MINNEHAHA CREEK
WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

Meeting: OPC
Meeting date: 8/26/2021
Agenda Item #: 4.1
Item type: Discussion

Title: MCWD Strategic Dialogs – Phase 1 Historic Analysis – WHITE PAPER #2

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Purpose:
At the August 26, 2021 Operations and Programs Committee (OPC), Louis Smith will facilitate a discussion with Board members around the second in a series of white papers that explore the Minnehaha Creek Watershed District's (MCWD) organizational history for timeless strategic insights that will guide and serve future generations of the District team.

Background:
2022 represents the midpoint of the Minnehaha Creek Watershed District's 10-year plan, and is also the 5 year anniversary of the District's 2017 plan for organizational alignment. As the District approaches this midterm milestone the Board of Managers expressed a desire to continue strategic preparations for the future.

As part of ongoing preparations for the future, and efforts to continuously improve the organization, the Board has decided to engage in a series of organizational conversations that will explore its past and benchmark its current position, to inform refinements in its mid-term strategic direction and priorities.

This work has been broken into three phases of work as follows:

1. Phase 1 – Past – Where have we been and what have we learned?
    a. A historical analysis to derive insights that underpin MCWD's identity today, and lessons for the future

2. Phase 2 – Present – Where are we now and what needs to be done?
    a. Status of current strategic priorities, and assessment of what will be required near term to execute

3. Phase 3 – Future – What challenges will we face in the future, and how can we prepare?
    a. An inventory and education on emerging strategic issues the District wishes to begin preparing for

Below are links to past Board and Committee packets where Managers and staff discussed the purpose and scope of these strategic dialogs.

- October 22, 2020 PPC Meeting – Introductory Discussion
- November 19, 2020 PPC Meeting – Discussion of purpose and desired outcomes
- January 28, 2021 PPC Meeting – Review proposed process and scope of work
- February 11, 2021 Board Meeting – Approval of the process and scope of work
- March 25, 2021 PPC Meeting – Kickoff of Phase 1 Strategic Dialogs – Historic Analysis
- June 10, 2021 OPC Meeting – White Paper #1, 1967 - 1979

August 26, 2021 OPC Meeting:
To design through a process to mine insights from the District's past, at the March 25, 2021 PPC Meeting, Board Members began by reviewing and discussing a chronology of MCWD's historical periods, key events and preliminary lessons (Attachment A).

Using this framework, and guided by initial discussions by the Board, Louis Smith has researched and drafted a white paper for the second historical time period: *1980 – 1992: Establishing Data-Driven Project Planning.*

At the August 26, 2021 Meeting, Mr. Smith will review the key events of this time period, and the preliminary principles and lessons learned that are emerging from the research. Feedback and discussion from the committee will be used to refine White Paper #2, particularly the insights/principles, before moving into the next period of research, *1993 – 1999: Growth of Planning and Implementation.*

Next Steps:
Ultimately, the White Papers and associated dialog with the Board will be synthesized into a package that chronicles MCWD's history into discrete periods, key events, and importantly timeless principles that will serve the organization well into the future.

If there are questions in advance of the meeting, please contact James Wisker at Jwisker@minnehahacreek.org

Supporting documents (list attachments):

- Attachment A – White Paper #2. *1980 – 1992: Establishing Data-Driven Project Planning*
- Attachment B – *MCWD Draft Time Periods, Key Events and Hypotheses*

DRAFT White Paper #2

1980 -1992: Establishing Data-Driven Project Planning

August 23, 2021

The MCWD completed its first major project at the Grays Bay Headwaters Control Structure and continued to build its technical understanding of the watershed. Keeping a primary focus on flood mitigation, the MCWD also integrated water quality into a second more comprehensive water resources management plan. This period also saw a significant expansion of the reach of the District's regulatory program and a related increase in enforcement efforts.

Key Events:

1. Precipitation Cycles

This twelve-year period saw major swings in precipitation in the watershed. Higher than normal precipitation in the early 1980s prompted ongoing concerns about flooding along Minnehaha Creek. In May 1986, Lake Minnetonka elevation was 930.4, and the Creek was flowing at 285 cubic feet per second, overtopping the fixed crest portion of the dam and overflowing the Creek banks in many places. The District worked extensively during this time with municipalities on floodplain policy. The District found the state floodplain standards inadequate, and urged municipalities to adopt more stringent floodplain ordinances to prohibit filling in the floodplain. The District adopted a "High Water Conditions Policy Statement" in September 1980 in conjunction with its operating plan for the Grays Bay dam and control structure. Many of the public comments on the operating plan in the early 1980s emphasized concerns with creek flooding. The District considered adopting a canoe policy to warn the public of dangerous Creek flow conditions. The District embraced a request from the Minneapolis Park & Recreation Board to cooperate in a hydraulic study of Minnehaha Creek.

