

Coon Creek Watershed District

2022 Annual Report

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Approved by Board of Managers April 24, 2023

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Reporting Requirements

The Coon Creek Watershed District (District) is required to annually report on a variety of activities. These requirements and the state and federal laws that mandate the reporting are:

1. The Minnesota Watershed Act (M.S. 103D.351)
2. The Metropolitan Water Management Act (M.S. 103B.231)

PURPOSE OF THE REPORT

The Objectives of the Required 2022 Annual Report are to:

1. Provide an Overview of Coon Creek Watershed District.
2. Provide an Assessment of the Financial Condition and Audit Status of the District.
3. Review 2022 Program Activities and Projects and Implementation of the 2013 – 2023 Comprehensive Watershed Management Plan.
4. Frame the Primary Problems Faced by gaining understanding of the program operating environment and the nature of the problem set.
5. Provide Strategic and Budget Guidance for 2024 District Program Budgets.

OVERVIEW OF COON CREEK WATERSHED DISTRICT

Background

The Coon Creek Watershed District was established in 1959 under the Minnesota Watershed District Law (Minnesota Statutes 103D).

The District is an independent special purpose unit of government that addresses comprehensive water and related resource management within the 107 square mile District. The District includes the drainage areas of Coon Creek and five smaller watersheds that also drain directly to the Mississippi River.

District Mission

The District mission is derived from the nine principle directives and 38 mandates and rules from the state and federal governments.

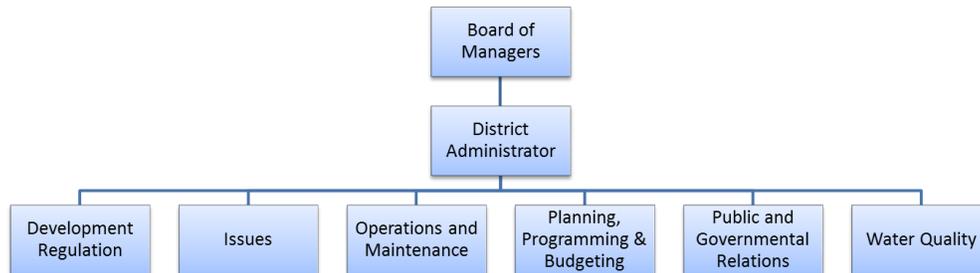
To prevent property damage, maintain hydrologic balance and protect water quality for the safety and enjoyment of the public and sustain the provision of the beneficial uses of water within the watershed.

Intent: To maintain and improve surface and ground water will require public involvement, intergovernmental collaboration, performance-based regulation and the on-going monitoring, maintenance, and operation within the District. In the end the public should experience a safe, enjoyable, and usable water resource, and a fishery and wildlife population adapted to an urban environment.

Vision

The District will focus on the drainage basin of Coon Creek and remain ready, willing, and able to collaborate, encourage, deter and correct a range of water resource related problems issues and concerns. The District is prepared and capable of pursuing this task alone or as part of a joint effort with the cities, Anoka County and the Anoka Conservation District. At the heart of the District's strategy is to leverage **the natural capabilities and capacities of the landscape, the adaptive and innovative evidence-based practices and the empowerment of professional, citizen based, and collaborative work efforts** that result in short and long-term beneficial use of the resource and that enable city staff and decision makers to achieve success in preventing, repairing, and correcting water resource problems and issues.

Coon Creek Watershed District 2021 Organizational Chart



District Goals

The District has adopted five mission goals and three issue goals. Pursuit of these goals is articulated in the District Comprehensive Watershed Management Plan.

1. To prevent property damage from flooding, erosion or degraded water quality
2. To ensure balance between inflow, outflow and storage of water
3. To protect and enhance water quality
4. To provide for multiple beneficial uses including the safety and enjoyment by the watershed's residents
5. To preserve and enhance wildlife
6. To be proactive in aquatic invasive species management through education and projects that improves lake and stream water quality and/or reduces the risk of entry of invasive species.
7. To gather and disseminate weather data and climatic information and provide meteorological expertise in support of water and related resource management decisions and weather-related management activities.
8. To manage groundwater dependent ecosystems under the principles of multiple use and sustainability, while emphasizing protection and improvement of soil, water and vegetation, particularly because of effects upon aquatic and wildlife resources.

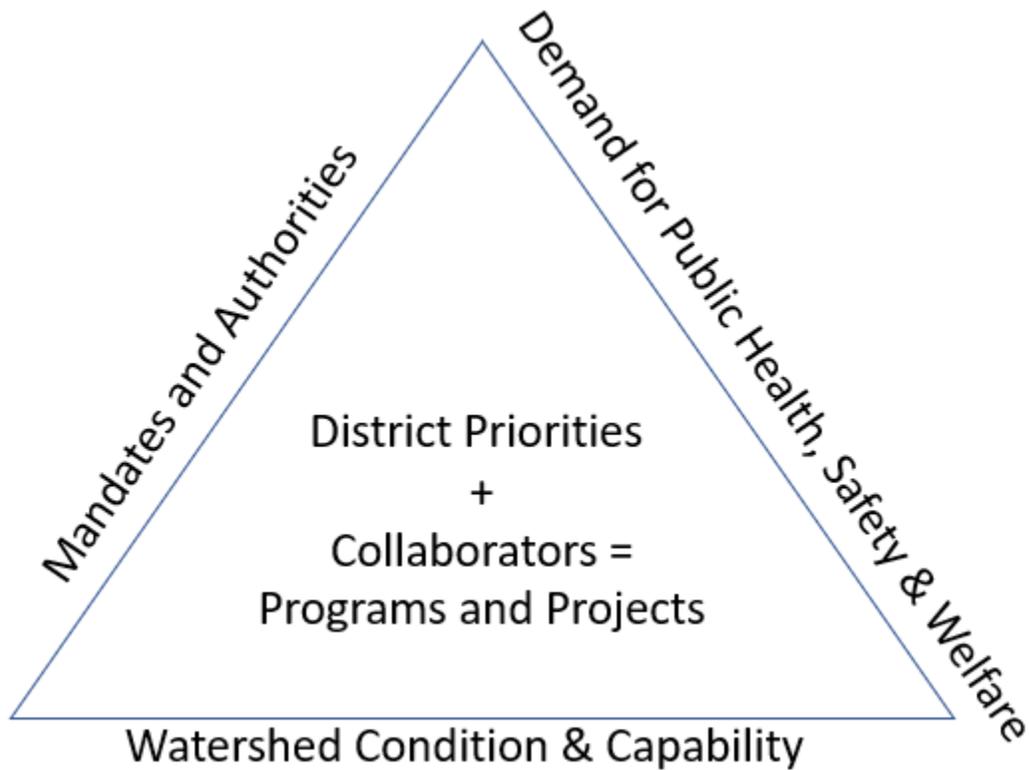
Management Priorities

1. Protect Drinking Water Supplies
2. Prevent Flooding
 - Improve water quality in impaired or impacted waters
 - Maintain and enhance water quality in waters that are not impaired
3. Groundwater Recharge
4. Aquatic Life
5. Recreation

