

DEPARTMENT OF NATURAL RESOURCES

Division of Water Resources

2 C.C.R. 402-16

RULES AND REGULATIONS GOVERNING THE MEASUREMENT OF GROUND WATER DIVERSIONS ~~LOCATED IN AFFECTING~~ THE REPUBLICAN RIVER ~~Basin Compact~~, WITHIN WATER DIVISION NO. 1 WITHIN WATER DIVISION NO. 1

16.1 Authority

These Rules and Regulations are adopted pursuant to the authority in sections 37-80-102(1)(g) and 37-80-104, C.R.S. and are intended to be consistent with the requirements of the State Administrative Procedure Act, section 24-4-101 et seq., C.R.S.

16.2 Scope and Purpose

A. ~~These Rules are applicable to all Wells located in Affecting the Republican River Basin Compact within the area as illustrated in Appendix A and described in Water Division No. 1 Appendix B, except decreed and/;~~

~~1. Decreed or permitted "exempt" Wells constructed pursuant to paragraphs (b) through (f) of section 37-92-602(1), C.R.S., section 37-92-602(3)(b)(II)(A), C.R.S. described in Appendix A or paragraphs as may be amended in the future.~~

~~1-2. Permitted small capacity wells constructed pursuant to (a) through (e) of section 37-90-105, C.R.S. described in Appendix B., or as may be amended in the future.~~

~~A.B. The purpose of these Rules is to obtain information needed for administration of the waters in the Republican River Basin within Water Division No. 1 subject to the Republican River Compact and to assist in and compliance with of the Republican River Compact.~~

16.3 Applicability

The provisions of this section shall be applicable to all Wells ~~within Affecting~~ the Republican River ~~Basin not Compact within the area as illustrated in Appendix A and described in Appendix B, unless otherwise~~ specifically exempted by these Rules.

16.4 Definitions

A. As used in these Rules:

~~1. "Affecting the Republican River Compact" means the diversion of ground water from a Well (a) included in calculations of the Republican River Compact ground water model and (b) within the area as illustrated by the map in Appendix A and described by the metes and bounds in Appendix B.~~

~~2. "Calibration Factor" is a ratio representing the flow as measured by a test meter compared to the flow as measured by an installed TFM. A calibration factor must be verified and submitted to the Division Engineer by a Qualified Well Tester in accordance with these Rules.~~

~~4-3. "Complex System" means any system where the total dynamic head at the pump will vary due to multiple discharge locations in a pipeline, or where the method of delivery will~~

vary between open discharge, gated pipe, or sprinkler system during a single irrigation season, or where multiple Wells discharge into a common pipeline.

- ~~2.4.~~ "Compound System" means a system where the power meter records electrical usage from any electrical device other than the pumping systems from a single well and its attached sprinklers.
5. "Division Engineer" means the Division Engineer, or designated personnel for the Colorado Division of Water Resources, Water Division No. 1.
6. "Inactive Well" means any Well that is not in use and is disconnected from a power source or the pump or motor has been removed.
- ~~3.7.~~ "Interim Water Measurement Program" means a temporary method of measuring the flow of water diverted by a Well that has been approved by the Division Engineer for use as a backup measurement method in case the primary Method of Measurement fails.
- ~~4.8.~~ "Notification" or "Notify" to the State Engineer means any action or method to deliver information, including but not limited to, personal contact, a telephone call, leaving a telephone message, or written or email message to the State Engineer or his/her designee or to the Water Commissioner who retains water administration authority in the former Water District where the subject ground water Well is located, "Notice", or "Notify" to the Division Engineer means submission to the Division Engineer by mail, facsimile, or email of a written message, or, where specifically required by these Rules, of a completed form or other format prescribed by the State Engineer.
9. "Person" means an individual, a partnership, an association, a corporation, a municipality, the State of Colorado, the United States, or any other legal entity, public or private.
- ~~5.10.~~ "Power Conversion Coefficient" or "PCC" means the amount of electrical energy expressed as kilowatt hours (KWH) consumed in pumping one acre-foot of ground water from a Well.
11. "PCC Test" means the process prescribed by the State Engineer requiring a Qualified Well Tester to determine in the field, and submit in a format prescribed by the State Engineer, the PCC to the Division Engineer.
- ~~6.12.~~ "Qualified Well Tester" means a person who is ~~annually~~currently certified by the State Engineer as qualified to determine the accuracy of a ~~flow meter, TFM and perform a Power Conversion Coefficient PCC test on a Well, and perform a Well efficiency test.~~
- ~~7.13.~~ "Republican River Basin Compact" means the geographic area with agreement between Colorado, Kansas, and Nebraska with respect to the Northern High Plains Designated Ground Water Basin that is illustrated by waters of the map in Appendix Republican River Basin, C and described by the metes, R.S. §37-67-101 et seq.; Final Settlement Stipulation, Kansas v. Nebraska and bounds in Appendix D. Colorado, No. 126 Original (Dec. 15, 2002).
- ~~8.14.~~ "Rules" means the Rules and Regulations Governing the Measurement of Ground Water Diversions Located in Affecting the Republican River Basin Compact within Water Division No. 1. The short title for these Rules is "Republican River Measurement Rules," and they may be referred to herein collectively as the "Rules" or individually as a "Rule."
15. "Totalizing Flow Meter" or "TFM" means a meter associated with a Well that is designed and manufactured for the purpose of measuring the flow of water, has a totalizing feature in acre-foot measurements, and meets the requirements of Rule 16.5.