By November 1986, the level of Lake Minnetonka had subsided to 928.45. Notwithstanding a major storm and flooding event in July 1987, the overall precipitation trend declined, and the Grays Bay control structure remained closed from the Fall of 1986 to June 25, 1991. The level of Lake Minnetonka decreased to as low as 925.48 in December 1989. These lower lake levels prompted intensive interest in dredging Lake Minnetonka for navigational access, and the MCWD entered a period of more intensive regulation and enforcement activities to protect the lake as noted more fully below.

2. More comprehensive water resource plan

In 1982, the Minnesota Legislature adopted the Metropolitan Surface Water Management Act, which required all parts of the seven county metropolitan area to be within an established watershed management organization, and required all metro watersheds to complete comprehensive water resources management plans every ten years. The MCWD invested significant time with the Minnesota Association of Watershed Districts to develop standards for this planning process. The District also engaged in a multi-year planning effort to update its plan. Beyond its regular hydrologic monitoring program begun with the District's inception in 1967, the MCWD invested considerable resources in developing its first computerized model to simulate the hydrologic characteristics of the entire watershed, which it completed in 1986. This model, along with water quality study of Lake Minnetonka formed the technical basis of the District's comprehensive water resources management plan, a draft of

which was completed in 1987. The MCWD had also spent several years developing its policies and updating its rules as a part of this planning process.

A quite lengthy period of plan review ensued after the initial distribution of the MCWD's draft plan in 1987. The District spent several years unsuccessfully seeking a cooperative agreement with Hennepin County for the financing of the MCWD's capital improvement projects. Several municipalities within the watershed registered comments of caution and concern with the District's process of ordering capital projects, seeking assurance of opportunities for city input. Ultimately, these concerns delayed the approval of the MCWD's plan by the Board of Water and Soil Resources until 1992.

3. Major Projects

The MCWD successfully completed projects identified in its initial plan, the Gray's Bay outlet structure and Creek recreational improvements, and the Painter Creek Upper Watershed Retention Project. The Grays Bay project was completed in 1980, and the Department of Natural Resources approved its operating plan in March 1980. This project had always been part of a package with smaller projects to improve recreational access to Minnehaha Creek, and these smaller projects were also complete by 1980.

The Grays Bay outlet structure received regular ongoing attention, as the District made small physical adjustments with staff gauges and consideration of fish and weed barriers in 1981. The District entered into an agreement with the City of Minnetonka to assist in maintenance of the structure, but declined the City's request to augment Creek flow for its summer festival. Ongoing hearings to update the operating plan reflected creek resident and some legislative concern with balancing updstream and downstream interests. The District also determined that generally it is not feasible to operate an open channel discharge during winter months, and devoted technical study to maintaining base flow of the Creek in summer months.

MCWD's second major capital improvement project was the Painter Creek Upper Watershed Retention Project. The Lake Minnetonka Conservation District petitioned for this project. The product of multiple years of feasibility study, planning and design, the project involved construction of various flow control devices and channel improvements to slow runoff to Lake Minnetonka and improve water quality. The District made extensive use of a project advisory committee to build community understanding and provide process advice for the project. The Board of Managers approved the preliminary engineering report for the project in May 1983, and after a public hearing held at the Orono High School auditorium on September 29, 1983, formally ordered the project. Detailed aerial photography and topographic mapping ensued in 1984 to assist in final project design and identification of easements required on 25 parcels. By December 1984, the Board awarded the construction contract, and commenced eminent domain proceedings to acquire the easements. Ultimately 21 of the easements were acquired voluntarily, and four acquired through the eminent domain process.

A third major capital improvement project to improve water quality in Long Lake commenced the diagnostic feasibility study process in 1988. Discussing of concerns for Long Lake water quality led to the District seeking a Clean Water Partnership grant from the Minnesota Pollution Control Agency to fund this initial diagnostic study.

4. Other Projects

MCWD annually funded small projects requested by cities through its maintenance and repair fund. These projects typically involved removal of obstructions such as fallen trees from the Creek, sediment removal from storm sewer outfalls, or aquatic weed harvesting. The District also spent several years working with local partners on a variety of localized flooding problems, including storm drainage improvements at Galpin Lake, channel improvements to the Creek at Highway 100 in cooperation with MnDOT and the City of Edina, dredging of the Creek at 44th Street in Edina, and work with the City of Shorewood to address flooding problems at Glen Road and County Road 19.

