



Title: Subwatershed Project Review: Minneapolis Parkway

Prepared by: Name: Anna Brown
Phone: (952) 641-4522
abrown@minnehahacreek.org

Purpose

The April 14, 2022 Operations and Programs Committee (OPC) Meeting will focus on project planning in the Minnehaha Parkway Corridor, the area of Minnehaha Creek extending through the City of Minneapolis. The Minnehaha Parkway falls within the Minnehaha Creek Focal Subwatershed. Since the 2008 Methodist Hospital Project the emphasis of integrated project development in this subwatershed has been concentrated in the Minnehaha Creek Greenway in Hopkins and St. Louis Park. This memo will provide grounding as to the emergence of the Minnehaha Parkway as a potential area of project development, in order to facilitate a conversation at the OPC meeting around the opportunities, process, and risks as MCWD continues its coordinated project planning in this corridor.

Background

The Minneapolis segment of Minnehaha Creek is an iconic state resource, connecting the Minneapolis Chain of Lakes through Minnehaha Falls and to the Mississippi River. The Minnehaha Parkway Regional Trail receives over one million visitors each year, connecting a wide variety of recreational users, activities, and featured natural resources. The drainage area of this segment of Minnehaha Creek is highly developed, with substantial altered hydrology including filled wetlands, sewer channels, and man-made lake footprints.

Minnehaha Creek is listed by the Minnesota Pollution Control Agency (MPCA) as an impaired water body for multiple parameters, including fecal coliform bacteria, chloride, low dissolved oxygen, and fish and macroinvertebrate communities. Further, due to the sediment and nutrient loads transported by Minnehaha Creek, the MPCA has listed downstream receiving water body Lake Hiawatha as impaired for excess nutrients, and, along with Minnehaha Creek, has an approved Total Maximum Daily Load (TMDL). In addition to these water quality indicators, Minnehaha Creek is impacted by rapidly fluctuating water flows that contribute to bank erosion and impair the biotic integrity of the stream. These issues are exacerbated by the extensive storm sewer network that drains directly to Minnehaha Creek, transporting sediment, nutrient and pollutant loads, creating untreated discharges that enter the stream system and flow to downstream Lake Hiawatha.

The City of Minneapolis (Minneapolis) and the Minneapolis Park and Recreation Board (MPRB) are both critical partners in advancing natural resource goals in the Minnehaha Parkway. Minneapolis is the local land use authority and owns the extensive stormsewer network that drains into Minnehaha Creek and the Chain of Lakes. MPRB owns the park network that encompasses Minnehaha Creek and the Chain of Lakes. Together, MCWD, MPRB, and Minneapolis have a history implementing natural resource projects with shared benefit, some of which are highlighted below.

Chain of Lakes Blue Water Commission (1996-2000)

In 1996, MCWD joined forces with Minneapolis, MPRB, Hennepin County, and St. Louis Park for what was at the time recognized as the nation's largest urban lake restoration project. The project incorporated stormwater best management practices and alum applications across the Minneapolis Chain of Lakes, resulting in substantial water

quality improvements system wide. The project represented a substantial early partnership achievement, underscoring the shared value in investing in urban water resources.

Minnehaha Falls Glenn Restoration (2008-2009)

The Minnehaha Falls Glenn is the area downstream of Minnehaha Falls extending to The Mississippi River. In 2005, it experienced two catastrophic bank failures, requiring major stream and trail work. MCWD partnered with MRPB and the US Army Corps to restore the natural and cultural resources while incorporating improved stormwater management. Regulatory challenges resulted in the project being scaled down from its original scope, and eventually led MCWD to move its focus away from project implementation in the Minnehaha Parkway. This led MCWD to refocus capital project planning upstream to the Urban Corridor of St. Louis Park and Hopkins, resulting in the creation of the Minnehaha Creek Greenway.

2014 Flooding and FEMA Flood Repairs

In 2014 record precipitation led to prolonged flooding across the watershed, resulting in a Federal Disaster Declaration. MCWD assessed 47 impacted sites along Minnehaha Creek and was awarded \$500,000 in Federal Emergency Management Agency (FEMA) funding to address flood damage across 35 sites. In a 2017 assessment preceding design and construction, 28 of the sites were deemed self-repaired, eight sites were deferred for inclusion in MPRBs Minnehaha Parkway master planning effort, and 11 sites were moved into final design and construction. Project construction of those 11 sites was completed in 2020.

