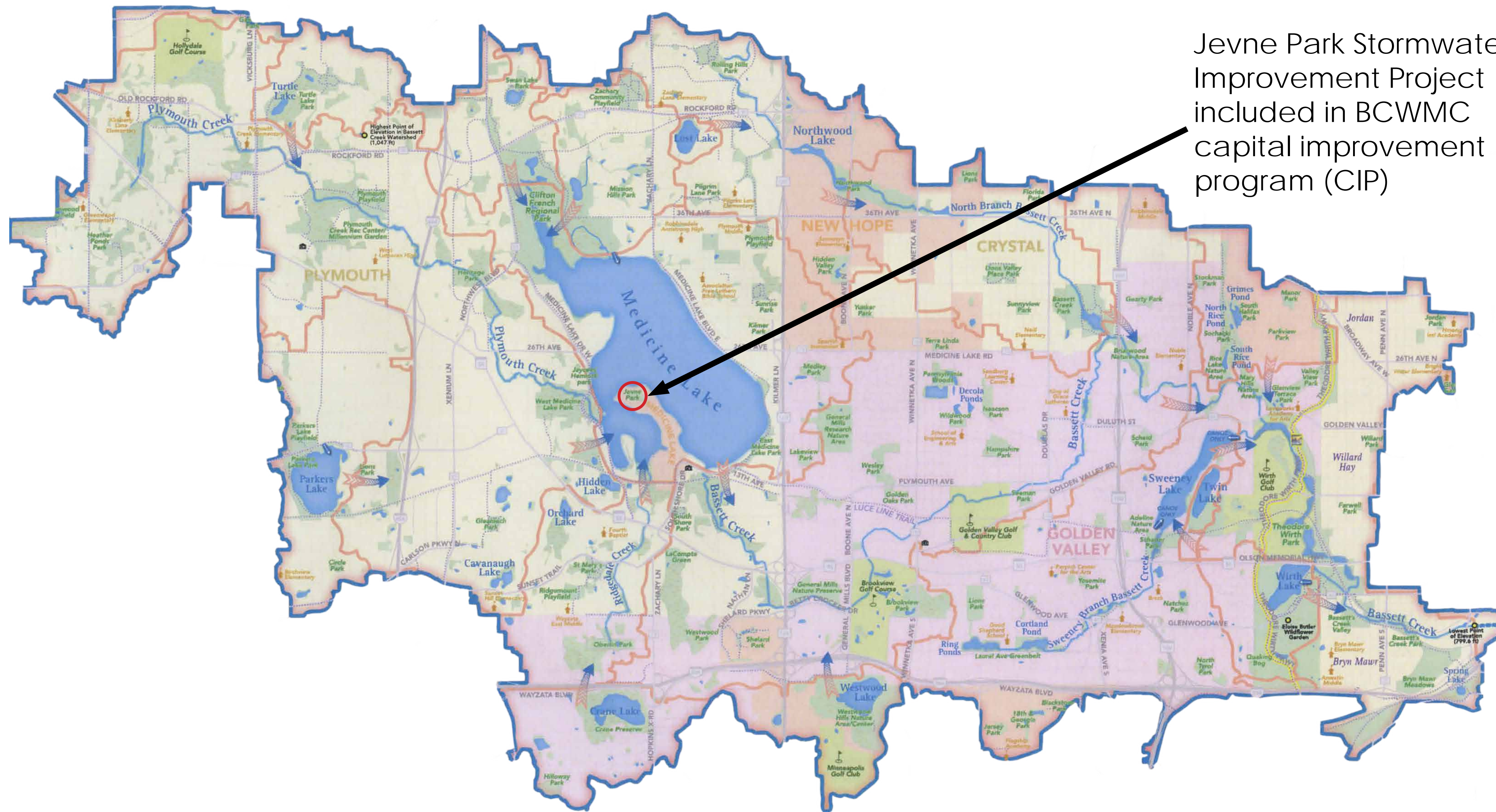


About the Bassett Creek Watershed Management Commission (BCWMC)

The vision: stewardship of water resources to protect and enhance our communities



Jevne Park Stormwater Improvement Project included in BCWMC capital improvement program (CIP)

About the BCWMC

- **Regional government organization** formed in 1969 to focus on flood control along Bassett Creek
- **Operates under 1982 Metropolitan Surface Water Management Act**
- **Focused on providing flood management and improving and protecting the water quality** of Bassett Creek and lakes/streams
- **Nine member cities:** Minneapolis, Golden Valley, Plymouth, Crystal, New Hope, Robbinsdale, St. Louis Park, Minnetonka, Medicine Lake
- **Area:** approximately 40 square miles

