

MCWD 50TH ANNIVERSARY

Celebrating 50 years of protecting some of our state's most iconic resources

Photo Credit: Tom Dixon

It is no accident that most of the world's great cities are built around great bodies of water. Whether providing essential services like drinking water, power for milling, navigation, or serving as a community gathering point, lakes and rivers underpin our sense of place around the world.

The Minnehaha Creek Watershed District (MCWD) came into being in 1967, at the request of residents concerned about flooding on Minnehaha Creek, to protect and improve the waters within its boundaries. In all, there are 129 lakes, eight major streams and thousands of wetlands in the 181 square-mile watershed. Among these resources are some of the state's most treasured waters, including Lake Minnetonka, the Minneapolis Chain of Lakes, Minnehaha Creek and Minnehaha Falls. These natural resources are not only an environmental concern - they are central to the economy, livability and sense of place in our communities.

In the 50 years the MCWD has been working to bolster quality of water and quality of life, a lot has changed. The major issues facing the health of our waters have evolved, as has our understanding of the best ways to address them. Our communities have grown and their priorities have shifted. Residents and public/private organizations have come together to accomplish some major victories for our natural resources.

This publication highlights a few of these stories from our first 50 years in relation to our five guiding principles: service, sound science, partnerships, innovation, and excellence. I hope you enjoy reading our history, and we look forward to working together to protect and improve land and water for generations to come.

Sherry White
President, MCWD Board of Managers

OUR MISSION

We collaborate with public and private partners to protect and improve land and water for current and future generations.



MINNEHAHA CREEK
WATERSHED DISTRICT

U.S. Army Corps staff use an armored car to break through the ice on a flooded Minnehaha Creek, 1966 (credit: Minnesota Historical Society)



SERVICE: 1967-1977

FLOODING AND FORMATION

The 1950's was a time of rapid expansion in the Twin Cities, fueled by a boom in population and the economy following World War II. Wetlands were drained, areas that used to be grass and trees were converted to pavement and concrete. This meant increased flooding and pollution.

Efforts to fix these problems were complicated. Because water doesn't flow along political boundaries, communities that share a lake or stream need to agree on a solution but they had little opportunity to make that happen back then.

In 1955, the Minnesota legislature came up with a new way to address water-related issues: watershed districts. These special units of local government manage water on a hydrological scale rather than by political boundaries. It wasn't a mandate, but communities that wanted one of these districts could request one.



Minnehaha Creek flooding in St. Louis Park, 1965

In the mid-1960's, flooding along Minnehaha Creek prompted residents to petition for the formation of the Minnehaha Creek Watershed District, which came into existence on March 9, 1967. Its first order of business: build an adjustable dam at the headwaters of the creek, where it flows out of Lake Minnetonka.

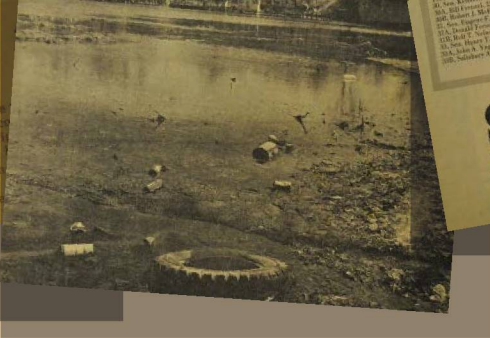
Coming up with a plan to operate the dam was complicated. Using historical lake elevations, the plan was developed to mimic natural hydraulic conditions throughout the year. Multiple stakeholders were involved, including the MN Department of Natural Resources and the U.S. Army Corps of Engineers.

It took nearly 10 years of work to come up with a plan, but the effort has been successful. The MCWD still uses this scientific model to manage water levels and coordinates with the National Weather Service to protect communities from flooding.

Lake Area Has Water Pollution Problem: Mick

Lake Minnetonka communities have a water pollution problem and are realizing they are going to have to build a central sewage disposal facility, Kerwin Mick, chief engineer of the Minneapolis-St. Paul Sanitary District, told a legislative subcommittee last week.

