HIAWATHA GOLF COURSE AREA MASTER PLAN

Aligning Water Management and Use











AMENDMENT TO THE NOKOMIS-HIAWATHA REGIONAL PARK MASTER PLAN FEBRUARY 17, 2021



ACKNOWLEDGMENTS

The MPRB would like to thank the following people and organizations for their dedicated participation in the master planning process, along with the general public who is passionate about this piece of land in the heart of South Minneapolis. This plan is a reflection of the input received from the Community Advisory Committee (CAC), the general public, collaborating agencies and other project stakeholders, and MPRB staff.

Dakota Land

The MPRB acknowledges the land subject to this master plan amendment is Bdote, lands once richly inhabited by the Dakota and other Indigenous peoples. Under the hands of the MPRB, that land changed dramatically and in ways that fail to resonate with the spirit of the Dakota and the honor they bring to the land. In crafting a master plan to guide the future of this land, we bring good intentions of healing what we have so dramatically disturbed, and with good hearts hope to restore the vital functions of the land and the water that passes through it. We are striving for a more holistic balance than has existed here for the past century, one that can better sustain all peoples for the next centuries.

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City of Minneapolis

Minnehaha Creek Watershed District

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Nokomis East Neighborhood Association
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Cover photos (left to right)

- 1. Bdote, Watercolor by Seth Eastman, 1848 (Source: bdotememorymap.org)
- 2. Lake Hiawatha, prior to golf course construction (Source: MPRB)
- 3. Golfers Jimmy Slemmons, second from left, and Rosella Ellis, front, 1938, ca (Source: Minnesota Historical Society)
- 4. Planting at Lake Hiawatha (Source: MPRB)

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EXECUTIVE SUMMARY

Nokomis-Hiawatha Regional Park is named for the lakes it surrounds, Lake Nokomis and Lake Hiawatha. The park is a treasured gathering space in the heart of South Minneapolis and is located along the Grand Rounds National Scenic Byway and the banks of Minnehaha Creek. It provides a wide range of recreational opportunities, including a beloved 18-hole golf course on the west shore of Lake Hiawatha. The site was once the location of Rice Lake and a connected wetland complex. The lake was dredged and the wetlands filled in the 1920s, and the golf course was designed and constructed in the early 1930s over the dredge materials. The course has a classic feel with its tree-lined fairways and pushup greens. It is easily playable, but still challenging. And it is a course that is steeped in history and a tradition of welcoming all people.

In June of 2014, over 11 inches of rain fell over a large area of the Minnehaha Creek watershed, causing a severe flood and subsequent closure of the Hiawatha Golf Course for a significant period. The Minneapolis Park and Recreation Board (MPRB) began a process of assessing damages and working with the Federal Emergency Management Agency (FEMA) to get the course up and running again. Quick actions by the golf course staff allowed the course to partially open for play later in 2014 and fully open in the spring of 2016.

When investigating the flood conditions at the course and in the nearby neighborhood, the MPRB and City of Minneapolis learned of significant groundwater pumping from the golf course. Master planning efforts, initiated prior to this discovery, were put on hold while the MPRB, City of Minneapolis, and the Minnehaha Creek Watershed District conducted a study of the site's conditions. A water management study for the course was completed in 2017, and the study demonstrated that:

- Water management can be improved.
- Pumping required to keep the golf course dry and playable can be reduced and relocated.
- Nearby homes, identified by the MPRB, can be protected from groundwater intrusion to the same degree that they are today.
- Flood-resiliency can be improved and some traditional golf can be retained on the site.

Even beyond the flooding in the summer of 2014, weather patterns produced seven years of rain in the last six years. The Minnesota Office of Climatology predicts these rainfall patterns to continue in the coming decades. This becomes important when comparing increases in the measured volume of pumped groundwater, which have increased from 242 million gallons in 2016 to more than 400 million gallons in 2019 and 333 million gallons in 2020.

This document is not an explicit plan for implementation of changes, but rather a guide aimed at long-term incremental change that aligns water management and use. As such, an evolution described by this plan might occur only over a period of 20 years or longer. As that occurs, pieces must fit at each stage of implementation such that each stage is a complete project

In March 2018, the Hiawatha Golf Course Area Master Plan that would accommodate the proposed water management solution began. Near the beginning of the master planning process, some members of a Community

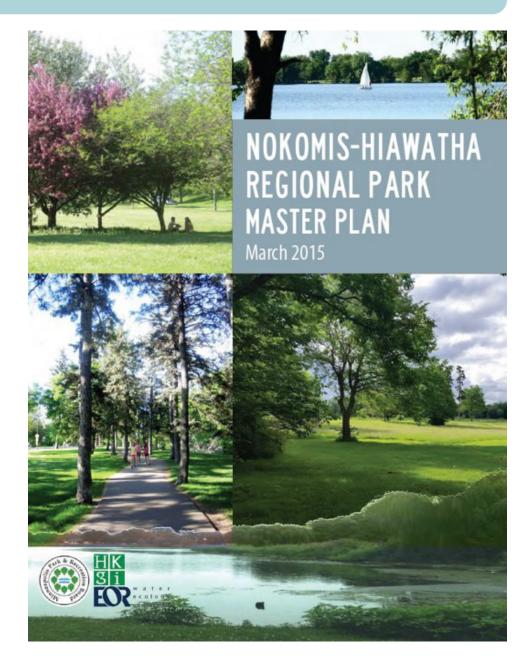
Advisory Committee (CAC) requested that the design team look at an 18-hole option. Given the increase in the anticipated water footprint within the area and the directive from the Board of Commissioners to achieve a flood-resilient design, the engineers, landscape architects, and golf course architect determined that an 18-hole golf course was not possible. However, by providing 9 holes, the MPRB will keep golf alive in South Minneapolis. Allowing for a course aligns with the water management strategy to restore ecological function, promote recreational diversity, increase park access for all visitors, and reduce pumping of groundwater.

The Board of Commissioners wants to improve water management, preserve traditional golf in some form, and celebrate the welcoming history of Hiawatha Golf Course. They affirmed this in resolution 2018-230 which includes:

- Pursuing a reduced-pumping scenario as conceptualized in [Water Management] Alternative B.
- At a minimum, providing a flood-resilient and ecologically driven 9-hole configuration for a golf course.
- Reflecting appropriate methods to recognize the role of Hiawatha Golf Course and the history of Black golfers in the Minneapolis park system.

The Hiawatha Golf Course Area Master Plan was developed through a comprehensive public engagement process spanning over two years, including guidance from the CAC which developed a vision and guiding principles and prioritized plan element recommendations for the site. The master planning process provided an opportunity to develop a plan that re-imagines the Hiawatha Golf Course area as a place that not only celebrates the rich history at the golf course, but creates a space that celebrates nature in an urban setting, welcomes the larger community, and reconnects this land with the surrounding neighborhoods, Lake Hiawatha, and the larger regional park.

The plan pushes toward a balance of golf and other activities set in a landscape guided by water management. It necessarily bends toward ecology in its aspirations, recognizing that restoration of natural processes—which were significantly altered by Wirth's dredging of Rice Lake—are a goal greater than those supporting human activities on the site. With ecology as the yardstick, choices favor preservation, conservation, and restoration rather than expanding past acts of disturbance or creating new development. While many uses are described, the restoration of sustainable water patterns and recreation, balanced in a new ecologically driven landscape, form the higher-order goals inherent in the plan.



The Nokomis-Hiawatha Regional Master Plan was adopted in March 2015 (Source: MPRB)

EXECUTIVE SUMMARY

With the vision and guiding principles, the CAC's prioritized design elements recommendation, focus-session input, community survey input, and input from our collaborating partners, the recommended Hiawatha Golf Course Area Master Plan includes:

- Relocating an improved and reduced pumping strategy at the site to protect nearby low basements from groundwater intrusion to the same degree they are protected today.
- Reutilizing pumped water for a variety of potential uses (e.g. irrigation, snowmaking, facility heating/cooling).
- Improving water management at the site while providing opportunities to address flooding in the watershed to the north.
- Improving water quality in Lake Hiawatha and Minnehaha Creek.
- Creating a destination golf facility focused on learning the sport and increasing opportunities for new players, including a 9-hole golf course, driving range, and practice facilities.
- Celebrating the history of Black golfers at the course and supporting and providing an introduction to golf for people of color.
- Expanding access to the site with bicycle and pedestrian trails, a reenvisioned clubhouse area that welcomes the larger community, and other new community gathering spaces.
- Restoring ecological function through the creation of wetlands, riparian and shoreline restorations, upland prairie restoration, and protecting existing wildlife habitat.
- Creating a South Minneapolis winter recreation destination complementary to North Minneapolis's Theodore Wirth Park.
- Developing nine experiences that tell the cultural and natural history through permanent elements and infrastructure, as well as through art, performance, community events, and ephemeral experiences.

Experiences include:

- A. Stormwater Terrace
- B. Pumping as a Resource
- C. All are Welcome
- D. A Place to Learn
- E. Island Respite
- F. Telling our Story
- G. A Connection to Water
- H. Urban Nature
- I. Celebrating Minnehaha Creek

Vision

The Hiawatha Golf Course property is a unique destination providing a welcoming and equitable park experience for both the surrounding community and regional park users that is ecologically responsible, addresses water management needs, and is respectful of the site's natural and cultural history. Park development will have a long-term focus for year-round passive and active recreation, where golf and other recreation will interface with ecology and art to provide for a flood-resilient design that is accessible, connected, and celebrates the spirit of Minneapolis.

Guiding Principles

Natural Resources

- Honor water and realize its significance at the site, in our lives, and in our cultures
- Provide a flood-resilient design within the park area
- Protect nearby homes from groundwater intrusion to the same degree they are protected today
- Reduce flood impacts in the neighborhoods to the north and west of the site
- Reduce the volume of trash entering Lake Hiawatha
- Enhance ecological benefits on the site, including consideration of existing habitat and creation of more varied habitat to support wildlife
- Improve water quality, including treatment of runoff to improve Lake Hiawatha
- Reuse pumped groundwater for the betterment of the site and environment.

Community and Equity

- Create equitable experiences and spaces that promote community with multi-generational, family-friendly, fun opportunities that are interactive and respectful for all park users
- Celebrate history in a meaningful way on the site
- Support sustainability in all aspects of the site, including environmentally, culturally, and economically
- Reduce barriers and encourage access to a broader set of park users
- Minimize negative impacts to the adjacent neighborhood, including consideration of impacts to traffic, parking, and noise

Recreation

- Envision golf as a central activity of the site, ensuring safety as a priority when looking at integration with other uses
- Provide golf and golf learning opportunities equitably to youth and other underrepresented community members
- Diversify recreation and create unique experiences on the site to meet the goals of the MPRB park system, including yearround activities.
- Enhance gathering spaces on the site to be welcoming and fun for all community members and be fiscally and environmentally responsible

Connectivity and Circulation

- Create connections between the site and the community, the regional park and trails, and the lake and creek
- Create cohesive and complementary solutions for site issues and design ideas
- Reduce barriers and encourage access to a more diverse and broader set of park users



EXECUTIVE SUMMARY

Recommended Master Plan



1. PLANNING OVERVIEW

Lake Hiawatha and the surrounding area provide a wonderful landscape within a park environment that is close to thousands of homes. It is a quintessential park in the Minneapolis park system, including a lake, rolling turf, a creek, and towering park trees—entirely modified by the watershed, city, and park system development. The area of study consists primarily of a golf course with a small open field and treed lawn areas filling in the gaps between the course and the neighborhood. Though geographically within the regional park, the property was not included in the 2015 Nokomis-Hiawatha Regional Park Master Plan. The need for a golf course master plan became more urgent after a devastating flood in 2014 and the discovery of extreme volumes of groundwater being pumped from the golf course. The Hiawatha Regional Park Master Plan.

1.1 Purpose

A master plan sets a vision to guide long-term development and improvements to a park; guides stewardship; helps ensure that park features, functions, and amenities reflect the needs of the communities served; and strives for long-term financial and ecological sustainability.

This master plan aligns water management with use. Water management of the property is described in the 2017 Water Management Alternatives Assessment; this master plan prescribes use on the property. The master plan is the result of more than two years of community engagement for visioning and designing the Hiawatha Golf Course area. Future feasibility, design, engineering, permitting and approvals, bidding, and construction are all guided by this master plan. It is a starting point. As engineering and new investigations take place to work through the details and achieve objectives, the plan will be adapted to that new information but stay in general alignment with its vision and goals. A master plan must be flexible to changing conditions and trends.

The master plan will:

- Reflect community needs and establish the expectations for future development in the park area.
- Meet the requirements of the various regulatory agencies.
- Guide the development of a sustainable financial model for the life of the master plan, including cost estimating and project phasing.
- Outline a framework for collaboration and partnerships required for successful plan implementation.
- Define expectations for future park operations and maintenance.

1.1.1 Master Planning Process

The master planning process began after a water management assessment was completed for the property. Throughout the water management study assessment, there were numerous public meetings and informational emails sent to interested community members. The community continued to be engaged by the MPRB as the transition from water management to master planning occurred in early 2018. The master plan must align with the water management plan to be successful. When the master planning effort started, a Community Engagement Plan was developed, a consultant was engaged, and a process was established. A Community Advisory Committee (CAC) was appointed and a Technical Advisory Panel and Project Advisory Committee were formed. These advisory committees



Sunrise at Hiawatha Golf Course, June 2017

met several times during the process to develop the master plan. Each played a role in formulating the plan and the future use of the site. Focus sessions dedicated to five themes were added when it became clear that some voices may not have been heard during CAC and public meetings. The focus sessions were absolutely necessary to learn about gender inclusion in golf course design, winter recreation needs, the history of Black golfers during segregation, the Old Negro Golf League at Hiawatha and the accomplishments of its members, the

long history of our Dakota and Indigenous relatives who once lived on this land, the Indigenous people still here, and the importance of responsible stewardship of our land.

This master plan is the sum of many people's perspectives and life stories. All of these factors, stories, and teachings alone don't solve the site's problems; but, together, as one, they can create a path toward the site's future that is wholly more resonant.



1. PLANNING OVERVIEW

1.1.2 Project Timeline

Project Kickoff Spring/Summer 2018

- CAC Kickoff (March 2018)
- CAC Process to Move Forward (April 2018)
- MPRB Youth Design Team Project (June 2018)
- Revision to MPRB Resolution at Request of CAC (July 2018)

Project Visioning Fall 2018

- Design Team Selection (September 2018)
- CAC Visioning (October 2018)
- Design Team Workshop (October 2018)
- CAC Working Vision and Principles (December 2018)
- Design Team Workshop (December 2018)
- Focus Sessions—First Series (November 2018, January 2019)
- University of Minnesota Art and Ecology Course (September–December 2019)

Preliminary Design Alternatives Winter 2018–Summer 2019

- Design Studies
- Design Team Workshops (January 2019, March 2019)
- CAC Design Alternatives (March 2019)
- Focus Sessions—Second Series (March 2019)
- CAC Preferred Alternative Prioritization/Recommendations (June and July 2019)

Preferred Alternative Fall 2019–Spring 2020

- Draft Preferred Alternative (April 2020)
- Public Input on Draft Preferred Alternative (April 2020)

Draft Master Plan Amendment Document Summer 2020

- 45-Day Public Comment Period for the Draft Master Plan Amendment
- (July-August 2020)
- Response to Public Comments and Revisions to Master Plan Amendment
- (August–September 2020)

Final Master Plan Amendment Document February/March 2021

- Public Hearing and Consideration of Plan by Planning Committee (February 17, 2021)
- Consideration of Plan by the Board of Commissioners (March 2021)
- Approval by Metropolitan Council (Spring 2021)

1.1.3 Past Studies of the Area

In addition to the significant public engagement process, numerous plans and studies have informed and influenced the development of the master plan, including:

- The Nokomis-Hiawatha Regional Park Master Plan—adopted by the MPRB, March 2015.
- The South Service Area Master Plan—adopted by the MPRB in September of 2016 and reviewed for recreation trends and needs for South Minneapolis parks.
- The 2013–2015 investigation by the City of Minneapolis—conducted to understand wet conditions at Hiawatha Golf Course. This, initially, identified the magnitude of pumping.
- The Lake Hiawatha Stormwater Management Feasibility Study by the City of Minneapolis, completed in 2014—evaluated flood-mitigation alternatives for the watershed north of Lake Hiawatha.
- 2015–2016 investigation for the MPRB—collected additional pumping and groundwater monitoring data, developed groundwater modeling, and utilized surface water modeling to better understand water management conditions at the golf course.
- The Hiawatha Golf Course Area Water Management Alternatives
 Assessment—completed in July 2017 in a partnership between the City of
 Minneapolis and the MPRB. This summarized water management impacts
 and alternatives, ecological and recreational impacts, and sustainability
 indicators. It also provided a benefit-cost analysis considering social,
 economic, and environmental benefits for revised use alternatives at
 Hiawatha Golf Course.















