

Background

The Coon Creek Watershed District (CCWD) is a special purpose unit of government whose political boundaries are defined by the drainage area of Coon Creek and other adjacent streams that discharge into the Mississippi River. The CCWD is a public body established by the State of Minnesota Water Resources Board (Now the Board of Water and Soil Resources) on May 28th, 1959, under Minnesota Statute 103D. The CCWD is organized pursuant to the Watershed Law, Minnesota Statute (MS) 103D.

The laws that influence its activities determine the basic purposes of the CCWD. The Watershed District Act (MS103D) and the Metropolitan Water Management Act (MS 103B) and the CCWD's designation as a Special Municipal Separate Storm Sewer System (MS4) provide the most basic authorities for the CCWD. Several other statutes influence the CCWD's operation and priorities. All these statutes emphasize a comprehensive approach to the wise use, preservation, and protection of water and related land resources for public health, safety, and welfare. While the statutes address almost all water resource features, they emphasize flood control and the protection of the soil and water quality.

To achieve the mission and goals, CCWD has the authority to tax and issue special assessment, regulate property and activities to guide landuse, and to budget and invest in people, projects, and programs.

The 2024 Comprehensive Plan (Plan) will govern the CCWD's goals, priorities, and actions from 2024-2033. The purpose of the Plan is both a strategic management and operational plan. The strategic management portion of the Plan sets the direction and the approach the CCWD will take in pursuing its mission and goals. The Plan also serves as a guide for management of water resources within the CCWD. The operational (implementation) portion of the plan lays out how the CCWD will achieve its mission and goals through annual planning, programming, budgeting, and execution. It provides policy, guidance, and information to direct programs in performing the projects and activities required to run the CCWD and pursue mission and goals.

A legislative analysis identified the District's most basic objectives are:

- To protect the health and safety of the present and future people that live, and will live, within the watershed.
- To provide for opportunities and uses of the water and related natural resources of the watershed which are demanded and appropriate for the area.
- To prevent unacceptable damage to the water and related natural resources of the watershed.
- To develop and implement a uniform program for water and related land management within the watershed of Coon Creek.

The Coon Creek Watershed District is a special purpose unit of government authorized and established by the State of Minnesota. As such the CCWD is a creature of the state whose purpose is to implement the policies and goals of the State of Minnesota.

The Water policy and goals of Minnesota are contained in several statutes. Minnesota Statute 103A states that these statues must be considered as a whole to systematically administer water policy for the public welfare (103A.211). State water policy and goals that appear contradictory in a specific situation or circumstance should be discussed in a public forum where the conflict surrounding a specific public interest can be presented and, by consideration of the whole body of water law, the controlling policy can be determined, and apparent inconsistencies resolved.

For development and implementation of this plan, public forums are identified as:

- Public engagement
- Initial planning meeting
- Public and State Agency review
- Board of Water and Soil Resources
- The Board of Managers regularly scheduled meetings
- **BWSR Dispute Resolution Committee**
- Court

Authorization and Mission

The CCWD is required by legislation in Minnesota statute to do the following:

- To conserve and use water resources in the best interests of the people, and to promote the public health, safety, and welfare (103A.201)
- To preserve the wetlands of the state to conserve surface waters, maintain and improve water quality, preserve wildlife habitat, reduce runoff, provide for floodwater retention, reduce stream sedimentation, contribute to improved subsurface moisture, enhance the natural beauty of the landscape, and promote comprehensive and total water management planning (103A.202)
- To reduce flood damages through floodplain management, stressing nonstructural measures such as floodplain zoning and floodproofing, and flood warning practices (103A.207)
- To plan and manage groundwater and surface water resources from the perspective of aguifers and watersheds to achieve protection, preservation, enhancement, and restoration of valuable groundwater and surface water resources. (MS 103A.212)
- To provide for the sustained use of our natural resources through direct and coordinated actions with other agencies and parties. (MS 103A)
- To conserve the natural resources for the protection of the public health, safety, and welfare and the provident use of the natural resources. (MS 103D)
- To protect, enhance, and restore water quality in lakes, rivers, and streams and to protect groundwater from degradation (114D.10)
- To achieve and maintain water quality standards for groundwater and surface waters, including the standards required by section 303(d) of the federal Clean Water Act, United States Code, title 33, section 1313(d) (114D.10)
- To broker requests and petitions for repair and improvement of the public ditch system (103E)

