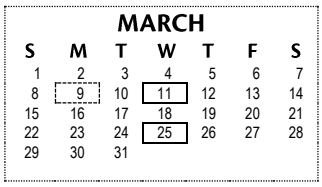
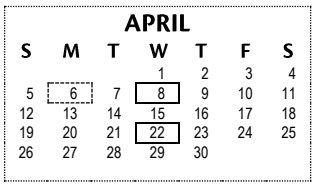
RCWD
RICE CREEK WATERSHED DISTRICT





RCWD BOARD OF MANAGERS SPECIAL MEETING AGENDA

Wednesday, March 25, 2026, 9:30 a.m.

Mounds View City Hall Council Chambers
2401 County Road 10, Mounds View, Minnesota
Virtual Monitoring via Zoom Webinar

Join Zoom Webinar:
https://us06web.zoom.us/j/81581349430?pwd=GY5o4FbiMdmjTQXHyRb5xg6VV4pDOZ.1
Passcode: 914035
+1 312 626 6799 US (Chicago)
Webinar ID: 815 8134 9430
Passcode: 914035

Agenda

ITEMS FOR DISCUSSION AND INFORMATION

1. Anoka County Ditch 10-22-32 Repair Alternative #4 Municipal / County Engagement (Tom Schmidt)
2. Ramsey County Ditches 2, 3 and 5 – Prioritization and Funding (David Petry)
3. Administrator Updates
4. Manager Updates

ITEMS FOR DISCUSSION AND INFORMATION

1. Anoka County Ditch 10-22-32 Repair Alternative #4 Municipal / County Engagement (Tom Schmidt)

MEMORANDUM
Rice Creek Watershed District

Date: March 17, 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 for discussion of a 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 March 09, 2026 Board Workshop, the Board provided staff with direction on the framework of proposed further municipal and county engagement in consideration of ACD 10-22-32 Alternative 4 (ACSIC Option) The focus on inviting governance stakeholders to a "round table" discussion by which constituent concerns from Anoka County, Columbus, Lino Lakes, elected representatives and technical staff, as well as representatives of the MN DNR may be heard.

As the Board continues to consider Repair Alternative 4 and through the Public Drainage Authority's engagement with public entities, it is important to share the repair/maintenance work completed with stakeholders. Staff have met multiple times with staff from both cities regarding ACD 10-22-32. However, this round table discussion will provide for direct communication between elected representatives and RCWD as the Public Drainage Authority decision maker. In addition to the primary goal of listening to stakeholders and their constituent concerns, Board engagement should include a review of the issue / problem that alternative 4 is working to address, as well as potential public cost.

Staff Recommendation

This item is informational for the Board's deliberation/discussion. Staff seek the board's consensus direction on:

- text of an invitation letter to the Anoka County Board of Commissioners, the city council members of Columbus and Lino Lakes, and their respective administrative and technical staff, as well as representatives of the MNDNR.
- schedule and notice a special meeting during normal business hours in mid-May at a convenient public meeting space (potential dates: Tuesday, 5/12, Thursday, 5/14, Monday, 5/18, Tuesday, 5/19, Wednesday, 5/20). The staff will use Doodle poll or similar software to ascertain the best availability.

Attachments

- Draft Invitation letter.

RCWD
RICE CREEK WATERSHED DISTRICT

March XX, 2026

Greetings All

The Rice Creek Watershed District (RCWD) is inviting you to a roundtable discussion on Anoka County Ditch (ACD) 10-22-32 Repair Alternative 4.

The RCWD Board of Managers put in motion an earnest effort of public drainage system management in the early 2000s. The effort resulted in considerable maintenance and numerous comprehensive and systematic repairs of its public drainage systems. Currently, RCWD has substantially completed repair and/or maintenance of nearly all systems. In 2023, the Board continued focus on ACD 10-22-32 considering the implementation of ACD 10-22-32 Repair Alternative 4. While RCWD comprehensively maintains the entire length of the drainage system, the segment under consideration is located north of W. Pine St. in Columbus, MN. Repair Alternative 4 would repair the ditch to its As Constructed and Subsequently Improved Condition (ACSIC), as evidence best defines, the condition at time of initial construction, by lowering culverts under two roadways. RCWD is obligated to consider the work under the benefit and burden it is to landowners.

RCWD Board of Managers invites you as critical stakeholders to participate in a roundtable discussion on ACD 10-22-32. The roundtable is intended to be an open discussion of the technical merits, benefits, and burdens of the potential Alternative 4, a forum for your inquiries and comments on the history and effectiveness of this drainage system, its conditions, as well as landowner concerns. The intention of this meeting is to be a peer-to-peer discussion, an opportunity to share your constituents' concerns, express opinions on the repair alternative, and dialog directly with the RCWD Board of Managers.

RCWD staff will initiate an on-line scheduling tool to facilitate scheduling the meeting. Subsequently the final meeting date will be communicated and noticed by RCWD.

