

**Lake Shamineau  
Lake Improvement District  
Informational Meeting – July 27, 2022**

**Informational Meeting:**

Provide information to Property Owners regarding the Annual Meeting, voting and the West Outlet High-Water Project.

**High-Water Project Goal:**

Determine a solution to the high-water problem that is most feasible, cost-effective, and timely, and will minimize ongoing maintenance and future operating costs.



# Lake Shamineau LID Informational Meeting 7/27/22

## ***Meeting Agenda***

- 1. Welcome and Introductions**
- 2. Voting and Annual Meeting Information**
- 3. High-Water Project Background**
- 4. West Outlet Project Engineering (Houston Engineering)**
- 5. Project Steps Est Costs and Est Timeline**
- 6. Questions/Comments- *Be concise and respectful. Use Chat feature and limit your comments to the topic.***
- 7. Next Steps**
- 8. Adjourn**

**Note that meeting will be recorded and posted;  
Presentation will also be posted to the website**

# Lake Shamineau LID Informational Meeting

**Welcome and Introductions**

**Rick Rosar**

**LSLID Board Chair**

**Board Member Introductions**

# Lake Shamineau LID Informational Meeting

- ***Meeting Code of Conduct –***
  - Use chat feature to indicate that you have a question or comment
  - Wait until question period for questions unless relevant to gain understanding of topic
  - Participants should wait to be recognized by meeting organizer, both online and at the Town Hall and speak one at a time
  - ***Mute all cell phones, mute your microphone and please be quiet*** so the audience can hear the speakers
  - Be respectful and wait your turn to speak. Be brief and please keep your questions to the topic under discussion.
  - When asking questions, participants should state their name and their property address on Lake Shamineau. Property Owners will have priority for questions
  - Should any participant become disrespectful or distracting, they will be asked to leave the meeting.

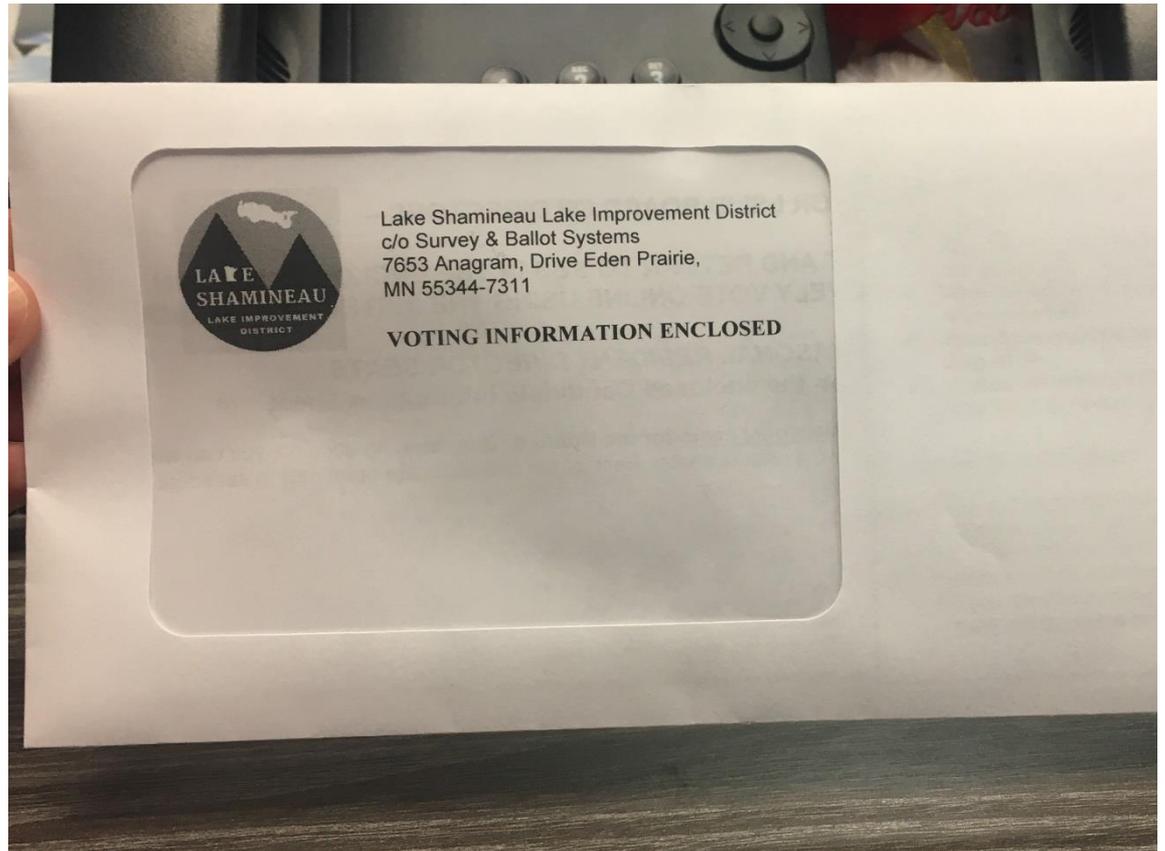
# LSLID Informational Meeting

## Voting and Annual Meeting Information

- LSLID using Survey and Ballot Systems (SBS) to administer Voting Process
- Voting Information will be mailed by SBS on August 3, 2022
  - Includes Letter, 2023 Budget Sheet, Candidate Information, Ballot and return envelope
- Voting process includes opportunity for mailing ballots OR online voting which will open on Aug 3rd. No in-person voting.
- Paper Ballots need to be postmarked by August 31, 2022
- Online Voting closes at Midnight on August 31, 2022
- Online Tabulation of results will be available after 6 PM on September 7, 2022