16. "Verification", "Verified", or "Measurement Method Verification" means the test performed by a Qualified Well Tester to verify the accuracy of a Well's method of measurement.

17. "Well Distribution System" means the pumping and piping systems through which the Well water is pumped.

~~9-18.~~ "Well" means any structure or device used for the purpose or with the effect of obtaining ground water for beneficial use from an aquifer except those exempted under Rule 16.2A.

19. "Well User" means any Person diverting ground water.

- B. Any other term used in these Rules that is defined in sections 37-80-102, 37-80-104, 37-90-103, 37-90-107, 37-90-137 or 37-92-103, C.R.S., (as may be amended) shall have the same meaning given therein.
- C. Any term used in these Rules not defined herein that is defined in other Rules and Regulations of the State Engineer applicable to Water Division No. 1 shall have the same meaning given therein.

16.5 Measurement ~~Devices~~Methods and Requirements

~~By March 1, 2009,~~All Wells within the scope of these Rules shall either: (1) be equipped with a ~~totalizing flow meter that is installed and maintained according to manufacturer's specifications and recommendations; verified TFM that meets the requirements of Rule 16.5.A.;~~ (2) be equipped with ~~an~~ ana verified Alternative Method of Measurement that ~~is granted a variance pursuant to these Rules~~meets the requirements of Rule 16.5.B; or (3) be declared Inactive in accordance with Rule 16.~~9 below~~8. All measurement devices must be tamper-resistant.

A. Totalizing Flow Meter (TFM) Method

- Any meter that is designed and manufactured for the purpose of measuring the flow of water, and that has a totalizing feature in acre-~~foot measurements~~feet, shall be considered to be acceptable for purposes of these Rules. A ~~totalizing flow meter~~TFM installed prior to the Rules 2009 effective date, that reads in gallons and contains sufficient recording digits to assure that "rollover" to zero does not occur within ~~three~~two years, will be acceptable ~~if already installed before the adoption of these rules.~~ The State Engineer may adopt written standards and specifications for the installation, calibration, testing, repair, and maintenance of meters. When a ~~totalizing flow meter~~TFM is used, it shall be the ~~owner's~~Well User's responsibility to keep the meter in accurate operating condition. An installed ~~flow meter~~TFM shall be deemed to be in accurate operating condition when the flow measured by the meter is within plus or minus 5% of an independent field measurement made using calibrated test equipment. The ~~State~~Division Engineer ~~shall~~may order any meter that fails to meet this standard to be recalibrated or replaced.
- ~~Totalizing flow meters~~TFM shall be: properly verified in the field to be in accurate operating condition by ~~either a licensed pump installer, a representative of the meter manufacturer, or certified by a Qualified Well Tester if the meter is installed by a private individual when installed;~~and contain sufficient recording digits to assure that "rollover" to zero does not occur within ~~three~~two years; and shall be maintained by the Well ~~owner~~User so as to provide a continuous, accurate record of withdrawals. ~~Totalizing flow meters~~ TFM's are required to be ~~reverified~~re-verified in the field to be in accurate operating condition by a Qualified Well Tester every four years ~~after~~from the date of original installation. ~~Flow meters in existence as of the effective date of these Rules, December 1, 2008, shall be certified to be in accurate working condition by a Qualified Well Tester by March 1, 2009, and re-verified to be in accurate working condition every four years thereafter. The Well owner shall provide written proof of the verification within 45 calendar days of the meter installation or verification to the State Engineer on a form to be prescribed by the State Engineer.~~ the most recent approved Measurement Method Verification unless repairs, alterations or modifications are made, which would be cause

for a new Measurement Method Verification.

~~3. Should a meter cease to operate accurately or fail verification at any time, the owner of the Well shall immediately notify the State Engineer and establish a specific interim water measurement program until the meter is replaced or repaired. If the meter is not replaced or repaired and verified to be in accurate operating condition within 14 calendar days of the Notification to the State Engineer, the Well shall not be operated until the meter is replaced or repaired or the State Engineer grants a variance.~~

4.3. Should a meter fail to meet the accuracy standard of Rule 16.5.A.1 the Well ~~owner~~ User may seek a variance, from the Division Engineer, to use a Calibration ~~coefficient~~ Factor computed by a Qualified Well Tester using standards provided by the State Engineer.

4. All totalizing flow meters TFM shall be installed and maintained according to manufacturer's specifications and recommendations.

5. A TFM shall be installed at the well before any point of discharge and at a point that is prior to any discharge pipe that is laid underground.

B. Alternative ~~Methods~~ Method of Measurement

The ~~State~~ Division Engineer may approve a variance, in accordance with Rule 16.11, to the installation of a ~~totalizing flow meter~~ TFM if it can be demonstrated by a Qualified Well Tester that the proposed Alternative Method of Measurement would produce results accurate to within plus or minus 5% of the actual volume pumped over a calendar year.

