

**BEFORE THE DEPARTMENT OF WATER RESOURCES**  
**OF THE STATE OF IDAHO**

IN THE MATTER OF REQUIRING MEASURING )  
DEVICES FOR GROUND WATER DIVERSIONS ) **PRELIMINARY ORDER**  
IN THE WATER DISTRICT NO. 100 AREA OF )  
EXPANSION (REXBURG BENCH AREA) )  
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**BACKGROUND**

On May 10, 2017, the Idaho Department of Water Resources (“Department”) issued a *Preliminary Order Revising Water District No. 100* (“Preliminary Order”) for the purpose of expanding Water District No. 100 (“WD100”) to administer ground water rights located within the Rexburg Bench and some surrounding areas within the Eastern Snake Plain Aquifer (“ESPA”)<sup>1</sup> Model 2.1 boundary<sup>2</sup> overlying portions of the Department’s Administrative Basin Nos. 21, 22 and 23 as shown in the map attached hereto as Attachment A. The Preliminary Order added all ground water rights located within the WD100 area of expansion except those ground water rights used for domestic and stockwater purposes as defined by Idaho Code §§ 42-111 and 42-1401A (11). The WD100 area of expansion is referred to hereinafter as the Rexburg Bench area.

A primary purpose of a water district is the administration of water rights and distribution of water within the water district by a watermaster. Idaho Code § 42-602. The watermaster delivers the flow rate and/or volume authorized by the water right to the water right holder by measuring diversions and adjusting controlling works. Idaho Code § 42-607. To ensure accuracy of the distribution of water, the Director of the Department (“Director”) can require installation of a measuring device by a water right holder to assist a watermaster in the administration and distribution of water in a water district. Idaho Code § 42-701.

To assist the watermaster of WD100 in the administration of ground water rights, ground water right holders must install measuring devices for ground water diversions within WD100, including those ground water rights and diversions within the Rexburg Bench area added to WD100 by the Preliminary Order.

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<sup>1</sup> The ESPA is:

[T]he aquifer underlying the Eastern Snake River Plain as the aquifer is defined in the report, Hydrology and Digital Simulation of the Regional Aquifer System, Eastern Snake River Plain, Idaho, USGS Professional Paper 1408-F, 1992 excluding areas south of the Snake River and west of the line separating Sections 34 and 35, Township 10 South, Range 20 East, Boise Meridian.

IDAPA 37.03.11.050.

<sup>2</sup> The ESPA Model 2.1 boundary is depicted in Attachment A of the Director’s November 2, 2016 *Order Designating the Eastern Snake Plain Aquifer Ground Water Management Area*.

## FINDINGS OF FACT

1. On December 29, 2006, the Director issued an order creating WD100 pursuant to the provisions of Idaho Code § 42-604. *Final Order Creating Water District No. 100*. The boundaries of WD100 were limited to those portions of Basins 21 and 22 overlying the Eastern Snake Plain Aquifer (“ESPA”).

2. On June 30, 2015, the Surface Water Coalition<sup>3</sup> (“SWC”) and the Idaho Ground Water Appropriators, Inc.<sup>4</sup> (“IGWA”), executed a settlement related to the SWC water rights delivery call (IDWR Docket No. CM-DC-2010-001). *See Settlement Agreement Entered Into June 30, 2015 Between Participating Members of the Surface Water Coalition and Participating Members of the Idaho Ground Water Appropriators, Inc.* (“Settlement Agreement”). The Settlement Agreement was subsequently filed with the Director as a mitigation plan pursuant to Rule 43 of the Department’s *Rules for Conjunctive Management of Surface and Ground Water Resources* (“CM Rules”). The Director approved the mitigation plan on May 2, 2016. *Final Order Approving Stipulated Mitigation Plan* at p. 4.

3. The Settlement Agreement acknowledges a decades-long declining trend in ground water levels of the ESPA and establishes practices that participants in the mitigation plan will implement for the following purposes: (1) to mitigate material injury to the SWC from junior ground water right diversions; (2) to provide “safe harbor” from curtailment under the SWC delivery call to participating ground water right holders; (3) to stabilize ESPA water surface elevations; and (4) to enhance ESPA water surface elevations to the average ESPA water surface elevations observed during the period of time 1991-2001. *Settlement Agreement* at p. 1.

4. Most of the ground water diversions located within the Rexburg Bench are located within the Madison Ground Water District (“MGWD”). The MGWD is both a participating member of IGWA and a party to the Settlement Agreement. The Settlement Agreement stipulates that participating IGWA ground water districts will initiate a number of mitigation and water management strategies, including measurement of ground water diversions.

