State of Idaho
DEPARTMENT OF WATER RESOURCES
322 East Front Street • P.O. Box 83720 • Boise, Idaho 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

November 25, 2013

**Re: Preliminary Order Requiring Measuring Devices and Controlling Works for Diversions in Water District No. 29-O, Bannock Creek Drainage**

Dear Water User,

The Idaho Department of Water Resources ("Department" or "IDWR") has issued the enclosed order requiring installation of measuring devices and controlling works for certain surface water and ground water rights within Water District No. 29-O, Bannock Creek Drainage. Pursuant to Section 67-5243, Idaho Code, the preliminary order will become a final order without further action of the Department unless a party petitions for reconsideration or files an exception and/or brief as explained in the enclosed information sheet.

Please note that the Preliminary Order contains several important deadlines as follows:

1) Holders of water rights listed in Attachment A of the Preliminary Order shall install measuring devices, and controlling works if required, prior to diversion of water for the 2014 irrigation season; and
2) Holders of water rights listed in Attachment A of the Final Order shall submit measurement plans to the Water District 29-O watermaster by January 24, 2014.

Please refer to the enclosed document *"Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices"* for information on types of measuring devices acceptable to IDWR. This document and other information on the topic are available on IDWR's website at the following address:
http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/water_measurement.htm

Owners of ground water diversions shall submit measurement plans for their wells by completing the attached *IDWR Measurement Plan Submittal Form for Irrigation Wells.* This same form may also be used if you propose to install a flow meter on a closed conduit surface water diversion (pipe must be flowing full). Water users may download additional copies of the form from the following IDWR web site address:
http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/MeasPlanForm_09.pdf

Owners of surface water diversions who propose to install open channel measuring devices should submit plans that describe the type of device to be installed, including drawings and dimensions.

Information must also be included regarding the type of controlling works that are planned to be installed.

If you have questions concerning the Preliminary Order or the Department's water measurement standards, please contact Tim Luke, IDWR, at 208-287-4959 or Richard Curry, Water District 29-O Watermaster, at 208-335-2373.

Respectfully,

Tim Luke
Chief, Water Compliance Bureau

Encl: *Explanatory Information to Accompany a Preliminary Order*
*Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices*
*List of Approved Closed Conduit Flow Meters*
*IDWR Measurement Plan Submittal Form for Irrigation Wells*

Cc: Richard Curry, Watermaster, Water District 29-O
IDWR Eastern Region

BEFORE THE DEPARTMENT OF WATER RESOURCES

OF THE

STATE OF IDAHO

| | | |
|---|---|---|
| IN THE MATTER OF REQUIRING MEASURING DEVICES AND CONTROLLING WORKS ON WATER DIVERSIONS IN THE BANNOCK CREEK DRAINAGE, WATER DISTRICT NO. 29-O | ) | PRELIMINARY ORDER |

The Idaho Department of Water Resources ("Department") issued the *Preliminary Order Creating Water District No. 29-O*, on March 8, 2013. The Preliminary Order became a Final Order ("Order") after March 22, 2013. The Order notified water right holders in the water district that the Department would issue a separate order requiring the installation of measuring devices and controlling works for state based water right diversions within Water District No. 29-O. A primary purpose of a water district is the administration of water rights within the water district by a watermaster. A watermaster administers water rights in part by measuring diversions and adjusting controlling works to deliver the authorized flow rate and/or volume to the water right holders within the water district. Measurement and control of diversions is necessary to assure the proper and equitable delivery of water in accordance with authorized water rights.

Section 42-701, Idaho Code, 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 use 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.

## ORDER

IT IS HEREBY ORDERED AS FOLLOWS:

1. The holders of those water rights identified in Attachment A of this order that divert from surface water and ground water sources within the Bannock Creek Drainage, Water District No. 29-O, shall install on each point of diversion a measuring device of a type acceptable to the Department prior to diverting water during the 2014 irrigation season. The water rights listed in Attachment A are limited to water rights that include irrigation of more than five (5) acres of land.

2. The holders of those water rights in Attachment A with diversions from surface water sources shall install lockable controlling works of a type acceptable to the Department that will allow the watermaster to control the delivery of water from the respective sources. Controlling works shall be installed prior to diverting water during the 2014 irrigation season.

