

2025 Pleasure Creek SWA Annual Update

3/25/2025



### Agenda

- Water Resource Situation Update
- 2024 Activity Summary
- Goal/Objective Progress
- New Opportunities
- 2025 Implementation Planning
- Future Budget Needs

Expected Meeting Outcomes:

- Provide major updates to situation
- Identify any new opportunities to be included in Implementation Plan
- Discuss 2025 planned items on the Implementation Plan
  - Budgeting and project leads



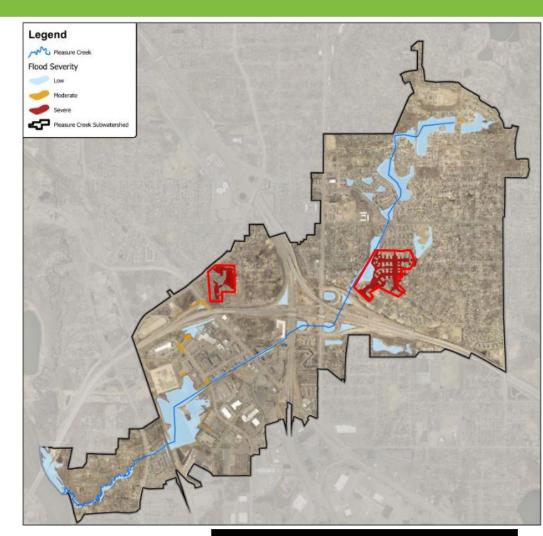
### Water Resource Situation

#### Water Quality Impairments

- Aquatic Life
  - High sediment levels
  - Slightly high phosphorus (good progress!)
  - High chloride
  - Poor habitat/altered hydrology
- Aquatic Recreation
  - $\circ$  High E.coli
  - $\circ~$  Sewage and pathogens

#### **Flooding Issues**

- 9 habitable structures in Coon Rapids (west area)
- 12 habitable structures in Blaine (east area)
- O habitable structures! Flooded streets ~ 96<sup>th</sup> Ln in Blaine (east area)



City/MS4	% Area of Watershed
ACHD	13
Blaine	44
CCWD	9
Coon Rapids	34

### 2024 Situation Updates

#### Water Quality

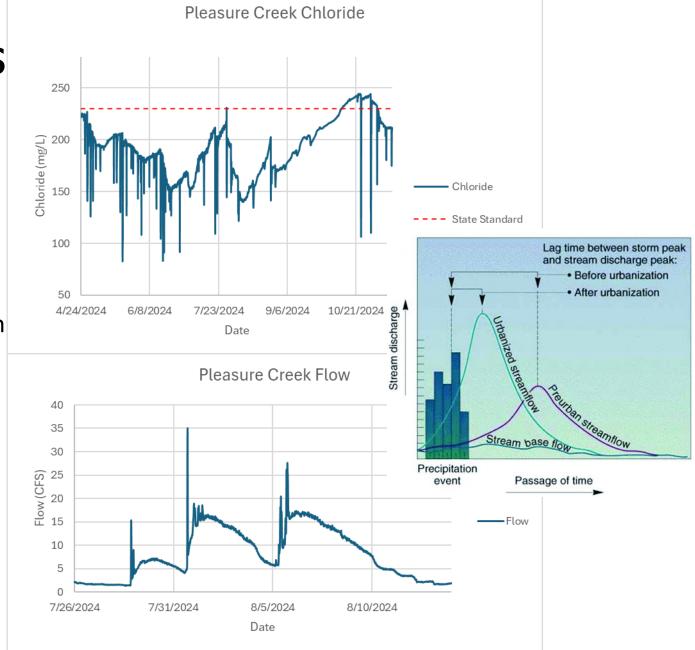
- Chloride levels rising (groundwater sourced)
- Altered hydrology/flashiness

### **Flooding**

- No structural flooding in "East Area" in Blaine
- Confirmed potential severe structural flooding in "West Area" in Coon Rapids

### <u>Other</u>

Mostly normal precipitation (3.3" or 15% above average precip)





### 2024 Activity Highlights

### West Area Flood Study

- Model was calibrated/verified for Mason Park Pond
- $\Box$  ~10 units with 3' flooding in 100y event
- No obvious solution. City to consider potential options.

