



COON CREEK WATERSHED DISTRICT

2025 Ditch 39 SWA Annual Update

3/27/2025



Agenda

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

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*



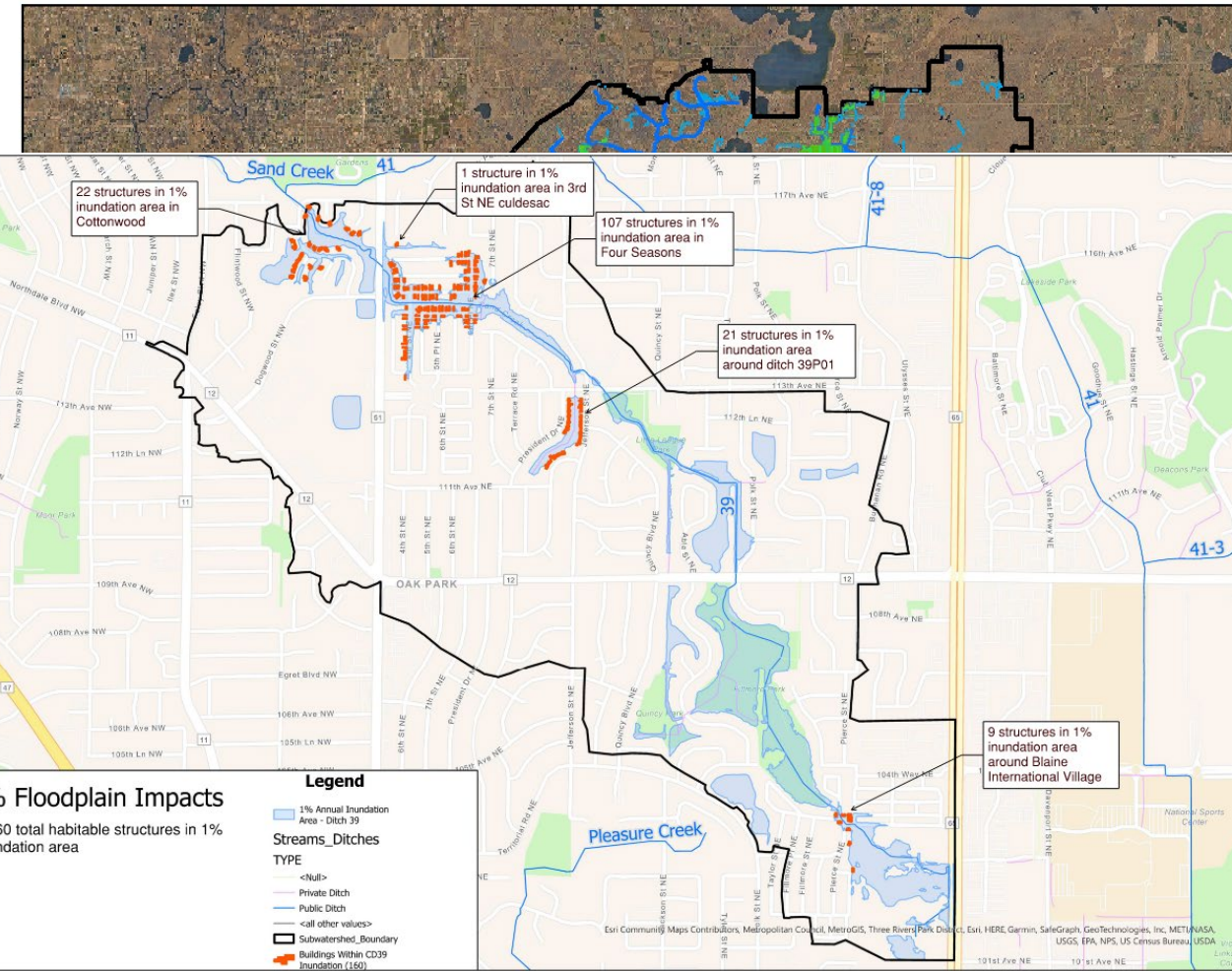
Water Resource Situation

Water Quality Impairments

- Aquatic Life
 - High sediment levels (high flows only)
 - High phosphorus (high flows only)
 - Rising chlorides (at risk)
 - Poor habitat/altered hydrology
- Aquatic Recreation
 - High E.coli
 - Sewage and pathogens