1. Power Conversion Coefficient ("PCC") Method of Measurement

~~a. The State Engineer may adopt standards and specifications for PCC testing. For Wells that operate under stable water table conditions only. As at the following minimum, standards and specifications for PCC testing apply:~~

~~a.~~ PCC Tests shall:

(1) ~~Be determined be performed~~ utilizing rating procedures approved by the State Engineer and conducted by a Qualified Well Tester.

~~(2) Be performed when~~ For verification of stable water table conditions, PCC Tests shall include the pumping system has stabilized, i.e., both operating pressure and pumping drawdown has not changed more than 10% in the last hour.

~~(3)~~ (2) Include one of the following: the pumping water level and operating pressure at the time the tests were conducted or the rate of flow.

(3) Verification of stable water table conditions require that the operating pressure and one of the following have not changed by more than 10% during the PCC Test: (a) the pumping water level or (b) the rate of flow.

b. A PCC computed from an acceptable PCC Test shall be valid for the following periods: and shall be used to calculate total well diversions as follows:

~~(1)~~ PCC tests performed between June 15 and October 15, 2008 shall be valid for a period of 3 years from the date of the test.

~~(2)~~(1) PCC Tests performed between June 15 and ~~the following~~ October 15 of ~~any the same calendar~~ year ~~after 2008~~, shall be valid for a period of 2 years from the date of the ~~test~~ PCC Test.

i. PCC ~~tests computed from the PCC Test~~ performed between June 15 and ~~the following~~ October 15, ~~where no PCC test was performed in of the prior October 16 to June 14 period, same calendar year~~ shall be used to compute the amount of water ~~during~~ diverted from the entire irrigation season ~~date~~ of the year in which PCC Test forward up to the test was performed ~~date~~ of any subsequent PCC Test.

~~(3)~~(2) PCC Tests performed between October 16 of any year and the following June 14 shall be valid ~~only~~ until the following August 14. An additional PCC Test shall be performed during the period June 15 through August 14 following that PCC Test. Should a subsequent PCC Test not be performed by the following August 14, no water shall be withdrawn from the Well after August 14 until an acceptable PCC Test is performed and approved by the State Engineer. ~~The PCC test performed before June 14 shall be used to compute the amount of water pumped between the dates of November 1 and June 14 of the period in which the test was performed, and the PCC test performed during the period June 15 through October 15 shall be used to compute the amount of water pumped subsequent to June 15.~~ approved by the Division Engineer.

i. The PCC computed from the PCC Test performed before June 15 shall be used to compute the amount of water pumped from the date of the PCC Test forward up to the date of the subsequent PCC Test.

ii. A subsequent PCC Test is required to be performed during the period June 15 through August 14 and that PCC shall be used to compute the amount of water pumped from the date of the PCC Test forward until any subsequent PCC Test.

c. A PCC Test shall be required more frequently than described above, and prior to any diversions from the Well, if any of the following occur:

(1) A new or re-worked pump and/or motor are installed on the Well.

(2) The Well is re-worked to change the yield of the Well.

(3) The system that the pump discharges into is modified in such a manner as to change the ~~Power Conversion Coefficient~~ PCC, the discharge of the pump, or the operating pressure.

(4) Any other alteration to the system which changes the discharge of the pump, the operating pressure, or ~~Power Conversion Coefficient~~ PCC.

(5) Additional PCC Tests may also be required if the State Engineer conducts or reviews PCC Tests and determines an error was made, or if ~~annual~~ any changes in to the Well Distribution System or ground water levels will make a the use of the PCC, based upon the ~~prior year's testing~~ current PCC Test, inaccurate by 5% or more.

d. Use of ~~the~~ PCC method may not be appropriate where varying terrain ~~makes accurate results in inaccurate~~ calculations ~~impossible~~ due to the differences in ~~height~~ elevations to which the water must be pumped unless the system has working pressure regulators installed.

e. If the difference between the current approved PCC and the results of the next subsequent PCC is greater than 10%, the new PCC shall be considered invalid and a PCC will not be considered a valid Alternative Method of Measurement for the Well from the date of the new PCC Test forward, unless the Well User submits and obtains approval by the Division Engineer of a variance to allow the PCC.

C. Interim Water Measurement Program

Should any approved measurement device or method cease to operate accurately or fail Verification at any time, or if changes are made to the Well or the Well's Distribution System that would result in a change to the current PCC, the Well User shall immediately Notify the Division Engineer and establish an Interim Water Measurement Program until the meter is replaced or repaired or a new PCC test is performed and approved. If the TFM is not replaced or repaired and Verified to be in accurate operating condition or a new PCC is not performed within 14 calendar days of the Notification to the Division Engineer, the Well shall not be operated until the TFM is replaced or repaired, or a new PCC is approved or until the Division Engineer grants a variance.

D. Measurement Method Verification Testing

The Well User shall provide Measurement Method Verification to the Division Engineer in a format prescribed by the State Engineer within 30 calendar days of the Verification. Measurement Method Verifications must be performed no later than the expiration date of the current Verification.