### East Area Flood Study

- □ Calibration verified model results
- □ Model updates removed structures from FP
- 96<sup>th</sup> Ln & Cloverleaf Prkwy have about 2' flooding in 100yr event

### Shallow GW Chloride Study

- Projects to model/measure GW chloride kicked off
- □ UofM project installed 6 monitoring wells
- □ USGS model to be completed in 2025
- Goal is to refine understanding, eventually inform mitigation strategies

#### Sweeping/Sweeping Piles!

- Coon Rapids removed entire MnDOT pond sweeping pile!
- Coon Rapids planning to increase efforts for 2025
- □ Blaine planning to increase efforts in 2025





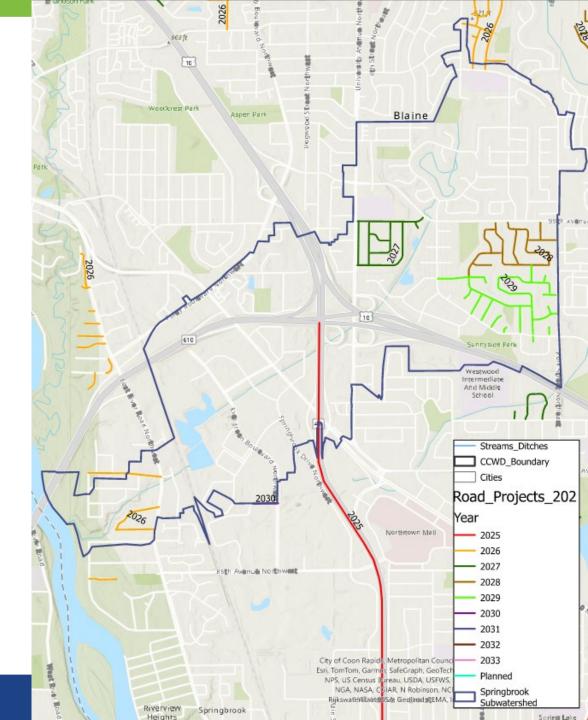
### Goal Progress

Goal 1: Limit the potential for flood damages within the Pleasure Creek subwatershed by 2035.									
1.1 Identify and remove or protect all habitable structures within the 1% annual exceedance probability (100-year) event floodplain.	<ul> <li>Survey data for all potential structures in 1% floodplain was collected</li> <li>Removed East Area structures (12) with updated model and info</li> </ul>								
1.2 Identify locations where road inundation depth for the 10% annual exceedance probability (10- year) may exceed 6" at the crown and develop and implement actions to minimize extent and duration of street flooding.	- Model predicts no roads are inundated 6" in 10-yr event - Objective accomplished								
Goal 2: To reduce flooding and flood damage									
2.1 Undertake load reduction projects and practices to achieve and maintain the wasteload reductions			TMDL Goal	Reduction to date	TMDL % Achievement				
set forth in the Coon Creek Watershed TMDL or other TMDLs that apply to discharge from the Coon Creek Watershed.		ТР	30 lbs	27 lbs	90%				
		TSS	73 tons	4 tons	5%				
		E. Coli	10,082 bill orgs	1,526 billion orgs	15%				
2.2 Implement the non-pollutant stressor mitigation actions identified in the Biotic TMDL.	- none	in 2024							
Goal 3: Work jointly and cooperatively with CCWD, City, County, State, and private partners to achieve the goals and objectives of this Subwatershed Plan.						•			
3.1 Meet at least annually, prior to March 15, to review progress and plan future implementation actions.	- Objec	tive accom	plished						
3.2 At least every five years formally review progress and update this Subwatershed Plan.	- Scheo	luled for 20	)27						
3.3 At least every five years complete a Community Survey to assess awareness gaps of residents.	- Scheo	luled for 20	)27						



# New Opportunities?

- Groundwater chloride studies
- Street project BMP oversizing, culvert crossings?
- West Area severe flooding opportunities? Coon Rapids timing?
- East Area severe flooding 96<sup>th</sup> Ln Pond





