TITLE: **Project No. 27 – Union Lake/Lake Sarah Outlet Landowner Informational Meeting**

Special Meeting of the Board of Managers

DATE: OCTOBER 7, 2026

Date: October 7, 2026
Time: 6:30 PM
Location: Sand Hill River Watershed District Office, Fertile, Minnesota

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I. Call to Order and Agenda Approval

Vice Chairman Don Andringa called the special informational meeting to order. The purpose of the meeting was to provide information regarding Project No. 27, review alternatives to address zebra mussel restrictions affecting operation of the Union Lake/Lake Sarah outlet system, discuss available grant funding, and receive input from affected landowners. No formal action was scheduled for the meeting.

II. Introductions

Board Members Present

Don Andringa, Vice Chairman, Todd Peterson, Manager, and Stuart Christian, Chairman (via remote technology)

Staff and Consultants Present

April Swenby, Administrator, Zach Herrmann, District Engineer, Houston Engineering and John Kolb, Attorney, Rinke Noonan (via remote technology

Landowners Present

Vern Johnson, Patti Johnson, Shawn Ostenaa, Shane Johnson, Belinda Johnson, Jack Erickson, Larry Altringer, Loren Rux, Duane DeBoer, Mary Ann Olson, Gerald Olson, Eileen Cook, Wesley Oian, Kelly Bailey, Jeremy Anderson, Willard Malwitz, and Lonnie Paradis.

Landowners Attending Remotely

- Zavoral (first name unavailable)
- Dave Jana Hinkley

III. Presentation

Project Background

District Engineer Zach Herrmann provided a history of Project No. 27. He explained that rapidly rising water levels between 1993 and 1999 threatened cabins, shorelines, private property, and septic systems around Union Lake and Lake Sarah. As a result, a pumping outlet project was developed and constructed in 1999. The project includes a pump station, an interconnection between Union Lake and Lake Sarah, a system of pipes and channels, and an outlet route discharging to the Sand Hill River. The project was originally operated by the Lake Improvement District and later transferred to the Sand Hill River Watershed District for operation and maintenance. In recent years, pumping was conducted during high-water periods in 2020 and 2022.

Zebra Mussel Discovery and Permit Suspension

Mr. Herrmann reported that zebra mussels were officially confirmed in Union Lake in 2024. Following the infestation designation, the Minnesota Department of Natural Resources suspended the project's permit in July 2024. As a result, the outlet system cannot be operated until measures are implemented to prevent the downstream spread of zebra mussels.

Alternatives Evaluated

Mr. Herrmann reviewed alternatives considered by the District and its consultants:

Seasonal Pumping Operation

- Pumping only when water temperatures are below 48 degrees Fahrenheit. The DNR had indicated reduced veliger risk at colder temperatures, with temperature potentially measured 4–5 feet below the surface.
- Determined to be impractical due to limited pumping windows and DNR concerns regarding adult zebra mussels remaining attached to infrastructure. Permanent in-water components would still require annual removal and cleaning or compliant filtration

Water Treatment Methods

- Chemical, ultraviolet, heat, and other treatment technologies were reviewed.
- These approaches were described as emerging or unproven for this application. The project sponsor would bear the burden of proving effectiveness to the DNR.

Groundwater Infiltration

- A high-level review of well and boring logs within roughly 1.5 miles indicated mostly surficial gravel over dense clay, limiting infiltration.
- Conveyance to a suitable site could also require substantial force main; a mile of 12-inch force main was described as potentially approaching $1 million.
- Construction of additional force main infrastructure would be costly and was not considered practical.

Filtration Retrofit

- Installation of 35-micron filters and a replacement pump was identified as the most feasible alternative.
- Existing intake and outlet infrastructure would remain in place.
- Additional maintenance would be required to clean and maintain the filtration system.