# LSLID Informational Meeting

- Look for Voting Materials
- They will be mailed out on August 3<sup>rd</sup> from SBS



# LSLID Informational Meeting

## 2022 Annual Meeting

- Annual Meeting will be held online
- Annual Meeting scheduled for August 27<sup>th</sup> at 9:00 AM
- Send email to [fred@homeinspectionsofmn.com](mailto:fred@homeinspectionsofmn.com) to receive invitation to the meeting
- Additionally, you may view the meeting at the Scandia Valley Town Hall where a Board member will be present
- Meeting will be recorded
- Voting will only be through mail-in ballots or online voting.

# LSLID Informational Meeting – Voting Information

**The August 3<sup>rd</sup> Mailing will include a ballot that you can fill out and mail in OR you will be able to vote online**

- **Election of Directors – The mailing will include information on each candidate**
  - *Voters will be able to vote for 1 Permanent Residency Seat*
    - There is one candidate for voting – Pat Tvedt
    - Or you will be able to write-in a candidate for the seat
  - *Voters will be able to vote for 2 Seasonal Residency Seats*
    - There are three candidates for the two seats for voting:  
Rick Rosar (incumbent), Fred Comb (incumbent),  
and Thomas R. Schuler
    - Or you will be able to write-in a candidate for each seat

**There will also be a Candidate Forum at the Annual Meeting where each candidate will have time to speak**

# LSLID Informational Meeting – Voting Information

## 2023 Budget Information

1. **Non-Project Operations Budget - \$38,000**
  - Includes administrative and LID Operation Costs
2. **Aquatic Invasive Species (AIS) Budget - \$30,000**
  - Includes AIS control, surveys and ambassador program.
3. **Lake Shamaineau High-Water Outlet Project Budget for Planning and Operations – \$295,000**
  - Includes planning expenses to finalize design, plans, bidding and right of way. Also includes estimate for operational expenses for electricity, maintenance and monitoring elevations.
4. **High-Water Outlet Project Budget**
  - Do you approve of an increase of the local cost to Construct High-Water Outlet from \$3,350,000 to \$5,550,000 if State funding is not secured to be sufficient to complete the High-Water project? *This voting item will be discussed later in the presentation.*

# Lake Shamineau High-Water Project



## Background

- Shamineau is a 1434-acre lake located east of Hwy 10 in Morrison County
- There are approximately 300 homes, cabins and commercial properties on the lake
- The lake is closed watershed basin with no outlet
- There have been increasing water levels for many years
- Water has risen over 7 feet since 1962
- Lake is now 2.2 feet over the Ordinary High-Water Level (OHWL)
- The rise in the water is caused by higher-than-normal precipitation and the lake having no natural outlet

# High Water Outlet Project - Background

- Routes have been analyzed for pumping water out of Lake Shamineau
- Engineers provided guidance on options with engineering and environmental analysis of alternatives
- West option through Ditch 41 was determined to be most feasible
- If left to naturally overflow in uncontrolled fashion, water from Lake Shamineau would flow downstream within watershed area of Ditch 41 and Long Prairie River
- Construction of Project will move water downstream in more controlled manner, water quality can be managed, and adverse impacts can be avoided



# High Water Outlet Project

August 2020 – Approval by LID Membership of High-Water Outlet project with 74% approval vote.

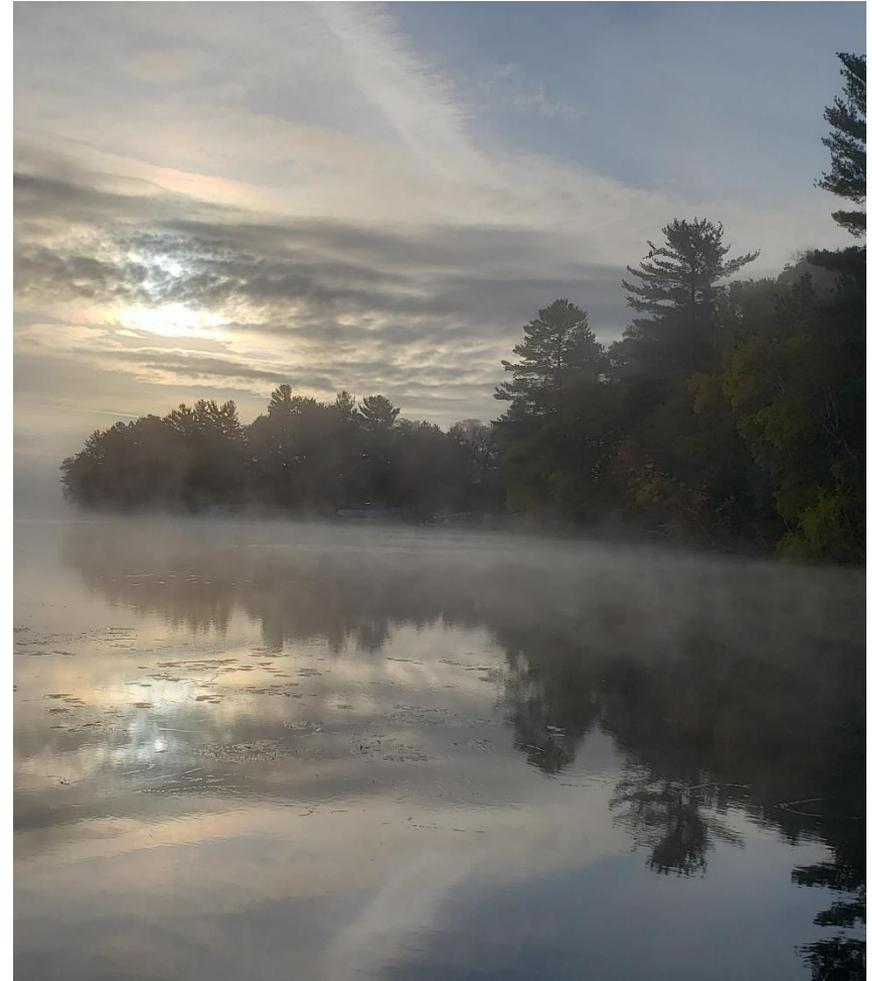
Board and Houston has Worked to complete design, route, wetland delineation, surveys, soil borings, groundwater monitoring

