

**RULES AND REGULATIONS GOVERNING THE MEASUREMENT OF SURFACE WATER AND GROUNDWATER DIVERSIONS AND STORAGE, RELEASE, AND DELIVERY OF WATER LOCATED IN WATER DIVISION 7**

**ORDER OF THE STATE ENGINEER**

**IT IS ORDERED** that the following rules governing the measurement of surface water and Groundwater diversions and storage, release, and delivery of water located in Water Division 7 are adopted by the State Engineer.

**Rule 1. Title**

The title of these rules and regulations is “Rules and Regulations Governing the Measurement of Surface Water and Groundwater Diversions and Storage, Release, and Delivery of Water Located in Water Division 7.” In this document these rules and regulations may be referred to as “Rules.”

**Rule 2. Authority**

In order for the State Engineer and Division Engineer for Water Division 7 to obtain information needed for the administration, distribution, and regulation of the waters in Water Division 7, it is necessary to adopt rules governing the measurement of surface water and Groundwater diversions and storage, release, and delivery of water located in Water Division 7. The State Engineer’s authority to adopt these Rules is based on section 37-80-102(1)(g), C.R.S., which vests rulemaking authority for the Division of Water Resources in the State Engineer; section 37-92-501, C.R.S., which authorizes the State Engineer to adopt rules and regulations to assist in the performance of the administration, distribution, and regulation of the waters of the state in accordance with the constitution of the State of Colorado, the provisions of article 92 of title 37, C.R.S., (The Water Right Determination and Administration Act of 1969), and other applicable laws; section 37-92-502(5)(a), C.R.S., which authorizes the State Engineer to order any owner or user of a water right to install and maintain, at such owner’s or user’s expense, necessary meters, gages, or other measuring devices and to report at reasonable times to the appropriate Division Engineer the readings of such meters, gages, or other measuring devices; and section 37-92-502(5)(b), C.R.S., which authorizes the State Engineer to order any person or company supplying energy used to pump Groundwater to provide, at reasonable times to the Division Engineer, records of energy used to pump Groundwater.

**Rule 3. Scope and Purpose of the Rules**

### **3.1 Scope**

These Rules apply to all surface water diversions, Groundwater diversions, and the storage, release, and delivery of surface water and Groundwater located within Water Division 7, as defined in section 37-92-201(1)(g), C.R.S., with the following exceptions:

- 3.1.1** Permitted or unregistered wells that operate pursuant to the provisions of section 37-92-602(1), C.R.S.;
- 3.1.2** Ponds used for the limited purposes of livestock watering, wildlife watering, fire protection, or any combination thereof that do not intercept Groundwater and are not filled by a Diversion from a natural stream;
- 3.1.3** Head stabilization ponds that are part of the conveyance and application of water and do not Divert water independently of the Diversion under the Water Right, and do not store water for more than 72 hours;
- 3.1.4** Surface water Diversions, including springs, that are Diverted at less than 15 gallons per minute and are used for the limited purposes of domestic use in no more than three single-family dwellings, fire protection, watering of domestic animals, the irrigation of not over one acre of home gardens and lawns, livestock watering on farms and ranches, wildlife watering, or any combination thereof;
- 3.1.5** Erosion control dams, as described in section 37-87-122, C.R.S.; and
- 3.1.6** A Diversion Structure that is declared to be an Inactive Diversion Structure in accordance with Rule 9.

### **3.2 Purpose**

The purpose of these Rules is to establish consistent and reliable standards to assist the State Engineer and Division Engineer in the administration, distribution, and regulation of water in Water Division 7. These Rules shall be liberally construed to carry out the purposes described in this Rule 3.2.

Specifically, these Rules are intended to:

- 3.2.1** Establish standards for the selection and installation of Measurement Methods and Diversion Structures or Other Structures for the purpose of controlling and measuring Diversions or measuring storage, releases, or deliveries of water.
  - 3.2.2** Establish consistent and reliable minimum standards for the recording and reporting of data for water Diversions, the storage, release, and delivery of water, and the means by which the Division Engineer will receive such data.
  - 3.2.3** Establish consistent and reliable standards for assessing compliance with the State Engineer's and Division Engineer's authority to implement and enforce the statutory requirement for installation of Measurement Methods and Headgates.
- 3.3** Nothing in these Rules is intended to or shall be interpreted to interfere with, constrain, or otherwise limit the right to appropriate water for beneficial use in accordance with Colorado law. These Rules do not relieve any Owner or Water User of a Water Right of any obligation to comply with the terms and conditions of any applicable water court decree, rule, permit, or order.

