

Minnehaha Creek

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Minnehaha Creek is located in the west-central metropolitan area. It begins at the Gray's Bay outlet of Lake Minnetonka, running through wetlands, forests, grasslands, and urban areas before plunging over the 53-foot-tall Minnehaha Falls before flowing into the Mississippi River. The creek provides opportunities for recreational activities, like canoeing and fishing, and for scenic viewing along park trails.

Flow

Stream flow, or the rate of water flowing in a stream, affects aquatic life and the ecosystem. High flows can lead to flooding and erosion, and transport pollutants.

Minnehaha Creek does not always flow year-round, and is highly dependent on the amount of water released from Lake Minnetonka, along with how much rain or snow has fallen in any given year. Since 2003, the average flow in Minnehaha Creek is nearly 46 cubic feet-per-second. At that rate, it would take Minnehaha Creek almost six days to fill the Target Center in Minneapolis.

Minnehaha Creek Annual Flows and Precipitation



Nutrients

Nutrients, like nitrogen and phosphorus, are necessary for stream health. However, elevated nutrient levels, caused by materials like fertilizers, animal manure, pet waste or grass clippings, can cause excessive algae growth and harm aquatic wildlife, insects and fish.

Minnehaha Creek has the lowest concentrations of phosphorus and nitrate of all the streams in the Mississippi River basin.

Chloride

Chloride, one component of salt, is typically used for winter road, parking lot, and sidewalk maintenance and home water softening.

Minnehaha Creek has a high concentration of chloride, like all the other urban streams, reflecting the dense network of roads and highways in the watershed.

Aquatic Insects

Aquatic insects are excellent indicators of the overall health of a stream since they spend the majority of their lives in the water, and are an important

FAST FACTS

Major river basin: Mississippi River

Water source: Surface water runoff, lake outflow

Length: 22 miles

Watershed area: 170 square miles

Watershed land use: Agriculture, forests and grasslands, high-density urban

Regional parks: Gale Woods, Morris T. Baker, Lake Minnewashta, Lake Minnetonka, Noerenberg Gardens, Minneapolis Chain of Lakes, Carver, Nokomis-Hiawatha, Minnehaha

Cooperator organizations:

Minnehaha Creek Watershed District and United States Geological Survey

Year first monitored: 1998 by MCES; intermittently from 1968 by others



0 2 4 8 Miles





Median Phosphorus Concentrations in the Mississippi River and Tributary Streams, 2003–2012



Median Chloride Concentrations in the Mississippi River and Tributary Streams, 2003–2012



food source for fish, birds and other wildlife.

Minnehaha Creek has a consistent population of aquatic insects, but analysis indicates they are being affected by pollutants. Improved water quality would likely increase the number of aquatic insects in the stream.

Sediment

Sediment from poorly-managed construction sites or eroded stream banks and gullies can decrease the light available in streams and harm aquatic life. Another term for sediment is "total suspended solids."

Minnehaha Creek carries an average of 1.5 million pounds of sediment into the Mississippi River each year (enough to fill 43 15-ton dump trucks), but its sediment levels are the second lowest of all the streams in the basin.

Preserving our Creeks

The Minnehaha Creek Watershed District is the local governing body responsible for managing the watershed and improving water quality. They partner with private landowners, cities, counties, state agencies, park boards, and other groups to complete various improvement projects, including:

- Building boardwalk and trails to improve accessibility to 4,600 feet of restored stream channel in St. Louis Park
- Beginning an aquatic invasive species inventory and management
 plan throughout the watershed
- · Restoring wetland and stream channel in Long Lake Creek
- Restoring 400 feet of stream and creating more than five acres of park land in Hopkins

Is the Stream Improving?

Long-term data analysis and computer modeling indicate that Minnehaha Creek's water quality has improved because phosphorus, nitrate and sediment levels have decreased.

Protecting the Region's Water Resources

This work supports the regional polices established in the Metropolitan Council's Thrive MSP 2040 and Water Resources Policy Plan to collaborate with partners to promote the long-term sustainability and health of the region's water resources, including surface water, wastewater and water supply.

For more information

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Visit www.metrocouncil.org/streams for the full results of the Comprehensive Water Quality Assessment of Select Metropolitan Area Streams.

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