- Stormwater Infrastructure Retrofits and Recommended Best Management Practices to Mitigate Trash Upstream of Lake Hiawatha—completed in May 2017 by the University of Minnesota Department of Civil, Environmental, and Geotechnical Engineering capstone team for the City of Minneapolis.
- Hiawatha Area Flood Mitigation Analysis for the City of Minneapolis, completed December 2018—further evaluated specific flood-mitigation projects for the watershed north of Lake Hiawatha based on the 2014 feasibility study.
- The 2018 MPRB Youth Design Team notes and concepts.
- The fall 2018 University of Minnesota Art and Ecology class visions and concepts for the Hiawatha Golf Course area.

1.1.4 Water Management Challenges

The Hiawatha Golf Course has suffered water management issues through much of its history. The wet conditions over the past decade, including a significant period of flooding in 2014, combined with the discovery of constant annual pumping of hundreds of millions of gallons of water (both groundwater and stormwater) to keep the golf course "dry" led to investigations at the golf course. The development of this master plan intends to align the water management needs with the recreational uses of the property.

1.1.5 Board of Commissioners' Direction to the Design Team and Community Advisory Committee

The Hiawatha Golf Course Area Master Plan development is driven by water management and MPRB resolution 2018-230 (see Appendix C), which included the following directives:

- Pursue a reduced pumping scenario as conceptualized in Alternative B (from the 2017 Water Management Alternatives Assessment [See Appendix B])
- Design, at a minimum, a flood-resilient and ecological 9-hole golf course on the property
- Recognize the role of the Hiawatha Golf Course and the history of Black golfers in the Minneapolis park system

1. PLANNING OVERVIEW

1.2 Nokomis-Hiawatha Regional Park Master Plan

1.2.1 Regional Park Overview

The Nokomis-Hiawatha Regional Park Master Plan was adopted by the MPRB in March 2015 (Appendix A). The regional park is one of the most visited parks in the MPRB system. It is located along the Grand Rounds National Scenic Byway and connected to the Chain of Lakes Regional Park to the west and Minnehaha Regional Park, with its iconic falls, to the east. The Nokomis-Hiawatha Regional Park comprises 660 acres of land and water located in southeast Minneapolis, about a mile north of the City of Richfield and 1.5 miles west of the Mississippi River and St. Paul. The regional park is surrounded by residential neighborhoods of mostly single-family homes and small commercial nodes at various intersections.

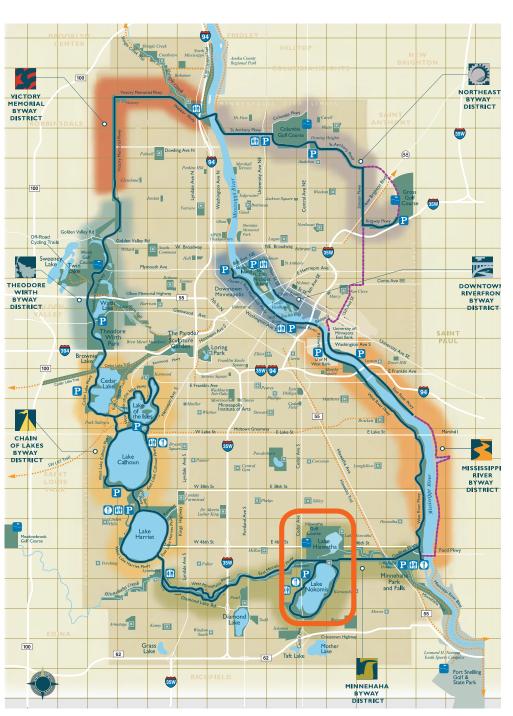
Completed in 2015, the master plan for the regional park notes dramatic changes in how the park is operated and in the spaces devoted to native vegetation and unprogrammed naturalized open space. CAC members and members of the community favored the reduction of the size of managed turf areas and the increase in the size and abundance of restored upland and wetland habitat. It calls for recreation spaces to be set within the landscape rather than dominating it. This connection to nature and the notion of carving recreation spaces from natural spaces is a direct reflection of the golf course area master plan's design intent.

1.2.2 Amending the Nokomis-Hiawatha Regional Park Master Plan

The Hiawatha Golf Course area was specifically excluded from the 2015 Nokomis-Hiawatha Regional Park master planning process. This document is an amendment to the regional park master plan and is intended to fill the gap. It was excluded in 2015 due to the financial separation of regional park spaces and enterprise-funded spaces. Small interstitial park areas directly adjacent to the golf course property were planned in the 2015 regional park master plan and have been respected to the fullest extent practicable in this plan.



Fishing pier on southeast shore of Lake Hiawatha



Location of Nokomis-Hiawatha Regional Park along the Grand Rounds Byway (Source: MPRB)



Nokomis-Hiawatha Regional Park Master Plan (Source: MPRB)



Many factors influence the need for change at the Hiawatha Golf Course including the stresses from Minnesota's extreme climate, economic realities, evolving "best practices," and needs of the community. The site has a varied natural and cultural history that has changed significantly over time. Understanding the site history, the existing conditions, and needs of the community sets the framework for the development of this master plan.

2.1 Site History

2.1.1 Pre-settlement Landscape and Indigenous History

Historic Natural Environment

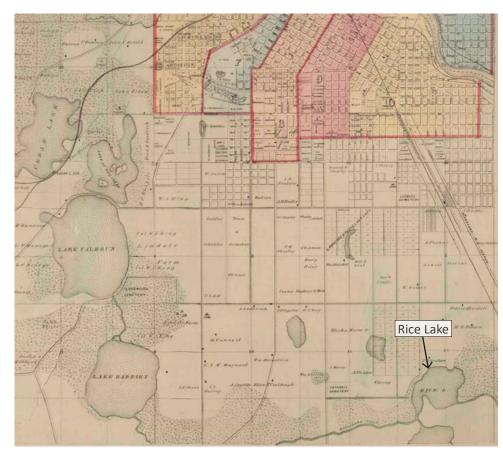
Prior to European settlement, the area around Lake Hiawatha was a matrix of upland prairies and oak woodlands. Wetlands and wet prairie communities were found along the stream corridors and bordering lakes, with many of the landscape depressions that retained water also being wetlands. Additionally, the Minnehaha Creek riparian areas and the Rice Lake delta areas (now known as Lake Hiawatha) were primarily wetlands. The shores of Rice Lake once grew wild rice and were home to numerous animals rarely seen today. The creek meandered through delicate wetlands in the area that is now the golf course and flowed on through the lake, over the falls, and into the Mississippi River. The surrounding upland landscape comprised upland prairie and oak woodland/savanna and brush land. Many of the large burr oaks in South Minneapolis today are a legacy of these savannas.

Additionally, for thousands of years prior to the arrival of Europeans, ancestors of the Siouan people, including the Missouria, Otoe, Iowa, and Dakota, were living on the land that would later become known as Minnesota. Mni Sóta Makoce, the Dakota's name for their homeland, means "the land where the waters reflect the clouds." American Indians in what is now south-central Minnesota demonstrated resiliency and a complex understanding of the ecological and social environments in which they lived.

European Settlement and Effects on Indigenous Population

In the mid to late 1600s. French missionaries and fur traders were the first Euro-Americans to arrive in the region. More white traders and explorers appeared in the 1700s, and white settlers and the American military became full-time residents in the 1800s. As the Euro-American population grew, the Dakota maintained a strong presence. They had settled more permanently in the area during the mid-1600s. Conflict between tribes had led the loway and Otoe to migrate south and west into Iowa and Nebraska, and the Ojibwe became established in northern and central Minnesota. For the Dakota, the confluence of the Mississippi and Minnesota Rivers (Bdote, "where two rivers come together") is the spiritual center of the universe and their birthplace. The Dakota name itself means "ally"; they are called the friendly people. Their history ranges from mobile, compact bands of huntergatherers about 12,000 years ago, to denser settlements proficient in ceramic manufacturing and corn-based horticulture by the 400s CE into the late 1700s. In the 1850s and 1860s, though, the Dakota presence in the area was significantly impacted by treaties, war, disease, and forced removal, with the Dakota War of 1862 being the boiling point in the Dakota peoples' history. It resulted in the largest mass execution by the US government to date and the outright exile of the Dakota people after the US Congress revoked all treaties with them. To the Dakota, Mni Sóta Makoce was lost, and their homes and families permanently altered.

Lake Hiawatha was a place for fishing and gathering for generations before the arrival of Euro-Americans. The landscape changed dramatically from the actions of the new settlers, as did the lives of the Dakota, who were forced to leave their homeland. Dakota and Indigenous people have come back and live nearby and visit the area today, though they feel invisible and forgotten by many.



1874 Plan of the City of Minneapolis (Source: MPRB)



Lake Hiawatha Park (then Rice Lake) looking northeast from corner of Cedar Ave and Minnehaha Blvd, 3/28/1922 (Source: MPRB)



Bdote,"where the rivers come together" (Source: MNHS)

2.1.2 Purchase and Transformation of the Site

The Park Board opened its first golf course in Glenwood Park, now named Theodore Wirth Regional Park, in 1916. Its immediate success encouraged the Park Board to develop more golf courses. In the Park Board's 1920 annual report, Superintendent Theodore Wirth noted that land between Rice Lake and Cedar Avenue was the only parcel of sufficient size that was available and affordable in the city. The Park Board seized the opportunity in 1922 and purchased the land around the lake and to the west, including the creek, for \$550,000, reserving 150 acres for the golf course. Three years later, the lake's name was changed from Rice to Hiawatha. The change in name not only marked the change in the physical landscape, but also echoed the constant pushing of Indigenous people from their historic landscapes throughout the region. It is entirely possible that wild rice grew around the lake before it was dredged. To the Dakota, wild rice is considered "sacred, because it is a gift from the creator."

The park was a relatively late addition to the Grand Rounds park and parkway system—the Park Board had created Minnehaha Park in 1889 and acquired Lake Nokomis in the early twentieth century.

In 1924, two years after the Park Board purchased the Hiawatha tract, Wirth designed the golf course and park area, but it took several years to implement the plans. The lake was dredged between 1929 and 1931 and 1.2 million cubic yards of the dredged material was used to fill the wetlands to the west. Native plant species, and likely wild rice, within the area were destroyed during this process. The dredged materials were pushed into place to produce a rolling terrain with a "fairly sporty" feel, as Wirth described it, for fairways and greens. The clubhouse was built in 1932, and the course's first nine holes were ready for play on July 30, 1934. The greens fee at the time was 35 cents for nine holes. The remaining nine holes opened the following season. The golf course was popular and profitable for the first few seasons until the Great Depression affected golf play. Workers funded by a federal relief program constructed walls around the lake in 1939 to prevent erosion of the fragile human-made shorelines, a technique used at many lakes in the park system.



Park board commissioner Maude Armatage christening the dredge at Lake Hiawatha Park (Source: MPRB)



Lake Hiawatha dredging (Source: MPRB)



Golfers Jimmy Slemmons, second from left, and Rosella Ellis, front, 1938, ca (Source: Minnesota Historical Society)

2.1.3 After World War II

Discrimination in the sport of golf had been common throughout the country before the war. Blacks were prohibited from joining golf clubs and barred from participating in tournaments sponsored by the Professional Golfers Association (PGA), so they formed the United Golfers' Association (UGA) and organized their own tour series. Solomon Hughes, a 26-year-old golfer from Alabama, won the UGA's National Negro Open in 1935, the first of many trophies he would collect on the national circuit. A friend of heavy-weight boxing champion Joe Louis, Hughes left the segregated South in 1943 and moved to Minneapolis. Louis, a golfer and sponsor of many UGA events, would force the PGA to integrate after a controversy at the 1952 San Diego Open.

When Hughes arrived in Minneapolis, discrimination foiled his plans to make a living as a golf pro. Restrictions remained at some of the MPRB's courses until 1952. Hughes found camaraderie, though, with local Black golf enthusiasts, who had established the Twin City Golf Club in 1931 and the Upper Midwest Bronze Amateur Tournament (originally known as the Minnesota Negro Open) in 1939. The annual tournament, tirelessly promoted by Jimmy Slemmons, attracted amateur Black golfers from around the nation. The tournament was first held at Armour (now Gross) Golf Course, which was beyond the city limits, and then at Wirth. It moved to the Hiawatha course in 1968, drawing some 300 participants in its heyday. This tournament has been played at a number of MPRB golf courses over the years. Blacks had been allowed to play at Hiawatha for a number of years, but they were not welcome in the clubhouse until the late 1940s, when Hughes helped negotiate a change in the rules.

Although the Hiawatha Golf Course had remained popular, the MPRB was required to constantly battle the side effects of dredging and filling, including settling and poor drainage. In an effort to address these persistent problems, the front nine holes were extensively remodeled in 1993, followed by the back nine in 1999.

Despite these modifications, the historic character of the course remains, and it is eligible for the National Register of Historic Places as part of the Grand Rounds Historic District. Many factors present challenges for managing historic landscapes including the life cycles of plants, stresses from Minnesota's extreme climate, economic realities, and evolving "best practices."





Left: Solomon Hughes in 1948 (Source: MNHS Publication) Right: Hiawatha Golf Course, 1935 (Source: MPRB)

2.2 Existing Site Conditions

2.2.1 Golf Course and Other Recreation

Golf Course Facility Overview

The current Hiawatha Golf Course facility includes:

- An 18-hole, par-73 course.
- An outdoor learning center with:
 - o A 50-station synthetic and natural turf driving range.
 - o Multiple putting greens.
 - Areas for chipping and bunker practice.

Golf Course Design and Conditions

Many of the holes run east/west and are constructed using traditional techniques, like the "push-up" style green, which involves pushing the site's nearby soils into an elevated area for the green. Due to the low-lying land on which the course sits, conditions will vary depending on time of year and rain frequency. Tees and greens are usually in good condition; however, fairways and areas of rough can be extremely irregular and impede mowing or play. Portions of the course are frequently closed under wet conditions.

Golf Course Clubhouse

The golf course includes a parking lot and a clubhouse located east of the intersection of 46th Street and Longfellow Avenue. The clubhouse has the following:

- A pro shop
- Men's and women's locker rooms
- Restrooms
- Seating area
- Offices
- Food and beverage service (primarily targeted toward golf course users)

Although the clubhouse kitchen was recently renovated, much of the remainder of the clubhouse has not been improved and would require significant upgrades to bring to modern standards, including ADA accessibility standards.

Facility Access and Safety

Due to safety considerations, access to the golf course is limited only to golfers during summer months. People canoeing or kayaking the creek travel through and are at risk of being hit by poor shots. An aging perimeter fence encompasses the entire course. A maintenance drive along the west side of the lake is used occasionally in the summer by determined walkers and is open for use in the winter when golf is not being played. The course is also open for cross-country skiers and sledders during the winter months.



Clubhouse at Hiawatha Golf Course, 2017



Golf carts at the Hiawatha Golf Course (Source: MPRB)

Natural Areas and Open Spaces in the Golf Course

Minnehaha Creek flows between berms through the south half of the golf course area. The berm between Lake Hiawatha and the golf course provides wildlife habitat, as does the sediment delta at the mouth of Minnehaha Creek that pushes into Lake Hiawatha. These areas are home to nesting birds, beavers, otters, and many reptiles and amphibians. They are also attractive to humans for fishing, hanging out, or observing wildlife.

The golf course area has minimal natural landscapes which support wildlife habitat in any substantial way. There are stormwater ponds, remnant woods, and small manicured plantings; however, the vast majority of the surface area of the course is mowed turf grass.

There are also small, open-space areas (unprogrammed turf and garden areas) used by the adjacent neighborhood. These are located outside the golf course fence at the corner of 43rd Street and 19th Avenue and the corner of 44th Street and Longfellow Avenue. At the southwest corner of the property is the MPRB Hiawatha Maintenance Facility and a stretch of treed green space abutting the parkway to the edge of the creek.

Although there are currently no official trails through the golf course area, the Minnehaha Creek Regional Trail crosses Minnehaha Parkway near the southeast side of the property, which is part of the Grand Rounds National Scenic Byway trail system and provides connections to the Chain of Lakes Regional Park to the west and the Minnehaha Regional Park to the east. Gates in the course's perimeter fence are opened during the winter months and the area is used primarily for cross-country skiing (when snow conditions allow), winter walking, and wildlife viewing. Rentals of cross-country skiing equipment have been available during recent winters.



Open space and seating at the northwest corner of the project site

2.2.2 Water Management Considerations

Pumping Groundwater is Required to Keep Hiawatha Golf Course Dewatered

The Hiawatha Golf Course has been plagued by water management issues through much of its history. In the late 19th and early 20th centuries it was common to see drastic measures in earth-moving and wetland filling for the development of our parks and the city. Such efforts by the MPRB are near impossible and irresponsible in our parks today. The property is fighting the area's low topography, wetter weather due to climate change, higher groundwater levels, and increased creek flows and lake levels. Settlement of peat soils is suspected based on anecdotal observation by golf course staff and the appearance of a linear hump over the large storm sewer pipe on the north side of the lake which sits on piers. Over the years, the Hiawatha Golf Course has undergone several repairs due to settling and poor drainage. This is indicative of peat soils underlying heavier overburden materials.