Flooding Issues

- 160 total structures impacted in 1% event
 - Bridgewater (22), Four Seasons (108), Lateral P01 (21), BIV (9)
- Four Seasons and BIV – road overtopping, evacuation concerns



City/MS4	% Area of Watershed
ACHD	4
Blaine	72
CCWD	7
Coon Rapids	17



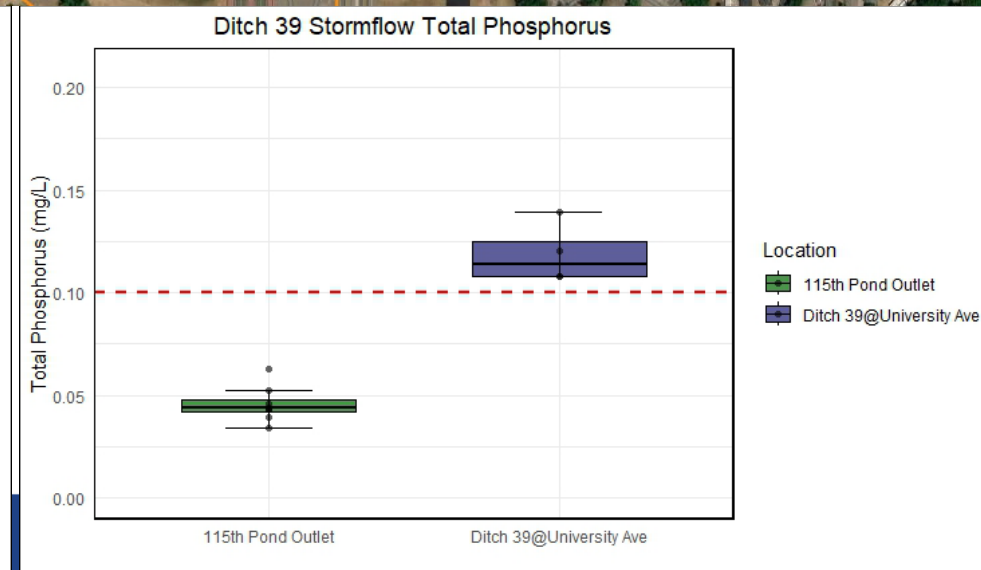
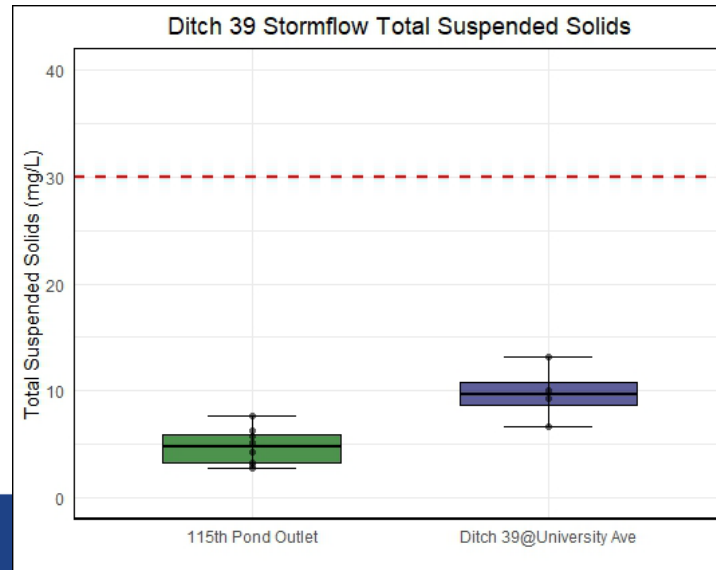
2024 Situation Updates

Water Quality

- Poor water quality in “very high flows” (top 10% of observed flows)
- Northdale (115th) Ponds discharge sampling = great WQ -> change to Bridgewater South BMP design

Other

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



2024 Situation Updates - Flooding

Four Seasons:

- Severe road overtopping @ 4th St. NE and 6th Pl. NE (>2.6 ft).
- ~175 homes potentially isolated in >10yr storms.
- Storm shelters also at high risk in large storm events.

Blaine International Village

- Severe road overtopping @ Pierce St. NE (1.7 ft).
- ~25 homes potentially isolated in >10yr storms.
- Storm shelters also at high risk in large storm events.



2024 Activity Highlights

Bridgewater BMP

- 625K grant award from BWSR
- WQ sampling and Geotech

Street Sweeping!