Filtration Retrofit Operations and Maintenance

- The proposed filtration opening is approximately 35 microns, compared with the existing approximately 500-micron screen. The fine filters create additional hydraulic head and require a pump capable of producing similar flow against substantially greater resistance.
- The filters would require cleaning and backflushing. Cold-weather operation would require protection from freezing; a small building and temporary heat were discussed.
- The existing air-burst system and the principal lake inlet/outlet conveyance were stated to remain independent or unchanged.
- The preliminary conceptual project cost was approximately $1.5 million, including pump, filters, piping, electrical work, structure, and contingency. This is not a contractor quotation. Final cost would depend on design, public bidding, market conditions, and construction.
- Existing annual project maintenance was described as approximately $15,000–$20,000, subject to annual conditions. A mechanical pump service life of roughly 5–30 years was discussed, with 30 years characterized as a reasonable upper planning horizon given limited operation and diligent maintenance. No definitive filter-screen replacement interval was provided.

Preliminary Cost Estimate

Mr. Herrmann presented a preliminary project estimate of approximately $1.5 million, including contingency. Major costs include a replacement vertical turbine pump, filtration equipment, electrical upgrades, piping modifications, structural work, permitting, engineering, legal

expenses, and project administration. He emphasized that these figures are preliminary planning estimates and final costs would be determined through detailed design and bidding.

Grant Funding Opportunity

The District reported that it had been notified of an award of up to $750,000 through the Minnesota DNR Flood Hazard Mitigation Program, requiring a one-to-one local match. Staff reviewed efforts undertaken since 2024 to secure funding, including legislative outreach, grant applications, state funding requests, and investigations into other funding programs and low-interest financing options.

Legal Considerations

Attorney John Kolb explained that Minnesota Statutes chapter 103D, including section 103D.631 was cited during the meeting, places responsibility on watershed district managers to maintain works of the watershed so they accomplish the purpose for which they were constructed. He described the threshold question as whether the project remains necessary and retains utility. If it does, the Board must determine how to make it operable under current aquatic invasive species requirements. He stated that the decision remains within the Board's discretion and that the filtration retrofit appeared to be the only presently feasible option identified. He also noted that, unless additional funding is found, the local match would likely be assessed to benefited landowners, with some additional ongoing maintenance cost.

IV. Landowner Public Input and Discussion

Project Costs and Assessments

Landowners asked questions regarding potential costs to property owners, the amount of future assessments, and how project costs could affect annual property taxes. Attendees indicated they wanted more specific cost information before supporting the project.

District staff responded that project costs remain preliminary and that actual assessments cannot be determined until final project costs are known. Staff explained that assessment amounts vary by property based upon the previously adopted benefit determination and are not equally divided among all property owners. Example calculations were provided from the assessment spreadsheet to help landowners understand the potential magnitude of future costs. Staff further explained that financing options could include bonding, low-interest loan programs, or internal District financing, depending on future financial conditions and Board decisions. Landowners were given the opportunity to review their specific parcel with a hypothetical cost of $750,000 local share, bonded over 20 years at a 5% interest rate. Landowners agreed this information was helpful to learn more about their specific parcel.

Long-Term Maintenance and Equipment Life

Inquiries were made regarding the long-term sustainability of the retrofit project, asking how long the pump and filtration systems would last and whether additional major expenses would occur in the future. Questions were also raised regarding replacement costs for the 35-micron filters.

Mr. Herrmann stated that a properly maintained pump could reasonably be expected to have a useful life of 20 to 30 years. He explained that filtration systems would require ongoing maintenance and periodic replacement of components, although exact replacement intervals would depend on operating conditions. He agreed to gather additional information from other Minnesota projects utilizing similar technology and ensured that the board had this information before making decisions.

Filtration System Performance

Attendees inquired if the proposed filtration system was practical if similar systems were being used successfully. An attendee was skeptical about pushing water through a 35-micron screen, noting that the opening is smaller than a human hair, and questioned electrical usage and operational expenses.