The central cities and the area should share the cost of transporting sewage to Park Township, which is planning to keep the rivers clean, Johnson also noted that suburban communities possible members of the district served by the



SAVE LAKE MINNETONKA

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SOUND SCIENCE: 1977-1987

LAKE MINNETONKA IN CRISIS

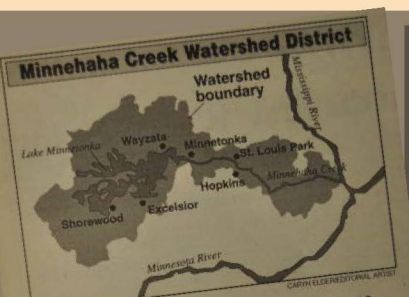
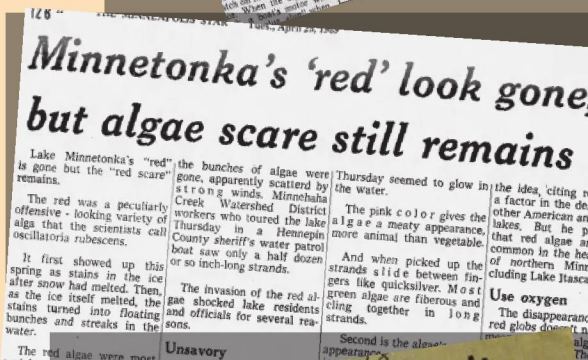
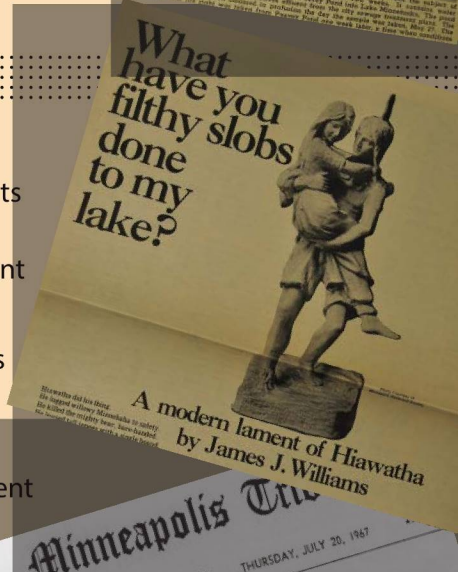
It may be hard to imagine today, but for most of the 20th century sewage treatment plants discharged wastewater into Lake Minnetonka and its tributaries. The enormous group effort to de-commission these plants in the 1970's and 1980's is among the most important events in the lake's and watershed's history.

In 1971, seven different plants were discharging wastewater into the lake. Although it was not exactly raw sewage, it contained high levels of phosphorus, which causes algae and other issues. During this time, water quality in the lake was at an all-time low.

Straining under the demands of a growing population, the inadequate municipal treatment facilities across the Twin Cities were gradually replaced by a new regional wastewater treatment system. Over the span of eight years the MCWD worked closely with local and regional governments to close the outdated plants that discharged into Lake Minnetonka. The Metropolitan Sewer Board built interceptors to route the flow to larger and more efficient central plants. As a result, Lake Minnetonka's water quality saw an almost immediate improvement.

We know this worked because of the thorough data the MCWD collects on its waters. Sound science is the foundation of all of the MCWD's work, including the ongoing effort to address the historic pollution problems in Lake Minnetonka's headwaters – the Six Mile Creek-Halsted Bay Subwatershed. Armed with results of cutting-edge research on the area's carp population and MCWD's data on the ecological health of the region, it will work with its partners on solutions that benefit our natural resources and boost the well-being of our communities.

Helping inform this work is MCWD's new E-Grade program, which is a more comprehensive system of assessing the ecological integrity of our waters and the surrounding landscape. MCWD staff are collecting and analyzing data about deep and shallow lakes, wetlands and other landscape types and evaluating how they prevent flooding, support a diverse habitat and perform other services. This will provide a more holistic view of the issues facing our natural resources and help identify solutions.



Lake Minnetonka healing itself after years of abuse

Lake Minnetonka cleanup begins to show results

By DON WOLTAT
Minneapolis Star Staff Writer

If the ecologists, engineers and politicians have done their homework right, Lake Minnetonka from now on will be getting cleaner instead of dirtier.

Over the last six months, the amount of phosphorus entering the lake has been reduced by about 75 percent.

Experts...

from sewage, and about half the sewage — that discharged from plants at Wayzata and Excelsior — has now been diverted to a new treatment plant on Lake Minnetonka near the Minnesota River.

The discharges from four other plants emptying into Lake Minnetonka — those serving Lake...

phorus, regarded as the single biggest polluter of the lake. Phosphorus is a nutrient that fosters algae growth. Algae speeds the natural eutrophication, or aging, process of lakes.

The alternative...

lake in a recent year, studies showed.

Sewage contains phosphorus, regarded as the single biggest polluter of the lake. Phosphorus is a nutrient that fosters algae growth. Algae speeds the natural eutrophication, or aging, process of lakes.

The alternative...

west portion, won't be affected at all by the Wayzata and Excelsior diversions.

When the four other treatment plants on the lake are connected to the Blue Lake plant, about two-thirds of the current sources of Lake Minnetonka pollution for more...