In addition to leading the FEMA flood repairs, MCWD was invited to the table to coordinate with MPRB on two major planning efforts resulting from the 2014 flooding: the Meadowbrook Golf Course project and the Hiawatha Golf Course master plan. Both courses sustained substantial flood damage, leading the MPRB to evaluate the resilience and long-term use of each site, but ultimately deciding to use FEMA funding to restore each course to its pre-flood condition.

2017 Watershed Management Plan to Today

The coordination and partnership surrounding the 2014 flood and its associated project opportunities created a renewed opportunity to pursue coordinated planning with MPRB and Minneapolis. Seizing on the collaboration around emerging water resource issues and opportunities in the Minnehaha Parkway, MCWD, MPRB and Minneapolis entered a memorandum of understanding (MOU) in 2017, which included the following key terms of coordination and shared priorities:

- Partnership to address multijurisdictional water resource issues including flooding, pollutant reduction, reducing discharge volumes and peak flows to Minnehaha Creek, and eliminated combined sewer overflows.
- Coordination on specific water resource issues including the FEMA flood repair projects, Hiawatha golf course, and grid flooding issues.
- The development of a shared priority implementation plan, including routine cross-agency meetings and the development of a shared capital improvement plan, identifying project opportunities, timelines and funding for priority initiatives.

The MOU created a framework for increased cross agency coordination and MCWD has been engaged on a number of multi-jurisdictional water resource initiatives within this area over the last five years. To date, however, the development of a shared implementation plan that facilitates routine investment in priority initiatives has not been developed. As the Board evaluates this area as an emergent focal geography, two initiatives will, over the next 12-18 months, shape the opportunity and need for a shared implementation framework.

Nokomis White Paper

Since November 2017, the District has been participating in an evaluation to understand South Minneapolis resident concerns over high groundwater levels near Solomon Park and Lake Nokomis, and its impact on public and private infrastructure as well as residential structures. This work, which has engaged a multi-jurisdictional partnership including the U.S. Geological Survey (USGS), MN Department of Natural Resources (DNR), Hennepin County, Minneapolis, and

MPRB, is culminating in the publication of a white paper and a public summit to present the multi-agency partnership's findings, set to take place in May 2022.

While the Nokomis White Paper does not propose the implementation of capital projects, it does present a valuable example of partnership on complex water resource issues. This mobilization of staff and policy makers can create momentum to carry forward into the development of a shared capital implementation plan for the Minnehaha Parkway. As such, staff are proposing to continue to work with key partners after the rollout to strive towards the development of an implementation plan for the broader corridor.

Minnehaha Parkway Regional Trail Master Plan

Between July 2018 and February 2020, MPRB in coordination with MCWD and Minneapolis, facilitated a master planning process for the Minnehaha Parkway Regional Trail (master plan). The master plan creates a 30 year vision that enhances recreational opportunities in the creek corridor, improves ecological function along the creek, improves safety for Parkway users, and addresses flooding, stormwater inflows, pollutants, and other water resource impacts. The plan was adopted in November 2020 with the support of the MCWD Board of Managers.

Through the master planning process, MCWD was able to substantially imprint targeted natural resource improvements into the final plan. Cumulatively, the identified 35 stormwater management, ecological enhancement, and flood mitigation opportunities in the master plan would add 2.65 miles of creek length, remove 434 pounds of phosphorus from draining to Lake Hiawatha, restore over 50 acres of landscape, and create 56 acre-feet of floodplain storage. The plan incorporated a comprehensive list of specific capital improvements, and each agency prioritized opportunities within that list, creating a preliminary cross agency framework for project implementation.

Summary

While the recently adopted master plan creates a valuable starting point for shared implementation of this 30 year Minnehaha Parkway vision, to date the agencies have not created the implementation plan to carry specific projects forward. Through the 2023 CIP, MCWD staff are proposing to build on the momentum of the Nokomis rollout to memorialize a partnership framework for advancing capital projects in the Minnehaha Parkway.