- Coon Rapids planning to increase efforts for 2025
- Blaine planning to increase efforts in 2025




Four Seasons and BIV Flooding

- Met with Blaine manufactured home task force to discuss situation
- Updated flood models to assess road crossings



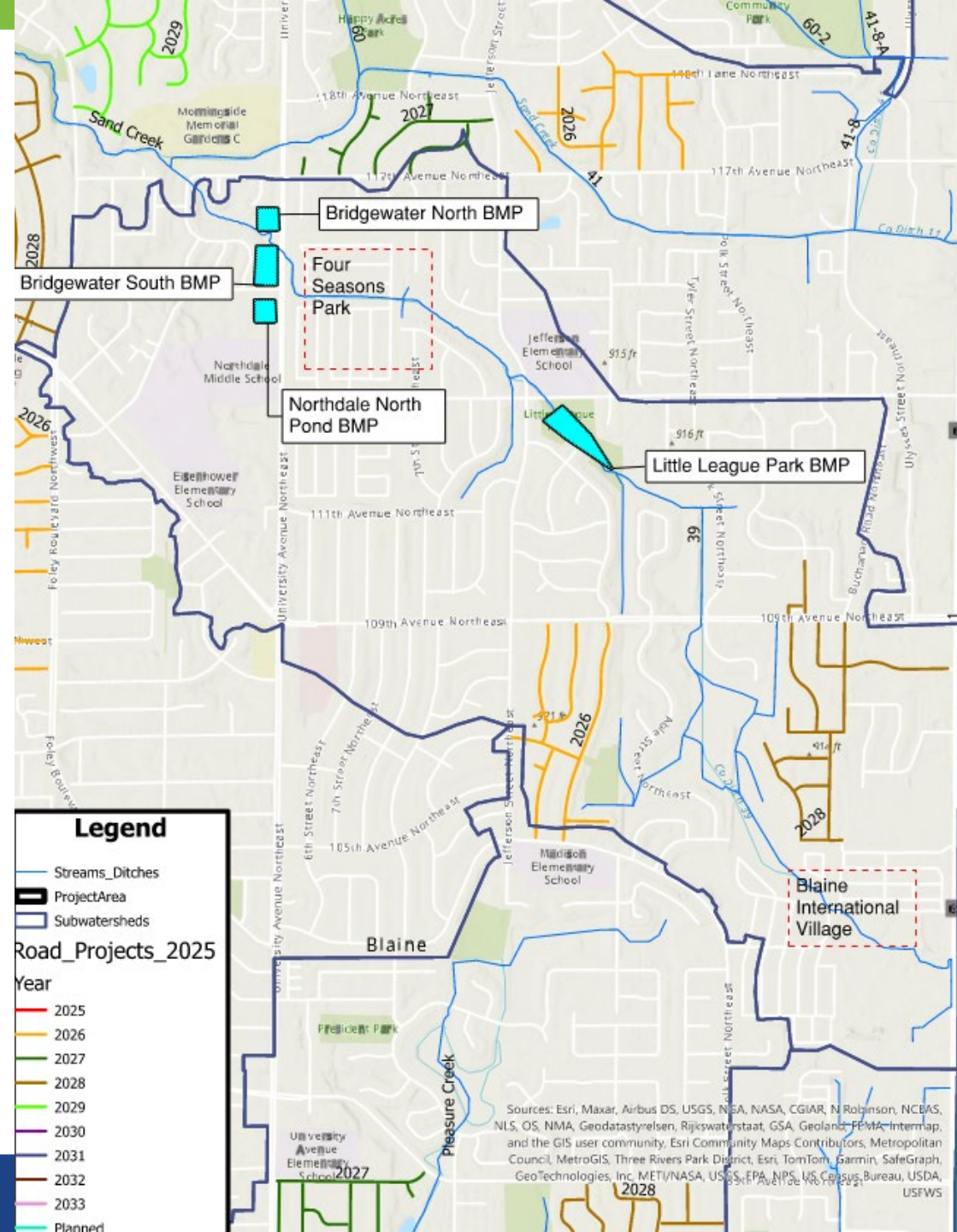
Goal Progress

Goal 1: Improvement water quality and meet TMDL requirements	Progress to-date
1.1 Reduce TP by 131 lbs/yr (20%) by 2045 (baseline 2023)	
1.2 TSS: Reduce TSS by 4.4 tons/yr (6%) by 2045 (baseline 2023)	
1.3 Identify and mitigate sources of active human fecal contamination	
1.4 Reduce chloride application for major private applicators and public entities	
1.5 Reduce e. coli by 10,857 bill orgs/yr (71%) by 2045	
Goal 2: Reduce risk for damage and injury caused by flooding	
2.1 Identify habitable structures within floodplain by 2025	- Met with Four Seasons property manager and Blaine manufactured home task force about collected BFEs.
