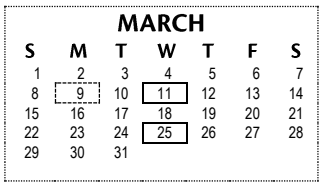
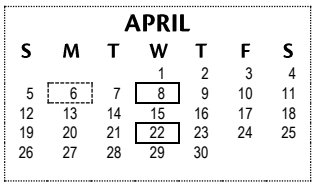
RCWD
RICE CREEK WATERSHED DISTRICT





RCWD BOARD OF MANAGERS WORKSHOP

Monday, March 9, 2026, 9:00 a.m.

Rice Creek Watershed District Conference Room
4325 Pheasant Ridge Drive NE, Suite 611, Blaine, Minnesota
Virtual Monitoring via Zoom Webinar

Join Zoom Webinar:
https://us06web.zoom.us/j/89025871688?pwd=AeeM0X2DAaYbN2amkqfOtjOalnUHM1.1
Passcode: 874272
+1 312 626 6799 US (Chicago)
Webinar ID: 890 2587 1688
Passcode: 874272

Agenda

ITEMS FOR DISCUSSION

- 2025 Public Drainage System and Facilities: Inspection, Maintenance, & Recommendations Report
- Anoka County Ditch 10-22-32 Repair Alternative #4 Municipal / County Engagement
- RCD 2, 3, 5 – Update and Flood Impact Simulation Task Order

Administrator Updates (If Any)

2025 Public Drainage System and Facilities: Inspection, Maintenance, & Recommendations Report

MEMORANDUM
Rice Creek Watershed District

Date: March 4, 2026
To: RCWD Board of Managers
From: Tom Schmidt, Public Drainage & Facilities Manager
Subject: 2025 Public Drainage System and Facilities: Inspection, Maintenance, & Recommendations Report

Introduction

Annually, District staff present to the Board a review of the program's completed work, the current year's recommended inspection, maintenance, and repair activities, and a forecast of the upcoming year's program and budgetary needs.

Background

As the Public Drainage Authority, Rice Creek Watershed District (District) is responsible for inspecting and maintaining the public drainage systems (Systems) within its boundary. Staff report to the Board on the past year's activities and program plans. There are 114 miles of Systems across 16 cities.

State statute 103E.705 subd. 1. states that all open drainage ditches shall be inspected by the "Public Drainage Inspector" at a minimum of once every five years. Based on this requirement, an annual schedule is in place to track inspections. This inspection frequency is routinely exceeded, with staff completing many more inspections than scheduled. The inspections serve as the basis for the planned maintenance projects. For minor maintenance, planned projects are subject to change pending weather, site conditions, contractor availability, budget, and reprioritization. Additionally, the District Engineer and the Drainage and Facilities Manager track long-term priorities for large-scale repairs and present these recommendations to the Board each year to define the work plan for the following year. The Board has traditionally undertaken one major repair per year. The most recent system completed using this traditional approach is Branches 5 and 6 of Anoka County Ditch 53-62 (ACD 53-62). Construction is now substantially complete. Staff are forecasting a moderate increase in next year's budget following a 30% increase for 2026, to address anticipated Systems inspection and maintenance needs. However, this is subject to change pending this year's Inspections and prioritization.

The District Facilities (Facilities) program consists of operating and maintaining water management structures and property constructed and/or owned by the District. The District is responsible for 31 facilities. Staff implement inspection, operation, and maintenance for each facility. (Maintaining facilities may also be an obligation under initial funding, grants, establishing the facility.) In addition to grant obligations, systematic facility management protects the public's investment in the facility to improve water quality and/or mitigate floods. Additionally, staff continue to evaluate the District Facilities to ensure they continue to fulfill the District's Watershed Management Plan (WMP) and will make recommendations to the Board as needed for additional facilities or decommissioning those no longer addressing District goals. Staff forecast a moderate increase (to account for inflation) in the overall facilities inspection operation and maintenance budget. This follows an 84% increase for 2026 to address ongoing vegetation maintenance and unforeseen repairs.

Attachments

- 2025 Drainage Inspection Report
- Summary of public drainage system status_2026-02-219

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RICE CREEK WATERSHED DISTRICT

PUBLIC DRAINAGE SYSTEM AND DISTRICT FACILITIES INSPECTION AND MAINTENANCE REPORT

2025

Tom Schmidt
RCWD Drainage & Facilities Manager/Public Drainage Inspector

Rice Creek Watershed District

Public Drainage and District Facilities

2025 INSPECTION AND MAINTENANCE REPORT

The Rice Creek Watershed District, as the Drainage Authority for all public drainage systems within its boundaries, is required under state statute to inspect those systems. This report fulfills that requirement and provides the RCWD Board of Managers with a concise summary of the previous year's drainage system District facilities program activities. The contents of this report will be used to inform the upcoming year's maintenance activities and to provide for a predictable and orderly program of inspection and maintenance of the District's drainage assets and District Facilities.