To effectively advance this framework, staff will take the next 12-18 months working with project partners, primarily MPRB and Minneapolis, to create an agreed upon framework for implementation. MCWD is not looking to advance a specific project within that time frame, but rather create shared expectations around leadership, funding, timing, and prioritization in implementing identified parkway improvements.

Following the Nokomis Summit in May, MCWD will seek to maintain the coalition of staff and policy makers supporting that multi-agency effort to work towards the development of a shared capital improvement plan (CIP). This plan will seek clarity on the priority and timing of capital expenditures across agencies and identify projects that can be advanced independently and those that will require a multi-agency partnership approach. This effort will target a renewal of the 2017 MOU by the end of 2022 with an explicit approach to cross-agency capital project planning, allowing MCWD to set a plan for capital improvements in the Minnehaha Parkway beginning in 2023.

Attachments

Staff have developed a draft project page for the Minnehaha Parkway planning effort. The materials are reflective of the process for partner engagement and CIP planning generally, not the development of a specific capital project. The materials use the one-page project summary sheet to outline the proposed planning approach and possible timeline for advancing a project identified through this planning effort, but the actual timeline is contingent on the ability to align capital project priorities across agencies, as outline above.

MINNEHAHA CREEK WATERSHED DISTRICT

MULTI-YEAR CAPITAL IMPROVEMENT PLAN

2023-2027

OVERVIEW

PROJECT NAME

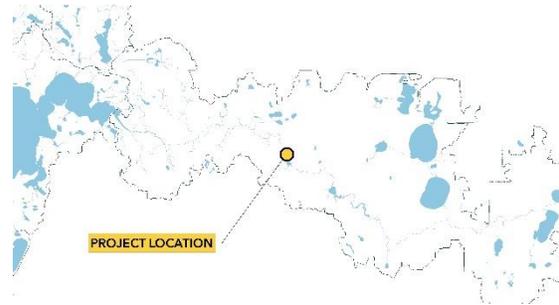
Minnehaha Parkway Stormwater Management

LOCATION

Minneapolis (Minnehaha Creek)

TARGET WATERBODY

Minnehaha Creek, Lake Hiawatha



DESCRIPTION

SCOPE

Partner with the City of Minneapolis and Minneapolis Park and Recreation Board to create a shared implementation framework for the Minnehaha Parkway Regional Trail Master Plan, a 30 year vision to enhance recreation, improve ecological function of the creek corridor, improve public safety, address flooding, and improve water quality in the Minneapolis segment of the Minnehaha Creek corridor.

GOALS

The Minnehaha Parkway Regional Trail Master Plan includes 35 water resource projects, which together would: re-meander 2.65 miles of creek, restore 51.8 acres of upland landscape, reduce annual phosphorus loading to Lake Hiawatha by 434 lbs/year; increase floodplain storage by 56 acre-feet, and create 6 new creek access points.

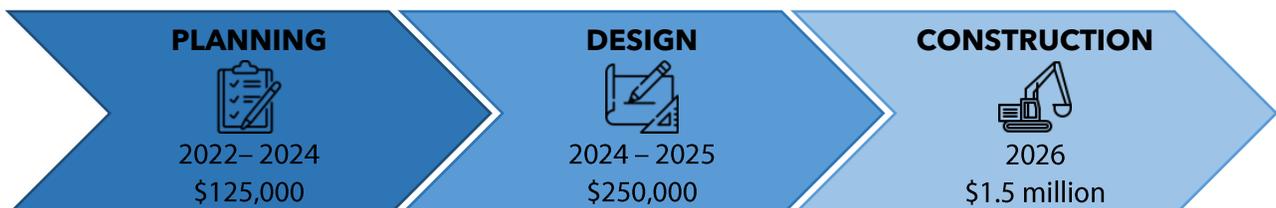
JUSTIFICATION

Minnehaha Creek is an iconic regional cultural and natural resource. Minnehaha Creek is an impaired water body for multiple parameters, including fecal coliform bacteria, chloride, low dissolved oxygen, and fish and macroinvertebrate communities. Further, the MPCA has listed downstream receiving water body Lake Hiawatha as impaired for excess nutrients. Minnehaha Creek is further impacted by rapidly fluctuating water flows that contribute to bank erosion and impair the biotic integrity of the stream.

