

## **Title 23. Waters**

### **Division 3. State Water Resources Control Board and Regional Water Quality Control Boards**

**Amend Chapter 2.8, Sections 931 through 938 and add Sections 939 and 939.1 through 939.6 to read as follows:**

#### **Ch. 2.8 Water Measurement**

##### **931 Definitions.**

The following definitions apply to the terms as they are used in this chapter (chapter 2.8).

(a) "Annual report" refers to any of the following documents:

- (1) Report of permittee or licensee, pursuant to sections 925 and 929, respectively;
- (2) Report of registration and certificate holder, pursuant to section 924; or
- (3) Supplemental statement of water diversions and use, pursuant to section 5104 of the Water Code.

(b) "Board" means the State Water Resources Control Board.

(c) "Claimed water right" means the legal entitlement or claim to divert a reasonable amount of water from a specified source for a beneficial, non-wasteful use. Such entitlement may be granted under a board-issued permit, license, or registration, a federal non-reserved or reserved right on file with the board, or through a riparian or pre-1914 appropriative right claimed in a Statement of Water Diversions and Use that may or may not have been confirmed or adjudicated.

(d) "Delta" means the Sacramento-San Joaquin Delta as defined in section 12220 of the Water Code and the Suisun Marsh as defined in section 29101 of the Public Resources Code.

(e) "Deputy director" means the Deputy Director for the Division of Water Rights, or their delegee.

(f) "Diverter" means any of the following:

- (1) Any person authorized to divert water under a permit, license, or registration;
- (2) Any person required under Division 2, Part 5.1 of the Water Code to file a Statement of Water Diversions and Use;
- (3) To the extent authorized by federal law, the federal government for claimed water rights under permits, licenses, registrations, Statements of Water Diversions and Use, or non-reserved or reserved rights on file with the board; or

- (4) For the purposes of reporting measurement data, registering measuring devices, or submitting measurement methodologies, alternative compliance plans, or any other submission in accordance with this chapter, an employee or agent acting and submitting on the diverter's behalf.
- (g) "Division" means the board's Division of Water Rights.
- (h) "Identification number" of a claimed water right means the unique alphanumeric value that starts with a letter followed by a minimum of six numeric characters and that identifies any of the following:
  - (1) Application number for a water right license, permit, or registration;
  - (2) Statement number for a claimed riparian or pre-1914 appropriative right submitted in a Statement of Water Diversions and Use; or
  - (3) Identifying number for a federal non-reserved or reserved right on file with the board.
- (i) "Maximum allowable diversion amount or rate" means any of the following:
  - (1) The maximum volume or flow rate of water that is authorized to be diverted annually under a permit, license, or registration;
  - (2) The larger between the initial and maximum volume or flow rate of water diverted in a twelve month reporting period for a claimed pre-1914 water right filed in a Statement of Water Diversions and Use;
  - (3) The larger between the maximum historical and maximum anticipated volume or flow rate of water diverted in any twelve month reporting period for a claimed riparian right filed in a Statement of Water Diversions and Use; or
  - (4) The maximum volume or flow rate of water diverted in a twelve month reporting period for a federal non-reserved or reserved right on file with the board.
- (j) "Measurement data" means the numerical data measured and submitted in accordance with and meeting the requirements of this chapter, subject to the following clarifications:
  - (1) "General measurement data" means the numerical values of the general measurement parameters described in subdivisions (a) and (c) section 933, as applicable, and submitted in accordance with subdivision (a) of section 935.
  - (2) "Large diversion measurement data" means the numerical values of the large diversion parameters described in subdivisions (b) and (c) of section 933, as applicable, and submitted in accordance with subdivision (b) of section 935.
  - (3) "Provisional measurement data" means measurement data of the required measurement parameters that may not yet be fully processed or quality assured to meet the accuracy requirements of this chapter or that may not yet be fully

apportioned to each claimed water right. Provisional measurement data are subject to change.

- (k) "Measurement methodology" means the combination of all measuring devices and any accompanying methodology, including calculations, conversions, formulas, and quality assurance protocols, through which a diverter accounts for the volume and flow rate of water diverted under each claimed water right.
- (l) "Measuring" includes accounting for, calculating, determining, and recording the measured value, as necessary.
- (m) "Measuring device" means a device or other means of measuring that either directly measures and provides a numerical value of volume or flow rate, or measures and provides a numerical value of a different parameter that can be used to calculate volume and flow rate, such as velocity, water elevation, volume of water in storage, or electricity consumption or generation.
- (n) "Online reporting platform" means an internet-based software application available on the board's website, through which reports, forms, data, documents, or other information are submitted.
- (o) "Point of diversion" means the location where water is diverted. Points of diversion include points of direct diversion, points of diversion to storage, and points of redirection of previously diverted or previously stored water.
- (p) "Qualified individual" means a person who meets any of the following criteria:
  - (1) For a claimed water right with a maximum allowable diversion amount greater than 200 acre-feet per year:
    - (A) A California-registered Professional Engineer or a person under the supervision of a California-registered Professional Engineer who is employed to install, operate, and maintain measuring devices or implement and verify the accuracy of measurement methodologies;
    - (B) A California-licensed contractor authorized by the State License Board for C-57 well drilling or C-61 Limited Specialty/D-21 Machinery and Pumps;
    - (C) A board-certified Water Treatment Operator or Water Distribution Operator who is trained and experienced in water measurement;
    - (D) A person professionally employed as a hydrographer or water measurement technician who is trained and experienced in water measurement;
    - (E) In the case of a claimed water right held by an agency of the federal government, a hydrologist or professional engineer experienced and trained in water measurement who is employed by the federal agency in that capacity; or

- (F) A diverter, or employee or agent of a diverter, who has completed an instructional course described in section 1841.5 of the Water Code, or other instructional course approved by the deputy director, and who is installing and maintaining measuring devices or implementing measurement methodologies for the diverter's own diversion.
- (2) For a claimed water right with a maximum allowable diversion amount of 200 acre-feet per year or less, a person trained and experienced in water measurement and reporting. This may include the diverter, the diverter's employee or agent, or a person who meets any of the criteria described in paragraph (1) of this subdivision.
- (q) "Quality assurance protocol" means any procedure or process used to ensure the quality and accuracy of measurement data, including correcting for any known or suspected errors in the raw device output to meet the requirements of this chapter.
- (r) "Rate" or "flow rate" means the volumetric flow rate, expressed in units of volume per unit of time, at which a volume of water passes a designated and calibrated observation point during a specific time period.
- (s) "Raw device output" means the unaltered, numeric values provided by a measuring device, before any calculations, conversions, formulas, or quality assurance protocols have been applied.
- (t) "Rediversion" means the diversion of controlled water that has been previously diverted or stored under the same claimed water right.
- (u) "Release" means all downstream outflow of water from a reservoir.
- (v) "Threatened, endangered, or fully protected aquatic species" means a species that lives in water for at least one stage of its life and is a species listed as threatened or endangered pursuant to the Endangered Species Act (16 U.S.C. §§ 1531-1544), or the California Endangered Species Act (Fish and G. Code, §§ 2050-2097) or listed as fully protected pursuant to section 5515 of the Fish and Game Code.
- (w) "Twelve month reporting period" means a water year beginning October 1 and ending the following September 30, consistent with subdivision (e) of section 907.
- (x) "Withdrawal" means water that is removed from a reservoir for subsequent beneficial use. Withdrawal includes water that is put into conveyance infrastructure at the reservoir, and release of water from a reservoir intended for downstream diversion.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Sections 1841.5, 5103, and 5104 Water Code.

### **931.5 Authority of the Delta Watermaster.**

The Delta Watermaster shall exercise all powers assigned to the deputy director or the division under this chapter for any point of diversion located within the Delta. The deputy

director may exercise these powers within the Delta during a vacancy in the position of Delta Watermaster or as authorized by the Delta Watermaster.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Section 85230, Water Code.