In 2025, 60 inspections on 16 of the 22 systems were completed. 45 Maintenance projects on 15 systems were completed. Of the $345,000.00 allocated to Ditch Maintenance (fund 80-02), at year's end, there was only a remaining balance of $18,000 which staff feel represent a lot of completed minor maintenance work and accurate budget forecasting. This report includes examples of work completed in 2025 and a list of planned maintenance projects for 2026. Climatically, 2025 in the Twin Cities was marked by significant extremes, finishing as a warm year (approx. 1.5°F above average) with generally dry conditions, ending with about 2 inches below-average total precipitation. with notable, intense rainfall in late spring and summer. These conditions were generally favorable for construction. Still, several planned maintenance projects scheduled for spring/early summer could not be rescheduled for autumn and will carry over to 2026.

Any questions or comments regarding the content of this report can be submitted to:

Tom Schmidt
Drainage & Facilities Manager/Public Drainage Inspector
Rice Creek Watershed District
4325 Pheasant Ridge Dr. NE, Suite #611
Blaine, MN. 55449
763-398-3076
tschmidt@ricecreek.org

RCWD Drainage System Inspection Schedule

			Inspection Type	X	- repair completed or scheduled	
			Level1		- Level 2 and 3 inspections completed	
2025			Level2			
			Level 3			
			X in box means completed			
Drainage System	**Branch**	**System Type**	**Inspection Priority**	**2023**	**2024**	**2025**
ACD 10-22-32	Main Trunk	Open Channel	High	X	X	
	Branch 1	Open Channel		X		
	Branch 1a	Open Channel				
	Branch 2	Open Channel		X		
	Branch 3	Open Channel		X		
	Branch 4	Open Channel		X		
	Branch 4a	Open Channel				
ACD 15		Open Channel			X	
ACD 25		Open Channel				X
ACD 31	Main Trunk and Branch 2	Open Channel	High	X	X	X
	Remaining Branches	Open Channel				
ACD 46	Main Trunk and Branch 3	Open Channel	High	X	X	X
	Remaining Branches	Open Channel				
ACD 53-62	Main Trunk	Open Channel	High	X	X	X
	Branch 1	Open Channel	High	X		X
	Branch 2	Open Channel		X		
	Branch 3	Open Channel				
	Branch 4	Open Channel				
	Branch 5	Open Channel				
	Branch 5 Lateral 1	Open Channel				X
	Branch 5 Lateral 2	Open Channel				X
	Branch 6	Open Channel				X
ACD 55		Tile		X	X	X
ACD 72		Tile		X	X	X
ARJD 1	Main Trunk	Open Channel	High	X	X	X
	Branch 1	Open Channel		X		
	Branch 2	Open Channel	High	X		X
	Branch 3	Open Channel		X		
	Branch 4	Storm Sewer				
	Branch 5	Open Channel		X		
AWJD 3	Main Trunk and Branch 3	Open Channel	High	X	X	X
	Remaining Branches	Open Channel			X	
JD 4	Main Trunk	Open Channel	High	X	X	X
	Main Trunk	Tile			X	
	Branch 2	Open Channel				
	Branch 3	Tile		X	X	
	Branch 4	Tile Outlet			X	
RCD 1	Main Trunk	Open Channel				X
RCD 2		Open Channel	High	X	X	
		Storm Sewer			X	
RCD 3		Storm Sewer outlet only			X	X
RCD 5		Open Channel				
		Storm Sewer				
RCD 4		Open Channel			X	
		Storm Sewer			X	
RCD 8		Open Channel				
RCD 11	Main Trunk	Open Channel				
RWJD 1	Main Trunk	Open Channel				
WJD 2	Main Trunk	Open Channel	High	X	X	
	Branch 1	Open Channel				
	Branch 2	Open Channel				
	Branch 3	Open Channel				
	Branch 4	Open Channel				
WJD 5		Tile		X		
WJD 7		Tile		X		

Level

Level 1 inspection

- View from road crossings, and at known problem areas.
- Schedule: Every year (high priority), every five years (normal priority), or in response to complaint.

Level

Level 2 inspection

- Aerial drone survey or walking survey.
- Schedule: Every 5 years (high priority), every ten years (normal priority), or one year following a major repair.

Level

Level 3 inspection

- Full survey of ditch (200' spacing on centerline, cross-sections at 1000 foot spacing).
- Schedule: Prior to a major repair (Repair Report); every 10 years following a major repair.

Examples of site conditions discovered during Inspections

WJD 2
Hugo

Left: Foot bridge holding debris north of County Road 4A West of Fenway Ave. In Hugo, before removal

Below Left: Unpermitted Bridge Downstream from CountyRd4East of Henna Ave.

AWJD 4
Forest Lake

Left: Excavation Branch # 2 Between City bike path and Main trunk.

Below: Surface Intake and private tile connection. repair On Branch #3, Lateral #1

ACD 10-22-32
Lino Lakes

Left: Branch #4 excavation between Andal Street and Pine Street.

Below: Before and after Replacement of the existing failing private crossing culvert at Robinson Landscaping. upstream of Carl Street, now a District crossing.

