district has been doing this monitoring for 20 years and it would be useful if there could be machine learning algorithms that could take the macroinvertebrate, fish, and groundwater data and show the fluctuations and help the district to understand the driving forces for those fluctuations. She said it could help the district identify possible projects and could be a way to help the district determine better ways to use its data. Ms. Rattei said the district could also evaluate if it needs to do the monitoring annually.

III. Hopkins Valley Park Streambank Project Repair Maintenance Project

Mr. Anhorn reminded the managers that they directed Barr to solicit quotes for the Hopkins Valley Park Streambank project repair. He reported the district received three quotes.

Ms. Kieffer reminded the managers that Barr determined the repair is necessary and recommends the board move forward with authorizing the work. She said the streambank erosion downstream of the pedestrian bridge would likely get worse if the repair is not done.

President Cutshall confirmed with Mr. Anhorn that the repair cost would be split 50-50 with the City of Hopkins.

Mr. Anhorn stated that the district engineers found all three contractors who submitted quotes to be to be qualified and said that in consultation with the district engineers, the recommendation is to choose the lowest quote, which is from Sunram Construction.

Mr. Welch explained the resolution in the packet for the meeting creates a record of the district spending money to retain the value of the money the district already spent on the original construction project. He said the resolution clarifies the district is using 103B levy funds to pay for the repair, authorizes the administrator to enter into a repair and maintenance agreement with the City of Hopkins, authorizes the administrator to contract with Sunram Construction for the construction of the repair at a cost not to exceed \$20,998, and authorizes the administrator to approve change orders not to exceed in aggregate \$2,100.

It was moved by Manager Kvam, seconded by Manager Olson to adopt Resolution 23-04. On a roll call vote, the motion carried 5-0.

IV. Adjournment

It was moved by Manager Butler, seconded by Manager Hunker to adjourn the meeting at 7:22 p.m. On a vote, the motion was approved.

Respectfully Submitted,

Grace Butler

Grace Butler, Secretary