- Pumps were installed in the 1960s for the purpose of transferring stormwater over the berm and into Lake Hiawatha.
- In the 1990s, drainage was improved by elevating some of the fairways, tiling the greens, adding water hazards as water collection points, and installing new high-capacity pumps.
- To maintain a playable area, the lake is separated from the course by an earthen berm. Average lake levels are approximately three feet higher than the ponds within the golf course. Over the years, material has been added to the berm to address settling and keep separation between the lake and the course.
- There are several pumping systems located throughout the golf course that have been added over the years; based on monitoring by the MPRB, these pumps are frequently used to dewater the golf course and minimize inundated areas.

The course receives regional groundwater flow and stormwater runoff from the watershed to the west, as well as seepage from the lake and creek through the berm. Approximately 35 acres of the property lie below the ordinary high-water level of Lake Hiawatha, putting the property in a vulnerable condition that relies entirely on the berm and significant pumping to maintain soggy conditions that are less than ideal for golf.

Significant pumping at six locations throughout the course is required to keep the golf course dewatered and playable, although wet conditions often persist in the low areas of the course. The pumping is not only keeping the course dry, but protecting, to some extent, the basements of low homes to the west from groundwater intrusion under normal, non-flooding conditions. The pumping, measured in 2016 at 242 million gallons, exceeded the original Minnesota Department of Natural Resources (MnDNR) appropriations permit, which allowed for pumping up to 36.5 million gallons per year for irrigation purposes only—not dewatering. The MPRB did not have a permit to dewater the course. The MPRB now has a new appropriations permit from the MnDNR to pump up to 308 million gallons of groundwater annually for dewatering the property. This magnitude of pumping was based on pump monitoring performed as part of 2015–2017 studies.

As noted in the following section of this report, pumping has since increased to more than 400 million gallons of groundwater in 2019 and 333 million gallons in 2020.

Images of Lake Hiawatha over time, from top to bottom: Prior to golf course construction (Source: MPRB), 1929 flood (Source: MPRB), and 2014 flooding (Source: Star Tribune)







Other Flooding Considerations

Minnehaha Creek enters the golf course on the south side, flows through the southeast corner of the course, and discharges into the southwest side of Lake Hiawatha. Since the golf course was constructed, the watershed and conditions along the creek have changed significantly for a variety of reasons, including development within the watershed, modifications to the dam at Lake Minnetonka, and other utility and infrastructure projects along and adjacent to the creek. Flows on the creek can have extreme fluctuations due to rain events and management of Lake Minnetonka water levels. Most normal creek flows through the property are contained within the creek's channel. The course is part of the Minnehaha Creek floodplain, with the earthen berm overtopping during larger and intense events (flows greater than the approximately 10-year or 10%-chance storm event). The Hiawatha Golf Course has been impacted by large floods in 1952, 1965, 1987, and most recently in 2014. In June 2014, record rainfalls in the spring and early summer overtopped the berm, flooding the course for an extended period and overwhelming the pumping system. Between repairs and lost revenue, total flood costs were estimated to be \$4 million.

Poor drainage and low topography not only impact the golf course, but areas of the watershed to the west which were constructed on filled wetlands. Filling of wetlands was a common practice in Minneapolis during the city's development many decades ago. Several areas in this watershed have historically experienced chronic flooding during intense storm events due to runoff volumes and storm sewer capacity issues, including the Bloomington Pond/Bancroft Meadow areas and the area around Sibley Park. Although some mitigation efforts were undertaken by the City of Minneapolis in the 1980s, these did not fully alleviate the flooding issues. Over the past 15 years, several flood-mitigation studies completed for the City of Minneapolis have identified that significant infrastructure projects are needed to begin reducing flood risk within the watershed. With modifications to storage in and drainage through the Hiawatha golf course, some of the flood-mitigation projects identified in the watershed to the north can be implemented.

Beyond the historic and chronic flooding, Minnesota's climate is changing. The state is seeing larger, more frequent, and more intense rainfall events that directly impact creek flows and conditions on the golf course. Looking to the future, the Minnesota State Office of Climatology expects to see this trend continue, with unprecedented rainfall events. This expected change increases the risk of flooding on the course and could result in more events like that of 2014. Additionally, the most recent six years have been the wettest period in the Twin Cities' climatic history, resulting in higher regional groundwater levels and likely more groundwater inflow to the golf course. This is exemplified by the increase in the estimated annual pumping from 308 million gallons per year in 2017 to more than 400 million gallons per year in 2019.





2014 flooding at Hiawatha Golf Course



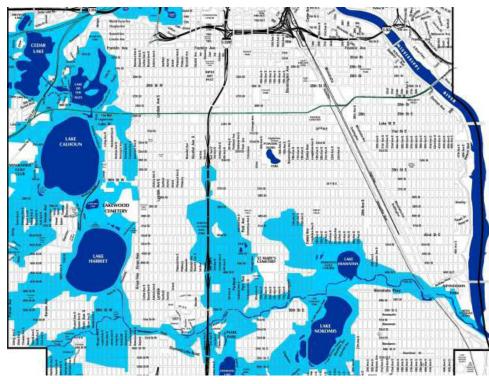
Existing golf course pump discharge



Minnehaha delta area at Lake Hiawatha which many animals call home.



Trash collected from Lake Hiawatha (Source: Sean Connaughty, Friends of Lake Hiawatha)



Potential groundwater conflict areas (Source: City of Minneapolis)

Water Quality Concerns

In addition to water volume and flooding concerns, Lake Hiawatha has water quality concerns—being listed by the Minnesota Pollution Control Agency (MPCA) as impaired for excess nutrients. A Total Maximum Daily Load (TMDL) study (Tetra Tech, 2013) was completed and approved on February 24, 2014, which establishes water quality goals for the lake (e.g., pollutant-load-reduction targets). A 30-percent reduction in the total phosphorus load is needed to achieve the TMDL for Lake Hiawatha. Through their Municipal Separate Storm Sewer System (MS4) permits, the City of Minneapolis and the MPRB are required to achieve a load reduction of 400.4 pounds of total phosphorus per growing season. The vast majority of water entering the lake is from the creek or storm sewer pipes—not from the area of the golf course itself. Runoff from the watershed to the north of the golf course discharges to Lake Hiawatha essentially untreated, as does water coming in from the creek.

Members of the larger Hiawatha community have expressed concerns about trash accumulating in the lake, and The Friends of Lake Hiawatha have made significant efforts to clean up thousands of pounds of trash and garbage from the shoreline and to bring awareness to wildlife habitats of concern. (*Anthropocenic Midden Survey—Final Report* can be found in Appendix N.)

Residents are also concerned about the quality of the water leaving the golf course due to the use of chemicals and fertilizers as part of golf course maintenance. Although the MPRB does use some chemicals for golf course maintenance, their use is limited, and the MPRB ultimately has a goal of maintaining an Audubon Cooperative Sanctuary Program for Golf certification. Additionally, Minnehaha Creek is listed as impaired for bacteria levels by the MPCA and also has an approved TMDL for bacteria (included with the Lake Hiawatha TMDL). The turf areas adjacent to the existing ponds are heavily used by geese and other waterfowl which produce droppings. The excrement has an impact on the water quality of the golf course (especially nutrients and bacteria), as well as Lake Hiawatha and Minnehaha Creek.

2.2.3 Ecological Considerations

The landscape of the existing Hiawatha Golf Course is not ecologically diverse and primarily comprises turf grasses. Delineated wetlands, including the existing constructed ponds and other adjacent low areas that are chronically wet, cover approximately 20% of the project area, although limited buffer is maintained around these ponds. After the floods of 2014, numerous trees died due to a significant period of inundation, and several ash trees were removed due to the emerald ash borer. Today, tree coverage is a mix of deciduous and coniferous trees with a canopy covering approximately 20% of the project area.

Areas providing habitat for wildlife are primarily confined to the shoreline of the lake along the existing berm, the vegetated delta where Minnehaha Creek enters Lake Hiawatha, and the forested slope in the southeast corner of the project area. Wildlife commonly observed by area residents includes otters, beavers, coyotes, owls, predatory birds, songbirds, and other waterfowl. Hiawatha Golf Course is within the Mississippi migratory bird flyway.

Existing Conditions Map Golf course fence restricts access/connection to neighborhood Winter only access gate Key **Project Boundary** Winter only Flooding in FEMA Floodplain access gate watershed to north (elevation 817.0) Golf Course Fence North storm sewer pipe E 43th St Gate location Green space used by Incomplete trail Storm Sewer neighborhood around lake Pipes in Golf Course Low basements to west of golf course Berm **Pumping Location** 1. 1200 GPM Sump Pumps installed in 1999 to replace original 1962 pump. 2. Original 600 GPM 1962 pump 3. 600 GPM Pup added in 1992 Lake Hiawatha 4. Small sump pump Stormwater ponds (elevation 812.8') installed to reduce installed in 2000 localized flooding Golf course constructed . by placing dredged spoils on deep, organic soils Habitat and wildlife along lake edge Golf course in floodplain E 46th St Wetland habitat at delta from Minnehaha Creek Driving 18-hole golf course and Range Area outside Project practice facility with Boundary from the diverse user group Nokomis-Hiawatha Parking at E 46th Regional Park Master ******** and Longfellow Plan (2015) Nokomis Community Center Neighborhood commercial and high E Minnehaha Pkwy density residential area Operations and Maintenance Access

2.3 Trends and Needs Assessment

The needs and trends compiled as part of the MPRB Comprehensive Plan 2007—2020, the Nokomis-Hiawatha Regional Park Master Plan, the South Service Area Master Plan, and the 2017 study by the MPRB were reviewed along with the input from the public and recent golf trends.

2.3.1 General Recreation Trends

Consciousness about health and fitness is increasing, and outdoor fitness activities like biking, walking, running, and yoga are perfectly suited for parks. With time constraints, many people are turning toward biking and walking as transportation rather than dedicating time for separate exercise. And while conventional/organized sports like football, golf, softball, or baseball are not expecting much growth, there are increasing trends in nontraditional sports such as skateboarding, rock climbing, rugby, lacrosse, ultimate Frisbee, disc golf, pickleball, soccer, archery, yoga, mountain biking, and basketball. Older adults are staying active longer than previous generations due to the increase in interest in lower impact activities like bocce, pickleball, and golf. Gardening, history, and other self-directed hobbies are increasingly popular among adults of all ages. Additionally, new technology is enhancing equipment, performance, and delivery of existing recreation activities (e.g., electric bicycles, scooters, and apps that tell you when a beach or ice rink is open).

Much of the feedback received during this process supported an increase in diversity of activities in the area. Several needs identified in the regional park and south service area master plans were applicable to the planning for the Hiawatha Golf Course area.

These specific needs include:

- Creation of full connections to regional trails and around Lake Hiawatha.
- Expansion of opportunities for skateboarding, pickleball, adventure and nature play, as well as nature and wildlife-oriented activities such as birding, fishing, wildlife viewing, and nature photography.
- Protection and enhancement of natural areas, habitat, and pollinators.
- Expansion of and access to winter activities such as cross-country skiing and ice skating.
- Creation of more social gathering places, such as picnic shelters and event spaces in the regional park. The public liked the idea of making the clubhouse area more neighborhood and community-focused, with gathering spaces that could be used year-round.
- Incorporation of public art and the opportunity to tell the cultural history of the site, including the Native American history and the African American golfer history.
- Connections to the water through the addition of a designated canoe/kayak launch and storage racks near the Lake Hiawatha shoreline, boardwalks/bridges, and other shoreline connections.
- Creation of other amenities such as a dog park, skate park, disc golf, ADA-accessible equipment, and more restrooms.



Opportunity for programming of activities like yoga (Source: MPRB)



Engaging kids with nature (Source: MPRB)



Interactive public art can be used to tell a story

2.3.2 Golf-Related Trends

Based on evaluation of the most recent 25 years of golf-round data, the MPRB has observed a declining trend in golf played at all of its courses, mimicking some of the trends that have been observed nationally. This decline is reflected in decreasing numbers of rounds played and net revenue, with the MPRB golf system operating at a deficit. Hiawatha Golf Course has not produced positive net revenue since 2012 due to the decline in rounds played and the course's chronic wet playing conditions, related closures, and damage due to water.

Although there may be a general declining trend in golf within the MPRB system and nationally, there are places where improving trends in golf have been observed in recent years. For example:

- There is an increase in gender inclusion and racial diversity.
- Newcomers to golf include more women, people of color, and millennials.
- Although growth for golfers over age 65 is expected to increase as baby boomers retire, the industry is appealing to the younger generation, especially girls under 18—representing the fastest growing section of the US golf population.
- Growth has been observed at off-course facilities such as TopGolf and other types of indoor simulators, which may lead to increase in on-course play.
- Golf course renovations, not new courses, are trending upward, with the majority at public facilities.
- Interest in multi-functional golf courses that share space with other activities through site design, time-share programming, or seasonal programming is increasing.

Golf course design trends include:

- More attention to players with varying levels of skill, including women and seniors.
- Sustainable design, including naturalized areas, habitat corridors, and improved water management.
- Expansion of clubhouse amenities (e.g., gathering spaces, spectating opportunities).
- Expanded practice facilities and increased technology for entertainment (i.e., gamification).
- Golf fitness and instruction facilities.

Notably, the Royal and Ancient conducted a survey which showed 60% of golfers would enjoy their round if it took less time. R&A, recognizing this, piloted the 2016 9-Hole Challenge at Royal Troon and has since continued the event. R&A notes that 9 holes "takes less time, can be social and/or competitive, can count for handicapping purposes, is still real golf, and is fast, fun, and flexible." These regional and national trends in golf play and design will be coupled with the elements most important to the local golf community. Attracting new players to the sport is this plan's aim, including embracing the importance of the learning and practice facilities, the inclusivity and accessibility of the golf course, and the important history of the course during times of segregation.

2.4 Demographics

The seven-county Twin Cities metropolitan area is currently experiencing steady population growth, with more than three million residents. In the past decade, nearly 30% of the growth has occurred in the urban areas of Minneapolis and Saint Paul. The 2040 population forecast suggests continued growth (approximately 25%). The trends show the overall population is aging and increasing in ethnic and racial diversity.

The neighborhoods surrounding the regional park and the Hiawatha Golf Course area are experiencing slight population declines and a decrease in the aging population (65+). The area is attracting young families with children and is also increasing in ethnic and racial diversity. Compared to the rest of the metro area, Hispanic or Latino populations are more concentrated in the neighborhoods around the park.

The median household income in the study area is slightly less than the income for the metro. The housing stock is generally older and home ownership is higher in the neighborhoods surrounding the park than for the larger metro area; however, cost-burdened households are also more concentrated in the neighborhoods surrounding the park. More of the residents around the park utilize public transportation and walk/bike/work at home compared to the rest of the region.

2.5 Visitor Demand

According to the Metropolitan Council's 2019 visitation estimates and the Regional Park Master Plan, Nokomis-Hiawatha Regional Park receives 2 million visits annually, with the vast majority of the use happening in the spring, summer, and fall. Modest growth in visitation is expected due to young families moving into the neighborhoods surrounding the park and implementation of the park improvement projects and new park facilities. Recent data suggests that visits to the Nokomis-Hiawatha Regional Park have grown by about 4.9% per year.

Visitors to the Hiawatha Golf Course area during the spring, summer, and fall are typically limited to golfers and local neighbors who utilize the open spaces in the northwest corners of the park outside the fence. In the winter, the golf course area is used for walking and cross-country skiing, though the MPRB does not have specific counts on the number of winter visits/users.

Based on the entire record of golf rounds played at the Hiawatha Golf Course, the average number of rounds per year is approximately 44,800, and the maximum number of rounds is 57,700. Within the past decade, only 20,000–40,000 rounds of golf have been played annually at Hiawatha. Some of this decline is due to the flooding from 2014 and closure due to wet conditions. However, some of this is also the result of a declining trend in golf that has been observed at all MPRB courses and nationally, with just under 30,000 rounds of golf played in recent years when the full course was open and playable all season. The MPRB system-wide golf study, completed in 2014, indicated that the Hiawatha Golf Course is operating at 47% of its practical capacity. This statistic is echoed across the MPRB golf system as depicted in the amount of rounds played since the early 1990s when golf was at its peak. This is indicative of a golf system which has twice the holes it may need.