2026 Planned Drainage System Maintenance Projects*

***(SUBJECT TO CHANGE)**

ACD 53-62

A. Branch 1 excavation east of Lexington Ave to Main Street (2025 carryover).
B. Branch 1 Lat.1 Excavation 109thAve. to Lochness Lake Public Waters Wetland (DNR permit may be required).
C. Branch2 Mowing and excavation, Devine Lateral to Main trunk.

AWJD#3

- A –Branch #3 brush mowing/spraying.
- B – Branch # 4 Bank stabilization, culvert relocation.

AWJD 4

- Main Trunk, Excavation,35E to 35W.
- Excavation Branch # 4 Elmcrest to35W.

ACD 10-22-32

- Branch # 4 from 4th Ave. to Pine Street, brush mowing and channel excavation.
- Branch #2 from Black Duck at the stormwater pond. To Main Trunk Brush mowing and excavation as needed.

ACD 25

- Branch #1, Tree/brush removal and excavation, Holly Drive to the main trunk.

RCD 8

- Tree/ Brush mowing plus excavation as needed. County road J to Baldwin Lake road.

RCD 11

- Tree/ Brush removal, Bald Eagle IESF to Park Ave.

WJD 7

- Main trunk replacement of existing clay tile with HDPE north of 190th St N.

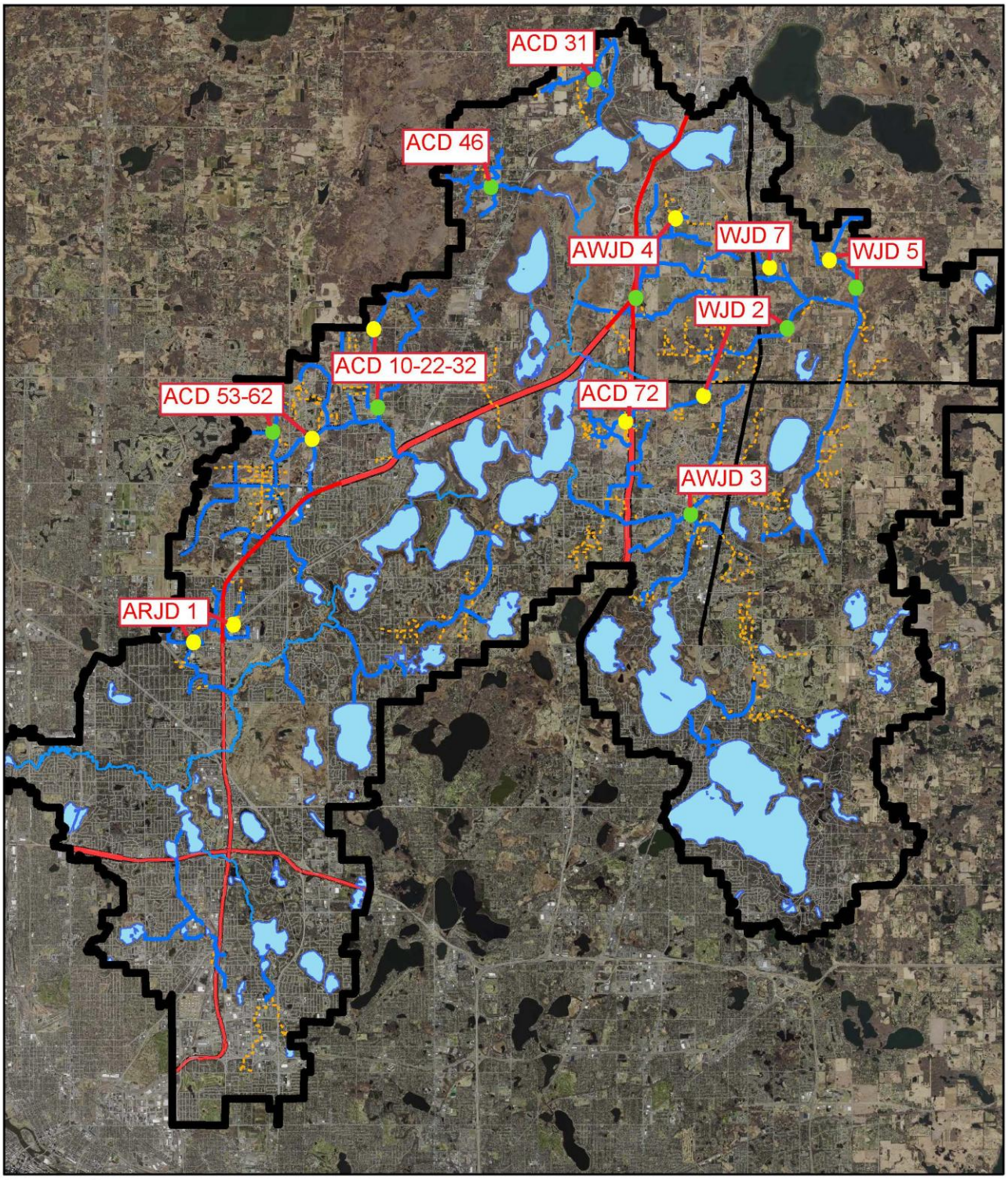
AWJD 4

- Main Trunk 35E to 35W.

