September 28, 2018

RE: Order Requiring Controlling Works and Measuring Devices on Surface and Ground Water Diversions in Administrative Basin 74

Dear Water User,

The Idaho Department of Water Resources (“Department”) has issued the enclosed Final Order (“Order”) requiring installation of controlling works and measuring devices on certain surface and ground water diversions in Administrative Basin 74. The Order requires non-irrigation diversions be controlled and measured by January 1, 2019, and irrigation diversions by the start of the 2019 irrigation season.

The Order waives the measurement requirement for diversions authorized to irrigate less than or equal to five (5) acres and non-irrigation uses authorized to divert less than or equal to 0.24 cubic feet per second. Shared diversions with multiple water rights are subject to the requirements of the Order if the sum of the acres authorized by water rights exceeds five (5), or the sum of diversion rates authorized for non-irrigation water rights exceeds 0.24 cubic feet per second.

Pursuant to Idaho Code § 42-1701A(3), any person aggrieved by the Order may, within fifteen (15) days after receipt of written notice of the Order or receipt of actual notice, file with the Director of the Department a written petition stating the grounds for contesting the Order and requesting a hearing.

Enclosed is the Department’s Minimum Acceptable Standards and Requirements for Open Channel and Closed Conduit Measuring Devices. This document and related information about acceptable measuring devices is available on the Department’s web site at the following address: https://idwr.idaho.gov/water-data/water-measurement/

If you have questions concerning this Order, please contact the Department’s State Office (208-287-4800) or the WD170 watermaster, Cindy Yenter (208-742-0655).

Respectfully,

Tim Luke
Chief, Water Compliance Bureau

Enclosures:  Order Dated September 28, 2018 (6 pages)
Minimum Acceptable Standards and Requirements for Open Channel and Closed Conduit Measuring Devices (2 pages)
BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF REQUIRING CONTROLLING )
WORKS AND MEASURING DEVICES ON )
SURFACE AND GROUND WATER DIVERSIONS )
IN ADMINISTRATIVE BASIN 74 )

FINAL ORDER

BACKGROUND

On April 6, 2006, the Director (“Director”) of the Idaho Department of Water Resources (“Department”) issued a final order creating Water District No. 170 (“WD170”) to include specific surface water and ground water rights in Administrative Basins 71 and 72.\(^1\) The Director stated he would “issue separate orders, as necessary, requiring the installation of measuring devices and lockable controlling works for diversions within Water District No. 170.” On February 20, 2007, the Department issued an order requiring installation of measuring devices and controlling works for diversions of surface water and ground water in Administrative Basins 71 and 72.\(^2\)

On December 10, 2012, the Department issued an order expanding WD170 to include specific surface water and ground water rights in Administrative Basin 73.\(^3\) On March 3, 2014, the Department issued an order requiring installation of measuring devices for diversions of ground water rights within Water District No. 73.\(^4\)

On April 10, 2018, the Department issued an order expanding WD170 to include specific surface water and ground water rights in Administrative Basin 74 (“Basin 74”).\(^5\) This order designated existing water districts within Basin 74 as sub-districts of WD170, modified sub-districts to include ground water diversions, and combined certain sub-districts within Basin 74. The April 10, 2018, order excluded domestic and stockwater rights as defined by Idaho Code §§ 42-111 and 42-1401A(11), and rights for in-stream watering of livestock as defined by Idaho Code § 42-113.

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\(^1\) Amended Final Order in the Matter of Creating the Upper Salmon River Basin Water District for Administration of Rights to the use of Surface Water and Ground Water in Administrative Basins 71 and 72 (Apr. 6, 2006).

\(^2\) See Preliminary Order in the Matter of Requiring Measuring Devices and Controlling Works on Diversions from the Salmon River and Tributaries in Water District No. 170 (Feb. 20, 2007).

\(^3\) Preliminary Order in the Matter of the Proposed Revision of Water District Nos. 73 and 170 by Including Administrative Basin 73 Ground Water Rights in in Water District No. 73 and Designating Water District No. 73 as a Sub-District of Water District No. 170 (Dec. 10, 2012).