To achieve the legislative requirements, the legislature authorizes the CCWD to:

- Tax and specially assess to fund actions to achieve those goals.
- Regulate property to guide land use actions to operate in harmony with and synchronized with their landscape and to prevent uses that would harm or damage the public health, safety or welfare or the resource's ability to provide beneficial uses now or in the future.
- To budget and invest in people, projects, programs, and actions.

The reason the legislature has stated these requirements and provided the CCWD with taxing and regulatory authority is to:

- Protect the public health, safety, and welfare (103A.211, & 103D.201)
- Protect the watershed's capacity to continue to produce and provide beneficial uses (103D.201)

- Operate and maintain those natural and manmade structures and functions necessary for the ongoing provision of beneficial uses. (103B, 103D & 103E)
- Restore adverse changes to the most sustainable productive capacity the resource can attain. (103B, 114D, 33 U.S.C §§ 1251 et seq.)
- Minimize capital costs associated with repair, replacement, or restoration of property and or water resources (103B.201)

To achieve the above goals, objectives, intentions and effects, the legislature prescribed a set of hierarchical plans to discover, disclose and address the needs for comprehensive water management and prevent costly problems and issues. The hierarchy is driven at the:

- State level by the laws and rules identified in the reference section above.
- Watershed level by comprehensive watershed management plans developed to address those goals as they relate to local hydrologic conditions.
- The municipal level through local water plans that further refined and operationalize the objectives of the watershed plan.

Consistency, a reflection of local tastes and preferences, and a broadened perspective are intended through required engagement and documentation with public and private stakeholders and are further assured through formal review and comment by those stakeholders and approval of the Comprehensive Plan by the Board of Water and Soil Resources.

Local water plans are assured consistency with watershed plans through watershed organization approval and review by the Metropolitan Council. Additional compliance and consistency are achieved by the Municipal Local water plans also being consistent with the stormwater chapters of the city comprehensive plans that are reviewed and approved by the Metropolitan Council. This system is intended to reflect local natural resources and their condition; and be consistent with metropolitan and state policies and priorities.

The legislative requirements from rule and statute are distilled and reflected in the CCWD's mission, which is to manage surface and groundwater systems and contributing land 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.

Evaluation of Previous Comprehensive Watershed Management Plans

In August 2023, the current Comprehensive Plan for the Coon Creek Watershed District will expire. Upon conclusion of the 2013 – 2023 Comprehensive Plan, the CCWD will have clearly arrived in the "water quality era". While public drainage and enforcement of the Wetland Conservation Act remain central themes in management, water quality concerns have now taken center stage.

The CCWD currently contains 11 impaired waters. Seven of those waters are creeks and ditches impaired for aquatic life and recreation. Two of those waters are lakes impaired for aquatic consumption due to high mercury levels in fish. One of the waters, Laddie Lake, is impaired for aquatic life due to excess chlorides. The final impaired water is the Mississippi River which is the CCWD's western border and a major receiving water. The Mississippi River is impaired for aquatic consumption due to mercury and PCBs, aquatic recreation due to fecal contamination, and aquatic life due to excess phosphorus. Information on mercury in fish consumption guidelines can be found here: Fish Consumption Guidance - MN Department of Health (state.mn.us).

The stressors contributing to these impairments include suspended solids, phosphorus, poor habitat, altered hydrology, chloride levels, low dissolved oxygen levels and E. coli.