3. Those water right holders identified in Attachment A of this order diverting water within the Bannock Creek drainage must submit written plans for measuring devices, and controlling works if required, to the Water District 29-O watermaster no later than January 24, 2014. Plans shall be reviewed by the watermaster and Department to determine whether proposed measuring devices and controlling works are of a type acceptable to the Department. If measuring devices and/or controlling works are already in place, a written description of the devices or works shall be submitted to the Department by January 24, 2014.

4. Measuring devices that are acceptable to IDWR are listed in IDWR's *Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices* (copy attached). These specifications apply to both irrigation and non-irrigation water uses.

5. In some situations, IDWR may exempt a diversion from the requirements of this order or may allow deferred compliance for a diversion. IDWR will consider each request for exemption or deferral on a case-by-case basis. Conditions that may result in exemption or deferral include, but are not limited to, the following:

- Abandonment, non-use, or consolidation of diversions that results in a diversion being unused, or reduces the use under the right to five acres or less.
- Delays caused by requirements of other government entities.

6. This Order shall be effective immediately on any new diversion(s) authorized after the date of this Order, except water right diversions used for irrigation of 5 acres or less and/or for non-irrigation uses in which the total authorized rate of diversion is 0.24 cfs or less.

7. The watermaster shall shut off and refuse to deliver water to any water right holder or water user with a diversion in Water District No. 29-O that does not have an adequate measuring device and/or lockable controlling works at any and all times during the 2014 irrigation season.