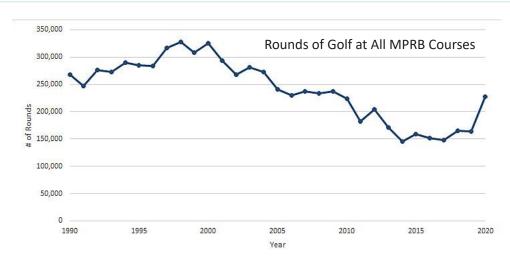
In 2020, Hiawatha Golf Course and other MPRB courses experienced a resurgence in golf supported, at least in part, by the COVID-19 pandemic. Nearly 39,000 rounds were purchased at Hiawatha Golf Course in 2020, about the same as 2010, but still 20% less than the late 1990s and early 2000s. Where the entertainment and dining industries were largely impacted, as were many amateur and professional sports, COVID-19 provided some people more time and money to play golf and buy golf equipment. The National Golf Foundation (NGF) notes "golf and the pandemic have a bit of a synergetic relationship."^[1] The inherent distancing involved in playing golf is largely aligned with limitations posed by the pandemic.

The NGF suggests the "law of the vital few" may have pushed golf numbers higher in 2020, meaning "20% of existing customers are contributing disproportionately to the outcome." This data shows "20% of core golfers will be 'over-spenders' this year, while roughly 30% will be 'same-spenders' and, believe it or not, half will actually underspend this year versus last (or typical)." The NFG suggests that the ability to sustain 2020 numbers into 2021 is unlikely with or without the restrictions of the pandemic, based on predictions for three player groups:

- The 20 percenters group who golfed most in 2020 "expects that their play in 2021 will fall back by 10–15%" [4] compared to 2020 regardless of pandemic restrictions.
- Those golfers who played about the same in 2020 as in 2019—about 45% of golfers—will continue to play at similar rates whether there are pandemic restrictions or not.
- The remaining 35% of golfers played 35% less in 2020 than 2019. This group may golf 24% more in 2021 compared to 2020 if the pandemic restriction remains; however, still falling short of 2019 numbers. If pandemic conditions allow a return to "normal," 2021 could see this group golf 54% more in 2021 compared to 2020, making their rounds about even with 2019.

The capacity for golf to continue at 2020 levels is uncertain. Data from the NGF suggests the "ability to match (or at least come close to matching) rounds totals from 2020 would hinge greatly on whether these zealous golfers continued to lean in as they have over the past seven months. Indeed, it's worth rooting for, although our most recent consumer pulse data suggests there will be some 'regression toward the mean' for these consumers in 2021." [5]

Golf courses must create new golfers to grow the sport, not just cater to current ones. George Kelley, founder of Greenway Golf, noted in late 2020 that the real challenge is "converting new and casual players into committed golfers after the pandemic eases." [6]



Golf round history at MPRB golf courses (Source: MPRB)



Trends show that golfing is increasingly appealing to young women (Source: The JuniorGolfer.com).



Increasing recreational opportunities beyond golf has the potential to increase park visitors (Source: MPRB).



¹November 5, 2020, The Q, 80/20: Understanding Golf's Surge, https://www.thengfq.com/covid-19/
²November 5, 2020, The Q, 80/20: Understanding Golf's Surge, https://www.thengfq.com/covid-19/
³November 5, 2020, The Q, 80/20: Understanding Golf's Surge, https://www.thengfq.com/covid-19/
⁴January 14, 2021, The Q, What's Ahead for Zealous Golfers?, https://www.thengfq.com/covid-19/
⁵January 14, 2021, The Q, What's Ahead for Zealous Golfers?, https://www.thengfq.com/covid-19/
⁶December 26, 2020, Golf's pandemic surge rivals the Tiger Woods boom. Will it last when coronavirus eases?,
Ron Kroichick, The San Francisco Chronicle, https://www.google.com/amp/s/www.sfchronicle.com/sports/golf/amp/Golf-s-pandemic-surge-rivals-the-Tiger-Woods-15828709.php

3. COMMUNITY ENGAGEMENT

A master plan involves extensive community engagement with individuals and groups of stakeholders, other community partners, and governmental entities. Master planning in the Minneapolis park system is rooted in public engagement. It is a process that includes extensive outreach, a Community Advisory Committee (CAC) of appointed members of the public, various input and engagement methods, and plan reviews at key points through open and targeted engagement events. The planning process utilizes multiple community engagement methods to gather input from a variety of targeted groups. One method does not outweigh another; the input received, whether from loud voices or soft voices, is highly regarded.

The draft master plan was subject to review and comment by the public, as well as a public hearing prior to approval by the Minneapolis Park and Recreation Board of Commissioners. Before adoption, it was required to move through a formal approval process with the MPRB, including a 45-day public comment period that began July 31, 2020. This document is the acting plan for guiding improvements for the park. Additionally, it is an amendment to the Nokomis-Hiawatha Regional Park Master Plan, requiring approval by the Metropolitan Council.

3.1 Community Advisory Committee

3.1.1 Representation on CAC

Representation on the CAC was one of the first things established at the start of the master planning process. Elected officials, nearby neighborhood organizations, and Minneapolis Public Schools were asked to appoint members to the CAC. Many organizations were also engaged during the development of the Nokomis-Hiawatha Regional Park Master Plan. Additionally, several other representatives were invited to participate based on feedback and specific concerns expressed prior to the start of the master planning process.

The CAC comprised a total of 18 people who met seven times over the two-year process to become knowledgeable about all aspects of the property (past and present); discuss and develop a plan vision, goals, and guiding principles; explore alternatives and options presented to them including providing input; and finally, provide their master plan recommendation to the MPRB. Members of the public were invited to attend and participate in CAC meetings, which included a designated time for public comment. Public attendance at CAC meetings typically ranged from approximately 40 to 80 people.

CAC Meetings

CAC Meeting #1—Meeting Goal: Get to know each other and the process (3/28/2018)

CAC Meeting #2—Meeting Goal: Get to know the facts and develop the process to move forward (4/30/2018)

CAC Meeting #3—Meeting Goal: Start the visioning process for the Hiawatha Golf Course property (10/10/2018)

CAC Meeting #4—Meeting Goal: Produce a working vision and working principles (12/4/2018)

CAC Meeting #5—Meeting Goal: Present three concept alternatives and gather preliminary input from the CAC and members of the public (3/7/2019)

CAC Meeting #6a—Meeting Goal: Create an outline for a single preferred design alternative (6/11/2019)

Meeting #6b—Meeting Goal: Continue the conversation and create an outline for a single preferred design alternative (6/22/2019)

Appointments

Appointments by community organizations and entities (8 appointments):

- Standish-Ericsson Neighborhood Association*
- Nokomis East Neighborhood Association*
- Hale Page Diamond Lake Community Association*
- Field Regina Northrup Neighborhood Group (no appointment made)*
- Hale School parent representative (no appointment made)*
- Lake Nokomis School parent representative (no appointment made)*
- Northrup School parent representative*
- Friends of Lake Hiawatha

Appointments by elected and appointed officials and other entities (14 appointments):

- MPRB President*
- MPRB Park District 5 Commissioner*
- MPRB at-large Commissioners (three appointments)*
- City of Minneapolis Ward 11 City Councilmember*
- City of Minneapolis Ward 12 City Councilmember*
- City of Minneapolis Mayor*
- Hennepin County District 4 Commissioner*
- Minneapolis Public Schools District 5 Director*
- Minneapolis Public Schools Athletic Director
- MPRB Director of Golf
- MPRB Assistant Superintendent for Recreation
- Metropolitan Urban Indian Directors (no appointment made)
- * Indicates organizations represented on a CAC who were present for the 2015 Nokomis-Hiawatha Regional Park Master Plan

3.1.1 Representation on CAC

The charge of representatives on the master plan CAC was to:

- Become knowledgeable about past investigations conducted by the MPRB and others to gain a reasonable understanding of water management conditions on the golf course property and any attendant effects on private properties.
- Become knowledgeable about past and current use of the property, including communities served by the current golf course use of the property.
- Become knowledgeable about other aspects of the golf course property and the master planning project and its scope and advise MPRB staff and consultants throughout the planning process.
- Contribute to broad community engagement by acting as a primary contact for the CAC's represented communities and by enhancing interaction with a wide range of stakeholders and stakeholder groups.
- Assist with ongoing communication of technical plan elements to the general public.
- Report back to appointers or appointing bodies, as requested, on the plan process, information presented, and possible recommendations.
- Make recommendations to the MPRB Commissioners on the future use or evolution of the Hiawatha Golf Course, based on agreed upon vision, goals, and principles.
- Make recommendations to the MPRB Commissioners in support of any changes to the golf course property or perpetuation of current uses, with attention to priority, sequencing, timing, and funding.

It is important to note the complex nature of what is happening to water at the Hiawatha golf course site and how that relates to community engagement. The MPRB relies on professionals to evaluate and identify technical solutions and engineering services as it relates to water management and informing the master planning process. As these solutions and services are developed, the design team presents them to the CAC, so the CAC can incorporate other aspects of the planning effort with the engineering solutions. The MPRB cannot place the burden of complex technical outcomes and solutions on the CAC. The CAC, with the guidance of the design team, recommends the site's spatial planning, circulation, landscape types, opportunities for further study, programming and events, recreation activities, and various uses.

The CAC meeting presentations and minutes are included as Appendix D.

3. COMMUNITY ENGAGEMENT

3.2 Focus Group Sessions

When it was clear that some voices may not be heard, the design team added five focus group sessions with various themes and convened each twice during the project. The two different sets of focus group sessions targeted specific interests within the community. These sessions provided venues to listen to stories, thoughts, ideas, and concerns specific to the following groups:

- General golfers
- African American golfers
- Persons with environmental interests
- Neighbors living near the golf course
- Indigenous/Dakota community members

A total of 10 well-attended focus group sessions were held during the master plan development process. A summary of the focus group discussions/meeting minutes is included as Appendix E.



Discussion at the focus group session in November 2018 (Source: MPRB)



Presentation on the African American golf history at Hiawatha Golf Course in November 2018 (Source: MPRB)

3.3 Public Input Surveys

Four different online public surveys were conducted during the master planning effort to solicit input. The surveys included:

- Visioning input from the CAC and general public (more than 129 survey response forms were submitted which included 292 single-word descriptors, more than 150 images, and numerous vision statement examples).
- CAC and public input on the three preliminary concepts (more than 450 survey response forms were submitted).
- CAC prioritization of preferred project elements (resulted in a ranked prioritization of 26 project elements).
- Public input on the draft preferred alternative (more than 440 comments were received).
- Public input on the draft master plan during the 45-day comment period (345 surveys and 26 emails were submitted generating over 1,100 comments).

The complete results of these surveys can be found in Appendices F, H, I, K, and L, respectively.

Public Surveys

- 1. Visioning input from the CAC and public
- 2. CAC and public input on the three preliminary concepts
- 3. CAC prioritization of preferred project elements
- 4. Public input on the draft preferred alternative
- 5. Public input on the draft master plan

Focus Session Series

- 1. Environment (11/8/2018)
- 2. Neighborhood (11/8/2018)
- 3. General golf (11/13/2018)
- 4. African American golf history (11/13/2018)
- 5. Native American history (1/9/2019)
- 6. General golf (3/18/2019)
- 7. African American golf history (3/18/2019)
- 8. Environment (3/18/2019)
- 9. Neighborhood (3/19/2019)
- 10. Native American history (3/19/2019)

3.4 Other Opportunities for Input

Besides presentations at CAC meetings (open to the public) and the focus group sessions which were all well-attended, there was one online video presentation of the draft preferred alternative. Instead of presenting in a gymnasium, a video presentation was produced and sent to over 16,000 email addresses due to the Covid-19 pandemic, which prohibited gatherings of groups of people. The online presentation presented a singular concept from which the master plan is derived and over 440 input surveys were received with comments varying widely from "Keep 18 holes of golf" to "The plan looks great and we are excited for the proposed plan." The online video presentation reached far more members of the public in a wider geographic area than simply holding a traditional in-person presentation.

Ongoing project information and updates about the Hiawatha Golf Course Area Master Plan were made available on the MPRB website. Gov-delivery emails and social media posts were used to keep the community informed of the process and opportunities for input. In particular, the neighborhood organizations near the lake, the non-profit Friends of Lake Hiawatha, and the District 5 MPRB Commissioner utilized social media and in-park face-to-face discussions to spread the word about the plan.

In addition to public and community input, the plan has benefited from the feedback of key MPRB staff who work directly on activities, programming, events, safety, operations and maintenance, environmental management, and community outreach on a regular basis. Efforts included five workshops/project advisory committee (PAC) meetings, as well as one-on-one follow-ups with various MPRB staff. Preliminary plans were reviewed with the Minnehaha Creek Watershed District and the City of Minneapolis Department of Public Works (Surface Waters and Sewers).

The Youth Design Team is a group of young adults from across Minneapolis who is interested in parks and recreation. Youth Design Team positions are paid and a great opportunity for youth interested in policy and planning to gain applicable community-engagement and career-building skills and experience. For the Hiawatha Golf Course, this group conducted a simple design activity where they brainstormed ideas in small groups, put those ideas together, and presented the ideas to MPRB staff.



Youth Design Team site visit, June 2018 (Source: MPRB)



Master plan development is an iterative process that involves the compilation of design studies, technical information, and public and other stakeholder input to inform the concepts developed. Ultimately, the recommended plan is shaped by the input received and directly supports the vision and guiding principles developed early in the planning process for the project site.

4.1 Master Plan Commitments and Goals

4.1.1 The MPRB Commitment to the Community

The MPRB is committed to developing a master plan that is supported by the following goals:

Engagement

• Extensive engagement of the community and stakeholders according to policies of the MPRB, including the creation and charge of a CAC and other activities aimed at providing information to nearby property owners to ensure they understand the directions and implications of changes posed in a master plan.

Water Management

- Protection of nearby homes from groundwater intrusion to the same degree they are protected by the current volume of pumping.
- A strategy for water management that can be supported by regulators, including reduced groundwater pumping and preservation of the existing floodplain storage.

Focus On Golf

- Perpetuation of a minimum of nine holes of traditional golf on the property.
- Consideration of the costs of any reconfiguration of the golf course property as a parameter for determining direction, as well as considering the potential for revenue generation that offsets costs of operations for any use scenario.

Partnerships

- Collaboration with the City of Minneapolis to resolve, to the degree practicable, stormwater and flooding issues immediately upstream of Lake Hiawatha, including considering methods of improving water quality and mitigating trash entering Lake Hiawatha from the watershed.
- Collaboration with the Minnehaha Creek Watershed District related to the ecology of Minnehaha Creek and the potential for the creek to aid in improving water quality in Lake Hiawatha.

New Recreational Opportunities

• Creation of a master plan that aligns recreational use, water management, viable financial projections for implementation, operations, and revenue with community expectations to the greatest degree practicable.

4.1.2 Vision and Guiding Principles

Early in the master planning process, the design team worked with the CAC and the public to develop a vision statement and a set of guiding principles for the Hiawatha Golf Course area. The project's vision statement is a high-level statement that captures the inspiration for the future. It does not identify specific details of the plan but, rather, guides the overarching direction of the plan.

The guiding principles are a set of outcomes that are born from the vision and input of the community—with the recommended plan being supported by these guiding principles. Building from the Nokomis-Hiawatha Regional Park Master Plan, the guiding principles were grouped into four categories; three of the categories align with those defined in the regional park master plan.

Making sure that these align with the MPRB's overarching mission, values, and goals, the vision statement, along with the guiding principles, helped inspire the preliminary and preferred design alternatives developed through the process. These were agreed upon by the CAC and will continue to guide the park's role, character, and function as the plan for the Hiawatha Golf Course area is implemented over time

Vision

The Hiawatha Golf Course property is a unique destination providing a welcoming and equitable park experience for both the surrounding community and regional park users that is ecologically responsible, addresses water management needs, and is respectful of the site's natural and cultural history. Park development will have a long-term focus for year-round passive and active recreation, where golf and other recreation will interface with ecology and art to provide for a flood-resilient design that is accessible, connected, and celebrates the spirit of Minneapolis.