The most significant emerging issue is the potential lowering of the water table. This issue is currently based on anecdotal evidence but could have negative effects to water resources if true. This uppermost part of the surficial aquifer provides an estimated 100% to 50% of the water to the lakes, streams, and wetlands within the watershed . It is also showing signs of high chloride levels and is discharging that pollutant to streams, contributing to impairment of surface water resources.

Added to these natural conditions the CCWD is faced with aging infrastructure, labor shortages, and limited financial resources. The CCWD is already making efforts to further optimize its management processes and practices. A key approach is to increase integration of its planning, programming, budgeting, and implementation efforts, particularly flood risk management and water quality protection and restoration.

To put the 2013-2023 Comprehensive Plan in context, a summary of the first three CCWD Comprehensive Plans is provided below.

1959-1987

• The CCWD was established in 1959 in response to the promises offered by Federal Law PL-566 and the potential increase in the efficiency and effectiveness of agricultural production. The focus was on money for improved drainage. Those funds were never realized, and the CCWD relied in the assessment process provided through the drainage law to repair the system. The period between 1960 and 1987 was characterized by legal and political controversy and challenges surrounding the conduct of the CCWD and the equity of its cost apportionments.

1987-2003

- In 1987, the CCWD completed its first Comprehensive Plan under the Metropolitan Water Management Act. At that time the CCWD was largely rural. The landscape was dominated by farms growing shallow rooted crops, and seasonally flooded wetlands. The developed areas in the lower portion of the watershed were experiencing flooding. The watershed management focus was on catch-up, mitigating and balancing the provision of both established drainage rights up stream and flood control downstream in a financially equitable way.
- In 1991, the Wetland Conservation Act placed the CCWD at ground zero of the competition and conflict between drainage, development, and the preservation of wetlands. From 1991 to 2003 (The wetland era), the CCWD was immersed in reviewing, managing, and balancing the effects of urban growth in one of the fastest growing areas of the state and nation. The CCWD's response was to adopt a management strategy based on the principles of "Growth Management" and "Sensitive Lands" land use management strategies. The CCWD's management strategy could be summarized by the following themes:
 - The law and the principles of established use or right (or first in time).
 - o The wetland delineation requirement of Normal Circumstances (not normal conditions) as described and litigated at the Federal Level though Regulatory Guidance Letter 90-07.
 - o Recognition that 98% of all wetlands in the CCWD needed to be evaluated as either problem and/or disturbed (new atypical) conditions under the 1987 Federal Delineation manual.
 - o A commitment to advocate solving development, agriculture, natural resource management problems.
 - o Reliance on a finding of facts and an acceptance that the result "is what it is".

2003-2013

- In 2003, the CCWD developed its second Comprehensive Plan anticipating a future focus on water quality. In 2004, the CCWD was recognized as a special Municipal Separate Storm Sewer System (MS4) under the National Pollution Discharge Elimination System (NPDES), ushering in the "Water Quality Era". The CCWD completed a minor amendment to its rules and standards to address "non-degradation" of the CCWD's receiving waters. In 2006, the CCWD also saw its first water quality impairments (Coon, Sand, Pleasure, and Springbrook Creeks for Aquatic Life) on the state and federal 303(d) list.
- The "Water Quality Era" has increased program responsibilities 50%, increased required tasks 83% and staffing needs almost 200%. The CCWD has evolved from being an organization primarily responsible for ditch maintenance and wetland preservation, to an organization responsible for drainage, water quality, flood risk management systems, and aquatic wildlife habitat management.

- The recession that began in 2006 emphasized a need for certainty in decision making and cost control by a constituency that prizes thrift, practicality, and minimum government involvement. The tightened fiscal operating environment made investing in natural resource concerns extremely challenging because of their long term, less tangible, and non-utilitarian nature.
- After 2006, the CCWD began to formally transition toward a 'natural infrastructure' asset-based management approach. This approach was founded on a sensitive lands /geologic sensitivity view of the resource which emphasized ecological function, the value as natural infrastructure, and the public out-of-pocket cost to mitigate the consequences of imbalanced decision making. This effort remains supported by well-defined legislative requirements and enforcement. The CCWD also began moving to a more formal planning, programming, and budgeting management framework. In this new management framework, the CCWD focused on the costs and consequences of mismanagement along with connecting the planning, programming, budgeting and implementation of systems and activities.

