

# Mississippi River Gauge on the Champlin-Anoka Bridge

In the Fall of 2017, the United States Geological Survey (USGS) installed a river gauge on the Champlin-Anoka bridge. The purpose of the gauge is to provide accurate, reliable and real-time river data for water resource professionals, residents and public officials, which can be accessed via USGS and National Weather Service websites. In addition, water alerts are available by user-specified text/email alerts. Funding to maintain the gauge is cooperatively shared by the Cities of Champlin, Anoka, Dayton, Coon Rapids, Brooklyn Park and Ramsey.

The specific data collected by the gauge are stage, discharge and velocity. Stage is the height of the water surface above a reference elevation. Discharge is the volume of flow passing a specified point in a given interval of time and it is usually measured in cubic feet per second. Velocity is the speed of the current.

Over the past few years data measurements have been gathered to develop a stage /discharge/velocity relationship. This relationship affords the ability for flood forecasting. Flood forecasting allows for timely warnings that save lives and decrease property damage. The National Weather Service (NWS) is the federal agency charged with the responsibility for issuing river forecasts and flood warnings. A reliable flood forecast, and its subsequent warning, depend on having a reliable and current source of depth and flow data, as well as precipitation data. Although the NWS uses many sources of data to develop flood forecasts, the USGS stream-gauging network is the principal source of data on river depth and flow.

Real time readings from Champlin's gauge may be viewed at the USGS or NWS websites (See links below). Of particular value to River-front property owners, the USGS site provides the ability to sign up for water alerts that are sent via email or text. If you have any questions regarding the river gauge in Champlin, please contact Community Development Director, Scott Schulte, at 763-923-7102 or [schulte@ci.champlin.mn.us](mailto:schulte@ci.champlin.mn.us).

## United States Geological Survey

<https://on.doi.gov/2WRmVjw>

## National Weather Service

<https://bit.ly/2WN7E3s>

Photos of the river gauge on the Champlin-Anoka Bridge.