Approval seen for line to replace Orono and Long Lake sewer plants

By DAVID DUFF

The sewer force main that the Metro Waste Control Commission wishes to build along the North Shore of Lake Minnetonka was expected to be approved yesterday by the full commission. A committee of the commission gave it unanimous approval last week.

The cities of Long Lake and Orono are currently operating sewage treatment plants and effluent from these facilities reaches Lake Minnetonka, thus providing nutrients that hasten decay of the water quality. Orono has delayed construction for more...

not be possible along the force main route except at three locations: County Road 15 intersections, Central Avenue (Crystal Bay), Central Avenue and Hillside (east end). The cities of Orono and Wayzata could decide at a late date to build local service systems that would tap into the force main locations.

Waste control commissioners said that tapping into at any other place would be a step down the whole system spending a great deal of money.

The committee of the waste control commission last week gave approval to low bidders for...



PARTNERSHIPS: 1987-1997

IMPROVING THE MINNEAPOLIS CHAIN OF LAKES

Groundbreaking ceremony at Calhoun Pond

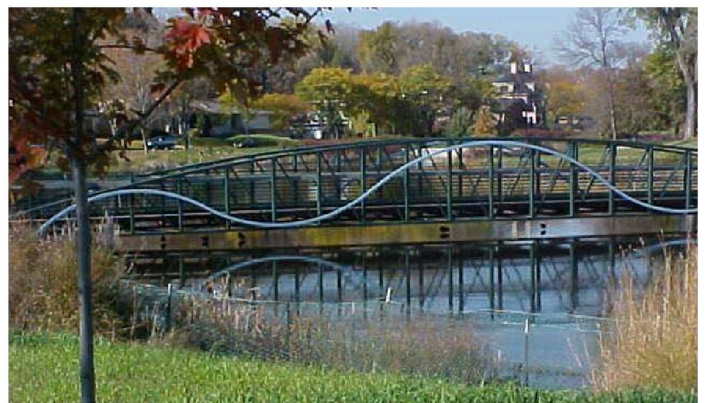
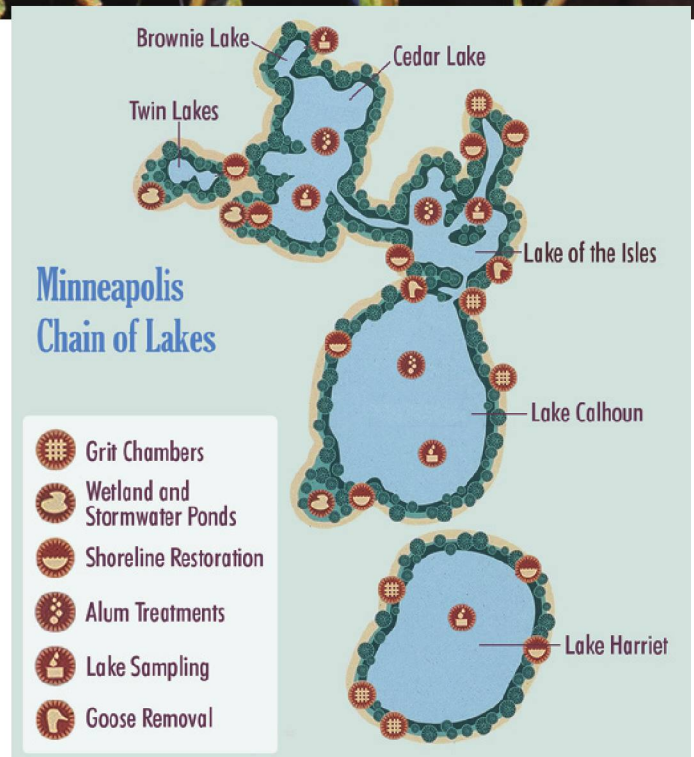
The Minneapolis Chain of Lakes are among the most visited natural resources in the state. Millions of people come to their shores each year to enjoy their beauty and serenity.

It's not easy to keep lakes in such a highly urbanized area clean and healthy. In the early 1990's the MCWD and a coalition of groups called the Minneapolis Chain of Lakes Clean Water Partnership undertook one of the largest urban water quality restorations in the nation, resulting in some dramatic improvements that we are still enjoying today.

It started with a thorough study of the lakes' problems. The study found the main culprit was phosphorus, a pollutant in stormwater runoff that promotes algae growth. To solve the issue, the Partnership built a series of ponds and wetlands to capture rainfall and remove the phosphorus and other pollutants before it entered the Chain of Lakes. Other improvements including shoreline restorations and alum treatments were completed.