Mr. Herrmann explained that similar filtration systems have been installed on other Minnesota lake outlet projects and are currently accepted by the DNR as a method for preventing zebra mussel movement. He stated that the filtration creates significant hydraulic resistance, which is why replacement of the existing pump is necessary. While the upgraded pump would require greater lifting capacity, it is intended to maintain the project's existing pumping capacity.

Alternative Outlet Concepts

Discussion occurred regarding historical drainage patterns and whether restoration of a natural outlet could be considered instead of modifying the existing pump station. One landowner referenced historical court records and questioned whether restoring a former outlet could be less expensive than constructing a filtration system.

District representatives responded that outlet alternatives had been explored by the LID during the development of the original project and that current elevations, watershed boundaries, permitting requirements, county roads crossing the northern natural drainage, and downstream impacts created significant challenges. Staff stated that the current proposal focuses on modifying the existing outlet because it remains the most feasible and practical option identified to date.

Regulatory and Permitting Concerns

Numerous comments reflected frustration with DNR regulations and concerns that landowners could invest significant resources only to encounter future permitting obstacles. Questions were

raised regarding DNR authority, future permit approvals, and the role of the U.S. Fish and Wildlife Service.

District staff acknowledged the challenges associated with regulatory approvals and noted that the District has spent considerable time working with state agencies to identify viable solutions. Staff explained that all required permits would need to be secured before construction could proceed and that the District would not construct the project without the required regulatory approvals. They further noted that the filtration retrofit is currently the alternative identified by the DNR as meeting permit requirements for continued operation of the outlet.

Landowners questioned the value of filtration if zebra mussels exist in other waters or can be transported by birds. Staff responded that the downstream Sand Hill system was not identified as infested and that statute/permit requirements apply to man-made conveyance regardless of other possible vectors. Mn DNR has confirmed that regardless of any infestation downstream, protection measures are required by Mn Statute.

Assessment Area and Benefit Determinations

Questions were raised regarding why Little Sarah, Lake Sarah, and Union Lake properties are assessed together and why Bradley Lake properties are not included in the assessment area. A landowner questioned whether all benefiting properties were being assessed equitably.

Attorney John Kolb and District staff explained that the lakes are hydrologically connected and were evaluated collectively during the benefit redetermination process. Staff stated that the Board previously chose to assess primarily shoreline properties receiving direct benefits from the project rather than all contributing watershed acreage. It was noted that reopening the benefit determination process would require starting a new legal and administrative process.

Staff explained that benefits considered flood protection, septic-system risk, shoreline erosion, water quality, lake condition, and property value. Shoreline and certain affected lowland properties were included; ordinary backlots were stated not to be assessed.

Staff offered to provide Board meeting minutes related to the previous assessment discussions upon request.

Necessity of the Project

Landowners discussed whether the project remains necessary given current lake levels and suggested that future high water conditions may be several years away. Landowners referenced historical lake-level trends and suggested there could be sufficient time to complete this project before the landowners are faced with high levels.

District staff responded that future weather patterns and runoff conditions are unpredictable. Although current water levels are low, severe flooding has occurred in the past and pumping was required as recently as 2020 and 2022. Staff cautioned that the current grant opportunity may not be available in the future if the need to pump returns during another wet cycle.

Future Board Consideration

Board members reiterated that no decision was being made during the informational meeting. Landowners were encouraged to submit written comments and feedback to the District for consideration. Board members noted they must evaluate public input, legal obligations, future project needs, permitting feasibility, available funding opportunities, and long-term costs before determining whether to move forward with the project.

Vice Chairman Don Andringa reminded attendees that the $750,000 grant opportunity represented a significant funding source that may not be available again in the future and encouraged landowners to carefully consider both the costs of proceeding and the consequences of taking no action.

V. Adjournment

Following completion of public comments and discussion, a motion to adjourn was made by Todd Peterson. The motion was seconded by Stuart Christian. Motion carried unanimously.

The meeting adjourned at approximately 8:11 p.m.

Respectfully submitted,

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April Swenby
Administrator Sand Hill River Watershed District

Approved November 5, 2026