



Figure 1. A river gauge marker located beside the Tower Bridge in Sacramento, California, measures the water level on the Sacramento River.



[Senate Bill No. 19 \(SB 19\)](#) (Statutes of 2019, Chapter 361, Dodd) enacts Water Code section 144, which directs the Department of Water Resources and the State Water Resources Control Board to develop a plan to address gaging information gaps through the deployment of a network of prioritized stream gages in consultation with the California Department of Fish and Wildlife, Department of Conservation, the Central Valley Flood Protection Board, and interested stakeholders.

Why are stream gages important?

It is the state's responsibility to manage and protect California's water while also protecting, restoring, and enhancing the natural and human environment. A stream gage is a structure installed beside a river or stream containing equipment that measures and records the water level of the stream. Stream flow is then computed. In winter and spring, the total flow is essential in calculating potential downstream flooding and allows emergency managers to provide early flood warning. A robust stream gage network is essential for effective water management, especially during times of extreme water shortage or flooding. Additionally, an improved stream gage network will promote best practices in water management and help protect fish and wildlife.

Gaging information allows agencies to:

- use the best available scientific data to increase their understanding of the functions that flows provide to native species
- manage flows for the greatest benefit to native species and other beneficial uses of water
- assess risks to public safety, property, infrastructure, and the environment from debris flows, landslides, erosion, and sedimentation.

The Plan

Per SB 19, the stream gaging plan will include a determination of funding needs and opportunities for modernizing and reactivating existing gages and deploying new gages in priority locations across hydrologic regions in the state.

Other criteria to be considered in prioritization and developing the plan include:

- Opportunities for local agencies to enter cost-share arrangements
- Ease of integrating the stream gage into the existing network
- Availability of historic gage data
- Availability of temperature data
- Water quality and flow impacts related to cannabis cultivation
- Integration with the Open and Transparent Water Data Act (Part 4.9 (commencing with Section 12400) of Division 6)
- Ability to provide data to assist with groundwater management



Figure 2. Several staff gauges have been installed on the inside walls of the newly constructed Lake Oroville main spillway in Butte County.



Figure 3. A view of the station house for the newly installed North Honcut Stream Gage on Honcut Creek in Butte County.

Tasks

Development of the plan will include tasks related to researching the existing stream gaging network (locations, costs, funding mechanisms, operational conditions), identifying gaps in stream gaging network, consultation with agencies, outreach with other stakeholders, identifying funding needs for future stream gaging, identification of partnership mechanisms and opportunities for partnering, and development of a draft and final plan.

It should be noted that the plan will identify priority stream gage locations and funding needs to improve the existing stream gage network, but additional funding to install and operate stream gages was not included in the State's Budget to implement SB 19.

Have Questions or Want More Information?

Visit the [Stream Gaging Plan webpage](#) and stay up to date on our efforts by signing up for email updates. If you have questions or comments, email us at: StreamGagingPlan@WaterBoards.ca.gov