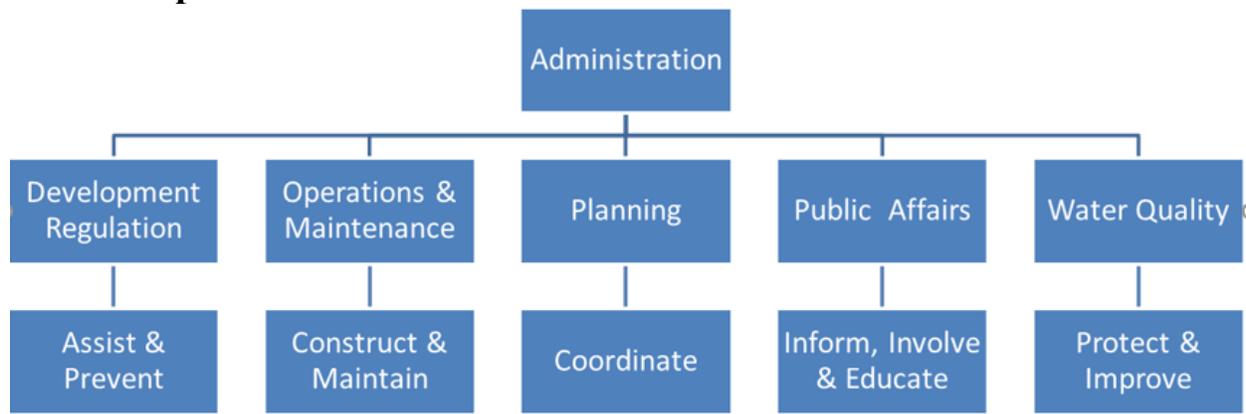
6. Hunting & Fishing
7. Irrigation
8. Watering: Livestock & Wildlife
9. Aesthetics
10. Industrial Use and Cooling

Strategy and Concept of Operations

The District’s current strategy and concept of operations is founded on watershed-based collaborative management actions.



Lines of Operation and Effort



District Finances

2022 Financial Condition

Description	Cash Balance
Special Revenue Funds	1/1/2023
509 Management Fund (8612)	1,963,209.17
Illicit Discharge Detection	750.00
Rapid Response Reserve	40,000.00
509 Operational Funds Balance	1,922,459.17
ACD WCA Block Grant	0.00
FY19 BWSR WBF Pleasure IESF Grant (901)	0.00
FY19 MPCA 319 MSCCR Grant (903)	0.00
FY19 BWSR CWF Woodcrest IESF Grant (904)	0.00
FY19 BWSR CWF MSCCR Grant (905)	0.00
FY20 BWSR WBF Coon Creek Park (2001)	6,715.63
FY21 BWSR WBF Aurelia Park (2101)	0.00
FY21 BWSR CWF PC BIESF (2102)	39,592.09
FY22 PCA 319 PET WASTE (2201)	(675.75)
FY22 BWSR CWF ECIESF (2202)	172,500.00
FY22 BWSR WBIF Retrofits (2203)	108,189.00
Fiduciary Funds	
Escrow Trust (8641)	2,104,111.12
Total Cash Balance: All Funds	<u>4,067,320.29</u>

Audit of 2022

Anoka County performs the accounting for the district and the district's accounts and general ledger are incorporated into the County database. To save time and money both audits are performed by the same audit team at the same time. The implication of this is that the 2022 audit will not be available until the fall of 2023.

2022 Budget

On September 13, 2021, the Board of Managers unanimously adopted the following budget for 2022. Also shown is the performance of both revenues and expenditures through December 2022.

Revenue Sources	2022 Budget	YTD Budget	YTD Actual	Variance	Pct Var
Property Taxes	3,027,370	3,027,370	2,975,201	(52,169)	-2%
Special Assessments	-	-	-	-	0%
Fees & Charges	641,785	641,785	322,847	(318,938)	-50%
Grants	465,374	465,374	857,508	392,134	84%
Other Revenue	25,926	25,926	56,409	30,483	118%
Fund Balances	77,302	77,302	37,077	(40,225)	-52%
	4,237,757	4,237,757	4,249,042	11,285	0%
Expenditure Sources	2022 Budget	YTD Budget	YTD Actual	Variance	Pct Var
Salaries & Benefits	1,538,808	1,538,808	1,363,511	(175,297)	-11%
Professional Services	933,346	933,346	640,227	(293,119)	-31%
Operating Expenses	208,846	208,846	152,298	(56,548)	-27%
Program Expenses	1,403,755	1,403,755	466,230	(937,525)	-67%
<i>Carryover Expenses</i>	<i>1,307,072</i>	<i>1,307,072</i>	<i>1,254,164</i>	<i>(52,909)</i>	<i>-4%</i>
Capital Equipment	75,700	75,700	66,306	(9,394)	-12%
	4,160,455	4,160,455	2,688,573	(1,471,882)	-35%

Review of 2022 Performance and Effectiveness

Evaluation of the 2013 – 2023 Comprehensive Watershed Management Plan

Where We Are At

In August, 2023 the current Comprehensive Watershed Management Plan for the Coon Creek Watershed District will expire. Upon conclusion of the 2013 – 2023 Comprehensive Plan, the District will have clearly arrived in the “water quality era”. While public drainage and enforcement of the Wetlands Conservation Act remain central themes in management, water quality concerns have taken center stage and dominate discussions, and budgeting.

The District contains 11 impaired waters. Seven of those waters are creeks and ditches impaired for aquatic life and recreation. Three are lakes. Two lakes are impaired for aquatic consumption due to high mercury levels in fish. One lake, Laddie Lake, is impaired for Aquatic life due to excess chlorides. The final impaired water is the Mississippi River which is the District’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.

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 lowering of water within the vadose zone. This upper most 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 level and is discharging that pollutant to streams, contributing to impairment of surface water resources.

Added to these natural conditions we are faced with aging infrastructure, labor shortages and limited financial resources. The District 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.

How We Got Here

The District 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 District 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 District and the equity of its cost apportionments.

In 1987 the District completed its first Comprehensive Watershed Management Plan under the Metropolitan Water Management Act. At that time the District was largely rural, and the landscape was dominated by farms growing shallow rooted crops, and seasonally flood 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 District at ground zero of the competition and conflict between drainage, development, and the preservation of wetlands. From 1991 to 2003 (The wetland era) the District 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 District's response was to:

- Adopt a management strategy based on 'Growth Management' and "Sensitive Lands" land use management.
- Strict adherence to:
 - the law and the principles of established use or right (or first in time)
 - the wetland delineation requirement of Normal Circumstances (not normal conditions) as described and litigated at the Federal Level through Regulatory Guidance Letter 90-07 and its requirements.
 - Recognition that 98% of all wetlands in the District needed to be evaluated as either problem and/or disturbed (new atypical) conditions under the 1987 Federal Delineation manual.
 - A commitment to advocate solving the development, agriculture, natural resource management problems.
 - Reliance on a finding of facts and an acceptance that the result "is what it is".