### **932 Applicability.**

- (a) General Applicability. Except as described in sections 939.1 through 939.6, this chapter applies to diverters who are authorized to divert water under any of the following:
  - (1) Any claimed water right that has a maximum allowable diversion amount greater than 10 acre-feet per year; or
  - (2) Any combination of claimed water rights held by the same diverter that either diverts from the same point of diversion or diverts to the same reservoir, if the sum of the maximum allowable diversion amounts under such claimed water rights is greater than 10 acre-feet per year.
  - (3) Stockpond certificates and registrations for small domestic use, livestock stockponds, and cannabis cultivation are not subject to the requirements of this chapter. The maximum allowable diversion amounts or rates, authorized points of diversion, and storage locations or capacities for these do not need to be considered in determining applicability or any requirements of diverters under this chapter.
- (b) Large Diversions. Except as described in sections 939.1 through 939.6, the additional measurement and submission requirements described in subdivision (b) of section 933 and subdivision (b) of section 935, respectively, are referred to as the “large diversion requirements” and apply as follows:
  - (1) Large Diversion Applicability. The large diversion requirements of this chapter apply to diverters who are authorized to divert water either:
    - (A) At any point of diversion that is shared by multiple claimed water rights held by the same diverter, if the sum of the maximum allowable diversion amounts or maximum allowable direct diversion rates of such claimed water rights at the point of diversion is greater than 10,000 acre-feet per year or 30 cubic feet per second, respectively; or
    - (B) Under any claimed water right that has a maximum allowable diversion amount greater than 10,000 acre-feet per year or that is authorized to directly divert more than 30 cubic feet per second at any time, with the following exceptions:
      - (i) Rediversions Under Claimed Water Rights. Any point of diversion that diverts significantly less than 10,000 acre-feet per year or 30 cubic feet per second and operates solely for rediversion is not required to meet the

large diversion requirements of this chapter unless otherwise required pursuant to subdivision (c) of section 933.

- (ii) Claimed Water Rights with Small Points of Diversion. Diverters may submit an alternative compliance plan in accordance with section 936 for the purpose of excluding from the large diversion requirements of this chapter any point of diversion that diverts significantly less than 10,000 acre-feet per year or 30 cubic feet per second.
- (2) Delayed Effective Date. For any claimed water right or point of diversion that meets the large diversion applicability criteria described in paragraph (1) but does not have a total maximum allowable diversion amount greater than 10,000 acre-feet per year and is not authorized to directly divert more than 30 cubic feet per second between June 1 and September 30, the large diversion requirements of this chapter will take effect on October 1, 2026.
- (c) Qualifying Reservoir. The requirements for measuring and reporting withdrawals and releases from a reservoir or the total volume of water in a reservoir apply to any reservoir with a storage capacity greater than 5,000 acre-feet. These reservoirs are referred to as “qualifying reservoirs.”

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Section 13, 1846, and 5103, Water Code.

### **933 Collecting Measurement Data.**

- (a) General Measurement Parameters. For each claimed water right that meets the general applicability criteria described in subdivision (a) of section 932, diverters must measure the following, as applicable:
  - (1) Date and time of measurement;
  - (2) Volume and rate of water directly diverted;
  - (3) Volume and rate of water diverted to or collected to storage;
  - (4) Volume and rate of water withdrawn from storage in any qualifying reservoir; and
  - (5) Volume and rate of water released from any qualifying reservoir. This may include water that was released from the qualifying reservoir with or without having been stored.
- (b) Large Diversion Parameters. In addition to the general measurement parameters described in subdivision (a), for any claimed water right or point of diversion that meets the large diversion applicability criteria described in subdivision (b) of section 932, diverters must measure the following, as applicable:
  - (1) Date and time of measurement;

- (2) Volume and rate of water diverted from the stream. This may include water that is diverted for beneficial use as well as water that is put into conveyance infrastructure for beneficial use, for transfer to another stream, or for storage in an offstream reservoir, as applicable. Water diverted from the stream does not include water entering or leaving an onstream reservoir; and
- (3) For claimed water rights to store water in or withdraw water from qualifying reservoirs:
  - (A) Total volume of water in the qualifying reservoir at the time of measurement; and
  - (B) Volume and rate of water leaving the qualifying reservoir, including water that is withdrawn or released from the qualifying reservoir with or without having been stored.
- (c) Rediversions. If not already being measured pursuant to subdivisions (a) or (b), the deputy director may require diverters to measure rediversions upon determining that rediversion data are necessary to understand the supply, demand, or availability of water.
- (d) Volume measurements described in this chapter must reflect the discrete volumes diverted, withdrawn, or released in each measurement time interval and not the cumulative total volume, unless otherwise specified.
- (e) Diverters may use any measuring device or combination of measuring devices along with an accompanying methodology to meet the measuring requirements described in this section.
- (f) Diverters may cooperate on a local or regional basis to collectively meet the measuring requirements described in this section. A diverter or group of diverters who collectively measures under multiple claimed water rights must account for the general measurement parameters described in subdivisions (a) and (c) for each separate claimed water right.
- (g) Measurement Location. No delivery, use, or significant loss of water due to percolation and evaporation shall occur between the point of diversion (or the location where water is withdrawn or released from a qualifying reservoir) and the measurement location unless such deliveries, uses, or losses are otherwise measured and/or accounted for.
- (h) Measurement Frequency. Diverters must measure the required measurement parameters described in subdivisions (a) through (c) of this section, as applicable, whenever water is diverted or whenever water is withdrawn or released from a qualifying reservoir. Diverters must collect measurements of the required measurement parameters at the following frequencies:

- (1) For a claimed water right to divert only to a reservoir without any authorized direct diversion or diversion to underground storage, the required measurement frequency is determined based on the storage capacity of the reservoir and must be the most frequent of the values listed below. For a reservoir with a storage capacity that is:
  - (A) Greater than 1,000 acre-feet, measurements must be collected on an hourly or more frequent basis.
  - (B) Greater than 200 acre-feet, measurements must be collected on a daily or more frequent basis.
  - (C) Greater than 50 acre-feet, measurements must be collected on a weekly or more frequent basis.
  - (D) Greater than 10 acre-feet, measurements must be collected on a monthly or more frequent basis.
  - (E) Less than or equal to 10 acre-feet, no measurement is required.
- (2) For all other claimed water rights, including claimed water rights that authorize direct diversion, diversion to underground storage, or a combination of direct diversion and diversion to surface and/or underground storage, the required measurement frequency is determined based on the maximum allowable diversion amount for the claimed water right and must be the most frequent of the values listed below. For a claimed water right with a maximum allowable diversion amount that is:
  - (A) Greater than 1,000 acre-feet per year, measurements must be collected on an hourly or more frequent basis.
  - (B) Greater than 200 acre-feet per year, measurements must be collected on a daily or more frequent basis.
  - (C) Greater than 50 acre-feet per year, measurements must be collected on a weekly or more frequent basis.
  - (D) Greater than 10 acre-feet per year, measurements must be collected on a monthly or more frequent basis.
  - (E) Less than 10 acre-feet per year, no measurement is required.
- (3) For multiple claimed water rights held by the same diverter that authorize diversion from a shared point of diversion:
  - (A) If all of the claimed water rights meet the criteria described in paragraph (1) of this subdivision, the required measurement frequency for each claimed water right is based on the storage capacity of the reservoir in accordance with the



measurement frequency thresholds described in subparagraphs (1)(A) through (1)(E).

(B) If any of the claimed water rights meets the criteria described in paragraph (2) of this subdivision:

- (i) At the shared point of diversion, the required measurement frequency for each claimed water right is based on the sum of the maximum allowable diversion amounts of the multiple claimed water rights sharing the point of diversion, in accordance with the measurement frequency thresholds described in subparagraphs (2)(A) through (2)(D).
- (ii) For any points of diversion that are not shared by the multiple claimed water rights, the required measurement frequency is based on the maximum allowable diversion amount of the respective claimed water right in accordance with the measurement frequency thresholds described in subparagraphs (2)(A) through (2)(D).

(C) In the event of any conflict between the measurement frequency requirements for a diverter with multiple claimed water rights that divert from the same point of diversion or to the same reservoir, the more stringent requirement shall control.

(i) **Measurement Accuracy.** For the purposes of this chapter, “accuracy” means the reported value of volume or flow rate compared with the actual value, expressed as a percentage. The percentage shall be calculated as  $100 \text{ percent} \times [1 - (\text{error} \div \text{actual value})]$ , where the error is defined as the reported value minus the actual value, expressed as an absolute value; the actual value is determined through laboratory, design, or field-testing protocols; and the reported value is the value included in the non-provisional measurement data submitted to the board and determined by the measurement methodology.