2.2 Determine if it is feasible to mitigate structures from 1% floodplain (baseline 2023 model)	
2.3 Communicate with areas at risk of flooding and future needs of road authorities to reduce flood risk	- Met with Blaine to communicate flood risk to residents in Four Seasons and BIV.
Goal 3: Increase resilience of subwatershed	
3.1 Identify locations of severe flooding in 500-yr (resiliency) event by 2024	- Objective accomplished 



New Opportunities/CIP Changes?

- Street project BMP oversizing, culvert crossings?
- Bridgewater site BMP combo
- Little League Park alternative BMP
- Four Seasons and BIV flood risk



Bridgewater Site BMP

Status: Working thru permitting. Blaine funding shortfall. Grant awarded. University Ave pipe.

Options:

1) Scale up to max pollutant removals and combine South and North Bridgewater projects.

Pros: more efficient to meet goals. One time site disturbance. ~40-50lbs TP.

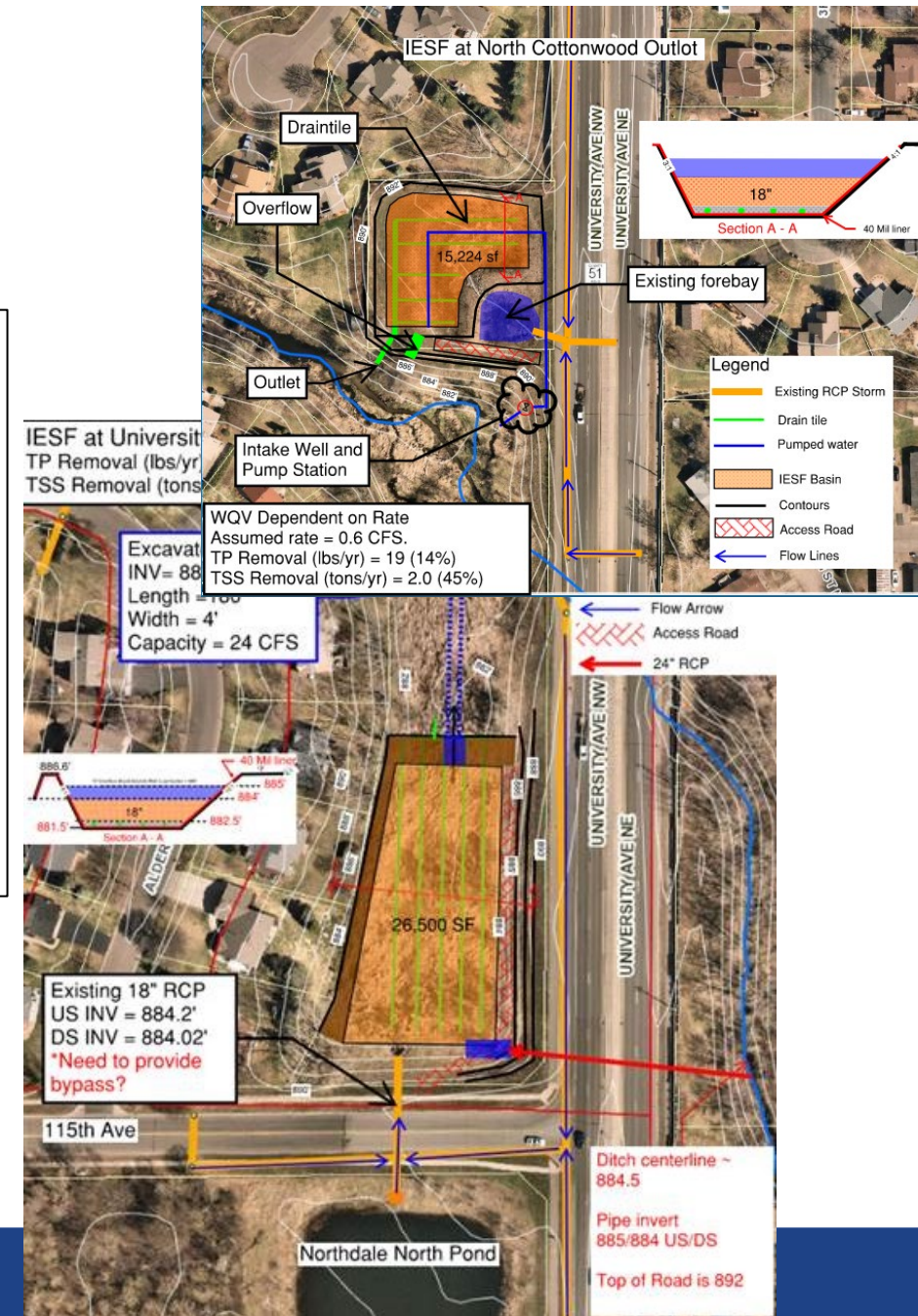
Cons: Unequal cost-sharing burden. Feasibility less certain.