Meetings with DNR have been held regularly to provide updates and discuss technical details



# High Water Outlet Project

- Purpose of High-Water Project is to establish a maximum operating level
- Project includes the installation of a lake outlet structure and pumping station at the west end of the lake
- Water will then flow west, eventually to Ditch 41, flowing to the Long Prairie River (route will be reviewed later in presentation)
- The LSLID has worked closely with property owners along the route, including those along Todd Co. Ditch 41, to ensure our project is not detrimental to their property
- The LSLID has obtained agreements for easements with Morrison and Todd County property owners west of Highway 10; agreements from landowners near the lake in Morrison County are in process and close to completion.



# High Water Outlet Project Update

- ***There has been tremendous progress on the project!***
- Petition to utilize Ditch 41 in Todd County was approved on Oct. 13th
- An Operations and Maintenance plan has been developed and has been approved by the DNR.
- A wetland delineation has been completed and approved by agencies.
- Technical tasks including groundwater monitoring, soil borings, surveys, electrical design has been completed
- Environmental Assessment Worksheet was completed and approved on January 17, 2022
- ***Good News! In the last week we received approved permits from MN DOT and MN DNR.***



# High Water Outlet Project

- High-Water Outlet Project Cost Estimate, an explanation of Increased Costs, and Timeline has been included in mailing to Property Owners and will be discussed at the end of this meeting.
- The technical information regarding the High-Water Outlet Project will be presented next by Houston

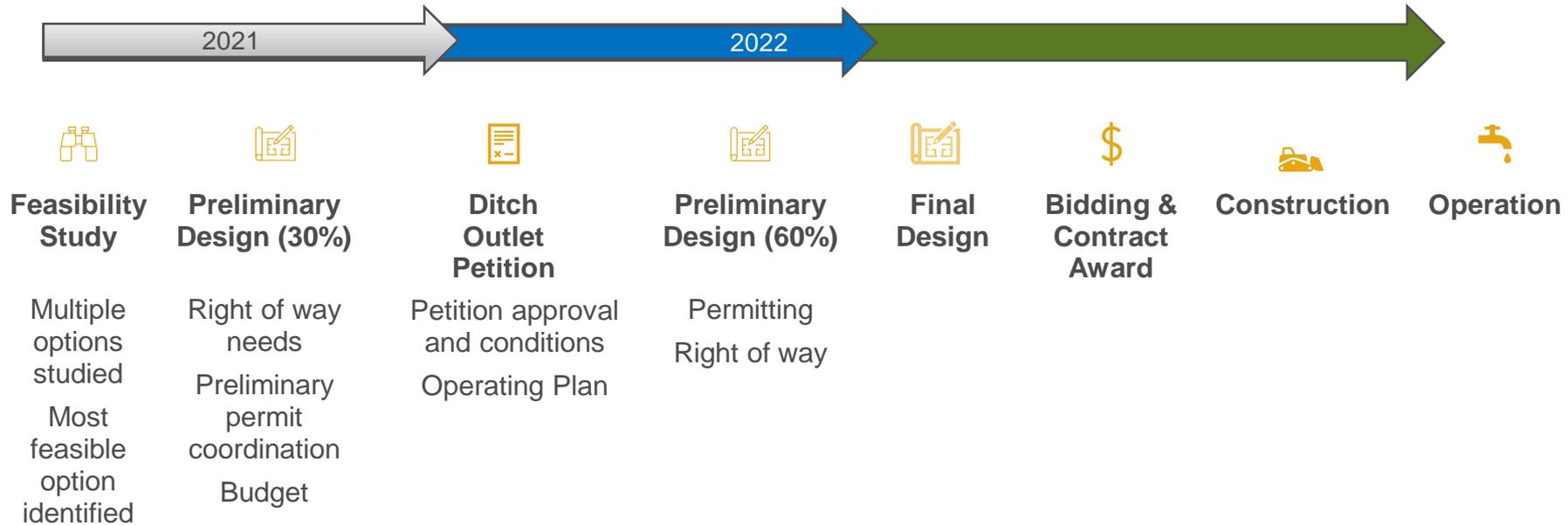
# Lake Shamaineau LID Informational Meeting