(1) Diverters are responsible for ensuring that the measurement methodology is implemented, operated, and maintained to meet the accuracy standards of this subdivision:

(A) For measuring devices installed on or before January 1, 2016, measurement data must be at least 85 percent accurate or within  $\pm 15$  percent error.

(B) For measuring devices installed after January 1, 2016:

- (i) For measurements that must be collected on a daily or hourly basis as described in subdivision (h), measurement data must be at least 90 percent accurate or within  $\pm 10$  percent error.
- (ii) For measurements that must be collected on a weekly or monthly basis as described in subdivision (h), measurement data must be at least 85 percent accurate or within  $\pm 15$  percent error.

- (2) Diversers must notify the board in writing within 30 days of detecting that the measurement data do not meet or are unlikely to meet the accuracy requirements of this section. The notification must include the diverter's plan to take appropriate and timely corrective action to meet the accuracy requirements of this subdivision.
- (3) If the measurement data fail to meet the accuracy requirements of this section, the diverter must repair or replace any measuring device as necessary or otherwise correct the measurement methodology at the diverter's own expense to meet such requirements.

Authority cited: Sections 1051, 1058, 1840, and 1841, Water Code.

Reference: Section 13, 1846, and 5103, Water Code.

### **934 Measurement Methodology.**

- (a) Measurement Methodology Content. For each measurement methodology used to measure and account for the required measurement parameters described in section 933, each diverter must electronically submit a measurement methodology on a form available through the online reporting platform and containing the following information, as applicable:
  - (1) Name and contact information, including email address, for:
    - (A) All participants covered by the measurement methodology;
    - (B) The primary contact person to represent all diversers covered by the measurement methodology in measurement matters; and
    - (C) The qualified individual who certified that the measurement methodology meets the requirements of this chapter;
  - (2) Identification number of each claimed water right covered by the measurement methodology;
  - (3) Identification of each point of diversion covered by the measurement methodology and of each measurement location;
  - (4) An explanation of any quality assurance protocol used to ensure the quality and accuracy of the measurement data;
  - (5) For any measuring device that does not directly measure both discrete volume and rate, the conversion method or formula used to convert the measurement data to volume and rate, including the following:
    - (A) For a measuring device that measures flow rate only, the conversion method must describe the protocol used to record the duration of operation during each measurement interval, where volume may be derived by the following formula:  $\text{volume} = (\text{flow rate}) \times (\text{duration})$ ;

- (B) For a measuring device that measures cumulative volume only, the conversion method to derive the discrete volume diverted within the measurement interval may use the following formula:  $\text{discrete volume} = (\text{cumulative volume at the end of the interval}) - (\text{cumulative volume at the beginning of the interval})$ . The conversion method to derive the flow rate must describe the protocol used to determine the duration of operation during each measurement interval, where flow rate may be derived by the following formula:  $\text{flow rate} = (\text{volume diverted in each measurement interval}) \div (\text{duration})$ ;
  - (C) For a measuring device that measures water velocity only, the conversion method must describe the protocol used to determine the cross-sectional area of flow and the duration of operation during the measurement interval, where volume and flow rate may be derived by the following formulas:  $\text{volume} = (\text{velocity}) \times (\text{cross-sectional flow area}) \times (\text{duration})$ , and  $\text{flow rate} = (\text{velocity}) \times (\text{cross-sectional flow area})$ ; and
  - (D) For a measuring device that measures water elevation at the point of measurement, electricity consumption, electricity generation, or any other parameter, the conversion method must describe the methodology or formula used to determine the volume and flow rate of water diverted;
- (6) A description of the methodology used to aggregate hourly or more frequent measurement data to reflect daily values;
  - (7) A description of the methodology used to distinguish measurement data for water directly diverted, diverted to or collected to storage, withdrawn or released from a qualifying reservoir, or rediverted, as applicable and if not measured individually;
  - (8) For the general measurement datafiles described in subdivision (a) of section 935, a description of the methodology used to distinguish and apportion general measurement data to each claimed water right covered by the measurement methodology. The aggregate general measurement data must meet the accuracy requirements of subdivision (i) of section 933, but any individual apportionment may be a reasonable approximation as follows:
    - (A) For a group of diverters covered by the same measurement methodology, the methodology for apportioning general measurement data to each claimed water right may include calculations based on the reasonably approximated percentage of water diverted under each claimed water right;
    - (B) For a diverter with multiple claimed water rights covered by the same measurement methodology, the methodology for apportioning general measurement data to each claimed water right may include calculations to allocate diversion amounts to each claimed water right; and

- (C) For a diversion that the diverter attributes to multiple claimed water rights and/or a combination of contract deliveries and claimed water rights, the methodology must identify these and apportion general measurement data between them;
  - (9) Any other description of the measurement methodology and how it is implemented to derive the measurement data submitted under section 935 from the raw device output; and
  - (10) A certification by a qualified individual that the measurement methodology meets the requirements of this chapter.
- (b) Registering Measuring Devices. Diversers must register each measuring device included in the measurement methodology as follows:
- (1) For each measuring device installed or replaced on or after October 1, 2025, diversers must register the measuring device with the board on or before the submission deadline of the annual report for which the measuring device is first used, or within 30 days of a request by the deputy director. For each measuring device installed or replaced before October 1, 2025, diversers must register the measuring device with the board on or before January 31, 2026.
  - (2) For any changes to the location of a measuring device, diversers must update the measuring device registry on or before the submission deadline of the annual report for which the changes first apply, or within 30 days of a request by the deputy director.
  - (3) Diversers must register each measuring device included in the measurement methodology by electronically submitting the following information, as applicable, on a form available through the online reporting platform:
    - (A) Identification number of each claimed water right that uses the measuring device or recording device;
    - (B) Make and model number of the measuring device;
    - (C) Type of measuring device, such as inline flow meters, submerged orifice gates, rectangular weirs, v-notch weirs, broad crested weirs, or other class of device designed to perform a similar function;
    - (D) Location of the measuring device, including identification of the associated point of diversion;
    - (E) Make, model number, and type of the recording device, if different from the measuring device;
    - (F) Measured parameter and associated units of the raw device output;
    - (G) Accuracy of the measurement data;

(H) Date of installation; and

(I) Contact information for the qualified individual who installed and verified the accuracy of the measuring device.

(c) Measurement Methodology Submission and Implementation. Each measurement methodology must be submitted to the board and implemented as follows:

- (1) For measurement methodologies first implemented on or after October 1, 2025, diverters must submit a measurement methodology to the board on or before January 31, 2027 or on or before the submission deadline of the annual report for which the measurement methodology first applies, whichever is later. For measurement methodologies first implemented before October 1, 2025, diverters must submit a measurement methodology to the board on or before January 31, 2027.
- (2) For any changes or modifications to a previously submitted measurement methodology, diverters must submit a revised measurement methodology to the board on or before the submission deadline of the annual report for which the changes first apply.
- (3) Measurement methodologies submitted in accordance with this section will be considered accepted by the board and must be timely implemented. The division may review any submitted measurement methodology in accordance with subdivision (e).
- (4) Measurement methodologies will be presumed to remain in effect until cancelled, updated, or otherwise modified by the diverter, or rejected by the division.
- (5) Measuring devices may only be installed and calibrated by a qualified individual who meets the requirements of subdivision (p) of section 931.
- (6) All measuring devices and measurement infrastructure installed after the effective date of this chapter, as amended, must be installed in a manner and location that does not result in a serious or major disturbance to an environmental or public trust resource and avoids exception criteria listed in title 14, section 15300.2 of the California Code of Regulations.

(d) Evidence of Proper Functioning. Diverters must submit evidence to the board's online reporting platform verifying that each measuring device included in the measurement methodology is functioning properly and that the non-provisional measurement data meet the accuracy requirements described in subdivision (i) of section 933 as follows:

- (1) Such evidence may include, but is not limited to, calibration reports, laboratory certification documentation, field-test reports, or an affidavit or declaration of a qualified individual documenting the accuracy and proper functioning of the measurement methodology and associated measuring devices;

- (2) Evidence of proper functioning must be submitted on or before the submission deadline of the first annual report after the measuring device was installed and at least once every five years thereafter, or upon request by the deputy director; and
- (3) A qualified individual must certify that all evidence of proper functioning submitted in accordance with this section is accurate to the best of their knowledge.