5. Regulatory Program Expansion

MCWD devoted substantial resources to the development of its regulatory program during this period. From approval of 113 permits in 1980 to a high of 206 permits in 1986, most of these permit applications related to development activity in the Lake Minnetonka area. Some projects arose in response to the precipitation cycle changes, with repair of shorelines in response to erosion or increased demand for dredging projects to achieve navigational access on Lake Minnetonka during the low water years of 1986-91. At its June 15, 1989 meeting, for example, the Board of Managers approved 11 permits for dredging projects alone.

Based on the technical information that the littoral zone of a lake is vital to the lake's ecology, the MCWD joined with the DNR to protect the lake bottom from over-dredging, and protect the lake's floodplain from fill of dredging spoils. As more marinas and other boating enthusiasts grew concerned with low lake levels and navigation access, some operators decided to challenge the MCWD's enforcement authority. One example came from a group of homeowners on Libbs Lake (a small waterbody connected by a narrow channel to Lake Minnetonka) who in 1989 obtained a permit to dredge approximately 2,000 cubic yards from the lake bottom to improve their access to Lake Minnetonka, but in fact were found to have dredged 9,000 cubic yards and left much of the spoils in the floodplain. The District devoted multiple meetings over a period of two years with the homeowners and the DNR. Some of the homeowners filed a district court action to appeal the Board's remedial order, and ultimately the parties achieved a settlement that required removal of all of the dredging spoils from the floodplain and payment of the MCWD's enforcement costs.

In July 1989, Gayles Marina sought an amendment of its MCWD dredging permit to allow the marina to dredge to an elevation of 921.6 feet instead of 924.0 feet as allowed by the District rules. The marina contended that half of its boat slips were unusable under the existing conditions, and the deeper elevation was necessary to meet the needs of its dredging barge. When the MCWD stood by the original permit decision, Gayles Marina sought judicial review in district court. The district court declined, concluding that only decisions about watershed district projects were appealable to district court. The marina appealed to the Minnesota Court of Appeals, which held that the marina could obtain an accelerated jury trial to review the Board of Managers decision de novo. The Minnesota Supreme Court affirmed the court of appeals. The MCWD then successfully petitioned the legislature to revise the statute to provide that watershed district permit decisions are reviewed in district court, but through a declaratory judgment action based on the record made before the board of managers. (The legislature did not adopt another MCWD request to provide authority to issue civil fines or administrative penalty orders for watershed district rule violations.)

During this time the MCWD addressed multiple dredging violations and devoted considerable effort to updating its rules and adopting a requirement that dredging contractors who work on "priority" lakes in the watershed be licensed by the District. The Board of Managers adopted this rule to address a

number of unpermitted and unfeasible dredging projects that threatened the lake environment. The District also updated its dredging standards and modified its rule regulating installation of sand blankets.

The MCWD's regulatory program also prompted engagement with the Minnesota Department of Transportation during this time, with President James Spensley taking the lead in commenting on MnDOT's plans for expansion of I-35W in south Minneapolis.

6. Other policy concerns

The MCWD engaged in a variety of other policy issues beyond its regulatory program during this period. In addition to intensive flood study and promotion of stronger floodplain ordinances, the District commented extensively to promote the ultimate closure of the Maple Plan sewage treatment plan, which was the last sewage discharge to Lake Minnetonka. Again through President Spensley's engagement, the MCWD weighed in with ongoing comments about the discharge from the Reilly Tar remedial gradient wells in St. Louis Park, urging that the wells discharge to the Minneapolis lakes. In 1991, managers participated extensively in the development of a new comprehensive management plan for the Lake Minnetonka Conservation District, providing for changes in the LMCD board's composition, funding sources for LMCD projects, and increased enforcement to address water quality and safety issues. The District also promoted watershed education and stewardship through annual Minnehaha Creek clean up days sponsored by the Izaac Walton League and Boy Scouts.

7. Governance

Barbara Gudmundson (Ph.D. in Botany and Water Resources) became the first female to serve on the MCWD Board of Managers, serving one term from 1980 – 1983.

The MCWD Board of Managers expanded from five to seven managers in late 1983 through the District's petition to the Minnesota Board of Water Resources. The two additional managers were for appointment from Hennepin County, and James Spensley from Minneapolis and James McWethy of Edina took their seats on the board in the spring of 1984. Manager Spensley contested and prevailed to be elected the board president in 1988. As Board President, Manager Spensley represented the District in many regulatory and policy discussions.