WORKPLAN

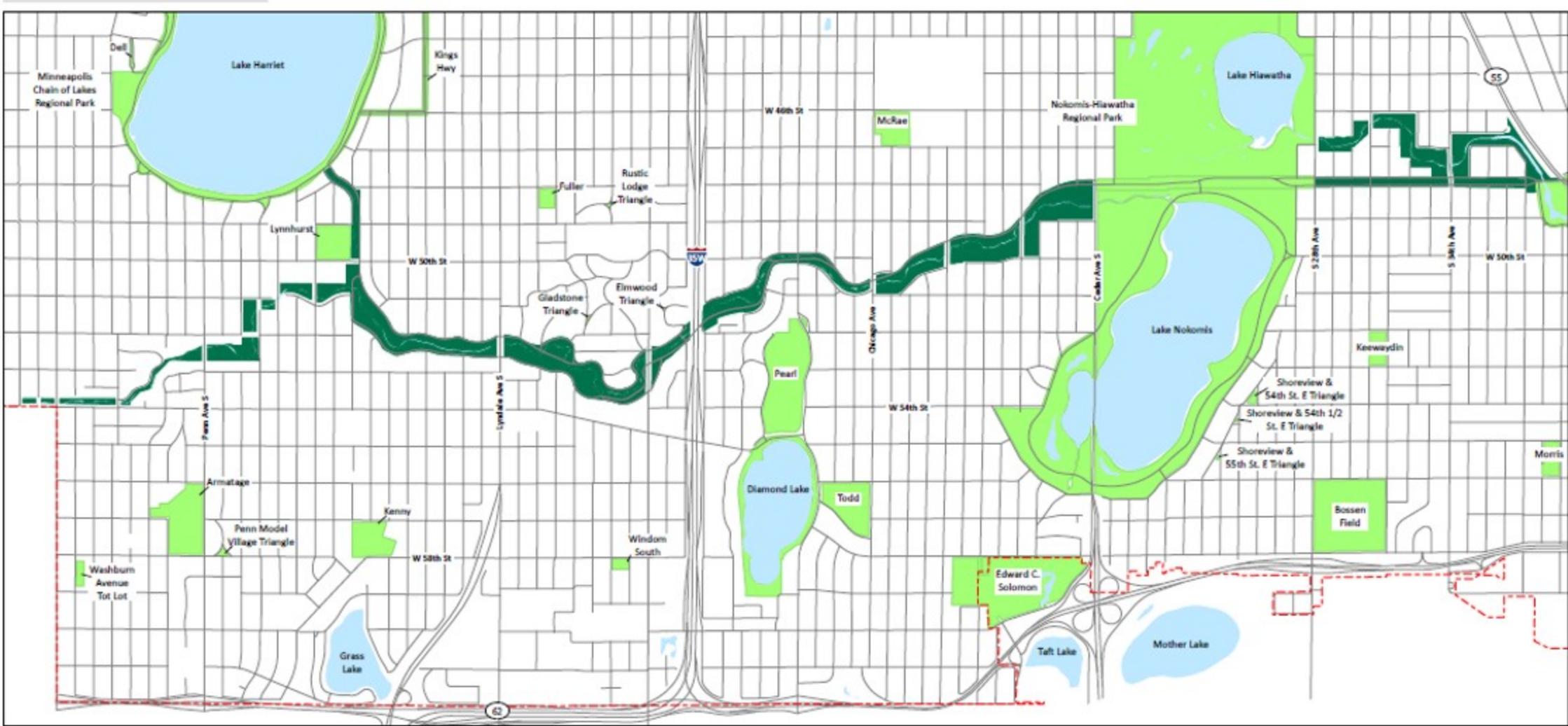
MCWD will focus in 2022 and 2023 on developing a shared capital improvement plan (CIP) with MPRB and Minneapolis that anticipates the timing of capital investment in the Minnehaha Parkway. Successful development of a CIP will identify capital project(s) to advance through feasibility, design and construction on the timeline proposed below.

SCHEDULE + BUDGET



Timeline is illustrative only and based the hypothetical identification of a specific capital improvement through the 2022/2023 planning process

Minnehaha Parkway Regional Trail Master Plan



Legend

- Minnehaha Parkway Regional Trail
- Other Parks/Out of Scope
- Minneapolis City Limits

N