**Rule 4. Definitions**

- 4.1** Definitions: Any term used in these Rules that is defined in articles 82, 87, 90, and 92 of title 37 of the Colorado Revised Statutes has the same meaning given therein unless otherwise stated in these Rules.
- 4.1.1** "Alternative Measurement Method" means a Measurement Method that does not meet the definition of a Measuring Device and is used to determine the Flow Rate, Total Volume, or the volume of water diverted, stored in a Reservoir, released from a Reservoir, or otherwise delivered for any purpose within the standards of accuracy identified in these Rules.
  - 4.1.2** "Diversion" or "Divert" means removing water from its natural course or location, or controlling water in its natural course or location, by means of a control structure, ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device, as more fully defined in section 37-92-103(7), C.R.S.
  - 4.1.3** "Diversion Structure" means a control structure, ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device designed to Divert water from its natural water course or location or control water in its natural course or location.
  - 4.1.4** "Flow Rate" means instantaneous flow, usually expressed in gallons per minute ("gpm") or cubic feet per second ("cfs").

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- 4.1.5** “Groundwater” means any water not visible on the surface of the ground under natural conditions, as defined in section 37-90-103(19), C.R.S.
- 4.1.6** “Headgate” means a structure sufficient to control the rate of Diversion of water at all ordinary stages, as more fully described in section 37-84-112(1), C.R.S.
- 4.1.7** “Inactive Diversion Structure” means a Diversion Structure for which a Water User files an affidavit, on a form prescribed by the State Engineer, with the Division Engineer declaring the Water User’s intent to not use the Diversion Structure for any Diversion or water application purpose, as more fully described in Rule 9.
- 4.1.8** “Measuring Device” means a Measurement Method that is a permanently-installed device, such as a flume, weir, staff gage associated with a stage-storage curve, or totalizing flow meter, including a totalizing flow meter that may be removed in the winter when the structure is not in use, used to directly determine the Flow Rate, Total Volume, or volume of water diverted, stored in a Reservoir, released from a Reservoir, or delivered for any purpose within the standards of accuracy identified in these Rules.
- 4.1.9** “Measurement Method” means a method used to determine the Flow Rate, Total Volume, or volume of water diverted, stored in a Reservoir, released from a Reservoir, or otherwise delivered for any purpose within the standards of accuracy identified in these Rules, and includes Measuring Devices and Alternative Measurement Methods.
- 4.1.10** “Notice,” “Notify,” or “Notification” to the Division Engineer means submission of a written message to the Division Engineer by mail or email, or the submission of a completed form or other format prescribed by the State Engineer where specifically required by these Rules.
- 4.1.11** “On-Stream Reservoir” means a Reservoir that is located on a natural stream flows through the reservoir.
- 4.1.12** “Off-Stream Reservoir” means a Reservoir that is located such that a natural stream does not flow through the Reservoir and the Reservoir fills by diverting water from a natural stream by means of a control structure, ditch, canal, flume, bypass, pipeline, conduit, well, pump, or other structure or device, or is filled by spring water, stormwater runoff, precipitation, or return flows, including effluent.
- 4.1.13** “Other Structure” means a structure operated to release water from a Reservoir or operated either to return water to the natural stream or to deliver a measured

amount of water for any purpose subject to administration, distribution, and regulation by the State Engineer or Division Engineer, including but not limited to a waste ditch or wasteway.