\(^4\) See Final Order in the Matter of Requiring Measuring Devices on Ground Water Diversions in Water District No. 73, the Pahsimeroi River and Tributaries (Mar. 3, 2014). The Department had previously issued an order requiring installation of measuring devices and headgates for all diversions of water from the Pahsimeroi River and tributaries. See Order in the Matter of Requiring Measuring Devices and Controlling Works on the Pahsimeroi River and Tributaries, Water District 73 (Nov. 18, 2002).

\(^5\) Preliminary Order in the Matter of the Proposed Expansion of Water District 170, the Proposed Modification of all Water Districts within Administrative Basin 74 to Include Ground Water Diversions and the Proposed Combination of Water Districts 74, 74K, 74U and 74Y (Apr. 10, 2018).

Final Order – Page 1
LEGAL PROVISIONS

Section 42-701, Idaho Code, states, 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 DIVERGENS – 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. . . .

(2) [T]he 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, or has not executed an agreement in lieu of a measuring device as provided in subsection (2) of this section, 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.
CONCLUSIONS OF LAW

1. Idaho Code § 42-701(1) authorizes the Director to require installation and maintenance of suitable, lockable headgates and controlling works, and measuring devices at the point where the water is diverted.


3. The control and measurement of diversions in Basin 74 is necessary for the Director to comply with his “clear legal duty to distribute water” according to decreed water rights. Adequate control and measurement of diversions ensures:
   a. The regulation of diversions within the water district or sub-district is consistent with the legal requirements of the prior appropriation doctrine, thereby protecting senior priority rights during times of water scarcity;
   b. The diversion of water associated with a decreed water right does not exceed the legal limits of the decree; and
   c. The assessments of individual water users within the water district are calculated based on the amount of water delivered, consistent with Idaho Code §§ 42-612(3) and 42-615.

4. The Director should require the installation of suitable, lockable headgates and controlling works and measuring devices within Basin 74.

ORDER

IT IS HEREBY ORDERED AS FOLLOWS:

1. This order applies to all surface and ground water rights within Basin 74, except domestic and stockwater rights or uses defined by Idaho Code §§ 42-111 and 42-1401A(11), and rights or uses for in-stream watering of livestock as defined by Idaho Code § 42-113.

2. The owners of all affected surface and ground water rights within Basin 74 shall install and maintain on each point of diversion lockable headgates and controlling works.

3. The owners of all affected surface and ground water rights within Basin 74, except those water rights, uses and diversions identified in item 4 below, shall install and maintain on each point of diversion a measuring device of a type acceptable to the Department. Owners of non-irrigation rights shall comply with this order by January 1, 2019, and owners of irrigation rights shall comply with this order by the start of the 2019 irrigation season.
4. The installation of measuring devices required by this order is waived until further notification by the Department for the following water uses and diversions:

   a. Surface or ground water diversions authorized to irrigate less than or equal to five acres\(^6\); and

   b. Surface or ground water diversions for any purpose other than irrigation authorized to divert less than or equal to 0.24 cfs (approximately 108 gallons per minute).\(^7\)

5. Measuring devices acceptable to the Department are devices identified in the Department’s *Minimum Acceptable Standards and Requirements for Open Channel and Closed Conduit Measuring Devices* (“Minimum Acceptable Standards,” enclosed).

6. Controlling works and measuring devices must be properly maintained, repaired or replaced if determined inaccurate or inoperable by the Department, the WD170 watermaster or the presiding sub-district watermaster.

7. The Department will consider a request for variance from the requirement to install measuring devices listed in the Minimum Acceptable Standards upon submittal of a written request to the watermaster of WD170. Acceptable variances are limited to the following methods or devices:

   a. Use of an hour meter (time clock) for open discharge wells with electric pumps that operate at a constant rate of flow; or

   b. Use of an acceptable closed conduit flow meter installed prior to the date of this order; or

   c. Use of power consumption coefficient for irrigation wells with a single operating condition and an electric pump connected to a dedicated demand meter; or

   d. Rated sections or non-standard devices in open channels with approved measurement plans satisfying the requirements of the Minimum Acceptable Standards.