5. The Settlement Agreement requires the installation of approved closed conduit flow meters on all ground water diversions by ground water users participating in IGWA’s mitigation plan by the beginning of the 2018 irrigation season. *Settlement Agreement* at p. 3.

6. On July 20, 2016, the Director issued a *Final Order on Reconsideration*, In the Matter of Requiring Measuring Devices for Ground Water Diversions in the Portions of Water Districts Nos. 31, 34, 100, 110, 120, 130, and 140 Overlying the Eastern Snake Plain Aquifer

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<sup>3</sup> The Surface Water Coalition consists of the following seven surface water delivery organizations: A&B Irrigation District, American Falls Reservoir District No. 2, Burley Irrigation District, Milner Irrigation District, Minidoka Irrigation District, North Side Canal Company, and the Twin Falls Canal Company.

<sup>4</sup> The Idaho Ground Water Appropriators, Inc., includes, but is not limited to, the following entities: Aberdeen-American Falls Ground Water District, Bingham Ground Water District, Bonneville-Jefferson Ground Water District, Carey Valley Ground Water District, Jefferson Clark Ground Water District, Madison Ground Water District, Magic Valley Ground Water District, North Snake Ground Water District, Southwest Irrigation District, and Fremont-Madison Irrigation District, Anheuser-Busch, United Water, and Glanbia Cheese.

("ESPA Measurement Order") to assist watermasters in the administration of water rights within the boundaries of the water districts affected by the ESPA Measurement Order. The ESPA Measurement Order was limited to ground water rights and diversions located within the ESPA except those ground water rights used for domestic and stockwater purposes as defined by Idaho Code §§ 42-111 and 42-1401A (11). The ESPA Measurement Order did not include ground water rights located within the Rexburg Bench area because the rights were not included in a water district. However, the SWC petitioned the Director to amend the ESPA Measurement Order to require measuring devices on all ground water diversions within the ESPA Model 2.1 boundary and all ground water diversions within the boundaries of ground water districts signatory to the Settlement Agreement. *See Surface Water Coalition's Petition for Reconsideration and Request for Hearing* at 6, In the Matter of Requiring Measuring Devices for Ground Water Diversion in the Portions of Water Districts 31, 34, 100, 110, 120, 130 and 140 Overlying the Eastern Snake Plain Aquifer (July 1, 2016).

7. On November 2, 2016, the Director designated the ESPA Ground Water Management Area which includes both WD100 and the Rexburg Bench area within the ESPA Model 2.1 boundary. *See Order Designating the Eastern Snake Plain Aquifer Ground Water Management Area* at Attachment A. Ground water in the Rexburg Bench area and the ESPA Model 2.1 boundary is hydraulically connected to the ESPA and the Snake River. *Id.* at 4.

8. On May 10, 2017, the Director issued the Preliminary Order revising WD100 to administer ground water rights located within the Rexburg Bench area. Paragraph three of the Preliminary Order states the following:

The Department shall issue a separate order requiring the installation of measuring devices for ground water diversions within the Rexburg Bench area added to WD100.

9. The Department held a public informational meeting on August 7, 2017, in Rexburg, Idaho to discuss the issuance and implementation of a measuring device order for water district diversions in the Rexburg Bench area. Notice of the public meeting was sent to all ground water right holders in the Rexburg Bench area of WD100 except those ground water rights used for domestic and stockwater purposes as defined by Idaho Code §§ 42-111 and 42-1401A (11).

10. Department representatives at the August 7, 2017, public information meeting explained that the Department's *Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices* ("Minimum Measurement Standards") require installation of a certified flow meter on closed conduit or pipe line diversions. Most ground water diversions or wells discharge water through closed conduits or pipe lines.

11. Department representatives at the August 7, 2017, public information meeting proposed that a measurement order for the Rexburg Bench area be similar to the Department's 2016 ESPA Measurement Order issued to ground water users within WD100 and other ESPA water districts, except that the deadline for installing meters on irrigation wells in the Rexburg Bench area be extended to the start of the 2019 irrigation season instead of the 2018 irrigation season. The additional year gives ground water users in the Rexburg Bench area a comparable amount of time to install flow meters as received by other ground water users in the ESPA. A 2019 meter installation deadline will enable WD100 to collect pumping data for the Rexburg Bench area wells in approximately two years. At that time, annual water use data collection in the WD100 expansion area will be consistent with data collection efforts in the original WD100 boundary area and result in a quicker, more complete evaluation of water use for the entire water district. Consistent data

collection will create a more accurate, equitable basis for water district assessments throughout the water district.