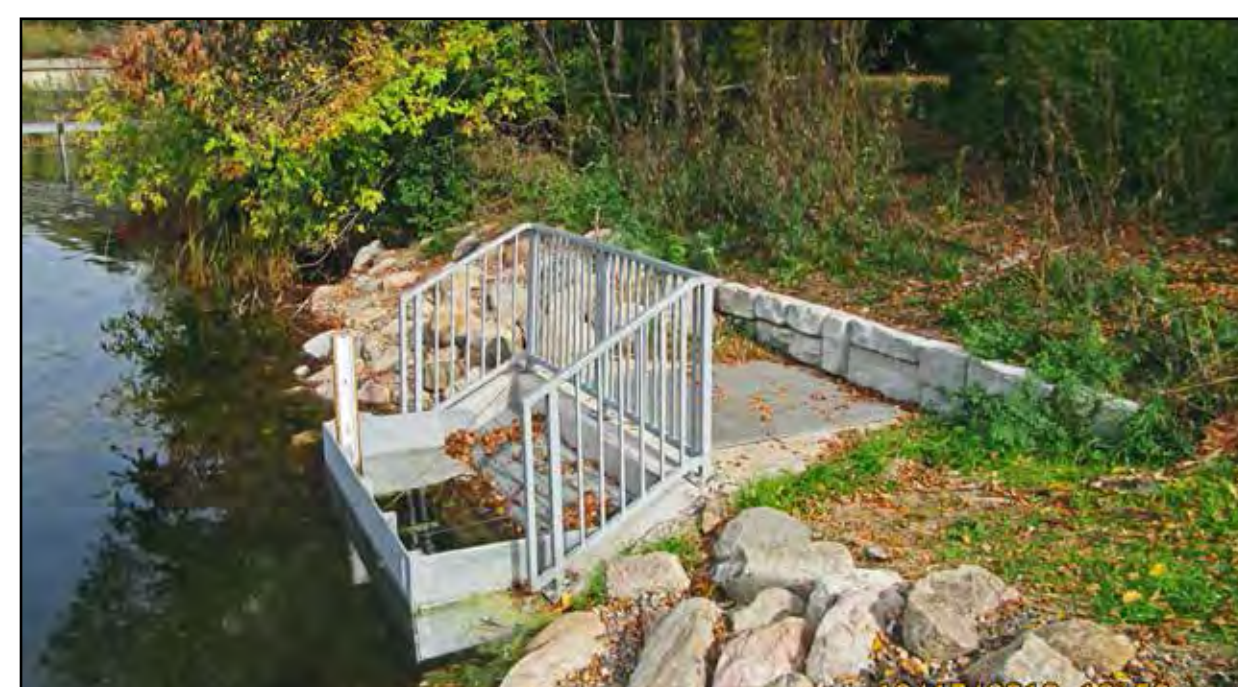
Commission funding

- Contributions from nine member cities (approximately \$500,000 per year)
- Hennepin County tax levy for major projects (approximately \$1.3 million per year)
- Grant funds and permit fees (varies)

Commission activities

- Implements capital improvement projects that reduce flooding and improve lakes, streams, and wetlands throughout the watershed
- Monitors water quality, performs studies, maps resources
- Provides water resource education
- Provides watershed-wide coordination of activities and watershed “point of contact” for all stakeholders

EXAMPLE BCWMC CIP PROJECTS



Wirth Lake outlet



Bassett Creek main stem restoration (before and after)

