



**COON CREEK**  
WATERSHED DISTRICT

## 2025 Springbrook 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*



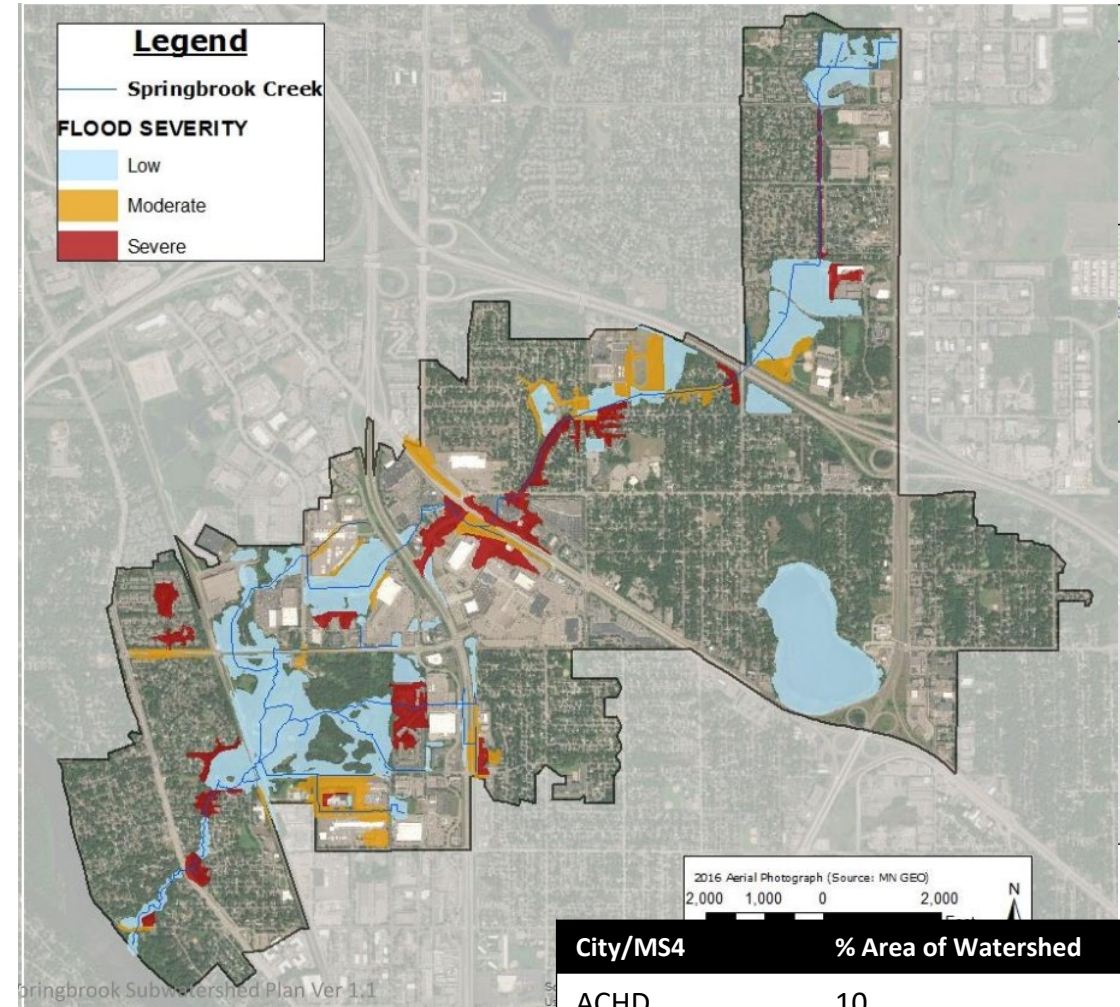
# Water Resource Situation

## Water Quality Impairments

- Aquatic Life
  - High phosphorus levels
  - **High chloride**
  - Poor habitat/altered hydrology
- Aquatic Recreation
  - High E.coli
  - Sewage and pathogens

## Flooding Issues

- 'Severe' flooding inundating 108 structures in 1% event
- 'Moderate' flooding in 13 areas affecting access and parking



City/MS4	% Area of Watershed
ACHD	10
Blaine	41
CCWD	15
Coon Rapids	14
Fridley	6
Spring Lake Park	15