WJD 2

- Main Trunk
  A. From County Rd 4 to 165th Started January. complete
  B. From HWY 61 east to Harrow Ave.
  C. Bank slough repair east of Harrow Ave. (GREGOIRE Property. complete
  D. Rehbein's crossing to County Rd 4.
- Branch #2
  A. Tree/ Brush mowing plus excavation as needed, upstream and downstream from Washington County Rd 8

2026 Recommended Maintenance



Legend

- Public Watercourse
- Public Ditch
- Private Constructed Channel
- Private Natural Waterway
- Recommended Maintenance
- Right-of-way Maintenance

2027 Forecast

For 2026, Staff recommended a 30% increase in the Public Drainage maintenance budget ($260,000 to $338,000). The increase reflected the ever-increasing maintenance pressure on the systems and increasing costs (inflation) and was equal to the 2025 amount plus any remaining funds expended in 2025. It is anticipated that the 2027 budget recommendation will remain relatively flat, with a likely moderate increase to account for inflation. This will allow staff to complete planned projects. Staff anticipates an equal number of planned projects for 2027 while maintaining flexibility to address the inevitable crises that arise each year.

ACD55 Main trunk Lino Lakes. Drain tile reinstallation and flotation prevention.

District Facilities
2025

In 2025, 22 inspections were completed, representing all scheduled Facility inspections for the year. Maintenance was performed on 15 facilities. This report includes examples of work completed in 2025 and a list of planned maintenance projects. As well as the District Facilities inspection schedule.

2027 Forecast

For 2026, the staff recommended an 84% increase in the District Facilities' inspection, operation, and maintenance (95-04) ($120,000 to $142,750). The increase reflected the ever-increasing maintenance demands of the iron-enhanced sand filters, aging infrastructure, and increasing costs (inflation). It is anticipated that the 2027 budget recommendation will remain steady, with a likely moderate increase to account for inflation.

Lower Rice Creek stabilization project, District Facility Maintenance, in Fridley. Summer of 2025

Above left: Hansen Park IESF Valve Vault before sump pump Installation

Above right: Hansen Park IESF Valve Vault after sump pump installation.

RCWD DISTRICT FACILITIES INSPECTION, MAINTENANCE & REPAIR SCHEDULE
2025

DISTRICT FACILITY NAME		INSPECTION		MAINTENANCE/REPAIR	
DISTRICT OWNED STRUCTURES	**(Facility ID)**	2025 PERFORMED	YEAR PLANNED	YEAR LAST PERFORMED	YEAR PLANNED
E2 Wetland Weir (Operable)	**AH-11**	**X**	**Annual**	**2019**	**2026**
North E2 Wetland Weir (2)	**AH-11**	**X**	**Annual**		
New Brighton FSC Weir (35W SW Quadrant)	**NB-10**	**X**	**Annual**		
Lake Johanna Outlet (Operable)	**AH-12**	**X**	**Annual**	**2020**	**2026**
Oasis Pond Weir	**RV-18**	**X**	**Annual**	**2010**	
Oasis Sediment Basin	**Rv-18**		**2026**	**2011**	
Long Lake Sedimentation Basin	**NB-8**		**As needed**	**2012**	
Locke Lake Sedimentation Basin	**FD-7**		**As needed**		
Jones Lake Outlet Weir	**NB-9**	**X**	**Annual**		
RWJD #1 Fish Barrier	**WBT-16**	**X**	**Annual**		**2026**
Hwy 61 Treatment pond/Skimmer	**WBT-15**		**As needed**		
Priebe Lake Outfall	**WB-134**	**X**	**Annual**	**2020**	**2026**
Hall's Marsh Outlet Structure	**MM-17**	**X**	**As needed**	**2017**	
Long Lake (Hugo) Outlet Structure	**N/A**		**As needed**		
82-201w Repair Weir	**N/A**	**X**	**As needed**		
82-201w Outlet	**N/A**	**X**	**As needed**	**2009**	
82-205w Outlet	**N/A**	**X**	**As needed**	**2009**	
Rondeau Fish Barrier (Operable)	**LL-3**	**X**	**Annual**	**2019**	**2026**
DISTRICT EASEMENTS/PROPERTY					
Walls Brothers Wetland Banking Easement		**X**	**Annual**	**2025**	**2026**
Malmstrom Conservation Easement (WJD #2)			**As needed**		
Eagle Brook Church (Lino Lakes) Easement			**As needed**		
Bredahl Conservation Easement (WJD #2)			**As needed**		
Rice Creek Corridor Conservation Easement			**As needed**		
Brown's Preserve Wetland Bank Site (OWNED)		**X**	**Annual**	**2025**	**2026**
Lamprey Pass Green Way (OWNED)		**X**	**Annual**	**2025**	**2026**

Lake Johnna Outlet Summer 2025.

Regional conveyance Drainageway Maintenance through RCWD-owned Lamprey Pass property in Forest Lake

Brown's preserve wetland bank easement center channel/formerAWJD#4 main trunk current ACD#15 outlet channel, before maintenance summer 2025, in Columbus, looking south (downstream).