During this period, Mike Panzer of Wenck assumed the role of District Engineer [in 1988], and Louis Smith from the Popham Haik firm assumed the role of District counsel in 1987. The engineer and attorney continued to serve as the sole staff support for the District.

Reflections and Lessons Learned

1. **Strong technical understanding of Creek hydrology is essential to the MCWD's mission and establishes a basis for city relationships, credible regulatory program, and project partnership potential.**

   The MCWD continued to invest greatly in its hydrodata collection program and partners like the City of Minneapolis and the Minneapolis Park & Recreation Board sought the District's expertise and resources in hydraulic study of the Creek. This database and expertise provided the District with a policy platform from which to promote more stringent floodplain protection in municipal ordinances.

2. **Occasionally, it is necessary for the MCWD to exercise its power of eminent domain in order for a project to move forward.**
   The Painter Creek upper watershed retention project designed by the District engineer involved flow control devices and retention on a total of 25 land parcels. While the vast majority, twenty-one, of these land owners agreed to voluntarily convey the necessary project easements, it was necessary to use the condemnation process to acquire the last four easements. From the record, it appears that this use of eminent domain was generally accepted at the time, such that it led to no major community controversy. The Painter Creek project was generally perceived as an MCWD effort to address flooding and water quality through retention in a major upper watershed contributing stormwater flow to Lake Minnetonka.

3. **If the regulatory program becomes the primary point of contact with stakeholders, the District is perceived as a regulator.**
   As the Grays Bay dam and the Painters Creek retention projects were completed in the early 1980s, the District's attention moved from its capital improvement program to regulation. The low precipitation, sustained low water levels of Lake Minnetonka, and resulting dredging pressures posed a serious challenge for the District. Based on a scientific understanding shared with the DNR that excessive dredging harms the lake ecology, the Board of Managers was faced with challenges to its enforcement authority. Ultimately, a great deal of board meeting time, public interaction, and litigation were devoted to this regulatory enforcement role.

   While the parties most impacted were marinas and lake shore owners on Lake Minnetonka, the District's regulatory role also framed growing interaction with MnDOT and some watershed municipalities. While there were multiple reasons for the long delay in approval of the MCWD's 1987 plan, the cautionary posture taken by some municipalities and Hennepin County clearly sent a signal to BWSR that more review time for the District's plan was in order. The MCWD's plan was finally approved after negotiating with some municipalities and Hennepin County to insert more detailed capital improvement project approval process. Even so, after several years of effort the District ultimately abandoned its pursuit of a cooperative agreement with Hennepin County for financing its capital improvement projects, and in fact the MCWD undertook no major projects until later in the 1990s.

DRAFT - MCWD Historical Periods, Key Events and Preliminary Lessons

1967 – 1979: Formation of MCWD and Initial Mandate

In its first twelve years, the MCWD focused on addressing flooding issues and construction of the Gray's Bay dam. Invited by cities to review land use development for water resource impacts, the MCWD developed its first regulatory program, initiated several major technical studies, and pursued an early land conservation initiative along the Creek in St. Louis Park.

Key Events:

- Impetus for the 1966 Petition made by Hennepin County and MCWD's initial "mandate"
- 1969 Watershed Plan – Goals and Programs included Monitoring, Permitting, CIP
- Elimination of municipal wastewater discharges to Lake Minnetonka (1971 – 1986)
- Construction of Gray's Bay Dam
    - Extensive litigation with USACE on legal requirements
- First computer model developed for Lake Minnetonka watershed
- Initial role in reviewing development projects at city requests
- Development of first rules to require watershed district permits; early enforcement actions
- Wayzata Wetland Study for USEPA
- Early land conservation initiative along Minnehaha Creek in St. Louis Park, partnership with City for HUD grants to acquire riparian easements

Hypotheses:

- Flood mitigation is central to MCWD mission, identity, and relationships; flooding will always be a source of conflict and strategic opportunity for MCWD to provide value at the nexus of land use and water management
- MCWD establishes its value through responding to the needs of cities and other land use actors with science-based or data-driven technical assistance
- Establishing a credible regulatory program requires a commitment to enforcement
- MCWD can play a leadership role in mobilizing resources for conservation of riparian areas in collaboration with a city partner

1980 – 1992: First Evolution – Establishing Data Driven Project Planning

The MCWD continued to build its technical understanding of the watershed, keeping a primary focus on flood mitigation, while also writing a second more comprehensive water resources management plan.