# 2024 Situation Updates

## Water Quality

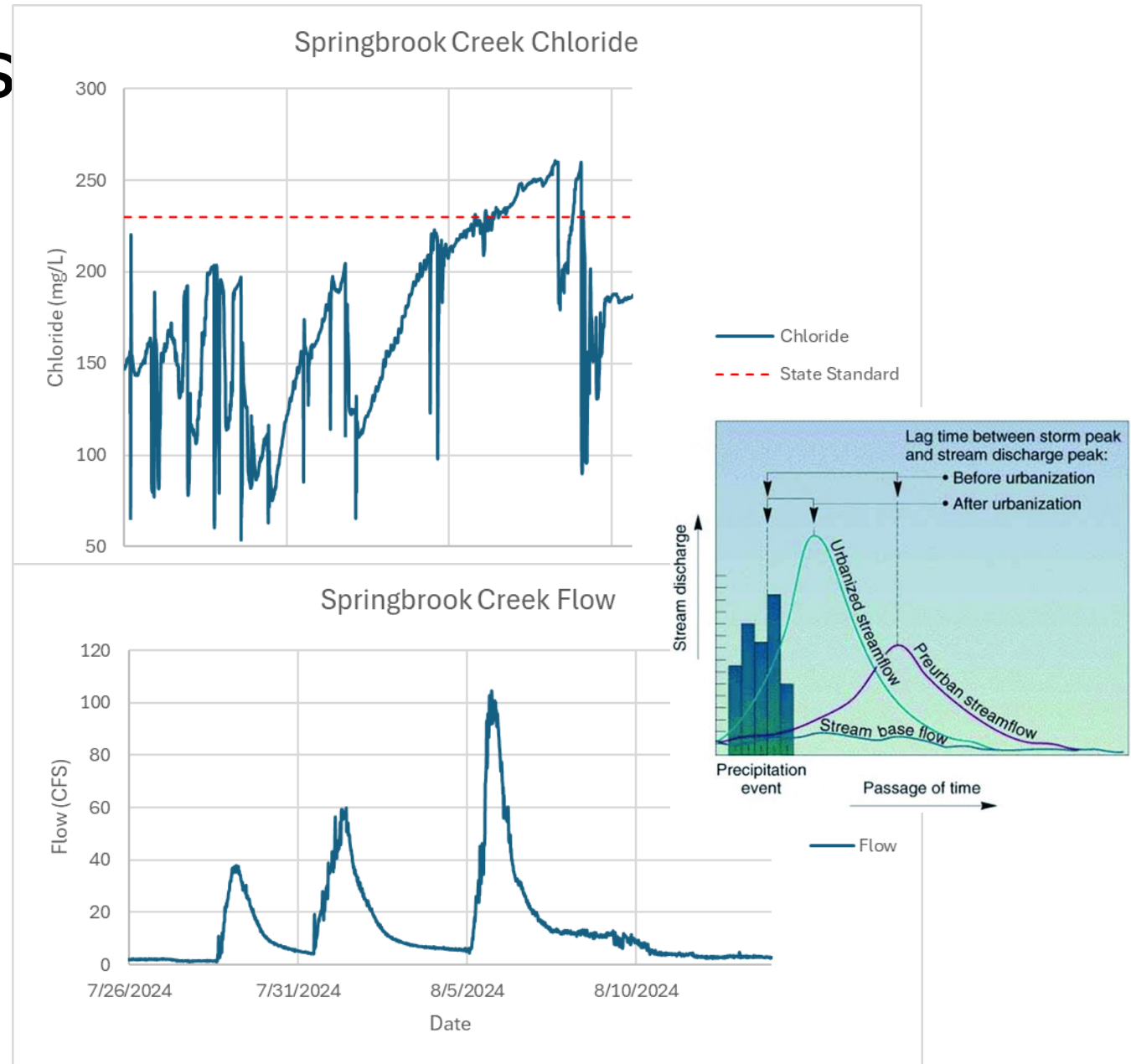
- Chloride levels rising (groundwater sourced)
- Altered hydrology/flashiness

## Flooding

- Conveyance improvements alone can't fix flooding downstream of SPBRK Nature Center.
- Total building value impacted in 100yr event ~ \$135 Million

## Other

- 10 new pet waste stations installed
- HWY47 & 65 PEL study complete – 2030 construction planned
- Mostly normal precipitation (3.3" or 15% above average precip)



# 2024 Activity Highlights

## Conveyance/Capacity Analysis

- ERR culvert modification not recommended
- Ironton/Hugo culvert improvements only provide localized benefit
- Further investigation needed for upstream flood storage

## SB Nature Center Outlet

- Bathymetry survey obtained
- Proof of concept for smart outlet on Pleasure Creek in progress

## 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

## Street sweeping!

- Spring Lake Park received 290K BWSR grant for new sweeper for 2025
- Increased sweeping in SLP = 14 lbs phosphorus and 820 lbs sediment/yr
- Blaine & Coon Rapids planning to also increase sweeping efforts in 2025