Brown's preserve wetland bank easement center channel/formerAWJD#4 main trunk current ACD# 15 outlet channel, during maintenance summer 2025, in Columbus, looking south (downstream).

2026 Planned District Facilities Maintenance/RepairProjects*

***(SUBJECT TO CHANGE)**

- Lake Johanna Outlet Structure
  - Complete structure replacement.

- Brown's Preserve
  - Finish 2025 Channel Excavation.
  - Drone applied Cattail control in center channel.
  - Prescribed Burn.
  - Tree cutting/Spraying.
  - Mechanical de-thatch if needed after the burn.
- E2 wetland Water Control Structure
  - Remove Low head crossing down stream of the Structure and add additional Rip Rap to buttress the sheet pile wall.

- Walls /Taylor Wetland Bank
  - Prescribed Burn.
  - Tree cutting/Spraying.
  - Annual Mowing
  - Mechanical de-thatch iif needed after the burn.

REPAIR STATUS OF RCWD PUBLIC DRAINAGE SYSTEMS

Updated 2/19/2026

Drainage System	Approx. Location	Probable Method for Future Repair	Primary Type of System	Detailed ACSIC Review	Correct Drainage System Record	Repair Report	Construction of Repair	On Going Maintenance	Next Steps
A/R JD 1, Br. 1, 2 & 3	Blaine	Repair / Minor Maintenance	Open Channel	2013	2014	2025-2026	**2027-2028**		Repair report/public info meeting
A/R JD 1, Br. 4 & 5	Blaine / M. V.	Minor Maintenance	Open Channel	2013	2014	2015 (Branch 4 only)	**2016 (Br4); 2019(Br 5)**		Routine inspection/maintenance
A/R JD 1, MT	Blaine / M. V.	Minor Maintenance	Open Channel	2013	2014				Routine inspection/maintenance
A/W JD 3, Br. 1, 2 & 4	Hugo / Lino Lakes	Minor Maintenance	Open Channel	2015	2015	2018/2022	**2023-2024**		Routine inspection/maintenance
A/W JD 3, Lower MT	Hugo / Lino Lakes	Repair / Minor Maintenance	Open Channel	2015	2015	2023-2024	**2026-2028**		Repair report; **Investigate outside funding options**
A/W JD 3, Upper MT & Br. 3	Hugo / Lino Lakes	Minor Maintenance	Open Channel	2015	2015	2018	2020		Routine inspection/maintenance
ACD 10-22-32	Lino Lakes / Columbus	Minor Maintenance	Open Channel	*(Functional grade)*	2010**/2022**	2010	2013		Stakeholder engagement on area upstream of Jodrell
ACD 15 / JD 4	Forest Lake/ Columbus	Minor Maintenance	Open Channel/Tile	2008		2009	2012		
ACD 25	Lino Lakes	Minor Maintenance	Open Channel	2022	2022				Routine inspection/maintenance
ACD 31	Columbus	Minor Maintenance	Open Channel	2009/2014	2015	2015	2016-2017		Work on lowering of pipeline; continued follow-up maintenance
ACD 46	Columbus	Minor Maintenance	Open Channel	2009/2014	2015	2015	2016-2017		Continued follow-up maintenance
ACD 53-62 Branch 1	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012	2013	2014-2015		Continued follow-up maintenance
ACD 53-62 Branch 2	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012	2016	2017		Continued follow-up maintenance
ACD 53-62 Branch 5	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012	2023-2024	**2025-2026**		Continued follow-up maintenance
ACD 53-62 Branch 6	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012	2023-2024	**2025-2026**		Continued follow-up maintenance
ACD 53-62 Lower MT	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012	2020	2022-3		Continued follow-up maintenance
ACD 53-62 Upper MT	Blaine / Circle Pines	Minor Maintenance	Open Channel	2014	2012				
ACD 55	Lino Lakes / Centerville	Minor Maintenance	Tile	2012	2013	2014			Tile to be abandoned/realigned/ trasferred as development occurs
ACD 72	Lino Lakes	Minor Maintenance	Tile	2013	2014	2014			Tile partially abandoned as development occurs
R/W JD 1	White Bear Twp.	Repair / Minor Maintenance	Open Channel	2020	2021	2026-2027	2028		Complete repair report
RCD 1	Shoreview	Minor Maintenance	Open Channel	2023	2024-2025				
RCD 11	Dellwood / W.B. Twp.	Minor Maintenance	Open Channel	2019	2020				
RCD 2, 3, 5	N.B. / St. Anthony	Minor Maintenance	Open Channel / Storm Sewer	2013	2018				Complete Jones Lake project petition process
RCD 4	Roseville/ Arden Hills	Minor Maintenance	Open Channel	2017	2020	2023	2024-2025		Continued follow-up maintenance
RCD 8	Shoreview	Minor Maintenance	Open Channel	**2021**	**2022**				
W JD 2 Branch 1	Hugo / Forest Lake	Minor Maintenance	Open Channel	2001		2017	2019		Continued follow-up maintenance and inspection
W JD 2 Branch 2	Hugo / Forest Lake	Minor Maintenance	Open Channel	2001		2017	2021		Continued follow-up maintenance and inspection
W JD 2 Main Trunk	Hugo / Forest Lake	Minor Maintenance	Open Channel	2001					Continued inspection and maintenance
W JD 5	Forest Lake	Minor Maintenance	Tile	2014	**2016**	2020	2021-2024		
W JD 7	Forest Lake	Minor Maintenance	Tile	2014	**2016**				Continue to replace segments of tiles as blow-outs occur

