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## State Water Resources Control Board

# Approval of Alternative Compliance Plan for the Russian River Telemetry Study

The State Water Resources Control Board (State Water Board), Division of Water Rights (Division) relies on accurate and timely water use data to help manage California's water. The Division is investing in this data resource by conducting a field study in the Russian River watershed to evaluate the cost, logistics, and data governance of telemetered water monitoring. The Russian River Telemetry Study will develop Division expertise to improve data timeliness, improve data quality, and support simplified water reporting. The study will also result in informational resources for the public to support their monitoring efforts.

In 2016, the State Water Board adopted water use measurement regulations. The regulations set standards for monitoring and reporting diversions of water. The regulations can be found in Title 23 of the California Code of Regulations (CCR), §931-938. Section 935 of the regulations allows alternative compliance.

Water right holders who participate in the Russian River Telemetry Study are eligible to enroll in the study's Alternative Compliance Plan (ACP) (Attachment 1) to satisfy their requirements under water use measurement regulations. Water right holders must opt-in to the ACP and are not automatically enrolled.

Per regulations, the ACP will be posted on the State Water Board's website. Posting will provide an opportunity for comment from any interested parties. Any comments received will be reviewed by the Deputy Director who may subsequently request additional information or modifications to the ACP.

The staff point of contact for this ACP is the Telemetry Research Unit. The unit can be reached by email at [telemetry@waterboards.ca.gov](mailto:telemetry@waterboards.ca.gov).

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E. JOAQUIN ESQUIVEL, CHAIR | ERIC OPPENHEIMER, EXECUTIVE DIRECTOR

Approved by:

A handwritten signature in black ink, appearing to read "Karen Kramer". The signature is fluid and cursive, with a long horizontal stroke at the end.

*Karen Kramer, PG, Program Manager - Enforcement  
Division of Water Rights*

Dated: May 12, 2025

# Attachment 1:

## Russian River Telemetry Study Alternative Compliance Plan

### A. Background

In 2021, the California State Water Resources Control Board (Water Board) received funding to create a modern geospatial data system capable of receiving telemetry data (UPWARD Project<sup>1</sup>). The funding also created the Telemetry Research Unit<sup>2</sup> (TRU), whose objective is to build institutional knowledge of costs, logistics, and data governance for telemetered water monitoring and to make recommendations about monitoring and reporting processes.

To support these goals, TRU is conducting a Telemetry Pilot Project (Pilot Project). The Pilot Project is a research initiative by the Water Board to explore and refine water monitoring practices using telemetered devices, and includes specific studies like the Russian River Telemetry Study<sup>3</sup> (Study). This Study will take place from 2025 to 2027 and evaluate telemetered water monitoring within and around the Russian River watershed<sup>4</sup> to understand costs, logistics, and data governance for telemetered water monitoring in a real-world setting. This Study has no regulatory or enforcement component and depends on community members volunteering access to their land and equipment.

TRU will enter a contract with a Field Contractor who will procure telemetered water monitoring equipment, install equipment at volunteers' sites, perform maintenance and repairs, and review and share telemetered data. Data will be collected with a variety of different equipment manufacturers and transmission types to understand logistics and characterize costs.

Real-time transmission of water monitoring data to a central data system (i.e., telemetry) is a novel approach for the Water Board and the Study will research a variety of processes and equipment. Therefore, data collected for the Study may not meet the requirements of the Water Board's Measuring and Monitoring Regulation (i.e., Senate

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<sup>1</sup><https://www.waterboards.ca.gov/upward/>

<sup>2</sup><https://www.waterboards.ca.gov/telemetry/>

<sup>3</sup><https://www.waterboards.ca.gov/telemetry/docs/russian-river-telemetry-study.pdf>

<sup>4</sup>Hydrologic Unit Code (HUC) 18010110

Bill 88 or SB88)<sup>5,6</sup> or Water Diversion and Use Reports Regulation (i.e., Annual Reporting)<sup>7,8</sup>. To encourage community members to volunteer and to support volunteers as the Study disrupts their existing monitoring and reporting processes, TRU developed this Russian River Telemetry Study Alternative Compliance Plan (Study ACP). Community members who volunteer for the Study and sign an access agreement with the Water Board are eligible to enroll one or more of their volunteer sites in the Study ACP.

If that site is currently covered by another active alternative compliance plan (ACP), the Study ACP would override the site's participation in that ACP for the term of the Study ACP. At the completion of the Study ACP, that site would revert to its former ACP if that ACP is still valid.

