

**Statement for the Record**  
**U.S. Geological Survey**  
**Department of the Interior**  
**before the**  
**Senate Committee on Energy Natural Resources**  
**on S. 4245 the Water Data Improvement Act**

**September 11, 2024**

Chairman Manchin and Ranking Member Barrasso, thank you for the opportunity to provide this statement on S. 4245 the Water Data Improvement Act, a bill to reauthorize certain U.S. Geological Survey (USGS) water research activities through the SECURE Water Act (P.L. 111-11, Title IX, Subtitle F of the Omnibus Public Land Management Act of 2009).

**Background**

Floods, droughts, and other extreme weather events present hazards for human lives and property. In the past six years, there have been 34 floods, tropical cyclones, and droughts each causing more than \$1 billion in damages and altogether accounting for more than \$415 billion in damages and over one thousand deaths. Climate change, growing populations in the drought-impacted western U.S., sea-level rise, and aging water infrastructure add to the pressures on limited water resources. For more than a century, USGS national water-monitoring networks have formed the backbone of observations on current conditions and trends in surface water and groundwater. These observations inform real-time decision making and long-term planning. USGS water data are fundamental to national and local economies, protection of life and property, and effective management of the Nation's water resources.

The Federal Priority Streamgauge (FPS) Network, previously known as the National Streamflow Information Program, was established in 1999 in response to Congressional concern about the decline in long-term streamflow monitoring across the Nation. The FPS Network is a core, federally funded network of streamgages that are designated to meet the priorities of the Nation. In 2009, FPS (as the National Streamflow Information Program) was included in Section 9507 of the SECURE Water Act (42 U.S.C. 10367). The current network design includes 4,760 eligible sites that are strategically positioned across the country to address long-term Federal information needs. These needs include informing flood and drought forecasts, implementing interstate, international, and Tribal water compacts and decrees, and tracking trends in undisturbed watersheds. There are approximately 3,500 active FPS sites. About one quarter of these sites are fully funded through USGS appropriations, the remainder through a combination of funding from the USGS and from partners such as the U.S. Army Corps of Engineers and the Bureau of Reclamation. USGS is in the process of updating the design of the FPS Network, using feedback from Federal agency partners, which will likely result in an increase in the number of eligible sites. This increase will likely be driven by an expanded list of flood-forecast locations identified by the National Oceanic and Atmospheric Administration (NOAA) National Weather Service since 1999 and increasing demands

for water information associated with population growth and extreme weather events and climate change.

The National Groundwater Monitoring Network (NGWMN) was designed in 2009 in response to passage of the SECURE Water Act. It is authorized as a collaborative groundwater network among intergovernmental agency data providers. Since initial appropriations were provided in 2015, the NGWMN provides access to water-level and/or water-quality data from nearly 20,000 groundwater wells that are supported by more than 45 Federal, State, local, and Tribal agencies. As part of the NGWMN, the USGS supports 630 Climate Response Network groundwater monitoring wells which represent 226 of the 370 NOAA climate divisions in the continental U.S. These monitoring wells are supported by a combination of USGS and partner funding. The NGWMN serves as a critical measure of current and long-term groundwater conditions and provides groundwater-level data that are beneficial to Federal, State, and local agencies and other stakeholders who use the data to monitor for drought and drought recovery, issue permits for groundwater withdrawals, and establish triggers for water conservation and/or pumping reductions. The data from the NGWMN are also foundational for decisions regarding the sustainable management of groundwater supplies, which are the source of drinking water for more than 130 million Americans each day and provide more than 40% of the Nation's irrigation water.

#### **S. 4245 the Water Data Improvement Act**

S. 4245 reauthorizes Section 9507 of the SECURE Water Act through Fiscal Year 2028. This includes authorities for the FPS Network, as well as the NGWMN. The USGS fully supports S. 4245.

The USGS appreciates Congressional interest in reauthorization of Section 9507 of the SECURE Water Act. The USGS notes that other USGS water-research activities are authorized at Section 9508 and should also be considered, as well as important authorities, throughout the SECURE Water Act, undertaken by the Bureau of Reclamation.