Guiding Principles

Natural Resources

- Honor water and realize its significance at the site, in our lives, and in our cultures
- Provide a flood-resilient design within the park area
- Protect nearby homes from groundwater intrusion to the same degree they are protected today
- Reduce flood impacts in the neighborhoods to the north and west of the site
- Reduce the volume of trash entering Lake Hiawatha
- Enhance ecological benefits on the site, including consideration of existing habitat and creation of more varied habitat to support wildlife
- Improve water quality, including treatment of runoff to improve Lake Hiawatha
- Reuse pumped groundwater for the betterment of the site and environment

Community and Equity

- Create equitable experiences and spaces that promote community with multi-generational, familyfriendly, fun opportunities that are interactive and respectful for all park users
- Celebrate history in a meaningful way on the site
- Support sustainability in all aspects of the site, including environmentally, culturally, and economically
- Reduce barriers and encourage access to a broader set of park users
- Minimize negative impacts to the adjacent neighborhood, including consideration of impacts to traffic, parking, and noise

Recreation

- Envision golf as a central activity of the site, ensuring safety as a priority when looking at integration with other uses
- Provide golf and golf learning opportunities equitably to youth and other underrepresented community members
- Diversify recreation and create unique experiences on the site to meet the goals of the MPRB park system, including yearround activities.
- Enhance gathering spaces on the site to be welcoming and fun for all community members and be fiscally and environmentally responsible

Connectivity and Circulation

- Create connections between the site and the community, the regional park and trails, and the lake and creek
- Create cohesive and complementary solutions for site issues and design ideas
- Reduce barriers and encourage access to a more diverse and broader set of park users

4.2 Master Plan Alternatives

The master plan design serves as a guide for exploring what will be included in the park in the future. It is a concept and does not provide specific details for every feature within the park. It provides enough detail to capture the critical elements of the plan, demonstrate plan feasibility and ability to meet the project goals, and allow for a greater understanding of the costs and metrics for redevelopment and opportunity at the site.

4.2.1 Preliminary Alternatives

Three preliminary alternatives were developed based on the vision and guiding principles, public input, identified park-system needs, a workshop with MPRB staff, and a strong working knowledge of the existing site conditions. Recognizing the site's connection to the larger watershed, the ultimate water management goals of the project served as the backbone to these designs. The alternatives included a wide range of recreation opportunities and layouts for the Hiawatha Golf Course area—all keeping some form of traditional golf on the property while integrating other recreational uses. The concepts have built-in flexibility to adapt to any new information gathered through further exploration of geology, hydrology, and surface water inputs during the next project phases. The goal of this planning effort is to identify how recreational opportunities can be interwoven with engineered solutions to provide a desired outcome that meets the needs of the community.

The three preliminary alternatives were presented to the CAC and discussed with MPRB staff. A public input survey was also conducted to gather people's preferences on the features included in each alternative. A brief description of the preliminary alternatives follows and more detailed information on each alternative can be found in Appendices D, G, and H:

- Alternative 1—Expanded Opportunities: Unique opportunities abound on a newly formed site with a focus on golf learning (4-hole practice course with comprehensive practice facilities) and recreational exploration that honors the original native landscape and cultures, as well as the past and presentday communities that call this land their home.
- Alternative 2—Experience Lake Hiawatha: Views of the lake unfold on every turn where a premiere Par-36, 9-hole golf course with practice facilities is interwoven into an ecologically diverse landscape that celebrates the history of golf on the site. The target audience is youth and learning adults.
- Alternative 3—Back to Nature: Water, ecology, golf (Par-34, 9-hole golf course with practice facilities), and recreation are blended to provide a unique opportunity to immerse yourself in a natural landscape that celebrates community and connection to the land.

4.2.2 Prioritized Elements Identified by the CAC

The general feedback and alternatives were further discussed with the CAC at two separate meetings with the hope of consensus and agreement on preference for specific park elements, ultimately defining the direction of the preferred plan. Similar to the polarized response from the public, the CAC was unable to come to consensus on the components to be propagated in the preferred alternative. A robust discussion took place over the course of two lengthy CAC meetings, including questioning the water management study's findings and the direction the Board of Commissioners gave to the CAC regarding the master

plan parameters. The CAC created an outline of the elements they'd like to see in the preferred alternative. At the end of CAC Meeting #6b they had settled on a list and voted on it. The CAC later voted on the priority of elements via online survey. The ranked CAC prioritized elements are shown below and in greater detail in Appendix I). The number-one priority is to protect homes from groundwater intrusion by including further engineering analysis; it is similar to the design team's goal of protecting homes to the same degree they are protected today.

CAC Priorities

Top priority: Protect homes from groundwater intrusion, including engineering analysis

- 1. Provide pollution mitigation coordinated by the City of Minneapolis and MPRB, including trash, sediment, and dissolved pollutant removal
- 2. Maintain First Tee program
- 3. Ensure more purposeful interpretation and presence of African American and Indigenous history, art, and culture
- 4. Include stormwater best management practices
- 5. Balance natural and recreational spaces with appropriate plantings (vegetation that reduces maintenance needs while optimizing land use experience, water management, and wildlife)
- 6. Enhance winter activities on the property
- 7. Keep costs low (capital and maintenance)
- 8. Explain why the MPRB wants to reduce pumping
- 9. Revise/Improve clubhouse with winter activity hub, a pet-friendly patio, and local business oriented
- 10. Provide a plan to retain the 18hole golf course with alternate ways to reduce pumping

- 11. Protect existing wildlife habitat
- 12. Enhance communal golf practice facilities
- 13. Provide a plan for memorials to people
- 14. Support wildlife connectivity
- 15. Provide a safe walking path around the lake, not necessarily directly adjacent to lake
- 16. Remove fence strategically to increase accessibility to park and water
- 17. Reuse existing infrastructure
- 18. New parking and traffic analysis
- 19. Push Audubon Certification levels further
- 20. Create public art opportunities
- 21. Maintain and expand, where appropriate, biking path locations
- 22. Provide opportunities for nongolf interaction on property
- 23. Create passive and active areas
- 24. Create an event venue
- 25. Explore what each park facility building does and how its use could be expanded, i.e., event facility at southwest maintenance building

4.2.3 Preferred Alternative

The preferred design alternative strives toward a balance of golf and other activities set in a landscape guided by water management. It necessarily bends toward ecology in its aspirations, recognizing that restoration of natural processes—which were significantly altered by Wirth's dredging of Rice Lake—are a goal greater than those supporting human activities on the site. With ecology as the yardstick, choices favor preservation, conservation, and restoration rather than expanding past acts of disturbance or creating new development. If a proposal doesn't measure up to this new conceptual yardstick, it likely should not be a part of the experience of this site. While any number of uses are described, its restoration of sustainable water patterns and recreation, balanced in a new ecologically driven landscape, form the higher order goals inherent in the concept.

Following the CAC-defined priorities, the Board of Commissioners' direction, and the public feedback on the preliminary design alternatives, the design team developed the preferred design alternative for the Hiawatha Golf Course area. This plan, which aligned with the vision and guiding principles, accommodated the site's complex water management needs. It included the development of a Par-36, 9-hole golf course, driving range, practice facilities, and improved community gathering opportunities. It also created a variety of multi-use and pedestrian trails, allowing for a complete loop around Lake Hiawatha and connections to the regional park and neighborhoods, preserved valued open space on the northwest side of the site, protected existing wildlife habitat, and enhanced winter recreation opportunities. In addition, the plan provides the space and opportunity to celebrate the site's natural and cultural history. Due to the Governor's Covid-19 pandemic stay-at-home order, which prohibited gatherings of groups of people, this preferred design alternative was presented to the pubic in an online video presentation with a subsequent input survey (see Appendix J and K). After a threeweek public comment period, the feedback was reviewed and incorporated, as appropriate, into the recommended master plan presented here.

4.2.4 18-Hole Option Exploration

Water management alternatives that address fully the range of issues faced by a property situated below the elevation of an adjacent lake render the opportunity to create an 18-hole golf course impracticable, if not impossible. A flood-resilient and ecologically driven 18-hole course, including relocation and reduction of pumping, would consume too much floodplain volume. Consuming too much floodplain volume raises the flood elevation of the lake and pushes further into the neighborhoods, causing a greater risk for flooding homes. In addition, the opportunity to address other water management goals and introduce activities that draw more users relies upon a configuration that better balances golf, environmental features, and other opportunities to engage people. Most important, the alternatives explored each offer a compelling golf solution intended to perpetuate the sport at this site.



4.3 Recommended Master Plan

4.3.1 Recommended Plan

4.3.1.1 Overall Master Plan



4.3.1.2 Site Character



Area recreation/golf



Neighborhood gathering space



Multi-use trail



Bridge



Upland habitat preservation and ecological restoration



Community gathering space



Natural surface trail



Play area



Wetland habitat preservation and ecological restoration



Hiawatha maintenance facility



Golf cart path



Fishing pier



Open water management area



Nature first habitat



Water trail



Canoe/kayak storage



4.3.1.3 Community Gathering Enlargement





Patio gathering space



Doa patio area



9-hole, par-36 golf course



Gradien Control

Flexible outdoor spaces

Beach access

4.3.1.4 The Backyard Neighborhood Park Enlargement

The Backyard, near the northwest corner of the property, preserves the open space for informal play, a highly-valued space for neighborhood residents. While the whole property is recognized as a regional park in the Minneapolis park system, it's impossible to consider the development of a park that doesn't somehow address its immediate neighbors and their need for daily recreation and gathering space. It's here that the natural restoration directives most clearly interact with everyday users, with nature play, informal gatherings, wild places, play with water—all things that exist in some backyards, but here they're brought together, not as a private backyard, but as a true neighborhood play space—not one controlled by a playground designer but one inspired by a child's imagination.





New places to play





Native plantings and connections to the neighborhood





Telling the story of water and hanging out



4.3.1.5 Winter Recreation Overlay



4.3.2 Water Management Solution

A Direction for Water Management

Improved water management, along with a chance to heal and restore the landscape, is the foundation of the Hiawatha Golf Course Area Master Plan. The plan aims to shape the land and water in more sustainable ways than occurred here a century ago, this time starting with the understanding that water is the force that shapes the land. Reduced pumping, improved water quality, and reduced chronic flooding issues are byproducts of a plan conceived as a means of healing the patterns of water misuse that have existed here for almost a century.

A Reduction in Pumping

The master plan acknowledges that pumping, although significantly reduced, may still be required to protect nearby homes and basements from groundwater intrusion to the same degree as they are today. The MPRB understands that this reduction in pumping is a concern to the public and is committed to pursuing further monitoring of pumping and regional groundwater levels in partnership with the City of Minneapolis. This additional data will be used to refine the groundwater model calibration used during final design and engineering of the entirely new pumping system.

This pumped water can be viewed as a resource, and opportunities to reuse this water on site should be pursued. The estimated magnitude of pumping may support a variety of uses throughout the year including:

- Golf course irrigation
- Once-through heating/cooling system for the clubhouse area facilities
- Toilet flushing and other non-potable water uses
- Snowmaking for winter recreation
- Water features, interactive water play, and art

Preservation of the Floodplain

The Hiawatha Golf Course area was historically part of a wetland complex along Minnehaha Creek and has always been part of the creek's floodplain. The proposed master plan preserves the floodplain's storage function while providing for a more flood-resilient golf course and park design. This design can better accommodate the complicated hydrology and anticipated flows resulting from our changing climate, including more frequent extreme rainfall events.

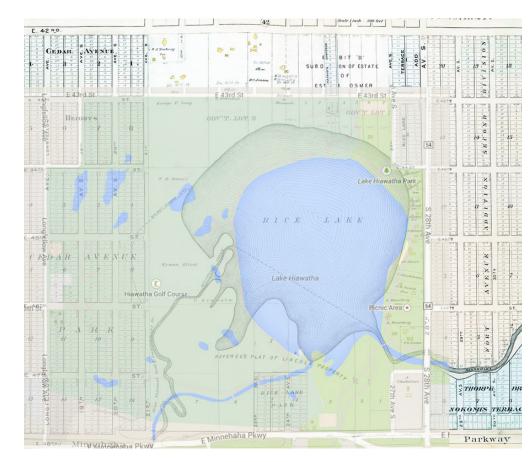
Improved Stormwater Management

The master plan replaces the limited capacity stormwater pipe at the north side of the lake with an open, free-flowing channel, the benefits of which include:

- An opportunity to reduce flooding in the watershed to the north
- Management of trash from the watershed
- Treatment of runoff to reduce pollutant loads to Lake Hiawatha, which is impaired for excess nutrients and bacteria
- Incorporation of stormwater best management practices, as required to manage runoff from the site

The design of the water management system will require long-term maintenance to be successful. A maintenance plan will be developed as part of final design and engineering.

Permitting from numerous agencies will be required as part of the design and engineering process to ensure significant evaluation and approval of the water management solution's design and demonstrate that the project will not negatively impact groundwater, flood elevations, or water quality.



Historic plat map of Hiawatha Golf Course laid over existing water bodies



Trash display (Source: photo by Penny Fuller, art by Sean Connaughty)



Pumped water can be used for irrigation



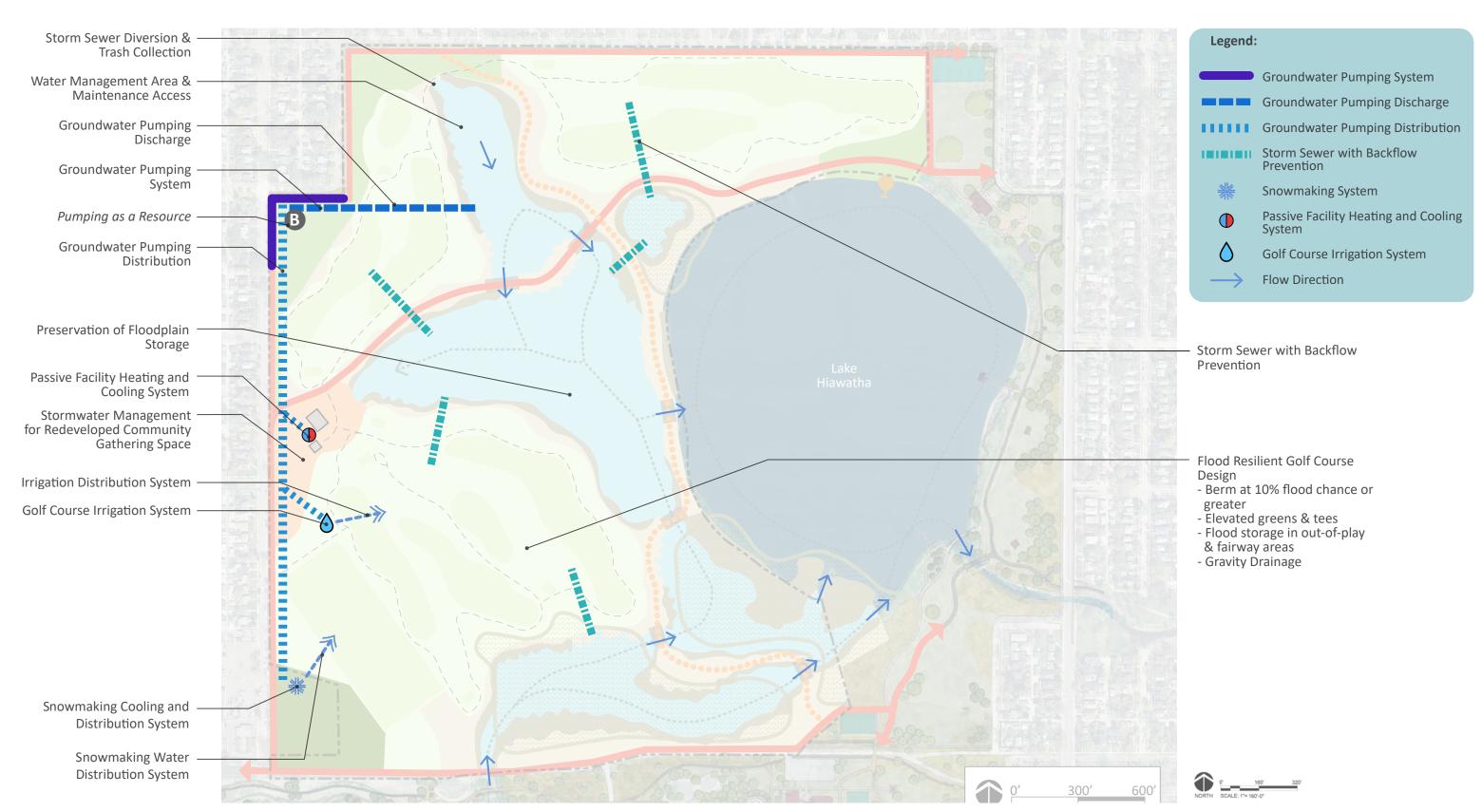
Trash in Lake Hiawatha (Source: Friends of Lake Hiawatha)



Snowmaking at Theodore Wirth (Source: MPRB)



4.3.2.1 Water Management Solutions Elements



4.3.3 Golf Within the Property

A Learning Facility

Golf at the Hiawatha Golf Course will be designed to be an inclusive and accessible Par 36, 9-hole course, catering to players of all skill levels. The programming will focus on learning the game of golf and inviting non-golfers to start playing. Programs like The First Tee of the Twin Cities and Minneapolis Public School teams can offer youths a chance to learn the game and the values golf teaches. While offering a space for learning, the design will also provide enough interest and challenge for the more advanced golfer. The redesign of Hiawatha Golf Course will include comprehensive practice facilities such as a driving range, multiple putting and chipping areas, indoor golf simulator, multi-purpose classroom, and other skill-development features.