Dated this 23 day of NOVEMBER, 2013

MAT WEAVER
DEPUTY DIRECTOR

**Attachment A**

Water Rights Diversions Subject to Measurement Order

Sorted by Last Name

| Water Rt Num | Owner | Priority Date | Div Rate (cfs) | Source | Usage | Total Acres | Town | Range | Sec | QQQ | QQ | Qtr | Gov Lot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29-13504 | STUART H ADAMS | 12/31/1942 | 0.42 | KNOX CREEK | IRRIGATION | 21 | 10S | 33E | 14 | SE | NE | NE | |
| 29-10422 | STUART H ADAMS | 12/31/1942 | 0.36 | WASTE WATER | IRRIGATION, STOCKWATER | 18 | 10S | 33E | 12 | | SE | SW | |
| 29-10422 | STUART H ADAMS | 12/31/1942 | 0.36 | BANNOCK CREEK | IRRIGATION, STOCKWATER | 18 | 10S | 33E | 13 | | NE | NW | |
| 29-10422 | STUART H ADAMS | 12/31/1942 | 0.36 | BANNOCK CREEK | IRRIGATION, STOCKWATER | 18 | 10S | 33E | 12 | | SE | SW | |
| 29-13676 | OLIVER DANIEL AMES | 3/25/1976 | 0.16 | MICHAUD CREEK | IRRIGATION | 8 | 06S | 33E | 23 | NW | SW | SW | |
| 29-13708 | W LYNN ANDERSEN | 2/15/1962 | 1.3 | GROUND WATER | IRRIGATION | 154.7 | 11S | 33E | 36 | NE | NW | NW | |
| 29-4326 | LOU BEVAN | 4/20/1952 | 1.78 | GROUND WATER | IRRIGATION | 150 | 06S | 33E | 31 | | SW | SE | |
| 29-4083 | IVAN BINGHAM | 6/14/1932 | 0.36 | UNNAMED STREAM | IRRIGATION, STOCKWATER, DOMESTIC | 15 | 10S | 32E | 35 | NW | SE | NE | |
| 29-10857 | DALE BOLINGBROKE | 4/10/1907 | 0.08 | SPRING | IRRIGATION | 409 | 10S | 34E | 7 | SW | SE | NE | |
| 29-13234 | DALE BOLINGBROKE | 9/12/1961 | | SPRINGS | IRRIGATION STORAGE, IRRIGATION FROM STORAGE | 409 | 10S | 34E | 7 | SW | SE | NE | |
| 29-13234 | DALE BOLINGBROKE | 9/12/1961 | | RATTLESNAKE CREEK | IRRIGATION STORAGE, IRRIGATION FROM STORAGE | 409 | 09S | 34E | 35 | NE | SW | SE | |
| 29-2565 | DALE BOLINGBROKE | 9/12/1961 | 1.04 | GROUND WATER | IRRIGATION | 409 | 10S | 34E | 7 | NW | NE | SE | |
| 29-477 | DALE BOLINGBROKE | | 0.7 | RATTLESNAKE CREEK | IRRIGATION | 409 | 09S | 34E | 35 | NE | SW | SE | |
| 29-10280 | KENNETH L CAMPBELL | | 7.3 | KNOX CANYON CREEK | IRRIGATION | 668 | 10S | 33E | 23 | SW | NW | SW | |
| 29-10280 | KENNETH L CAMPBELL | | 7.3 | KNOX CANYON CREEK | IRRIGATION | 668 | 10S | 32E | 36 | NW | SE | SE | |
| 29-2458A | BILL CURRY | 1/19/1962 | 1.37 | GROUND WATER | IRRIGATION | 155 | 11S | 33E | 12 | | NE | NW | |
| 29-4349 | D & D RANCHES PARTNERSHIP | 4/1/1962 | 1 | GROUND WATER | IRRIGATION | 91.2 | 10S | 34E | 18 | | NW | SE | |
| 29-7630 | NORMAN DAVIS | 3/8/1982 | 1.07 | GROUND WATER | IRRIGATION | 149 | 11S | 33E | 23 | NE | NE | SW | |
| 29-13949 | G5 LAND CO | 5/8/1977 | 1.41 | GROUND WATER | IRRIGATION | 101.7 | 12S | 33E | 2 | NE | SE | SE | |
| 29-13950 | G5 LAND CO | 5/8/1977 | 0.72 | GROUND WATER | IRRIGATION | 108.9 | 12S | 33E | 2 | | SE | SE | |
| 29-13951 | G5 LAND CO | 5/8/1977 | 1.89 | GROUND WATER | IRRIGATION | 136.2 | 12S | 33E | 2 | NE | SE | SE | |
| 29-13952 | G5 LAND CO | 5/8/1977 | 0.3 | GROUND WATER | IRRIGATION | 108.9 | 12S | 33E | 2 | | SE | SE | |
| 29-13984 | G5 LAND CO | 3/22/1963 | 4.71 | GROUND WATER | IRRIGATION | 281.2 | 12S | 33E | 1 | NE | NW | SW | |
| 29-13985 | G5 LAND CO | 3/22/1963 | 0.58 | GROUND WATER | IRRIGATION | 108.9 | 12S | 33E | 2 | | SE | SE | |
| 29-476 | JANET HAYBALL | | 2 | RATTLESNAKE CREEK | IRRIGATION | 100 | 09S | 34E | 35 | NE | SW | SE | |
| 29-10893 | HANS HAYDEN | 12/31/1927 | 1.6 | CLIFTON CREEK | IRRIGATION, STOCKWATER | 166 | 09S | 34E | 16 | | NW | NW | |
| 29-13522 | HANS HAYDEN | 4/1/1960 | 1 | RATTLESNAKE CREEK | IRRIGATION | 120.3 | 09S | 34E | 8 | | NE | SW | |
| 29-13522 | HANS HAYDEN | 4/1/1960 | 1 | RATTLESNAKE CREEK | IRRIGATION | 120.3 | 09S | 34E | 8 | SW | SW | SE | |
| 29-2144 | HANS HAYDEN | 7/3/1912 | 0.98 | CLIFTON CREEK | IRRIGATION | 166 | 09S | 34E | 16 | | NW | NW | |
| 29-13215 | RUSSELL J HAYDEN | 10/1/1903 | 0.8 | RATTLESNAKE CREEK | IRRIGATION | 120.3 | 09S | 34E | 8 | | NE | SW | |