On behalf of the RCWD Board,

Michael Bradley
Board President
Rice Creek Watershed District

Please direct your entities inquires to Tom Schmidt RCWD Drainage and Facilities Manager by email: Tschmidt@ricecreek.org

cc: Anoka County, Columbus, and Lino Lakes Board/Council and Key Staff

ITEMS FOR DISCUSSION AND INFORMATION

2. Ramsey County Ditches 2, 3 and 5 – Prioritization and Funding (David Petry)

MEMORANDUM
Rice Creek Watershed District

Date: March 18, 2026
To: RCWD Board of Managers
From: David Petry, Project Manager
Subject: Ramsey County Ditches 2, 3 and 5 – Prioritization and Funding

Introduction

This is an informational discussion item, sharing updates to project prioritization and potential funding options for the Ramsey County Ditches 2, 3, and 5 suite of projects. This will be discussed during the March 25, 2026 workshop.

Background

Following the July 2011 "super storm" in which the District experienced upwards of seven inches of rain in a four-six hour period, the Cities of New Brighton and St. Anthony (and later Roseville) filed a Joint Petition to RCWD for the establishment of a phased Basic Water Management Project (BWMP) to develop a comprehensive strategy for stormwater management, flood damage reduction, and water quality enhancements.

Phase 1 (2013-2018) of the BWMP outlined project phasing, summarized flood prone areas, and identified potential projects. Two key projects, Mirror Pond and Hansen Park, were selected for accelerated implementation, funded in part by a $3 million Clean Water Fund grant from the Clean Water, Land & Legacy Amendment for a Targeted Watershed Demonstration project.

Phase 2 (2018-2019) focused on developing a regional, comprehensive stormwater management and flood damage reduction plan and included concept-level technical studies for the projects with an estimated probable cost of $21 million (based on the 2019 analysis).

Phase 3 (2020-2021; ongoing) detailed an anticipated implementation schedule and project prioritization, cost allocations, and revenue generation methods. It considered flood reduction and water quality benefits, the relationship to existing capital improvement plans, property ownership coordination, complexity of regulatory approval, and project sequence or prerequisites to avoid interim flood damages.

The Phase 3 report outlined key language included in the analysis to assign "benefit categorization" to each of the proposed projects. Benefit classifications included Local and Street Flooding, Regional Flooding, and Water Quality benefits. **Table 2** – Project and Benefit Categories (page 7 of 13) in the report identifies which benefits are associated with each proposed project.

Phase 4 is currently ongoing and focuses on implementation of the projects identified in Phase 2. This includes the Jones Lake project, which is the largest in the plan and is a critical prerequisite for most of the other projects to ensure there is adequate stormwater storage.

Potential Funding Sources Based on Benefit Categories

Local flooding is related to areas not directly adjacent to RCD 2, 3, or 5 and includes residential backyards, commercial building parking lots, or other private structures or property. The portion of project costs addressing local flooding could be funded by stormwater utility fees, property tax assessments, water management district charges, and other local funding sources.

Regional flooding is related to areas on the RCD 2, 3, or 5 systems and may damage public and public infrastructure. The portion of project costs addressing regional flooding could be funded by a combination of ad valorem levy, local or state sources. A Water Management District (WMD) has been established over the area within the District that drains to RCD 2, 3, & 5. The Watershed Management Plan identified both ad valorem and the WMD as potential sources of funding for the projects.

Water quality benefits for these projects result primarily from the creation of additional dead storage volume to increase settling time. As a public benefit, the portion of the project costs associated with water quality improvements could be funded by a combination of ad valorem levy and other external grant funding sources.

Potential Funding for the Jones Lake Project

Specific to the Jones Lake Project, benefits in all three categories are created. Based on this analysis and the cost estimates included in the Phase 2 report, the Phase 3 report recommended a 50.6% cost share portion to the regional flooding benefit, a 48.2% cost share portion to the water quality benefit, and a 1.2% cost share portion to the local and street flooding benefit (**Table 3** – Project Benefit Categories Cost Allocation, page 11 of 13).

State and federal funds have been and will continue to be sought for project implementation. The RCD 2, 3 and 5 suite was added to the Minnesota Department of Natural Resource's Flood Hazard Mitigation Grant Program list approximately 10 years ago and was updated to be specific to the Jones Lake project in 2025. This grant requires a 50% match and, due to the size of the request, would need to be approved by the Legislature. Capital budget requests may be an option but are highly competitive. A capital budget request was submitted to Minnesota Management & Budget for the Jones Lake project in 2024 and was updated in 2025. Other state and federal grants are announced periodically and applied to as applicable. For the Jones Lake project, this includes the $1.17 million Minnesota Pollution Control Agency Stormwater Implementation Grant the District received in 2025 for final design and the first phase of construction.

Future Budget and Implementation Schedule Planning

The Phase 3 report was not developed with the intent that it would establish a rigid funding policy and timeframe, but rather serve as a starting point for an adaptable project implementation framework that would be adjusted as funding opportunities, regulatory processes, and project development became more realized. To that end, it is appropriate now to revisit the project budgeting and implementation schedule as it relates to short- and long-term RCWD budget forecasting and for further communication with municipal partners in this project.