E. Complex or Compound Systems

If the Well(s) are part of a Complex System or Compound System, or if the pump is not powered by electricity, or the Well produces from a confined aquifer, the ~~owner or user of the Well~~ User must utilize a ~~totalizing flow meter~~ TFM (Rule 16.5.A.).

F. Acceptable Measurement Method

1. A TFM is considered acceptable only if, under operating conditions, the pipe on which the TFM is installed maintains a full pipe of water, and meets the requirements of Rule 16.5.A.
2. A PCC is considered acceptable only if, under operating conditions, the pipe on which the Qualified Well Tester's flow measuring equipment was used to compute the PCC maintains a full pipe of water, and meets the requirements of Rule 16.5.B.

D.G. Testing Equipment Calibration

All flow measuring equipment utilized in verification of accuracy and working condition of TFM's or to obtain a PCC in the field ~~and/or rating of wells~~ must be calibrated ~~biannually~~ every two years to be accurate within plus or minus 2%, unless a variance is granted by the ~~State~~ Division Engineer. 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 to this Rule using National Institute of Standards and Technology (NIST) traceable standards.

H. All Wells newly incorporated into the Scope of the Rules as a result of these amendments, shall be required to comply with these Rules in their entirety no later than April 1, 2016.

16.6 Notice of Compliance

A. All owners of TFM's

Well Users with Wells within the scope of these Rules ~~who install totalizing flow meters with a TFM~~ shall provide ~~written~~ Notice to the ~~State~~ Division Engineer ~~by March 1, 2009~~, on a form ~~to be or~~

format prescribed by the State Engineer that includes: (1) the name and address of the owner of the Well(s); (2) the name and address of the user of the Well(s) (if different than the owner); (3) the Well permit number(s); (4) the decree or case number(s) (if applicable); (5) the legal description and UTM coordinates of the location of the Well(s); (6) a legal description and map or drawing of land irrigated; (if applicable); (7) the type or method of irrigation; (if applicable); (8) the meter manufacturer, the meter model number and the meter size; (9) the meter serial number(s); (10) the volumetric units (gallons or acre-feet); (11) the name of power utility company and power company account number (if applicable); (12) the kilowatt hour meter reading on the date of installation (if applicable); (13) the beginning ~~totalizing flow meter~~ TFM reading; (14) and the date of installation of the TFM. The State Well Owner must immediately Notify the Division Engineer ~~shall be notified~~ of any change of method of Well measurement ~~on~~. Such Notice shall be provided in a form ~~format as~~ prescribed by the State Engineer within 30 days of such change.

~~16.7~~ Notice of Compliance with Variance Terms and Conditions

~~All owners of Wells within the scope of these Rules who obtain a variance from installation of a totalizing flow meter shall, by March 1, 2009, or March 1 of the first calendar year in which the variance is in effect, provide in writing to the State Engineer such information as specified in the terms and conditions of the approved variance.~~

B. PCC Method of Measurements

All Well Users of Wells within the scope of these Rules with a PCC shall provide Notice to the Division Engineer, on a form or format prescribed by the State Engineer, such information as specified in the terms and conditions of the approved variance, which may include: (1) the name and address of the owner of the Well(s); (2) the name and address of the user of the Well(s) (if different than the owner); (3) the Well permit number(s); (4) the decree or case number(s) (if applicable); (5) the legal description and UTM coordinates of the location of the Well(s); (6) a legal description and map or drawing of land irrigated (if applicable); (7) the type or method of irrigation (if applicable); (8) the power company name, and account number; (9) the power meter serial number, number of digits, multiplier, and other power meter factors; (10) description of all equipment served by power meter (house, sprinkler, well, etc); (11) description of all types of discharges, and if irrigation, all Well Distribution System detail; (12) the kilowatt hour meter reading on the date of installation (if applicable); (13) the beginning power meter reading; (14) and the date of installation of the power meter. The Well Owner must immediately Notify the Division Engineer of any change of method of Well measurement. Such Notice shall be provided in a format as prescribed by the State Engineer within 30 days of such change.

~~16.8~~ 16.7 Data Submission

A. Annual Reporting

All ~~owners~~ Well Users of Wells within the scope of these Rules shall report in writing a format prescribed by the State Engineer, the annual amounts of water ~~pumped~~ diverted from Wells for the period of November 1 to October 31 and, for irrigation Wells, the method of irrigation (flood, center-pivot, etc.), to the State Division Engineer no later than December ~~1, 2009 and every year thereafter~~ 1st. Amounts pumped shall be reported more frequently if required by the State Engineer.