In 2003 the District developed its second comprehensive plan anticipating a future focus on water quality. In 2004 the District 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 District completed a minor amendment to its rules and standards to address "non-degradation" of the District's receiving waters. In 2006, the District also saw its first water quality impairments (Coon, Sand Pleasure and Springbrook Creeks for Aquatic Life) under the Federal and state program.

The "Water Quality Era" has increased program responsibilities 50%, increased required tasks 83% and staffing needs almost 200%. The District 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.

Also, in 2006, the recession struck emphasizing a need for certainty in decision making and control of costs by a constituency that prizes thrift, practicality, and minimum government involvement. The tightened operating environment made investing in long term, less tangible, non-utilitarian benefits, common characteristics of many natural resource concerns, extremely challenging.

At this time the District 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 the pocket cost to repair, replace or mitigate the consequences of imbalanced decision making.

This effort remains supported by well-defined legislative requirements and enforcement. The District also began moving to more formal planning, programming, and budgeting approach. In this new management framework, the District focused on the costs and consequences of mismanagement and evolving and connecting the planning, programming, budgeting and implementation systems and activities.

In 2013 the District developed and adopted its third Comprehensive Watershed Management Plan. In 2014, the District began developing an asset management program for all of its activities and continued to adhere to the doctrine adopted in 1991. The asset management approach defined each program and activity the District 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 District’s water resources and investments in the prevention and protection of people and property from natural catastrophes or expensive unintended consequences provided by the District. This combination of asset management and sensitive lands management allows the District to make more defensible and compelling investments and provides needed transparency for elected and appointed officials and citizens.

How We’ve Done

The 2013 to 2023 Comprehensive Watershed Management Plan was approved by the BWSR in August 2013. The District’s Mission 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.

The District's goals were distilled from the various legislative mandates as they apply to the watershed. The goals were to:

1. Prevent property damage from flooding, erosion, and degraded water quality.
2. Ensure balance between inflow, outflow, and storage of water.
3. Ensure that water is protected from contamination.
4. Provide for a variety of beneficial uses including the safety and enjoyment of the watershed's residents.
5. Preserve and enhance wildlife.

The dominant concerns at the time were:

1. Preventing flooding.
2. Improving water quality in impaired or impacted waters.
3. Maintaining and enhancing water quality in waters that are not impaired.

Emerging issues were:

1. Aquatic Invasive Species (AIS)
2. Changes in precipitation intensity, duration, and apparent return frequency
3. The decline in surficial groundwater and the effect on groundwater dependent resources

Goal 1: Preventing Property Damage

The District has done an excellent job at protecting property damage by:

- Enforced erosion and sediment control rules to prevent the loss of topsoil and sedimentation restricting recreational use and aquatic life of waters within the watershed.
- Regulating the low floor and low entry point to structures to prevent flooding from ground water and flooding.
- Avoiding adverse impacts associated with the use and modification of floodplains and with the destruction, loss, or degradation of wetlands.
- Prohibiting development within the floodway and new construction in wetlands wherever there is a practicable alternative.
- Continued bank stabilization & repair projects.
- Performing regular surveys to evaluate flood hazards and storm damage occurrences and their hazards and to develop treatment programs where needed.
- Responding quickly and effectively to alleviate the effects of natural disasters and reduce the threat to life, public health, and property.
- Assist in preventing, treating, and controlling aquatic invasive species where they have degraded the water quality of natural water bodies restricting recreational use, aquatic life or enjoyment.
- Identifying minor sub-watersheds providing water within the drinking water supply Management Area.
- Ensuring District participation in State and local early flood warning systems.

- Preparing public service announcements used to caution against strong currents and under tows that may exist in the watershed during times of high water.
- Providing opportunity for early public review of plans or proposals for actions in floodplains.
- Identifying critical events and conditions that lead to local flooding and water quality problems.

Goal 2: Ensuring Hydrologic Balance

The District has done a satisfactory job in ensuring hydrologic balance. It has done very well if the increased randomness of precipitation is considered. The following actions and policies support this assessment:

- The update of the hydrologic model using XPSWMM. The model has both the ability to scale, account for reverse flows, and account for varying hydraulic conditions.
- Working with the cities within the District and DNR to update the Floodplain management model to be used by FEMA in the old National Flood Insurance Program and New National Resiliency Program.
- Having DNR recognize the model as the Best Available Science and information on local surface water hydrology.
- Strict administration of the District's Drainage Sensitive Use policy which reduces discharge volume from developed land, reduces peak flows and thereby protects established drainage rights.
- Established and evolved a watershed wide precipitation tracking and reporting system and water content information on snowpack that has improved flood predictions and spring flood preparedness.
- Modified regulatory standards to ensure that the rate, volume, and quality of water entering wetlands matches wetland type and need.
- Worked with USGS to establish a real-time, continuous discharge monitoring station at the outlet of Coon Creek.
- Raised a warning flag to DNR, the Northeast Groundwater Management group, and Minnesota geologic survey that the surficial ground water aquifer is at risk, and places the lakes, wetlands and other groundwater dependent surface water resources with needs to be evaluated separately from the routine assessments of "groundwater".

Goal 3: Addressing Water Quality

The District has done an excellent job at addressing the water quality problems, issues, and concerns of the watershed.

- Hired a water quality coordinator and specialist competent in Aquatic Invasive Species, Clean Water Act requirements and the continued monitoring, evaluation and response to TMDLs.

- Secured \$3,616,729.58 in state and federal grant funds to further water quality restoration objectives.
- Constructed the first and largest Iron Enhanced Sand Filter (IESF) amended with biochar filter media that treats runoff from nearly a square mile catchment. And have since constructed three additional IESF and biochar filters. Continue to monitor and report on the treatment success as well as the maintenance needs and costs to operate and maintain this practice. All have significant effect on load reductions and progress towards meeting approved TMDL standards.
- Restored three segments of creek within the watershed where no upstream or downstream conflicts can occur due to flow modification. Techniques involved re-meandering, reconnection to the floodplain and flow modification and was conducted in close collaboration and with the support of the DNR, MPCA, BWSR. Anoka Conservation District and the Cities of Andover and Coon Rapids.
- Applied for and was accepted into the MPCA's pilot small watersheds program that provides guaranteed federal funding in excess of \$1.2 million dollars for water quality restoration projects over 16 years starting in 2022.
- Stabilized 28,326 LF of channel (5.36 Mile) of active erosion, reducing sediment and attached phosphorus loads by 2951 Tons TSS/yr and 2507 Lbs TP/yr, respectively.
- Initiated and was successful in treating and largely eliminating Hybrid Eurasian Watermilfoil from Crooked Lake with the support and assistance of the Crooked Lake Area Association, DNR, and the Cities of Coon Rapids and Andover.
- Initiated semiannual early detection inspections of all lakes and aquatic habitats likely to support colonization of "at risk" AIS.