RCWD and its municipal partners continue to coordinate and collaborate to advance the goals of the RCD 2, 3 and 5 Basic Water Management Project. Staff and the District Engineer will make a short presentation including a review of the Phase 3 report during the special workshop.

Staff Recommendation

N/A. This is an informational discussion item.

Attachments

- RCD 2, 3, and 5 Basic Water Management Project Phase 3 Final Report, May 18, 2021

Technical Memorandum

To: Nick Tomczik, District Administrator
Rice Creek Watershed District

Cc: Kyle Axtell

From: Joseph A Lewis, PE
Houston Engineering, Inc.

Through: Chris Otterness, PE

Subject: RCD 2, 3, and 5 Basic Water Management Project Phase 3

Date: May 18, 2021

INTRODUCTION

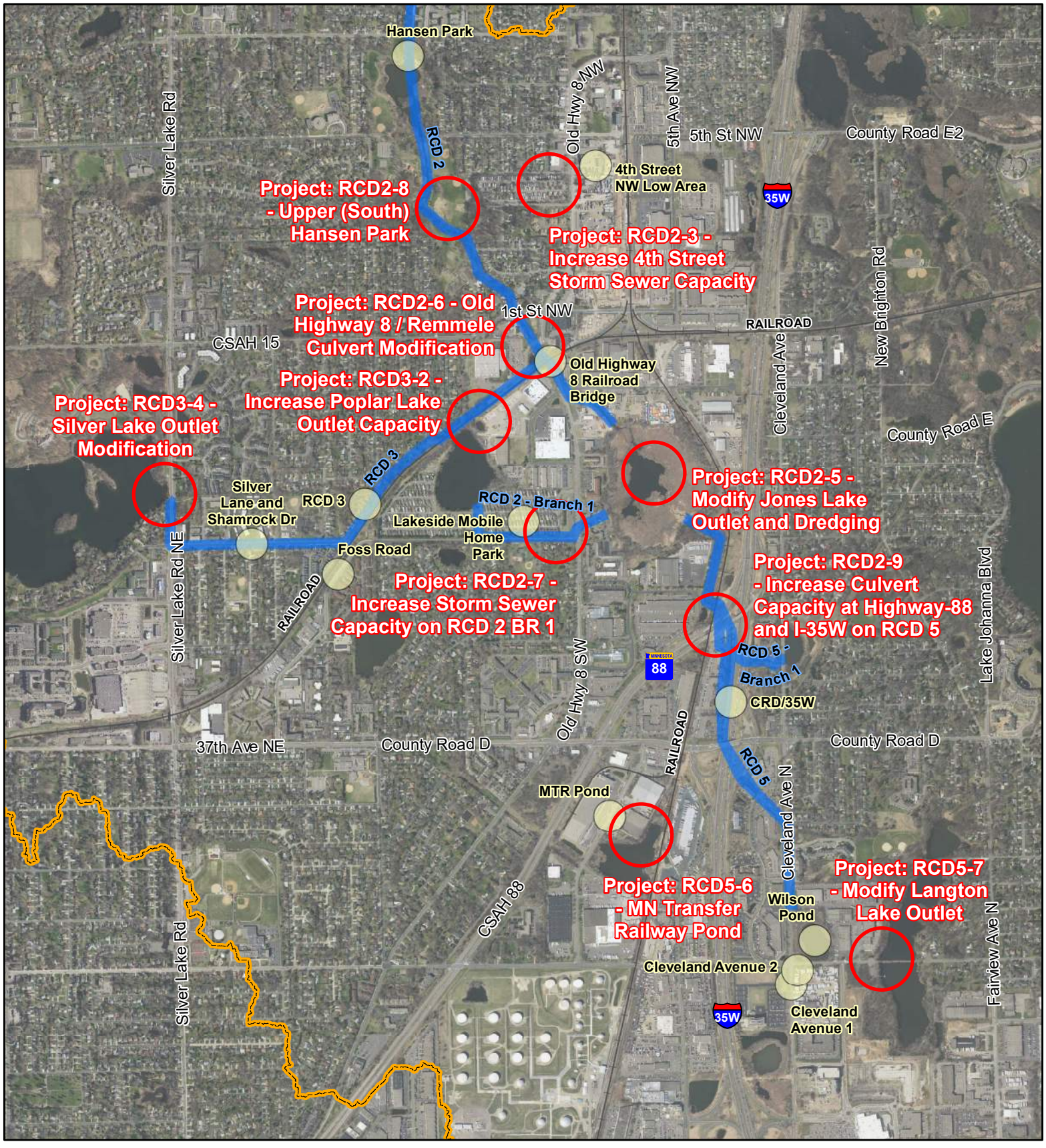
This technical memo is a continuation of the development of a Basic Water Management Project (BWMP) for the Ramsey County Ditch (RCD) 2, 3, and 5 public drainage systems. The origin for the Basic Water Management Project was a petition to the Rice Creek Watershed District (RCWD) by the cities of New Brighton, St. Anthony, and Roseville. Phase 1 of the plan documented known flood damage locations and identified potential projects for further technical evaluation. Phase 2 was a comprehensive stormwater management and flood damage reduction plan that proposed several "suites" of flood mitigation projects that showed marked reductions in high water surface elevations at the known flood damage locations. **Figure 1** below shows the locations of the flood mitigation projects and known flood damage locations.