(e) Review and Verification. The division may:

- (1) Review any measurement methodology and request additional information to support a measurement methodology;
  - (2) Audit a measurement methodology, conduct a field inspection, or request additional information from the diverter to determine if all measuring devices have been properly installed and if the measurement methodology has been properly implemented to meet the requirements of this chapter. The diverter must make all measuring devices reasonably available and accessible for inspection upon request;
  - (3) Confer informally with the sponsor or participants of a measurement methodology to suggest modifications to the measurement methodology;
  - (4) Require changes or modifications to a measurement methodology to meet the requirements of this chapter or to correct a deficiency. Such changes or modifications must be made and implemented within a reasonable time;
  - (5) For a measurement methodology that does not include installation of a measuring device at each point of diversion, require the diverter to install a measuring device at each point of diversion within 90 days if identified deficiencies in the measurement methodology are not timely corrected, or if the measurement methodology is rejected;
  - (6) Approve, with or without conditions, any measurement methodology that meets the requirements of this chapter; or
  - (7) Reject any measurement methodology that fails to meet the requirements of this chapter. The division must notify the diverter in writing if the measurement methodology has been rejected, and written notices of rejection must include the basis for the rejection. The rejection of a measurement methodology shall not retroactively affect the compliance status of a submitted and implemented measurement methodology.
- (f) An incomplete measurement methodology or documentation for a measurement methodology that does not meet the minimum standards of this section shall not relieve the diverter of fully meeting the requirements of this chapter.

Authority cited: Sections 1058 and 1841, Water Code.

Reference: Section 13, 183, 1051, 1840, 1841.5, 1846, and 5103, Water Code.

### **935 Submitting Measurement Data.**

(a) General Measurement Datafiles. General measurement data collected before October 1, 2025 must be submitted in accordance with sections 939.1 through 939.6. General measurement data collected on or after October 1, 2025 must be submitted in accordance with this subdivision. For each claimed water right that meets the general applicability criteria described in subdivision (a) of section 932, diverters must electronically submit general measurement datafiles to the board as follows:

(1) General Measurement Datafile Contents. The reported values in each general measurement datafile must meet the following criteria:

(A) General measurement datafiles must include the required general measurement data described in subdivisions (a) and (c) of section 933, as applicable, and include appropriate units. General measurement datafiles must distinguish between general measurement data relating to direct diversions, diversions to or collections to storage, rediversions, withdrawals from qualifying reservoirs, and releases from qualifying reservoirs, as applicable.

(B) The reported values in each general measurement datafile must reflect general measurement data for the claimed water right being reported. For a diverter or group of diverters that collectively measures under multiple claimed water rights, a separate general measurement datafile must be submitted for each claimed water right. Diverters may submit multiple general measurement datafiles for the same claimed water right.

(C) The reported values in each general measurement datafile must be recorded, at a minimum, at the required frequency and accuracy described in subdivisions (h) and (i), respectively, of section 933. For measurements that must be collected on an hourly basis, the reported values included in the general measurement datafile may be aggregated to reflect daily or more frequent values of each general measurement parameter.

(D) The reported values in each general measurement datafile must reflect general measurement data associated with the respective measurement location, point of diversion, or point of storage, as applicable. Diverters may submit multiple general measurement datafiles for the same measurement location, point of diversion, or point of storage.

(2) General Measurement Datafile Submission Process. Diverters must either submit general measurement datafiles to the board's online reporting platform using an

electronic, machine-readable template provided by the board or transmit general measurement data directly to the board's online reporting platform.

- (3) **General Measurement Datafile Submission Schedule.** General measurement datafiles must be submitted to the board annually as specified in chapter 2.7 of this title. General measurement datafiles must also be submitted within 30 days of a request by the deputy director. Raw device output must be made available upon request.
- (b) **Large Diversion Submissions.** Large diversion submission requirements described in this subdivision are in addition to the general measurement datafiles that must be submitted in accordance with subdivision (a). Large diversion measurement data collected before the effective date of this chapter must be submitted in accordance with sections 939.1 through 939.6. Large diversion measurement data collected on or after the effective date of this chapter must be submitted in accordance with this subdivision. For each claimed water right and point of diversion that meets the large diversion applicability criteria described in subdivision (b) of section 932, diverters must electronically submit large diversion submissions to the board as follows:
  - (1) **Large Diversion Submission Contents.** Large diversion submissions must reflect daily or more frequent values of each of the large diversion parameters described in subdivisions (b) and (c) of section 933, as applicable, and include appropriate units.
    - (A) Provisional large diversion measurement data may be submitted for the purpose of meeting the requirements described in this subdivision, so long as the provisional measurement data are clearly labeled.
    - (B) Diverters must indicate the identification numbers of all claimed water rights represented by the large diversion measurement data, but large diversion measurement data submitted under this subdivision do not need to be apportioned to each claimed water right.
    - (C) Large diversion measurement data submitted under this subdivision do not need to distinguish between direct diversions, diversions to or collections to storage, or rediversions, or between withdrawals or releases from qualifying reservoirs.
  - (2) **Large Diversion Submission Process.** Before October 1, 2026, diverters must post the required large diversion measurement data to a publicly accessible website or transmit the required large diversion measurement data directly to the board's online reporting platform. For large diversion measurement data that are posted to a publicly accessible website, diverters must provide to the board the exact website address or uniform resource locator (URL) where the large diversion measurement data are posted. Beginning October 1, 2026, diverters must either submit large diversion measurement data to the board's online



reporting platform using an electronic, machine-readable template provided by the board, transmit the required large diversion measurement data directly to the board's online reporting platform, or post the required large diversion measurement data to a publicly accessible website approved by the deputy director. The deputy director must maintain and post on the board's website a list of approved publicly accessible websites to which large diversion measurement data may be posted.

- (3) Large Diversion Submission Schedule. Large diversion submissions must be submitted on a weekly basis, at minimum. Each large diversion submission must be submitted with a lag time of no more than 7 days between the date of the most recent measurement and the submission date.
- (c) Data Retention. Diverters must maintain records of the raw device output from each measuring device for a period of not less than 10 years.

Authority cited: Sections 1051, 1058, 1840, and 1841, Water Code.

Reference: Section 13, 1846, and 5103, Water Code.

### **936 Alternative Compliance with Water Measurement Requirements.**

- (a) Eligibility and Scope. Diverters may submit an alternative compliance plan to more effectively or efficiently measure the parameters described in section 933. Alternative compliance may be appropriate in circumstances including, but not limited to, where strict compliance with the requirements of this chapter is not feasible, would be unreasonably expensive, would unreasonably affect public trust uses, would result in the waste or unreasonable use of water, or is met by another person, agency, or organization. Alternative compliance plans must fulfill the requirements of this chapter to the extent practicable and provide sufficiently accurate and timely measurement data to the board.
- (b) Alternative compliance plans may cover a single diverter or a group of diverters.
- (c) Alternative Compliance Plan Content. Each alternative compliance plan must be electronically submitted on a form available through the board's online reporting platform and contain the following information, at a minimum:
  - (1) Name and contact information, including email address, for:
    - (A) All participants covered by the alternative compliance plan;
    - (B) The primary contact person to represent all diverters covered by the alternative compliance plan in measurement matters; and
    - (C) The qualified individual who certified that the alternative compliance plan meets the requirements of this chapter;
  - (2) Identification number of each claimed water right covered by the alternative compliance plan;

- (3) Detailed description of the area covered by the alternative compliance plan, including all of the following:
  - (A) All points of diversion and how water is diverted at those points and conveyed to the place of use;
  - (B) Total acreage included in the alternative compliance plan, if applicable;
  - (C) Assessor's parcel number and ownership within the area covered by the alternative compliance plan; and
  - (D) A map that clearly shows the location of each place of use, point of diversion, and measurement location for each claimed water right covered by the alternative compliance plan must be clearly labeled;
- (4) Description of how the proposed alternative measurement methodology functionally complies with the requirements of this chapter to the extent practicable, including:
  - (A) An explanation of the specific basis for claiming that the proposed alternative compliance plan is more efficient or effective than strict compliance with the requirements of sections 933 through 935 and meets the alternative compliance eligibility criteria described in subdivision (a);
  - (B) Identification of the proposed measurement frequency and accuracy;
  - (C) A description of the proposed measurement methodology, including any measuring devices or alternative means of measuring the required measurement parameters, any measurement locations, and any calculations, conversion methods, formulas, and quality assurance protocols, and how the proposed measurement methodology is implemented to derive the measurement data submitted to the board from the raw device output. For measurements using remote sensing, a description of the methodology used to determine the required measurement parameters from the remote sensing data;
  - (D) A description of the proposed methodology to distinguish and apportion general measurement data to each claimed water right covered by the alternative compliance plan;
  - (E) For each claimed water right or point of diversion that meets the large diversion applicability described in subdivision (b) of section 932, a description of the proposed large diversion submission frequency; and
  - (F) If applicable, including for measurements using remote sensing, a description of the methodology used to account for any water losses between the point of diversion (or the location where water is withdrawn or released from a

qualifying reservoir) and the measurement location, including water losses due to percolation or evaporation;