# Goal Progress

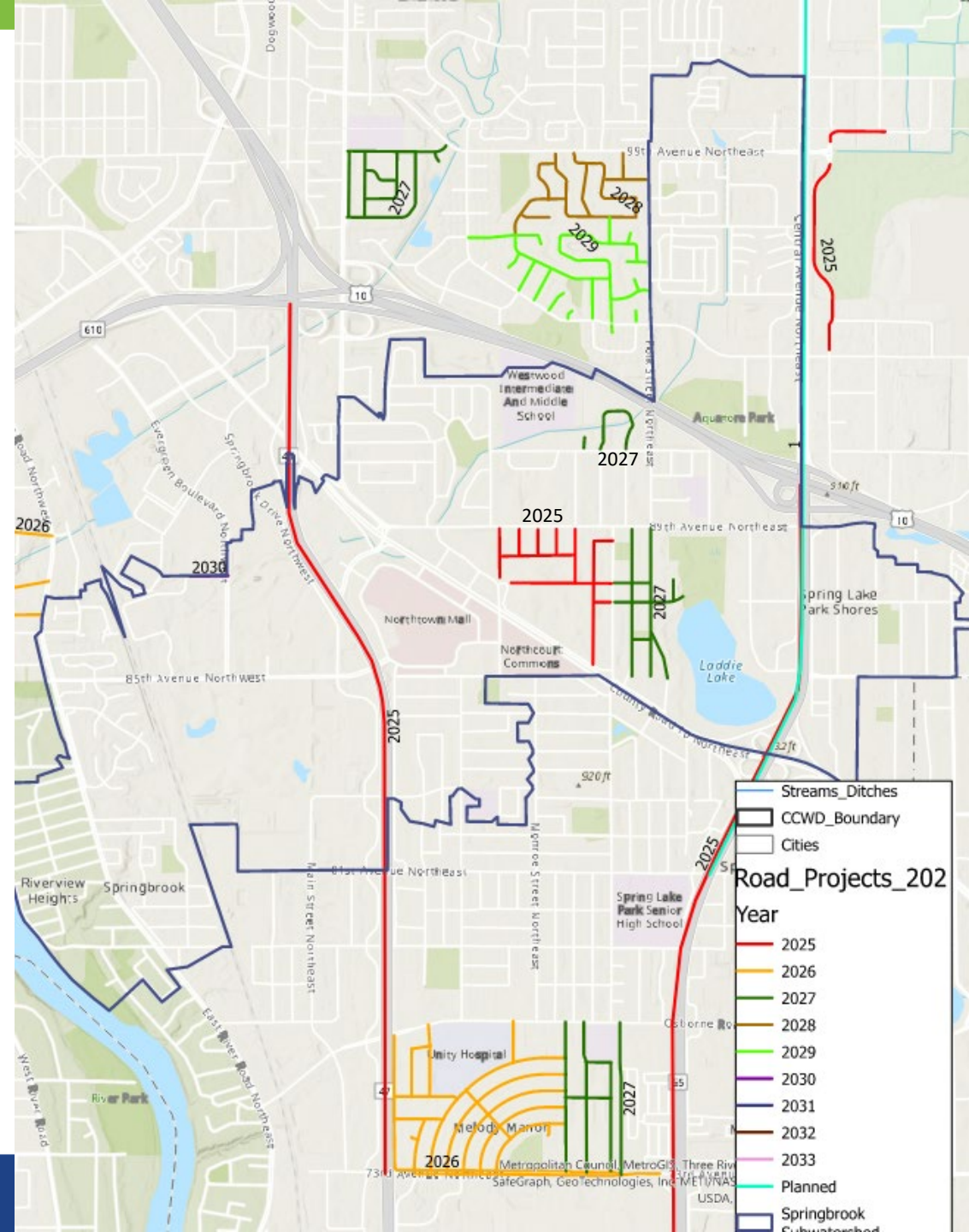
Goal/Objective	2024 Cumulative Progress
<b>Goal 1: To restore the water quality of Springbrook Creek so that it can be removed from the impaired waters list by 2045</b>	
1.1 Reduce <i>E. coli</i> loading by 52% (~15,738 billion organisms per year) from 2012 condition.	- 1,239 bill orgs (8% of needed reductions)
1.2 Reduce Total phosphorus loading by 16% (~490 lbs per year) from 2012 condition	- 49 lbs TP (10% of needed reduction)
1.3 Improve Minnesota Stream Habitat Assessment score by 18%, from 'Fair' to 'Good'	
1.4 Lake Pepin Impairment: Reduce Total phosphorus loading by 69% (~2,055 lbs per year) from 2012 condition.	See 1.2
1.5 Reduce winter/spring chloride concentrations by 54% from 2019 conditions.	- Fridley reduction**, CL groundwater study initiated
1.6 Reduce Laddie Lake's winter/spring chloride concentrations by 5% from 2019 conditions	- Fridley reduction **, CL groundwater study initiated
<b>Goal 2: To reduce flooding and flood damage</b>	- Railroad culvert replaced - 89 <sup>th</sup> Ave culvert crossing improvement to reduce potential blockage
<b>Goal 3: Increase the resilience of the subwatershed</b>	
3.1 Identify locations of severe flooding from 500-yr (resiliency) event in 2024.	





# New Opportunities?

- 2D Model and flood analysis task
  - Removed potential project areas for implementation table
  - Added placeholder flood storage projects for 2028
- Groundwater chloride studies
- Education and outreach pilot plan
- Street project BMP oversizing, culvert crossings?



# 2024 Implementation Plan

Color Coding Key	
	= activity will be cost-shared
	= activity will be funded by lead MS4/owner

Project Info				Responsible Parties		Project Timeline					Notes
ID	Type	Name	Status	Lead	Involved	2024	2025	2026	2027	2028	
	Protection	Pet Waste Management	Ongoing	CCWD	CCWD	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	
	Planning	Northtown Drainage Improvement	Ongoing	CCWD, BL	All			TBD	TBD	TBD	2021 Northtown Mall Reimagining exercise, need more info to assign cost
	Improvement	Aquatore Park BMP	Not started	CCWD	All	\$ 10,000		\$ 180,500			2022 postponed, needs siting analysis
	Improvement	Ironton Culvert Replacement	Not started	Fridley	All						2022 evaluated, elected to start w/downstream culvert first, contingent on ERR
	Improvement	East River Road Culvert Upgrade	Not started	ACHD	CCWD, ACHD	\$ 500,000					ACHD has 500K for 2024, CCWD provides technical guidance
	Improvement	Springbrook Nature Center Pond Outlet Retrofit	Not started	CCWD	All	\$ 22,500	\$ 160,000	\$ 12,000	\$ 12,000	\$ 12,000	Discuss software fee cost share
	Improvement	Springbrook Nature Center Pond Sediment	Not started	Fridley	CCWD	\$ 50,000	\$ 458,000				Could be done in coordination w/outlet mod.
	Improvement	Springbrook Creek Conveyance Improvements/Culvert Capacity Analysis	Ongoing	Fridley	CCWD	TBD	TBD				2022 evaluated, elected to start w/downstream culvert first, may have to revisit contributions
	Improvement	89th Ave Culvert replacement	Not started	Blaine	CCWD, BI	TBD					Blaine replacing 89th Ave culvert in 2024
	Improvement	Springbrook Nature Center Lateral Repair and Flood Reduction	Not started	Fridley	Fridley	\$ 18,500					Northern lateral needs to be cleaned to remove excess vegetation
	Improvement	University Ave (Orphan) Pond Retrofit	Not started	CCWD	All	\$ 10,000	TBD				Concept/feasibility design in 2024. Pond has significant O&M issues - modification of outlet could fix it. Sanburno Dr NE reconstruct this year (retrofit?)
	Improvement	Streambank stabilization	Not started	CCWD	CCWD		TBD				2022 postponed, estimated 2024/2025
	Improvement	Riverview Terrace Flood Protection	Not started	Fridley	F, CCWD						fill out floodplain application
	Improvement	Inline (Evergreen) Pond Repair/Retrofit	Not started	CCWD	BL, CR, F, SLP	\$ 10,000		TBD			Needs siting analysis, likely some potential here, very dirty water thru here
	Improvement	Enhanced Street Sweeping	Not started	BL, CR, F, SLP, ACHD	All	TBD	TBD	TBD	TBD	TBD	
	Engagement	Education/Outreach Activities	Not started	CCWD	BL, CR, F, SLP	TBD	TBD	TBD	TBD	TBD	
<b>Totals</b>						<b>\$ 624,200</b>	<b>\$ 621,200</b>	<b>\$195,700</b>	<b>\$15,200</b>	<b>\$15,200</b>	