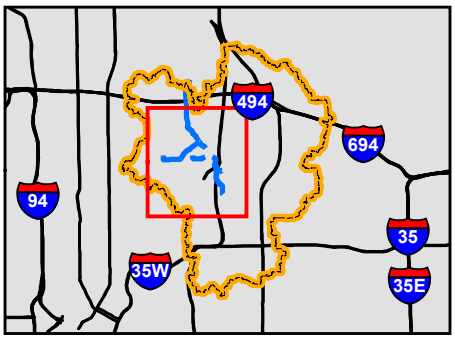
This phase of the Basic Water Management Project will detail an anticipated implementation schedule and priorities, cost allocations, and revenue generation methods.

IMPLEMENTATION SCHEDULE AND PRIORITIZATION

The following implementation schedule and project prioritization is intended to guide project development and is not intended to be absolute regarding the exact timing and order of projects. The anticipated schedule and prioritization are based on the following factors:

- Suite Flood Reduction Benefit – This factor generally considers the effectiveness of project(s) at reducing the frequency and scale of flood damages at flood prone locations. Phase 2 hydrologic modeling considered "suites" of projects to simulate the effects of flood mitigation. Since projects were modeled in this way, their relative effectiveness is considered by suite, with relative ratings (benefit) displayed as "High", "Medium", and "Low". Projects with High flood reduction benefits are considered to have a greater prioritization than those with Low flood reduction benefits.





Study Area
Flood Damage Locations
Public Drainage Systems
Project Locations

0 750 1,500 3,000 Feet

N

Figure 1 - Project Locations Map

Scale:	Drawn by:	Checked by:	Project No.:	Date:	Sheet:
AS SHOWN	TWM		5555-0221	4/21/2021	

Houston Engineering Inc.
Maple Grove
P: 763.493.4522
F: 763.493.5572

- Relationship to Existing Capital Improvement Plans - This factor considers the relationship between the flood damage reduction projects and any municipal Capital Improvement Projects that partners currently have identified. If there is an advantage from a cost perspective or other consideration, completing both projects concurrently should be contemplated. For example, if a street reconstruction project is planned (as with 4th Street in the City of New Brighton), adjacent flood damage reduction projects should be constructed on a parallel timeframe to realize the advantages.
- Property Owner Coordination – Project implementation will require coordination with various property owners such as the partner cities, road authorities and private landowners. Those projects involving multiple property owners will likely require additional time to develop. Property owners that are not project partners will be assumed to require a higher amount of coordination. Coordination is assumed to be lower where project partners are property owners. Projects are classified as “High”, “Medium”, and “Low” representing the relative complexity and time required to coordinate property rights acquisition. “High” complexity projects may require longer lead times to obtain appropriate property rights.
- Complexity of Regulatory Approval – Projects will have a range of regulatory coordination and approval complexities which will impact the time necessary to prepare projects for construction. Projects that require permitting from multiple entities and/or entities that are not direct partners are assumed to have a higher level of complexity. Projects are classified as “High”, “Medium”, and “Low” representing the relative complexity and time required to obtain the necessary approvals. “High” complexity projects may require longer lead times to obtain regulatory approvals.
- Sequence Conveyance and Storage Project Implementation to Avoid Temporary Flood Damages (i.e., prerequisite projects) – The schedule and prioritization must consider the sequence of project implementation to avoid temporary and/or permanent increases in flood elevations.

Table 1 summarizes the various schedule considerations described above for each individual project. An approximate schedule summary is displayed on **Figure 2** that lists approximate start and end timeframes by individual project.