## Engineering Report:

Mike Opat, Project Manager  
Houston Engineering



## LSLID PROJECT OVERVIEW- APPROACH & TIMELINE





# LSLID PROJECT OVERVIEW

## Feasibility Studies

- Multiple options and routes were studied
- Outlet to TCD 41 is the most feasible

## Permit Coordination

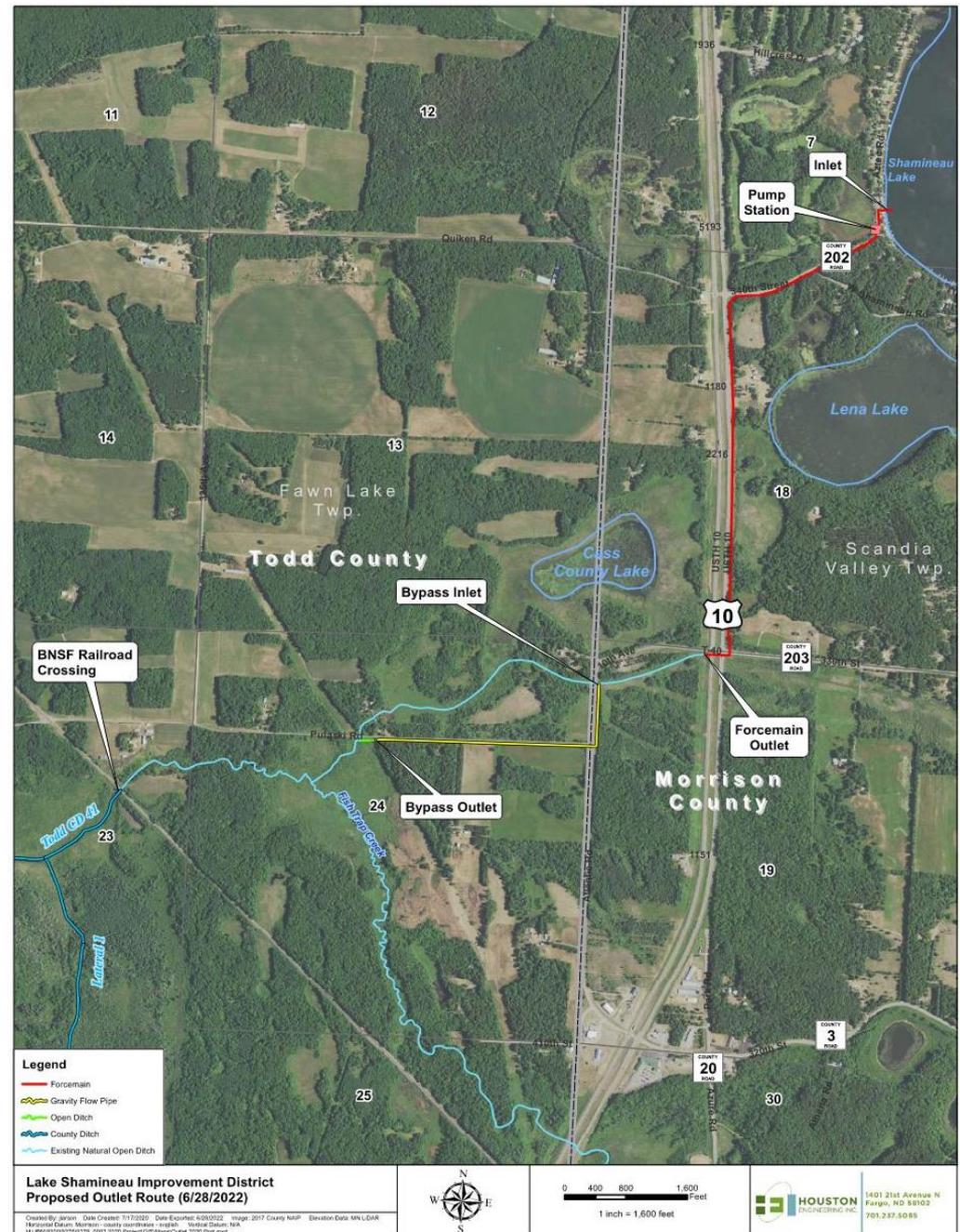
- **MnDOT:** Permit approved.
- **DNR:** Permit approved.
- **Morrison County:**
  - Zoning-
    - Pump station design conforms with zoning requirements
    - Formal application to be submitted after vote; quick review and approval anticipated.
  - Highway Department-
    - Will allow use of road of way, including road crossings
    - Permit review in progress; no issues anticipated.
- **Wetlands:**
  - Wetlands have been delineated and approved by Technical Evaluation Panel (TEP)
  - Wetland impacts and mitigation plan have been approved; wetland credits lined up
- **Townships:** All permits approved.