### 2024 Implementation Plan

Color Coding Key = activity will be cost-shared

= activity will be funded by lead MS4/owner

		Project Info		Respon	sible Parties		Pro	ject Time	line		
ID	Туре	Name	Status	Lead	Involved	2024	2025	2026	2027	2028	Notes
1	Planning	Detailed Study and Survey of East Area	Ongoing	CCWD	CCWD, BL	\$ 20,000					data collected, all \$ carried over. JJ scheduling kickoff soon.
2	Planning	Detailed Study of West Area	Ongoing	CCWD	CCWD, CR	\$ 10,000					data collected, all \$ carried over
1	Improvement	Cloverleaf Park WQ BMP	Not started	Blaine	CCWD, BL, CR	\$ 440,000					Design in Feb 2024. Construction likely in late 2024 - 2025. Above and beyond TBD
2	Improvement	Swan Park WQ BMP	Not started	Blaine	CCWD, BL, CR	\$ 170,000					Design in late 2024. Construction likely in 2025. Above and beyond TBD
3a	Improvement	96th Lane Pond (Study)	Not started	Blaine	BL	\$ 40,000					Blaine leading survey and feasibility in 2024.
3b	Improvement	96th Lane Pond (Design and Construction)	Not started	Blaine	CCWD, BL, CR			\$ 560,000			Contingent on 96th Ln Pond study. Construction (450K) budgeted for design & construction in 2026
4	Improvement	Sweeping Pile Housekeeping	Ongoing	Coon Rapic	lsCCWD, CR	\$ 20,000					Need to install temporary measures at least
5	Improvement	MnDOT Pond Outlet Retrofit	Not started	CCWD	All	\$ 21,000	\$ 150,000	\$ 12,000	\$ 12,000	\$ 12,000	Study and then implementation (range is 22-100K) follows % of subwatershed area
5.1	Improvement	Woodbridge Channel Improvement	Not Started	CCWD	All +HOA		\$ 100,000				Channel between ERR and BNSF - clearing treees around channel and improve channel bank stability - would help with MNDOT pond outlet retrofit - HOA would cost share
7	Improvement	Streambank Repairs and Stabilization	Not started	CCWD	CCWD		\$ 10,000		\$ 10,000		Every 2-3 years, range of 5-15K, none schedule for 2024, pending results of outlet study
9	Improvement	Implement enhanced street sweeping	Not started	BL, CR, ACHD	All		TBD	TBD	TBD	TBD	CR to purchase trommel screener for future added capacity
4	Protection	Chloride Management	Ongoing	AII	All						Encourage smart salting training for applicators
1	Engagement	Comms and Engagement Plan and Implementation	Ongoing	CCWD	АШ	TBD	TBD	TBD	TBD	TBD	
1 Engagement Pet Waste Ongoing CCWD All						\$ 2,870	\$ 2,870	\$ 2,870	\$ 2,870	\$ 2,870	
		Totals			\$ 723 <i>,</i> 870	\$ 262 <i>,</i> 870	\$ 574,870	\$ 24 <i>,</i> 870	\$ 14,870		