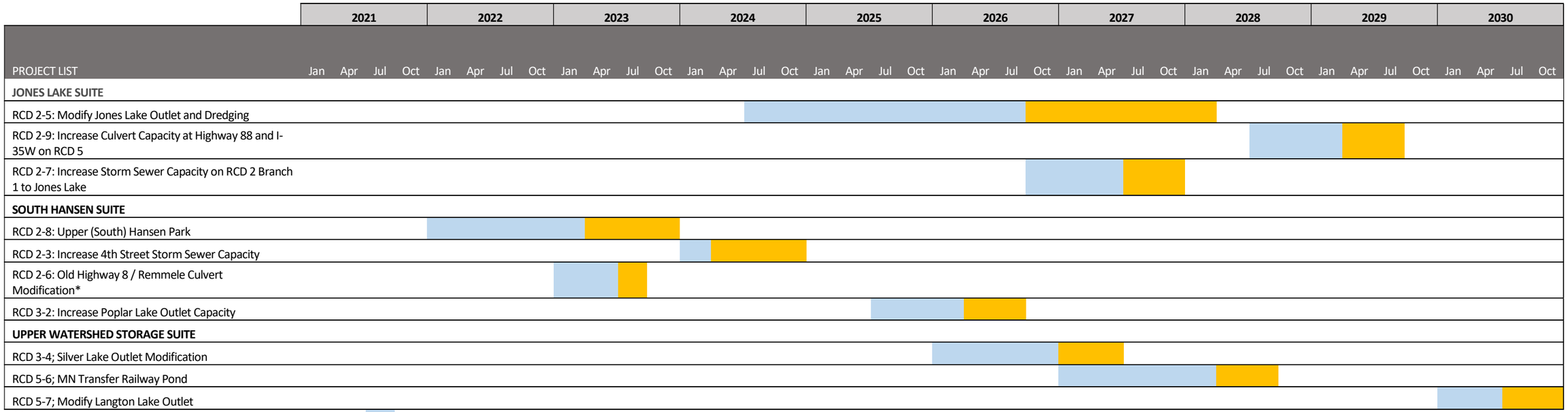
Table 1 – Implementation Schedule Considerations

Project	Suite	Suite Flood Reduction Benefit*	Relationship to Existing Capital Improvement Plans	Property Owner Coordination**	Complexity of Regulatory Approval**	Sequence Conveyance/ Storage** (i.e., Prerequisite Projects)	Cost
RCD 2-5: Modify Jones Lake Outlet and Dredging	Jones Lake Suite	**Medium**	-	**High**: Multiple property owners	**High**: DNR Public Water Permitting, DNR Dam Safety, COE Permitting	-	**High**: $6,421,175
RCD 2-9: Increase Culvert Capacity at Highway 88 and I-35W on RCD 5	Jones Lake Suite	**Medium**	-	**High**: MnDOT & Railroad (MN Transfer Rail)	**Low**	RCD 2-5; Jones Lake	**High**: $4,148,291
RCD 2-7: Increase Storm Sewer Capacity on RCD 2 Branch 1	Jones Lake Suite	**Medium**	-	**High**: Coordination Lakeside North Mobile Home Park and Hillside East Apartments & requires watershed passing drainage system ownership to city partner	**Low**	RCD 2-5; Jones Lake	**Medium**: $816,437
RCD 2-8: Upper (South) Hansen Park	South Hansen Suite	**High**	-	**Low**: City of New Brighton	**Low**	-	**Medium**: $2,691,659
RCD 2-3: Increase 4th Street Storm Sewer Capacity	South Hansen Suite	**High**	4th Street (New Brighton)	**Low**	**Low**	RCD 2-8; Upper (South) Hansen	**Medium**: $2,138,409
RCD 2-6: Old Highway 8 / Remmele Culvert Modification*	South Hansen Suite	**High**	-	**Low**	**Low**	RCD 2-8; Upper (South) Hansen	**Medium**: $651,228
RCD 3-2: Increase Poplar Lake Outlet Capacity	South Hansen Suite	**High**	-	**High:** Railroad and Northwestern Holdings Inc	**Low:** Potential DNR Public Water Permitting	RCD 2-8; Upper (South) Hansen	**Medium**: $1,153,343
RCD 3-4; Silver Lake Outlet Modification	Upper Watershed Storage Suite	**Low**	-	**Low**: City of St. Anthony Engineering dept.	**Medium**: DNR Public Water Permitting	-	**Low**: $66,173
RCD 5-6; MN Transfer Railway Pond	Upper Watershed Storage Suite	**Low**	-	**High**: 2 Properties (Hood Packaging and B&D Services)	**Low:** Potential WCA wetland	-	**High**: $3,290,231
RCD 5-7; Modify Langton Lake Outlet	Upper Watershed Storage Suite	**Low**	-	**Low**: City of Roseville	**Medium**: DNR Public Water Permitting, freeboard limitations (2 homes)	-	**Low**: $69,296

*High = Greater benefit from project implementation

**High = Greater amount of effort and lead time necessary from project initiation to construction

Figure 2 – *Approximate Schedule*



****SCHEDULE BASED ON ASSUMED START DATE - SUBJECT TO CHANGE**

- PLANNING/PERMITTING PHASE
- CONSTRUCTION PHASE

BENEFIT CATEGORIZATION

Benefits of each project are classified into different categories to inform discussions regarding the apportionment of project costs among project partners and their various funding mechanisms. The benefits are classified as Local and Street Flooding, Regional Flooding, and Water Quality.

LOCAL AND STREET FLOODING

Local flooding is considered to be any flooding that is experienced by areas that are not directly adjacent to the RCD 2, 3, or 5 public drainage systems. Examples of local flooding include residential backyards, commercial building parking lots or other private structures or property. Flooding reduction in these areas mainly benefit property owners of the residential and commercial parcels. When street and roadways are inundated, impedances to traffic and dangerous driving conditions occur. Such conditions might lead to hydroplaning vehicles, stalled vehicles, or impassable roads, causing congestion, limiting commerce or blocking emergency vehicle routes. Additionally, overtopping roads may be damaged and require repairs with the responsibility to repair belonging to the road authority.

