

# INTRODUCTION TO THE MONTANA REAL-TIME STREAM GAGE NETWORK

### WATER RESOURCES DIVISION

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### **WHAT IS A STREAM GAGE?**

Stream gages measure water flow. They can also be customized to include other measurements like water temperature and water quality. Real-Time Stream gage data for all sites is publicly available at: https://gis.dnrc.mt.gov/apps/StAGE

### WHAT IS THE MONTANA REAL-TIME STREAM GAGE NETWORK?

The Real-Time Stream Gage Network is a system of stream gages operated and maintained by the U.S. Geological Survey (USGS), the Montana Department of Natural Resources and Conservation (DNRC), and Tribal Nations in Montana. Real-time gages are distinguished from other types of gages in that they transmit data for public use, and update at regular intervals.

### WHO USES MONTANA REAL-TIME STREAM GAGE DATA?

DNRC relies on streamflow information for water administration, distribution, and management objectives. Real-time streamflow information also supports planning, decision-making, monitoring, management, and operations by individuals and entities throughout Montana.

## STREAM GAGE DATA USERS



LOCAL, STATE, TRIBAL AND FEDERAL AGENCIES



WATER COMMISSIONERS



FLOODPLAIN AND DISASTER MANAGEMENT FNTITIES



UTILITIES
AND
INDUSTRIAL
USERS



WATERSHED AND CONSERVATION GROUPS



RECREATIONISTS, FISHING GUIDES AND OUTFITTERS



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**USGS Stream Gage Network:** The USGS currently operates a network of 217 real-time gages across Montana, primarily on mainstem rivers (or the primary segment) and large tributaries.

- Of the 217 sites, 39 are Federal Priority Gages that are funded entirely by the federal government and support federal activities like Bureau of Reclamation reservoir operation or USGS studies.
- The remaining 178 sites are Cooperatively Funded through a mix of state, tribal, local, or private sector funding and support multiple objectives.

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**DNRC Stream Gage Network:** DNRC-operated real-time stream gages are typically located on medium to smaller streams and tributaries not monitored by the USGS. Currently, the DNRC network consists of 76 real-time stream gages. Thanks to funding

appropriated during the 2025 Legislative Session, DNRC will be able to conduct ongoing operations and maintenance of its existing network as well as install 24 additional high-priority gages to complete the recommendation of 100 DNRC gages as set forth in the State Water Plan and Montana Drought Management Plan. New gage locations are prioritized based on the following considerations:

- Public awareness and education;
- Partner needs from municipal, watershed groups, and conservation districts;
- •Support for academic studies and investigations.
- Water distribution projects;
- Multi-agency overlapping benefit;
- Federal and tribal compact related administrative need;
- DNRC administrative need

# Montana Stream Gage Network Cases Stream Gage Network Cases Stream Gage Network Cases Stream Gage Network Completed DNRC 2025/2026 Gages Completed DNRC 2024/2025 Gages Pre 2023 DNRC Gages USGS Gages USGS Gages

Real-Time Stream Gage Data visit:

GIS.DNRC.MT.GOV/apps/stage/