Goal 4: Providing Beneficial Uses

The Coon Creek watershed is a "working" watershed, where a host of beneficial uses are in demand and experience high levels of use. The District has done an excellent job, under a performance based multiple use management doctrine to produce and provide opportunities and access to the quantity and quality of water demanded. Actions supporting this assessment include:

- Routine maintenance conducted to accomplish objective while minimizing alterations and facilitating channel equilibrium.
- Monitoring of lake and stream quality.
- Completion of a Watershed Restoration and Protection Strategy (WRAPS) with MPCA.
- Completion of a Nine Key Elements Document for Coon and Sand Creeks with MPCA.
- Updated Crooked Lake Management Plan.
- Developed Ham Lake Management Plan .
- Actively worked to address recreation impairments via bacteria source tracking, implementation of pet waste management program, and testing of innovative biochar-amended filtration media.

Goal 5: Preserving And Enhancing Wildlife

Wildlife is clearly the legal responsibility of the State and the Federal government. The District has done a good to excellent job in fulfilling its supportive responsibilities, given the history, constraints, and restraints under which it operates. Actions supporting this assessment include:

- Early encouraged or required reconnaissance and preapplication meetings that include review of threatened and endangered species and rare plant communities recorded or potentially on the site.
- Coaching on project alternatives and modifications that can avoid or reduce potential impacts.
- Strong encouragement of applicants to contact DNR immediately and coaching on the nature of both their project and the probable and potential resulting impacts to wildlife resources.
- Strict refusal to issue permits involving threatened, endangered species or rare plant communities until a DNR decision or permit can be shown.
- Strict refusal to make decisions or enforce state rules or wishes involving the avoidance, impact, taking or loss of threatened and endangered species or rare natural communities because of philosophical or moral appeals on the part of DNR staff.
- Successful restoration of fishery habitat in three locations and an analysis of barriers to aquatic organism passage to be addressed.
- The successful planning to avoid and protect threatened and endangered species on approximately 50 developments and subdivisions over the past 10 years.
- Implementation of Aquatic Invasive Species prevention and management activities .

Goal 6: Aquatic Invasive Species

The District has done an excellent job in preventing, detecting and facilitating the education, inspection, intervention and treatment of aquatic invasive species within the watershed. Significant actions in the past 10 years include:

- Assisted in the formation of the Ham Lake Lake Association and continued operation of the Crooked Lake Area Association.
- Updated and developed lake management plans for Crooked and Ham Lake in collaboration with their respective lake associations and the Cities of Andover and Coon Rapids in the case of Crooked Lake.
- Conducted public information and education program for lake residents and interested parties on AIS and identification of key species.
- Launched and administered a volunteer zebra mussel spotter program for early detection of zebra mussels.
- Facilitated and coordinated the assessment, grant acquisition and treatment of Crooked and Ham Lakes for hybrid Eurasian Watermilfoil and curlyleaf pondweed.
- Established a rapid response fund to address either new minor colorizations or to supplement cost share for major occurrences.

- Developed and implemented a twice annual inspection program of key habitats.
- Annually review, refresh and brief stakeholders on trends and risks of new AIS species.
- Successfully defended against invasive common reed (*Phragmites australis*) through early detection, herbicide treatments, and post-treatment monitoring; reduced infested area by 98%.
- Successfully eradicated pale yellow iris.

Goal 7: Addressing Changes In Precipitation Patterns

The District has done a good job in adjusting to changes in the effects of higher intensity and shorter duration rainfall events. Key District actions in the past 10 years include:

- Adopted Atlas 14 as the best available information for planning and sizing infrastructure.
- Evolved precipitation monitoring network to better assess the length and intensity of storms.
- Evolved stream level monitoring to enable real-time data viewing through telemetry-enabled devices.
- Expanded local information and communication network to include ongoing implications of impending weather conditions and hydrologic implications for current conditions.
- Established a system that has been key in coordinating and documenting storm damage for grants, adapting and updating select standards and providing the foundation for planning and anticipating issues ranging from flooding to aquatic invasive species monitoring.
- Required staff to remain current on evidence-based research, findings and developments, on best practices in their areas of responsibility.
- Collaborated with cities to consider in frequency and occurrence of precipitation in planning and decision-making involving infrastructure construction, replacement, and rehabilitation.

Goal 8: The Effect of Declining Regional Surficial Groundwater on Groundwater Dependent Resources

The District has been working towards gaining the attention, interest and assistance required to accurately assess nature, structure and function of this concern. Actions taken in the past 10 years to address this goal have included:

- Development of a detailed conceptual model and water budget of the vadose zone within the district.
- Presentation to DNR North-east Ground Water Management Area project managers during scoping to address larger Anoka Sand Plain surficial/unconfined aquifer issues.
- Collection of continuous lake and wetland level data at long-term monitoring sites.

Lessons Learned

The planning and management approach adopted in 2013 needs updating and continual evolution to enable the District and its collaborators to adapt and succeed through and beyond 2034. The following lessons will be incorporated into the fabric of the 2024-34 Comprehensive Watershed Management 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 is the product and a dynamic combination 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 is more important than ever.** Not to decide and commit to a rigid schedule of projects and activities, this has proven unrealistic and impractical. Its value is in facilitating and communicating common understanding of problems, and identifying available options and their consequences, and to facilitate 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, even if when those consequences will occur is uncertain, is more effective than the traditional defensive based conservation, “just say no” strategy that increasingly dominates the natural resource and 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. But immediate and short-term condition and capacity are important too.

Implications

1. Fulfillment of the responsibilities for drainage, flood prevention, wetland conservation and water quality restoration will be challenging.
2. We cannot 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.
3. We 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.
4. We can, however, state with certainty, that 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.
5. 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.

2023 - 2024 Situational Assessment

Introduction

The 2024 budget will be the first year implementing the 2024 to 2034 comprehensive plan. This report is also the first introduction to a formalized planning, programming, budgeting and implementation or execution system that evolves and formalizes the existing system and ensures operations consistent with the Comprehensive Watershed Management Plan.

Purpose

The purpose of this report is to:

1. Describe the current and expected conditions of the operating environment that impacts District operations and fulfillment of our responsibilities.
2. Identify and appraise existing and emerging critical problems, issues & concerns for 2024 Budget that either presents a risk to the public health and safety or the District's ability to efficiently and effectively address those priorities.
3. Identify the disposition, capability, and capacity of other MS4s and organizations that may be involved.
4. Identify the disposition and capability of other non-governmental or intergovernmental organizations that have a significant interest.
5. Describe the critical aspects of the public interest that impact water management operations.
6. List the assumptions being considered for development of the 2024 annual budget and plan.

Current Operating Environment

The District's operational environment is a composite of the conditions, circumstances, and influences that affect its capacity and capability to pursue its responsibilities and have influence on the decisions of the Board of Managers.

Economic Environment

- Increased demand on land and water resources is playing a significant role creating rapidly increasing economic scarcity and magnifying the conflicts relating to competing demands at the local and state levels.
 - Property values within the district have increased an average of seven percent annually over the past five years and have risen 84% in the past ten years.
 - The District tax rate has shown a zero percent increase over the past five years and has decreased eight percent over the past ten years.