Legend

Completed

In Progress

Forecasted ***(with estimated year)***

Probable type of Repair

Repair Followed by Minor Maintenance

Minor Maintenance

Prioritization / Funding Notes

1. Prioritization generally follows latest long-range CIP planning schedule
2. Assumes one system-wide repair per year (approx. $500,000-1,000,000)
3. Roughly $10,000 per system per year (average) spent for minor maintenance

Factors Considered to Define Work as "Maintenance"

1. The as-constructed and subsequently improved condition determination is available, and therefore work can be completed at select locations within the system (rather than the entire system) and provide the necessary drainage function
2. The need for wetland or other types of mitigation to complete the work is generally lacking .
3. The work generally excludes system-wide culvert replacement.
4. Anticipated construction cost can reasonably be spread across several years, and generally is near the cost of establishing and administering a WMD
5. The work is consistent with the Board-authorized public drainage system maintenance budget.

Cost/Funding Notes

1. Systems where future repair is indicated as "minor maintenance" are expected to be funded by the District annual drainage system budget. Each system indicated as "Repair" will require a future repair report .
2. Estimated costs are subject to change. Repair costs are based on the latest repair report, with 3% cost inflation factored in.

Anoka County Ditch 10-22-32 Repair Alternative #4
Municipal / County Engagement

MEMORANDUM
Rice Creek Watershed District

Date: March 2, 2026
To: RCWD Board of Managers
From: Tom Schmidt, Drainage & Facilities Manager
Subject: Anoka County Ditch 10-22-32 Repair Alternative #4 Municipal / County Engagement

Introduction

This agenda item provides a possible framework for District, Municipal, and County engagement regarding Repair Alternative 4 for Anoka County Ditch 10-22-32 (ACD 10-22-32).

Background

At the January 12, 2026, Board Workshop, manager feedback sought further municipal and county engagement by which to further consideration of ACD 10-22-32 Alternative 4 (ACSIC Option). The Drainage and Facilities program team developed a framework, meeting agenda arrangement, for Board consideration from which to engage with Anoka County and the cities of Columbus and Lino Lakes elected representatives and technical staff.

As the Board continues to consider Repair Alternative 4 as the Public Drainage Authority and its engagement with public entities, it is important to share the repair / maintenance work completed to this point with stakeholders. Staff have met multiple times with staff from both cities regarding ACD 10-22-32 and its Alternative 4 option. Board engagement may warrant review of the issue / problem RCWD is working to address and potential landowner costs.

The Board is approaching a decision point which will document the rational of its decision. RCWD Managers may engage to describe both the statutory and landscape limits and determine, know, whether there is demand or an expectation from the interested stakeholders for the District to proceed with the remaining elements of Repair Alternative 4. This provides a forum for the potential clear understanding of the potential benefits relative to the anticipated cost.

Staff Recommendation

This item is informational for the Board's deliberation / discussion in consideration of proceeding with further engagement with County and Municipal stakeholders.

Attachments

- Draft_Engagement_framewok

RCWD Anoka County Ditch (ACD) 10-22-32 Alternative #4 City / County Engagement Meeting

The following is a DRAFT framework and comments for the Board's consideration as it develops an engagement meeting regarding ACD 10-22-32 Alternative 4:

Notice and hold a special meeting inviting county and city representatives (entity governing leaders and technical staff) for the city of Columbus, Lino Lakes, and the Anoka County. Hold meeting at a neutral location, City of Columbus staff suggested a meeting room at Running Aces in Columbus.)

Potential Meeting Agenda:

- Welcome and Introductions
- Outline of Meeting
- RCWD Board's purpose of the meeting (engagement on important topics, inform on RCWD's work, statutory and physical limits, feedback on Alternative 4)
- The Issue RCWD Board is working to address
    - Defining the problem
        - Repair of public drainage systems (decade of systematic PDS maintenance)
        - Water levels, landowner concerns, across ACD 10-22-32 system (north of West Pine Street as well as downstream to outlet)
- RCWD's Administration of MN Statute 103E (general -obligations and protocols utilized throughout RCWD), MN Statute 103B Management and MN Statute 103D potential projects
    - As Constructed Subsequently Improved Condition (ACSIC)
    - Crossing standard
    - Inspection / Maintenance
    - RCWD repair and maintenance work
    - Projects (joint studies, petition RCWD)
- Obligations and protocols applied to ACD 10-22-32
    - ACSIC (investigation, discussion / open record twice, decision)
    - ACD 10-22-32 maintenance work
    - Alternative #4 – HEI memo December 22, 2025
        - Engineer's, Hydrologic including analysis of the modeling showing the hydrologic effects of alternative #4 implementation
        - Anticipated cost of remaining components of Alternative 4
    - Allocating cost (WMD / Ad Valorem split)
- RCWD work to address the stated problem in terms of its statutory powers (MN103E repair work,103B,103D)
- Decision-points regarding ACD 10-22-32 Alternative #4 work (Repair project verses Maintenance, attendant cost allocations, Water Management District (WMD) verses ad valorem, potential cost allocation example amount to landowners)
- Factors Impacting the ability to address stated problem, drainage system functional ACSIC to the relief expected/desired (geography, headwaters, ground water, climate change)