- 4.1.14** “Person” means an individual, a partnership, a corporation, a municipality, the State of Colorado, the United States, or any other legal entity, public or private, as defined in section 37-92-103(8), C.R.S.
- 4.1.15** “Qualified Tester” means a Person who either is certified by the State Engineer as qualified to determine the accuracy of an installed Measuring Device or Alternative Measurement Method or is a hydrologic technician, or professional engineer competent in the use of hydrographic measurement equipment, such as current meters and acoustic doppler velocity meters.
- 4.1.16** “Recording Device” means any device acceptable to the Water Commissioner or Division Engineer that is capable of recording the flow data or water level for a Diversion Structure or Other Structure.
- 4.1.17** “Reservoir,” for the purpose of these Rules, means a structure designed to impound and store water, or store and subsequently release water, for one or more beneficial uses.
- 4.1.18** “Total Volume” means the volume of water, usually expressed in acre-feet (“AF”), that is Diverted or that is stored in or released from a Reservoir over a specific period of time or is in storage in a Reservoir at a given point in time.
- 4.1.19** “Verification” or “Verified” means the testing performed by a Qualified Tester to verify the accuracy of a Measuring Device or an Alternative Measurement Method.
- 4.1.20** “Water Right” means a right to use in accordance with its priority a certain portion of the waters of the state by reason of the appropriation of the same, as defined in section 37-92-103(12), C.R.S.
- 4.1.21** “Water User” or “User” means a Person who owns or uses a Diversion Structure, any Water Right decreed to a Diversion Structure, or any Other Structure. For the purposes of these Rules, “Water User,” “User,” and “Owner” may be used interchangeably.
- 4.1.23** “Well” means any structure or device used for the purpose or with the effect of obtaining Groundwater for beneficial use from an aquifer, as more fully defined in section 37-92-103(14), C.R.S.

**4.2** Other Definitions. All other terms used in these Rules shall be given their usual, customary, and accepted meanings. All words of a technical or legal nature specific to the administration, distribution, and regulation of Water Rights in the State of Colorado shall be given the meaning that is generally accepted within that field.

**Rule 5. Headgate Requirements**

All Diversions of surface water within the scope of these Rules shall have a Headgate, if necessary, to control the rate of Diversion. Headgates must allow the Water Commissioner, or Owner at the direction of the Water Commissioner, to accurately adjust the Diversion of water with reasonable effort and within a reasonable amount of time and to secure the Diversion Structure at the adjusted condition so as to prevent any unauthorized Diversion or adjustment.

**Rule 6. Measurement Methods and Recording Requirements**

All Diversion Structures within the scope of these Rules shall either: (1) be equipped with a Measuring Device or an Alternative Measurement Method that meets the requirements of Rule 6.1 and is approved by the Division Engineer as described in Rule 7; or (2) be declared an Inactive Diversion Structure as described in Rule 9. For any Other Structure, a Measuring Device or Alternative Measurement Method that meets the requirements of Rule 6.1 may be required by the Division Engineer and approved by the Division Engineer as described in Rule 7. All Measurement Methods must be resistant to tampering or other physical interference.

**6.1 Measurement Method Functional Standard:**

- 6.1.1** A Measuring Device or Alternative Measurement Method must measure Flow Rate, Total Volume, or other volume of water passing through a Diversion Structure or Other Structure, depending on the defining elements of a Diversion Structure's Water Right, the purposes for other Diversions by a Diversion Structure, or the purposes of any Other Structure.
- 6.1.2** For Diversion Structures or Other Structures that have or propose Flow Rates greater than 1.0 cfs, a Measuring Device or Alternative Measurement Method shall be designed to accurately measure flows to within plus or minus five percent (5%) throughout the full range of anticipated flows.
- 6.1.3** For Diversion Structures or Other Structures that have or propose Flow Rates greater than 0.25 cfs and less than or equal to 1.0 cfs, a Measuring Device or Alternative Measurement Method shall be capable of accurately measuring flows to within plus or minus 0.05 cfs throughout the full range of anticipated flows.
- 6.1.4** For Diversion Structures or Other Structures that have or propose Flow Rates less than or equal to 0.25 cfs, a Measuring Device or Alternative Measurement

Method shall be capable of meeting an accuracy standard approved by the Division Engineer throughout the full range of anticipated flows.