2) Maintain current scope to keep initial cost-share. Keep North and South as separate projects.

Pros: Cost-share matches proposed %s. ~45-55 lbs TP.

Cons: Less efficient. South and North sites still needed. 2x site disturbance.

2025 Construction Cost		
Fund Source	Option 1 (\$)	Option 2 (\$)
CCWD	\$ 182,000	\$ 38,889
Blaine*	\$ 400,000	\$ 400,000
Coon Rapids	\$ 207,000	\$ 94,444
Anoka County	\$ 49,000	\$ 22,222
BWSR Grant	\$ 625,000	\$ 625,000
Total	\$ 1,463,000	\$ 1,180,556



Little League Park BMP

Status: updated feasibility design based on monitoring and geotech.

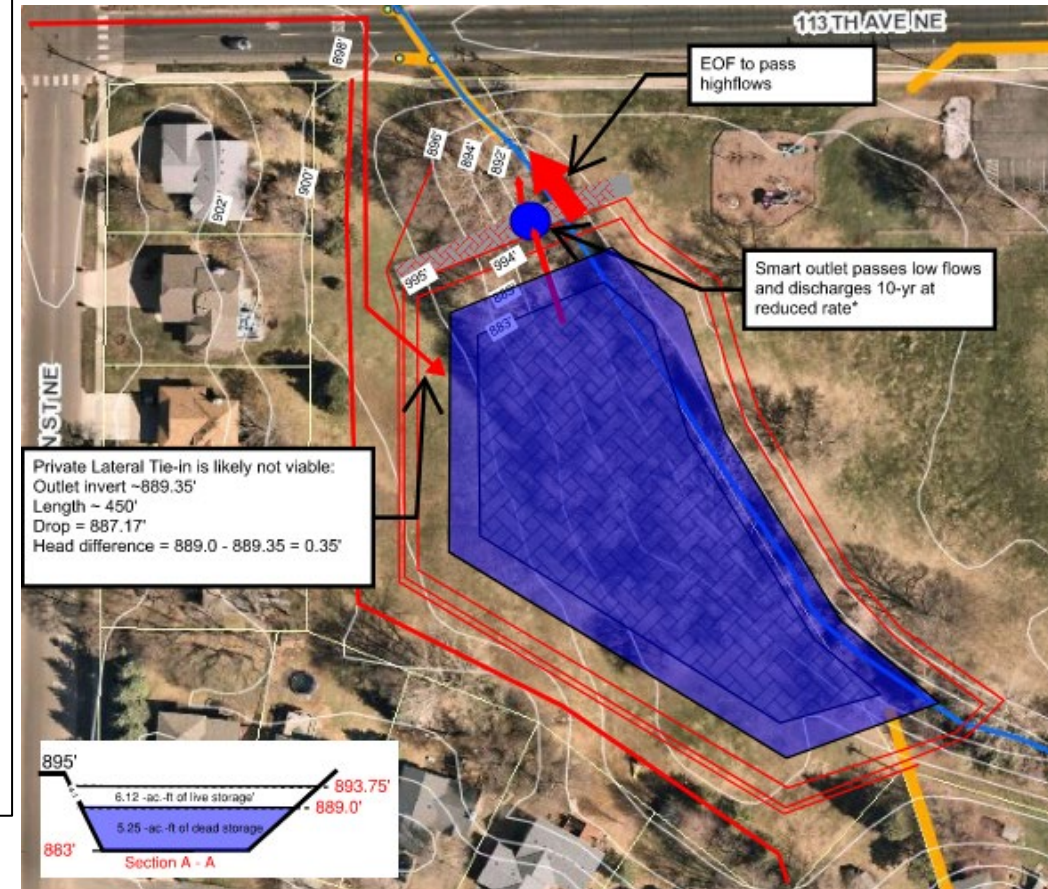
BMP Options:

IESF Filter: an offline filter that treats mostly baseflow, likely pump-based

- Effective for dissolved pollutants
- 55 lbs TP (42% of goal)
- 3 tons TSS (68% of goal)
- \$1.6M
- \$1,271/lb TP
- **Pump-based, baseflow**
- **No impact on altered hydrology**
- **NOT targeted (on paper vs. in-stream)**
- **Increased maintenance**

Pond: an in-line wet pond that can treat stormflow

- Captures particulates, TSS
- 52 lbs TP (40% of goal)
- 7.5 tons TSS (170% of goal!)
- \$2M
- \$1,587/lb TP
- Attenuates stormflow, good for altered hydrology
- Targeted for D39 & Sand Creek
- Less maintenance
- **Safety concerns**



Four Seasons and BIV Flooding

Status:

- 160 total structures at risk. Road crossings in 4Seasons and BIV (>2'). Potential evacuation issues.
- Prior analysis only showed 0.5' drop in FP w/multiple large culvert upgrades around Bridgewater and Four Seasons. NO obvious solutions. Including this area in HMP for potential federal funding.

City Perspective?

Options?

- Collect BFEs, calibration data, new 2D model, flood analysis, mitigation, floodproofing, buyouts



2024 Implementation Plan

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

Project Info				Responsible Parties		Cost - % contribution					Timeline					
ID	Type	Name	Status	Lead	Involved	CCWD	Blaine	CR	ACHD	Total	2025	2026	2027	2028	2029	Total
1	Project	Little League Park Basin (Design)	Not started	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%		\$134,000				\$134,000
1	Project	Little League Park Basin (Construct)	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%			\$1,116,000			\$1,116,000
2	Project	Bridgewater South IESF (Design)	Not started	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%	\$215,280					\$215,280
2	Project	Bridgewater South IESF (Construct)	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%	\$1,219,920					\$1,219,920
3	Project	Bridgewater North Basin (Design)	Not started	CCWD/ACHD	CCWD, ACHD	100%	0%	0%	0%	100%	\$110,000					\$110,000
3	Project	Bridgewater North Basin (Construct)	Not started	CCWD/ACHD	CCWD, ACHD	7%	72%	17%	4%	100%		\$920,000				\$920,000
4	Project	Northdale North Pond IESF Bench	On Hold	CCWD	CCWD, CR, BL	7%	72%	17%		96%						\$0
1	Activity	Targeted Public Engagement	Not started	CCWD	CCWD	100%				100%	\$2,870	\$2,870	\$2,870	\$2,870	\$2,870	\$14,350
2	Activity	High-resolution bacteria study	Not started	CCWD	CCWD	100%				100%	\$2,500	\$2,500				\$5,000
3	Activity	Collect elevation certificates	Not started	CCWD	CCWD, CR, BL					0%						\$0
4	Activity	Provide BFEs to Four Seasons & BIV	Not started	Blaine	CCWD, BL					0%						\$0
5	Activity	Flood proofing BIV & Four Season structures	Not started	Blaine	BL					0%						\$0
6	Activity	Evaluate 500yr Flood Event	Ongoing	CCWD	CCWD	100%				100%	\$5,000					\$5,000
TOTALS											\$1,555,570	\$1,059,370	\$1,118,870	\$2,870	\$2,870	\$3,739,550