**Attachment A**

Water Rights Diversions Subject to Measurement Order

Sorted by Last Name

| Water Rt Num | Owner | Priority Date | Div Rate (cfs) | Source | Usage | Total Acres | Town | Range | Sec | QQQ | QQ | Qtr | Gov Lot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29-2509 | RUSSELL J HAYDEN | 8/2/1965 | 0.93 | GROUND WATER | IRRIGATION | 67 | 09S | 34E | 8 | NE | SE | SW | |
| 29-480 | RUSSELL J HAYDEN | 10/1/1903 | 0.6 | RATTLESNAKE CREEK | IRRIGATION | 120.3 | 09S | 34E | 8 | | NE | SW | |
| 29-480 | RUSSELL J HAYDEN | 10/1/1903 | 0.6 | RATTLESNAKE CREEK | IRRIGATION | 120.3 | 09S | 34E | 8 | SW | SW | SE | |
| 29-7272 | RUSSELL J HAYDEN | 7/2/1975 | 0.62 | GROUND WATER | IRRIGATION | 92 | 09S | 34E | 3 | NE | SW | SE | |
| 29-7335 | TWAIN HAYDEN | 7/14/1976 | 0.34 | SPRING | IRRIGATION | 32 | 08S | 34E | 32 | SW | SE | NE | |
| 29-13858 | JOHN HERRMAN | 4/15/1968 | 0.19 | MICHAUD CREEK | IRRIGATION | 15 | 06S | 33E | 22 | NW | NE | SE | |
| 29-13860 | JOHN HERRMAN | 3/13/1987 | 0.11 | MICHAUD CREEK | IRRIGATION | 15 | 06S | 33E | 22 | NW | NE | SE | |
| 29-7483 | WYNN JARVIS | 2/10/1987 | 0.2 | GROUND WATER | IRRIGATION, DOMESTIC | 13 | 06S | 33E | 22 | SW | NE | SE | |
| 29-2470 | BLAKE JOHNSON | 12/11/1962 | 4.22 | GROUND WATER | IRRIGATION | 283 | 10S | 34E | 31 | SW | SW | SW | 4 |
| 29-2237A | KIMBERLY WHITTIER WILLIAMS TRUST | 12/11/1922 | 0.14 | MIDNIGHT CREEK | IRRIGATION | 7 | 08S | 34E | 18 | NE | NE | SW | |
| 29-2490 | MICHAUD CREEK RANCHES INC | 4/20/1964 | 0.32 | MICHAUD CREEK | IRRIGATION, STOCKWATER | 9 | 07S | 33E | 1 | SE | SE | SW | |
| 29-2490 | MICHAUD CREEK RANCHES INC | 4/20/1964 | 0.32 | MICHAUD CREEK | IRRIGATION, STOCKWATER | 9 | 07S | 33E | 1 | SE | NW | SW | |
| 29-7948 | MID CRYSTAL FARMS | 5/16/1990 | 0.74 | CLIFTON CREEK | IRRIGATION | 150 | 09S | 34E | 16 | NE | NW | NW | |
| 29-7949 | MID CRYSTAL FARMS | 5/16/1990 | 2.32 | GROUND WATER | IRRIGATION | 278.4 | 09S | 34E | 8 | SE | SE | SE | |
| 29-7868 | LAURENCE NELSON | 9/11/1989 | 0.17 | GROUND WATER | IRRIGATION, DOMESTIC | 15 | 06S | 33E | 22 | | SW | SE | |
| 29-2343 | GENE A STEWART | 3/18/1954 | 0.24 | MUDDY CREEK | IRRIGATION | 12 | 09S | 34E | 13 | NW | SE | NE | |
| 29-2343 | GENE A STEWART | 3/18/1954 | 0.24 | MUDDY CREEK | IRRIGATION | 12 | 09S | 34E | 13 | SE | SE | NE | |
| 29-2343 | GENE A STEWART | 3/18/1954 | 0.24 | MUDDY CREEK | IRRIGATION | 12 | 09S | 34E | 13 | NW | SE | NE | |
| 29-7291 | WARD & SONS CO INC | 10/22/1975 | 4.53 | GROUND WATER | IRRIGATION | 326.3 | 11S | 33E | 35 | | NW | SW | |
| 29-7291 | WARD & SONS CO INC | 10/22/1975 | 4.53 | GROUND WATER | IRRIGATION | 326.3 | 11S | 33E | 35 | NW | NW | SW | |
| 29-7931A | WARD & SONS CO INC | 3/15/1990 | 7.85 | GROUND WATER | IRRIGATION, STOCKWATER | 547 | 11S | 33E | 36 | NW | NW | SW | |
| 29-13243 | WARD FARMS | 5/22/1914 | 0.3 | SPRING | IRRIGATION | 15 | 11S | 33E | 28 | SW | NE | NW | |
| 29-10990 | BARRY T WILLIAMS | | 4.2 | RATTLESNAKE CREEK | IRRIGATION | 167 | 09S | 34E | 35 | NE | SW | SE | |
| 29-13530 | BARRY T WILLIAMS | 7/1/1910 | 0.14 | SPRINGS | IRRIGATION, STOCKWATER | 6 | 11S | 34E | 7 | SW | SE | SW | |
| 29-13764 | BARRY T WILLIAMS | 8/28/1911 | 0.7 | BANNOCK CREEK | IRRIGATION | 35 | 11S | 33E | 13 | | SW | SE | |