Designed for Flood Resilience

Although the course will remain in the floodplain of Minnehaha Creek, it will be designed to be more flood-resilient—improving drainage, elevating all golf play spaces above the normal water levels on Lake Hiawatha, and elevating critical features (greens, tees, etc.) above the 10%-annual-chance flood elevation. Additionally, the design will focus on improved drainage from the golf course area so there is decreased recovery time and golf rounds resume more quickly with less loss in revenue.

Providing a Healthy, Safe, and Eco-Friendly Community Space

Some golf carts will remain for those who wish to use one; however, the plan will focus on the walkability of the course. Additionally, the course layout will be designed considering integration with other uses in the park; the uses would be separate, but integrated. Safety of park users is of the utmost concern. Netting will likely be necessary in some places; however, providing the appropriate safety margins and buffers to eliminate fencing and netting where possible is the plan's goal. Out-of-play areas will provide opportunities for ecological restoration, habitat creation, and development of additional flood storage. Pumped water will be used for irrigation. To make the golf course and its operations more sustainable, the MPRB will maintain a certification through the Audubon Cooperative Sanctuary Program for Golf.

4.3.4 A New Community Gathering Space

Shared Sustainable Spaces

The plan shows the need for a new clubhouse clearly oriented to serving the needs of golfers, a main park building that brings together golfers









Add elements that attract new golfers and support and improve the existing golfers' games



Continue to support inclusivity



Flood resilient design at Owatonna Country Club



Natural restoration within the golf course at Chambers Bay Golf Course

and birdwatchers, paddlers, runners, and bicyclists in a setting meant for gathering and exchange, where stories about their individual experiences on the site are shared. The addition of a Lake House is a restorative retreat oriented to a healing water experience. Each of the three new buildings work together as one but provide a distinct service to each user.

Through the lenses of ecology and sustainability, a new community gathering space will be greated poor the ovicting slubbours on the

Through the lenses of ecology and sustainability, a new community gathering space will be created near the existing clubhouse on the hill adjacent to the intersection of Longfellow Avenue and East 46th Street. Three new buildings, using pumped groundwater for heating and cooling, are proposed and are meant to be used and shared by golfers, neighborhood residents, and regional park visitors.

To the extent possible, this area will strive to meet LEED and SITES sustainability certifications and/or a zero-net energy building.

New Main Park Building

The new main park building will house several shared assets, including a restaurant and bar, a banquet space, kitchen, restrooms, walk-up food window, informal lockers, multi-purpose classroom (for nature education, art, etc.), open space for golf simulators, large decks/patios with various seating options, and fire pits for extended seasons. There will also be a separate dog-friendly patio. It will be situated to take advantage of views of the golf course and views to the new open water of the expanded Lake Hiawatha. The two-story building will be set into the hillside and be the same relative height as the existing clubhouse building.



The new golf clubhouse will sit to the south of the main building, attached by a shared deck/patio. It will include a large deck/patio with various seating options, point-of-sale space, a small pro shop, golf equipment rentals, informal lockers, a trophy display, access to golf pros, and access to a golf simulator and a multi-purpose classroom in the new main building. There will be an opportunity to bring wooden post and beam or other historic elements of the existing clubhouse, like the hand-made chandeliers, into the new clubhouse. The master plan proposes a pergola over the deck facing out to the course and lake.

New Lake House

At the new edge of the lake, a small building for summer and winter rentals will be situated on a platform structure that elevates its floor level above the existing flood elevation. Visitors may rent canoes or kayaks from this location during the warmer months and rent skates and warm up in the winter months. The platform will serve as a flood-resilient space for rentals or just for hanging out.

New Arrival Experience and Sustainable Parking

The new parking lot will take advantage of existing parking surfaces as much as possible and open up a large rainwater garden in its center; parking will be expanded to the south. Upon arrival to the site, vehicles entering the existing drive will be greeted with a lovely view of one of the putting greens and an overlook of the golf course and lake. Parking will be available to the right or left of the entry drive, and a drop-off area will be located to the left, in front of the new buildings.



Shared, flexible patio space



Support winter activity



City Park Golf Course Clubhouse, Denver, Colorado



Floodplain house (Source: www.paulhirzel.com)



4.3.5. Integration with Other Uses

There is a unique opportunity to immerse new activities fully within a landscape that places water first and recreation second, and in doing those things creates an elevated place for nature. Then, human activities are added where they don't disturb the core goal of healing and restoration.

Addressing Community Needs and Priorities

The public supports diversifying ecologically driven experiences on the site beyond just golf. This addresses some of the needs identified in the larger Nokomis-Hiawatha Regional Park Master Plan, which includes golf course property. Community priorities include:

- Creating both active and passive recreation areas
- Improving trail connections
- Preserving nature and wildlife
- Expanding water access
- Developing more community gathering spaces
- Enhancing winter recreation
- Providing opportunities for public art

Improving Access for All Users

Proposed trails provide numerous connections to the surrounding neighborhood and throughout the larger regional park. These trails include paved trails for bicyclists and pedestrians, natural surface tails for pedestrians, and bridges and/or boardwalks over low areas and open water. A complete looped trail around Lake Hiawatha and the expanded area of the lake is included. For those choosing to walk around the lake, the restored ecology of the golf course is made part of their daily routines.

Access via a water trail through the constructed wetlands will welcome paddlers to explore Minnehaha Creek and Lake Hiawatha in new ways. Several new water access points with canoe/kayak launches and storage racks will be included. A fishing pier will also be added on the north shore of Lake Hiawatha.

Enhancing Experiences through Multi-Functional Spaces

Expanded community gathering spaces are highlighted in the plan, with the proposed improvements in the clubhouse area not only supporting golf but also serving as a new year-round hub for the surrounding community. Passive open spaces for informal play have been preserved based on feedback from the public. The plan provides new picnic facilities for use by neighborhood residents. The "experiences" identified by the plan highlight the significance of the cultural and natural history of this site, lending themselves to the creation of public art and interactive experiences for park users. This overlapping use



Simple outdoor recreation space



Added paddling opportunities



Birding and wildlife viewing





New trail experiences



More ways to enjoy the water

and flexibility in park space and experience offers more substance to more park users and the ability to adapt spaces over time to consider recreation trends.

Community feedback indicated that increased traffic and on-street parking are concerns; concern was also expressed about developing additional parking lots on the property. As future phases of the project continue, the MPRB will work in partnership with the City of Minneapolis to further evaluate parking and traffic concerns in the neighborhood. The master plan expands the existing parking at the clubhouse area only.

4.3.6 Winter Recreation

Creating a Winter Recreation Destination

The proposed plan creates a winter recreation destination in the heart of South Minneapolis—something valued by the community. The expanded clubhouse serves as the jumping off point in the park and includes gathering spaces, access to food, winter equipment rentals, and an outdoor patio with fire pits. Park users will be able to get out, relax, and enjoy the Minnesota winters. Winter activities will include:

- 4–5 km of groomed cross-country ski trails aligned to minimize impacts to the golf course
- Cross-country ski stadium area
- Sledding area on the slopes near the clubhouse
- Ice skating loop on the expanded lake
- Winter walking trails
- Ice fishing
- Fat biking on groomed trails and on Minnehaha Creek and Lake Hiawatha, as conditions allow

Creative Water Reuse for Recreation

The winter recreation program will include a snowmaking system utilizing the pumped groundwater for more consistent recreation opportunity throughout the winter.

Similar to Theodore Wirth Regional Park, the MPRB hopes to build a partnership with an organization to program, operate, and maintain the cross-country ski trail system.





Snowshoeing and sledding



Ice fishing



'ce skating



Fat biking

2

4.3.7 Restoration Opportunities Abound

Habitat Preservation and Ecological Restoration

The pre-European settlement landscape of this area was a matrix of upland prairies, oak woodland/savanna, and brush land with wetlands and wet prairie communities found along the stream corridors, bordering lakes, and in low depressions. Much of the low area of the golf course was part of a wetland complex known as Rice Lake prior to the dredging of the property in 1929.

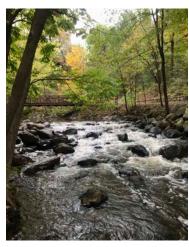
The master plan protects existing areas of important habitat for wildlife that were identified by the public. The plan balances the desired recreation activities with the restoration of a variety of ecosystems on the site including open water aquatic habitat, wetland and shoreline restorations, riparian buffers, and upland prairies and oak savannah. This includes incorporation of ecological restoration within the golf course in out-of-play areas.

Not only do these diverse restorations create habitat, they can also help mitigate the impacts of climate change. They can remove atmospheric carbon dioxide through carbon sequestration or capture and long-term storage within trees and native perennial grass plantings and soil organic matter. Additionally, the restorations improve the flood resiliency of the site to better accommodate changing precipitation patterns and flows.

Flows on Minnehaha Creek are highly-managed by the operation of the Gray's Bay Dam at Lake Minnetonka. As a result, successful ecological restoration will need to consider the managed hydrologic conditions at the site (i.e., fluctuations in water levels, including the depth and duration of flooding) as well as the historic seed bank that exists in the site soils. Although some tree removal will be required with the implementation of the master plan, reforestation and replacement of trees is expected. Tree removals will be offset through the creation of more sustainable and self-perpetuating landscape patterns. Reforestation of the site should target floodplain forest, floodplain terrace forest, and mesic forest species, selected based upon the complex hydrology.

The restoration plan should target vegetation and plantings that are appropriate for site conditions and that reduce maintenance needs while optimizing land-use experience and water management. Vegetation and plantings should also preserve and create wildlife and pollinator habitat. This includes the use of bee lawns in passive open turf spaces.

An adaptive vegetation management plan, including an integrated pest-management system, should be developed for the site as part of final project design. Maintenance during the establishment period as well as long-term maintenance is critical for a successful ecological restoration. The site will be hydraulically connected to Minnehaha Creek and Lake Hiawatha; therefore, aquatic invasive species (AIS) management and measures for common carp and other AIS should be included in the project design.





Support a wild landscape



Pollinator and native landscapes



Savanna landscape



Nature-inspired design

Pollution Reduction Throughout

In addition to creating wildlife habitat, restoration of well-established native prairies and riparian buffers can help stabilize soils and reduce movement of sediment and other pollutants (nutrients and pesticides), thereby improving runoff water quality.

The storm sewer diversion at the northwest corner of the site will ensure the opportunity to collect and remove trash from the system. And, the restoration of the adjacent open-water wetland complex will remove sediment and phosphorus loads before they reach Lake Hiawatha. It is estimated that this feature will be able to remove more than 100 pounds of total phosphorus during the growing season, a level that helps the City of Minneapolis and the MPRB achieve approximately 25% of the total phosphorus load reduction required by the EPA-approved Total Maximum Daily Load (TMDL) study for Lake Hiawatha. Most stormwater improvement projects achieve only a few pounds at most, making this a huge opportunity for the city and the community. It will be critical that the future design of these features considers long-term access for maintenance and removal of accumulated trash and sediment.

Improvements around the community gathering space will include new facilities and expansion of the parking lot. Stormwater runoff from these redevelopment activities will need to be managed to meet the City of Minneapolis and MCWD stormwater management requirements. These methods will include implementation of stormwater green infrastructure best management practices. Examples include bioretention and infiltration practices, stormwater planters, tree trenches, and permeable pavements. There may also be opportunities for reuse of stormwater runoff at the site, along with the reuse of the pumped groundwater.

The proposed changes at the site align with the MPRB's plans to pursue certification of the golf course through the Audubon Cooperative Sanctuary Program for Golf. This program helps golf courses protect the environment and preserve the natural heritage of the game of golf through a variety of components, including environmental planning, wildlife and habitat management, chemical use reduction and safety, water conservation, water quality management, and outreach and education.



Stormwater management



Responsible parking lot design



Management of the site is required





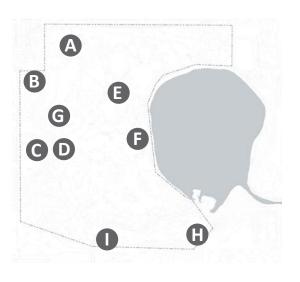
Example trash removal system (Source: Stormtrap)



4.3.8 Experiences

Through the community engagement process for the master plan, themes were identified to enrich the park experience and tell the story of the cultural and natural history of the site and its significance, based on input from the public.

The following descriptions represent a brief synopsis of ideas that should be explored further as the plan is implemented over time. These could include permanent elements and infrastructure as well as art, performance, community events, and ephemeral experiences.



A Stormwater Terrace

Improved water management is the foundation of the master plan for the site, and the Stormwater Terrace is an engaging opportunity to learn about stormwater management and all the ways the site's design is protecting and improving water resources. The Stormwater Terrace provides space for interpretive signage, public art, and interactive education.







B Pumping as a Resource

The master plan acknowledges that ongoing pumping, although significantly reduced, will still be required to protect nearby homes and basements. This pumped water is viewed as a resource, and several potential uses that have been identified should be further evaluated as the master plan is implemented. Pumped water could be used for once-through heating and cooling of the property's buildings, making snow in the winter, aesthetic improvements like public art or water features, and play opportunities.







C All Are Welcome

African Americans have been welcome at Hiawatha Golf Course since its beginning years of operation, even while segregated elsewhere in the city. Minneapolis golf courses have a rich history of welcoming all people onto the courses. Heroes like Solomon Hughes, Jimmie Slemmons, and other people of color, should be recognized and celebrated for their pioneering efforts at Minneapolis golf courses.

The MPRB will request partnerships with African American golfers and leaders in the golf community to incorporate tributes to these heroes throughout the golf course facilities so that every aspect of the golf experience is welcoming. Additionally, the MPRB recognizes the importance of inventorying the existing memorials on the site, preserving the histories of the golfers who've been recognized or contributed to the Hiawatha Golf Course. A list of known memorials can be found in Appendix M.

The golfing experience should be accessible to all people, especially focused on youth development and continuing to support and be a home course for people of color.





A Place to Learn

Based on the conversations and feedback from this process, the MPRB recognizes it is critical to develop a program at the course that attracts new players and supports the learning and education of new and seasoned golfers. The Community Gathering Area is a space that will attract non-golfers and may inspire them to learn the game. This mixture of visitors and uses will help make the course less intimidating to check out for a first-time golfer. The MPRB values relationships that foster youth development and will continue to support and partner with The First Tee program, Minneapolis Public School teams, and other organizations.





B Island Respite

Located on a newly formed island within the restored wetland, this experience encourages interaction and exploration with nature and the water's edge. Stepping off the beaten path, this space provides an opportunity to immerse yourself in a tranquil setting that allows one to take a breath and enjoy the beauty of the site.







F Telling Our Story

Dakota and Indigenous people had been living in this area in a symbiotic relationship with the Earth for thousands of years prior to European settlement. These people are still here, but living in a fractured world in need of healing. The landscape and its resources are precious and honored, especially water. As the MPRB's relationship with our Dakota and Indigenous relatives grow, projects can be formed in collaboration throughout the site and along the north/south trail along the lake's edge. Bringing back tree species like white pine, which has been decimated throughout the state and surrounding area and honoring water, rather than discarding it, can help heal the property and maybe some hearts.







G A Connection to Water

This experience reestablishes a connection from the neighborhood on the west side of Lake Hiawatha, previously disconnected by the golf course, by providing water access and experiences year-round. The complex hydrology and water-level fluctuations resulting from changes in flow on Minnehaha Creek can provide an opportunity to visually showcase that change day to day.







(H) Urban Nature

This experience is intended to highlight the juxtaposition of nature in an urban setting. Taking advantage of the existing elevation on this corner of the site, located along the Minnehaha Creek Regional Trail and Minnehaha Creek Parkway, this experience includes the creation of an iconic tower or overlook that allows for wildlife and lake views and a new perspective of downtown Minneapolis.







Celebrating Minnehaha Creek

Minnehaha Creek, the "backbone" of South Minneapolis, is a highly managed and modified natural flowing waterway through the site. This experience allows park users to engage with this significant resource which could include highlighting the watershed and stream history, crowd-sourced data collection, or the installation of art that provides real-time visualization of flows.











The MPRB operates an enterprise fund where private vendors, organizations, and its own internally run operations provide services to park visitors. Generally, these services generate revenue which is reinvested into enterprise operations and used for the MPRB general fund, supporting non-revenue recreation opportunities. Examples of services housed in the MPRB enterprise operation include food vendors/restaurants, equipment rentals, event space rentals, golf course operation, dog park permits, and pay parking. The MPRB enterprise fund generates almost a million dollars annually for reinvestment and debt service. In the Nokomis-Hiawatha Regional Park, the existing enterprise activities include the Sand Castle restaurant, Wheel Fun recreation equipment rental, pay parking lots, and the Hiawatha Golf Course.

The main components of the recommended master plan were grouped into six budget categories, shown in the table to the right. The first two categories (regional water management and park features) draw funding from the MPRB's general fund, which can be supported by many funding sources and typically do not generate revenue the same way an enterprise function might. For comparison purposes, revenues (funding from the general fund) have been included to match spending and create a net profit of \$0. The golf course, restaurant, winter, and other enterprise categories generally draw from the MPRB enterprise fund or a separate partnering agency's funds and typically generate revenue within the MPRB's enterprise program.