# 2025 Implementation Plan

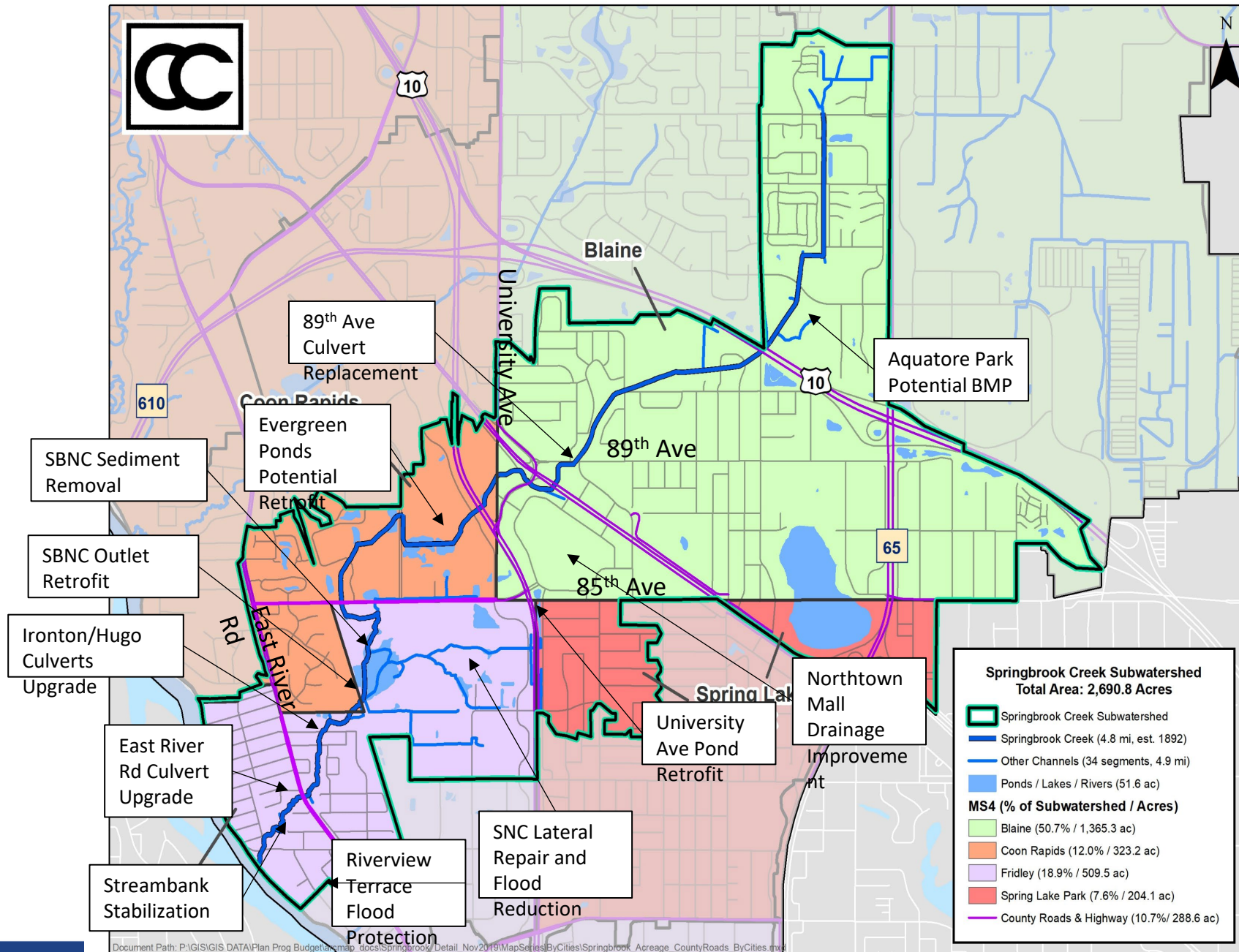
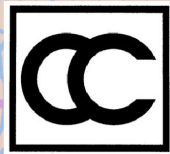
## Color Coding Key

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= activity will be funded by lead MS4/owner

