

Footnotes:

- ¹ Total Maximum Daily Load. A TMDL study quantifies the sum of allowable pollutant loads within a watershed.
- ² Municipal Separate Storm Sewer System.
- ³ The following MS4s are not part of the categorical TMDL: Anoka County Highways, Minnesota Department of Transportation



Celebrating 65 years of water management!

Sixty-Five years ago local citizens petitioned for the Coon Creek Watershed District to be the local ditch authority overseeing 92 square miles of land draining to Coon Creek in central Anoka County. In 2012, the District was given additional jurisdiction over 15 square miles draining directly to the Mississippi River in Coon Rapids, Fridley and Spring Lake Park for a total of 107 square miles.

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2024 District Tour

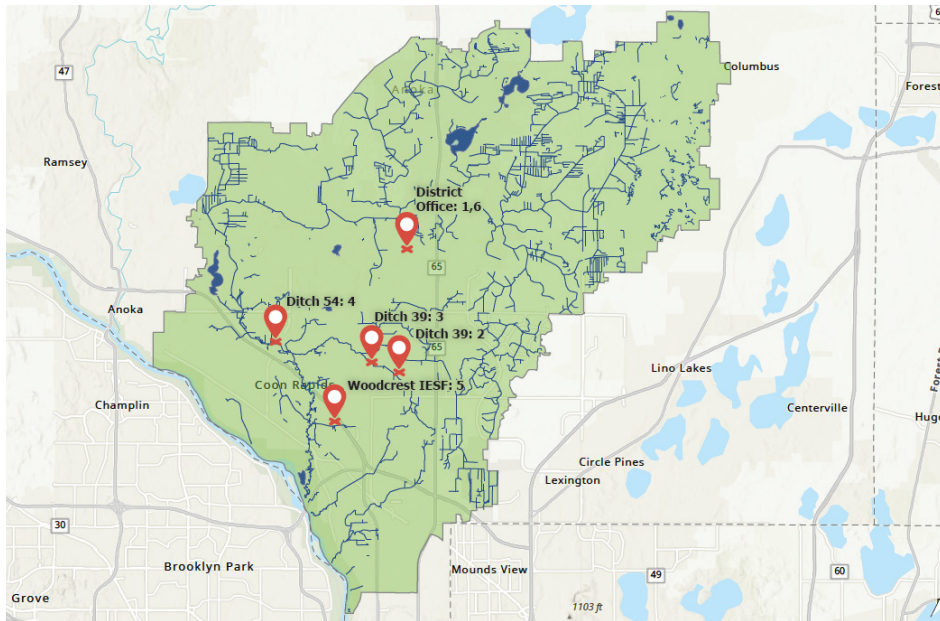
Our Mission: Manage surface water and groundwater systems and contributing lands to provide for and balance the competing uses of development, drainage, flood prevention, and the protection and restoration of water quality and habitat for the benefit of our communities now and in the future.

Overview

Purpose of the Tour

The Coon Creek Watershed District (CCWD) has held an annual tour almost every year since 1991. The purpose of these tours have been to 1) provide an opportunity to see projects in the field and 2) focus on a specific issue or topic and its implications in the field. The focus of the 2024 tour is on Phase 1 of the Comprehensive plan. Phase 1 emphasizes organization and initiation or establishment of an agile and adaptable foundation in pursuit of our mandated goals and responsiveness to local priorities.

Itinerary



	Location	City
1	CCWD Office	Ham Lake
2	Ditch 39 - Little League Park	Blaine
3	Ditch 39 - Bridgewater Pond	Blaine
4	Ditch 54 - Coon Creek	Coon Rapids
5	Woodcrest Park IESF	Coon Rapids
6	CCWD Office	Ham Lake