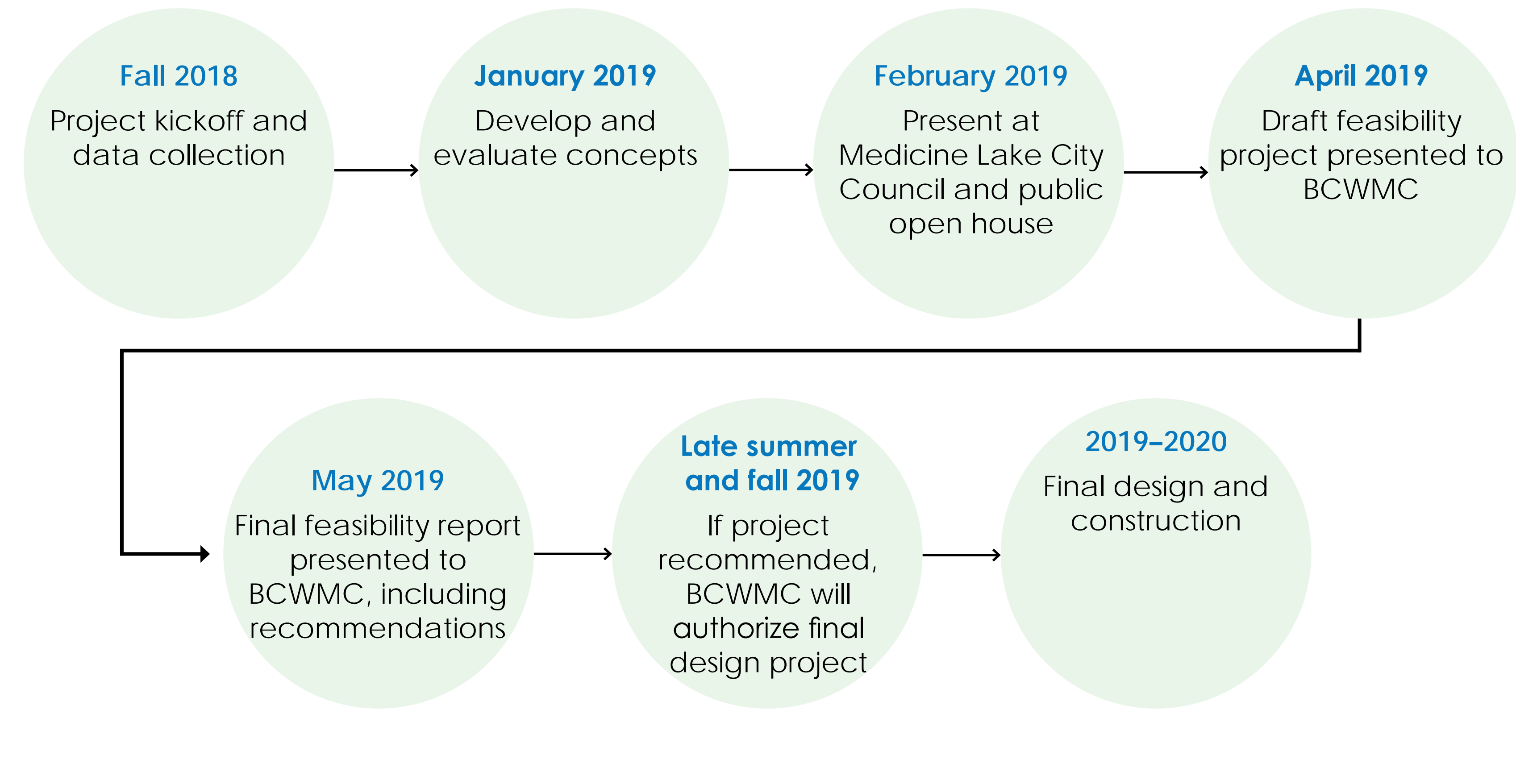


Jevne Park Stormwater Improvement Project

Project study area:



Project timeline:



Project goals: BCWMC CIP project (ML-21)