Key Events:

- Hydraulic flood study of Creek in Minneapolis
- TR-20 runoff model for 1, 10 and 100 year events for existing and future unmanaged scenarios
- Edina – MNDOT flood management projects at Hwy 100 & dredging at 44th Street
- Engagement with MnDOT on I-35W construction planning
- Painter Creek subwatershed improvement projects
- 1987 Watershed Plan
    - Response to 1982 Metropolitan Surface Water Management Act
    - Evolution of goals and programs
    - Pursuit of Hennepin County financing for projects (unsuccessful)

Hypotheses:

- Effective relationships with county boards are vital to MCWD success
- Strong technical understanding of Creek hydrology is essential to mission and establishes a basis for credible regulatory program and project partnership potential
- Merely adequate outreach to cities, counties, and state agencies gains plan approval, but effective engagement with citizens or general public creates more relationship capital and greater project opportunities

1993 – 1999: Second Evolution – Growth of Planning and Implementation

MCWD entered a time of greater public visibility by addressing water quality in the Minneapolis Chain of Lakes. City leaders learned the power of MCWD's broad tax levy, technical expertise, and unique ability to improve water quality in major lake assets. MCWD learned the power of negotiating effective multiparty agreements to reflect true working partnerships, and learned the challenging consequences of proceeding with projects such as Long Lake without such partnerships in place.

Key Events:

- 1993 Watershed Plan
- Engagement with MNDOT, legislature to establish MCWD permitting jurisdiction over highway projects (1996)
- Extensive litigation on shoreline improvements issues (1996-97)
- Long Lake Feasibility and Pond Projects (1996)
    - Condemnation and litigation
- Gleason Creek Flood Control (1995) and Phase II work for Water Quality (2000s)
- Chain of Lakes and Blue Water Commission (1996 – 2000)
    - Informed the art of negotiating public partnership and cooperative agreements
    - Twin Lakes Projects (1996)
        - Cedar Lake Project; geometry, function and aesthetics
    - Chain of Lakes Stormwater Ponds (1996-1996)
        - Important lawsuit to facilitate project
    - Lake Nokomis Ponds & Weir (1998-2001)
    - Strong working relationship with mayor of Minneapolis, Hennepin County, MPRB, St. Louis Park,
- Outstanding Watershed District of the Year (1996)
- Noted for the largest urban lake restoration project in the United States; received five environmental awards, including the CF Industries National Watershed Award and the Minnesota Governor's Award for Excellence in Pollution Prevention
- MN Landscape Arboretum Wetland Restoration (1997)
- 1997 Watershed Management Plan
    - Increased emphasis on education and public participation

Hypotheses:

- MCWD occasionally faces critical tests (David v. Goliath) of its credibility and authority; passing these tests can establish MCWD's relevance, but also presents risk in creating perception of heavy-handed regulatory agency

- Partnership with MNDOT, other state agencies based on mutual respect is most productive posture
- MCWD can face tough dilemmas in moving ahead with water quality project without strong partnership with key actors; (cf. Long Lake, Medina, Orono, land owners); just because there is science to support a project doesn't mean the District should go it alone.
- There are many more "opportunities and needs" than time or money. Selectively working where we have partnership capital provides long term wind in our sails, and credibility; building relationship capital requires more than MCWD's financial investment
- Exercising eminent domain to acquire property rights for project can have significant costs in local perceptions and relationships;
    - Note technical issues re Wahlfors, Pearce ponds;
- Price of moving ahead without strong partner support can be long-lasting;
- Relationships with local leaders are essential to success
    - Discuss dynamic with MPRB, Mayor of Mpls, County Commissioners
    - Compare Long Lake challenges and Chain of Lakes successes
        - note emboldened by "David v. Goliath" success

2000 – 2009: Third Evolution – Updating Science, TMDL Approach and Expanding Programs
MCWD entered the new millennium taking strong stands, willing to pursue the leading and bleeding edge of water resources protection. It succeeded with groundwater protection at Highway 55 thanks in part to strong legislative support, and failed with regulatory ideas like imposing lake buffers and allowing fees in lieu of site compliance. A Total Maximum Daily Load or pollutant loading allocation approach in the MCWD plan, followed by the development of new District regulations, brought more stringent standards and imposed somewhat unwelcome demands on cities. The MCWD also continued to expand its vision of partnerships to include private partners such as Methodist Hospital, Duke Realty, and Bachmans. The MCWD also expanded its education programming pursuing cost share projects to promote resident action, to serve as demonstration within the watershed, and to increase grass roots engagement.