Woodcrest Park

Location Details

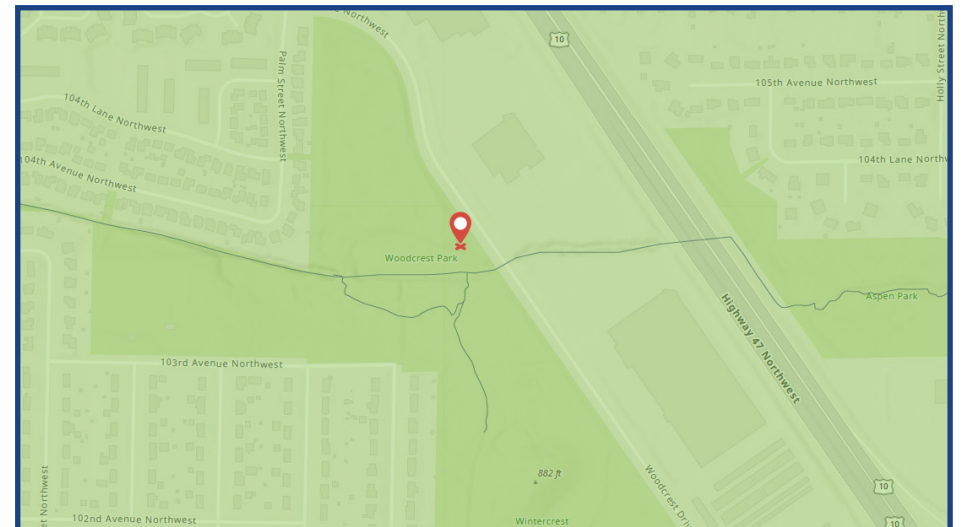
Woodcrest Park is located in an area developed in the 1950s-70s, prior to stormwater regulations. Woodcrest Creek, a tributary to Coon Creek, flows through the park and has been the focus of several past District projects including rain garden retrofits, construction of a new pond, channel stabilization, and the Woodcrest Biochar Iron Enhanced Sand Filter.

Completed Project

The Woodcrest Biochar Iron Enhanced Sand Filter was completed in 2020. This project uses a mixture of sand, iron filings, and biochar (a plant based charcoal) to filter out pollutants from stormwater. The iron binds with phosphorus, a nutrient that fuels rapid algal growth, and the biochar binds *E. coli*, a type of bacteria commonly found in animal waste. This was the first and largest full-scale stormwater filter that used biochar as part of its media mixture. Ongoing post-project monitoring suggests that the filter is functioning as intended, meeting removal targets for both nutrients and bacteria.

Continued Concerns: Rising Chloride Levels

Chloride levels in surface waters across the District have been increasing over the past several decades and are now elevated above chronic toxicity standards affecting aquatic organisms in the southern third of the District. Pleasure Creek, Springbrook Creek, and Laddie Lake were listed as impaired for aquatic life due to chlorides in 2024. Monitoring data shows that chlorides are not only elevated during winter and spring runoff, but also during summer baseflow due to contamination of the shallow groundwater. In Woodcrest Park, CCWD has a groundwater discharge point at a large french drain system that was constructed to route groundwater around the stormwater filter. Conductivity readings of this groundwater show levels 10x of that in undisturbed areas of Anoka County with similar geology.



Ditch 54: Coon Creek

Location Details

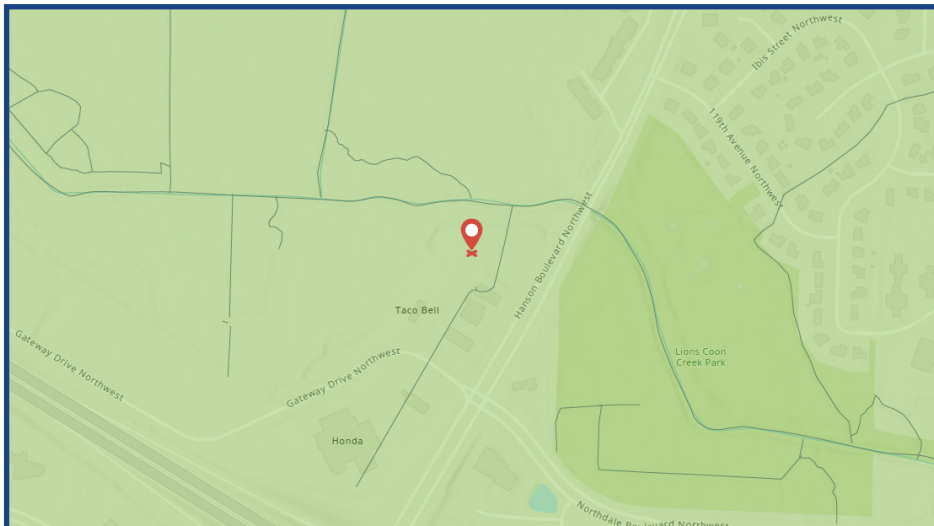
This location is where the upstream ditched portion of mainstem Coon Creek (Ditch 54) transitions into the reach of Coon Creek that is still in its natural, meandering alignment (Lower Coon Creek). This reach of Coon Creek is impaired for aquatic life for failing to support healthy communities of fish and macroinvertebrates. Stressors impacting this reach include excess sediment and phosphorus, altered hydrology, and poor habitat. Nearly the entire site is regulated floodplain, with impacts to Hanson Blvd included in the updated District Flood model. This location is of local significance as a valued natural area known for its pair of nesting bald eagles. Past development at this site has been controversial. The City of Coon Rapids is in the process of constructing a trail along the Eastern edge of the channel from 121st Ln to Main.

