



# Rum River

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**ENVIRONMENTAL SERVICES**

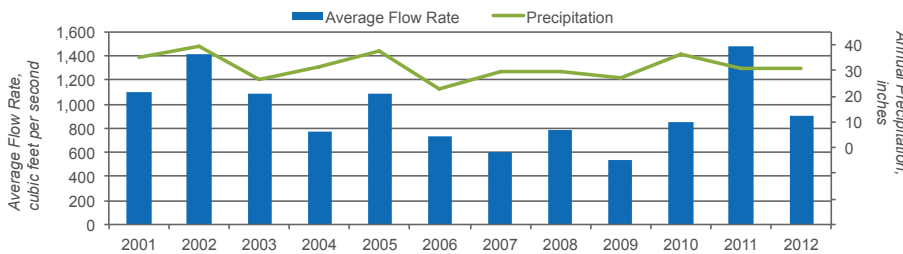
**Rum River** is located north of the metropolitan area. It begins at the Lake Mille Lacs outlet in Mille Lacs Kathio State Park and runs through lakes, wetlands, forest, grassland, agricultural, and urban areas, including Onamia Lake, a crucial wild rice lake. There are small stands of wild rice found along the length of the river. The river discharges into the Mississippi River near the city of Anoka. The river is both a State Water Trail and State Wild and Scenic River.

## 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.

Rum River flows year-round, but is influenced by how much rain or snow has fallen in any given year. Since 2003, the average flow in the Rum River is nearly 886 cubic feet-per-second. At that rate, it would take the river seven days to fill the Target Center in Minneapolis.

**Rum River 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.

Rum River has the second lowest concentrations of phosphorus and nitrogen (measured as nitrate) compared to other streams in the Mississippi River basin. Since its phosphorus levels are the same as the Mississippi, it does not affect the river's water quality, and its nitrate levels are lower than other rural watersheds.

## 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."

Rum River carries an average of 26 million pounds of sediment into the Mississippi River each year (enough to fill 787 15-ton dump trucks), but it has the lowest sediment concentration of all the streams in the basin.

## FAST FACTS

**Major river basin:** Mississippi River

**Water source:** Surface water runoff, lake outflow

**Length:** 150 miles

**Watershed area:** 1,584 square miles

**Watershed land use:** Wetlands, forests, grasslands, agricultural and urban areas

**Regional parks:** Lake George, Rum River Central

**State park:** Mille Lacs Kathio

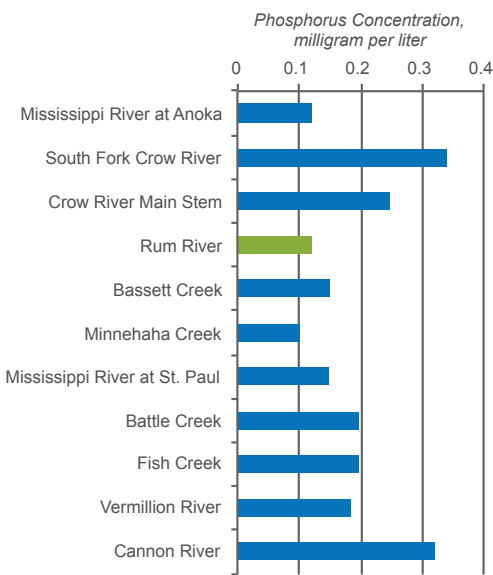
**Cooperator organizations:** Anoka Conservation District

**Year first monitored:** 1996

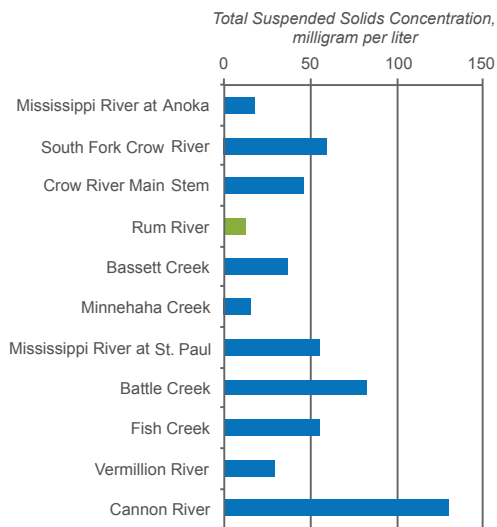
**Special feature:** Wild rice, historic and archaeological sites near Mille Lacs



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



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



**Chloride**

Chloride, one component of salt, is typically used for winter road, parking lot, and sidewalk maintenance and home water softening. Large-lot rural, residential areas also have many individual on-site septic systems to manage wastewater since there is no centralized sewage system. Failed septic systems can leak chloride into the groundwater and eventually pollute the stream.

Rum River has the lowest concentration of chloride of the Mississippi River streams, reflecting the rural nature of the region.

**Preserving our Creeks**

The Upper Rum River and Lower Rum River Watershed Management Organizations are the local governing bodies responsible for maintaining the watershed and improving river water quality. They partner with private landowners, cities, counties, and the Minnesota Department of Natural Resources to complete various improvement projects, including:

- Building rain gardens
- Establishing vegetation buffers along the river
- Restoring wild rice stands

**Is the Stream Improving?**

Long-term data analysis and computer modeling indicate that Rum 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 policies 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](http://www.metrocouncil.org/streams) for the full results of the Comprehensive Water Quality Assessment of Select Metropolitan Area Streams.