

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

THURSDAY, NOVEMBER 2, 2023

Call to Order of the Workshop

President Bob Cutshall called the Nine Mile Creek Watershed District Board of Managers workshop to order at 4:30 p.m. The meeting was held at the NMCWD office, Discovery Point, 12800 Gerard Drive, Eden Prairie.

Managers Present: Grace Butler, Bob Cutshall, Peggy Kvam, Chris-Ann Lauria, and Larry Olson

Advisors Present: Janna Kieffer, Stephanie Johnson,* Maureen McFarlane* (Barr Engineering), and Michael Welch (Smith Partners)

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

Others Present: Richard Allendorf, Paul Markwardt and Dan Wolfe (Arrowhead Lake Association)

*Indicates attended virtually.

I. Overall Flood Reduction Management Vision Discussion

Erica Sniegowski said the purpose of discussing the Flood Reduction Management vision is to help the district move from thinking to acting, aid in decisionmaking and help staff understand the resources needed. She said it is ok that this discussion is a difficult endeavor.

Michael Welch noted that flood projects may require changes to the procedures and structures NMCWD has established for pursuing water-quality projects. Ms. Sniegowski commented there also has to be some acceptance of risk in terms of things that may come up unexpectedly or that outcomes cannot be predicted.

Ms. Sniegowski reminded the managers that a goal of the district’s watershed plan is “Human life and permanent structures will be protected from damage due to flooding.”

Ms. Sniegowski said the plan has two objectives under that goal: Manage the flood plain to prevent encroachment and maintain flood storage volume; and, reduce the risk to public safety and permanent structures due to flooding.

Ms. Sniegowski said these are the guiding principles for the district’s flood-reduction work.

Janna Kieffer reminded the managers that the district’s Atlas 14 Flood Risk and Resiliency study identified opportunities to engineer flood risk-reduction solutions along the creek to store more water. She said storage is a preferred engineering approach, with other approaches including water diversion and increased conveyance. Manager Peggy Kvam asked about infiltration. Ms. Kieffer said infiltration is important but for managing the volume of water from a 7.5-inch rain event, for example, infiltration will not solve the issues because infiltration does not significantly reduce flood flows.

Ms. Sniegowski said an important part of the overall discussion is the potential scale of effort and ensuring the board, staff, and all stakeholders interpret the scale in the same way.

Ms. Sniegowski said the next step in developing the district’s flood-management vision will discussion at the board’s January 4, 2024, workshop.

Ms. Kieffer said part of the phase 3 scope of work for the Atlas 14 Flood Risk and Resiliency study is to develop a framework for making decisions around project benefits and tradeoffs. She said the decision map is in progress and will be shared with the board and Technical Advisory Committee.

II. Atlas 14 Flood Risk Reduction and Resiliency Update –Communication Strategy

Ms. Kieffer reminded the managers that a communication strategy about flood risk must address the information to be communicated to various audiences, the details to include, and the most useful format. Ms. Kieffer said the board previously identified the importance of all community members having access to the information. Ms. Kieffer said the audience generally falls into two groups: technical and non-technical. She said the preferred delivery format is the web.

Ms. Kieffer said Barr and district staff met to talk about web map interface options to communicate flood-risk information. She introduced Maureen McFarlane to present options Barr and NMCWD staff have been exploring. Ms. McFarlane displayed examples of web maps, noting the layers and what data can be turned on and off.

In response to a question from Manager Chris-Ann Lauria, Ms. McFarlane confirmed that the plan is smartphone compatible.

President Bob Cutshall recessed the regular meeting to open the public hearing on Arrowhead Lake and Indianhead Lake.

III. Public Hearing on Arrowhead Lake and Indianhead Lake Feasibility Study and Preliminary Engineering Report

President Cutshall opened the public hearing at 5:30 p.m.

Randy Anhorn said that after a short presentation by Stephanie Johnson of Barr Engineering, the board will receive comments and at the board's November 15 meeting, the managers will consider ordering the project.

Ms. Johnson said monitoring data show the lake is not meeting the state standard for water quality for total phosphorus. She reported the district conducted a water quality study on Arrowhead Lake and Indianhead Lake in 2022 to understand the phosphorus loading to help form mitigation and management strategies to help control phosphorus and improve water quality of the two lakes. Ms. Johnson said based on the study's findings, the engineer recommends both an iron and an alum treatment on both lakes to control internal loading. She said the treatments should be coupled with aeration to ensure there is enough dissolved oxygen in the system for the necessary chemical reactions to occur for the treatment to be most effective. Ms. Johnson recommended upgrading the existing aeration systems at each lake.