## CONCLUSIONS OF LAW

1. Idaho Code § 42-233b, provides, in pertinent part:

### 42-233b. GROUND WATER MANAGEMENT AREA.

The director may require all water right holders within a designated water management area to report withdrawals of ground water and other necessary information for the purpose of assisting him in determining available ground water supplies and their usage.

2. Idaho Code § 42-701 provides, in pertinent part:

### 42-701 INSTALLATION AND MAINTENANCE OF CONTROLLING WORKS AND MEASURING DEVICES BY WATER APPROPRIATORS – PROCEDURE UPON FAILURE TO INSTALL AND MAINTAIN – MEASURING AND REPORTING OF DIVERSIONS – PENALTY FOR FAILURE TO COMPLY – REPORT FILING FEE.

(1) The appropriators or users of any public waters of the state of Idaho shall maintain to the satisfaction of the director of the department of water resources suitable headgates and controlling works at the point where the water is diverted. Each device shall be of such construction that it can be locked and kept closed by the watermaster or other officer in charge, and shall also be of such construction as to regulate the flow of water at the diversion point. Each such appropriator shall construct and maintain, when required by the director of the department of water resources, a rating flume or other measuring device at such point as is most practical in such canal, ditch, wellhead or pipeline for the purpose of assisting the watermaster or department in determining the amount of water that may be diverted into said canal, ditch, wellhead or pipeline from the stream, well or other source of public water. Plans for such headgates, rating flumes or other measuring devices shall be approved by the department of water resources.

(2) If an appropriator determines that installation and maintenance of a measuring device required by the director would be burdensome for his diversion, the appropriator may, upon approval of the director, execute an agreement with the director and submit to the director such information and technical data concerning the diversion and pumping facilities as the director determines necessary to establish the relationship of power usage to water withdrawal by any pump used to divert public water.

(3) Any appropriator or user of the public waters of the state of Idaho that neglects or refuses to construct or maintain such headgates, controlling works, or measuring devices..., upon receiving ten (10) days' notice from the director of the department of water resources within which to begin and diligently pursue to completion the construction or installation of the required device or devices or to begin and diligently pursue to completion a remedy to such defects as exist in accordance with said notice, then the director of the department of water resources may order the duly qualified and acting watermaster of the water district to shut off and refuse to deliver at the point of diversion, the water owned by such appropriator

or user until the user does construct and maintain such headgates, controlling works or measuring devices or remedy the defects which exist or the director may take action pursuant to section 42-1701B, Idaho Code, to enforce the requirement to construct, install or maintain such devices.

(4) The appropriators or users of the public waters of the state of Idaho shall be given a reasonable time within which to complete construction of such headgates, controlling works or measuring devices, depending upon the size and extent thereof, when due diligence has been used in the prosecution of such work.

3. Measurement of diversions is necessary in WD100, including the Rexburg Bench area, for the proper distribution of water and administration of water rights. Measurement of diversions has the following administrative benefits:

- i. Collective quantification of ground water withdrawals assists the director of the Department, the water district and local ground water right holders in determining the available ground water supplies and usage;
- ii. Quantification of individual ground water withdrawals creates the necessary evidence to ensure ground water rights are used within their authorized diversion limits and that withdrawals can be regulated to the authorized diversion limits of the water rights when such limits are exceeded; and
- iii. Collective and individual quantification of ground water withdrawals establishes an equitable, defensible and legal basis for determining water user assessments since Idaho law requires that expenses of the water district be based on water delivery.

4. The Director should require the installation of measuring devices for diversions of ground water within the Rexburg Bench area of WD100. The order should require the installation of flow meters on irrigation wells by the start of the 2019 irrigation season, and by January 1, 2019, for non-irrigation wells. The 2019 installation deadline is consistent with the amount of time given to other ground water users in the ESPA to install measurement devices pursuant to the Department's 2016 ESPA Measurement Order.