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 25th day of November, 2013, 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 posted on the Department's website: 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.

Sarah Garceau
Technical Records Specialist
Idaho Department of Water Resources

STUART H AND JUDY G ADAMS
1271 MINK CREEK RD
ARBON ID 83212

BONNIE B AND OLIVER DANIEL AMES
2198 MICHAUD CREEK RD
POCATELLO ID 83204

W LYNN ANDERSEN
1258 ANDERSEN RD
ARBON ID 83212

LOU BEVAN
160 IDAHO ST
POCATELLO ID 83201

IVAN AND MARTI E BINGHAM
14735 N 4400 W
GARLAND UT 84312

DALE BOLINGBROKE
PO BOX 15
ARBON ID 83212

KENNETH L AND MELINDA CAMPBELL
4798 BAILEY RD
ARBON ID 83212

BILL AND DEANNA CURRY
PO BOX 21
ARBON ID 83212

D & D RANCHES PARTNERSHIP
C/O DAVID N LUSK
PO BOX 7
ARBON ID 83212

NORMAN DAVIS
1392 CHURCH RD
ARBON ID 83212

G5 LAND CO
1310 S 600 W
OAKLEY ID 83346

JANET HAYBALL
PO BOX 725
FORT HALL ID 83203

TWAIN HAYDEN
3747 MID CRYSTAL RD
ARBON ID 83212

HANS HAYDEN
3746 MID CRYSTAL RD
ARBON ID 83212

RUSSELL J HAYDEN
1654 HILLTOP RD
PO BOX 598
SODA SPRINGS ID 83276

JOHN AND SANDRA HERRMAN
2157 MICHAUD CREEK RD
POCATELLO ID 83204

WYNN JARVIS
2171 MICHAUD CREEK RD
POCATELLO ID 83204

BLAKE JOHNSON
4751 EVANS LN
ARBON ID 83212

KIMBERLY WHITTIER WILLIAMS TRUST
C/O GREG CUSTER
1600 HUNTINGTON DR
SOUTH PASADENA CA 91030

MICHAUD CREEK RANCHES INC
2470 MICHAUD CREEK RD
POCATELLO ID 83204

MID CRYSTAL FARMS
C/O HANS HAYDEN
3747 MID CRYSTAL RD
ARBON ID 83212

LAURENCE NELSON
2184 MICHAUD CREEK RD
POCATELLO ID 83204

GENE A AND LOIS ANNE STEWART
764 UPPER RATTLESNAKE RD
ARBON ID 83212

WARD & SONS CO INC AND WARD FARMS
5336 ARBON HWY
ARBON ID 83212

BARRY T AND VALORIE WILLIAMS
1277 MINK CREEK RD
ARBON ID 83212

# EXPLANATORY INFORMATION TO ACCOMPANY A PRELIMINARY ORDER

(To be used in connection with actions when a hearing was **not** held)

(Required by Rule of Procedure 730.02)

The accompanying order or approved document is a "**Preliminary Order**" issued by the department pursuant to section 67-5243, Idaho Code. **It can and will become a final order without further action of the Department of Water Resources ("department") unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below:**

## PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. **Note: the petition must be received by the department within this fourteen (14) day period.** The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

## EXCEPTIONS AND BRIEFS

Within fourteen (14) days after: (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

## REQUEST FOR HEARING

Unless a right to a hearing before the Department or the Water Resource Board is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the Department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

## ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

## CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01.01302 and 37.01.01303 (Rules of Procedure 302 and 303).

## FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

> Unless a different date is stated in a final order, the order is effective fourteen (14) days after its service date if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:
>
> (a) The petition for reconsideration is disposed of; or
> (b) The petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

## APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which:

i. A hearing was held,
ii. The final agency action was taken,
iii. The party seeking review of the order resides, or
iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

# STATE OF IDAHO
# DEPARTMENT OF WATER RESOURCES (IDWR)

## MINIMUM ACCEPTABLE STANDARDS FOR OPEN CHANNEL AND CLOSED CONDUIT MEASURING DEVICES

The source and means of diversion of water, whether surface or ground water, generally affects the selection of a measuring device. Surface water sources such as streams, springs and waste channels are normally diverted into open channels (ditches or canals), but closed conduits (pipes or culverts) are also used. Ground water is usually diverted into pipes (which may also discharge into open channels).

Measuring devices when required by IDWR are to be installed at or near the point of diversion from the public water source.

## I. MEASUREMENTS IN OPEN CHANNELS

The following discussion is applicable only to diversions from surface water sources. Measurement of a ground water diversion with an open channel measuring device must be pre-approved by the IDWR.

### A. Standard Open Channel Measuring Devices

All open channel surface water diversions should be measured using one of the following standard open channel flow measuring devices commonly used in Idaho:

- **Weirs:** contracted or suppressed rectangular weirs, Cipolletti weir, 90 degree V-notch weir
- **Flumes:** Parshall flume, trapezoidal flume, ramped flume (ramped, broad-crested weir)
- **Submerged Orfices:** submerged rectangular orifice, constant head orifice
- **Acoustic:** acoustic Doppler flow meter (ADFM), acoustic Doppler current profiler

The installed flow rate accuracy of open channel measurement devices must be +/- 10.0% as compared to an acceptable open channel current meter or other standard portable measuring devices such as an acoustic Doppler flow meter or acoustic Doppler current profiler.

Construction, installation and operation of these devices should follow published guidelines, such as those published by the United States Bureau of Reclamation[1]

### B. Non-standard open channel devices: Rated Structures or Rated Sections

Any weir, flume, or other measuring device that has not been constructed, installed, or maintained correctly and therefore does not measure flow in the standard manner consistent with standard rating tables or curves is considered to be a non-standard device. IDWR may authorize the use of non-standard devices and rated sections provided the device or section is rated or calibrated against a set of flow measurements using an acceptable open channel current meter or standard portable open channel measuring device. Examples of standard portable open channel measuring devices include the acoustic Doppler flow meter, the acoustic Doppler current profiler, or a portable flume. These devices are acceptable provided they are installed and operated according to all relevant manufacturer recommendations.

Further information and requirements are available from IDWR upon request.

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[1] The Bureau of Reclamation measurement guidelines can be found at;
http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/BoR_WMM_%202001revision.pdf

## II. CLOSED CONDUIT MEASURING DEVICES

The following discussion is applicable to measurement of diversions from any water source that diverts via a full-flowing, closed conduit.

### A. Standard Closed Conduit Measuring Devices

A certified meter is required on new installations of measuring devices for closed conduit or pipe line diversions. A certified meter is a model of flow meter that has participated in independent third party testing and has been approved by IDWR for use. IDWR has published a list of meters that have participated in independent third party testing[2] and have been certified for use where the installation configuration and application meet manufacturer's requirements. Tests were conducted for both accuracy and repeatability on all submitted models, and a pass/fail rating awarded. A list of these meters may be found at:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf.

Owners or operators who install a certified meter without the minimum manufacturer spacing requirements, or otherwise inconsistent with manufacturer's specifications, may need to provide an adequate testing section of straight pipe located somewhere on the diversion system either upstream or downstream of the installed flow meter. This testing section can be excavated pipeline as long as the section of pipe carries all water being measured through the installed flow meter. Water users choosing to expose pipe will be required to excavate the pipe at their expense at the request of the district hydrographer, watermaster and/or IDWR staff.

### B. Non-standard Closed Conduit Measuring Devices: Requests for Variance

In some cases, site conditions preclude use of a certified meter, and another meter or method of measurement will produce similarly accurate results. In cases where the user can show that a proposed alternative meter or method would be as accurate as, or otherwise is better suited to an application than any of the meters on the approved list, a user can propose using an alternative meter or method by submitting a Request for Variance Form, available from IDWR. If a request is submitted and granted, the water user bears the risk that the alternative meter or method will perform as expected.