Community members who choose not to enroll one or more of their volunteer sites in the Study ACP have several other paths for complying with regulations at those sites:

- Continue operating under an existing ACP already on file with the Division of Water Rights.
- File a new ACP with the Water Board following established procedures.
- Comply with regulations without alternative compliance.

## **B. Modified compliance terms**

This ACP is designed to provide Study participants with an alternative compliance approach for enrolled sites. This ACP includes modified compliance for the following areas:

1. General Data Quality:
  - a. Volunteers are not responsible for lost, missing, or inaccurate data or data measured at the incorrect frequency for the duration a site was enrolled in the Study and for 6 months afterward.
2. Water Diversion and Use Reporting:
  - a. Volunteers must submit annual Water Diversion and Use Reports by due date before, during, and after the Study. These reports may contain estimates of the monthly water amounts since accurate data may be unavailable.

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<sup>5</sup>[https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/diversion\\_use/water\\_measurement.html](https://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_measurement.html)

<sup>6</sup>California Code of Regulations 23:931-938

<sup>7</sup> [https://www.waterboards.ca.gov/waterrights/water\\_issues/programs/water\\_diversion\\_reporting/](https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_diversion_reporting/)

<sup>8</sup> California Code of Regulations 23:907-930

### 3. Measuring and Monitoring (SB88):

- a. Volunteers are not required to submit weekly measurement files (commonly called “SB88 telemetry”) for the duration a site was enrolled in the Study and for 6 months afterward.
- b. Volunteers are not required to submit measurement files with their annual Water Diversion and Use Report for the duration a site was enrolled in the Study and for 12 months afterward.
- c. Volunteers must amend submitted annual Water Diversion and Use Reports with measurement file(s) and any updated water amounts within 24 months after a site is no longer enrolled in the Study.

## **C. Name and contact information for all water right holders covered by the plan**

This ACP is available to any volunteer that participates in this Study. Volunteers must opt-in to this ACP. Volunteers may choose to file their own ACP or measure and report in compliance with current regulations instead of enrolling in this ACP.

An enrollment table will be continuously maintained with enrolled sites, site information, relevant water rights, water right holders contact information, and enrollment/exit dates. Newly enrolled sites will be added to the enrollment table as volunteer information is received, reviewed, and approved. The enrollment table is available to all staff at the Division of Water Rights at this SharePoint location:

<https://cawaterboards.sharepoint.com/DWR/DataSection/Telemetry/Russian%20River%20Telemetry%20Study%20ACP/Volunteers%20enrolled%20in%20ACP.xlsx?web=1>.

## **D. Identification of the proposed measurement methodology**

The designated Field Contractor for the Telemetry Study will procure, install, and operate a variety of measurement equipment to measure water at volunteers’ stations. The equipment may be from a variety of manufacturers and may be installed in a variety of configurations to accomplish study goals. One of the goals of the Telemetry Study is to understand costs and data quality for different equipment in diverse environmental settings and field applications, therefore, novel equipment and installation practices will be employed to achieve study goals.

A record of the equipment and installation configuration for each site will be maintained by the Field Contractor.

## E. Implementation schedule

A tentative schedule of specific milestones and dates is included below. This schedule may change as the Study progresses.

Event	Date
Sign contract with Field Contractor	May 2025
Begin equipment installations at volunteers' sites*	beginning August 2025, ongoing as volunteers enroll
Station closeout <sup>#</sup>	September - December 2027
Russian River Telemetry Study ends	July 2027

\* Pending signed contracts with volunteers and approval of Quality Assurance Plan, Station Plan, and any required environmental permits

<sup>#</sup> Volunteers may choose to retain equipment and ownership will be transferred to them. Otherwise the Field Contractor will decommission a station and remediate the site.

## F. Budget for implementation of the plan and the source(s) of financing for the plan

The budget to conduct this Study is around \$12 million and was funded through a Budget Change Proposal in 2021.

## G. A list of any permits required for plan implementation, the agencies that will issue the permits, and expected dates for issuance

There are currently no permits planned to implement this Study. Permits are contingent upon volunteers that join and the location of their station(s).

## H. Compliance with CCR §933 and 934

This ACP complies with §933 and 934 because equipment will be installed to collect measurement data. The data will then be transmitted in real-time to a centralized data system where reporters will access the data to use in their reporting (after an initial delay during station setup). The frequency at which data is collected will vary based on volunteer site location and study goals.

## **I. Certification by qualified individual**

All equipment installation and monitoring work will be performed by the Field Contractor. The cost and logistics of certifying equipment under the terms of SB88 is a research area. Volunteers who choose to retain the study equipment at their site after the study concludes will be responsible for officially certifying the equipment and installation for their reporting compliance.