- Input from City/County Partners (Input from public / landowners under future statutory protocols)
- RCWD's next steps

RCD 2, 3, 5 – Update and Flood Impact Simulation Task Order

MEMORANDUM
Rice Creek Watershed District

Date: February 27th, 2026
To: RCWD Board of Managers
From: Kendra Sommerfeld, Outreach and Communications Manager
Subject: Jones Lake Flood Simulation Tool

Introduction
Houston Engineering (HEI) has provided Task Order 2026-001 to develop a Flood Impact Model and Flood Simulation Tool to support the Jones Lake Flood Mitigation Project. Staff is seeking Board approval to move forward with this work.

Background
The Jones Lake Flood Mitigation Project addresses potential and future flooding risks in the Jones Lake area, including portions of New Brighton, Roseville, and the I-35W corridor. HEI will develop a Flood Impact Model for the RCD 2, 3, and 5 corridor using ESRI's Flood Impact Solution integrated with RCWD's existing SWWM model. The task order outlines specific tasks and deliverables.

Because this project focuses on reducing current and future flood risks, it can be challenging for stakeholders to fully understand the extent of the problem and the benefits of proposed mitigation strategies.

This tool will be a significant outreach and communication tool by:
- Helping stakeholders clearly visualize flood risk that is difficult to see
- Supporting public meetings, interagency coordination, and discussions with affected communities
- Strengthening RCWD's ability to communicate the long-term benefits of the project in a clear, data-driven format

The not-to-exceed cost for this work is $20,500, funded from the Jones Lake account (60-08), with final delivery anticipated by June 30, 2026.

Staff Recommendation
Staff recommend placing the HEI Task Order 2026-001 to develop the Flood Impact Model and Flood Simulation Tool for the Jones Lake Flood Mitigation Project on their March 11, 2025, regular meeting agenda for consideration.

Attachments
- Houston Engineering Task Order 2026-001 – Flood Impact Simulation

RCWD Administrative Information:

Account No.: 60-08

Account Name: Jones Lake

Houston Engineering Project No.: R005555-0362

Task Order Purpose:

The purpose of the task order is to provide the Rice Creek Watershed District with a tool (Flood Impact Model) to help the public visualize the extent of impacts of flood modeling in the Ramsey County Ditch (RCD) 2,3,5 corridor. For this effort, we will utilize ESRI's Flood Impact Solution, integrating results from RCWD's SWWM Model to generate flood elevations for a 100-year flooding event. With these flooding events, a 3D scene will be generated to show where flooding occurs on the landscape at various times during/following the rainfall simulation. The specific areas of interest which we will model include Hansen Park and south of Jones Lake to Interstate Highway 35W.

Professional Services Rendered:

HEI intends to provide the following professional services during the completion of this Task Order:

Task 1 – Model Flood Mapping

HEI will utilize the existing RCD 2,3, & 5 SWWM model and update the full build-out Basic Water Management Project model for the simulations. We will then convert model output data into ESRI raster formats to be ingested into the Flood Impact Solution. This will require coordination with the HEI District Wide Model team to get the correct data out of the model for the area of interest listed above.

Task 2 – LiDAR elevation building footprints

HEI will take the existing LiDAR and connect the building footprints to the correct elevations for each building. HEI will then develop a 3D rendering of the buildings in the area. This data will then be ingested into the Flood Impact Solution program.

Task 3 – Flood Impact Solution

HEI will take the created inputs from the previous tasks and run through the ESRI Flood Impact Solution tool. This will process the data to help create a 3D scene to show where flood impacts buildings and surrounding areas within the area of interest. Once the scene is created specific areas can be animated and recorded. This will show the flood waters rising in the affected areas based on the model data. Simulations will be run for both the current conditions model and the proposed model.

Deliverables:

The deliverables for the Task Order consist of the following:

- 2 video simulations of the areas of interest (Hansen Park and Jones Lake/I35W).
- Meeting with RCWD to show Flood Impact results.

Schedule and Compensation:

HEI recommends a budget in the amount of **$20,500** for engineering services described within this task order. HEI shall not exceed this amount for the completion of this work without prior authorization. A breakdown of costs by tasks is included in **Appendix A.** HEI will deliver Flood Impact Results no later than **June 30th, 2026**.