Opportunities

- » Potential future site of a creek corridor restoration project similar to the Middle Sand Creek Corridor Restoration. There is a need for improved habitat and floodplain connectivity and space available for mass grading if regulatory hurdles and challenges with public perception can be overcome.
- » Opportunities for public education and engagement as part of restoration project given new trail corridor.

Challenges

- » Receives drainage from roughly 70 square miles; flood mitigation difficult given scale of runoff and discharge volumes
- » Extensive peat deposits and high groundwater can create access and construction difficulties
- » High level of public interest and potential scrutiny



Impaired Waters: The Need for Investment

The Coon Creek Watershed District (CCWD) currently contains 11 impaired waters. The stressors contributing to these impairments include poor habitat, altered hydrology, and low dissolved oxygen levels, as well as pollutant stressors like suspended solids, phosphorus, chloride, and *E. coli*. Addressing these stressors, and removing the impairments, will require significant investment from both CCWD and its partners. The Coon Creek Watershed TMDL study¹, aimed at identifying and reducing pollutant stressors, assigned categorical waste-load allocations to CCWD and each city involved in managing regulated stormwater. This means that all MS4² entities within the watershed³ are to work collectively toward the achievement of the TMDL. The categorical approach of the TMDL provides greater opportunity to implement pollution reduction practices efficiently and capitalizes on the long history of collaboration between member cities and CCWD on various water quality projects.



Scan the QR Code to access the full TMDL report

Cost & Challenges

The cost associated with addressing these stressors by the 2045 deadline is estimated to be around \$50 million over the next 10 years and \$103 million over the next 20 years. This places a significant financial burden on the local tax base and raises several concerns related to the need for increased state and federal funding, functional classification changes, and extension of the 2045 timeline.

Additionally, local entities are faced with the risk, uncertainty, and cost associated with random damaging weather events, aging infrastructure, demands for tangible results, and growing public skepticism.

Our Role

When the Coon Creek Watershed District (CCWD) was established in 1959 our primary responsibility was the maintenance and repair of the public drainage system. Since that time several federal and state mandates have expanded CCWD's role and responsibilities. These mandates include the Clean Water Act, MN Metropolitan Water Management Act, MN Wetland Conservation Act, and the District's designation as an MS4.

Over the years CCWD has continued a topic expert and professional resource to our member cities and agency partners. CCWD is committed to working with, and supporting, our partners in the efforts needed to make significant progress on the TMDL while continuing to balance the other needs of the communities we serve.