8. All requests for variance must be received by the WD170 watermaster by **December 1, 2018**. The watermaster and the Department will consider requests on a case-by-case basis. Variance requests proposing use of an existing flow meter will be denied unless the existing meter is tested and satisfies the Department’s established standards for accuracy and the manufacturer installation specifications. Existing meters that do not satisfy the established standard for accuracy and the manufacturer specifications must be replaced with a meter from the Department’s *List of Approved Closed Conduit Flow Meters* (most

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\(^6\) A common point of diversion used for multiple irrigation rights where each individual right is five acres or less must be measured if the sum of the irrigated acres pursuant to the authorized rights exceeds five acres.

\(^7\) A common point of diversion serving multiple non-irrigation uses must be measured if the total diversion rate pursuant to the authorized right(s) is greater than 0.24 cfs.
current version), which is available at https://idwr.idaho.gov/files/water-measurement/approved-flow-meter-list.pdf.

9. If a user cannot comply with the deadlines in item 3 of this order, the Department may grant an extension. An extension request for each diversion must be submitted to the WD170 watermaster by December 1, 2018. Extension requests will be considered on a case-by-case basis. Conditions that may result in the Department granting an extension include, but are not limited to, the following:
   a. The diversion is unused; or
   b. Unique site specific condition(s) prevent accurate water measurement; or
   c. Delays caused by requirements of other government entities.

10. This order shall become effective immediately for any new diversion(s) authorized after the date of this order, except water right diversions described in item 4 of this order.

11. If a water user fails to comply with the requirements of this order, the Director may issue an order instructing the WD170 watermaster and presiding Basin 74 sub-district watermaster to shut off and refuse delivery of water at any non-compliant diversion.

12. Pursuant to Idaho Code § 42-1701A(3), any person aggrieved by this order may, within fifteen (15) days after receipt of written notice of the order or receipt of actual notice, file with the Director a written petition stating the grounds for contesting the order and requesting a hearing.

Dated this 28th day of September 2018.

[Signature]

GARY SPACKMAN
DIRECTOR
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 28th day of September 2018, 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. 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: Final Order in the Matter of Requiring Controlling Works and Measuring Devices on Surface and Ground Water Diversions in Administrative Basin 74

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BRET BAIRD  
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CHARTRAND FAMILY TRUST  
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JANIS S AND KERRIE N CHENEY  
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SALMON ID 83467  

DEBORAH K AND RANDALL F CHENEY  
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SALMON ID 83467  

MARGARET L AND RAYMOND F CHENEY  
36 CHENEY LN  
SALMON ID 83467  

ALBERT CHORN  
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CITY OF LEADORE  
PO BOX 157  
LEADORE ID 83464-0157  

CITY OF SALMON  
200 MAIN ST  
SALMON ID 83467
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<td>ERICA H AND TIMOTHY H CRAIG</td>
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<td>PO BOX 46</td>
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<td>KESTER L AND MONA J COCKRELL AND LAMAR COCKRELL &amp; SONS LLC</td>
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<td>WILLARD COLSTON</td>
<td>61 THOMAS ST</td>
<td>Portland</td>
<td>ME</td>
<td>04102</td>
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<tr>
<td>CORP OF THE PRESIDING BISHOP</td>
<td>CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS REAL ESTATE SERVICES DIV</td>
<td>50 E NORTH TEMPLE ST</td>
<td>Salt Lake City</td>
<td>UT</td>
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<td>1603 MICK J</td>
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<td>EAGLE VALLEY RANCH LLC</td>
<td>446 BOHANNON CREEK RD</td>
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<td>JEROME L AND MARIAN L EASTMAN</td>
<td>PO BOX 57</td>
<td>TENDOY ID 83468</td>
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<td>JEFFREY ARTHUR AND SUZANNE MARIE EDER</td>
<td>163 HWY 28</td>
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<td>CLARA E AND DUANE R ELLIS</td>
<td>PO BOX 146</td>
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<td>ELLSWORTH ANGUS RANCH</td>
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<td>MARVIN AND MICHELLE ENGLAND</td>
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<tr>
<td>ESTATE OF LEWIS BIRCH</td>
<td>PO BOX 1345</td>
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SHANNA L FOSTER
PO BOX 212
LEADORE ID 83464