## ORDER

IT IS HEREBY ORDERED that:

1. The holders of ground water rights within the Rexburg Bench area of WD100, except those ground water rights, uses and diversions identified below, shall install and maintain on each point of diversion or well, a measuring device of a type acceptable to the Department. **Owners of irrigation wells or diversions that are required to be measured shall install acceptable measuring devices by the start of the 2019 irrigation season. Owners of non-irrigation diversions that are required to be measured shall install acceptable measuring devices by January 1, 2019.**

2. The measuring and reporting required by this order is waived until further notification by the Department for the following ground water uses and diversions:

- a. Domestic and stockwater uses as defined by Idaho Code §§ 42-111 and 42-1401A(11);
- b. Diversions of ground water or water systems with multiple diversions irrigating less than or equal to five (5) acres;
- c. Diversions of ground water or water systems with multiple diversions delivering ground water for any purpose other than irrigation that divert less than or equal to 0.24 cubic feet per second (approximately 108 gallons per minute).

3. Measuring devices acceptable to the Department for wells required to be measured shall be flow meters identified in the Department’s *List of Approved Closed Conduit Flow Meters* (Version 2.9 updated 8-17-2017) (copy attached). These specifications apply to both irrigation and non-irrigation water uses.

4. The Department will consider a request for variance of the Department-approved flow meter requirement upon submittal of a written plan to the Department. Acceptable variances may include the following methods or devices:

- Development of a PCC, which is a ratio of power usage to water withdrawal. The PCC method will *only be considered for irrigation diversions that consist of one (1) well and one irrigation discharge point or one distinct flow and demand condition, and water levels do not change significantly during the irrigation season (example: a well diverting water to one center pivot only with no end gun, a well diverting water to one wheel line, or multiple wheel lines as long as the same multiple wheel lines are always on at the same time)*;
- Timing diversion with an hour meter (time clock) *for one well that discharges to an open ditch or pond where a) discharge is constant and not controlled by valves, b) ground water levels do not change significantly during the annual season of use, and c) the rate of flow is measured annually by a ground water district hydrographer*;
- Measurement with a properly functioning flow meter that was installed *prior to the date of this order, and determined as acceptable by the Department* (meters installed prior to the date of this order and included in the Department’s *List of Approved Closed Conduit Flow Meters version 2.9* are deemed acceptable); and
- Measurement with a standard open channel measuring device installed in an open channel or ditch for measuring multiple wells in a well field and the measuring device is read daily, or daily flows are recorded by use of a continuous recorder or data logger.

5. Requests for variance must be submitted to the Department and will be considered by the Water District watermaster and the Department on a case-by-case basis. Variances proposing measurement with an existing flow meter or measuring device must satisfy Department criteria and accuracy tests. Existing meters or measuring devices that do not satisfy standards, or that fail, will be required to be replaced with an approved flow meter unless another variance is obtained. Requests for variance must be made using the Department’s form “*Request for Variance of IDWR Approved Flow Meter Requirement*” available on the Department’s website or upon request.

6. If a user cannot comply with the deadlines in item 1 above, the Department may grant an extension of time. The Department will consider requests for extensions on a case-by-case basis. Requests for extension must be made to the Department in writing. A water right holder may request an extension because of non-use. Non-use may be required by a federal land set aside program, or the water user may be temporarily not diverting as authorized by the water right. In some situations, the Department may exempt a diversion from the measurement requirements of this order. Conditions that may result in an exemption include, but may not be limited to, the following:

- Abandonment, non-use, or consolidation of diversions that results in a diversion being unused; or
- A reduction or change to the water right that results in an authorized diversion rate less than or equal to 0.24 cubic feet per second (cfs) and/or reduces the authorized irrigation use to five acres or less.

7. The requirements of this order apply to new ground water diversions authorized after the date of this order, except those ground water uses or diversions identified in items 2a. through 2c. of this section. This order does not require the installation of lockable controlling works, although nothing in this order shall preclude the Director and/or the watermaster from mandating the installation of lockable controlling works on any diversion if such works are determined to be necessary for adequate administration and control of the diversion.

8. The watermaster shall shut off and refuse to deliver water to any ground water user who does not have, or who fails to maintain, an adequate measuring device on a diversion after the start of the 2019 irrigation season (irrigation diversions) or after January 1, 2019 (non-irrigation diversions), unless an extension or exemption has been granted by the Department.

9. The WD100 watermaster shall be responsible for the collection and annual reporting of all measurement data for the diversions within water district boundaries subject to this order. All diversions shall be reported to the Department using the Department's WMIS online database application.