Increase flood storage for smaller, more frequent events and improve drainage

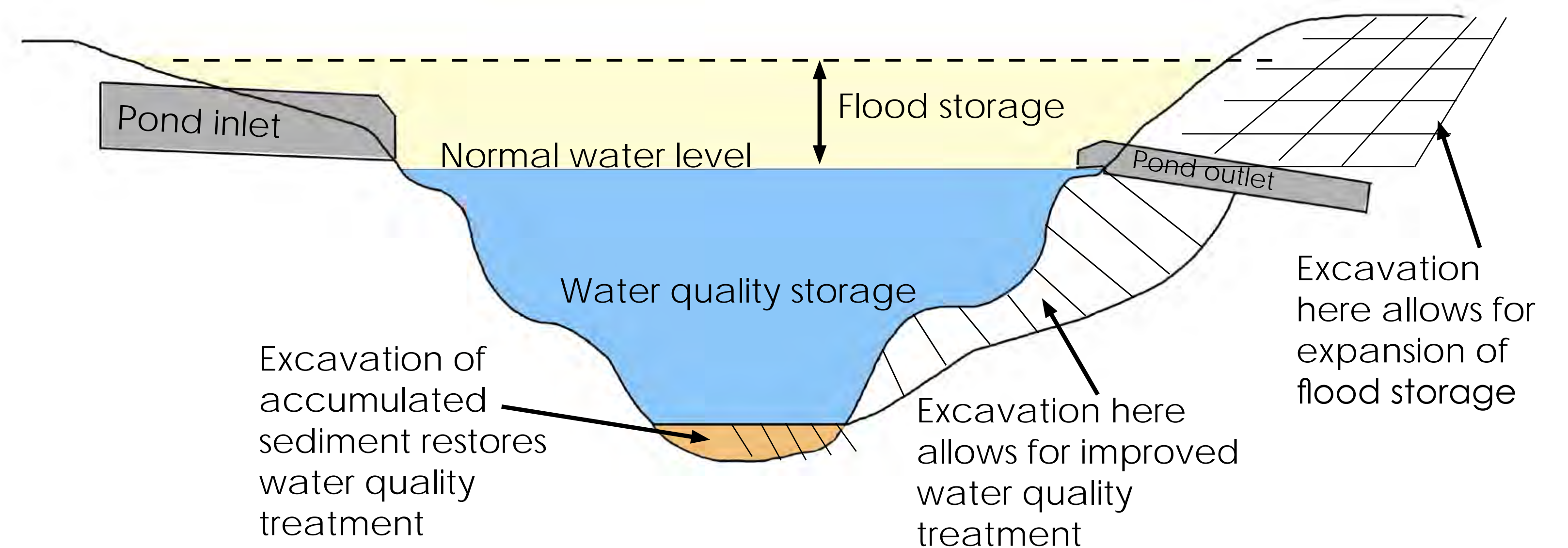


Improve wildlife habitat



Increase water quality treatment and reduce sediment load to Medicine Lake

How do you create flood and water quality storage?



Existing Conditions



Summary

Increase in Flood Mitigation Volume:
Not applicable

Flood Level*:
2-year: 889.6 ft MSL
10-year: 890.0 ft MSL
100-year: 890.4 ft MSL
(*Peninsula Road overtops at 889.7 ft MSL)

Phosphorus Removal:
2.9 lbs/year

Open Water, Wetland, and Buffer
Open water = 0.06 ac
Total wetland = 0.86 ac
Buffer = 0.15 ac




Concept 1

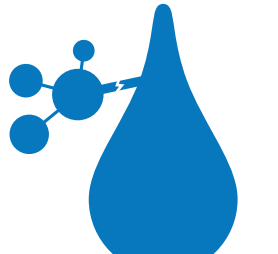
Estimated Cost (-20%/+30%) = \$404,000




Concept Summary

 **Increase in Flood Mitigation Volume:**
0.38 acre-feet

 **Reduction of Flood Level:**
2-year: -0.2 feet
10-year: no change
100-year: no change

 **Increase in Phosphorus Removal:**
4.1 pounds/year

 **Open Water, Wetland, and Buffer:**
Open water = 0.39 ac
Total wetland = 0.92 ac
Buffer = 0.47 ac

 **Estimated Tree Removal:**
8 trees

Concept 2

Estimated Cost (-20%/+30%) = \$562,000



Concept Summary

Increase in Flood Mitigation Volume: 0.93 acre-feet

Reduction of Flood Level:
2-year = -0.5 feet
10-year = -0.2 feet
100-year = no change

Increase in Phosphorus Removal:
4.9 pounds/year

Open Water, Wetland, and Buffer:
Open water = 0.72 ac
Total wetland = 1.16 ac
Buffer = 0.53 ac

Estimated Tree Removal:
24 trees

Concept Design: Summary Matrix

Category	Item	Existing Conditions	Concept 1	Concept 2
Flood Mitigation	Flood mitigation volume	2.52 ac-ft	2.90 ac-ft	3.45 ac-ft
	2-year flood	889.6 ft MSL	889.4 ft MSL (-0.2 ft)	889.1 ft MSL (-0.5 ft)
	10-year flood	890.0 ft MSL	890.0 ft MSL (0.0 ft)	889.8 ft MSL (-0.2 ft)
	100-year flood	890.4 ft MSL	890.4 ft MSL (0.0 ft)	890.4 ft MSL (0.0 ft)
Water Quality	Total phosphorus removal	2.9 pounds/year	7.0 pounds/year (+4.1)	7.7 pounds/year (+4.8)
Habitat	Open water	0.06 ac	0.39 ac	0.72 ac
	Total wetland area (including open water)	0.86 ac	0.92 ac	1.16 ac
	Wetland and buffer area	0.15 ac	0.47 ac	0.53 ac
Project Costs	Planning-level cost estimate (-20%/+30%) (BCWMC CIP budget = \$500,000)	N/A	\$404,000	\$562,000
	Cost benefit	N/A	\$5,800 per lb TP/year	\$6,700 per lb TP/year

