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

THURSDAY, MAY 5, 2022

I. Call to Order

President Cutshall called the Nine Mile Creek Watershed District Board of Managers workshop to order at 5:30 p.m. on Thursday, May 5, 2022. The meeting was conducted by web-based video conference, pursuant to Minnesota Statutes section 13D.021, after the president determined that because of the COVID-19 pandemic, it was not prudent for the board of managers to meet in person.

Managers Present:	Grace Butler, Bob Cutshall, Peggy Kvam, and Larry Olson
Advisors Present:	Janna Kieffer (Barr Engineering Co.) and Michael Welch (Smith Partners)
Staff Present:	Randy Anhorn, Brett Eidem, Lauren Foley, and Erica Sniegowski
Others Present:	Judy Karasch (resident) and Meg Rattei (Barr Engineering Co.)

II. Hennepin County Multi-Jurisdictional Hazard Mitigation Plan

Administrator Anhorn stated the District applied for a Federal Emergency Management Agency grant for phase III of NMCWD's Atlas 14 flood-resiliency study in the amount of $135,000, which is 75% of the $180,000 scope of work. Administrator Anhorn reported staff has been informed the District will receive funds. He explained that to be eligible for the FEMA funds, the District needs to have adopted a local flood-hazard mitigation plan. He said in this case, staff has determined that the most efficient course is for NMCWD to adopt Hennepin County's plan.

Administrator Anhorn said NMCWD wasn't originally involved in the development of the county's plan, he is working with county staff to incorporate NMCWD flood-hazard mitigation measures.

a. Resolution 2022-05: Adoption of the 2018 Hennepin County Multi-Jurisdictional Hazard Mitigation Plan

Administrator Anhorn introduced the resolution. Michael Welch said the administrator has read the plan and represents to the board that it is consistent with NMCWD interests and plans.

Manager Butler moved, seconded by Manager Kvam to adopt Resolution 2022-05, adopting the 2018 Hennepin County Multi-Jurisdictional Hazard Mitigation Plan. On a roll call vote, the motion was approved 4-0.

III. Summary of Draft 2021 Water Quality Monitoring Program

Administrator Anhorn reminded the managers that the overall goal of the District's water-quality monitoring program is to track water-quality trends and evaluate results of implemented projects.

a. Presentation of Draft 2021 Water Quality Monitoring Summary

Janna Kieffer said the District's 2021 water quality monitoring program monitored seven lakes and 10 locations on Nine Mile Creek. She said the 2021 lake-level monitoring included 29 monitoring locations and the groundwater level monitoring included six observation wells. She displayed a map indicating the locations of the monitoring sites and described the types of monitoring conducted.

Engineer Kieffer presented the 2021 water-quality results for the three lakes comprising the Anderson Lakes chain.

Engineer Kieffer reviewed the results for Lake Cornelia, north and south, and Lake Edina, which is downstream of Lake Cornelia. She reported all three lakes exceeded the state standards for phosphorous, chlorophyll-a, and Secchi depth transparency, noting extremely high levels of chlorophyll-a. Ms. Kieffer said blue-green algae counts in all three lakes exceeded the World Health Organization's threshold for moderate probability of adverse health effects.

Ms. Kieffer said monitoring of Lake Otto and Lake Nancy, which are part of the Lake Cornelia system, included sediment analysis and watershed modeling, with the goal of determining if there is significant internal loading of phosphorous. She said that Mirror Lake, which is a shallow lake adjacent to Interlachen Country Club and Blake Road, had phytoplankton samples that showed that blue-green algae dominated for most of the summer. She said the lake had been studied in 2004 and the District will be refreshing the study with new data in 2022.

Ms. Kieffer said Normandale Lake met the state standards for shallow lakes for phosphorous, chlorophyll-a, and Secchi depth transparency. She said the number of plant species observed was greater than the Minnesota Department of Natural Resources guideline for healthy aquatic plant communities. Ms. Kieffer phytoplankton analysis for Normandale Lake showed blue-green algae counts were low, and green algae and cryptomonads dominated. Ms. Kieffer indicated there were several areas of low dissolved oxygen throughout the lake during June and August. She explained that the 2019 alum treatment likely minimized or prevented release of phosphorus from lake-bottom sediments during these times. It may have been the case, though, that low dissolved oxygen near the bottom of the lake prevented phosphorus release.