2013-2023

- In 2013, the CCWD developed and adopted its third Comprehensive Plan. In 2014, the CCWD began developing an asset management program for all its activities and continued to adhere to the doctrine adopted in 1991. The asset management approach defined each program and activity the CCWD needed to meet the legislative requirements or through the expectations of citizens.
- The approach has provided a clear relationship between the provision of the beneficial uses of the CCWD's water resources and investments in the prevention and protection people and property from natural catastrophes or expensive unintended consequences provided by the CCWD. This combination of asset management and sensitive lands management allows the CCWD to make more defendable and compelling investments and provides needed transparency for elected and appointed officials and citizens.
- The CCWD's mission statement during this time was: to manage groundwater and the surface water drainage system to prevent property damage, maintain hydrologic balance and protect water quality for the safety and enjoyment of citizens, and the preservation and enhancement of wildlife habitat.

Lessons Learned

The planning and management approach adopted in 2013 needs updating and continual evolution to enable the CCWD and its collaborators to adapt and succeed through and beyond 2033. The following lessons will be incorporated into the fabric of the 2024-2033 Comprehensive Plan:

- 1. Water management involves the continual combination, recombination and evolution of physical, social, and political/economic factors and trends. These factors combine at multiple scales to influence water resource decision making, even when they originate from the resource itself or the actions of non-government groups.
- 2. The physical, social and management factors and trends, are 'open' systems, available to constant inputs creating an operating environment characterized by volatility, uncertainty, complexity, and ambiguity (VUCA). The result is often a profound sense of struggle on the part of local managers.
- 3. Short and long-term water management is characterized by a fog and friction created from the risk and uncertainty in the physical, social, and management domains. The risk and uncertainty are the product of human perception and chance. These two variables tend to distort, cloak, and twist the course of events, regardless of the advances in science, technology, or computing power.
- 4. Planning and the planning process are more important than ever. Committing to a rigid schedule of projects and activities has proven unrealistic and impractical. The value of planning is facilitating and communicating common understands of problems, identifying available options and their consequences, and facilitating unified action.
- 5. Management actions need to be practical and relevant to those financially affected. The reliance on a proactive, multiple-use, utilitarian management approach that focuses on physical consequences is more effective than the traditional defensive-based conservation "just say no" strategy that increasingly dominates environmental debates.
- 6. Where you are going is more important than where you are at. The performance, evolution, and potential of physical, social, and management systems is more important than their current condition.

The implications of these lessons learned are:

- Fulfillment of the responsibilities for drainage, flood prevention, wetland conservation and water quality restoration will be challenging.
- It isn't possible to predict what kinds of specific water management problems, issues, or concerns, or for what purposes or priorities other land and water management organizations will be engaged in over the next ten years.
- One can only speculate about potential and probable problems and issues, how they might occur and the costs they may cause to either prevent, mitigate, or recover from their effects.
- The fundamental foundation and nature of water management within the Coon Creek Watershed will not change in sense that the mix of political and economic aims, pressures, and hesitations will continue to condition water management operations.
- The likely result will be an operating environment characterized by:
 - » Volatility, uncertainty, complexity, and ambiguity (VUCA) in the physical, social and political economic environments in which it operates.
 - » Increasing pressure to meet water quality targets, anticipate flood risk, and account for the effects of changes in precipitation.
 - » A growing obligation and need to manage aging infrastructure within limited budgets and resources.

The 2024-2033 Comprehensive Plan provides an opportunity to further adapt and transform the collective water management organization into one that can adapt and sustainably manage storm water quality and drainage in a transparent and cost-effective manner, that justifies funding requirements and management decisions. It will require the CCWD and its collaborators to continually evaluate programs to develop and refine its core mission, goals, objectives, levels of service, and measures of performance and effectiveness.