### 2025 Implementation Plan

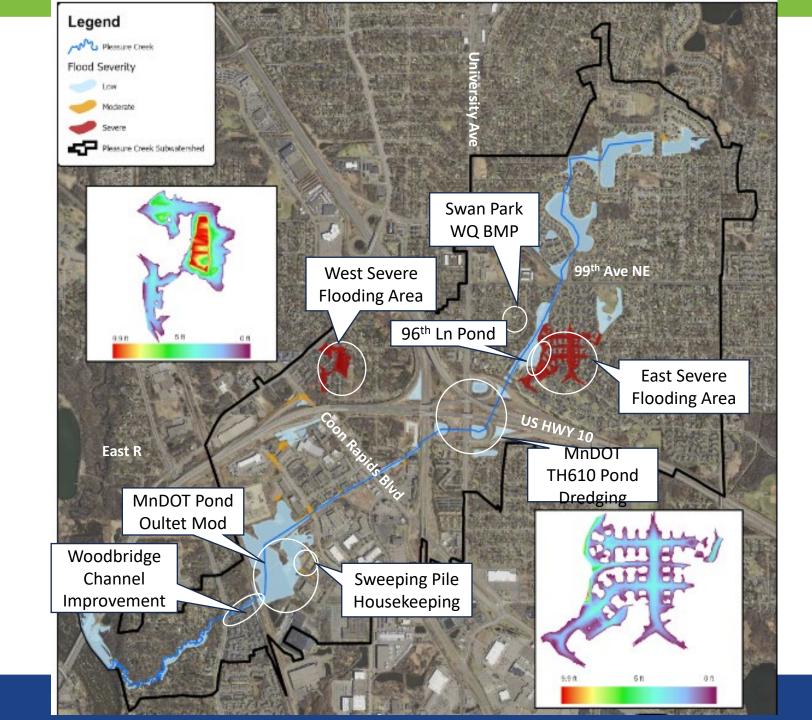
= activity will be cost-shared

**Color Coding Key** 

= activity will be funded by lead MS4/owner

		Project Info		Respons	ible Parties		1	Ye	ars				
ID	Туре	Name	Status	Lead	Involved	2024	2025	20	26	2027	2	028	Totals
1	Planning	Detailed Study and Survey of East Area	Complete	CCWD	CCWD, BL	\$ 20,000							\$ 20,000
2	Planning	Detailed Study of West Area	Complete	CCWD	CCWD, CR	\$ 10,000							\$ 10,000
2	Improvement	Swan Park WQ BMP	Not started	Blaine	CCWD, BL, CR			\$ 1	70,000				\$ 170,000
3a	Improvement	96th Lane Pond (Study)	Not started	Blaine	BL		\$ 40,000						\$ 40,000
3b	Improvement	96th Lane Pond (Design and Construction)	Not started	Blaine	CCWD, BL, CR					\$ 560,000			\$ 560,000
4	Improvement	Maximize MnDOT Pond Treatment (sweeping piles)	Complete	Coon Rapids	CCWD, CR	\$ 20,000							\$ 20,000
5	Improvement	MnDOT Pond Outlet Retrofit (Design)	Ongoing	CCWD	AII	\$ 21,000	\$ 87,000						\$ 108,000
5.1	Improvement	MnDOT Pond Outlet Retrofit (Construct)	Not started	CCWD	AII		\$ 110,000	\$	2,000	\$ 2,000	\$	2,000	\$ 116,000
5.2	Improvement	Woodbridge Channel Improvement	Ongoing	CCWD	CCWD		\$ 100,000						\$ 100,000
6	Improvement	Habitat Enhancement	On Hold	CCWD	All								\$ -
7	Improvement	Streambank Repairs and Stabilization	Not started	CCWD	CCWD		\$ 10,000						\$ 10,000
9	Improvement	Implement enhanced street sweeping	Ongoing	BL, CR, ACHD	All								\$ -
4	Protection	Chloride Management	Ongoing	All	All								\$ -
1	Engagement	Communications and Engagement Plan and Implementation	Ongoing	CCWD	All	\$ 19,900	\$ 5,000	\$	5,000	\$ 5,000	\$	5,000	\$ 39,900
1	Engagement	Pet Waste	Ongoing	CCWD	CCWD	\$ 2,870	2,870		2,870	2,870	\$	2,870	\$ 17,220
		TOTALS				\$ 93,770	\$ 354,870	\$ 1	79,870	\$ 569,870	\$	9,870	\$ 1,316,520







## **Critical Project Discussion**

✓ MnDOT Pond Outlet Retrofit



# **MnDOT Pond Outlet Retrofit**

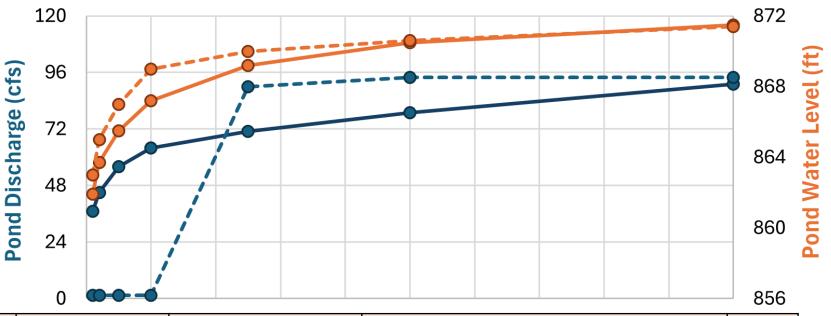
Figure 1. Project Location

Existing Fixed Orifice vs Proposed Smart Outlet

<u>What</u>: Adding a "smart" valve to outlet pipe to optimize water storage capabilities