Ms. Kieffer said that 2021 chloride concentrations were generally higher in some monitored lakes in comparison with other years, for Lake Cornelia, Lake Edina, and Normandale Lake.

Ms. Rattei summarized the goals and components of the District's stream monitoring program. She displayed a map showing the 10 monitoring sites, explaining monitoring occurred monthly from March to October. Ms. Rattei presented the 2021 stream monitoring results.

Ms. Rattei provided recommendations to the District based on the 2021 stream monitoring data:

- Continue implementing the chloride reduction strategies indicated in the District's 2010 Total Maximum Daily Load study;
- Further evaluate potential sources of high fall chlorides;
- Consider updating the biological stressor analysis, last completed in 2010;
- Continue biological and water quality monitoring to assess the stream's water quality and biological communities; and,
- Contact the Minnesota Pollution Control Agency prior to when the MPCA plans to monitor Nine Mile Creek in 2025 and update its assessment of Nine Mile Creek.

Engineer Kieffer presented the results of the 2021 monitoring of lake levels and groundwater levels. Manager Kvam asked if there are any lakes in the watershed infiltrating into groundwater. Engineer Kieffer said it is actually a complicated answer and it changes on a year-to-year basis. She indicated that in 2019 and 2020 there was more groundwater pushing into the lakes, exacerbating high water levels in those years and especially evident in land-locked lakes. Administrator Anhorn said Shady Oak Lake is an example of a lake in which the groundwater contributed to the high lake levels and also when there isn't as much water, the lake contributes to groundwater. Administrator Anhorn also mentioned that the District completed a study in 2019 that evaluated the interaction of groundwater and surface water within the Nine Mile Creek watershed. The study compiled and analyzed surface water, groundwater, and other data to determine how groundwater and surface water interact across the District and then used that data to identify surface waters that may be particularly sensitive or vulnerable to changes in groundwater levels.

Manager Butler suggested the final report include a map toward the front to show where the lakes are. She expressed concern with the chloride levels in Northwest Anderson Lake. Manager Butler said she would like to know whether the high levels were related to drought or runoff from Highway 169. She noted the District engineer didn't give a recommendation in response to this result.

Manager Butler also inquired about the prevalence of Bearded Stonewort, wondering if too much of the plant can be problematic. Manager Buter said based on the presentation, it sounds like it is just a big mat in the lake and she isn't should sure if it should be perceived as a positive since it's a native species or a negative because it is so prevalent. Ms. Rattei said that after discussion with the Department of Natural Resources staff and researchers, she recommends continued monitoring of that plant species using the point-intercept survey. She explained that the DNR would have to declare the plant an invasive species to allow wide-scale control, which currently the DNR isn't allowing. Engineer Kieffer said the District could work with its other partners that do monitoring so they can monitor the growth of Bearded Stonewort and track it quantitatively or anecdotally.

Manager Butler said she would like to have an understanding on whether or not there's a correlation between hot weather, or in particular drought, with water flow-through as related to blue-green algae blooms , especially as related to climate change. Manager Butler commented the District should reach out to the MPCA regarding stream assessment.

Engineer Kieffer said the data indicate implementation of the Eden Prairie Lakes Water Quality Improvement Project, which included a drawdown and subsequent herbicide treatments of Northwest and Southwest Anderson Lakes and an alum treatment in Southwest Anderson Lake, and herbicide treatments on Southeast

Anderson Lake has resulted in improvements in water quality and the health of the plant community.

IV. Adjournment

After discussion, the managers directed that the May 18 regular meeting be conducted virtually. **It was moved by Manager Olson, seconded by Manager Butler to adjourn the meeting at 6:55 p.m. On a roll call vote, the motion was approved 4-0.**

Respectfully Submitted,

Grace Butler

Grace Butler, Secretary