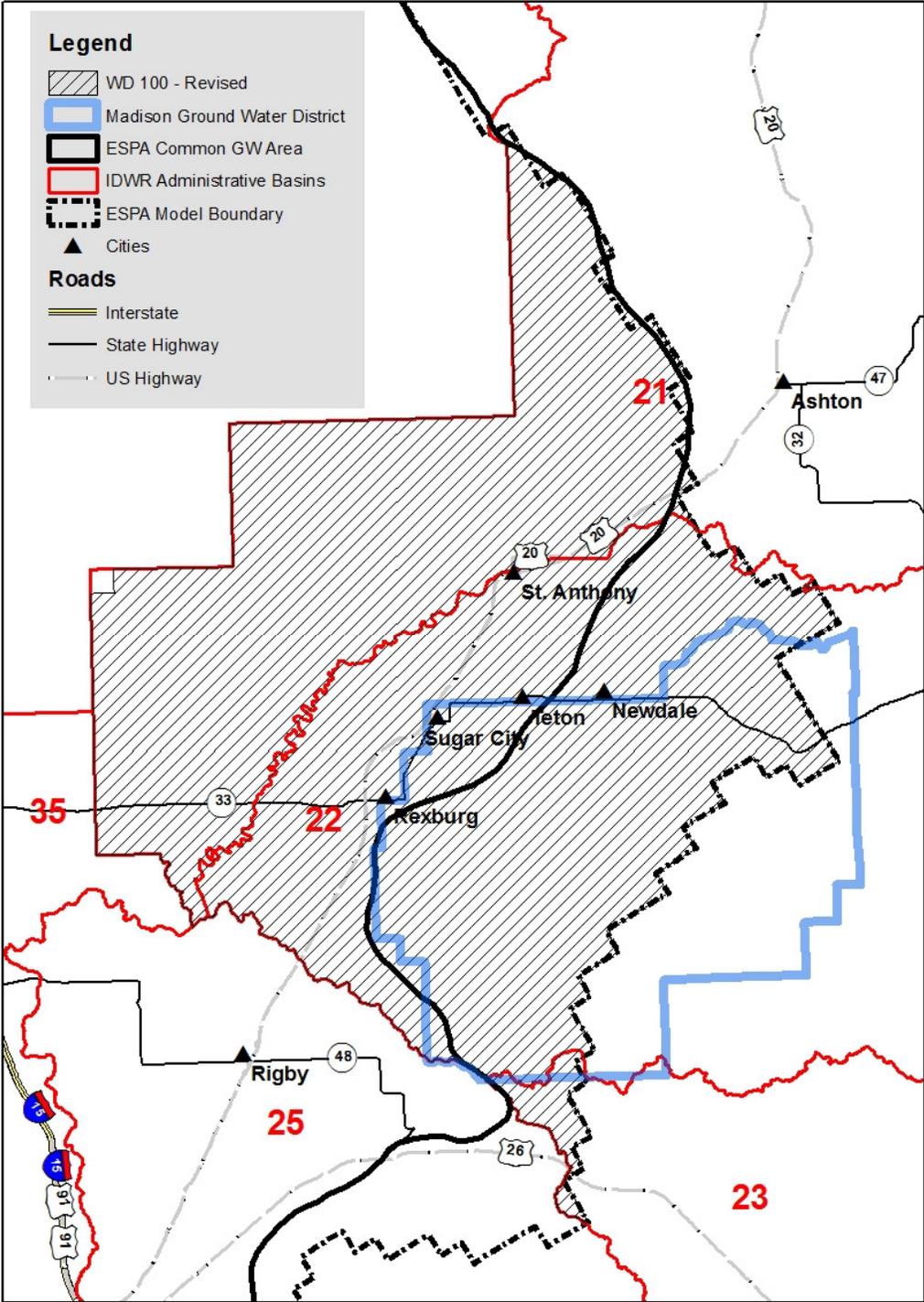
Dated this 12<sup>th</sup> day of September 2017



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MAT WEAVER  
Deputy Director

# Water District 100 Revised Boundary



## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this \_\_\_<sup>th</sup> day of September 2017, the above and foregoing document was served on each individual or entity on the service list for this matter on file at the Idaho Department of Water Resources, 322 East Front Street, Boise, Idaho and [www.idwr.idaho.gov](http://www.idwr.idaho.gov). Each individual or entity on the service list was served by placing a copy of the above and foregoing document in the United States mail, postage prepaid and properly addressed.

Documents served: **Preliminary Order in the Matter of Requiring Measuring Devices for Ground Water Diversions in Water District No. 100 (Rexburg Bench Area).**

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**Sarah Shaul**  
**Technical Records Specialist**  
**Idaho Department of Water Resources**