## Design

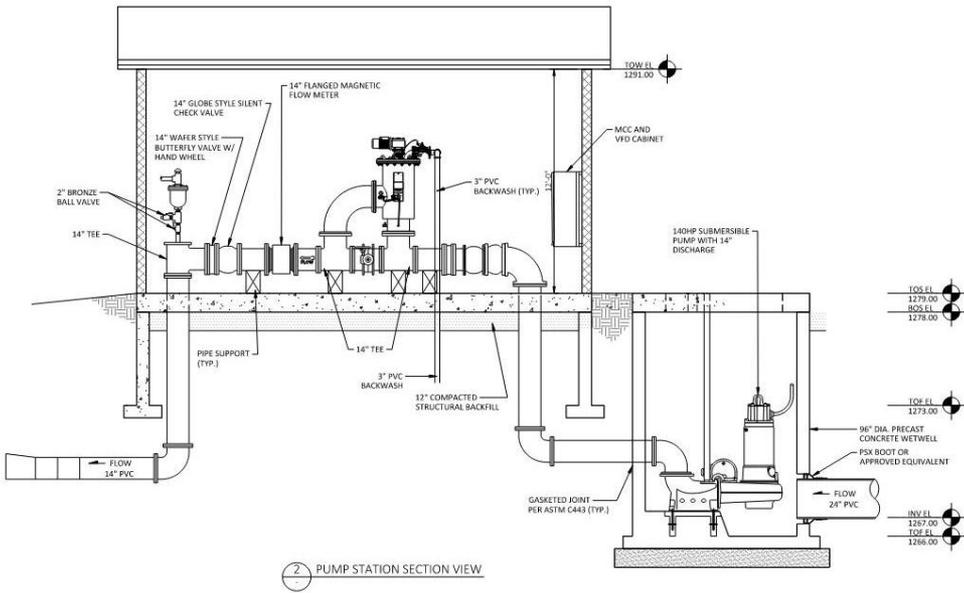
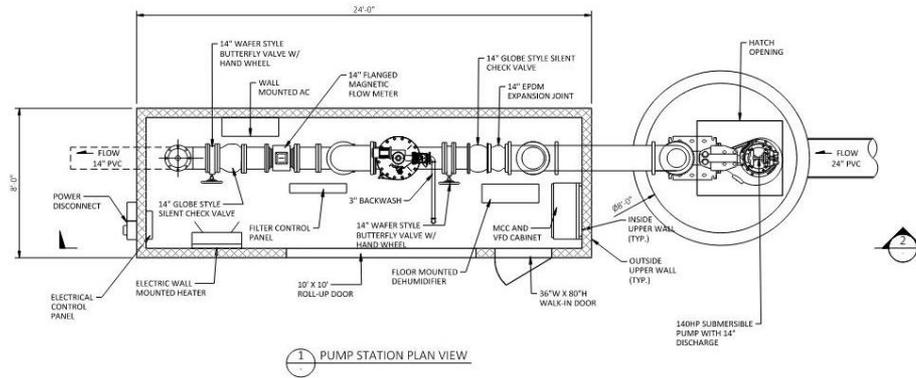
- Plans now at 60%+
- Updates were made to account for permitting requirements (MnDOT, DNR, Morrison County, wetlands, etc.)
- Final design to occur after vote

# LSLID PROJECT OVERVIEW

- Lake Intake
- Pump Station
  - Pump
  - AIS Filter
  - Building
- Forcemain (Pipe)
- Outlet
- Downstream
  - “Blue Line Ditch”
  - Bypass
  - Fisht Trap Creek/TCD 41



# PUMPSTATION SCHEMATIC



- NOTES:
- 24' X 8' TIMBER FRAME BUILDING WITH STEEL SIDING AND 3:1 PITCH ROOF WITH ASPHALT SHINGLES.
  - 10' X 10' ROLL-UP DOOR FOR FILTER SKID REMOVAL.
  - 8 - WET LOCATION, SURFACE MOUNTED LED LIGHTING FIXTURES.
  - 400A 277/480V 3 PHASE POWER SUPPLY.
  - VARIABLE SPEED PUMP OPERATION WITH USE OF FLOW METER, PRESSURE MEASUREMENTS, AND VARIABLE FREQUENCY DRIVE.



By	PRELIMINARY		Drawn by	Date	LAKE SHAMINEAU OUTLET PROJECT LAKE SHAMINEAU LAKE IMPROVEMENT DISTRICT MORRISON COUNTY	PUMP STATION PLAN & ELEVATION VIEW PROJECT NO. XXXX-XXX	SHEET M-1
			TRK	5-13-21			
			Checked by	Scale			
			MMO	AS SHOWN			

**HOUSTON**  
engineering, inc.

Drawn by  
TRK  
Date  
5-13-21  
Checked by  
MMO  
Scale  
AS SHOWN

LAKE SHAMINEAU OUTLET  
LAKE SHAMINEAU LAKE IMPROVEMENT DISTRICT  
MORRISON COUNTY

## OPERATING PLAN

### ■ What is it?

- The Operating Plan is a formal document that governs the operation of the LSLID High-Water Outlet project
  - States when pump can be turned on, including specific criteria for downstream properties
  - States when it must be turned off, including specific criteria for downstream properties
  - Specifies when and where downstream water flow conditions must be monitored, including specific locations along TCD 41
- The Operating Plan is a condition attached to the DNR permit for the project
- Operation is dependent upon downstream conditions, even if properties around the lake are flooding

## OPERATING PLAN

- Key Points:
  - LSLID will be required to monitor downstream conditions both prior to and while operating the pump.
  - Gauges/markers will be installed at key locations for the LSLID and the public to monitor
    - Primary & Secondary Gauges
  - Monitoring will occur more frequently as water levels approach critical elevations