- (5) Description of the implementation and the implementation schedule with date-specific, objective milestones from the date of submission of the alternative compliance plan to the board through final implementation;
  - (6) An affirmation, signed by all diverters covered by the alternative compliance plan or their agent, that the alternative compliance plan will be implemented in accordance with the schedule contained therein; and
  - (7) A certification by a qualified individual that the alternative compliance plan meets the requirements of this chapter.
- (d) **Registering Measuring Devices.** Diverters must register each measuring device included in the alternative compliance plan with the board in accordance with subdivision (b) of section 934. For alternative compliance plans that do not use any measuring devices, diverters must indicate when submitting measurement data that no measuring devices were used.
- (e) **Measurement Data Submission and Schedule.** Except as described in sections 939.1 through 939.6, diverters must submit general measurement datafiles in accordance with subdivision (a) of section 935. Except as described in sections 939.1 through 939.6, for each claimed water right or point of diversion that meets the large diversion applicability described in paragraph (b) of section 932, diverters must submit large diversion submissions in accordance with subdivision (b) of section 935 or in accordance with an alternative large diversion submission schedule described in the alternative compliance plan.
- (f) **Alternative Compliance Plan Submission and Implementation.** Each alternative compliance plan must be submitted to the board and implemented as follows:
- (1) For alternative compliance plans first implemented on or after October 1, 2025, diverters must submit an alternative compliance plan to the board on or before January 31, 2027 or before its implementation, whichever is later. For alternative compliance plans first implemented before October 1, 2025, diverters must submit an alternative compliance plan to the board on or before January 31, 2027.
  - (2) For any changes or modifications to a previously submitted alternative compliance plan, including changes in the methodology, area, measurement location, or participants, diverters must submit a revised alternative compliance plan to the board on or before the submission deadline of the annual report for which the changes first apply.
  - (3) Alternative compliance plans submitted in accordance with this section will be considered accepted and must be implemented according to the schedule

described in the alternative compliance plan, unless otherwise directed by the deputy director. The division may review any submitted alternative compliance plan in accordance with subdivision (g).

- (4) Alternative compliance plans will be presumed to remain in effect until cancelled, updated, or otherwise modified by the diverter, or rejected by the division. Diverters must review their alternative compliance plan every five years and confirm that there are no proposed changes with the alternative compliance plan as submitted.
- (5) Alternative compliance plans submitted pursuant to this section must be posted on the board's website with the opportunity for comment by any interested party.

(g) Review and Verification. The division may:

- (1) Review any alternative compliance plan and request additional information to support the alternative compliance plan, including for purposes of validating the effectiveness and appropriateness of the alternative measurement methodology and its implementation;
- (2) Make findings evaluating the appropriateness of an alternative compliance plan based on the contents of the alternative compliance plan and related evidence, and whether the alternative compliance plan meets the eligibility and scope requirements of this section;
- (3) Audit an alternative compliance plan, conduct a field inspection, or request additional information from the diverter to determine if an alternative compliance plan has been properly implemented and meets the requirements of this section;
- (4) Require the diverter to submit evidence that an alternative compliance plan has been implemented in accordance with the proposed schedule;
- (5) Confer informally with the sponsor or participants of an alternative compliance plan to suggest modifications to the alternative compliance plan;
- (6) Require changes or modifications to any alternative compliance plan to meet the requirements of this chapter, correct a deficiency, or respond to changes in hydrologic or other circumstances. Such changes or modifications must be made and implemented within a reasonable time;
- (7) Approve, with or without conditions, any alternative compliance plan that meets the requirements of this chapter. Conditions for approval may include, but are not limited to, implementation of the alternative compliance plan in accordance with its schedule and continued adherence to the requirements of this section in response to changes in hydrologic conditions or other circumstances; or
- (8) Reject any alternative compliance plan that fails to meet the requirements of this chapter. The division must notify the diverter in writing if the alternative

compliance plan has been rejected, and written notices of rejection must include the basis for the rejection. The rejection of an alternative compliance plan shall not retroactively affect the compliance status of a submitted and implemented alternative compliance plan.

- (h) Incomplete alternative compliance plans and alternative compliance plans that do not meet the minimum requirements of this section shall not relieve the diverter of the requirement to fully comply with this chapter.

Authority cited: Sections 183, 1051, 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1123, 1841.5, 1846, and 5103, Water Code.

### **937 Temporary Exemption from Measurement Requirements.**

- (a) Diverters must complete and submit annual reports in accordance with chapter 2.7 of this title, regardless of whether they are subject to or exempted from any of the requirements under this chapter.
- (b) Request for Additional Time. Diverters may submit a request for additional time on a form available through the Board's online reporting platform to comply with the provisions of this chapter.
  - (1) The deputy director may grant additional time not to exceed 24 months per extension.
  - (2) Approval of a request for additional time is contingent on the following:
    - (A) Financial considerations shall be considered only in cases where the diverter has requested agency funding and is awaiting a grant or loan award.
    - (B) Additional time based on other considerations is limited to the minimum time needed to access the site due to weather conditions, minimum time needed to obtain necessary permits, minimum time needed to comply with construction time periods set in other agency permits, or unforeseen circumstances.
  - (3) All requests for additional time must be accompanied by documentation of grant or loan requests or agency permit requests, as applicable. Funding and/or permit approval documents must be submitted to the board within 30 days of receipt. Requests for additional time based on unforeseen circumstances must be accompanied by a showing of good cause and a showing that all reasonable efforts have been made to comply with this chapter.
  - (4) All requests for additional time must be accompanied by a plan documenting the additional time needed to comply with the provisions of this chapter. The plan must describe the interim measurement and reporting practices the diverter will implement while diligently pursuing compliance with this chapter.

(c) Temporary Exemption for No Diversions and No Withdrawals or Releases. The diverter is exempt from meeting measurement data submission requirements as follows:

(1) No Diversions and No Withdrawals or Releases During the Twelve Month Reporting Period. If, during the entirety of the twelve month reporting period, no diversions are made under the claimed water right and no withdrawals or releases are made from qualifying reservoirs, diverters are not required to submit a general measurement datafile as described in subdivision (a) of section 935.

(A) Diverters claiming a temporary exemption under this subdivision must indicate in the associated annual report for the claimed water right that no diversions were made and no water was withdrawn or released from qualifying reservoirs.

(B) The general measurement datafile submission requirements described in section 935 shall resume for the claimed water right for any twelve month reporting period during which a diversion occurs or water is withdrawn or released from qualifying reservoirs.

(2) No Large Diversions. For any claimed water right or point of diversion that meets the large diversion applicability criteria described in subdivision (b) of section 932, if no diversions are made and no water is withdrawn or released from qualifying reservoirs during the entirety of the week or other schedule for reporting as established under section 938, diverters are not required to submit the large diversion submissions described in subdivision (b) of section 935 for the corresponding week or other such large diversion submission schedule during which no diversions were made and no water was withdrawn or released from qualifying reservoirs.

(A) Diverters claiming a temporary exemption under this subdivision must indicate in the online reporting platform that no diversions were made and no water was withdrawn or released from qualifying reservoirs during the time period.

(B) The large diversion submission requirements described in section 935 shall resume once diversions or withdrawals or releases from qualifying reservoirs resume.

