

Credit River

www.metrocouncil.org ENVIRONMENTAL SERVICES

Credit River is located in the southwestern metropolitan area. It begins in New Market Township and flows through lakes and wetlands, and Murphy-Hanrehan Regional Park before entering into the Minnesota River near the city of Savage.

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.

Credit River flows year-round due to groundwater, wetland, and lake outflow. Its flow is also influenced by how much rain or snow has fallen in any given year. Since 2003, the average flow in Credit River is more than 18 cubic feet-per-second. At that rate, it would take the river about 14 days to fill the Target Center in Minneapolis.

Credit River 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."

Credit River's sediment concentration is lower than most of the streams monitored by MCES in the Minnesota River basin, except for the more urban streams.

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.

Credit River has lower concentrations of nitrogen (measured as nitrate) and phosphorus than most of the agricultural streams monitored by MCES in the Minnesota River basin, but these levels are higher than the more urban streams in the basin.

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: Minnesota River

Water source: Surface water runoff, groundwater, wetland and lake outflow

Length: 21.5 miles

Watershed area: 47 square miles

Watershed land use: Undeveloped lands, agricultural land, open space, and some urban areas

Regional Parks: Murphy-Hanrehan, Cleary Lake

Watershed management organization: Scott County Watershed Management Organization

Year first monitored: 1989





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



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



food source for fish, birds and other wildlife. Credit River has a relatively healthy population of aquatic insects.

Chloride

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

Credit River has a higher chloride concentration than the more rural streams monitored by MCES in the Minnesota River basin, but is lower than most of the more urban streams in the basin.

Preserving our Creeks

The Scott Watershed Management Organization is the local governing body responsible for managing the Credit River watershed. They partner with private landowners, the Scott Soil and Water Conservation District, cities, state agencies, and others to manage changing land uses and complete various improvement projects, including:

- · Stabilizing stream banks and ravines
- Constructing rain gardens
- · Installing vegetated filter strips and prairie plantings
- · Improving near-stream vegetation
- · Providing landowner education about land and water management

Is the Stream Improving?

Long-term data analysis and computer modeling indicate that Credit River's water quality has improved, because sediment, phosphorus, and nitrate 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