#### <u>Benefits</u>:

- ✓ 127 lbs Phos. (>100% of goal!)
- ✓ 10 tons Sediment (14% of goal)
- $\checkmark\,$  Lower erosive forces
- ✓ Improved conditions for fish/bugs
- ✓ Decreased flood risk
- ✓ Decreased maintenance needs
- ✓ Potentially lower chloride levels!

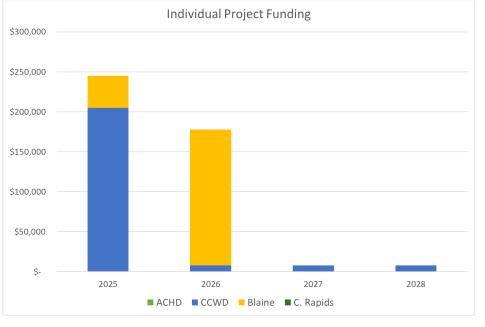


	P	Project Info		Responsible Parties Cost - % contribution												
ID Type Name		Status	Lead	Involved	CCWD	Blaine	CR	ACHD	2023	2024	2025	2026	2027	2028	Totals	
5	Improvement	MnDOT Pond Outlet Retrofit (Design)	Ongoing	CCWD	All	100%	0%	0%	0%		\$ 21,000	\$ 87,000				\$ 108,000
5.1	Improvement	MnDOT Pond Outlet Retrofit (Construct)	Not started	CCWD	All	9%	44%	34%	13%			\$ 110,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 116,000
5.2	Improvement	Woodbridge Channel Improvement	Ongoing	CCWD	ссwd	100%						\$ 100,000				\$ 100,000