Project Info				Responsible Parties		Year					Total \$
ID	Type	Name	Status	Lead	Involved	2024	2025	2026	2027	2028	
	Protection	Pet Waste Management	Ongoing	CCWD	CCWD	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	\$ 16,000
	Protection	Regulation	Ongoing	BL, CR, F, SLP	BL, CR, F, SLP						\$ -
	Planning	Northtown Drainage Improvement	Ongoing	CCWD, BL	All						\$ -
*	Improvement	Springbrook Nature Center Pond Outlet Retrofit (Design)	Ongoing	CCWD, Frid	All		\$ 22,500				\$ 22,500
*	Improvement	Springbrook Nature Center Pond Outlet Retrofit (Construction)	Not started	CCWD, Frid	All			\$ 160,000	\$ 3,000	\$ 3,000	\$ 166,000
*	Improvement	Springbrook Nature Center Pond Sediment (Design)	Ongoing	CCWD, Frid	all		\$ 68,700				\$ 68,700
*	Improvement	Springbrook Nature Center Pond Sediment (Construction)	Ongoing	CCWD, Frid	All				\$ 458,000		\$ 458,000
	Improvement	Springbrook Creek Conveyance Improvements/Culvert Capacity Analysis	Complete	CCWD	All						\$ -
	Improvement	89th Ave Culvert replacement	Ongoing	Blaine	CCWD, BI						\$ -
	Improvement	Springbrook Nature Center Lateral Repair and Flood Reduction	Not started	Fridley	All	\$ 18,500					\$ 18,500
*	Improvement	2D Flood Model & Flood Analysis	Ongoing	CCWD	All		\$ 97,400				\$ 97,400
	Improvement	Flood Storage Project (top ranking)	Ongoing	CCWD	All					\$ 1,000,000	\$ 1,000,000
	Improvement	University & 85th Pond Retrofit	Ongoing	CCWD	All	\$ 10,000	\$ 51,400				\$ 61,400
	Improvement	Streambank stabilization	Not started	CCWD	CCWD						\$ -
	Improvement	Riverview Terrace Flood Protection	Not started	Fridley	F, CCWD						\$ -
	Improvement	Enhanced street sweeping	Ongoing	BL, CR, F, SLP, ACHD	All						\$ -
	Engagement	Education/Outreach Activites	Not started	CCWD	BL, CR, F, SLP	\$ 69,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 89,000
<b>TOTALS</b>						<b>\$ 102,200</b>	<b>\$ 266,200</b>	<b>\$ 186,200</b>	<b>\$ 469,200</b>	<b>\$ 1,011,200</b>	<b>\$ 2,035,000</b>





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# Critical Project Discussion

- ✓ SBNC Outlet Modification and Sediment Removal
- ✓ 2D Flood Model and Flood Analysis
- ✓ Information/Education Strategy



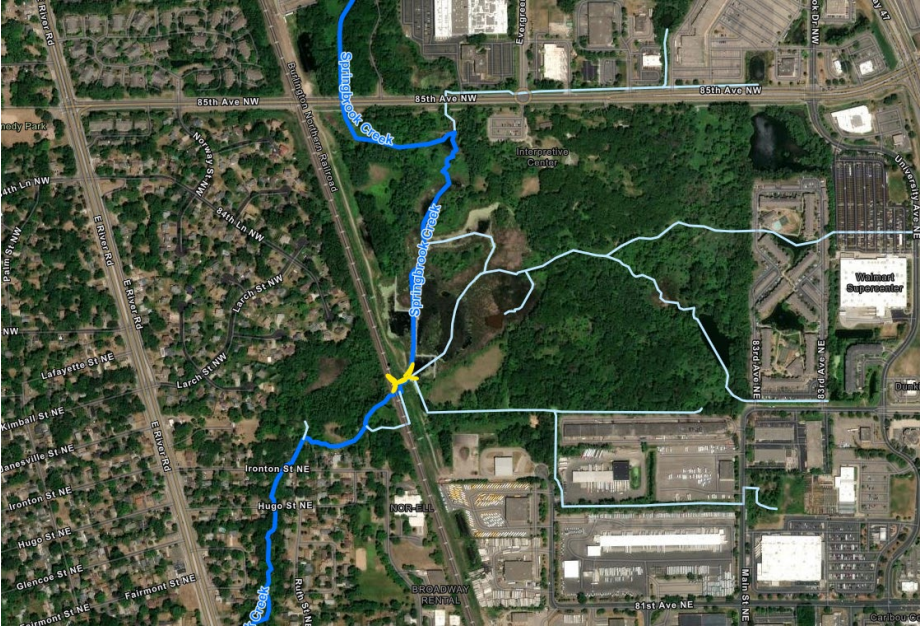


# SBNC Outlet Mod/Sediment Removal

What: Adding a smart outlet orifice to “pre-drawdown” water to provide additional storage. Analyzing outlet config and need for sediment removal in 2025. Costs are still very high level.

Benefits: flood risk reduction downstream, pollutant reductions, altered hydrology

Coordination: with Fridley and Nature Center



Project Info				Parties		Cost - % contribution						Year					
ID	Type	Name	Status	Lead	Involved	CCW D	Blain e	CR	Frid	SLP	ACH D	2024	2025	2026	2027	2028	Total \$
	Improvement	Springbrook Nature Center Pond Outlet Retrofit (Design)	Ongoing	CCWD	All	100%	0%	0%	0%	0%	0%		\$ 22,500				\$ 22,500
	Improvement	Springbrook Nature Center Pond Outlet Retrofit (Construction)	Not started	CCWD	All	11%	48%	11%	17%	7%	6%			\$ 160,000	\$ 3,000	\$ 3,000	\$ 166,000
	Improvement	Springbrook Nature Center Pond Sediment (Design)	Ongoing	CCWD	All	100%							\$ 68,700				\$ 68,700
	Improvement	Springbrook Nature Center Pond Sediment (Construction)	Ongoing	CCWD	All	11%	48%	11%	17%	7%	6%				\$ 458,000		\$ 458,000



# 2D Flood Model and Flood Analysis

What: Creating a new flood model to identify and assess flood mitigation projects.