- 6.1.5** A Measuring Device or Alternative Measurement Method shall be located within reasonable proximity of the Diversion Structure or Other Structure, as determined by the Water Commissioner, to enable the Water Commissioner to observe the effect of any Headgate adjustments or other operational adjustments.
- 6.1.6** A Measuring Device or Alternative Measurement Method shall be properly installed, and, if applicable, calibrated to engineering specifications.
- 6.1.7** A Measuring Device or Alternative Measurement Method shall be maintained by the User in a condition that provides accurate measurement throughout the full anticipated range of Flow Rate or volume of water diverted, stored in a Reservoir, released from a Reservoir, or otherwise delivered for any purpose.
- 6.1.8** A Measuring Device or Alternative Measurement Method shall not be deemed complete and acceptable until such time that the proper rating table for the Measuring Device or Alternative Measurement Method, or stage-capacity table, as applicable, has been made available to the Water Commissioner, unless such rating table is for a standard flume, weir, or meter and is otherwise available to the Water Commissioner.
- 6.1.9** Off-Stream Reservoirs require two of the following, as approved by the Water Commissioner or Division Engineer:
  - 6.1.9.1** A Measuring Device or Alternative Measurement Method at the point of Diversion of the structure used to deliver water to a Reservoir;
  - 6.1.9.2** A Measuring Device or Alternative Measurement Method used to measure the volume of water in storage; or
  - 6.1.9.3** A Measuring Device or Alternative Measurement Method used to measure releases. Measurement of releases may also be made by calibrated release tables, gaging, or calculation of the change in storage.
- 6.1.10** On-Stream Reservoirs require:
  - 6.1.10.1** The installation of an outlet or other structure capable of releasing all out-of-priority inflows;
  - 6.1.10.2** A Measuring Device or Alternative Measurement Method used to measure the volume of water in storage; and

- 6.1.10.3** A Measuring Device or Alternative Measurement Method used to measure releases from storage. Measurement of releases may also be made by calibrated release tables.

The combination of 6.1.10.2 and 6.1.10.3, above, shall be considered sufficient by the Division Engineer to determine or calculate evaporation, inflows, and outflows.

**6.2 Recording Device Functional Standard:**

- 6.2.1** A Recording Device may be required for any Measuring Device or Alternative Measurement Methods pursuant to the terms and conditions of a water court decree, the terms and conditions of a well permit, or as may be reasonably required by the Division Engineer.
- 6.2.2** Where a Recording Device is required, the Recording Device shall be a device acceptable to the Water Commissioner or Division Engineer that is capable of the accurate and continuous recording of Flow Rates in accordance with the standards set forth in Rule 6.1.2, 6.1.3, or 6.1.4 depending on the Flow Rate, at no greater than 15-minute intervals.
- 6.2.3** Where a Recording Device is required, the Recording Device must include a means to verify on-site that the Recording Device is properly calibrated.
- 6.2.4** Where a Recording Device is required, the Recording Device shall not be deemed complete and acceptable until all equipment and software necessary to download and process recorded data from the Recording Device is supplied to the Water Commissioner and/or the Division Engineer by the User.

**6.3 Temporary Measurement Method:**

In the instance where an accepted Measuring Device or Alternative Measurement Method is incapable of accurately measuring flows, the Division Engineer may allow another temporary Measurement Method until the Measuring Device or Alternative Measurement Method is repaired, replaced, or restored.

**6.4 Measurement Method Verification:**

- 6.4.1** If a Measuring Device is properly installed and maintained and has a standard rating table, an adjusted standard rating table or custom rating table accepted by the Division Engineer, or a stage-capacity table, as applicable, the Division Engineer shall presume that the Measuring Device is accurate, and no Verification will be required.



- 6.4.2** The Division Engineer may at any time require that a Measuring Device or Alternative Measurement Method be rated or Verified to be operating properly. Such Verification shall be conducted by a Qualified Tester.
- 6.4.3** Alternative Measurement Methods shall be rated or Verified every four years beginning on the date the Alternative Measurement Method is approved by the Division Engineer. Such rating or Verification shall be conducted by a Qualified Tester.
- 6.4.4** All flow measuring equipment, such as a current meter or acoustic velocity meter, used by a Qualified Tester to certify the accuracy and working condition of Measuring Devices and Alternative Measurement Methods in the field must be calibrated every two years to be accurate within plus or minus two percent (2%). Calibration and certification of accuracy of such testing equipment must be accomplished by a facility qualified and equipped to certify a test meter as accurate in accordance with this Rule using National Institute of Standards and Technology (NIST) traceable standards.
- 6.4.5** A report of the Verification testing shall be provided to the Division Engineer on a form developed by the State Engineer.