(d) Destruction of Diversion or Withdrawal or Release Infrastructure. If a natural disaster, emergency, or other unforeseen circumstance destroys the diversion or withdrawal or release infrastructure or equipment, or otherwise prevents any water from being diverted at a point of diversion or from being withdrawn or released from a qualifying reservoir, diverters may be temporarily exempt from certain requirements of this chapter as follows:

(1) For destruction of diversion infrastructure or equipment:

- (A) Diverters are not required to submit diversion measurement data for the affected point of diversion covering the portion of the twelve month reporting period for which the diversion infrastructure or equipment was inoperable.
  - (B) For any water that is withdrawn or released from qualifying reservoirs while the diversion infrastructure or equipment is inoperable, diverters must continue to measure withdrawals and releases and submit these measurement data in accordance with the general measurement requirements of this chapter.
  - (C) Large Diversions. For any claimed water right or point of diversion that meets the large diversion applicability criteria described in subdivision (b) of section 932, diverters must continue to measure the total volume of water in qualifying reservoirs and the volume and rate of water leaving qualifying reservoirs and submit these measurement data in accordance with the large diversion requirements of this chapter.
- (2) For destruction of withdrawal or release infrastructure or equipment:
  - (A) Diverters are not required to submit withdrawal or release measurement data for the affected location where water is withdrawn or released from qualifying reservoirs covering the portion of the twelve month reporting period for which the withdrawal or release infrastructure or equipment was inoperable.
  - (B) For any water that is diverted at a point of diversion while the withdrawal or release infrastructure or equipment is inoperable, diverters must continue to measure diversions and submit these measurement data in accordance with the general measurement requirements of this chapter.
  - (C) Large Diversions. For any claimed water right or point of diversion that meets the large diversion applicability criteria described in subdivision (b) of section 932, diverters must continue to measure the volume and rate of water diverted from the stream and the total volume of water in qualifying reservoirs and submit these measurement data in accordance with the large diversion requirements of this chapter.
- (3) Diverters must indicate in the associated annual report for the affected claimed water right when the diversion or withdrawal or release infrastructure or equipment was inoperable.
- (4) All requirements of this chapter shall resume when diversions or withdrawals or releases from qualifying reservoirs resume.
- (e) Destruction of Measuring Device or Measurement Infrastructure. If a natural disaster, emergency, or other unforeseen circumstance destroys measuring devices or measurement infrastructure, or otherwise prevents measurement of any of the required measurement parameters described in section 933, diverters may request a

temporary exemption from measuring the affected measurement parameter at the measurement location. Diverters must continue to measure and submit measurement data for each measuring device that remains operational.

- (1) Any temporary exemption requested under this subdivision must be submitted in writing to the board within 30 days of detecting that the measurement infrastructure or measuring device has become inoperable and must describe the reason for the request, which measurement parameters are affected, and a timeline in which the measurement infrastructure or measuring device will be repaired or replaced and become operational.
- (2) The deputy director may approve or reject any temporary exemption request on a case-by-case basis. Any rejection of a temporary exemption request must include an explanation for the rejection. If the deputy director does not issue a written notice of approval or rejection within 30 days of receipt of the temporary exemption request, the temporary exemption request shall be presumed to be provisionally approved until a written notice of approval or rejection is issued, up to a maximum of 180 days from the date the temporary exemption request was submitted.
- (3) Upon approval of a temporary exemption request, the diverter is not required to meet the general or large diversion measuring requirements described in section 933 or the large diversion submission requirements described in section 935 for the affected measurement parameter at the measurement location for up to 180 days after the measurement infrastructure or measuring device became inoperable.
- (4) Diverters must indicate in the associated annual report for the affected claimed water right when the measurement infrastructure or measuring device was inoperable and provide estimates of the values for the affected measurement parameters that occurred during the period of inoperability.
- (5) Diverters may submit a written request to extend the temporary exemption up to an additional 180 days. Any such request must include an explanation for the time extension and a timeline in which the measurement infrastructure or measuring device will be operational. The deputy director may approve or reject any time extension requests for temporary exemptions on a case-by-case basis.
- (6) All requirements of this chapter shall be reinstated 180 days after the measurement infrastructure or measuring device became inoperable, or on the expiration of any approval of a temporary exemption request pursuant to paragraph (3) of this subdivision, whichever comes earlier, or the expiration of any time extension approved pursuant to paragraph (5) of this subdivision.
- (7) Diverters are required to meet all requirements of this chapter if the temporary exemption request is denied.



Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Section 13, 1846, and 5103, Water Code.

### **938 Threshold and Submission Schedule Adjustment.**

- (a) For the purposes of this chapter, “threshold” means the numeric value above which a particular requirement of this chapter applies and at or below which it does not apply. Thresholds may refer to the general applicability, large diversion applicability, or qualifying reservoir thresholds described in section 932, or the measurement frequency thresholds described in subdivision (h) of section 933.
- (b) For the purposes of this chapter, “submission schedule” means the submission frequency and associated dates by which general measurement datafiles or large diversion submissions must be submitted, as described in paragraphs (a)(3) and (b)(3), respectively, of section 935.
- (c) The deputy director may issue orders to adjust any threshold, or submission schedule within a watershed or portion thereof.
- (d) The deputy director may raise the general applicability threshold consistent with paragraph (b)(2) of section 1840 of the Water Code but may not lower the general applicability threshold to be any value below 10 acre-feet per year.
- (e) For diverters not subject to large diversion requirements, the deputy director may not lower the measurement frequency thresholds below the following:
  - (1) For hourly measurements, 1,000 acre-feet of storage capacity or 1,000 acre-feet per year;
  - (2) For daily measurements, 100 acre-feet of storage capacity or 100 acre-feet per year; or
  - (3) For weekly measurements, 10 acre-feet of storage capacity or 10 acre-feet per year.
- (f) The deputy director must provide notice and opportunity for comment before adjusting the large diversion applicability, qualifying reservoir, or measurement frequency thresholds, or the submission schedules.
- (g) The deputy director may adjust a threshold or submission schedule after considering:
  - (1) The total volume of water diverted per month in relation to the total volume of water available per month within the watershed or portion thereof;
  - (2) The requirements of any policy, decision, or order of the board or a court;
  - (3) The need for diversion and/or withdrawal or release measurement information in evaluating how the diversions and/or withdrawals or releases impact public trust resources or water availability;

- (4) Any relevant information submitted by affected diverters, federal, state, local, or tribal governments, or other interested parties regarding a proposed adjustment;
  - (5) The cost of meeting the requirements of this chapter in relation to the benefits of the additional measurement information at a specific threshold or submission schedule; and
  - (6) Whether a proposed adjustment will unreasonably injure public trust resources or threatened, endangered, or fully protected aquatic species.
- (h) The deputy director has the discretion to allow diverters to submit provisional measurement data for submission schedules that have been adjusted to require more frequent submission of general measurement datafiles than described in paragraph (a)(3) of section 935. Provisional measurement data must be clearly labeled. For general measurement datafiles that are submitted with an annual report, the general measurement data must not be provisional.
- (i) Any order to adjust a threshold or submission schedule may remain in effect for a period not to exceed five years, after which the order may be renewed. If changing conditions warrant, the deputy director may modify or cancel any adjustment.
- (j) The deputy director must maintain and post on the board's website a list of thresholds and submission schedules for watersheds or portions thereof where the threshold or submission schedule is different from the default value established in this chapter.

Authority cited: Sections 1051, 1058, 1840, and 1841, Water Code.

Reference: Section 13, 1123, 1846, and 5103, Water Code.

### **939 Compliance.**

- (a) A decision or order issued under this chapter by the deputy director is subject to reconsideration under article 2 (beginning with section 1122) of chapter 4 of part 1 of division 2 of the Water Code, and all applicable sections of this title.
- (b) Failure to meet the requirements of this chapter, including, but not limited to, failure to timely implement, maintain, verify the accuracy of, or correct deficiencies of a measurement methodology or alternative compliance plan, is a violation subject to civil liability up to the maximum per day penalty pursuant to section 1846 of the Water Code.
- (c) **Conflicting Requirements.** Any person with a claimed water right identified in or subject to a legal action or requirement, including, but not limited to, a statute, order, policy, regulation, decision, judgement or probationary designation of the board, a Regional Water Quality Control Board, or a court, must meet the terms and conditions of the claimed water right and the legal action or requirement in addition to the requirements of this chapter. If there is any conflict or inconsistency between

any legal requirement and the requirements of this chapter, then the more stringent requirement shall control in each instance.