~~1. All owners of Wells within the scope of these Rules who choose to utilize the alternative Power Conversion Coefficient method shall provide notice in writing to the State Engineer by March 1, of each year the Power Conversion Coefficient method shall be used, stating: (1) the name and address of the owner of the Well(s); (2) the name and address of the user of the Well(s) (if different than the owner); (3) the Well permit number(s); (4) the decree or case number(s) (if applicable); (5) a legal description of the location of the Well(s); (6) a legal description and map or drawing of land irrigated; (7) the type or method of irrigation; (8) the power meter serial number(s); (9) the utility company name;~~

~~(10) the power company account number; (11) the Power Conversion Coefficient; (12) the dates of Power Conversion Coefficient rating; (13) the kilowatt hour meter reading on the date of the Power Conversion Coefficient ratings; (14) the name and address of the Qualified Well Tester performing the Power Conversion Coefficient ratings; (15) the current transformer (C.T.) factors, if applicable; and (16) the potential transformer (P.T.) factors, if applicable. Notice to the State Engineer shall be on a form prescribed by the State Engineer. The State Engineer shall be notified of any change of method for measurement on a form to be prescribed by the State Engineer within 30 days of such change.~~

B. Forms and Notification

Data ~~as required by these Rules~~ shall be submitted ~~on form~~ to the Division Engineer in a format prescribed by the State Engineer. Such ~~forms~~ format shall also include consent to release power data to the State Division Engineer. If the power account number, ~~measurement method, or any other change~~ associated with a ~~Well~~ Well's Measurement Method changes for any reason, the ~~Well~~ User must ~~immediately~~ Notify the State Division Engineer of the ~~new account number on a form prescribed by the State Engineer within 45 calendar days following the change.~~ ~~changes, and submit all required reporting in accordance with these Rules.~~

~~16.9~~16.8 Inactive Well

An owner of an Inactive Well must, ~~upon Inactivation,~~ provide ~~Notification to the Division Engineer in a notarized affidavit, on a form~~ format prescribed by the State Engineer, ~~filed with the State Engineer by March 1 of the year in which the Well will be in inactive status.~~ Once an Inactive Well ~~affidavit~~ Notification is filed with the State Division Engineer no further filings are required under these Rules unless the ~~owner of Well~~ User wishes to change the Well from Inactive status to active status. When ~~an owner of user desires~~ a Well User intends to change an Inactive Well to active status, ~~written~~ Notification to the State Division Engineer is required prior to activation. A Well listed as Inactive under this Rule 16.98 shall not be used until such Notification is given and the Well is in compliance with ~~the requirements of~~ these Rules.

~~16.10~~16.9 Water not to be Withdrawn

No water shall be withdrawn from any Well that is not in compliance with these Rules except to verify the ~~accuracy of the totalizing flow meter or to verify the accuracy of an approved alternative~~ Measurement Method.

~~16.14~~16.10 Noncompliance

Failure to comply with any of these Rules may subject the Well ~~owner and/or~~ User to court proceedings and the state's costs, including reasonable attorney's fees, associated with enforcement of these Rules. Prior to filing any court action, the State Division Engineer shall notify the Well ~~owner and/or user (or both if known by records maintained by the State Engineer)~~ User of the violation in writing by Certified Mail and shall advise the Well ~~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 calendar days following the date of receipt of the notice by the Well ~~owner and/or~~ User or personal service of the notice on the Well ~~owner and/or~~ User.

~~16.12~~16.11 Variance

When the strict application of any provisions of these Rules would cause unusual hardship, the State Division Engineer may grant a variance. Any request for a variance shall be made ~~in writing to the Division Engineer, in a format prescribed by the State Engineer,~~ and shall state the basis, with supporting ~~technical data and other~~ documentation, for the requested variance. If the State Division Engineer finds the request justifiable, the State 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 State Division Engineer.

46.1316.12 Effect of Rules on Other Wells

Nothing in these Rules shall be construed to preclude the State Engineer from requiring metering of withdrawals, periodic reporting of such withdrawals, and cessation of excessive withdrawals from wells not covered by these Rules.

46.1416.13 Effect of Rules on Prior Rules of the State Engineer

~~As of March 1, 2009,~~ These Rules shall supersede ~~any previous Rules or regulations governing the measurement of any ground water diversions located in the~~ Republican River Basin ~~in Water Division No. 4~~ Measurement Rules adopted in 2009.

46.1516.14 Severability

If any portion of these Rules is found to be invalid, the remaining portion of the Rules shall remain in force and in effect.

46.1616.15 Revisions

These Rules may be revised in accordance with section 24-4-103, C.R.S. and 2 CCR 402-5.

46.1716.16 Statement of Basis and Purpose Incorporated by Reference

The Statement of Basis and Purpose for these ~~Republican River Measurement~~ Rules is incorporated herein as part of these Rules.

46.1816.17 Effective Date

These Rules shall become effective on ~~December 1, 2008,~~ the date adopted by the State Engineer and shall 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 sections 24-4-101 et seq., C.R.S., (the State Administrative Procedure Act).

Submitted on this _____ day of _____ 2014

Dick Wolfe, P.E.
State Engineer

APPENDIX A—Exempt Wells

~~(b) — Wells not exceeding fifteen gallons per minute of production and used for ordinary household purposes, fire protection, the watering of poultry, domestic animals, and livestock on farms and ranches and for the irrigation of not over one acre of home gardens and lawns but not used for more than three single-family dwellings;~~

~~(c) — Wells not exceeding fifteen gallons per minute of production and used for drinking and sanitary facilities in individual commercial businesses;~~

~~(d) — Wells to be used exclusively for fire-fighting purposes if said Wells are capped, locked, and available for use only in fighting fires;~~