# Estimated Project Costs

- Preliminary level design → Preliminary level cost estimate
  - Currently at ~60% level design
  - Estimates will be refined as level of design increases
  - Estimates include all anticipated costs; including construction, engineering, right-of-way, permitting, utilities, legal, administration, etc.
  - Focus on higher cost items (pumps, filters, etc.)
  - Estimates include a contingency in the budget to account for uncertainties involved with the concept level design and unknowns that might come up



# Estimated Project Costs

- The construction estimates are based on recent bids submitted by contractors on similar projects, and information from contractors and suppliers.
- A better picture of the actual cost of the LSLID project won't be known until the project is let for bids.
  - Actual costs could vary from estimates as market conditions, weather conditions, construction schedules, and other factors all impact the bids submitted by contractors.



# Estimated Project Costs

- Estimated Total Construction Phase Costs: \$4,300,000
  - Construction, right-of-way, legal, engineering, permitting, contingency, etc.
  - Included contingency amount: \$550,000
- Estimated cost has increased since August of 2020
  - Design Changes: Hwy 10 crossing (MnDOT), Bypass
  - Inflation:
    - Material prices (pipe, pumps, control panels, etc.)
    - Fuel
    - Labor



# Estimated Project Costs

- **Key Cost Factors:**
  - Dewatering: Required for intake installation, wet well construction, pipe installation; Costs will vary depending on contractor's desired means and methods, weather conditions, ice, etc; costs from similar LMKP LID project used
  - Filtration: Mechanical filter provides potential for resale if DNR determines filters are not required in the future; Eurasian watermilfoil
  - System Capacity: Costs currently reflect a 10 cfs system



LMKP Intake Installation (<https://www.lmkp-lid.com/>)



# Estimated Project Costs

- Key Cost Factors:
  - Forcemain: Pipe prices are often impacted by petroleum prices and other variables, so actual costs will depend on conditions at the time of the bid
  - Pump Station Building: Will house filtration system and controls; Building allows for year around operation and will provide added sound abatement; Pump will be underground in a concrete structure



# Estimated Project Costs

- Key Cost Factors:
  - Contingencies: The goal is to not spend any of the contingency funds. Any funds not spent would translate to a lower bond amount.
    - Including a contingency is good practice and mitigates delays and financial challenges
  - Value engineering has been ongoing and will be considered during future design phases to identify potential cost savings (dewatering, filtration, route, etc.)



## Other Considerations

- Lead Times for Materials:
  - PVC pipe → +/- 30 weeks
  - Pump → +/- 14 weeks
- Schedule:
  - Construction timeline selected by LSLID will impact bids
    - Timeline including frozen conditions may allow contractors to work through ice for lake intake and trench through frozen wetlands → lower bids
    - Longer timeline may allow contractors to factor in lower material, fuel and labor costs



## Next Steps

- After annual meeting:
  - Continued stakeholder outreach
  - Finalize permitting
  - Finalize right of way acquisition
  - Final design
  - Bidding
  - Construction

# High Water Outlet Project

## New Cost Estimate included with Vote 4

Do you approve of an increase in the local cost to Construct High-Water Outlet from \$3,350,000 to \$5,550,000 if State funding is not secured to be sufficient to complete the project? A “Yes” vote means that you approve of an increase to the local cost of the High-Water Project. A “No” vote means that you want the local cost of the Project to be capped at its previously approved amount of \$3,350,000 which will result in an indefinite delay in the project until State or other funding will be available.

The increased cost to construct a High-Water Outlet includes:

- |   |                |
|---|----------------|
| • Project Construction based on Engineer’s opinion of probable cost | 4,300,000      |
| • Engineering   | 250,000        |
| • Land Rights (including easements and outlet fee)                  | 250,000        |
| • Administrative, fiscal, legal                                     | 150,000        |
| • Other (utility relocations, electrical service, wetland credits)  | 50,000         |
| • Contingency (at 11%) (to be charged only if needed)               | <u>550,000</u> |

**Total High-Water Outlet Project Budget**

**\$5,550,000**

# High-Water Outlet Project

## West-Outlet Project Budget

- The 2021 Budget included a Vote 4 at a cost of \$3,350,000 to establish a project to construct a High-Water Outlet. This budget item was approved in August 2020 with 74% voting in favor of the budget question.
- Project costs have since increased and detail of the increases are included on page 5 of the letter to Property Owners dated August 3, 2022 and will be on the next slides.
- The LSLID Board is working with legislators for funding for the project from State bonding. If State funding is received, it will be utilized to reduce the local cost to the Lake Shamaineau property owners.

# Cost Increases for High Water Project

- The increase in project costs is in large part due to inflation with rising costs of materials and labor due to the COVID pandemic and rising fuel costs. The project requires over 2 linear miles of pipe and the increase in the price of oil has resulted in substantial increases in the price of the required pipe because the resin required to produce the pipe is petroleum based. More pipe is needed for the project due to design changes required by agencies.
- The cost of the pump and control panels has increased. There is an increased demand on these types of materials and supplies due the number of projects around the country.
- Additional reviews by the DNR, MN DOT, townships, Soil and Water, etc. has required additional design changes to the lake inlet, a new piping requirement under Highway 10, design changes for road right of way, design changes to avoid wetland areas and the acquisition of wetland credits.