Benefits:

- Better refinement at small scale vs watershed
- Better overland flow modeling
- Better analysis and design of flood mitigation projects
- Better visualization of depth and duration of flood impacts
- Running multiple scenarios

Coordination: stormsewer info, site constraints, potential project locations



Project Info				Parties		Cost - % contribution						Year				
ID	Type	Name	Status	Lead	Involved	CCWD	Blaine	CR	Frid	SLP	ACHD	2024	2025	2026	2027	2028
	Improvement	2D Flood Model & Flood Analysis	Ongoing	CCWD	All	100%							\$ 97,400			
	Improvement	Flood Storage Project (top ranking)	Ongoing	CCWD	All	25%	25%	25%	25%							\$ 1,000,000



# Information & Education Strategy

What: A new approach to information and education strategies.

The strategy aims to:

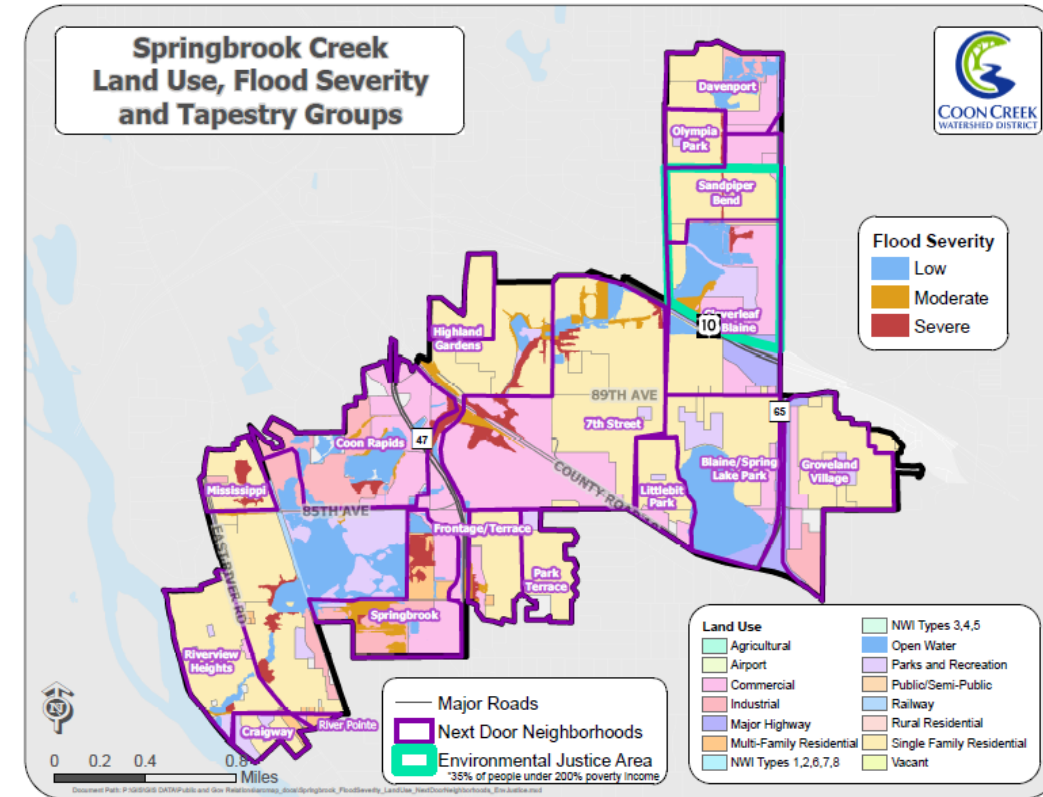
- Ground truth flood model
- Garner public support for funding and projects
- Build active community connections

Benefits: Gain better understanding of localized flooding issues.

Gain local support for future potential projects. Create community connections to gain insight and leverage.

Approach:

- ✓ Complete a community survey.
- ✓ Develop a Community Engagement Roster Program
- ✓ Educate and empower individual action.