The following alternate measurement methods may be considered:

- Development of a Power Consumption Coefficient (PCC), which is a ratio of power usage to water withdrawal. Acceptance of the PCC method may be provided *for qualifying irrigation diversions only*;
- Use of an hour meter (time clock) *for qualifying diversions only*;
- Use of an acceptable flow meter that was installed *prior to the date of the measurement order*;
- *For irrigation diversions only,* use of an acceptable non-certified flow meter where it can be shown that installation of a certified flow meter would be burdensome or ineffective.

If a meter is already installed, that meter may be used if the meter is field-tested by IDWR staff, the water district watermaster, or a district hydrographer using a portable standard flow meter and upon a determination that the meter is installed properly and accurate to within ±10% of actual rate of flow and volume. If a non-certified meter is approved and installed but does not pass a field check, IDWR may require the water user to replace the meter with a certified meter at the water user's expense.

If an alternative method is approved and that method is later found to be insufficient, the variance will be withdrawn and a certified meter will be required to be installed. The suitability of any pumping station for an hour meter or the PCC method of measurement will be based on criteria found in this document and in the document entitled *IDWR ESPA Water Measurement and Reporting Guidelines*[3].

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[2] Testing was conducted at the Utah Water Research Laboratory (UWRL), a National Institute of Standards and Technology (NIST) traceable lab in Logan, Utah.

[3] This document can be found at: http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/IDWRESPA_WaterMeasurement_ReportingGuidlines.pdf

Version 2.4

# Idaho Department of Water Resources
# List of Approved Closed Conduit Flow meters

The table below lists flow meters **that have been tested and approved by IDWR for use in closed conduit measurement applications where the installation configuration and application meet manufacturer's requirements for the selected model.** These approved flow meters were subject to testing requirements outlined by IDWR and conducted by staff from Utah State's NIST[1] traceable lab in Logan Utah and performed at or above IDWR minimum acceptable standards for accuracy when installed in piping distances that met or exceeded minimum straight run piping requirements specified by IDWR. The approved list is current as of this printing, but may change as additional models and manufacturers undergo testing and approval. The current version of these standards, including this list, is posted on the IDWR Internet site at the following URL:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/PDFs/Approved_flow_meter_list.pdf

Note that not all models are appropriate for every application. Pipe size, available straight pipe lengths, water chemistry, pressure, velocity, environmental exposure, and power requirements are among the factors affecting whether a given meter will perform for a given application. Prior to selecting a meter, consult the manufacturer's installation requirements to assure they can be met.

| Manufacturer | Model/Specifications | Type | IDWR-accepted Pipe Applications (Nominal Pipe Size) |
|---|---|---|---|
| Siemens | CLAMP-ON ULTRASONIC -SITRANS FUS 1010 w/ HIGH PRECISION TRANSDUCERS | Clamp-On Ultrasonic | >12" |
| Siemens | SITRANS F M MAGFLO MAG 5100W w/ 5000 converter | Full profile Electro-Magnetic | 1" to 78" |
| Siemens | SITRANS FM, MAGFLO 8000, model 7ME6880 | Full profile Electro-Magnetic | 1" to 48" |
| Fuji | Time Delta C w/ 1MHz transducers | Clamp-On Ultrasonic | >12" |
| Seametrics | AG 2000 | Full profile Electro-Magnetic | 4" to 10" |
| GE Panametrics | AT868 w/ 1MHz transducers | Clamp-On Ultrasonic or Wetted Transducer | >12" |
| McCrometer | Ultra Mag w/ M-Series Converter | Full profile Electro-Magnetic | 2" to 48" |

[1] NIST - National Institute of Standards and Technology.