## Cost Increases for High Water Project, cont.

Cost increase information has been included in the Letter to Property Owners that will be mailed on August 3<sup>rd</sup>.

The original cost estimate included a contingency for unanticipated costs. The revised estimate includes an increase in the contingency to accommodate the rapidly increasing prices of materials and labor.

Other Considerations: There is currently a 30-week lead time on PVC pipe and a 14-week lead time for pumps. Houston will continue to research options and cost savings. Lead times can be mitigated if the LSLID acquires materials and supplies as funding is available, perhaps even prior to the bidding process.

## High Water Outlet Timeline

The chart provides an estimated timeline for project completion.

Note that the dates are estimated and the final timeline for construction will depend the timing of the approval of the funding (Votes 3 and 4 and/or State Funding), completion of agency permitting, and lead times for construction materials.

	Project Task	Description	Est. Completion Period
<b>1</b>	Receive Positive Votes on Vote 3 and 4	Finalize local LID and state funding	September 2022
<b>2</b>	Finalize approvals	Finalize approvals from all agencies	November 2022
<b>3</b>	Detail Design, Right of Way	Plans, bid and contract documents	December 2022
<b>4</b>	429 Hearing	Hold 429 Hearing for Project Approval	December 2022
<b>5</b>	Bidding	Issue bidding docs and select contractor	February 2023
<b>6</b>	Financing	Finalize financing for construction	Winter 2023
<b>7</b>	Construction	Start construction of West Outlet	Spring/Summer 2023
<b>8</b>	Pumping Begins	Testing and Pumping	TBD
<b>9</b>	Bonding	Issue Bonding for financing	TBD

## High-Water Outlet Project

### Answers to Commonly Asked Questions:

### How much has the water elevation changed?

According to the DNR elevation readings, since the Fall of 2021, the lake has risen .71 feet or 8.5 inches

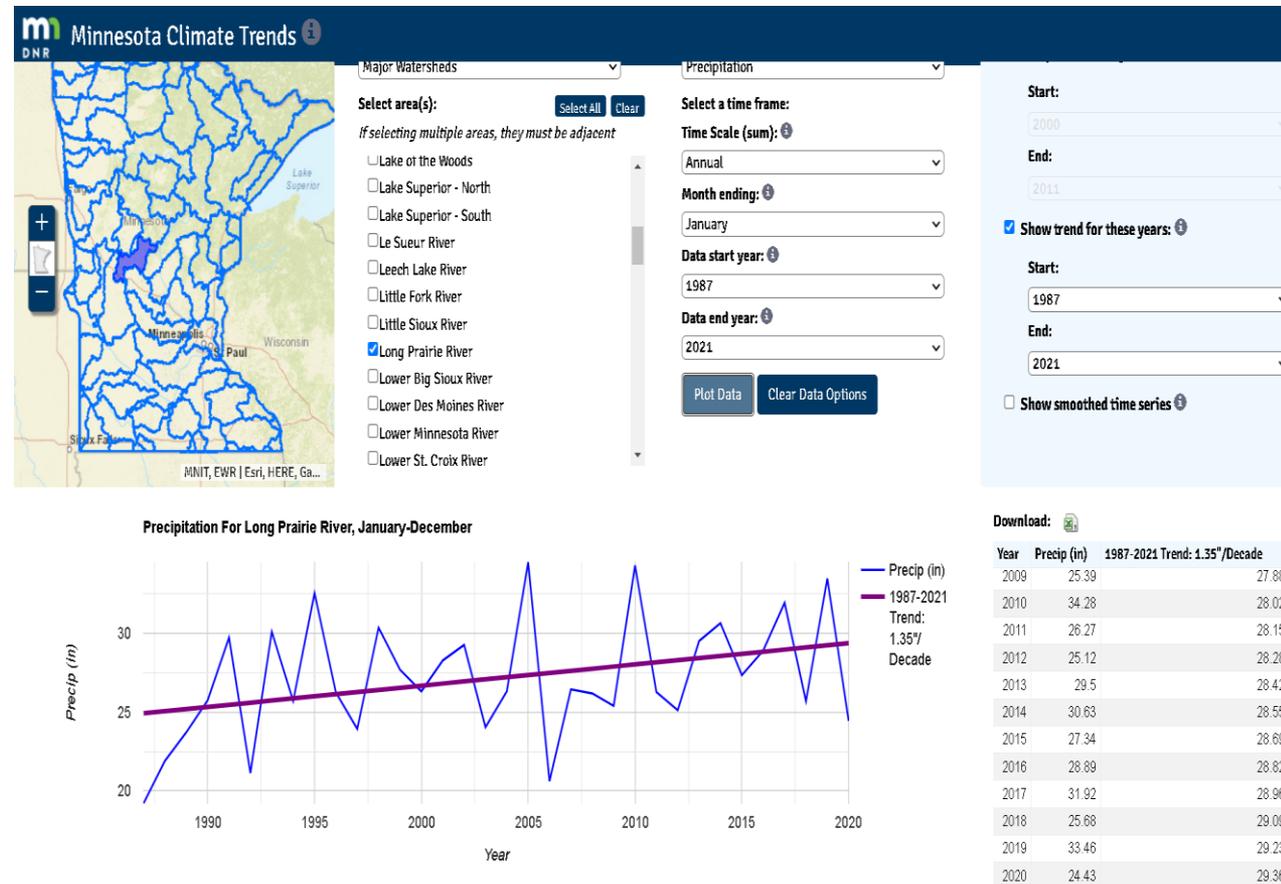
<b>Lake Shamineau</b>			
<b>Elevation Readings (data from MN DNR)</b>			
<b>Date</b>	<b>Elevation</b>	<b>Feet Above</b>	
		<b>OHW</b>	<b>Notable Events</b>
9/6/1962	1270.55	-4.55	<i>Lowest Recorded Reading</i>
4/24/2017	1276.09	0.99	
7/11/2017	1275.92	0.82	
8/26/2017	1276.28	1.18	Positive Vote for High-Water Project
10/14/2017	1276.38	1.28	
5/13/2018	1276.51	1.41	
7/1/2018	1276.87	1.77	
8/23/2018	1276.37	1.27	Positive Vote for High-Water Project
10/5/2018	1276.09	0.99	
5/21/2019	1276.84	1.74	
7/1/2019	1277.13	2.03	
8/31/2019	1276.82	1.72	Positive Vote for High-Water Project
10/6/2019	1277.52	2.42	
5/26/2020	1278.08	2.98	<i>Highest Recorded Lake Level</i>
7/21/2020	1277.96	2.86	
8/30/2020	1277.76	2.66	Positive Vote for High-Water Project
9/20/2020	1277.52	2.42	
4/14/2021	1277.55	2.45	
8/26/2021	1276.44	1.34	Positive Vote for High-Water Project
10/16/2021	1276.61	1.51	
5/24/2022	1277.20	2.10	
7/15/2022	1277.32	2.22	
OHW = Ordinary High Water		The OHW Level for Lake Shamineau is 1275.10	