# Project Funding

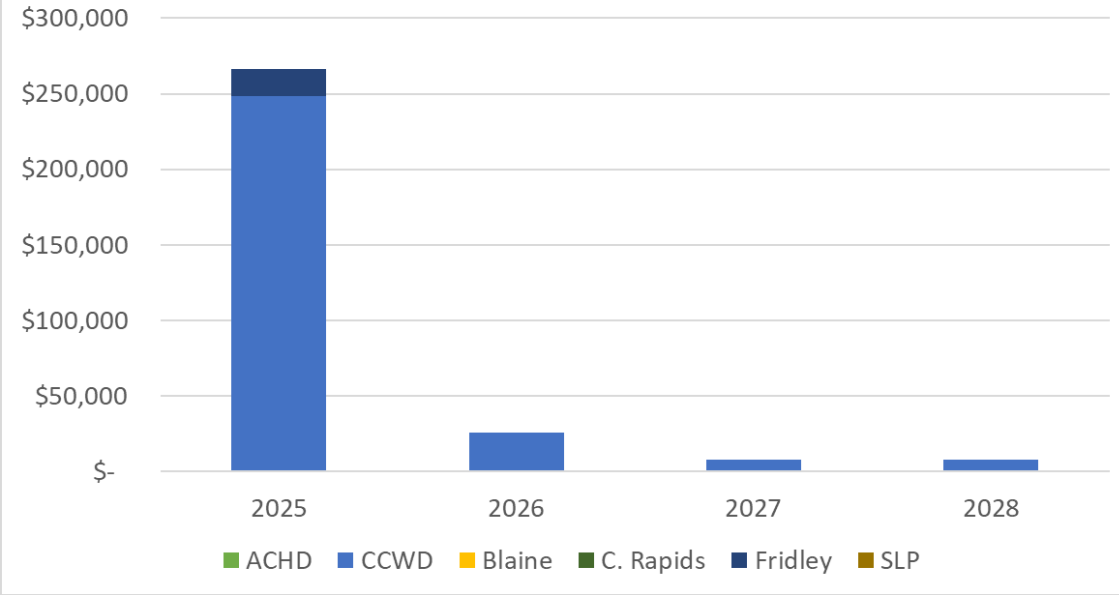
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Project Name	Status	Lead	Involved	CCWD	Blaine	C. Rapids	Fridley	SLP	ACHD	Total %	2024	2025	2026	2027	2028	Total \$
Pet Waste Management	Ongoing	CCWD	CCWD	100%	0%	0%	0%	0%	0%	100%	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	\$ 3,200	\$ 16,000
Regulation	Ongoing	BL, CR, F, SLP	BL, CR, F, SLP							na						\$ -
Northtown Drainage Improvement	Ongoing	CCWD, BL	All	11%	48%	11%	17%	7%	6%	100%						\$ -
Springbrook Nature Center Pond Outlet Retrofit (Design)	Ongoing	CCWD, Frid	All	100%	0%	0%	0%	0%	0%	100%		\$ 22,500				\$ 22,500
Springbrook Nature Center Pond Outlet Retrofit (Construction)	Not started	CCWD, Frid	All	11%	48%	11%	17%	7%	6%	100%			\$ 160,000	\$ 3,000	\$ 3,000	\$ 166,000
Springbrook Nature Center Pond Sediment (Design)	Ongoing	CCWD, Frid	all	100%						100%		\$ 68,700				\$ 68,700
Springbrook Nature Center Pond Sediment (Construction)	Ongoing	CCWD, Frid	all	11%	48%	11%	17%	7%	6%	100%				\$ 458,000		\$ 458,000
Springbrook Creek Conveyance Improvements/Culvert Capacity Analysis	Complete	CCWD	All	100%						100%						\$ -
89th Ave Culvert replacement	Ongoing	Blaine	CCWD, BI		100%					100%						\$ -
Springbrook Nature Center Lateral Repair and Flood Reduction	Not started	Fridley	All				100%			100%		\$ 18,500				\$ 18,500
2D Flood Model & Flood Analysis	Ongoing	CCWD	All	100%						100%		\$ 97,400				\$ 97,400
Flood Storage Project (top ranking)	Ongoing	CCWD	All	25%	25%	25%	25%			100%				\$ 1,000,000		\$ 1,000,000
University & 85th Pond Retrofit	Ongoing	CCWD	All	100%	0%	0%	0%	0%	0%	100%	\$ 10,000	\$ 51,400				\$ 61,400
Streambank stabilization	Not started	CCWD	CCWD	100%						100%						\$ -
Riverview Terrace Flood Protection	Not started	Fridley	F, CCWD				100%			100%						\$ -
Enhanced street sweeping	Ongoing	BL, CR, F, SLP, ACHD	All													\$ -
Education/Outreach Activites	Not started	CCWD	BL, CR, F, SLP	100%	0%	0%	0%	0%		100%	\$ 69,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 89,000
<b>TOTALS</b>											\$ 102,200	\$ 266,200	\$ 186,200	\$ 469,200	\$ 1,011,200	\$ 2,035,000