BOYD D AND RICHARD E FOSTER
PO BOX 55
LEADORE ID 83464

CLAUDIA W AND ROBERT B FRAHME
PO BOX 27
LEMHI ID 83465

E DAN AND T EILEEN FRENCH
218 HWY 28
SALMON ID 83467

JO ANN FUREY AND SHERMAN F FUREY JR
116 N CENTER ST
SALMON ID 83467

JILL AND LARRY GARDNER
PO BOX 52
TENDOY ID 83468

BEN AND DELILA T GARECHANA
103 CEMETARY LN
SALMON ID 83467

GEORGE AND PHYLLIS GARRISON
PO BOX 5
TENDOY ID 83468-0005

JOHN T AND KATHLEEN M GATENS
36 CHERRY DR
SALMON ID 83467-5062

DARLENE AND JAMES L GAUTHIER
PO BOX 8
TENDOY ID 83468

MARLENE GEORDGE
PO BOX 62
SALMON ID 83467

RICK D AND MICHELLE GERBO
PO BOX 1905
TRUCKEE CA 96160

EDWIN R AND MARLENE J GIBSON
1015 LEMHI RD
SALMON ID 83467

PHYLLIS H GILES
1704 MAIN ST
SALMON ID 83467

DAVID D GILES
240 W SUNFLOWER DR
ST GEORGE UT 84790

DEBORAH L AND KENNETH L GINN
20561 DEERHAVEN DR
TUOLUMNE CA 95379

JOHN GITTLESON
205 BEACH ST
SALMON ID 83467

ROBERT P GLENNEY
PO BOX 434
SALMON ID 83467

MARGARET AND MICHAEL J GLODOWSKI
430 CONFEDERATE DR
SALMON ID 83467

PHILIP R GOODELL II
400 HWY 28
SALMON ID 83467
CHARLES A AND ROBERTA I GOODMAN
61 THREE MILE LN
SALMON ID 83467

CLYDE L AND LEOLA BELLE GOODWIN
204 LEMHI RD
SALMON ID 83467

CINDY AND GLENN GOULET
274 SANDY CREEK RD
SALMON ID 83467

Sande K Grebe
179 LEMHI RD
SALMON ID 83467

Guardian Ltd Partnership No 2
1740 S Yellowstone Hwy
Idaho Falls ID 83403

Bill And Paula Guth
25 Country Living Ln
Salmon ID 83467

Timothy M Haak
1301 K NW
Ste 900 East Tower
Washington DC 20005

Timothy M HaaKe
1301 K St NW Ste 1100 E
Washington DC 20005

Darlene Haas
PO Box 55
Tendoy ID 83468

Jerel G Hagen
PO Box 32
Tendoy ID 83467

Jeffrey James Haire
319 Palos Verdes Blvd Unit 411
Redondo Beach CA 90277

Clayne A And Julie Hanson
PO Box 98
Lewisville ID 83431

Minnie L Harris
1904 E Main
Salmon ID 83467

Vaughn Hartman
PO Box 4
Leadore ID 83464

Judy B And Lenard A Hatch
144 Highway 28
Salmon ID 83467

Bessie M And Raymond Hathhorn
17 River Vista Ln
Salmon ID 83467

Carol J And Grant M Havemann
3 Boots Rd
Salmon ID 83467

Teresa A Hawley
877 Hwy 28
Salmon ID 83467

James E Hawley
PO Box 1055
Salmon ID 83467

Hayden Creek Cattle & Horse Growers
C/O Karl W Snyder
PO Box 49
Lemhi ID 83465
JOHN M HAYES
2843 TONGASS
KETCHIKAN AK 99901