Within a few years measurable improvements in phosphorus and clarity were visible and the initiative received a national award.

By collaborating to align goals and leverage resources, the MCWD and its partners achieved significant and lasting results. This spirit of partnership can be seen today as the MCWD embarks on a joint effort with the Minneapolis Park and Recreation Board and the City of Minneapolis to investigate opportunities to improve the health and recreational enjoyment of Minnehaha Creek.



Walking bridge over Calhoun Pond, one of the many projects involved in the Chain of Lakes partnership



INNOVATION: 1997-2007

WHEN BUSINESS AND NATURE MIX

Looking back at the 50-year history of the Minnehaha Creek Watershed District there are a few developments could be considered milestones that changed the course of our future work. The restoration of Minnehaha Creek at Methodist Hospital is one of those milestones. The project signaled a turning point in the District's approach. We have found success in solving problems in a manner that benefit the water resources and our partners.

In the mid-1900's Minnehaha Creek was ditched and straightened to make way for new development. Buildings were positioned with their back toward the creek, which was treated more like a ditch than an amenity.

In the early 2000's Park Nicollet approached the MCWD to expand the Methodist Hospital campus in St. Louis Park. The creek presented a significant barrier to that expansion, but the MCWD found an opportunity for a broader partnership beyond its regulatory role and crafted a solution that maximized natural resource benefits, created economic value for the hospital and provided a community amenity that boosts ecological and human health. By working together, the MCWD returned the creek to a more natural alignment and function and restored the surrounding wetlands. The hospital built an environmentally-focused expansion and a boardwalk for people to access the creek.

The project taught a valuable lesson: by finding where the landowner's and MCWD's goals aligned, they were able to build a much better project than either of them could have done alone.

Building on the success of the initial partnership, the MCWD and Park Nicollet collaborated on a flood mitigation project at Methodist Hospital in 2017 that showcases MCWD's innovative spirit and the benefits of collaborating early in a project's design process. By working together, they created a project that protects the hospital from future flooding, restores a wetland, improves ecological diversity and creates another amenity on the hospital campus.

"What we once considered a nuisance is now our greatest asset. Having a healthy stream and wetland incorporated into our Methodist Hospital campus differentiates us from other health care facilities.

This place of healing now promotes well-being inside and outside of its walls. We are thrilled with the results we've achieved by working with the watershed district."

– Duane Spiegle
VP of Real Estate and Support Services,
Park Nicollet Health Services



L to R: Cottageville Park, Boardwalk at Japs-Olson Company, and the Minnehaha Creek Preserve, all part of the Minnehaha Creek Greenway

EXCELLENCE: 2007-2017

INTEGRATING LAND USE AND WATER PLANNING

From the urban streetscape of Minneapolis to the rural landscape of Victoria, there are many challenges to providing and protecting clean water in the Minnehaha Creek watershed. Land use is changing and communities are evolving to meet the needs of their residents. To help address these challenges, the MCWD has found success in using a sustained and coordinated approach with its public and private partners that achieves significant, lasting land and water improvements.

A great example of this approach is the Minnehaha Creek Greenway. Inspired by the restoration of Minnehaha Creek at Methodist Hospital in 2009, the Greenway is a comprehensive restoration of the most degraded stretch of Minnehaha Creek through Hopkins and St. Louis Park. It consists of a series of improvements that cleans stormwater before it enters Minnehaha Creek, enhances habitat, provides more green space, improves public safety, connects people to transit and local businesses and creates jobs.

Each of these projects – Cottageville Park in Hopkins, Minnehaha Creek Preserve in St. Louis Park and the expansion of Japs-Olson Printing Company in St. Louis Park – embodies the MCWD’s “Balanced Urban Ecology” policy. By integrating land use and water planning, we have achieved natural resource, economic and social benefits.

Eight years after this effort began with the re-meander of Minnehaha Creek at Methodist Hospital, we are seeing results. The amount of phosphorus entering the creek in this stretch has been reduced by nearly one-third, a Hopkins neighborhood that was once the highest crime area in the city is now among the lowest and a business facing obstacles to expansion was able to grow.

This model of aligning goals and investments with public and private partners to reap multiple benefits is the foundation for the next decade of the District’s work under its Watershed Management Plan. By integrating its water resource work with others’ plans, the MCWD can realize its vision of a landscape of vibrant communities where the natural and built environments in balance create value and enjoyment.

BALANCED URBAN ECOLOGY GUIDING PRINCIPLES

- » We will join with others in pursuing our watershed management goals.
- » We will intensify and maintain our focus on high-priority projects.
- » We will be flexible and creative in adapting our practices to those of our partners

KEEP UP WITH US



www.minnehahacreek.org