- (d) Nothing in this chapter shall be construed to limit or modify the board's authority to obtain information under any other lawful authority.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1122, and 1846, Water Code.

### **939.1 Water Year 2025 Reporting.**

- (a) Sections 939.1 through 939.6 will become inoperative after the data submission deadline for water year 2025. Diversers must submit measurement data for water year 2025 in accordance with the requirements that were in effect prior to the amendment to chapter 2.8, as reproduced in sections 939.2 through 939.6, with minor revisions for clarity.
- (b) Beginning on the effective date of this chapter, as amended, measurement data must be collected and submitted in accordance with sections 931 through 939.
- (c) Before the effective date of this chapter, as amended, measurement data must be collected and submitted in accordance with sections 939.1 through 939.6.

### **939.2 Water Year 2025 Definitions.**

The following definitions apply to the terms as they are used in sections 939.2 through 939.6. In the event of any conflict between definitions provided in section 931 and definitions provided in this section, the definitions provided in this section shall control in sections 939.2 through 939.6.

- (a) "Diverter" means:
  - (1) Any person authorized to divert water under a permit, license, or registration; or
  - (2) Any person required under Division 2, Part 5.1 of the Water Code, to file a Statement of Water Diversions and Use; or
  - (3) To the extent authorized by federal law, the federal government for claimed water rights claimed under permits, licenses, registrations, Statements of Water Diversions and Use, and non-reserved and reserved rights on file with the board.
- (b) "Diverter with multiple claimed water rights" means a diverter who diverts water under more than one of the following: permits, licenses, registrations, stockpond certificates, or Statements of Water Diversions and Use.
- (c) "Measurement method" means a method capable of accounting for the rate of direct diversion, rate of collection to storage, and rate of withdrawal or release from storage where the method is likely to achieve accuracy standards comparable to those of individual measuring devices as described in section 939.4 subdivision (d).

- (d) "Measuring device" means a device by which a diverter determines and records the numeric value of flow rate, velocity or volume of the water passing a designated and calibrated observation point during a specific time period. A measuring device may be a manufactured device, an on-site built device, or an in-house built device.
- (e) "Place of use" means the legal location where water is used under the claimed water right, subject to the following clarifications:
  - (1) For livestock stockpond registrations, as defined in section 1228.1, subdivision (b)(3) of the Water Code, and for stockpond certificates, as described in section 1226.1 of the Water Code, the place of use is the stockpond.
  - (2) For single purpose recreational ponds, the place of use is the pond.
  - (3) For other ponds or reservoirs, the deputy director may designate the pond or reservoir as the place of use for the purposes of compliance with this chapter.
  - (4) For instream flow beneficial uses and wetland preservation and enhancement dedications, the place of use is the designated reach of the stream or the wetland area where the water is applied to beneficial use.
- (f) "Point of diversion" means the legal location where water is diverted from its source.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Sections 13 and 5103, Water Code.

### **939.3 Water Year 2025 Applicability.**

- (a) Beginning on the effective date of this chapter, as amended, for each claimed water right, point of diversion, or qualifying reservoir that meets the criteria described in section 932, diverters must measure the required parameters and submit the resulting data in accordance with sections 931 through 939.
- (b) Before the effective date of this chapter, as amended, the following diverters shall use a measuring device or employ a measurement method capable of measuring the rate of diversion, rate of collection to storage, the rate of withdrawal or release from storage, and the total volume of water diverted or collected to storage, and shall submit the resulting data to the board in accordance with sections 939.1 through 939.6:
  - (1) Any person authorized to divert greater than 10 acre-feet of water per year under a permit or license.
  - (2) Any person who has previously diverted or intends to divert greater than 10 acre-feet of water per year and is required under Water Code Part 5.1 to file a Statement of Water Diversions and Use.

- (3) Any person authorized to divert greater than 10 acre-feet of water per year or to have a storage facility with a capacity greater than 10 acre-feet under a registration.
- (c) Before the effective date of this chapter, as amended, a diverter with multiple claimed water rights shall use a measuring device or employ a measurement method for all claimed water rights to divert from the same point of diversion or serving the same place of use if the sum of the diverter's multiple claimed water rights to divert from the same point of diversion or serving the same place of use exceeds 10 acre-feet per year. Measurement methods employed by a diverter with multiple claimed water rights shall be capable of measuring the rate of diversion, rate of collection to storage, the rate of withdrawal or release from storage, and the total volume of water diverted or collected to storage. A diverter with multiple claimed water rights shall submit the resulting data to the board in accordance with sections 939.1 through 939.6.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1122, 1123, 1846, and 5103, Water Code.

#### **939.4 Water Year 2025 Measuring and Reporting Using a Measuring Device.**

- (a) Measurement Options. A diverter may choose any measuring device, or combination of devices, that meet the requirements of this section.
- (b) Data
  - (1) Data Recording. The measuring device shall be capable of recording the date, time, and at least one of the following: total volume of water diverted, flow rate, water velocity, or water elevation. The data shall be recorded in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the deputy director. The measuring device shall be capable of recording the required information as follows:
    - (A) For direct diversion:
      - (i) On an hourly or more frequent basis for a diverter with a claimed water right to divert 1000 acre-feet of water per year or more.
      - (ii) On a daily or more frequent basis for a diverter with a claimed water right to divert 100 acre-feet of water per year or more.
      - (iii) On a weekly or more frequent basis for a diverter with a claimed water right to divert more than 10 acre-feet of water per year.
    - (B) For direct diversion by a diverter with multiple claimed water rights:
      - (i) On an hourly or more frequent basis, where the sum of the diversions made under the claimed water rights from the same point of diversion or to serve the same place of use is 1000 acre-feet of water per year or more.

- (ii) On a daily or more frequent basis, where the sum of the diversions made under the claimed water rights from the same point of diversion or to serve the same place of use is 100 acre-feet of water per year or more.
- (iii) On a weekly or more frequent basis, where the sum of the diversions made under the claimed water rights from the same point of diversion or to serve the same place of use is greater than 10 acre-feet of water per year.
- (iv) In the event of any conflict between recording requirements for a diverter with multiple claimed water rights from the same point of diversion or to serve the same place of use, the more stringent requirement shall control.

(C) For storage in a reservoir or pond:

- (i) On an hourly or more frequent basis for a reservoir or pond with a storage capacity of 1000 acre-feet or more.
- (ii) On a daily or more frequent basis for a reservoir or pond with a storage capacity of 200 acre-feet or more.
- (iii) On a weekly or more frequent basis for a reservoir or pond with a storage capacity of 50 acre-feet or more and less than 200 acre-feet.
- (iv) On a monthly or more frequent basis for a reservoir or pond with a storage capacity of greater than 10 acre-feet and less than 50 acre-feet.
- (v) In the event of any conflict between recording requirements for a diverter with multiple claimed water rights to divert to storage in a reservoir or pond, the more stringent requirement shall control.

(2) Data Submittal.

- (A) Each diverter to which a measurement requirement applies shall submit the data from each measuring device to the board as required by chapter 2.7 of division 3 of this title, and within 30 days of any request or order by the board.
- (B) For a reservoir subject to drawdown and refill during the collection to storage season, or that is otherwise operated in a cyclical manner, the maximum and minimum water surface elevations, the corresponding reservoir volume, and the monitoring dates shall be measured and the resulting data maintained.
- (C) For each reservoir, if water is diverted or flows into the reservoir under more than one claimed water right, including groundwater or water purchased under a contract, the amounts reported to the board shall be limited to the amounts covered by the claimed water right being reported. A record of the alternative supplies entering the reservoir throughout the year shall be maintained to demonstrate that water stored is under a separate basis of right or contract.

(3) Telemetry Requirements.

(A) This paragraph applies to any diverter who either:

- (i) Diverts more than 10,000 acre-feet annually; or
- (ii) Owns or operates a reservoir or pond with a storage capacity of 10,000 acre-feet or more; or
- (iii) Diverts during the period from June 1 through September 30, and directly diverts more than 30 cubic feet per second at any time.

(B) This paragraph applies to all claimed water rights to divert from a single or shared point of diversion if the sum of such claimed water rights meets the criteria of subparagraphs (A)(i) or (A)(iii) of this paragraph.

(C) By January 1, 2020, diverters subject to this paragraph shall provide telemetered diversion data via a public website that displays the data on at least a daily basis, and that is updated weekly, at minimum. The data shall be provided to the board upon the request of the deputy director in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the deputy director.