*see back page for footnotes

Ditch 39: Little League Park

Location Details

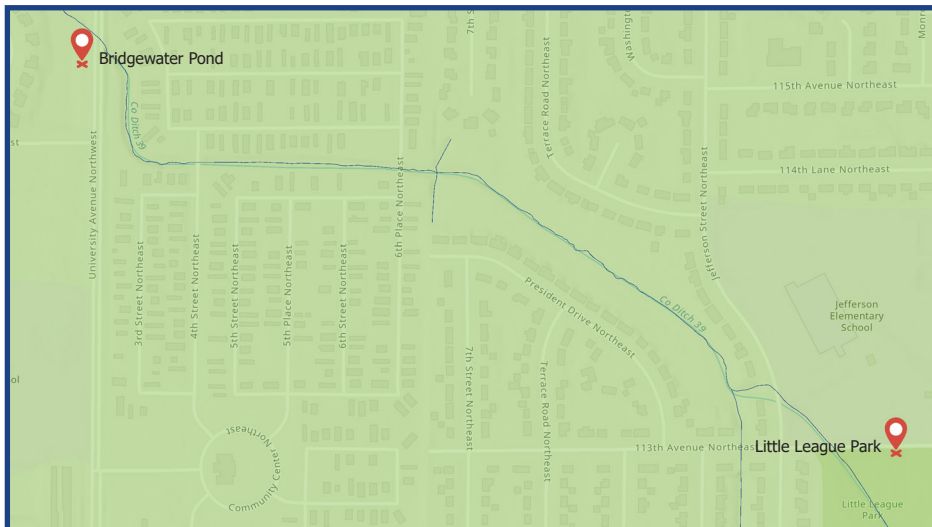
Ditch 39 (D39) drains from HWY 65 in Blaine and to the northwest under 109th Avenue and University Avenue into Coon Rapids where it combines with Ditch 41 and forms Sand Creek. Sand Creek is impaired for aquatic life for failing to support healthy communities of fish and macroinvertebrates. Stressors impacting this reach include excess sediment and phosphorus, altered hydrology, and poor habitat. It is also impaired for aquatic recreation due to unhealthy levels of *E. coli*. The drainage area, or subwatershed, of Ditch 39 was historically agricultural land. The subwatershed was developed and converted into mostly residential properties between 1960 and 1980. Flood risk in this subwatershed is relatively high due to the lack of stormwater and floodplain regulations in place at the time of development.

Opportunities

- » Little League Park (LLP) regional BMP – infiltration or stormwater reuse
- » Reroute additional stormsewer into LLP regional BMP
- » Enhanced street sweeping
- » Better lawn care practices
- » Road diets

Challenges

- » Lack of open space for most traditional stormwater treatment practices
- » Neighborhoods developed prior to stormwater regulations
- » Multiple wellhead protection areas restrict stormwater infiltration practices
- » High phosphorus and sediment concentrations in the ditch
- » Evidence of leaky sanitary sewers



Ditch 39: Bridgewater Pond

Location Details

The Bridgewater Pond is a flow-through pond system of Ditch 39. The pond was formed from a borrow pit that was dug during the construction of the Bridgewater neighborhood in the 1990s. The pond is at the bottom of the Ditch 39 subwatershed, and the water quality at this site is very poor. The northern and southern lobes of this pond adjacent to University Avenue are some of the only available open space for regional stormwater treatment practices in the Ditch 39 subwatershed.

Opportunities

- » The southern lobe of Bridgewater Pond is planned to be retrofitted with an iron-enhanced sand filter in 2025 to remove excess nutrients entering Sand Creek from Ditch 39.
- » The northern lobe of the pond also presents an opportunity to retrofit an existing infiltration basin constructed by the Anoka County Highway Department that will increase the nutrient removal from Ditch 39.

Challenges

- » Private landowner agreements for culverts under University Avenue
- » How to route "dirty" stormwater into filters
- » Access and longterm maintenance
- » Support or opposition from adjacent property owners
- » Maximizing stormwater treatment and progress towards TMDL reductions in the most cost-effective manner

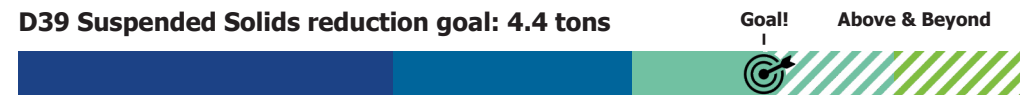
Potential For Success!

Should both of the Bridgewater retrofit projects and the Little League Park regional BMP get implemented, it is estimated that we could achieve 50% of the Total Phosphorus (TP) reductions and 100% of the Total Suspended Solid (TSS) reductions needed in the Ditch 39 subwatershed. Implementing the recommendations from the Enhanced Street Sweeping Study has the potential to accomplish the remaining 50% of phosphorus reductions.

D39 Phosphorus reduction goal: 131 lbs.



D39 Suspended Solids reduction goal: 4.4 tons



Little League BMP (21 lbs TP, 2.2 tons TSS)	Bridgewater North (19 lbs TP, 2.0 tons TSS)
Bridgewater South (29 lbs TP, 1.4 tons TSS)	Street Sweeping (52 lbs TP, 1.4 tons TSS) Note: Sweeping reductions are variable depending on level of implementation