~~(e) — Wells not exceeding fifty gallons per minute which were in production as of May 22, 1971, and were and are used for ordinary household purposes for not more than three single-family dwellings, fire protection, the watering of poultry, domestic animals, and livestock on farms and ranches and for the irrigation of not over one acre of gardens and lawns; and~~

~~(f) — Wells to be used exclusively for monitoring and observation purposes if said Wells are capped and locked and used only to monitor water levels or for water quality sampling.~~

~~(3)(b)(II)(A) — Wells exempted under paragraph (b), above, that are the only Well on a residential site, that are used solely for ordinary household purposes inside a single-family dwelling and are not used for irrigation or are the only Well on a tract of land of thirty-five acres or more or are the only Well on a cluster development lot, serving one single-family residence, where the ratio of water usage in the cluster development does not exceed one acre-foot of annual withdrawals for each thirty-five acres within the cluster development and is used solely for the purposes specified in paragraph (b), above, and the return flow from such uses are returned to the same stream system in which the Well is located.~~

APPENDIX B—Small Capacity Wells

~~(a) Wells not exceeding fifty gallons per minute and used for no more than three single-family dwellings, including the normal operations associated with such dwellings but not including the irrigation of more than one acre of land;~~

~~(b) Wells not exceeding fifty gallons per minute and used for watering of livestock on range and pasture;~~

~~(c) (I) One well not exceeding fifty gallons per minute and used in one commercial business.~~

~~(II) To qualify as a "commercial business" under this paragraph (c), the business shall be:~~

~~(A) A business that will be operated by the Well owner and that will have its own books, bank accounts, checking accounts, and separate tax returns;~~

~~(B) A business that will use water solely on the land indicated in the permit for the Well and for the purposes stated in such permit;~~

~~(C) A business that will maintain its individual assets and will own or lease the property on which the Well is to be located or where the business is operated;~~

~~(D) A business that will have its own contractual agreements for operation of the business;~~

~~(E) A business that agrees not to transfer a permit issued under this paragraph (c) to another entity that also holds a small capacity commercial Well permit under this paragraph (c); and~~

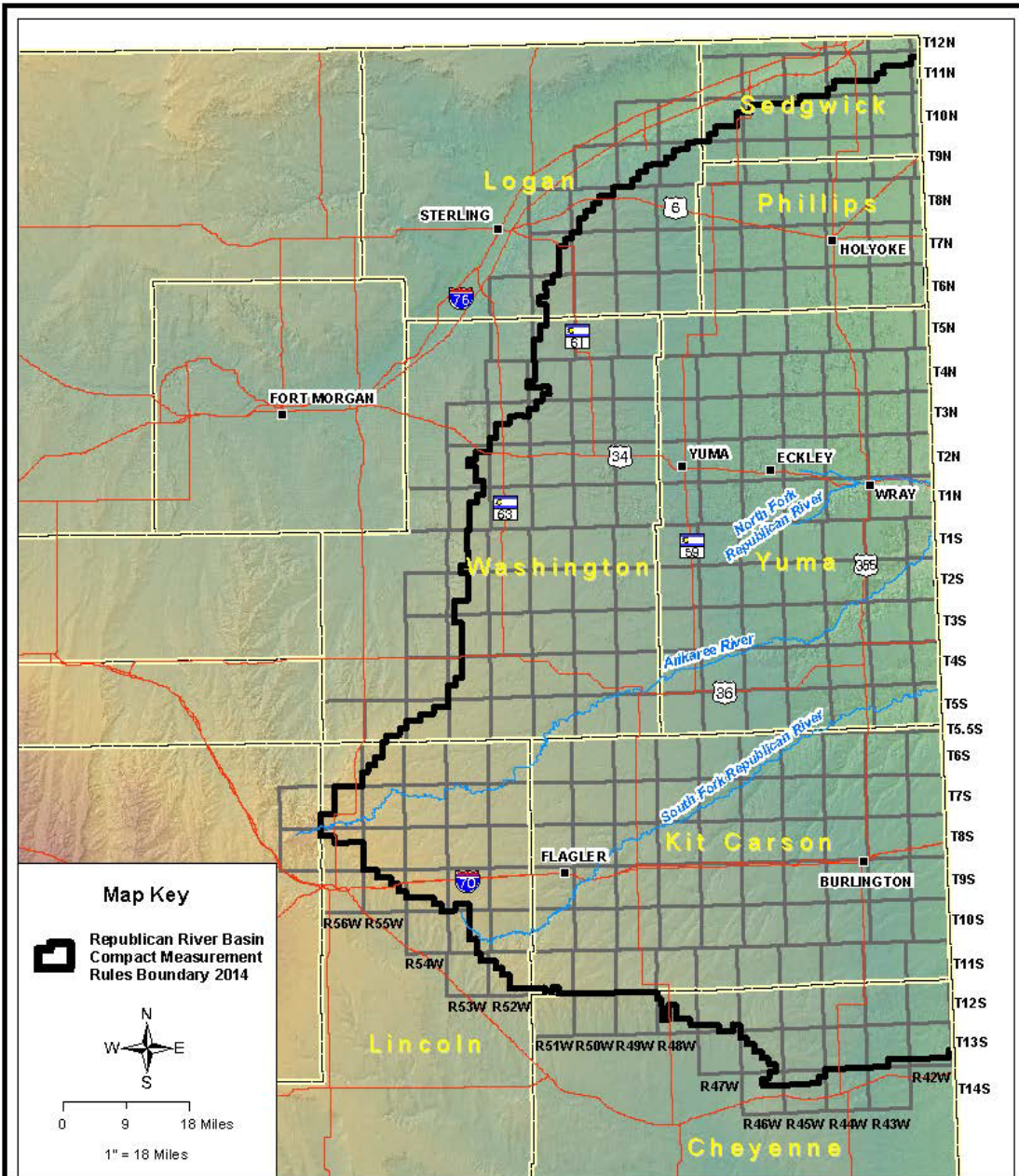
~~(F) A business that agrees to notify any potential buyer that such buyer shall notify the state engineer of any change in ownership of such business within sixty days after any such change in ownership.~~