(c) Calculating Volume from Recorded Data. If a measuring device measures the flow rate, water velocity, or water elevation, and does not report the total volume of water diverted or delivered, the diverter shall report the conversion method used to convert the measured value to volume. The conversion method shall be approved by a qualified individual.

- (1) For a measuring device that measures flow-rate, the report shall describe protocols used to record the duration of operation where volume is derived by the following formula:  $\text{Volume} = (\text{flow rate}) \times (\text{duration})$ .
- (2) For a measuring device that measures flow velocity only, the report shall describe protocols used to determine the cross-sectional area of flow and the duration of operation, where volume is derived by the following formula:  $\text{Volume} = (\text{velocity}) \times (\text{cross-section flow area}) \times (\text{duration})$ .
- (3) For a measuring device that measures water elevation at the device (e.g. flow over a weir or differential elevation on either side of a device), the report shall describe protocols used to derive flow rate at the measuring device and the method or formula used to derive volume from the measured elevation value(s).

(d) Required Accuracy. The accuracy for each measuring device applies to the volume diverted or stored. "Accuracy" means the measured volume relative to the actual volume, expressed as a percent, and determined at the same frequency as is specified for monitoring in subdivision (b). The percent shall be calculated as  $100 \text{ percent} \times [1 - (\text{error}/\text{actual value})]$ , where the error is defined as the measured value

minus the actual value, expressed as an absolute value. "Measured value" is the value indicated by the device or measurement method or determined through calculations, such as flow rate combined with duration of flow. "Actual value" is the value as determined through laboratory, design, or field testing protocols.

- (1) A measuring device installed on or before January 1, 2016, shall be certified to be at least 85 percent accurate by volume or within  $\pm 15$  percent error based on periodic testing of the installed device.
- (2) A measuring device installed or replaced after January 1, 2016 that is used to measure the diversion of water shall be certified to be at least:
  - (A) 95 percent accurate by volume or within  $\pm 5$  percent error in the laboratory if using a laboratory certification.
  - (B) 90 percent accurate by volume or within  $\pm 10$  percent error based on periodic testing of the installed device if using a non-laboratory certification for a diverter with a claimed water right greater than or equal to 100 acre-feet per year.
  - (C) 85 percent accurate by volume or within  $\pm 15$  percent error based on periodic testing of the installed device if using a non-laboratory certification for a diverter with a claimed water right greater than or equal to 10 acre-feet per year.
- (3) A measuring device installed or replaced after January 1, 2016 that is used to measure the water stored in a reservoir or pond shall be certified to be at least:
  - (A) 90 percent accurate by volume or within  $\pm 10$  percent error in based on periodic testing of the installed device for a reservoir or pond with a storage capacity of 200 acre-feet or more.
  - (B) 85 percent accurate by volume or within  $\pm 15$  percent error in based on periodic testing of the installed device for a reservoir or pond with a storage capacity greater than 10 acre-feet and less than 200 acre-feet.

Authority cited: Sections 183, 1051, 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1846, and 5103, Water Code.

#### **939.5 Water Year 2025 Measuring and Reporting Using a Measurement Method.**

- (a) A measurement method is a protocol for measuring water diversions, other than through a measuring device at each authorized point of diversion, where the method achieves the accuracy requirements of subdivision (d). The board encourages diverters on a local or regional basis to cooperate and establish a measurement method or methods to measure direct diversion, diversion to storage, and withdrawal or release from storage in an efficient and cost effective manner which meets the accuracy requirements of subdivision (d). Any measurement method shall be able to



quantify the amount of water diverted under all separate claimed water rights being exercised. If the claimed water rights included in a measurement method have different requirements under section 939.4, the more stringent requirement shall control for all of the claimed water rights covered by the measurement method.

(b) Shared Measurement Point Upstream of the Delivery Point or Farm Headgate. A group of diverters may measure water diverted at a location upstream of their respective delivery points or farm headgates or at shared points of diversion if a written agreement is in place for the diverters to share a measuring device located at the shared point of diversion. Diverters using a shared measuring device under this subdivision shall report the following additional information to the board on an annual basis:

- (1) The methodology used to apportion the volume of water delivered from the shared point of diversion to each downstream diverter, including how water will be apportioned among the diverters participating in the agreement during periods of insufficient supply while preventing injury to any other legal user of water or to public trust resources.
- (2) The field or flow condition at each individual diverter's delivery point downstream of the point of measurement including the duration of water delivery to the individual diverter, annual water use patterns, irrigated acreage (including GIS map showing assessor's parcel number and USDA field identification number), crops planted, on-farm irrigation system, and other relevant distinctions in beneficial uses and water management practices.
- (3) Consumptive use of water for each individual diverter, if available.

(c) Data

- (1) Data Recording. The measurement method shall be capable of reporting the date, time, and total amount of water diverted in accordance with the requirements of subdivision (b) of section 939.4. The data shall be recorded in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the deputy director.
  - (2) Data Submittal. Each diverter or claimant shall submit data from the measurement method to the board pursuant to chapter 2.7 of division 3 of this title, or within 30 days of request of the deputy director. Water use data for each twelve month reporting period shall be submitted on a form available on the board's website with the appropriate water use report including a Progress Report by Permittee, Report of Licensee, Supplemental Statement of Water Diversion and Use, and Water Use Reports of Registration and Certificate Holders.
- (d) Required Accuracy. The accuracy of the measurement method to determine the volumes of water diverted, diverted to storage, and withdrawn or released from

storage shall reasonably achieve accuracy standards comparable to the standards listed in subdivision (d) of section 939.4 for individual measuring devices. The accuracy of the measurement method shall be determined by a qualified individual.

- (e) Operation and Performance Requirements. A measurement method shall be operated and maintained to meet the accuracy standards of subdivision (d).
- (f) Inadequate Measurement Method. If a measurement method fails to meet the accuracy standards of subdivision (d), the measurement method shall be corrected to comply with such standards.
  - (1) Notification. The diverters employing a measurement method shall notify the board in writing within 30 days of finding a measurement method does not comply with the accuracy standards of subdivision (d). The notification shall include a plan to take appropriate, timely corrective action.
  - (2) Enforcement. Failure to correct defects or to ensure the measurement method complies with the accuracy standards of subdivision (d) is a violation of this chapter.
- (g) Measurement Method Duration and Renewal.
  - (1) A measurement method may remain in effect until the effective date of this chapter, as amended. Beginning on the effective date of this chapter, as amended, diverters must adhere to the measuring and reporting requirements described in sections 932 through 939.
  - (2) Incomplete measurement method documentation, documentation that does not meet the minimum standards of this section, and lapses in measurement methods shall not relieve a diverter of the requirement to fully comply with sections 939.4 and 939.5.
- (h) Measurement methods submitted in accordance with the provisions of this section shall be timely implemented.

Authority cited: Sections 183, 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1846, and 5103, Water Code.

#### **939.6 Water Year 2025 Alternative Compliance.**

- (a) Alternative Compliance – Generally. In circumstances where strict compliance with sections 939.4 or 939.5 is not feasible, would be unreasonably expensive, would unreasonably affect public trust uses, or would result in the waste or unreasonable use of water, a diverter may submit an alternative compliance plan.
- (b) The plan shall include an explanation and substantiating documentation of alternative compliance for each of the requirements of sections 939.4 and 939.5. Absent substantiation of the specific basis for reduced performance standards, the plan shall state how compliance with sections 939.4 and 939.5 will be achieved.

- (c) Documentation of compliance with the alternative compliance plan shall be filed with the applicable annual report under chapter 2.7 of this title.
- (d) All plans submitted in accordance with the provisions of this section shall be timely implemented in accordance with the schedule contained therein.
- (e) Plan Duration and Renewal.
  - (1) An alternative compliance plan submitted under this section may remain in effect until the effective date of this chapter, as amended. Beginning on the effective date of this chapter, as amended, alternative compliance plans must meet the requirements of section 936.
  - (2) Incomplete plans, plans that do not meet the minimum standards of this section, and lapses in plans shall not relieve a diverter of the requirement to fully comply with sections 939.4 and 939.5.

Authority cited: Sections 1058, 1840, and 1841, Water Code.

Reference: Sections 13, 1846, and 5103, Water Code.