# High-Water Outlet Project

## Answers to Commonly Asked Questions:

### What are the climate trends that may be affecting lake levels?

According to the DNR, “Heavy rains are now more common in Minnesota and more intense than at any time on record. Long-term observation sites have seen dramatic increases in 1-inch rains, 3-inch rains, and the size of the heaviest rainfall of the year.....Climate projections indicate these big rains will continue increasing into the future.”



# High Water Project

## Answers to Commonly Asked Questions

How much has been spent on Engineering Costs to Date?

Firm	Time Period	Project	Expense	DNR Reimb.	Net Expense
Houston	2017-2018	Initial West Outlet Plan	\$42,573		\$42,573
WSN	2019-2020	Infiltration Plan	\$198,700	\$65,000	\$133,700
Houston	2020-2021	Current West Outlet Project	\$191,257	\$52,000	\$139,257
Houston	2021-2022	Current West Outlet Project	\$190,562		\$190,562
<b>Total</b>			<b>\$623,092</b>	<b>\$117,000</b>	<b>\$506,092</b>

Note – Information and data from the first west outlet project and the infiltration project has been re-used in the current High-Water West Outlet Project.

# High Water Outlet Project

## Answers to Commonly Asked Questions

### Why is the project taking so long?

- It has taken time to complete the agreements with landowners for easements, with additional changes required to the technical design and route plan.
- The petition process with Todd County took longer than expected.
- Additional reviews by the DNR, MN DOT, Soil and Water agencies, townships and Morrison County has required additional design changes to the lake inlet, a new piping requirement under Highway 10, design changes for road right of way, design changes to avoid wetland areas, etc
- The LSLID Board worked with legislators for funding for the project from State bonding but unfortunately since bonding has not yet been approved, additional approval to increase local funding of the project will be needed.

## Other Commonly Asked Questions

**There have been large bogs floating in the lake. Can the LID do anything to help?**

The LID Board understands that the high water has caused more large bogs to be floating around the lake. The LID Board is working with the Lake Association and Property Owners to determine how we may be able to assist with the removal or relocation of very large bogs.



# Answers to Commonly Asked Questions

- **I heard that the State has stopped the project. Is this true?**

No. The MN DNR and the MN DOT have recently approved the required permits for the project.

- **When the permits are received, will they be posted?**

The permits will be posted as required by the permitting agencies.

- **Where can I find more information on the project?**

The *NEW* LID website includes information regarding engineering reports, financial information, and other information that may be of interest to property owners.

Website: <https://LakeShamaineauLID.org>

# Lake Shamineau LID Informational Meeting

## Questions and Comments

- Use the Chat feature to indicate that you have a question or comment, *OR* let the Board Member at Scandia Valley Town Hall know that you have a question or comment
- Wait for Chair to recognize you
- State your Name and Lake Address to the audience
- Lake Owners will have priority for questions/comments
- Be concise and respectful
- ***Please limit your time to 2 minutes or less***

# LSLID Informational Meeting

## Next Steps

- A link to the recording of today's meeting and the presentation will be posted to the website
- Voting Materials Mailed on August 3rd
- **Annual Meeting on August 27<sup>th</sup> at 9:00 AM – Meeting will be online with viewing at Scandia Valley Town Hall**
- **Voting open from August 3<sup>rd</sup> to August 31st**
- **Questions:** Send email to [LSLIDBD@gmail.com](mailto:LSLIDBD@gmail.com) or visit website: [LakeShamaineauLID.org](http://LakeShamaineauLID.org)

# MEETING CONCLUSION