- Waiting for certainty is not a viable option. Choosing the best direction and actions for the future will require strong practical vision, leadership and consensus.
- Expect owners, planners, and regulators to start asking about the resilience of water resource assets in the broadest sense. Those without resilience plans should expect a grilling.
 - In 2022 The FEMA restructured its program that addressed floodplain insurance to address resiliency. The new program orientation covers more and more types of natural catastrophes but requires steps on the part of local government to ensure resiliency for coverage.

Information Environment

- The pace of technological change is accelerating almost exponentially.
- During the next two decades, technological innovations—including automation, online collaboration tools, artificial intelligence, and additive manufacturing—will reshape some fundamental aspects of how and where people work.

Infrastructure Environment

- Expect to see planning, programming, and budgeting approaches that enable a much more agile and adaptive planning, development and delivery.
 - The District is piloting an “evolved” planning, programming budgeting, and execution system.
 - Anoka County is adopting a new budgeting system.
- Expect a focus on “enhancing” asset utilization and optimizing performance as a way to better “sweat” existing assets.
 - An increasing number of District and city projects over the past three years have involved “enhancement” or “retrofitting” existing storm water treatment facilities to increase either the efficiency, effectiveness or capacity of the facility or practice.
- The industry will need to address the way that evolving technology makes some legacy assets obsolete.
- Expect to see new infrastructure financial vehicles that provide sustainable inflation protected long-term annuity returns, particularly if treasury rates remain low.
- Expect owners, planners, and regulators to start asking about the resilience of water resource assets in the broadest sense. Those without resilience plans should expect a grilling.
 - In 2022 The FEMA restructured its program that addressed floodplain insurance to address resiliency. The new program orientation covers more and more types of natural catastrophes but requires steps on the part of local government to ensure resiliency for coverage.
 -

Physical Environment

- The District contains eleven waters that are impaired:
 - Seven streams
 - Three lakes
 - Mississippi River
- Impairments are driven by seven stressors creating approximately 30 dynamic occurrences or situations.
- Overall, the District is in poor condition exhibiting low geomorphic, hydrologic, and biotic integrity relative to its natural condition. However, it is in fair condition for an urban system exhibiting expected physical, hydrologic, and biotic integrity relative to a modified urban system that has “worked” for more than 100 years.
- The majority of the system requires constant maintenance and repair to prevent or discourage flooding and/or damage to the channel itself.
- The physical, chemical, and biological conditions of the system individually and in combination do not meet federal and state water quality standards over the majority of the watershed system.

Political Environment

- Diverse actors in the water management arena who have divergent interests and goals are increasingly competing to promote and shape water management norms on a range of issues, creating greater challenges for local water management organizations.
 - HF2354 (Pursell) Drainage registry information portal established, and money appropriated.
 - HF1680 (Hansen) Sustainable diversion limits on groundwater appropriations provided.
 - HF2304 (Curran) Issuance authorized and modification of water use permits prohibited, White Bear Lake Area Water Use Work Group established, comprehensive plan required, and money appropriated.
 - HF1900 (Hollins) Renewal of environment and natural resources trust fund provided, and constitutional amendment proposed.
 - HF2778 (Hansen) Legislative-Citizen Commission on Minnesota Resources membership and terms modified.
- Some watershed and local water management organizations are retreating from their longstanding role as norms leaders and protectors, as populist influence grows.
- At the same time, increasingly prescriptive policies led by BWSR, MDNR and MPCA are reinterpreting local water management autonomy norms, offering alternatives to what they view as non-environmental centric norms, such as drainage, floodplain management and storm water management in urbanizing areas. advocating norms and standards to promote, in their view more comprehensive or holistic goals.

Social Environment

- The District will add approximately 1,930 people each year and reach an estimated population in 2033 of 200 - 218 thousand. The demand for and value of water and related resources is highly predictable.
- Over the next two decades, people are likely to demand more from their political and government leaders, potentially prompting those leaders to be more responsive and possibly accountable but also risking societal divisions, broader enforcement, and less coherent policies.
- During the past decade, public activism—direct public action intended to impart social or political change—has been on the rise, including high-profile protests and demonstrations.
- The combined increases in prosperity, education, urbanization, and access to communication technologies are equipping people to express their interests and needs and seek more government action.
- As public activism continues to expand and potentially becomes more sophisticated, governments of all types will seek avenues to respond—either by attempting to appease public demands or by actively cutting off or eliminating avenues for activism.
- Over time, this dynamic will offer the prospect for more accountable leadership and improved democratic health, but in the near term, it could increase factionalism and reduce policy coherence and effective strategic planning.

Water Management Environment

- During the next two decades, water conflicts most likely will be driven by the same factors that have historically prompted problems, issues and concerns—ranging from resource protection, economic or regulatory disparities, and ideological differences to the pursuit of power and influence.
- The ways in which water management is conducted will change as new technologies, applications, and doctrines emerge and as additional actors gain access to these capabilities.
- The combination of improved sensors, automation, and artificial intelligence (AI) and other advanced technologies will produce more accurate, better connected, faster, longer range, and more effective practices and treatment devices, primarily available to the most advanced organizations but some within reach of smaller city and non-governmental actors.
- The proliferation and diffusion of these systems over time will make more assets vulnerable, heighten the risk of problems due to equipment failure, and make water management more complex and involved, though not necessarily more effective.

Critical and Emerging Issues for 2024

Issues Surfaced During the Planning Process

Four high priority issues were identified during the Management Plan Scoping and Prioritization process:

1. Water quality
2. Population growth and audience evolution
3. Wetland loss
4. Ground Water x Surface Water Interactions

Water Quality: Pace of Work and Time Remaining to address TMDL Load Reductions

Situation

The District contains eleven streams that do not meet state or Federal water quality standards for select beneficial uses of water and are therefore classified as impaired. These impairments are to be addressed by limiting stressors to a Total Maximum Daily Load (TMDL) by 2045. The process of pursuing these TMDLs is a process called load reduction. Load reductions must be achieved for:

1. Total Suspended Solids
2. Total Phosphorus
3. Poor habitat
4. Altered hydrology.
5. Chloride
6. Dissolved Oxygen
7. E coli

The District is currently engaged in conducting studies to target the source of some stressors, conducting projects to resolve or neutralize the source or cause of others, regulating land use changes to prevent or mitigate stressors and conducting education and outreach to the public, engineers and developers to further prevent and provide alternatives.

Achieving the TMDL by addressing some of the more pervasive and influential stressors, such as altered hydrology and E coli, will require construction, modification, restoration, and enhancement of new and existing infrastructure, (eg. ponds and filters) and restoration of natural infrastructure (eg. streams, ditches and ditch banks).