**Rule 7. Approval of Measurement Method**

To comply with these Rules, each Measurement Method must be approved by the Water Commissioner or Division Engineer.

- 7.1** To confirm approval of the use of a pre-existing Measurement Method that was installed prior to the effective date of these Rules, the Water User should contact the Water Commissioner or Division Engineer. The Water Commissioner or Division Engineer will confirm with notice in writing, including via email, that the pre-existing Measurement Method is approved or denied.
- 7.2** For the purpose of obtaining approval of the use of a Measurement Method, and in compliance with the timelines described in the phase in provisions of Rule 17, the Water User seeking to use a newly installed, reinstalled, or changed Measurement Method shall provide Notice to the Division Engineer or the Division Engineer's delegate that includes the following information: (1) Person's name, (2) Diversion Structure or Other Structure name, (3) decree case number (if applicable), (4) legal description (PLSS quarter-quarter, section, township and range or UTM coordinates) of the Diversion or Other Structure, (5) Measuring Device installed, (6) rating table for Measuring Device (if non-standard), and/or a stage-capacity table in the case of a Reservoir, and (7) the date of installation.

- 7.3 To obtain approval of a Measuring Device, the Water User must provide evidence that the Measuring Device is properly rated and properly installed, as described in Rule 6.1.
- 7.4 To obtain approval of an Alternative Measurement Method, the Water User must provide the basis for the use of an Alternative Measurement Method, including, but not limited to, any and all assumptions, field conditions, and calculations, to the satisfaction of the Division Engineer, as described in Rule 6.1.7, to ensure that the Division Engineer can accurately determine that the Alternative Measurement Method will operate according to the accuracy standards identified in these Rules.

**Rule 8. Data Recording and Data Submission**

The Division Engineer has the authority to require the Water User to record and report at reasonable times the data for Diversions by any Diversion Structure or for measurement for Other Structures subject to these Rules. Diversion data will be recorded by the Water Commissioner, Water User, or both as determined by the Division Engineer, in cooperation with the Water User.

**Rule 9. Inactive Diversion Structures**

Inactive Diversion Structures are excluded from these Rules provided that the Water User files an affidavit, on a form prescribed by the State Engineer, with the Division Engineer declaring the Water User's intent to not use the Diversion Structure for any Diversion or water application purpose. Once an Inactive Diversion Structure affidavit is filed with the Division Engineer, no further filings are required under these Rules unless the Water User wishes to change the Diversion Structure from inactive status to active status. When a Water User desires to change an Inactive Diversion Structure to active status, written Notification from the Water User to the Division Engineer is required prior to activation. A Diversion Structure listed as inactive under this Rule 9 shall not be used until such Notification is given and the Diversion Structure and associated Measurement Method are determined by the Division Engineer to be in compliance with these Rules.

**Rule 10. Noncompliance**

Failure to comply with any of these Rules or a valid order of the Division Engineer to comply with these Rules may subject an Owner and/or User to court proceedings and payment of the state's costs, including reasonable attorney's fees, associated with enforcement of these Rules or a valid order of the Division Engineer to comply with these Rules pursuant to sections 37-92-502 and -503, C.R.S. Prior to filing any court action, the Division Engineer shall notify the Owner and, if a different Person, the User, if both are known by records maintained by the Division Engineer, of the violation in writing in the form of an order to comply, by certified mail and shall

advise the Owner and/or User of the date by which the violation must be corrected to avoid court proceedings, which date shall be at least ten (10) calendar days following the date of receipt of the notice by the Owner and/or User or personal service of the notice on the Owner and/or User. The Division Engineer may also order the Water User to curtail all Diversions by a Diversion Structure until the Water User is in compliance with these Rules.