Assumptions:

The estimated compensation for the execution of the tasks identified within the "Professional Services Rendered" section of this Task Order is based upon the following assumptions:

1. RCWD will coordinate the extent of the initial video development location.
2. HEI will use the existing RCWD SWWM Model for the flood elevations.
3. HEI will use the existing building foot prints for the current LiDAR they are associated with to get the correct elevations are assigned

SIGNATURES:

The services described by this Task Order are being provided in accordance with the Professional Services Agreement between the Rice Creek Watershed District and Houston Engineering dated May 14, 2008, as amended and extended. This **Task Order** shall be effective **January 1, 2026** as authorized by the signatures of representatives of the Rice Creek Watershed District and Houston Engineering, Inc.

Rice Creek Watershed District

By: _____

Name: Nick Tomczik

Title: Administrator

Date: _____

Houston Engineering, Inc.

By: _____

Name: Chris Otterness

Title: District Engineer

Date: January 15, 2026

Appendix A - HEI Task Order 2026-001 RCWD Flood Impact

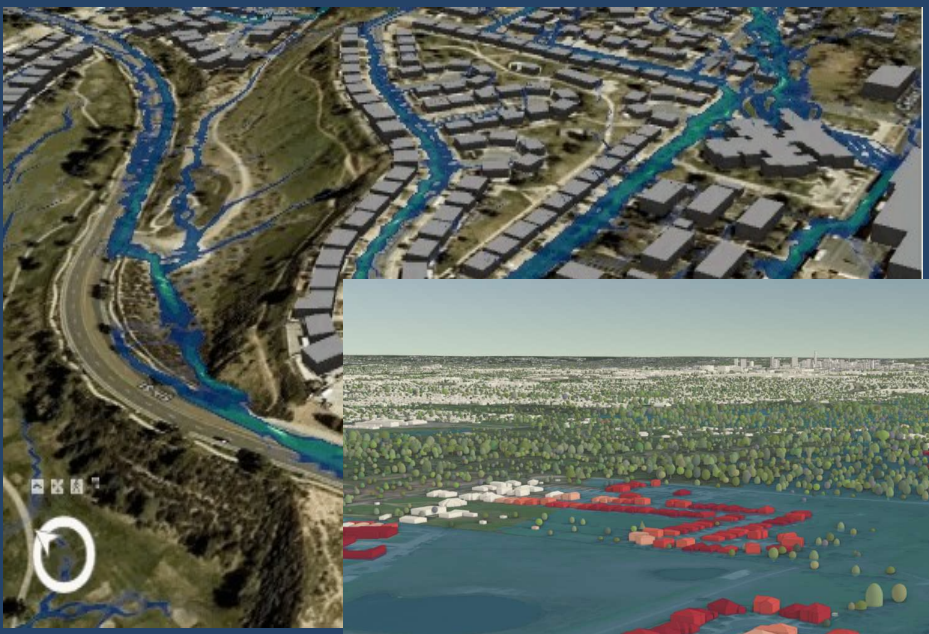
Developed by: KZS 1/13/2026
Reviewed by: CCO 1/15/2026

			2026 rates				
			Chris	Kiah	Erik	Megan	Josie
			Eng. 11	GIS Analyst 6	Tech 6	GIS Analyst 3	Engineer 2
			$230	$163	$152	$130	$140
TASK DESCRIPTION		**HEI Total**	3	16	21	93	14
Task 1. Model flood mapping		**$4,424**	**1**	**4**	**1**	**11**	**14**
	Kick off meeting		1	1	1	1	1
	Modeling of proposed (full build-out) conditions						8
	Engineer needs to outputs model results to create depth grids			1			4
	Work with engineer to get depth grids			2		10	1
Task 2. LiDAR Set up building food prints		**$3,042**	**0**	**0**	**20**	**0**	**0**
	Getting building foot prints to have height associated with LiDAR				20		
Task 3. Run Flood Impact tool for Current conditions and Proposed Conditions (2)		**$13,041**	**2**	**12**	**0**	**82**	**0**
	Inputting and formatting data to fit tool		.	2		16	
	Run through tool process			4	0	24	
	With tool create 3D model to fly through			2		24	
	Meeting with RCWD		2	2		2	
	Create videos of designated areas			2		16	
	Total =	**$20,507**					

Jones Lake Flood Simulation

RCWD
RICE CREEK WATERSHED DISTRICT

HOUSTON
engineering, inc.



Flood Impact Model

used to show/analyze the impact of flooding on infrastructure and share flood impact maps with stakeholders.

Show flooding events and provide valuable info about the affected areas and the potential risks and hazards

Outreach/Communication Key Points

- Makes Future Flooding Visible. Turns abstract modeling into clear visuals. shows flood reduction and risk mitigation
- Translates “potential risk” into something people can see
- Improves public understanding. Simplifies complex engineering data
- Reduces confusion and misinformation
- Strengthens communication with elected officials. Fast, visual storytelling for limited meeting time. Powerful tool for bonding/funding discussions
- Helps policymakers explain the project to constituents

Transforms a technically complex, future-focused flood mitigation project into a clear, visual story, improving awareness, engagement, and funding support.