Nine Mile Creek

www.metrocouncil.org ENVIRONMENTAL SERVICES

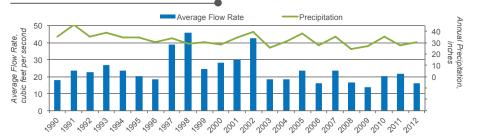
Nine Mile Creek is located in the southern metropolitan area. The creek has two forks: the north fork begins in Hopkins, while the south fork begins in Minnetonka. The two forks join together upstream of Normandale Lake in Bloomington. The Creek flows through numerous lakes, park land and the Minnesota Valley National Wildlife Refuge (providing habitat for wildlife and recreational opportunities) before entering into the Minnesota River. The creek's name is based not on its length, but on the distance early settlers had to travel from Fort Snelling to the creek crossing along Old Shakopee Road in Bloomington.

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.

Nine Mile Creek flows year-round due to lake and wetInd outflow and is influenced by how much rain or snow has fallen in any given year. Since 2003, the average flow in Nine Mile Creek is nearly 19 cubic feet-persecond. At that rate, it would take the creek a little more than 13 days to fill the Target Center in Minneapolis.

Nine Mile Creek Annual Flows and Precipitation



Sediment

Sediment from poorly-managed construction sites, farm fields, 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."

Nine Mile Creek carries an average of 2.6 million pounds of sediment into the Minnesota River each year (enough to fill 79 15-ton dump trucks), but its sediment concentration is among the lowest of the streams in the Minnesota River basin monitored by MCES.

Chloride

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

Nine Mile Creek has the second highest concentration of chloride in the Minnesota River basin streams monitored by MCES, which reflects the densely developed, urban nature of the watershed.

FAST FACTS

Major river basin: Minnesota River

Water source: Surface water runoff, wetland and lake outflow

Length: 15 miles from the north fork headwaters to the Minnesota River. The south fork is 8 miles long.

Watershed area: Approximately 50 square miles

Watershed land use: Open space, bluff land, and urban areas

Regional Parks: Bryant Lake, Hyland–Bush–Anderson Lakes

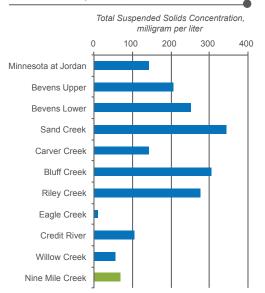
Watershed management organization: Nine Mile Creek Watershed District

Year first monitored: 1989 by MCES; intermittently since 1968 by others

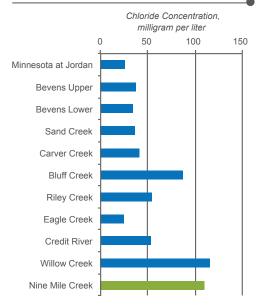




Median Sediment Concentrations in the Minnesota River and Tributary Streams, 2003–2012



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



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.

Nine Mile Creek has among the lowest nitrogen (measured as nitrate) and phosphorus concentrations of all the streams in the Minnesota River basin monitored by MCES.

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 food source for fish, birds and other wildlife.

Nine Mile 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 and variety of aquatic insects in the stream.

Preserving our Creeks

The Nine Mile Creek Watershed is the local governing body responsible for maintaining the watershed. They partner with private landowners, counties, cities, state agencies, and others to complete various improvement projects, including:

- Completing an extensive restoration of the lower creek valley to prevent erosion and restore the channel
- · Constructing rain gardens
- Constructing Normandale and Marsh lakes to control floods and remove pollutants
- Treating Bryant Lake with alum to remove phosphorus

Is the Stream Improving?

Long-term data analysis and computer modeling indicate that Nine Mile 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

About this fact sheet, contact Joe Mulcahy: joe.mulcahy@metc.state.mn.us, 651-602-1104

About stream monitoring, contact Scott Haire: scott.haire@metc.state.mn.us, 651-602-8747

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

> Metropolitan Council 390 Robert Street North Saint Paul, MN 55101 Main: 651.602.1000 TTY: 651.291.0904 Public Information: 651.602.1500 public.info@metc.state.mn.us

www.metrocouncil.org

Published 2014