Specific features of the master plan design that are expected to be part of the MPRB enterprise program include the following:

- The 9-hole golf course
- Driving range
- Clubhouse/Pro shop and equipment rentals
- Golf simulators, the restaurant, and associated facilities
- Flexible event space
- Cross-country skiing activity (passes and equipment rentals)
- Canoe and kayak rentals and storage
- Dog park permits

Estimated annual revenues for the recommended plan were developed in coordination with MPRB staff and included review of comparable financial performance data. The estimates considered low and high revenues from similar operations within the MPRB system, as well as from other operations and facilities within the Twin Cities metropolitan area, both public and private. The average of the estimated annual revenue range is reported.

Category	Recommended Plan Features	Estimated Annual Revenue
Regional Water Management	Regional stormwater management systemGroundwater pumping systemWetland creation/restorationShoreline/Riparian restorations	\$60,500
Park Features	 Picnic areas Play areas Open fields Plantings Trails Experiences Parking Pavilions Lighting Local utilities 	\$232,500
Golf Course and Related Enterprise Features	 9-hole golf course Driving range and practice facilities Irrigation system Clubhouse and pro shop Golf simulators 	\$513,500
Restaurant Enterprise	 Main building and flexible event space Kitchen Bar Deck/patio and outdoor seating Dog patio 	\$435,000
Winter Activity Enterprise	Snowmaking systemGrooming equipmentCross-country ski trailsEquipment rentals	\$130,000
Other Enterprise	Lakeside buildingCanoe/kayak launchesCanoe/kayak racksEquipment rentals	\$35,000
Recommende	d Plan Estimated Total Annual Revenue	\$1,406,500



Flexible event space can be used for a variety of community gatherings (Source: MPRB)



A pro shop will continue to support golfers (Source: MPRB)

5. OPERATIONS AND MAINTENANCE

In its vision statement in the MPRB 2007–2020 Comprehensive Plan, the MPRB highlights that the park system be sustainable, well-maintained, and safe, meeting the needs of the communities and preserving and connecting people to the land. The plan also recognizes that climate change will increase the need for park operations and maintenance at the site.

5.1 Stewardship of the Property

MPRB's 2007–2020 Comprehensive Plan outlines the MPRB's commitment to stewardship of all land within the park system: "Natural resources such as land, trees, and water are the foundation of the park system and require long-term investment and care. Parks are protected to benefit the entire city; therefore, all residents have a stake in the future of these resources and bear responsibility for their stewardship. The Minneapolis Park and Recreation Board is committed to providing leadership in natural resource management, connecting people to their natural environment, and fostering a sense of stewardship." (p. 3) It's important to note that the new comprehensive plan for the parks, Parks for All, is currently underway. No policy guidance has been recommended as of the writing of this master plan. As that policy is created and new and improved methods of operations and maintenance are implemented, this master plan should be flexible enough to fit within them.

As steward of the parks of Minneapolis, the MPRB is responsible for providing daily and long-term maintenance and operations for all parks. The existing Hiawatha Golf Course area is operated and managed by the MPRB through its enterprise fund. The MPRB provides park maintenance and oversight for facility operations, recreation, and programs for its whole system. Staffing levels are increased in the summer through the employment of seasonal staff. Natural resources management services are provided by the MPRB including water resources, forestry, horticulture, and natural area management. Community volunteer groups often support MPRB management by working in natural areas, cutting invasive species, picking up trash, and other community-service-related projects. The MPRB's volunteer coordinator handles the day-to-day operations and helps the community members develop stewardship agreements that align with each park's management plans. Other operational and support services to the park include administrative services, marketing and communication, revenue handling and finance, human resources, planning and project management, research, and policing.

Future management and stewardship of the property will be funded through a combination of MPRB enterprise activities sources and regional park maintenance and operation sources. As previously mentioned, the enterprise activities sustain themselves and maintenance and operations is paid for by revenues generated, similar to a business model. The regional park operations and maintenance sources are distributed by the Metropolitan Council to all regional parks in the Twin Cities metro area according to many factors associated with each park.

Although the design of the site will improve drainage on the golf course and be resilient to periods of temporary inundation, the MPRB will need to plan for future flood damages at the golf course since the area is ultimately part of a floodplain. Most of the non-golf areas of the park that will be redeveloped for passive regional park uses will be managed through the regional park operations and maintenance system. A more naturalized landscape will be introduced to areas outside the golf

course and, to an extent, some areas within the golf course. The natural restoration areas will include prairie, meadows, savannah, wetlands, and riparian zones. These will serve as open space and natural habitat for wildlife and provide improved water management. Typically, routine maintenance will be performed by MPRB staff, while specific services for ecological restoration and habitat areas are often performed by contractors, agency partners, seasonal youth programs, and volunteers.

The MPRB will continue to work with non-profit partners on the potential management of the winter recreation systems, similar to their operation at Theodore Wirth Regional Park. Components of the recommended plan allow for improved regional stormwater and groundwater management and these systems will be managed solely by or in partnership with the City of Minneapolis.

The MPRB recognizes that successful land and resource management projects include the development and implementation of long-term operation and maintenance plans. Although details of these management plans will be developed as part of future design phases, we recommended the development of more comprehensive management plans that prescribe specific management protocol for the following:

- Groundwater pumping system
 - O A long-term maintenance plan is required for the pumping system.
 - O Additional maintenance plans may be required for any uses of the pumped water (e.g., golf course irrigation, once-through heating and cooling, snowmaking, etc.).
- Trash and stormwater management system
 - O A long-term maintenance plan and access for maintenance and removal of accumulated trash and sediment in the water management area is necessary.
- Vegetation and pest management, especially for aquatic and terrestrial restoration areas
 - O An adaptive vegetation-management plan and integrated pestmanagement (IPM) plan are required.
 - O Adaptive vegetation and IPM plans must align with MPRB IPM plans at the time of implementation.
- Maintenance during the vegetation-establishment period, as well as longterm maintenance, is critical.
- O Because the site is hydraulically connected to Minnehaha Creek and Lake Hiawatha, management measures for common carp and other aquatic invasive species should be included.

5.2 Maintenance Costs

The anticipated maintenance costs of the enterprise features such as the golf, restaurant, and rental facilities will be like those incurred at other locations within the MPRB system. General recreation facility maintenance will be funded similar to facility maintenance within the larger regional park system.

The more naturalized landscape areas may require a shift in the land management, as performed in the Hiawatha Golf Course area today. For example, those performing maintenance and management (e.g., MPRB workers or additional contracted management services) may need specific training to properly manage natural areas. However, natural area management can be targeted to very specific periods, making the overall time spent managing naturalized landscapes similar to, or less than, traditional maintenance efforts performed on the vast swaths of turf covering the course and much of the park system today. The future development of the park will increase the operations and maintenance requirements, but those expenses are generally anticipated to be offset by an increase in revenues due to expanded enterprise activities.

Category	Annual Operations and Maintenance	Source of Funding
Regional Water Management	\$60,500	Local and regional government funding
Park Features	\$232,500	Regional park operations and maintenance funding
Golf Course and Related Enterprise Features	\$513,500	Enterprise fund
Restaurant Enterprise	\$184,000	Enterprise fund
Winter Activity Enterprise	\$130,000	Enterprise fund
Other Enterprise	\$5,000	Enterprise fund
Recommended Plan Total Annual O&M Costs	\$1,125,500	



5. OPERATIONS AND MAINTENANCE

5.3 Boundaries, Acquisitions, and Conflicts

The long-term vision for Nokomis-Hiawatha Regional Park is to maintain the park with its current boundaries both north and south of Minnehaha Parkway, with no plans to acquire additional land or alter park ownership. As such, the area considered in the development of the Hiawatha Golf Course Area Master Plan is located within the larger Nokomis-Hiawatha Regional Park and is entirely owned by the MPRB. There are no anticipated boundary adjustments to the regional park resulting from this master plan amendment and there are no parcels that need to be acquired for the implementation of this plan.

Much of the land within the project area falls within the mapped floodplain of Minnehaha Creek and the recommended plan identified compatible uses in the floodplain. There are no other anticipated special assessments or other conditions that would affect park development.

5.4 Partnerships

The MPRB engages many partners including government agencies, non-profit organizations, and for-profit organizations to provide an award-winning park and recreation system and fulfill the Park Board's mission. These partnerships strengthen stewardship of the parks. The recommended plan for the Hiawatha Golf Course area will continue to build on existing partnerships for additional data collection needed to inform final design, implementation of the master plan, and management of the park and natural resources.

Anticipated project partners will include the Metropolitan Council, the Minneapolis Parks Foundation, the City of Minneapolis, the Minnehaha Creek Watershed District, the Loppet Foundation, the First Tee of the Twin Cities, local school golf teams, golf leagues, and future restaurateurs and concessionaires. The MPRB has an opportunity to engage with these project partners along with other community organizations, such as the Friends of Lake Hiawatha, as future phases progress.



The Loppet Foundation has been a critical partner at Theodore Wirth Regional Park (Source: MPRB)

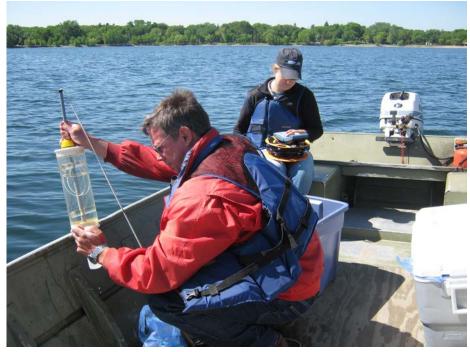
5.5 Public Services

Most of the Hiawatha Golf Course Area Master Plan can be developed without extensive investment in public infrastructure, services, and utilities. Because of its location within the city, there is direct access to electricity, gas, water, and sewer services to implement the plan. City water, sanitary sewer, gas, and electric service is currently provided to the site at the existing clubhouse location at the intersection of 46th Street and Longfellow Avenue. The new proposed facilities at the clubhouse area may require updates to the existing utility connections due to the increase in facility size and capacity, which will be further evaluated in future phases of project design. These costs have been factored into the project costs. However, there are no new proposed facilities (e.g. buildings/plumbed restrooms) at other locations within the park area that will require new public services.

The existing clubhouse has a parking lot that will be modified and expanded as part of the recommended plan. There is on-street parking on the streets to the west and north of the golf course area and no additional parking is proposed within the park as part of the recommended plan. There are no anticipated changes to the roads surrounding the Hiawatha Golf Course area which include 43rd Street to the north, Longfellow Avenue to the west, and Minnehaha Parkway to the south. However, the regional master plan includes improvements to the regional trail crossing at Minnehaha Parkway, adjacent to this master plan amendment area, which will require continued coordination with the City of Minneapolis. With the recommended trail improvements, it is expected that many park users will arrive on bike or foot, and bike parking is planned for the clubhouse area and other gathering spaces.

Because improved water management and reduced pumping were drivers for this master plan, there are several infrastructure components related to the stormwater and groundwater management that are critical to the implementation of the plan. Stormwater management, as it relates to the implementation of the master plan, will be designed in accordance with the stormwater management rules of the City of Minneapolis and MCWD. Additionally, the regional stormwater management infrastructure will include diversion of the storm sewer system at the corner of 19th Avenue S and 43rd Street into the Hiawatha Golf Course through the proposed water management area that will provide water quality treatment and help reduce flooding in the larger Lake Hiawatha watershed to the north. This diversion will also allow for the incorporation of trash collection and management to help reduce the trash load to Lake Hiawatha from the northern watershed. This system would be constructed and managed in partnership with the City of Minneapolis.

A new groundwater pumping system is proposed as part of the recommended plan to reduce groundwater pumping at the site while still protecting basements of nearby homes. Preliminary evaluation indicates that the groundwater pumping infrastructure will include strategically placed wells that will continuously monitor groundwater levels and direct two dynamic pumping systems: a drain tile pumping system at the corner of Longfellow Avenue and 44th Street and a well pumping system at E 43rd Street and 17th Avenue S. Further data collection and updated groundwater modeling during future phases will refine the proposed groundwater pumping system design.



MPRB staff conduct lake water quality sampling (Source: MPRB)



Working with the Mississippi River Green Team to manage native plantings (Source: MPRR)

5. OPERATIONS AND MAINTENANCE

5.6 Accessibility

The MPRB continually strives to provide equal access and equal opportunities for all residents to its neighborhood and regional parks and trails which are open to all community members. As outlined in the Nokomis-Hiawatha Regional Park Master Plan, the MPRB is committed to connecting park users to the land and each other. The 2007–2020 Comprehensive Plan identified the following three strategies specifically related to accessibility and special needs populations:

- Build or renew facilities to meet or exceed standards for accessibility (pg. 27 of the 2007–2020 Comprehensive Plan)
- Ensure that recreation opportunities are available for persons with disabilities (pg. 20)
- Identify and reduce physical and financial barriers to participation in programming (pg. 20)

New facilities and amenities within the Hiawatha golf course area will be designed to meet the requirements of the Americans with Disabilities Act (ADA), as well as principles for universal accessibility. Existing facilities that do not meet ADA requirements shall be rehabilitated to meet ADA standards as requirements dictate.

Because cost can also be a barrier for park and recreation use, most of the park amenities and facilities will not require a fee for public use, as is consistent with MPRB policy throughout its system. Amenities such as multi-use and pedestrian-only trails, community gathering spaces, picnicking, play spaces, and public water access points are generally provided free of charge. Some of the amenities proposed for the Hiawatha Golf Area that could have minimal associated user fees include:

- Boat storage at Lake Hiawatha
- Rental fees for canoes and kayaks
- Rental fees for large gathering spaces; however, reduced-fee arrangements will be available for recreational programming
- Purchase of food and drink from the concessionaire at the improved clubhouse

Additionally, there are fees associated with the use of the Hiawatha Golf Course for golf, use of the driving range, and use of other golf-specific facilities (equipment rental, golf cart rental, virtual simulators, etc.). Historically, Hiawatha Golf Course has served a diverse community with a wide-range of ages—acting as both a learning center for youth and high school teams and a home course for those that have golfed for 40 or more years. Discounted rates are available for adults over 55 and for juniors. Practice facilities, such as the putting greens and pitching and chipping areas, are free to anyone. The MPRB recognizes the importance of Hiawatha's role as an inclusive learning facility and intends to keep golf at the course as affordable as possible.

Although many existing users of the site arrive by car, there are several public transit options for visitors not carrying golf clubs. The Light Rail Transit (LRT) Blue Line runs along Hiawatha Avenue, approximately a half-mile east of Lake Hiawatha. The closest LRT transit stations are at 38th Street S and 46th Street S.

Bus connections can be made from 38th Street and 46th Street LRT Stations and several city bus routes provide nearby transit access to the Hiawatha Golf Course area:

- Bus Route 22 travels north-south on 28th Avenue S and accesses the Blue Line LRT at the 38th Street Transit Station.
- Bus Route 46 runs east-west along 46th Street (west of the park) and 42nd Street (north of the park).
- Bus Route 14 runs east-west along 42nd Street (north of the park).

The 46th Street S LRT station is near trails along Minnehaha Creek, providing offstreet bicycle and pedestrian access to the park.

There is biking access to the Hiawatha Golf Course area via the 21st Avenue, 42nd Street, and 46th Street bikeways. With the addition of bike parking and multi-use trails throughout the site, we expect many park users to be arriving by bike or on foot. Nice Ride has stations throughout the area, as well as a new dockless bike program, allowing visitors to arrive by rented bike. With the addition of water trails and non-motorized landings some visitors may also arrive by canoe or kayak.



There are several public transit options for visitors to the Hiawatha Golf Course area.

6.7 Ordinances

The MPRB has adopted a set of ordinances which define the rules and regulations for Minneapolis Parks to provide for:

- 1. The safe and peaceful use of the parks and corresponding facilities.
- 2. Educational and recreational benefits and enjoyment of the public.
- 3. Protection and preservation of the property, facilities, and natural resources.
- 4. The safety and general welfare of the public.

A copy of the ordinances may be obtained from the MPRB web site (www. MinneapolisParks.org), and rules and regulations are also posted throughout the Minneapolis Parks' properties and facilities.

6.8 Public Awareness

The high public interest in this project and the location of the Hiawatha Golf Course area—within the heart of South Minneapolis and the larger Nokomis-Hiawatha Regional Park—will help make the public aware as park development progresses. Ongoing community engagement will be a critical part of the future design process.

The MPRB will publicize and promote the Hiawatha Golf Course area along with the larger Nokomis-Hiawatha Regional Park through a variety of established channels, including its website, social media, publications, community newspapers, and other media. Grand openings, press releases, and integration with school and recreational programs will also expand awareness. Within the Hiawatha Golf course area trails will be signed, and current MPRB system maps will be incorporated as progress is made in extending trails and making connections to the larger Nokomis-Hiawatha Regional Park.



