

Drought and Water Supply Committee

Stream Gage Oversight Work Group

Work Plan

Adopted August 12, 2020

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1. Introduction

Water is an essential ingredient to Montana's economy and way of life. Management of Montana's water resources is complicated by the fact that water is in high demand across the state, yet its abundance varies widely in time (weeks, months, and seasons) and space (geographic location). The Montana State Water Plan (2015) highlighted that effective water management and distribution depends on accurate, publicly available, real-time measurements of streamflow.

The primary source of surface water data for monitoring Montana's water resources is gathered from a network of stream gages operated by the U.S. Geological Survey (USGS), and financially supported by federal, state, tribal, local and private funds. Stream flow data provided by this network supports decision making by water managers, water users, recreationists and the public as they adjust to seasonal supply and demand imbalances. Local governments, state, tribal and federal agencies also rely on stream flow information for emergency planning and notification as well as longer-term water supply planning.

The Stream Gage Oversight Work Group was created by the 2019 Montana Legislature in response to stakeholders concerns over the shutdown of 10 USGS stream gages due to a lack of funding to support operation and maintenance. The loss of these gages came with little warning to the water user communities who depended on them for monitoring and cooperatively managing local water resource plans. The event revealed that as demand for water continues to grow, the continuity of Montana's stream gaging network is threatened by declining funding support. It also highlighted the disconnect between those entities that operate and/or fund the system and those entities or individuals who rely on it daily for real-time stream information, local planning and response.

In complying with the statute under §2-15-3308 (6)(b), The Stream Gage Oversight Work Group (SGOWG) is responsible for developing an infrastructure work plan. The following plan will guide the work of the Work Group as it begins to achieve its stated purpose identified in the Terms of Reference:

The purpose of the Work Group is to engage with stakeholders in a review of the USGS stream gage network in Montana and develop recommendations to minimize the vulnerability of the network to disruptions in O&M funding.

2. Goal

To create a more resilient stream gage network in Montana by engaging stakeholders from both the private and public sectors in a way that improves coordination and explores opportunities to enhance the monitoring network throughout the state.

3. Objectives

1. Develop a rapid-response process to notify stakeholders of vulnerable stream gages and provide support for stakeholders to explore both short and long-term funding options.
2. Identify the locations, uses and existing funding arrangements associated with the USGS Stream Gage Network in Montana and work with stakeholders to identify needs and opportunities for expanding the network.
3. Identify the users of the USGS Stream Gage Network in Montana and develop methods to further engage these users through collaborative planning, outreach and education.
4. Identify cost effective and reasonable alternatives to stream gages, including gages that are not part of the USGS network, if applicable
5. Develop specific policy recommendations that would minimize the vulnerability of the network to disruptions in O&M funding.

4. Tasks

Objective 1: Develop a rapid-response process to notify stakeholders of vulnerable stream gages and provide support for stakeholders to explore both short and long-term funding options.

Task	Status	Point Person
<p>1) Work with USGS WY-MT Science Center to establish a communication process for notifying the Work Group and interested stakeholders of funding or program changes with the potential to positively or negatively impact the ongoing operation of USGS stream gages in Montana.</p> <p>Subtasks Include:</p> <ul style="list-style-type: none"> • Develop a schedule when USGS WY-MT Science Center can notify stakeholders of program changes. • Develop a contact list of stakeholders that should be notified in the event of changes. • Discuss ways to increase the profile of gages that are vulnerable to funding cuts. 	Ongoing	Paul A.
<p>2) Establish a semiannual check-in process for state agencies contributing funding to stream gages to share information on funding or program changes that may positively or negatively impact their ability to participate in the USGS stream gage program.</p> <p>Subtasks Include:</p>	Ongoing	Stephen B.

Task	Status	Point Person
<ul style="list-style-type: none"> • Document source of agency funds – HB2, SSR, Other? • Document agencies management objectives served by USGS stream gages. • Document agencies gaging priorities. 		
3) Work with stakeholders to establish a process for sharing information on potential changes to the USGS stream gage program that may positively or negatively impact their ability to access stream flow information.	Ongoing	Paul A.

Objective 2: Identify the existing funding arrangements associated with the USGS Stream Gage Network in Montana and work with stakeholders to identify needs and opportunities for expanding the network.

Task	Status	Point Person
1. Develop a map showing the location of stream gages and identifies the funding source of each gage.	In development	Paul A.
2. Develop a reference table/spreadsheet that identifies funders for each stream gage as well as their management objectives and priorities.	In development	Stephen B.
3. Review options for funding the operation and maintenance of the stream gage network including the use of private funds, consolidated agreements and multi-payer payments.	In development	Stephen B.

Objective 3: Identify the users of the USGS Stream Gage Network in Montana and develop methods to further engage these users through collaborative planning, outreach and education.

Task	Status	Point Person
1. Develop a survey that identifies users of the stream gage network, their demographic, stakeholder representation, and how the data is used.	In development Tentative launch date of April 2020.	Arin Peters/ Nikki Sandve
2. Meet with selected stakeholder groups to develop a deeper understanding of their priorities, needs, and expectations.	In development	Paul A.

Task	Status	Point Person
3. Meet with Tribal water resources agencies to develop a deeper understanding of their priorities, needs, and expectations.	In development	Stephen B.
4. Meet with Representatives of Disaster and Emergency Services to discuss role of gages in Flood and Fire Planning.	In development	John Peterson Andrew Long
5. Develop and disseminate outreach and education materials promoting the value of accurate, publicly available, real-time measurements of streamflow data.	On going	Nikki Sandve

Objective 4: Identify cost effective and reasonable alternatives to stream gages, including gages that are not part of the USGS network, if applicable

Task	Status	Point Person
1. Meet with representatives of the USGS WY-MT Science Center to discuss alternative to real-time stream gages.	In development	Paul A.
2. Meet with representatives of the USGS WY-MT Science Center to discuss advances in technology that may lower the cost of stream flow information.	In development	Paul A.
3. Explore the feasibility of expanding DNRC's real-time stream gage program to collect data on streams and tributaries that are not part of the USGS monitoring network.	In development	Paul A.
4. Explore cooperation with Tribal Water Resources agencies to expand the collection of stream flow data on Tribal lands.	In development	Stephan B.

Objective 5: Develop specific policy recommendations that would minimize the vulnerability of the network to disruptions in O&M funding.

Task	Status	Point Person
1. As the above objectives 1-4 are being addressed, evaluate potential policy recommendations and include those in the final report of the committee.	Not started.	Stephan B. & Paul A.

5. Resources

The Stream Gage Oversight Work Group will seek resources in the form of voluntary assistance from the following entities.

- a. Department of Natural Resources & Conservation – Water Resources Division
- b. Department of Fish Wildlife and Parks -
- c. USGS WY-MT Science Center
- d. Montana Bureau of Mines and Geology
- e. National Weather Service
- f. Tribal Water Resource Agencies
- g. Soil & Water Conservation Districts of Montana
- h. Montana Watershed Coordination Council and local watershed groups
- i. Water users and stakeholders with the desire to contribute
- j. U.S. Forest Service – David Callery and Thor Burbach
- k. Natural Resources Conservation Service

6. Budget

The budget for this initiative falls within the operational budget of each agency represented on the Work Group.

7. Timeline

Completion date: April 30, 2022.