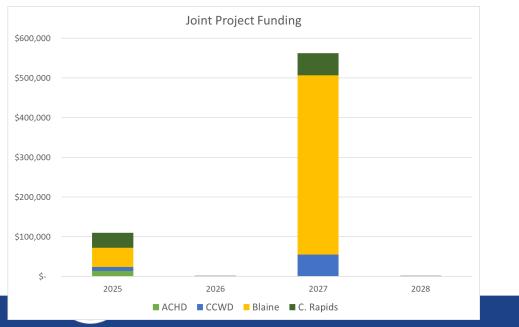
# **Project Funding**

	_	Project Info		Responsi	ble Parties	Co	ost - % co	ntributio	n		Pr	oject Time	line		
ID	Туре	Name	Status	Lead	Involved	CCWD	Blaine	CR	ACHD	2024	2025	2026	2027	2028	Totals
1	Planning	Detailed Study and Survey of East Area	Complete	CCWD	CCWD, BL	50%	50%			\$ 20,000					\$ 20,000
2	Planning	Detailed Study of West Area	Complete	CCWD	CCWD, CR	50%		50%		\$ 10,000					\$ 10,000
2	2 Improvement Swan Park WQ BMP		Not started	Blaine	CCWD, BL, CR	0%	100%	0%				\$ 170,000			\$ 170,000
3a	Improvement	96th Lane Pond (Study)	Not started	Blaine	BL		100%				\$ 40,000				\$ 40,000
3b	Improvement	96th Lane Pond (Design and Construction)	Not started	Blaine	CCWD, BL, CR	10%	80%	10%					\$ 560,000		\$ 560,000
4	Improvement	Maximize MnDOT Pond Treatment (sweeping piles)	Complete	Coon Rapids	CCWD, CR	0%		100%		\$ 20,000					\$ 20,000
5	Improvement	MnDOT Pond Outlet Retrofit (Design)	Ongoing	CCWD	All	100%	0%	0%	0%	\$ 21,000	\$ 87,000				\$ 108,000
5.1	Improvement	MnDOT Pond Outlet Retrofit (Construct)	Not started	CCWD	All	9%	44%	34%	13%		\$ 110,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 116,000
5.2	Improvement	Woodbridge Channel Improvement	Ongoing	CCWD	CCWD	100%					\$ 100,000				\$ 100,000
6	Improvement	Habitat Enhancement	On Hold	CCWD	All	9%	44%	34%	13%						\$-
7	Improvement	Streambank Repairs and Stabilization	Not started	CCWD	CCWD	100%					\$ 10,000				\$ 10,000
9	Improvement	Implement enhanced street sweeping	Ongoing	BL, CR, ACHD	All										\$-
4	Protection	Chloride Management	Ongoing	All	All										\$-
1	Engagement	Communications and Engagement Plan and Implementation	Ongoing	CCWD	All	100%				\$ 19,900	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 39,900
1				ссwd	CCWD	100%				\$ 2,870					
		TOTALS								<mark>\$ 93,770</mark>	<mark>\$ 354,870</mark>	<mark>\$ 179,870</mark>	<mark>\$ 569,870</mark>	\$	<mark>\$ 1,316,520</mark>

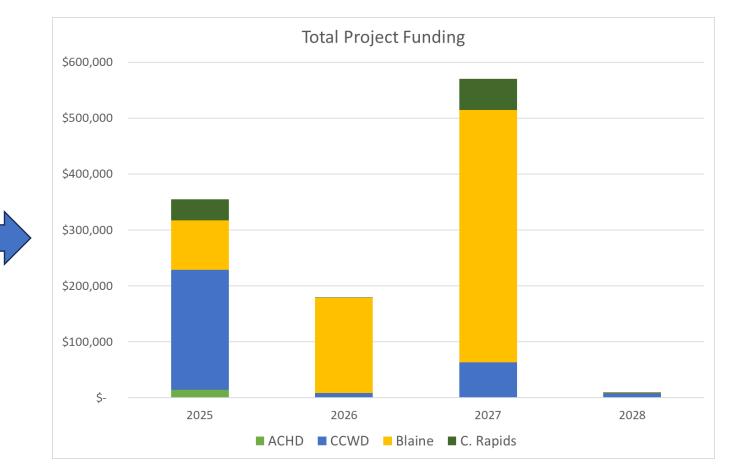




#### €



## Funding Breakdown



Funding	Breakdown
---------	-----------

	Individual Project Funding														
	2025 2026 2027 202														
ACHD	\$	-	\$	-	\$	-	\$	-							
CCWD	\$	204,870	\$	7,870	\$	7,870	\$	7,870							
Blaine	\$	40,000	\$	170,000	\$	-	\$	-							
C. Rapids	\$	-	\$	-	\$	-	\$	-							
Total	\$	244,870	\$	177,870	\$	7,870	\$	7,870							

		2025	2026	2027	2028
,870	ACHD	\$ 14,300	\$ 260	\$ 260	\$ 260
	CCWD	\$ 214,770	\$ 8,050	\$ 63,050	\$ 8,050
	Blaine	\$ 88,400	\$ 170,880	\$ 450,880	\$ 880
	C. Rapids	\$ 37,400	\$ 680	\$ 55,680	\$ 680
8	Total	\$ 354,870	\$ 179,870	\$ 569,870	\$ 9,870

	Join	t Pi	roject Fun	din	g	
	2025		2026		2027	2028
ACHD	\$ 14,300	\$	260	\$	260	\$ 260
CCWD	\$ 9,900	\$	180	\$	55,180	\$ 180
Blaine	\$ 48,400	\$	880	\$	450,880	\$ 880
C. Rapids	\$ 37,400	\$	680	\$	55,680	\$ 680
Total	\$ 110,000	\$	2,000	\$	562,000	\$ 2,000

## Next Steps

- ✓ CCWD to provide updated finalized costs at May TAC
- ✓ Kickoff or continue 2025 project/activities



## The end