**Rule 11. Variance**

When the strict application of any provision of these Rules presents practical difficulties or may cause undue hardship, the Division Engineer may grant a variance for a specific instance or method of application under these Rules, and the Division Engineer may impose any additional terms and conditions to such variance as are necessary to ensure compliance under these Rules. Any request for a variance shall be made to the Division Engineer, in a format prescribed by the State Engineer, and shall state the basis for the requested variance and provide supporting documentation. If the Division Engineer finds the request justifiable, the Division Engineer may issue a written order granting the variance and setting forth the terms and conditions on which the variance is granted. Variance requests are granted at the sole discretion of the Division Engineer.

**Rule 12. Effect of Rules**

Nothing in these Rules exempts Water Users from the requirements of any other laws, rules, permits, or water court decrees governing the use, Diversion, and administration, distribution, and regulation of surface water and Groundwater in Water Division 7, whether now existing or hereafter adopted or decreed.

**Rule 13. Process to Appeal a Decision under these Rules**

Any Person adversely affected or aggrieved by the State Engineer's or Division Engineer's application of the Rules to a particular Diversion Structure or approval or disapproval of a Measurement Method under these Rules may request administrative review of such determinations. Administrative review will be conducted in accordance with the adjudicatory and reconsideration procedures of the State Engineer's Procedural Rules (2 CCR 402-5), subject to judicial review of the final agency action under section 24-4-106 of the State Administrative Procedure Act, §§ 24-4-101 to 24-4-204, C.R.S.

**Rule 14. Severability**

If any Rule or part thereof is found to be invalid, the remaining Rules will remain in full force and effect, including any part thereof not found to be invalid.

**Rule 15. Revisions**

These Rules may be revised in accordance with applicable laws.

**Rule 16. Statement of Basis and Purpose Incorporated by Reference**

The Statement of Basis and Purpose for these Rules is incorporated herein as part of these Rules.

**Rule 17. Phase In**

- 17.1** In order to allow Water Users the time necessary to come into compliance with these Rules, Water Users shall meet the following deadlines for installation of Measuring Devices, approval and implementation of Alternative Measurement Methods, or declaring an Inactive Diversion Structure under Rule 9:
- 17.1.1** For Diversion Structures with a capacity or total Water Rights greater than or equal to 5.0 cfs, the deadline shall be 12 months after the effective date of the Rules.
  - 17.1.2** For Diversion Structures with a capacity or total Water Rights greater than or equal to 2.0 cfs and less than 5.0 cfs, the deadline shall be 18 months after the effective date of the Rules.
  - 17.1.3** For Diversion Structures with a capacity or total Water Rights less than 2.0 cfs, the deadline shall be 24 months after the effective date of the Rules.
  - 17.1.4** For Reservoirs with a capacity or total Water Rights greater than or equal to 5.0 AF, the deadline shall be 12 months after the effective date of the Rules.
  - 17.1.5** For Reservoirs with a capacity or total Water Rights less than 5.0 AF, the deadline shall be 24 months after the effective date of the Rules.
- 17.2** Water Users are not in violation of Rules 5 or 6 during the applicable Phase In period if they meet the deadlines set forth in Rule 17.1, above.
- 17.3** Upon a showing of good cause by the Water User, the Division Engineer may extend the compliance deadlines of Rule 17.1 for one or more periods of time not exceeding one year each and may impose such terms and conditions as part of such extension as the Division Engineer deems reasonably necessary to ensure compliance with the requirements of the Rules. Good cause requires that the Water User demonstrate that it has been diligent in its efforts to comply with the requirements of these Rules, has made substantial progress in complying with the requirements of these Rules, and despite its diligent and good faith efforts has been unable to fully comply with the requirements of these Rules. The Water User must also provide an estimate of the amount of additional time required for it to fully comply with the Rules and such other information as the Division Engineer may reasonably require in order to evaluate a request for an extension of time.

**Rule 18. Effective Date**

These Rules shall become effective on TBD, in accordance with section 37-92-501, C.R.S., and will thereafter remain in effect until amended as provided by law.

IT IS FURTHER ORDERED that any persons wishing to protest these Rules may do so in the manner provided in section 37-92-501, C.R.S. In the event that protests are filed with respect to these Rules, the Effective Date is the date on which all protests have been resolved, or TBD, 2023, whichever date is later.

Dated this XX day of XX, XXXX.

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Kevin G. Rein, P.E.  
State Engineer