Projects that reduce local and street flooding are typically funded by stormwater utility fees, property tax assessments, and other local funding sources. Among the project list, all proposed projects determined to include local and street flooding benefits are within the city of New Brighton.

REGIONAL FLOODING

Regional flooding is characterized by the flooding that occurs on the RCD 2, 3 or 5 public drainage systems and damages private and public infrastructure alike. Projects that reduce flooding damages along the RCD 2, 3 or 5 drainage systems are often funded through a combination of ad valorem levy, local or state sources.

WATER QUALITY

Some of the planned projects will create improvements in water quality as documented in the Phase 2 report. Water quality benefit defined in Phase 2 is from the creation of additional dead storage volume in storage projects leading to increased settling time for particulates. The RCWD has treated this type of water quality benefit as a public benefit and therefore, the portion of project cost associated with water quality is likely to be funded with a combination of RCWD ad valorem levy and other external grant funding sources targeting water quality restoration or protection.

Table 2 identifies the types of benefits associated with each project with a more detailed narrative for each project following the table.

Table 2 – Project and Benefit Categories

Project	Regional Flood Benefit	Water Quality Benefit	Local and Street Flood Benefit
RCD 2-5: Modify Jones Lake Outlet and Dredging	Yes	Yes	Yes
RCD 2-9: Increase Culvert Capacity at Highway 88 and I-35W on RCD 5	Yes	No	No
RCD 2-7: Increase Storm Sewer Capacity on RCD 2 Branch 1 to Jones Lake	No	No	Yes
RCD 2-8: Upper (South) Hansen Park	Yes	No	Yes
RCD 2-3: Increase 4th Street Storm Sewer Capacity	No	No	Yes
RCD 2-6: Old Highway 8 / Remmele Culvert Modification	Yes	No	No
RCD 3-2: Increase Poplar Lake Outlet Capacity	Yes	No	Yes
RCD 3-4; Silver Lake Outlet Modification	Yes	No	No
RCD 5-6; MN Transfer Railway Pond	Yes	Yes	No
RCD 5-7; Modify Langton Lake Outlet	Yes	No	No

PROJECT BENEFIT ALLOCATION DESCRIPTIONS

The following section describes analysis for each project completed to define the types of benefit and the apportionment of project costs based on those benefits.

RCD 2-5: Modify Jones Lake Outlet and Dredging

The Jones Lake project create benefits in all three categories. As noted earlier, storage projects that increase dead storage provide a water quality benefit by extending the residence time and allowing for increased particulate pollutant settling. Therefore, the cost to create additional dead storage in Jones Lake under the proposed Normal Water Level (NWL), is considered to be the water quality benefit and can potentially be apportioned to ad valorem levy and external grant funding sources. 48.2% of material to be excavated as part of the Jones Lake project is below the proposed live storage elevation.

Given the location of Jones Lake on the RCD 5 public drainage system, there is a regional flooding benefit for Jones Lake and other downstream and upstream locations on RCD 2 and RCD 5. 51.8% of material to be excavated as part of the Jones Lake project is above the permanent pool water elevation and therefore is live storage that attenuates flood flows.

Additionally, Jones Lake is in part designed to mitigate downstream flooding caused by the conveyance improvement project identified as “RCD 2-7: Increase Storm Sewer Capacity on RCD 2 Branch 1 to Jones Lake”. This project reduces localized and street flooding by increasing conveyance capacity. The resulting loss of floodplain storage is mitigated by the creation of live storage in the Jones Lake project. Therefore, the cost portion allocated towards the Local Flooding benefit is calculated based on the amount of lost floodplain storage volume along RCD 2 Branch 1 compared to the total live storage volume created by the Jones Lake project. This is essentially the cost to provide compensatory floodplain storage mitigation. Remaining flood management costs are allocated to ad valorem levy, as they are providing regional benefit along RCD2 and RCD 5.

Further analysis of the Jones Lake Model Suite (Phase II) shows that the peak flood volume on RCD 2 Branch 1 (Project RCD 2-7) between existing and proposed scenarios is approximately 2.4% of the peak live storage on Jones Lake (proposed conditions). Therefore, 2.4% of the cost of live storage enhancement shall be apportioned to local flood benefit and the remaining 97.6% of live storage enhancement serve regional flooding.

Estimated line-item costs associated with this project in the Phase II report were partitioned based on the preceding reasoning. To summarize, the ratio of dead storage to live storage excavation was used to determine water quality benefit costs for each line item (e.g., mobilization, weir construction, etc.). The remaining costs are therefore apportioned regional and local benefit. 2.4% of the live storage costs belong to local flood benefit and 96.7% belong to regional flooding which is 1.2% and 50.6% of the total cost, respectively.

