

# Drought and Water Supply Committee

## Stream Gage Oversight Work Group

### Terms of Reference

Approved February 21, 2020

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**Terms of reference** define the purpose and structures of a project, committee, meeting, negotiation, or any similar collection of people who have agreed to work together to accomplish a shared goal.

Source: [https://en.wikipedia.org/wiki/Terms\\_of\\_reference](https://en.wikipedia.org/wiki/Terms_of_reference)

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## 1. Introduction

Access to accurate, publicly available, real-time stream flow information 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 primary source of this information in Montana is a network of approximately 232 stream gages operated by the U.S. Geological Survey (USGS). and financially supported by an array of federal, state, tribal, local, and private funding sources.

The Stream Gage Oversight Work Group was created in 2019 by the 66<sup>th</sup> 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 (O&M). 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.

## 2. Term

This Terms of Reference is intended to guide the work of the Stream Gage Oversight Work Group up through the delivery of the first stream gage infrastructure work plan.

## 3. Purpose

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.

## 4. Scope

The scope of the Work Group's efforts is defined by its founding legislation (§ 2-15-3308, MCA). The following items are within the scope Work Group activities:

1. Reviewing the locations, uses, and funding arrangements for the stream gage network of the U.S. Geological Survey;
2. Reviewing the priorities, needs, and expectations of those funding the maintenance and operations of these stream gages and those using data measured by these stream gages;
3. Creating a stream gage infrastructure work plan;
4. Reviewing options for funding the maintenance and operations of the stream gage network, including use of private funds, consolidated agreements, or multipayer payments;
5. Developing a proposal for stream gage priorities;
6. Reviewing cost-effective and reasonable alternatives to stream gages, including gages that are not part of the USGS' survey's stream gage network, if applicable;

7. Oversight of recommendations and activities related to any legislative study of stream gages; and
8. Coordination of information regarding stream gage funding recommendations and requests from state and federal agencies.

### Out of Scope

While the State’s snowpack (SNOTEL) and soil moisture monitoring networks are important to understanding state-wide moisture conditions, these networks are beyond the scope of the Work Group’s current efforts. Flow monitoring devices placed at head gates or within ditches and canals are also beyond the scope of this effort.

## 5. Membership

Stream Gage Work Group members represent the seven state agencies that are voting members of the Drought and Water Supply Advisory Committee (§2-15-3308, MCA).

| <b>Representing</b>                         | <b>Name</b>               |
|---|---------------------------|
| Dept of Natural Resources and Conservation  | Paul Azevedo – Co-Chair   |
| Dept of Fish Wildlife & Parks               | Stephen Begley – Co-Chair |
| Dept of Livestock                           | Mike Honeycutt            |
| Dept of Agriculture                         | Jon Peterson              |
| Dept of Emergency Services/Military Affairs | Andrew Long               |
| Dept of Commerce                            | Wayne Johnston            |
| Dept of Environmental Quality               | Darin Kron                |

### Additional Participants

There are other individuals and organizations that are necessary to either support the Work Group or that must be communicated with and made aware of it. They include technical support personnel, direct stakeholders, and those who will receive communication notices.

| <b>Participant Type</b> | <b>Individual or Organization</b>  |
|-------------------------|--|
| Technical Support       | <ul style="list-style-type: none"> <li>• Dept of Natural Resources</li> <li>• US Geological Survey – WY-MT Science Center</li> <li>• MT Bureau of Mines and Geology</li> </ul>   |
| Direct Stakeholders     | <ul style="list-style-type: none"> <li>• Conservation Districts</li> <li>• MT Watershed Coordination Council and other Watershed Groups who have expressed interest</li> <li>• Tribal governments</li> <li>• Conservation Groups, Irrigator Groups, Water Commissioners</li> <li>• Recreation, fishing and guiding interests</li> <li>• Municipalities,</li> </ul> |

|                      |  |
|----------------------|--|
|                      | <ul style="list-style-type: none"> <li>• Current funders of USGS stream gages, including: Northwest Energy, BPA, Energy Keepers, Avista Corp, Talen Energy, East Bench ID, tribal groups, other state and federal agencies.</li> </ul> |
| Communication Notice | <ul style="list-style-type: none"> <li>• Drought and Water Supply Advisory Committee</li> <li>• Water Policy Interim Committee</li> <li>• Leadership of Departments represented on the Work Group</li> </ul>                           |

## 6. Procedures, Responsibilities and Expectations

### Quorum

All meetings must have a quorum of participants to proceed. A quorum is a minimum of four (4) members present.

### Procedures for Finding Agreement

The Stream Gage Oversight Work Group will seek consensus on all decisions and recommendations. When participants disagree with a recommendation, proposal, or action they should articulate their concern to the larger group and provide a constructive alternative(s) that seeks to accommodate the interests of all participants.

The Stream Gage Oversight Work Group will continue with this procedure until consensus is achieved or the group decides to disagree.

### Procedures in the Event of Not Reaching Consensus

If the Stream Gage Oversight Work Group has tried in good faith but is unable to reach consensus, and wants to move forward on the recommendation, proposal, or action at hand, they may use the following fallback mechanisms:

- Define the issue (issue: a subject of discussion, negotiation or problem solving – the what, the problem to be solved)
- Identify interests (interest: one party’s concerns, needs or desires underlying the issue – why the issue is being raised [interests may be mutual or separate]. This is the motivation to solve the problem.)
- Brainstorm options for moving ahead (option: potential – often partial – solutions to meet one or more interests – how the problem might be solved)
- Identify standards (standard: agreed upon qualities of an acceptable solution – that is – how well an option solves the problem)
- Evaluate options
- Choose an option

If the Work Group is unable to reach agreement on an issue, further follow-up may be assigned to a task group. The task group will attempt to develop additional proposals or actions to resolve the issue and report its recommendations to the Work Group.

When appropriate, external resources may be engaged to provide an independent opinion.

If none of the above helps the Work Group make progress, the members will seek further direction from the Drought and Water Supply Advisory Committee.

## Responsibilities

Members are expected to:

- Attend and participate in all meetings.
- Review relevant information and be prepared to fully participate in meetings.
- Seek areas of agreement and uphold agreements that are reached.
- Explore all options and make recommendations.
- Seek the advice of their constituency throughout the process.
- Make every effort to represent and speak for their constituency.
- Keep their respective hierarchy of decision-makers informed on progress and seek direction as required to support upcoming decisions and recommendations.

## Expectations

All participants are encouraged to contribute openly and professionally to discussions, share relevant information regarding the issues under consideration, and to support a transparent and collaborative process.

## 7. Oversight and Reporting

The Work Group is a subcommittee of the Drought and Water Supply Advisory Committee. The Work Group will report to both the Drought and Water Supply Committee and the Water Policy Interim Committee.

## 8. Budget

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

## 9. Updates and Amendments

This Terms of Reference can be updated and amended by consensus of Work Group members.