<u>Key Events:</u>

- Highway 55 Camp Coldwater Conflict, MNDOT, MAC, Groundwater, Boundary Change (2000s)
- Pamela Park Projects (2000)
- Studies HHPLS, Stream Assessment, Creek Visioning, Assessment of Wetlands (2003-2005)
- Buffer Requirements, Rule M, fee in lieu (2002-2004)
- 2007 Watershed Plan – TMDL approach, abstraction, rules, program expansion
- Land Conservation Program issues
- Rule revisions and BATC (2006 – 2011)
- Terminated feasibility work in Carver, Long Lake; lack of systems context and relationships
- Mound Downtown Redevelopment Projects (2006)
- Bachmans Project
- Methodist Development (2007 – 2009)
- Big Island (2009)
- Duke Realty and formation of LID, later Cost-Share (2009)
- Minnehaha Glen, USACE, MPRB (2007 - 2009) – problems in collective understanding among partners and challenges in project execution
- Grass roots engagement through Cost Share Iterations and the Lake Association initiative

Hypotheses:

- MCWD is willing to play David against Goliath if the issue is central to its mission
- Partnering with private land developers can yield significant water resource benefits not otherwise attainable
- Good intentions are not enough to succeed in rulemaking or watershed plan; careful stakeholder engagement is essential
    - Substantively important changes in water resource protection; volume, load allocations
    - Critical need to build understanding and support
- Expansive program growth in response to serial requests or perceived needs can expand MCWD reach but also result in lack of focus and alignment
- MCWD benefits by having citizens who understand and support the MCWD mission, but local water issues can also be a source of conflict and divert MCWD resources or attention
- Partnering with land use actors creates endless opportunities, but opportunities should be evaluated for fit with MCWD mission and strategic goals, and risk assessment
    - Unforeseen problems in project execution can have lasting consequences on relationships
    - Spending and science do not necessarily build relational capital

2010 – 2020: Fourth Evolution – Focus on Partnerships with Land Use Community

MCWD entered a new era of strategic focus on integrating its mission with the missions of public and private land use actors through effective partnerships. The organization underwent a significant staff change and undertook its first major strategic planning exercise as an organization which facilitated refocused direction, deeper Board engagement in governance, new staff organizational structure and attention to culture, and capacity to pursue a new watershed management plan.

Key Events:

- Richfield Taft-Legion Development (2010 – 2013)
- Watershed Partnerships Paper (2011)
- Initiated and Sunset AIS programming (2011-2016)
- Himle-Horner Governance Evaluation (2012)
- Master Water Stewards initiative (2012)
- Reach 14 Streambank Projects (2013)
- Balanced Urban Ecology (2014)
- Leadership Transition (2014)
- Bushaway Road Development (2011 – 2014)
- Strategic planning (2016) and Program Insights
- Greenway Planning (2009 – 2020)
    - Acquisition of 325 Blake Road (2011)
    - Cottageville Park Development (2010 – 2015)
    - Japs Olson (2012 – 2016)
    - Meadowbrook Project Failure
- 2017 Watershed Management Plan
    - Introduce Cities to BUE and Focal Geographies
- Flooding
    - 2014 flood of record

    - Wettest six years on record (2014-2019)
    - 2019 wettest year)
- Arden Park (2019)
- Minneapolis Planning
    - 2017 MPRB & Mpls MOU
    - 2018-2019 FEMA Repairs
    - 2020 Minnehaha Parkway)
- Six Mile Creek Halsted Bay
- Focus on culture and leadership

Hypotheses:

- Pausing to reflect deeply on organizational strategy can yield many long-term benefits in MCWD capacity and success
- A thorough risk analysis and staff engagement before launching new projects can help to avoid a misdirection of MCWD resources
- MCWD can achieve much more resource protection by working in partnership with key land use actors including cities and private developers
- MCWD can achieve much more resource protection by developing trusted relationships through concentrating on specific geographic areas
- Relationships alone are not enough; MCWD is most impactful when we have an optimized blend of sound science justifying our work, we integrate outside considerations (land use) to maximize benefit of our actions, we assess risks, and develop relationships and support at all levels needed to be successful
- Continued assessment and reflection can develop a culture of self-awareness, learning, celebrating failures as opportunities to grow, and continuous improvement
- Careful attention to staff/Board leadership and personnel can transform the organization's culture, resiliency, and capacity for success.