~~(d) Wells to be used exclusively for monitoring and observation purposes if said Wells are capped and locked and used only to monitor water levels or for water quality sampling; or~~

~~(e) Wells to be used exclusively for fire fighting purposes if said Wells are capped and locked and available for use only in fighting fires.~~

APPENDIX C — Graphical Representation of boundary and area encompassed by the

Republican River Basin Compact Measurement Rules Boundary (2014)



**Republican River Basin
Compact Measurement Rules
Boundary 2014**

APPENDIX B

The Public Land Survey System description of the boundary and area encompassed by the
Republican River Compact Measurement Rules Boundary (2014)

All the following are west of the 6th P.M.

~~T. 11 N., R. 42 W., Sections 7, 8, 17, 18, 19, thru 20, 29, 30, 31, and thru 32—~~

~~T. 11 N., R. 43 W., Sections 13 thru 16 ~~(incl.)~~, and 20 thru 36 ~~(incl.)~~—~~

~~T. 11 N., R. 44 W., Sections 25 thru 29 ~~(incl.)~~ and 31 thru 36 ~~(incl.)~~—~~

~~T. 10 N., R. 42 ~~W.~~, thru ~~R.~~ 44 W., ~~(incl.)~~, All Sections—~~

~~T. 10 N., R. 45 W., Sections 1 thru 4 ~~(incl.)~~, and 7 thru 36 ~~(incl.)~~—~~

~~T. 10 N., R. 46 W., Sections 8 thru 36 ~~(incl.)~~—~~

~~T. 10 N., R. 47 W., Sections 13, 24 thru 28 ~~(incl.)~~, and 32 thru 36 ~~(incl.)~~—~~

~~T. 9 N., R. 42 ~~W.~~, thru ~~R.~~ 47 W., ~~(incl.)~~, All Sections—~~

~~T. 9 N., R. 48 W., Sections 1, 2, 9 thru 17 ~~(incl.)~~, and 19 thru 36 ~~(incl.)~~—~~

~~T. 9 N., R. 49 W., Sections 23, 24, 25, 26, thru 27, and 33, 34, 35, thru 36—~~

~~T. 8 N., R. 42 ~~W.~~, thru ~~R.~~ 49 W., ~~(incl.)~~, All Sections—~~

~~T. 8 N., R. 50 W., Sections 11 thru 15 ~~(incl.)~~, 21 thru 29 ~~(incl.)~~, and 32, 31 thru 36 ~~(incl.)~~—~~

~~T. 7 N., R. 42 ~~W.~~, thru ~~R.~~ 50 W., ~~(incl.)~~, All Sections—~~

~~T. 7 N., R. 51 W., Sections 12, 13, thru 14, 23, 24, 25, thru 26, 35, and 36—~~

~~T. 6 N., R. 42 ~~W.~~, thru ~~R.~~ 50 W., ~~(incl.)~~, All Sections—~~

~~T. 6 N., R. 51 W., Sections 1, 2, thru 3, 9 thru 16 ~~(incl.)~~, 20 thru 28 ~~(incl.)~~, and 33, 34, 35, thru 36—~~

~~T. 5 N., R. 42 ~~W.~~, thru ~~R.~~ 50 W., ~~(incl.)~~, All Sections—~~

~~T. 5 N., R. 51 W., Sections 1, 2, 3, thru 4, 8 thru 17 ~~(incl.)~~, and 19 thru 36 ~~(incl.)~~—~~

~~T. 4 N., R. 42 ~~W.~~, thru ~~R.~~ 50 W., ~~(incl.)~~, All Sections—~~

~~T. 4 N., R. 51 W., Sections 1, 2, 3, 4, thru 5, 8 thru 17 ~~(incl.)~~, 19 thru 27 ~~(incl.)~~, and 33, 34, 35, thru 36—~~

~~T. 3 N., R. 42 ~~W.~~, thru ~~R.~~ 50 W., ~~(incl.)~~, All Sections—~~

~~T. 3 N., R. 51 W., Sections 1, 2, 3, 4, thru 5, and 7 thru 36 ~~(incl.)~~—~~

~~T. 3 N., R. 52 W., Sections 13, 14, 15, 21 thru 28 (incl.), and 33, 34, 35, 15, 20 thru 29, 31 thru 36—~~