Issue: The Water Quality bill has come due

The current pace of investment, (\$1-2 million per year) is not sufficient to achieve the end state of meeting state and federal standards by 2045. In addition, economic and investment best practices indicates that to be successful in a dynamic and fluid situation, you should have 80% of the infrastructure in place in the first 20% of the time. This means 80% of the total cost (Estimated at

\$100 million) should be made in the first 20% of the time between now and 2045 (2028). This computes to an additional investment of \$20 million a year for the next 4-5 years. The District's share is estimated at \$6 million per year for the next four years and \$1.5 million per year for the following 16 years. These figures are in 2023 dollars and assume no significant increase in fuel, labor, or material costs.

Population Change and the Development of a New Audience

Situation

The District is required, under both state and Federal law, to conduct activities to inform, educate, involve, and engage the public to ensure awareness, reflect their concerns and recruit them over the long term to assist in preventing and/or exacerbating the water resource problems of the District, particularly water quality.

The 2020 census became available in 2021 and related data and studies in 2022. The data indicates that Coon Creek Watershed District has both grown in population and indicates a shift in the tastes and preferences of the public that we serve. Every two to three years the District conducts a paired comparison survey of priorities and preferred beneficial uses of water. Those results are presented to the Board of Managers and are reflected in planning and policy priorities. However, the intent of the Federal and state requirements are to influence behavior through education of consequences and alternatives. The priorities and attitudes available through the census and the biannual survey are poor precursors to actual behaviors and why trying to "enlighten" and/or make an audience "love us" ("us" may be substituted by any environment concern, water quality, the conservation movement, Coon Creek WD, EPA DNR, BWSR, , etc.) using mass advertising techniques is destined to fail.

Issue: We Need to Consider a Different Approach to Understanding our Publics

Understanding our audiences is not a "nice to have" but an imperative pre-requisite for success. Increased population and diversity of perspective and opinion requires staff to know how and why citizens and the public do certain things to be effective.

The resources and guidance available from the state and EPA largely rely on generic communication models applicable to all groups and cultures. The District's Public Affairs staff have done an excellent job at modifying, customizing, and improvising available resources to keep costs down and meet our statutory requirements. However, effective communication efforts must be tailored to the local dynamics and with respect to the behaviors one is seeking to change.

With the new census and the new Comprehensive Watershed Management Plan, the District needs to conduct a Target Audience Analysis (TAA) of the District's population. A TAA aims to address our understanding of our citizens by constructing a robust profile of the audiences and how they

can be appropriately influenced through bottom-up messaging constructed from a process of measurement and research, and subsequently derived from reliable knowledge of the audience.

This is a significant change from the way PR and marketing surveys are usually conducted. The traditional approach is based on sending pre-determined messages in volume to mass audiences in the hope that they will resonate with some portions of that audience. This, of course, fits with the traditional way that the environmental and natural resource agencies conduct their business, where themes and messaging are crafted centrally and distributed downwards to local agencies.

Experience from over 30 years tells us, that the training, resources and messaging packages from Washington DC (EPA) and St Paul (BWSR, MPCA & DNR) are often a diluted and distant memory by the time they reach local agencies, and they may actually have no relevance at ground level. Working out who to influence, why, how, when, and whether it is possible, constitutes an increase in effectiveness and a potential decrease or more efficient cost.

Wetlands: Continued Apparent Loss and State Unresponsiveness

Situation:

The acres of jurisdictional wetland appear to be decreasing. The District, as the Local Governmental Unit administering the Wetland Conservation Act is responsible for their preservation.

What we know is that approximately 90% of the wetlands within the watershed are hydrologically classified as seasonally flooded or seasonally saturated. The implication is that these resources typically only meet the “hydrology criteria” (one of three criteria required for protection) in spring and are often dry the remainder of the year.

The District wetlands provide an important cost reduction benefit through storage and treatment of water in the soils and then in the basin itself. Sometimes they perform this function more efficiently and effectively than constructed infrastructure, other times they do not. In both cases, they perform this and other landscape functions people find beneficial.

Issues:

1. We appear to be losing wetlands, the issue is why: There are several hypotheses, but no systematic investigations that looks at water source, residence time and water loss.
2. We are spending time defending some of our programs and actions, the issues are staff time, time away from problem solving and being put on the defense.

Ground water - Surface water Interactions

Situation

Groundwater is prevalent in the District and Anoka Sand Plain. It breaches the surface in the upper part of the watershed and is the principal source of drinking water for public and private water supplies. The origin of that water come from two different sources:

1. Bed rock aquifers: The St. Peter, The Mt Simon – these sources are confined by their size, type of rock, and their water bearing capacity. For the most part, this water is thousands of years old.
2. The surficial aquifer: Water contained in 300 feet of mixed sand, silt and gravel on top of the bed rock and below our feet. These sources are unconfined, and water moves easily both vertically and horizontally at rates of feet per day. This water’s origin is primarily rainfall and migration from up gradient (Columbus and Washington County). This water is typically days to months old.

Under normal circumstances the surficial aquifer will fluctuate three to ten feet in a year and recover over winter and spring returning to an elevation where it has left chemical signatures in the soil in the form of staining. The depth of fluctuations vary across the watershed but trend downward the closer to the Mississippi River. Fluctuations are driven by evapotranspiration of plants, water appropriations from dewatering or domestic use and drainage of soils. Discounting the effect of the drought and the hydrologic impact of the changes in precipitation and storm type, recovery of water levels is slowing and not achieving full recovery over an increasingly large area of the watershed. This trend, if true, has extreme significance for drinking water availability and surface waters such as lakes, wetlands and water quality treatment ponds.

Issue

1. The trend needs to be verified, its driving forces quantified, its timing and sequencing identified and the needs and feasibilities to mitigate the impacts identified and organized.

Management Issues and Functions

The District's capacity and capability to:

- Engage in meaningful water management activities,
- Fulfill its legislative mandates, and
- Respond to and meet both the public's demand for health and safety and its needed and desired use the water resource for sustained economic benefit.

in 2024 and on to 2034 is critical for long range and annual planning and budgeting.

To inform the Board of Managers and enable them to effectively govern requires an assessment of the capacity and capability, (or readiness) of the District to operate and accomplish its mission essential tasks. While readiness lacks a statutory definition, management literature defines it as "the ability to conduct work, accomplish assigned tasks while preparing for future challenges" (Betts, 1995, Powell, 2012).

The degree to which the District can meet various demands and satisfy its legislative requirements is determined by three criteria that together define capability:

1. **Joint Capability Areas**: Assessment of nine groups of field activities or systems, that comprise and describe those tasks that are essential for accomplishing the legislative goals.
2. **Planning**: Assessment of District's ability to produce/provide long and short-term plans and an assessment of the mission critical tasks
3. **Readiness Deficiencies**: An assessment of shortfalls of resources to meet the requirements of reporting programs assigned goals and responsibilities.

Joint Capability Areas

Joint Capability Areas are the strategic administrative and program management functions that serve as the major inputs or drivers of District activities. Their analysis can provide a side-by-side comparison of program contributions to joint water management and a tool that will assist decision-makers in deciding whether to move resources between program budgets.