Implementation of the master plan will not occur overnight and will likely take years, if not decades, to fully implement. The master plan lays out the framework to begin the process of implementation, including working with identified project partners, fundraising, and conducting the additional investigations that will be needed to proceed with project feasibility and design.

6.1 Project Cost

The recommended plan includes a variety of improvement projects that will work to achieve the overall vision for the park. This master plan is a long-term plan that may take many years to fully implement. The estimated development costs for implementing the recommended Hiawatha Golf Course area master plan are \$43 million.

Category	Subtotal ¹	Mobilization ¹	Contingency ¹	Studies, Design and Engineering, Permitting ¹	Project Total ¹	MPRB Fund
Regional Water Management	\$3,025,000	\$150,000	\$795,000	\$990,000	\$4,960,000	General fund
Park Features	\$9,880,000	\$490,000	\$2,600,000	\$3,300,000	\$16,270,000	General fund
Golf Course and Related Enterprise Features	\$6,800,000	\$350,000	\$1,750,000	\$2,300,000	\$11,200,000	Enterprise fund
Restaurant Enterprise	\$3,870,000	\$190,000	\$1,020,000	\$1,270,000	\$6,350,000	Enterprise fund
Winter Activity Enterprise	\$2,300,000	\$115,000	\$600,000	\$755,000	\$3,770,000	Enterprise fund
Other Enterprise	\$272,000	\$14,000	\$73,000	\$91,000	\$450,000	Enterprise fund
Recommended Plan Total Project Cost	t				\$43,000,000	

¹ The total estimated planning-level capital cost for each project is calculated using previously known construction costs, example bids, and other similar example projects. The costs also include mobilization (5%), contingency (25%), and engineering, design, and permitting (25%). All costs are computed in 2020 dollars and are subject to change as further design is completed. Additionally, an inflation factor should be added for each year beyond this date. Although the point estimate is presented, there is cost uncertainty and risk associated with this concept-level design ranging from-25% to +50% per industry standards (ASTM E 2516 11 Standard Classification for Cost Estimate Classification System).

Because of the complicated hydrology and interactions between the land and adjacent water resources, it is difficult to break the recommended master plan into smaller, phased projects without a holistic understanding of additional site details. Further data collection and a phased design approach will provide more of the technical details that will be needed to determine if/how a phased-implementation approach may be possible.

The following is a summary of the estimated annual operation and maintenance costs, the estimated annual revenue, and the net revenue based on the recommended plan.

Category	Annual Operations and Maintenance	Annual Revenue	Net
Regional Water Management	\$60,500	\$60,500	\$0
Park Features	\$232,500	\$232,500	\$0
Golf Course and Related Enterprise Features	\$513,500	\$513,500	\$0
Restaurant Enterprise	\$184,000	\$435,000	\$251,000
Winter Activity Enterprise	\$130,000	\$130,000	\$0
Other Enterprise	\$5,000	\$35,000	\$30,000
Recommended Plan Total Annual Summary	\$1,125,500	\$1,406,500	\$281,000

6.2 Project Phasing



Additional studies



Feasibility and preliminary design studies and interpretive planning



Final design and permitting



Project construction

Areas requiring further data collection and study to inform future phases of site design include:



Pumping Monitoring

The MPRB is currently monitoring pumping magnitudes and duration at all pumping systems within the Hiawatha Golf Course area. This information will be used along with additional groundwater monitoring to inform the pumping system design.



Basements Floor Surveys

Although the MPRB and City of Minneapolis collected measurements of basement floor elevations at 28 homes during the 2017 study, not all homes were surveyed. This information will be critical for the future evaluation and design of the proposed pumping systems to be located northwest of the golf course. This should include collection of basement floor elevations for low areas west of the golf course as well as around Bloomington Pond/Bancroft Meadows and Sibley Park.



Traffic Studies and Counts

Although there is traffic count data on Cedar Avenue, 46th Street, and along Minnehaha Parkway, there is currently no traffic count data available along Longfellow Avenue or 43rd Street on the west and north edges of the Hiawatha Golf Course. Collecting additional traffic data in partnership with the City of Minneapolis before any changes are made to this area can establish the baseline average daily traffic count and turning patterns for existing conditions at the Hiawatha Golf Course (operation as an 18-hole course with existing clubhouse) and can be used to inform design.



Groundwater Monitoring

The addition of groundwater monitoring wells in the area west of the Hiawatha Golf Course will help to better understand the current groundwater conditions, especially north and west of the Hiawatha Golf Course, and refine the groundwater modeling that will be used during project design. Locations where City of Minneapolis and the MPRB should consider additional monitoring wells include the following:

- Sibley Park
- Powderhorn Park
- Bloomington Pond/Bancroft Meadows
- McRae Park



Geotechnical Investigations

The Hiawatha Golf Course is located in an area that was historically wetland and the golf course was constructed on spoils dredged from the wetland to the east. Often these wetland soils can continue settling or cannot handle significant loads. Geotechnical investigations can identify locations of peat or deep areas of peat within the golf course and can influence future site design.



Wetland Bank Establishment

In light of current wetland regulations, it will be necessary to meet with the State of Minnesota Board of Water and Soil Resources (BWSR) to discuss how wetland banking may fit into the overall project goal. With current regulations, Hennepin County encourages applicants to make a 1:1 replacement. In addition, the MCWD Wetland Rule requires replacement in a preferred sequence which could drive the need for a local wetland bank within the watershed. It usually takes quite a while to establish a wetland bank (at least 1–2 years for approval), and the wetland bank plan needs to be approved before construction begins. This means the plan would need to be done as part of the planning and design process. There is currently one wetland bank within the Minnehaha Creek watershed and wetland banking credit sale prices can vary significantly, with the state setting guidelines for wetland bank credits.





Feasibility and Preliminary Design

This first phase of design will utilize the recommended master plan, past technical studies, and the recommended data collection studies to develop a preliminary site, infrastructure, and pumping system design. This first step in design will develop the overarching site-grading plan to demonstrate the preservation of the floodplain storage. This will include:

- 1. Layout and preliminary design of critical components of the recommended plan such as the regional stormwater management features (e.g., storm sewer diversion, open water management area, modifications to Minnehaha Creek).
- 2. The club house area improvements.
- 3. Golf course features (holes, driving range, practice facilities, cart paths).
- 4. Multi-use and pedestrian trails and connections to the neighborhood and larger regional park.
- Water access.
- 6. The larger overlook area. As part of this feasibility and preliminary design, cost estimates will be further refined.

A more-detailed phasing strategy for implementation of portions of the recommended master plan can be developed based on the technical understanding of how the overall site will need to perform and work together to achieve the water management goals, including coordination with the City of Minneapolis Public Works. This phase will include ongoing community engagement. Although permitting through the various agencies will not be pursued during this phase, agency staff will be engaged to review the preliminary design and provide direction and input based on anticipated permitting requirements. Additionally, this may be the appropriate phase to conduct the Environmental Assessment Worksheet (EAW) process and pursue further funding to support final design and construction efforts.



Interpretive Planning:

Although the recommended plan has acknowledged the importance of the site's cultural history, further community engagement and partnerships during the future design process will be critical to defining the specific project details that capture this history in a meaningful way.

Conversations with African American golfers during the public engagement process and focus sessions highlighted the leadership and contributions of Solomon Hughes and Jimmie Slemmons at the Hiawatha Golf Course. These local golf heroes, others of their generation, and Black golfers today push to make golf at Hiawatha and other Minneapolis golf courses welcoming, fun, and safe. Conversations with Black golfers must continue as the golf course design is developed so that these histories are baked into the design and not unjustly added later. True honoring is not found in a plaque or a statue, but in the uplifting of people by a myriad of sources, including hiring more people of color; awarding scholarships to new golfers; offering places to gather, talk, and play; purposely seeking out new diverse golfers; and educating people on the history of Minneapolis golf courses. There is a great deal of cooperation, partner-building, learning, and listening that must be done prior to any changes at the site to ensure the MPRB best honors the inclusive history at Hiawatha Golf Course.

In addition to preserving golf at the site and providing a learning facility, the MPRB will continue to engage with the golf community throughout the design process—developing the course's features and programming to support the needs of a diverse community while improving the playing conditions and user experience.

There are several memorials that exist on the Hiawatha Golf Course property. These will be cataloged and notifications sent out prior to moving or removing according to MPRB policy at the time. A list of known memorials can be found in Appendix M.

As part of the focus group sessions, the history of the Dakota people was presented, and a dialogue was started with the Dakota community. Although many issues were discussed, several topics emerged from the conversations. Members of the tribe spoke about the significance of this area to the Dakota and other tribes, with the larger area around Fort Snelling being both a place of genesis and genocide. Having this area acknowledged as a Dakota place would be powerful. With the future changes at the site there is an opportunity to reconnect with nature and let the land heal. Other comments from the focus session suggested that the Dakota people have felt invisible, that people often think of the Dakota people as if they only existed in the past when there are many Dakota here today. Making the Dakota people visible and have part of their story told is important. There is a rule in Dakota histories and stories called "Owóthanna," which means they tell it straight nothing is added, changed, or left out. Conversation with the Dakota community started with the master planning process; this connection will continue to be fostered through future phases of project implementation, giving the Dakota a platform to tell their story.



Final Design, Permitting, and Construction

Depending on the implementation phasing strategy, the final design and construction phase could potentially be implemented as one single project or as multiple projects of varying size and magnitude. The final design phase will include further community engagement in project design, coordination with City of Minneapolis Public Works, work with various agencies to obtain permits, and development of construction drawings and bid packages.



The MPRB will continue engaging with project stakeholders, like First Tee of the Twin Cities, in the future phases (Source: MPRB).

6.3 Regulatory Considerations and Permitting

Because of the magnitude of change proposed, the implementation of the Hiawatha Golf Course area recommended plan will require significant coordination, approvals, and funding from other entities (e.g., the City of Minneapolis or Minnehaha Creek Watershed District), as well as several state and federal agencies, and could take several years to work through the permitting process. Based on the recommended plan and the anticipated impacts to the various water resources, we expect that the Environmental Assessment Worksheet process will occur during the preliminary design phase, while the other permits will be required and obtained as part of final design:

Agency	Permit/Approval		
United State Army Corps of Engineers (USACE)	Section 404 Permit		
United States Fish and Wildlife Service (USFWS)	Section 7 Permit		
Minnesota Department of Natural Resources (MnDNR)	Work in Public Waters Permit		
	Construction Dewatering Permit		
	Appropriations Permit		
Minnesota Pollution Control Agency	Section 401 Water Quality Certification/Anti-Degradation Rule		
	NPDES Construction Stormwater Permit		
	NPDES General Dredging Permit		
State of Minnesota Historic Preservation Office	Section 106 concurrence		
Minnesota State Archaeologist	Project approval on public lands		
Board of Water and Soil Resources	Technical Evaluation Panel (TEP) for the Minnesota Wetland Conservation Act (WCA)		
	Involvement in wetland banking, if pursued		
	City of Minneapolis TEP for the WCA		
	Floodplain permitting—no net loss in floodplain storage and no-rise certificate		
	Preliminary development review (PDR)/Modified PDR		
	Conditional use permitting		
	Modification to shoreland overlay and shoreland zoning		
	Temporary Groundwater Dewatering Permit/Long-Term Groundwater Pumping Permit		
Minnehaha Creek Watershed District	WCA local government unit (LGU)		
	 Water Resource Permit (erosion control, wetland impacts and buffers, floodplain and flooding impacts upstream and downstream of the project, water body crossings and structures, stormwater management, dredging) 		
Minneapolis Park and Recreation Board	Environmental Assessment Worksheet (EAW)		
	Construction Permit		



Many permits from local, regional, state, and federal agencies will be needed before construction can begin.



Restoring and enhancing ecological function is typically viewed favorably by regulatory agencies.



6.4 Funding Sources and Strategies

The master plan establishes a long-term vision for improvement for the Hiawatha Golf Course area, which is a complete re-envisioning of the site. The estimated cost of \$43 million for plan implementation reflects the cost to the MPRB if no outside funding is available. However, given its location within a regional park and the opportunities to help address regional water management issues beyond the park boundary, this master plan will likely be implemented with funding from both the MPRB and outside sources. Significant efforts will be needed in subsequent years to identify new funding sources, grants, donors, and partnerships to supplement existing local, regional, and state funding. MPRB will actively seek grants, collaborative funding agreements, donations, volunteer projects, and multi-agency projects to reduce the total cost to the MPRB. This will require participation by a number of project partners that could include, but is not limited to, the City of Minneapolis, MCWD, MnDNR, Metropolitan Council, Hennepin County, non-profit entities, and community volunteers (e.g., Friends of Lake Hiawatha).

Nokomis Hiawatha Regional Park's maintenance and operations outside the golf course are supported by state funding through lottery proceeds and not solely born by local tax payers. Similar projects, such as Water Works near the Stone Arch Bridge, or the Minneapolis Sculpture Garden were constructed not with local tax payer funds only, but by region-wide tax payers, grants, donations (very large to very small), and state bonding paid back over several years.

MPRB Fund Potential Funding Sources General Fund Local and state bonding • Regional park grants and others (Examples: State of Minnesota Clean Water Fund Grants, Minnesota Department of Natural Resources Flood Damage Reduction Grants, Minnesota Department of Natural Resources Fishing in the Neighborhood program, Metropolitan Council Regional Park Grants, Legislative-Citizen Commission on Minnesota Resources, Conservation Partners Legacy, Hennepin County Natural Resource Opportunity Grants, Federal Grant Opportunities [Federal Recreational Trails Program], 319/PFA Grants) • Non-MPRB funding (Examples: City of Minneapolis, various local and regional agencies [Metropolitan Council Regional Park funds, Minnehaha Creek Watershed District]) • Philanthropy (Examples: Minneapolis Parks Foundation—Water Works and Hall's Island) • Wetland banking credit sale (if wetland bank established) **Enterprise Fund** • MPRB enterprise revenue (Examples: MPRB Golf Course Enterprise Fund, net revenues) • Partnerships (Examples: concessionaire, restauranteur, non-profit entities Sponsorships • Philanthropy (Example: Minneapolis Parks Foundation)



Minnehaha Creek will remain a key feature of the park after implementation of the master plan.

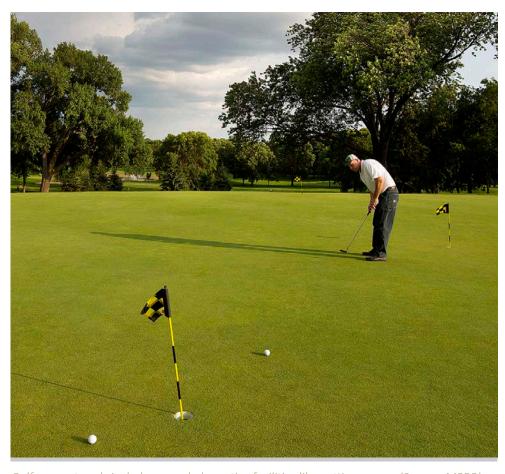


The master plan preserves golf for users of all ages.

The following table summarizes the anticipated funding sources for the identified expenses for the proposed master plan, organized by major category. There are a variety of different funding sources that will be used to support the implementation of the various components of the master plan.

Category	Expenses	Funding Sources
Regional Water Managaement	Capital	 Shared by City of Minneapolis and various local and regional agencies: State of Minnesota Clean Water Grant Funds, Minnesota Department of Natural Resources Flood Damage Reduction Grants, Conservation Partners Legacy, Hennepin County Natural Resource Opportunty Grants, Federal Grant Opportunities, 319/PFA Grants, Wetland Banking
	Annual Operations and Maintenance	 Shared by City of Minneapolis and various local and regional agencies
Park Features	Capital	 MetCouncil Regional Park Grants, Legislative Citizen Commission on Minnesota Resources, Minnesota Department of Natural Resources Fishing in the Neighborhood Program, Conservation Partners Legacy, Hennepin County Natural Resource Opportunty Grants
	Annual Operations and Maintenance	 Regional Park Operations and Maintenance (MN Lottery Proceeds)
Golf Course and Related Enterprise Feature	Capital	MPRB Golf Course Enterprise Fund, net revenue over time
	Annual Operations and Maintenance	Revenue, MPRB Enterprise Fund
Restaurant Enterprise	Capital	Partnership with restauranteur, net revenue over time
	Annual Operations and Maintenance	Revenue
Winter Activity Enterprise	Capital	Partnership with non-profit entity, net revenue over time, philanthropy
	Annual Operations and Maintenance	Revenue, philanthrophy
Other Enterprise	Capital	Partnership with concessionaire, net revenue over time
	Annual Operations and Maintenance	Revenue





Golf course trends include expanded practice facilities like putting greens (Source: MPRB).