| Manufacturer | Model/Specifications | Type | IDWR-accepted Pipe Applications (Nominal Pipe Size) |
|---|---|---|---|
| Badger | M2000 Amplifier w/ M2000 Detector | Full profile Electro-Magnetic | 1/4" to 54" |
| Khrone | Enviromag 2000 w/ Optiflux 2000 F/G | Full profile Electro-Magnetic | 3/8" to 80" |
| Rosemount | 8705 w/ 8732E transmitter | Full profile Electro-Magnetic | 1/2" to 36" |
| Burkert | 8054/8055 w/ Magflow transmitter | Full profile Electro-Magnetic | 1" to 80" |
| Sparling | Tiger Mag W/FM6561051110 Converter | Full profile Electro-Magnetic | 3/8" to 48" |
| Sensus | IPerl | Full profile Electro-Magnetic | 5/8"-1" |
| Master Meter | Octave | Full Profile Ultrasonic | 2"-10" |
| Badger | E-Series | Full Profile Ultrasonic | 3/4"-2" |

IDWR

MEASUREMENT PLAN SUBMITTAL FORM FOR IRRIGATION WELLS

*Please fill out a form for each well*

Well Name: _____

IDWR site tag: _____

Legal description: _____

Owner/Operator: _____

Water District: _____

Check one of the following measurement options for this well:

*Please note: this plan must be approved before you may install a flow meter or use any alternate measurement method.*

A. I plan to install a magnetic flow meter on my well pursuant to IDWR's Order and criteria: _____

Manufacturer and Model of flow meter you have selected _____

I have not selected a meter _____

*Please complete section #10, then sign and submit this form to the address provided.*

B. I am requesting a variance of the magnetic meter requirement: _____

Please indicate the method of measurement you wish to use and have approved:

____ Existing operating flow meter

____ Non-magnetic flow meter

____ Hour Meter / Time Clock

____ Power Consumption Coefficient (PCC)

If you are requesting a variance, you must answer the following questions:

1. Please describe the irrigation equipment used with this well (*example: center pivot with hand lines, ¼ mile wheel lines, solid set hand lines, etc).* _____

_____

Do your pivot systems operate with corner machines? ____yes ____no ____N/A

Approximate number of acres irrigated by this well: _____ acres

2. Does the well open discharge into a pond or ditch? ____yes ____no

3. Is there a flow meter presently installed on your well? ____yes ____no

Type: _____

Manufacture: _____

Installation date: _____

Is the meter operable? _____

4. Are there multiple pumps wired to the same electrical demand meter? ____yes _____no

If yes, how many pumps are surface water boosters that would increase the power use when the deep well is not in operation? _____

How many are in-line pressure boosters? _____

*over*

Do in-line boosters always run with the well? _____yes _____no

5. Pressure Changes:

   Do you throttle the main well pump? ____yes _____no

   Do you throttle the in-line booster pumps? _____yes _____no

   Additional explanation/information regarding pump throttling or pressure changes: _____

   _____

6. Does the system operate with a variable frequency drive? _____yes _____no

   On Well motor: _____

   On Booster motor: _____

   On Both: _____

7. Is the well interconnected to other wells? _____yes _____no

   Does the well supply water for use other than irrigation? *(Example: stock water, commercial)*

   _____yes _____no If yes, please list: _____

   _____

8. Do your cropping patterns differ under pivot systems within the same year *(example: one pivot in potatoes, one pivot in wheat and both systems irrigated by the same well)?*

   ____yes ____no If yes, please describe: _____

   _____

9. Does the well production decrease over the irrigation season? ____yes ____no

   Does pumping water level decrease over the irrigation season? _____yes _____no

   If yes, approximately how much does the level decrease (in feet)? _____

If you answered YES to any of the questions #4 through #9, your system is not likely a candidate for the Power Consumption Coefficient (PCC) method of measurement. You will be required to install a flow meter.

If the system is an OPEN DISCHARGE system (answer to #2 is YES) and well production does not decrease during the irrigation season (answer to #9 is NO), then the system may use an hour meter for measurement.

10. ***Required for all systems.*** Please attach a diagram or photo of the wellhead and pumping plant. Include or show locations of all proposed or existing flow meters, and the locations of boosters, valves, elbows, chemigation ports, etc., and the spacing between each.

    What is the pump discharge line size? _____

PLEASE PROVIDE YOUR SIGNATURE AND A CONTACT PHONE NUMBER, AND RETURN ALL FORMS TO:

IDWR
322 E FRONT ST
PO BOX 83720
BOISE ID 83720

_____

*Name/Title* *Phone #* *Date*