Situational Awareness: Is the ability to understand the dispositions, tendencies, and intentions, as well as characteristics and conditions of the operational environment that bear on District and water management decision making by leveraging all sources of physical, social and political economic information. The goal and intent is to provide managers at all levels the knowledge needed about the physical, social and managerial circumstances affecting a project, program or problem, issue or concern.

Finding: Program staff do not, as of yet sufficiently understand the District's and their program's operating environment and management situation based on a general inability to articulate those forces and trends influencing and defining the context and need for the District's and their programs organization and mode of operation.

Sustainment: Is the ability to supply, support, and sustain staff, and programs and provide the District with the agility and freedom to effectively respond and address problems, issues and concerns at or near their period of emergence.

Finding: The District's ability to provide adequate support to retain District staff has been compromised by Anoka County's recent and unexpected decision to separate and no longer provide the administrative services of accounting, health insurance, human resources, and payroll to the District.

Finding: The degree to which the District uses its tax capacity is insufficient to pay for the capital work needed, on the District's part, to retrofit and rehabilitate the system to address water quality impairments. However, taxation and cost reduction are significant political issues and keeping taxes down are political priorities for the Board's appointing authority.

Conclusion:

The District has three principal issues or shortfalls that have significant impact on the District's capacity or capability to execute mandated tasks and duties:

1. **Situational Awareness:** The degree of adequate situational awareness and adaptive management orientation by all program coordinators
2. **Sustainment:** The District's ability to provide adequate support in the form health insurance to retain District staff.
3. **Sustainment:** Adequacy of funding to address water quality capital investment needs

Assessment of District Planning

Assesses the capability or probability of achieving annual and comprehensive objectives. This assessment reflects the District's ability:

- To develop relevant and timely comprehensive and annual operating plans/budgets
- Assess the District's Mission Essential Tasks (METs)

The assessment and analysis are composed of:

Staff allocation and readiness: Looks at the reason each program was established and the requirements and objectives it is required to meet within the context of the sufficiency of staffing, equipment, equipment condition and training to accomplish or address the priorities and objectives in the annual and comprehensive plans.

Finding: The analysis showed that achieving objectives may be questionable in some circumstances due to:

1. Equipment readiness: Due primarily to depreciation more than performance
2. Training Deficiencies: In select mission essential tasks – especially situational awareness

Analysis of the Mission Essential Tasks of the District: District operations are built around a core of four kinetic principles (Leadership, positioning, projects and protection) which are augmented, supplemented and/or supported by four more (intelligence, information, sustainment and public engagement) relies on mission essential tasks METs to organize the individual duties and steps of a project. METs are the physical means that the District and Program Coordinators use to perform tasks and accomplish objectives. They are made up of the specified and implied tasks that the District must perform to accomplish its mission, goals and objectives. Their purpose is to provide a structure to identify training requirements and qualifications, establish program or work group purpose and drive progress towards accomplishing goals and objectives.

Findings: The District struggles at the program level to achieve the objective of gathering social, political, and economic information for decision making which hinders our ability to anticipate, position the program or District and efficiently and effectively accomplish objectives

Conclusion:

The District ability to achieve Comprehensive and Annual planned goals and objectives is likely. There is currently an adequate supply of critical requirements, legislative depth and financial capacity.

Deficiencies in Capacity and Capability

This analysis assesses the District’s ability to successfully execute the comprehensive and annual plans by:

- Identifying the ability of different programs and authorities to intervein in a timely manner.
- Analyzing the use of different programs, the variance and impact of providing the critical requirements of funding, material/authority, and qualified staff, and the effect of any deficiencies on the risk to achieving management objectives.

The following are deficiencies and short comings which are significant and are not currently being addressed:

1. Administrative Support and Service Separation from Anoka County

Issue: Sustainment – Attracting and Retaining Qualified Staff

Major Points:

- Anoka County wishes to end its administrative support of the District.
- Notice of that decision was informally provided in February, 2022 with an initial expectation that all services would end by end of April.
- The April and December deadlines were impractical due to:
 - Funds available to replace services.
 - Time and logistics to find replacement services.
 - Time to collect and have available funding to pay for those services.
 - Cost of replacement of same health coverage
- Services include accounting, health insurance, human resources, and payroll.
- Health care is a critical benefit that has allowed us to attract and retain staff talent of a caliber to address the water resource problems in the District.
- Funding availability and cash flow indicate that a more realistic start date may be June, 2024 for accounting and payroll services and December, 2024, at the earliest, for health insurance.

Situation

In February, 2023 Anoka County notified the District that it intended to end its 30 year arrangement with the District to provide the services of:

- Accounting & Audit Support
- Banking and access to the MAGIC Fund
- Health Insurance
- Payroll
- At present, Anoka County would like to transfer accounting and payroll services by December 31, 2023, and Health Insurance by end of 2024.
- Given the timing of the property tax levy and the first tax settlement (June 2024), preliminary cash flow projections indicate that the most likely date for a smooth transition would be late June early July 2023.

Impact

1. Replacing the quality of Health Insurance is a primary strategic factor in attracting and retaining qualified and talented staff. The cost of doing that is, at present, unknown.
2. Replacing the professional services of accounting HR and payroll is in process and should be known before budget review.

Recommendation:

Stay the course.

1. RFPs are due in early April.
2. Interviews are scheduled for mid-April.
3. Selection was originally discussed for early May.

4. Begin transition of accounting and payroll in June.

However, regardless of the costs of bringing on additional professional services and the fact that these expenses will be unbudgeted, indicates that the RFPs will serve the greatest benefit for:

1. Assessing price/cost of these services
2. Determining a good/best fit
3. Assessing flexibility/feasibility/suitability of firms to delay or defer payment until June 2024

2. Water Quality: Pace of Work and Time Remaining to address TMDL Load Reductions

Issue: Facilities and Installations: Water quality fails to meet minimum standards for health, safety welfare and enjoyment.

Major Points:

- The District contains eleven streams that do not meet state or federal water quality standards.
- Reducing the pollutant loadings to acceptable levels is to be achieved by 2045.
- The “impairments” also serve as indicators that the water resource is at significant risk being unable to provide the beneficial uses on which we depend.
- The current pace and volume of money being invested is insufficient to either accomplish the task by 2045 or show a good faith effort.

Situation

The District contains eleven streams that do not meet state or Federal water quality standards for select beneficial uses of water and are therefore classified as impaired. These impairments are to be addressed by limiting stressors to a Total Maximum Daily Load (TMDL) by 2045. The process of pursuing these TMDLs is a process called load reduction. Load reductions must be achieved for

1. Total Suspended Solids
2. Total Phosphorus
3. Poor habitat
4. Altered hydrology.
5. Chloride
6. Dissolved Oxygen
7. E coli

The District is currently engaged in conducting studies to target the source of some stressors, conducting projects to resolve or neutralize the source or cause of others, regulating land use

changes to prevent or mitigate stressors and conducting education and outreach to the public, engineers and developers to further prevent and provide alternatives.

Achieving the TMDL by addressing some of the more pervasive and influential stressors, such as altered hydrology and E coli, will require construction, modification, restoration, and enhancement of new and existing infrastructure, (eg. ponds and filters) and restoration of natural infrastructure (eg. streams, ditches and ditch banks).