~~T. 2 N., R. 42 W., thru R. 5152 W. (incl.), All Sections—~~
~~T. 2 N., R. 52 53 W., Sections 1, 2, 3, 1011 thru 15 (incl.), 22, 23 thru 27 (incl.) and 31 thru 26, 36 (incl.)—~~

~~T. 2 1 N., R. 53 W., Section 36—~~
~~T. 1 N., R. R 42 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 1 N., R. 53 W., Sections 1, 11, 12, 13, 14, thru 15, 22 thru 27 (incl.) and 34, 35, thru 36—~~

~~T. 1 S., R. 42 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 1 S., R. 53 W., Sections 1, 2, thru 3, 10 thru 15 (incl.), 22 thru 27 (incl.) and 33, 34, 35, thru 36—~~

~~T. 2 S., R. 42 W., thru R. 52 W. (incl.) All Sections—~~
~~T. 2 S., R. 53 W., Sections 1, 2, thru 3, 10 thru 15 (incl.), 22 thru 29 (incl.), and 32, 33, 34, 35, thru 36—~~

~~T. 3 S., R. 42 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 3 S., R. 53 W., Sections 1 thru 5 (incl.), 9 thru 16 (incl.), 21 thru 28 (incl.), 33, 34, 35, thru 36—~~

~~T. 4 S., R. 42 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 4 S., R. 53 W., Sections 1, 2, 3, thru 4, 9 thru 16 (incl.), and 20 thru 36 (incl.)—~~

~~T. 5 S., R. 42 W., thru R. 53 W. (incl.), All Sections—~~
~~T. 5 S., R. 54 W., Sections 11 thru 16 (incl.) and 19 thru 36 (incl.)—~~
~~T. 5 S., R. 55 W., Sections 25, 34, 35, and 36—~~
~~T. 5.5 S., R. 42 W., thru R. 50 W. (incl.), All Sections —25, 34 thru 36~~

~~T. 6 5.5 S., R. 42 W., thru 50 W All Sections~~

~~T 6 S R. 42 thru 54 W. (incl.), All Sections—~~
~~T. 6 S., R. 55 W., Sections 1, 2, thru 3, 10 thru 16 (incl.), and 20 thru 36 (incl.)—~~

~~T. 7 S., R. 42 W., thru R. 55 W. (incl.), All Sections—~~
~~T. 7 S., R. 56 W., Sections 1, 2, 3, thru 4, 9 thru 16 (incl.), and 21 thru 36 (incl.)—~~

~~T. 8 S., R. 42 W., thru R. 55 W. (incl.) All Sections—~~
~~T. 8 S., R. 56 W., Sections 1 thru 6 (incl.), and 9, 10, 11, thru 12—~~

~~T. 9 S., R. 42 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 9 S., R. 53 W., Sections 1 thru 31 (incl.), and 34, 35, thru 36—~~
~~T. 9 S., R. 54 W., Sections 1 thru 26 (incl.), and 36—~~
~~T. 9 S., R. 55 W., Sections 1, 2, 3, thru 4, 11, 12, and thru 13—~~

~~T. 10 S., R. 43 W., Section 4, 5, 6, and 7—~~
~~T. 10 S., R. 44 W., Sections 1 42 thru 12 (incl.), and 16 thru 20 (incl.)—~~
~~T. 10 S., R. 45 W., Sections 1 thru 34 (incl.)—~~
~~T. 10 S., R. 46 W., thru R. 52 W. (incl.), All Sections—~~
~~T. 10 S., R. 53 W., Sections 1 thru 3 (incl.), 10 thru 15 (incl.), 22 thru 26 (incl.), 35, and 36—~~

~~T. 11 S., R. 45 41 thru 50 W., All Sections~~
~~T 11 S R 51 W Sections 3, 4, and 61 thru 30, N1/2 33, 35, 36~~
~~T. 11 S., R. 46 52 W., Sections 1, 2, 3, 5, and 6— thru 6, 8 thru 16, 22 thru 27~~
~~T. 11 S., R. 47 53 W., Sections Section 1~~

~~T 12 S R 41 thru 12 (incl.), and 16 thru 19 (incl.)—~~
~~T. 11 S., R. 48 46 W., Sections 1 thru 32—~~
~~T. 11 S., R. 49 W., thru R. 50 W. (incl.), All Sections—~~
~~T. 11 12 S., R. 51 47 W., Sections 1 thru 30 (incl.), N/2 of 33, 34, 35, and 36—~~
~~T. 11 S., R. 52 W., T 12 S R 48 W Sections 1 thru 6, 8 thru 15, 17, 20, 22 thru 25~~

~~T 13 S R 41 W Sections 6, 7, 18, 19~~
~~T 13 S R 42 W Sections 1 thru 24, W1/2 25, 26 thru 30~~
~~T 13 S R 43 W Sections 1 thru 33~~
~~T 13 S R 44 thru 45 W All Sections~~
~~T 13 S R 46 W Sections 1 thru 6 (incl.), 8 thru 16 (incl.), and, 22 thru 27 (incl.)—26, 36~~

~~T. 11 14 S., R. 53 45 W., Section Sections 1- thru 11~~
~~T 14 S R 46 W Sections 1, 2, 10 thru 12~~