RCD 2-9: Increase Culvert Capacity at Highway 88 and I-35W on RCD 5

The “RCD 2-9: Increase Culvert Capacity at Highway 88 and I-35W on RCD 5” project is located on the RCD 5 public drainage system. As such, the benefit is solely focused toward reducing flooding damages that are regional in nature. Specific flooding concerns in this area are based on flooding of Interstate 35W. Table 8 of the Phase II report indicate the flooding on Interstate 35W could decrease by over 2.75 feet. The increased conveyance provided by this project will not facilitate off-channel flow increases to occur as they would reverse flood damage reduction progress.

RCD 2-7: Increase Storm Sewer Capacity on RCD 2 Branch 1

This project is entirely focused on reducing local flooding in the Lakeside North Mobile Home park. It is not located on a public drainage system and contains no improvements to water quality. It is therefore entirely a local flooding benefit.

RCD 2-8: Upper (South) Hansen Park

The Upper (South) Hansen Park Project involves the construction of a new storage basin that is located on the RCD 2 public drainage system. The conceptual design does not include creation of dead storage and therefore does not provide a water quality benefit. Primarily this project involves excavating a basin to detain RCD 2 flows at the primary outlet elevation of 873.00. The primary outlet is a weir that will regularly restrict flow along RCD 2, mitigating surges of water downstream.

The project, in part, is intended to mitigate for the increased conveyance capacity of the "RCD 2-3: Increase 4th Street Storm Sewer Capacity" and to detain surging water on the RCD 2 main trunk. Therefore, costs should be proportioned between the regional flood benefit and the local flood benefits. The peak flood volume of the area of concern for 4th Street was compared between the existing and proposed scenarios. This volume difference is a local street flooding benefit that relies on the downstream Upper Hansen Park Project to mitigate increase in peak flows. The ratio of the flood volume reduced at 4th Street to the newly created peak live storage in the Upper Hansen Park Project represents the proportional cost of the Upper Hansen Park Project required to provide relief to the 4th Street area (i.e., local flood benefit). The flood volume reduction along 4th street is 4% of the live storage created in the proposed Upper Hansen Park project during a 100-year rainfall event. Therefore, 4% of the cost of that project serves local flood benefits and the remaining 96% of costs serves regional flooding.

RCD 2-3: Increase 4th Street Storm Sewer Capacity

This project is aimed entirely at reducing flooding along 4th Street within the City of New Brighton. These areas are not located along the public drainage system and therefore are entirely a local flood benefit.

RCD 2-6: Old Highway 8 / Remmele Culvert Modification

Replacing the Remmele culvert along RCD 2 is considered a regional flood benefit as it lowers flood elevations along RCD 2. Due to the proximity of this site to the confluence of RCD 2 and RCD 3, there is also some benefit to regional flooding on RCD 3. The increased conveyance provided by this project will not facilitate off-channel flow increases to occur as they would reverse flood damage reduction progress.

RCD 3-2: Increase Poplar Lake Outlet Capacity

This project increases the conveyance from RCD 3 to Poplar lake as well as creates an additional parallel outlet from Poplar lake to RCD 2. In general, as water on RCD 3 rises, poplar lake takes on overflow and acts as an off-channel storage area while also receiving runoff from its local drainage area. Analysis of the model shows that during a 100-year event, approximately 56% of flooding within Poplar lake is due to overflow from RCD 3 (regional flooding) and 44% is due to runoff from the Poplar lake direct drainage area (local flooding). Therefore, we recommend that 56% of benefit costs be allocated to regional flood benefits and the remaining sum be allocated to local flood benefit.

RCD 3-4; Silver Lake Outlet Modification

The Silver Lake outlet modification is focused towards lowering flooding along RCD 3 by limiting flow rates out of Silver Lake to RCD 3 and therefore is a regional flood benefit. The increased storage within Silver Lake provided by this project will not facilitate off-channel flow increases to occur as they would reverse flood damage reduction progress.

RCD 5-6; MN Transfer Railway Pond

This project creates additional flood storage primarily to alleviate flooding downstream along the public drainage systems. Additionally, there is a water quality benefit through the creation of additional dead storage. The local flooding benefit is not considered significant. The water quality benefit amount is assumed to be equal to the cost of creating the additional dead storage. The regional flood benefit is determined based on the cost to create the additional live storage through excavation.

24.7% of material to be excavated as part of the Jones Lake project is below the proposed live storage elevation (water quality benefit), while 75.3% of material to be excavated is above the proposed live storage elevation (regional flood benefit).

RCD 5-7; Modify Langton Lake Outlet

The Langton Lake outlet modification reduces flooding along the RCD 5 public drainage system by increasing live storage within Langton Lake and is therefore a regional flooding benefit. There is no significant water quality benefit.

PROJECT BENEFIT ALLOCATION PROTOTYPE ESTIMATIONS

To allocate project cost to the multiple project partners, it is necessary to allocate portions of each project's cost to the various benefit categories. Many project components provide benefits to multiple categories. In such cases, the cost of the project component is proportionally allocated by the benefits provided, even though the benefit to any particular category may far exceed the allocated cost. **Table 3** below displays the allocation of estimated costs to each benefit category.