HAYNES CREEK CATTLE & HORSE ASSN
C/O ED SNOOK
1205 HWY 28
SALMON ID 83467

LINDA B AND TERRENCE C HEATON
102 HWY 28
SALMON ID 83467

CARL C AND LINDA HECKENDORF
2345 N SHIELDS ST
FORT COLLINS CO 80524

PAUL O HEDT JR AND JULANA HEDT
1024 TRIUMPH DR
MIDDLETON ID 83644

BEVERLY KIRKHAM HEINZ
5529 COTTONWOOD CLUB DR
SALT LAKE CITY UT 84117

KELSEY HELFRICH AND KIDD YOUREN
35 BOOTS RD
SALMON ID 83467

JANE AND ROGER HENRY
5665 S 5TH W
IDAHO FALLS ID 83404

MATTHEW J AND NICOLE CHERIE HERBEK
1307 BRYAN
SALMON ID 83467

LYNN, LYNN A, ROBIN AND ROBIN R HERBST
26 PINE CREEK RANCH RD
SALMON ID 83467

JANNA LYNN AND STEVEN R HERBST AND NELSON FAMILY
CO LTD
74 LEMHI RD
SALMON ID 83467

AUBREE B AND EMIL L HERBST
PO BOX 44
TENDOY ID 83468-0044

HERMITS OF MOUNT CARMEL IDAHO INC
PO BOX 37
LEMHI ID 83465

IRVIN B HEROD
1551 SONOMA AVE
SEASIDE CA 93955

CHARLES L AND PATRICIA HIATT
3655 SUNNYSIDE RD
AMMON ID 83406

WHITNEY R HICKEY
16 STRAWBERRY LN
SALMON ID 83467

JOHN E AND REBECCA J HILGENDORF
PO BOX 1517
SALMON ID 83467-1517

JOHN AND MELANIE HOECK
PO BOX 94
TENDOY ID 83468

ALPHONSE L AND CLARICE C HOKANSON
PO BOX 596
SALMON ID 83467

DARLENE S AND DEE R HOLLAND
PO BOX 23
TENDOY ID 83468
JOSHUA HOLLOWAY AND MORGAN KING  
2046 BETH ST  
POCATELLO ID 83201

CHARLENE HOLSCHER-TOMCHAK  
580 CRIMSON DR  
IDAHO FALLS ID 83401

SUSAN AND WILLIAM HUDSON  
4105 N SHATTO LN  
BOISE ID 83703

DAVE AND MARCY HULL  
19 SUNNY LN  
SALMON ID 83467

JOEL REA AND MARLA HUNTEMAN  
10 KARLA DR  
PO BOX 576  
SALMON ID 83467

MARK A HURLEY  
5470 N COLLISTER DR  
BOISE ID 83703-3810

MARK A HURLEY  
PO BOX 70  
TENDOY ID 83468-0070

HUSTON FARM & RANCH REPAIR LLC  
PO BOX 1076  
SALMON ID 83467-1076

DEBRA A AND JOHN N INFANGER  
1241 MAIN ST  
GOODING ID 83330

RAY E AND VERA S INFANGER  
9 MOUNTAIN LEGEND LN  
SALMON ID 83467-5165

DARCY M AND PHILIP JACKSON  
268 HWY 28  
SALMON ID 83467

DEAN ROBERT AND PEGGY J JACKSON  
50 SUMMER MEADOW LANE  
SALMON ID 83467

ANTHONY AND STACEY S JAMES  
1438 HWY 28  
SALMON ID 83467

JEFFREY J BOCKMON & KELLY A BOCKMON REVOCABLE FAMILY TRUST  
18501 E COMSTOCK RD  
LINDEN CA 95236

BERT W AND RIKKA J JEFFRIES  
299 GEERTSON CREEK RD  
SALMON ID 83467

LEANN JENSEN  
1420 CASH AVE  
PAHRUMP NV 89048

BRADLEY N JENSEN  
365 S 1300 W  
PINGREE ID 83262

RINALDO E JENSON  
1712 LEMHI RD  
SALMON ID 83467

GARY R AND JOAN JENSON  
55 THREE MILE LN  
SALMON ID 83467-5251

GARY R AND JOAN JENSON AND HOLLY A AND RICHARD M NATELSON  
55 THREE MILE LN  
SALMON ID 83467
THOMAS LEIPHART
17 S HAWK RD
SALMON ID 83467