Mr. Anhorn noted that in addition to the proposed capital project identified by Ms. Johnson, the study also recommends programmatic initiatives such as enhanced, prioritized street sweeping.

Paul Markwardt of 6516 Indian Hills Road, Edina, said the Arrowhead Lake Association is very appreciative of the study having been undertaken, the work conducted, and the recommendations presented. He said following the informational meeting that occurred in October in Edina, Association representatives sent its membership a summary of the information that Ms. Johnson presented. Mr. Markwardt said the responses from the members were very favorable. He said the association thinks moving forward with the recommendations in the feasibility study would be very helpful. He said the lake gets a lot of recreational use in the open water season. Mr. Markwardt said his group has had concerns about the possible impacts to recreational use of the lake from water-quality degradation. He said there is a fairly strong wildlife presence at the lake, including waterfowl, eagles, turkey, and deer, and that anything that could be done to improve water quality would have a positive benefit on wildlife. Mr. Markwardt said the current aeration system is focused on the southern end of the lake, and the association sees the expansion of the aeration to the northern

end as helpful. Mr. Markwardt said there have been more fluctuation of water levels in recent years. He asked if such fluctuations have any relevance to or could impact the treatments the district is recommending.

Ms. Kieffer said fluctuating water levels are not likely to have a significant impact on the effectiveness of the treatment.

In response to a question from Manager Larry Olson, Mr. Markwardt said lake residents and people from outside the immediate vicinity fish the lake. He said boaters are mainly lake residents.

Dan Wolfe of 6520 Indian Hills Road said people bring floating devices for fly fishing, although he has not seen much of that activity in recent years. He said it is mostly the lake residents on the lake in watercrafts such as canoes, kayaks, paddleboats, a few pontoons with electric trolling motors, and even a sailboat.

Mr. Markwardt said the Arrowhead Lake Association and Indianhead Lake Association met and the people in attendance were very supportive and complimentary of the feasibility study and recommendations. He when the project, if approved, will start. Ms. Kieffer said the first alum treatment is planned for spring 2024.

The board closed the public hearing at 5:45 p.m.

Atlas 14 Flood Risk Reduction and Resiliency Update –Communication Strategy **[continued]**

Ms. McFarlane presented web-map examples, explaining the opportunity to connect data and contextual information.

Manager Grace Butler said users need to be able to see the bigger context when viewing an individual property in a web interface. She said it is helpful for maps to show stormwater pipes and connections. Manager Butler said it would be nice if Hennepin County developed a flood-risk communication system.

Ms. Kieffer said NMCWD could consider building its system using the platform Hennepin County uses, Logis.

Mr. Anhorn said he understands that the managers support the direction the communication strategy is heading. He said Barr will develop a scope of work for development of a web-based map system.

IV. Mirror Lake Water Quality Study Update

Mr. Anhorn said the district has completed a water-quality study of Mirror Lake and staff has scheduled a community stakeholder meeting for November 8.

Ms. Kieffer said the draft water quality report is on the district's website. She reported that the lake consistently has not met the state standard for water quality for phosphorus chlorophyll *a*, and clarity.

Ms. Kieffer reported that analysis based on data collected in 2019 and 2021 reveals 60% to 72% of the phosphorus load is from lake sediments and 40% to 28% of the load is from external sources. She said recommendations stemming from the study include an alum treatment to address the internal loading.

Ms. Kieffer said the shoreline of the lake is steep in several areas, with erosion, so another recommendation is shoreline erosion repair as well as an enhanced street sweeping program, a fertilizer management program, continued chloride monitoring, and continued promotion of cost-share grants. She said another recommendation is to gather more data on the lake's fish population.


Ms. Kieffer asked the managers to review the report and provide feedback. Ms. Kieffer said after receiving the comments, Barr will finalize the report, and the board will receive the final report and review the proposed scope of work at its December 7 workshop.

Manager Kvam said it seems a lot of the eroded shoreline is on private property. Ms. Kieffer said some is on private land and some is on public land. Mr. Anhorn said the district's streambank restoration projects have included work on private properties. Ms. Kieffer said part of the feasibility work is to determine project scope including estimated costs and finding out if there are landowners willing to participate.

V. **Adjournment**

Manager Olson moved, seconded by Manager Lauria, to adjourn the meeting at 6:25 p.m. Upon vote, the motion carried.

Respectfully Submitted,



Grace Butler, Secretary