2025 Implementation Plan (option 1)

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

Project Info			Status	Responsible Parties		Cost - % contribution					Timeline					
Name	ID	Type		Lead	Involved	CCWD	Blaine	CR	ACHD	Total	2025	2026	2027	2028	2029	Total
Little League Park Basin (Design)	1	Project	Not started	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%		\$500,000				\$500,000
Little League Park Basin (Construct)	1.1	Project	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%			\$1,500,000			\$1,500,000
Bridgewater S&N BMP (Design)	2	Project	Ongoing	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%	\$215,000					\$215,000
Bridgewater S&N BMP (Construct)	2.1	Project	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%	\$1,462,598					\$1,462,598
Targeted Public Engagement	1	Activity	Not started	CCWD	CCWD	100%				100%	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$15,000
High-resolution bacteria study	2	Activity	Not started	CCWD	CCWD	100%				100%	\$2,500	\$2,500				\$5,000
Collect elevation certificates	3	Activity	Not started	CCWD	CCWD, CR, BL					0%						\$0
Provide BFEs to Four Seasons & BIV	4	Activity	Not started	Blaine	CCWD, BL					0%						\$0
Flood proofing BIV & Four Season structures	5	Activity	Not started	Blaine	BL					0%						\$0
Four Seasons and BIV Flood Mitigation Analysis	7	Activity	Not started	Blaine	BL, CCWD	50%	50%			100%			\$100,000			\$100,000
Evaluate 500yr Flood Event	6	Activity	Ongoing	CCWD	CCWD	100%				100%	\$5,000					\$5,000
	TOTALS										\$1,688,098	\$505,500	\$1,603,000	\$3,000	\$3,000	\$3,802,598



2025 Implementation Plan (option 2)

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

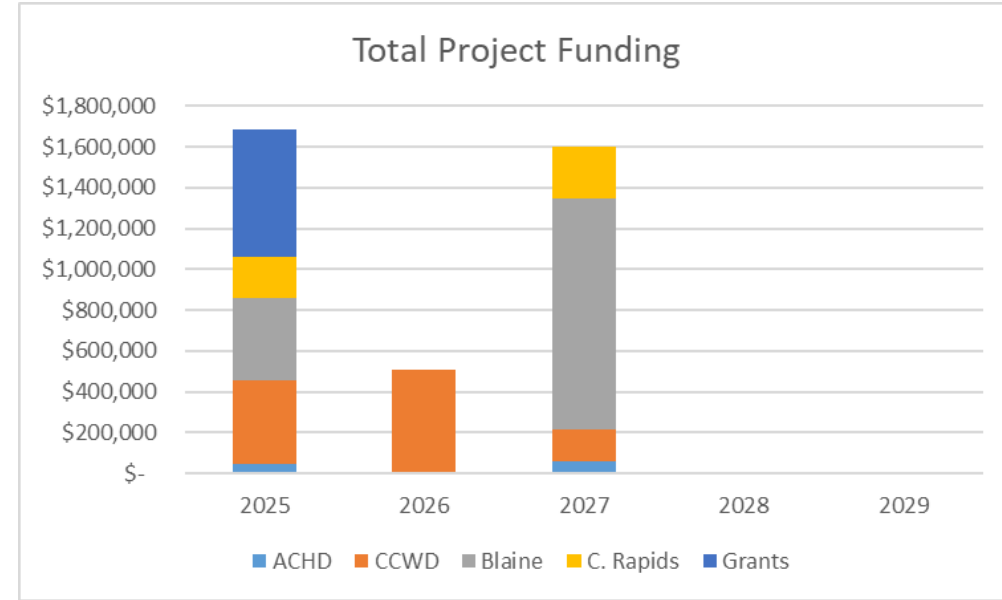
Project Info			Responsible Parties			Cost - % contribution					Timeline					
Name	ID	Type	Status	Lead	Involved	CCWD	Blaine	CR	ACHD	Total	2025	2026	2027	2028	2029	Total
Little League Park Basin (Design)	1	Project	Not started	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%		\$500,000				\$500,000
Little League Park Basin (Construct)	1.1	Project	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%			\$1,500,000			\$1,500,000
Bridgewater South IESF (Design)	2	Project	Ongoing	CCWD	CCWD, CR, BL	100%	0%	0%	0%	100%	\$215,000					\$215,000
Bridgewater South IESF (Construct)	2.1	Project	Not started	CCWD	CCWD, CR, BL	7%	72%	17%	4%	100%	\$1,180,555					\$1,180,555
Bridgewater North Basin (Design)	3	Project	On Hold	CCWD/ACHD	CCWD, ACHD	100%	0%	0%	0%	100%	\$110,000					\$110,000
Bridgewater North Basin (Construct)	3.1	Project	On Hold	CCWD/ACHD	CCWD, ACHD	7%	72%	17%	4%	100%		\$920,000				\$920,000
Targeted Public Engagement	1	Activity	Not started	CCWD	CCWD	100%				100%	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$15,000
High-resolution bacteria study	2	Activity	Not started	CCWD	CCWD	100%				100%	\$2,500	\$2,500				\$5,000
Collect elevation certificates	3	Activity	Not started	CCWD	CCWD, CR, BL					0%						\$0
Provide BFEs to Four Seasons & BIV	4	Activity	Not started	Blaine	CCWD, BL					0%						\$0
Flood proofing BIV & Four Season structures	5	Activity	Not started	Blaine	BL					0%						\$0
Four Seasons and BIV Flood Mitigation Analysis	7	Activity	Not started	Blaine	BL, CCWD	50%	50%			100%			\$100,000			\$100,000
Evaluate 500yr Flood Event	6	Activity	Ongoing	CCWD	CCWD	100%				100%	\$5,000					\$5,000
TOTALS											\$1,516,055	\$1,425,500	\$1,603,000	\$3,000	\$3,000	\$4,550,555