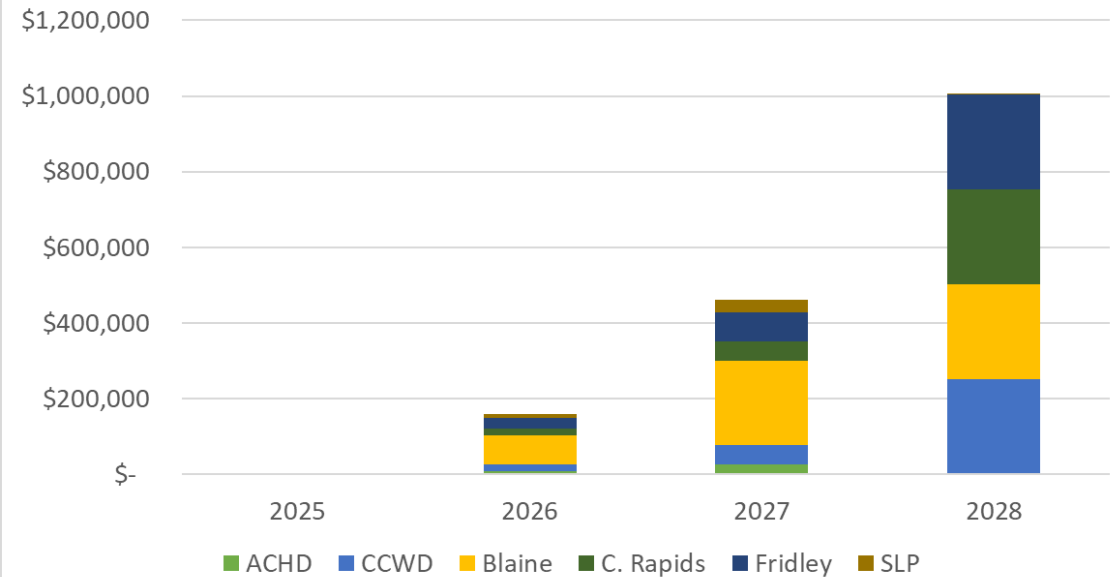


# Funding Breakdown

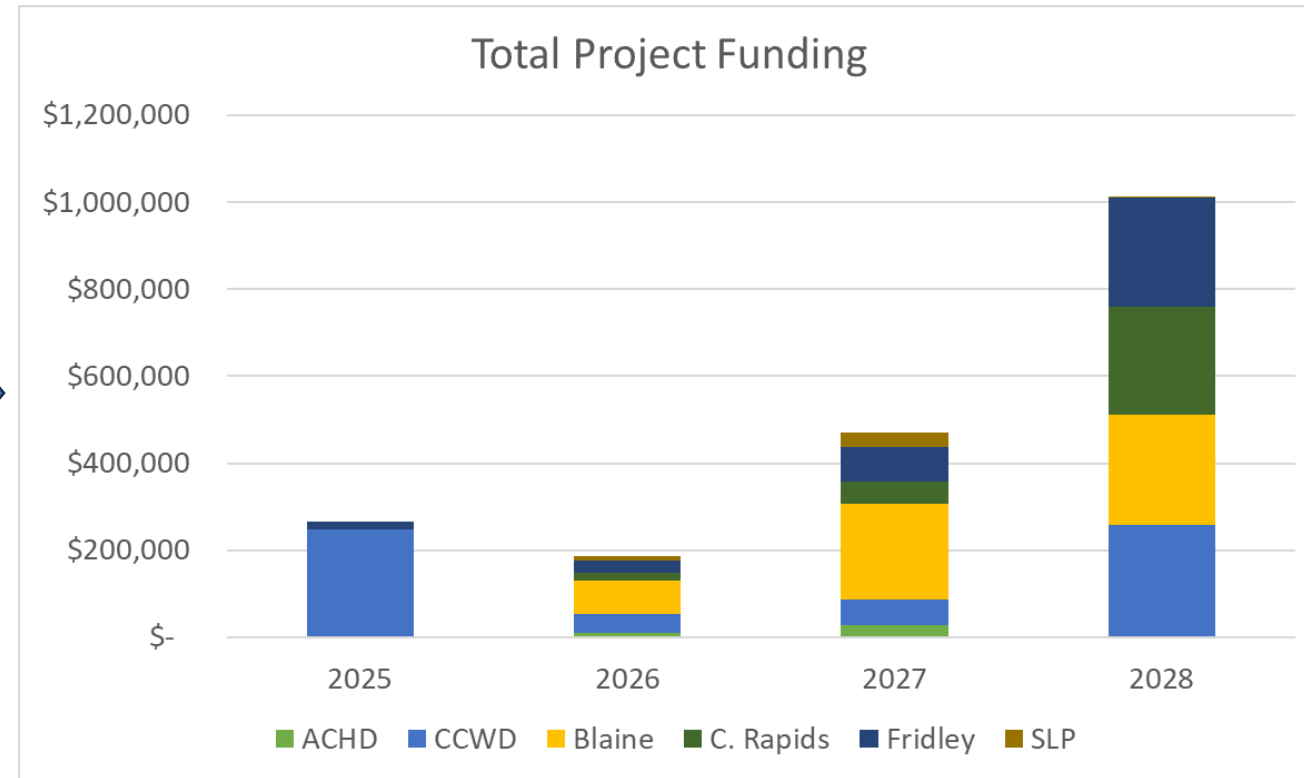
## Individual Project Funding



## Joint Project Funding



## Total Project Funding



# Funding Breakdown

Individual Project Funding				
	2025	2026	2027	2028
ACHD	\$ -	\$ -	\$ -	\$ -
CCWD	\$ 248,200	\$ 26,200	\$ 8,200	\$ 8,200
Blaine	\$ -	\$ -	\$ -	\$ -
C. Rapids	\$ -	\$ -	\$ -	\$ -
Fridley	\$ 18,000	\$ -	\$ -	\$ -
SLP	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ 266,200	\$ 26,200	\$ 8,200	\$ 8,200



Joint Project Funding				
	2025	2026	2027	2028
ACHD	\$ -	\$ 9,600	\$ 27,660	\$ 180
CCWD	\$ -	\$ 17,600	\$ 50,710	\$ 250,330
Blaine	\$ -	\$ 76,800	\$ 221,280	\$ 251,440
C. Rapids	\$ -	\$ 17,600	\$ 50,710	\$ 250,330
Fridley	\$ -	\$ 27,200	\$ 78,370	\$ 250,510
SLP	\$ -	\$ 11,200	\$ 32,270	\$ 210
<b>Total</b>	\$ -	\$ 160,000	\$ 461,000	\$ 1,003,000

Total Project Funding				
	2025	2026	2027	2028
ACHD	\$ -	\$ 9,600	\$ 27,660	\$ 180
CCWD	\$ 248,200	\$ 43,800	\$ 58,910	\$ 258,530
Blaine	\$ -	\$ 76,800	\$ 221,280	\$ 251,440
C. Rapids	\$ -	\$ 17,600	\$ 50,710	\$ 250,330
Fridley	\$ 18,000	\$ 27,200	\$ 78,370	\$ 250,510
SLP	\$ -	\$ 11,200	\$ 32,270	\$ 210
<b>Total</b>	\$ 266,200	\$ 186,200	\$ 469,200	\$ 1,011,200





# Next Steps

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



The end

