



Interstate Council on Water Policy
Sue Lowry, Executive Director
avocetconsult@gmail.com
307-630-5804
PO Box 20908, Cheyenne WY 82003

Interstate Council on Water Policy
Senate Appropriations Sub-Committee for Interior, Environment and Related Agencies
Testimony in Support of U.S. Geological Survey Streamgaging Programs
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The Interstate Council on Water Policy consists of state, interstate and regional water managers. They simply cannot do their jobs of efficient water use and distribution without the robust streamgaging programs of the USGS.

We request for FY19 that the Groundwater and Streamflow Information Program of the USGS be restored to \$72,500K.

Here are just a few of the critical areas in which data from the USGS streamgaging program are critical:

Flood Warning and Prediction:

Flood forecasting allows for timely warnings that **save lives** and decrease property damage. There are over **200 flood-related deaths** annually. Real-time Stream gage data are used in river models to estimate how a river will respond to rainfall. Reliable flood forecasts and warnings depend on having consistent and current, real-time measurements of depth and flow, as well as precipitation.

Drinking Water Supply:

USGS streamflow gages provide information vital to water suppliers in the management of drinking water sources. Both real-time and historic data allow suppliers to plan for the immediate operations and the long-term **infrastructure** for **drought resiliency** and future growth.

Agriculture:

Over 80 percent of the country's water use is devoted to irrigation. Although 16 percent of the nation's cropland is irrigated, that acreage generates half of the value of all crops sold. In 2013, \$2.64 billion was spent on irrigation facility and equipment improvements.

Navigation:

Maintenance of flow in the River is vital for the country's commerce. The closing of the Mississippi River during the drought of 2012 cost over \$30M per day when navigation is closed.

Recreation:

Fishing, boating, rafting and other popular forms of recreation rely on sufficient water levels in the stream or river. Members of the public use the USGS online data to determine if river levels are right for recreation.

Aquatic Life:

Reservoir Operators, including the USACE, use USGS streamgage flow and temperature data to determine if releases of water are needed for the protection of aquatic life and endangered species. Long term flow records are used to develop minimum passing flow requirements or design release programs that are protective of aquatic resources.

Infrastructure Investments:

Streamflow information is vital to the design of new and rehabilitation of existing infrastructure, specifically dams, levees, inland waterways and ports and water and wastewater treatment plants.



INTERSTATE COUNCIL ON WATER POLICY: SUPPORT FOR USGS STREAMGAGES

Critical decisions, that protect **public safety** and support the **economy**, are being made every day based upon real-time information from U.S. Geological Survey (USGS) streamflow gages. These decisions range from mobilizing emergency management teams to respond to impending flooding, determining the amount of water to release to maintain navigation, choosing to use an alternate source of water for treatment due to water quality, to deciding if it is a good day to boat or fish.

The USGS Groundwater and Streamflow Information Program works in partnership with more than 1,450 Federal, regional, State, Tribal, and local agencies to operate more than 8,200 streamgages. These streamgages are funded using federal appropriated funds for Federal Priority Streamgages or Cooperative Matching Funds in combination with funds from the numerous partners.

Consistent, systematically-collected, and publicly available information is paramount to meet the full gamut of water priorities and responsibilities over the long term related to:

- streamflow forecasting;
- planning and warning to protect lives and property;
- design of water infrastructure;
- water-resource appraisal and allocations;
- operation of locks and dams and power production;
- and recreational safety.



Federal Priority Streamgages (formerly referred to as National Streamflow Information Program): This network design consists of 4,760 high priority stream locations important for measuring streamflow to meet strategic long-term Federal priorities and responsibilities.

Issue: Currently, only one quarter of the federal priority streamgages are fully funded by the USGS.

Cooperative Matching Fund Streamgages

The remaining streamgages are also integral to the USGS mission related to hazard mitigation and water availability for human and ecosystem health. The USGS works with over a thousand partners nation-wide using Cooperative Matching Funds to jointly support streamgages.

Issue: Insufficient Cooperative Matching Funds have resulted in decreased USGS match and increased costs for their partners and limited options to expand the number of streamgages.

Funding Request for Groundwater and Streamflow Information Program	<u>FY19 President's</u>
<u>Request</u> Groundwater and Streamflow Information	\$35M
Cooperative Matching Funds	\$29M
	-\$7.7M lower than FY17 appropriated level

Funding Support Needed:

Streamflow Information Infrastructure (one-time costs)

Water Data Infrastructure Modernization - Upgrade the enterprise data management systems, information technology infrastructure and real-time data delivery capabilities to provide more comprehensive and responsive flood hazard information. Data infrastructure improvements would be spread out over a three year period at about \$37.3M/yr.

Total Funding Need: \$112M

Streamgage Equipment Modernization and Hardening - Update streamgage equipment to meet new data transmitting requirements and harden about half the streamgages in the network to withstand major flood events. About 1,500 streamgages would be updated and hardened each year over a three-year period for about \$79.3M/yr.

Total Funding Need: \$238M

Streamgage Annual Operation and Maintenance (annual costs)

Full Implementation of the Federal Priority Streamgage Network - Provide funding needed to fully implement the plan to operate streamgages at all 4,760 high priority stream locations.

Total Funding Need: \$125M

Cooperative Matching Funds – Increase cooperative matching funds to the Groundwater and Streamflow Information Program to increase the streamgage cooperative match with localities and States and/or increase the number of streamgages.

Total Funding Need: \$70M

Value of Network to our Members

“The independent, science-based streamflow information that we obtain from USGS gages is paramount to assuring compliance under our various interstate compacts with our neighboring states.”

Julie Cunningham, Oklahoma Water Resources Board

“We simply would not be able to run our complex reservoir management models without the trusted streamflow data we obtain from USGS gages throughout our river basin.

Amy Shallcross, Delaware River Basin Commission