

Background

California's recent droughts have highlighted the need for advanced water monitoring, including telemetered data. These data support timely and targeted water management actions, especially during extreme weather events.

The Water Board is building a modern data system called CalWATRS that can accept inflow of telemetered data. The Board is also leading a Telemetry Pilot Project to research water telemetry and perform the Russian River Telemetry Study.

Why Telemetry?

Telemetry provides real-time, standardized data directly to data systems, which reduces labor, delays, and inaccuracies. Accurate, real-time water data is vital for:

- Making timely decisions about water availability and use.
- Supporting water rights management.
- Improving accuracy and reducing delays in reported data.
- And more!

About the Russian River Telemetry Study

The Water Boards' Telemetry Research Unit is conducting a field study from 2025-2027 in the Russian River watershed. Staff and contractors will install new water monitoring equipment or upgrade existing equipment at approximately 100 locations provided by volunteers, including water diversions, streams, storage, and wells. Study data will transmit in real-time to a secure and private research data system (separate from reporting systems) for automated review and visualization and then final staff review.

Study goals include:

- 1. Evaluate the cost and effectiveness of monitoring and transmission equipment.
- 2. Refine the technical tools that the Water Board uses to receive and manage water data.
- 3. Advise the Water Board on simplifying reporting and supporting monitoring efforts.

Seeking Volunteers!

This Study depends on volunteers for success. Volunteers can sign agreements to provide access to land, equipment, or data during the study. Volunteers may receive:

- Free telemetered water monitoring equipment
- Free operations and maintenance of that equipment during the study
- Opportunities to inform staff about monitoring and reporting barriers

Learn More

View more information about this study and upcoming engagement opportunities at https://www.waterboards.ca.gov/telemetry/.

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