The current pace of investment, (\$1-2 million per year) is not sufficient to achieve the end state of meeting state and federal standards by 2045.

Impact:

Economic and financial best practices indicate that investing in infrastructure/equipment under a deadline should be guided by Pareto's Law where 80% of the infrastructure/equipment should be in place in the first 20% of the timeline. This means 80% of the total cost (estimated at \$100 million) should be made in the first 20% of the time between now and 2045 (2028). This computes to an additional investment of \$20 million a year for the next 4-5 years. The District's share is estimated at slightly less than \$ 6 million per year for the next four years and \$1.5 million per year for the following 16 years.

Recommendation:

1. Develop more accurate 10- and 20-year forecasts of costs
2. More accurately allocate costs between the District and other MS4s for consideration in District CIP and annual budgets for 2024 and 2025.

Risk Assessment

Purpose

The Risk Assessment is informed by the full scope of the Comprehensive Watershed Management Plan and provides the Board of managers the District Administrator's assessment of the nature and magnitude of strategic and management risk in pursuing the missions and mandates called for in State and Federal legislation and rule. By considering the range of operational, future challenges, force management, and institutional factors, the risk assessment provides a comprehensive assessment of the ability of the District to meet legislative requirements in the near-term.

Risk is the probability and consequence of an event adversely affecting either the public health, safety and welfare or the resource's ability to continue to produce and provide beneficial uses. Risk is classified within one of four risk levels (low, moderate, significant or high). Accurately assessing risk allows the Board and Administrator to make informed decisions across disparate processes.

The assessment consists of four elements:

1. **Problem framing**: a look at the strategic operating environment, identifying the items or elements which are valued (Risk to what?)
2. **Risk Assessment**: Identifying and scaling threats (Risks from what?)
3. **Risk Judgement**: Developing a risk profile (How much risk?) and evaluating the risk (How much risk is OK?)
4. **Risk Management**: Recommendations, on actions to accept, avoid, mitigate, or transfer risk (What should be done about risk?)

1. Strategic Environment and Framing the Problem

The District is a special unit of government under Minnesota state law who is charged with comprehensive management of water and related resources within the boundaries of the District. The District mission 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.

And has been granted the authority to:

1. Levy property taxes to raise revenue to develop and implement the programs and work identified in the approved comprehensive plan
2. Adopt rules to regulate the development and affect of land use changes adverse to water management goals

To achieve this mission, the District is to address:

- Ground water: Its availability and quality for drinking water as well as supply to surface water and base flows to creeks, lakes and wetlands.
- Public Drainage: Its structure and function as both an essential piece of infrastructure to the agriculture economy but as a water resource that provides beneficial uses.
- Water Quality: The water in 11 lakes and streams within the district do not meet state or Federal water quality standards for three different beneficial uses.
- Water Quantity: The public safety and specific properties and public infrastructure as well as agricultural land is at risk from flooding.
- Wetlands: wetlands are at risk of being adversely impacted or lost due to drainage, fill or conversion.

The reason the legislature has authorized the District to pursue the legislated goals and the mission and provided the District 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)

Based on the trends identified in the “Alternatives” portion of the Comprehensive plan and summarized in this report, the emerging operating environment influencing the District’s capability and capacity to address water resource concerns is increasingly characterized by the simultaneous and connected challenges of

- contested norms and
- persistent disorder.

The evolution of these challenges are already being seen and, in all probability will be evident across the watershed, the Anoka Sand Plain and the State over the next 10 years.

2. Risk Assessment (Risk From What?)

The criticality of any problem, issues or concern is a measure of the risk to the public health, safety, and welfare and/or productivity capacity of the watershed in the event of failure. The more critical the problem, issue, or concern, the higher the risk to which the Cities and the watershed district are exposed. This risk may come in the form of flooding, reduced access to clean water, and impairment of water bodies in the case of:

- Natural assets such as drinking water or floodplain

- Physical assets such as pipes, BMPs, etc.

The risk in the case of programmatic assets is different, but significant regardless.

Strategic Management Risks

Risks stemming from the physical, social and managerial trends identified earlier.

Risk	Probability	Consequence
<u>Overt Ideological Competition:</u> Irreconcilable ideas communicated and promoted by identity networks through overt and disruptive actions.	Very Likely (80-100%)	Damage to interests and/or long-term impacts
<u>Threats to Local Water Management Authority:</u> Encroachment, erosion or disregard of laws, rules and investments that provide the context and medium on which the state and local economies operate through coercion.	Likely (50-80%)	Damage to interests and/or permanent of defining system
<u>Antagonistic Hydropolitical Balancing:</u> Increasingly ambitious governmental and nongovernmental units maximizing their own influence while actively limiting the ability to manage and protect the water resource.	Likely (40-70%)	Damage to interests and/or short to mid-range impacts
<u>Disruption of the Watershed or Subwatershed Commons:</u> Denial or compulsion of access to resources that are essentially unregulated but available to all.	Very Likely (80-100%)	Damage to interests and/or long-term impacts
<u>Shattered and Reordered Efforts:</u> Agencies, groups unable to cope with internal political fractures, environmental stressors, or deliberate external interference.	Likely (40-60%)	Damage to interests and/or long-term impacts

Program Operation Risks

Risk to District Mission stemming from District’s ability to achieve goals and objectives identified within the Comprehensive plan. This ability considers the District’s ability to execute current, planned and contingency operations in 2024 and beyond to 2034, the ability to access staff to implement those plans and limit the financial, legal and political risk.

Risk Subset	Risk Drivers	Consequence
Current Mission/Staff	Achieve Annual Objectives	Modest: Can achieve most objectives at acceptable cost.
	Meet Board/Administrator Staffing Requirements	Minor: Operational staffing at 90%. No critical shortfalls
Current & Future Mission/Staff	Achieve Comprehensive &/or Annual Plan Objectives	Modest: Limited delays. Acceptable costs
	Meet Budget Requirements	Modest: Shortfalls cause minor plan deviations. No critical shortfalls
	Authorities	Minor: Full authority provided to achieve all objectives
	Resources Available to meet required timelines.	Minor: Substantially as planned. Minimal costs
	Partnerships and collaboration	Minor/Modest: Partnerships mostly effective
	Messaging	Modest: Key messaging effective
	District Capability vs problem/issue/ concern	Modest: Dominant in essential capabilities
Future Mission/Staff	District Readiness: Capability & Capacity	Modest: Issues and shortfalls have limited impact on capacity and capability to perform required tasks and responsibilities
	Stress on Staff	Modest: District possesses the required resources and trained to undertake most

Risk Subset	Risk Drivers	Consequence
		of its legislative mission for which it is organized
	Modernization/Critical Maintenance	Minor: As planned. Minimal cost
	Staff Development & Design	Modest: Meets priority legislative requirements. No critical shortfalls.
	Investment in Operational Imperatives	Major: Achieves minimal operational imperatives.