Table 3 – Project Benefit Categories Cost Allocations

Project	Total Project Cost	Regional Flood Benefit		Water Quality Benefit		Local and Street Flood Benefit	
		Cost share portion	Cost share value	Cost share portion	Cost share value	Cost share portion	Cost share value
RCD 2-5: Modify Jones Lake Outlet and Dredging	$6,421,000	50.6%	$3,249,026	48.2%	$3,094,922	1.2%	$77,052
RCD 2-9: Increase Culvert Capacity at Highway 88 and I-35W on RCD 5	$4,148,000	100.0%	$4,148,000	-	-	-	-
RCD 2-7: Increase Storm Sewer Capacity on RCD 2 Branch 1	$816,000	-	-	-	-	100.0%	$816,000
RCD 2-8: Upper (South) Hansen Park	$2,692,000	96.0%	$2,584,320	-	-	4.0%	$107,680
RCD 2-3: Increase 4th Street Storm Sewer Capacity	$2,138,000	-	-	-	-	100.0%	$2,138,000
RCD 2-6: Old Highway 8 / Remmele Culvert Modification	$651,000	100.0%	$651,000	-	-	-	-
RCD 3-2: Increase Poplar Lake Outlet Capacity	$1,153,000	56.0%	$645,680	-	-	44.0%	$507,320
RCD 3-4; Silver Lake Outlet Modification	$66,000	100.0%	$66,000	-	-	-	-
RCD 5-6: MN Transfer Railway Pond	$3,290,000	75.3%	$2,477,370	24.7%	$812,630	-	-
RCD 5-7: Modify Langton Lake Outlet	$69,000	100.0%	$69,000	-	-	-	-
Totals	**$21,444,000**		**$13,890,396**		**$3,904,922**		**$3,569,000**

PROJECT FUNDING

The RCD 2, 3 & 5 BWMP is a multi-purpose project providing benefits at local, regional, and state-wide levels. Due to the large scale of the project, it is imperative that multiple funding sources are considered, including local (municipal), regional (RCWD), state, and federal funds. The following is an outline of potential funding sources for the project. Although it is unlikely that all of these sources will be available and/or utilized, it is important to explore multiple funding options for maximum flexibility.

LOCAL (MUNICIPAL / ROAD AUTHORITY) FUNDING

Project components identified as having "local flood benefit" may be funded in part or in whole by local funding sources, including municipal funding and/or road authority funding. Much of the project work in this category is within road right-of-way and may be completed in conjunction with roadway reconstruction projects. Note that some of the work in this category may be eligible for state and local funding (see *State/Federal Funding* below).

REGIONAL (RCWD) FUNDING

The RCWD has identified the RCD 2, 3 & 5 BWMP as a priority project within is 2020 Watershed Management Plan (WMP). The WMP identifies two potential sources for the RCWD to provide project funding: 1) ad valorem (general levy) funding; and 2) the RCD 2, 3 & 5 Water Management District (RCD 235-WMD) established via the WMP over the area within the RCWD that drains to RCD 2, 3 & 5.

As identified in the WMP, local flood benefit portions of the project may be funded in part via the RCD 235-WMD. Regional flood benefit and water quality improvement portions of the project may be funded in part through RCWD ad valorem funding.

STATE/FEDERAL FUNDING

There are several state and federal funds that are potential funding sources for the project. Below is a summary of the four most likely candidates for funding.

Flood Hazard Mitigation Grant Program

The Flood Hazard Mitigation (FHM) Grant is administered by the Minnesota Department of Natural Resources, intended to provide financial assistance to local governmental units for conducting flood damage reduction studies and for planning and implementing flood damage reduction measures. Project features providing local and regional flood benefit are eligible for this program. A preliminary application for this project has been submitted to the DNR, and the project has been placed on the DNR's grant request list. The grant can pay up to 50% of total eligible project costs. As the RCWD's grant request is greater than $150,000, the request must be approved by the Legislature. Due to the

size of the project, it is recommended that both the project and funding requests under this program be phased.

Capital Budget Request

The state Legislature can appropriate funds toward projects via the bonding bill cycle. Minnesota Management and Budget (MMB) is responsible for guiding the capital investment process. Submissions must be made in mid-June of an odd-numbered year, for consideration in the next even numbered year.

Building Resiliency in Communities

Building Resiliency in Communities (BRIC) is a federal grant program administered by FEMA which supports states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. Projects must be determined to be cost-effective. Projects that mitigate risk to infrastructure and lifelines or incorporate nature-based solutions are generally scored higher.

Clean Water Fund Projects and Practices

The Clean Water Fund (CWF) projects and practices grant is a competitive grant program administered by the Board of Water and Soil Resources (BWSR) which provides financial assistance for water quality improvement projects. A 25% match of local (non-state) funding is required under this program.