Funding Breakdown

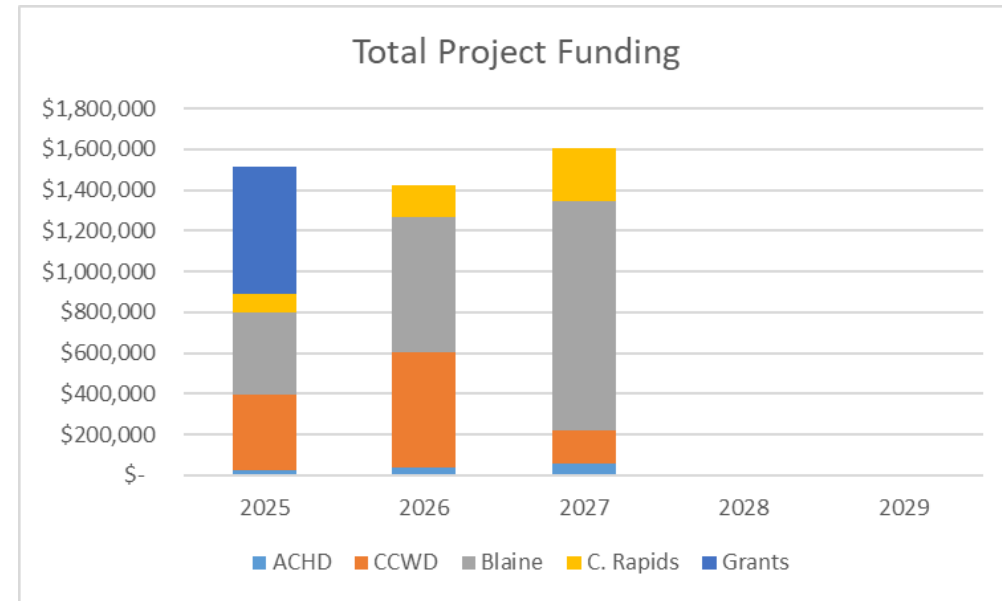
Option 1

	2025	2026	2027	2028	2029	Total
ACHD	\$ 48,797	\$ -	\$ 60,000	\$ -	\$ -	\$ 108,797
CCWD	\$ 407,015	\$ 505,500	\$ 158,000	\$ 3,000	\$ 3,000	\$1,076,515
Blaine	\$ 400,000	\$ -	\$ 1,130,000	\$ -	\$ -	\$1,530,000
C. Rapids	\$ 207,286	\$ -	\$ 255,000	\$ -	\$ -	\$ 462,286
Grants	\$ 625,000					
Total	\$ 1,688,098	\$ 505,500	\$1,603,000	\$ 3,000	\$ 3,000	\$3,802,598



Option 2

	2025	2026	2027	2028	2029	Total
ACHD	\$ 22,222	\$ 36,800	\$ 60,000	\$ -	\$ -	\$ 119,022
CCWD	\$ 374,389	\$ 569,900	\$ 158,000	\$ 3,000	\$ 3,000	\$1,108,289
Blaine	\$ 400,000	\$ 662,400	\$1,130,000	\$ -	\$ -	\$2,192,400
C. Rapids	\$ 94,444	\$ 156,400	\$ 255,000	\$ -	\$ -	\$ 505,844
Grants	\$ 625,000					
Total	\$1,516,055	\$1,425,500	\$1,603,000	\$ 3,000	\$ 3,000	\$4,550,555



Next Steps

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



The end