LEMHI HYDROPOWER CO
1032 GRANDVIEW DR
IVINS UT 84738

LEMHI RIVER ESTATES
C/O WINFRED DUDLEY
PO BOX 1
TENDOY ID 83468

LEMHI RIVER ESTATES SUBDIVISION
PO BOX 37
TENDOY ID 83468

CATHY AND ROBERT LETH
939 HWY 93 S
SALMON ID 83467

DAVID, JAN, JEFFREY AND LAYNE PARMENTER AND
MICHELLE LIDDIAIRD
139 CEMETERY LN
SALMON ID 83467

BRENDA AND DENNIS LILE
PO BOX 793
SALMON ID 83467

DEBBIE LYNN AND WILLIAM FLOYD LINGER
PO BOX 51
TENDOY ID 83468

LINGER DISTRIBUTING INC
175 HWY 28
SALMON ID 83467-5336

NANCY C LISCHNER
33 LEMHI RD
SALMON ID 83467

JERRY D SMITH AND MARIANNE LITTLE
PO BOX 40
TENDOY ID 83468

CONNIE L AND SHAWN P LIVINGSTON
15 LEMHI BACK RD
SALMON ID 83467

JAMES W LOCKES
C/O BONNIE LOCKES
3770 LEMHI RD
LEADORE ID 83464

BONNIE E LOCKES
3770 LEMHI RD
LEADORE ID 83464

NICOLE J AND R TERRY LOFT
167 WIMPEY CREEK RD
SALMON ID 83467

RALPH G LOGAN
C/O KATHLEEN A JORDAN
7187 HAPPY VALLEY RD
KUNA ID 83634

MILDRED I LOGAN
48 RED ROCK STAGE RD
SALMON ID 83467

DANIEL AND DARCY LOHMILLER
637 COULEE DR
BOZEMAN MT 59718

HARRY AND RAYLENE LOMONACO
10 BAIRD LN
SALMON ID 83467-5023

LONG CREEK MINING COMPANY
PO BOX 600
CHALLIS ID 83226-0600
PATRICK D MC CONNAGHY
373 SANDY CR LN
SALMON ID 83467

BRUCE AND GLEMDA MC CONNELL
100 COTTOM LN
LEADORE ID 83464

GINA C MC FARLAND
319 N ST CHARLES
SALMON ID 83467

MC FARLAND LIVESTOCK CO INC
PO BOX 50
LEMHI ID 83465-0050

F PAULINE MC GEE
PO BOX 223
SALMON ID 83467

WHIT AND JUNE M MC KINNEY
PO BOX 39
LEMHI ID 83465-0039

BARBARA AND SAM P MC KINNEY
PO BOX 52
LEMHI ID 83465

TERRY A MC NELLIS
PO BOX 4
LEMHI ID 83465

JESSICA K AND TERRY A MC NELLIS
PO BOX 834
RANCHO SANTA FE CA 92067

MARJORIE E MC REA
PO BOX 121
LEADORE ID 83464

VICTORIA MELTON
10 BANTA DR
SALMON ID 83467

STEFANI MELVIN
35 N BAKER RD
SALMON ID 83467

GARRY D MERRITT
PO BOX 1516
SALMON ID 83467

JERRY R MEYERS
254 FOURTH OF JULY CREEK RD
NORTH FORK ID 83466

M MAE MILLER
C/O LINDA MATTHEWS & JEANNE VARILONE
210 N LEMHI RD
SALMON ID 83467-4527

JOHN W AND RUBY MILLER
176 RED ROCK STAGE RD
SALMON ID 83467-5201

DONALD E MILLER
228 MEADOW LARK LN
HAMILTON MT 59840-9147

BEVERLY SCHUPP AND MARCUS R MILLER
PO BOX 1218
HAINES AK 99827

PATRICIA M AND RYAN MILLER
PO BOX 44
SALMON ID 83467

DELOY AND NELDA MILLER
RT 1 BOX 19
SALMON ID 83467
VINN AND DEBORAH LEE STRUPP  
324 LEE CR RD  
LEADORE ID 83464

JUDY K AND WILLIAM STUDEBAKER  
2616 E 4000 N  
TWIN FALLS ID 83301

DENNIS AND LEAH STUDEBAKER  
PO BOX 2618  
KENAI AK 99611

LARRY A AND MARGARET SCOTT SVALBERG  
PO BOX 1181  
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RODGER C SWANSON  
71 PRICE CREEK RD  
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ERIC, JIM AND REAH TARKALSON  
705 LEMHI RD  
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PHILIP EDWARD AND SHERRY TAYLOR  
27 N BAKER RD  
SALMON ID 83467

B ALLEN AND WHITNEY E TELLER  
PO BOX 79  
TENDOY ID 83460

TERRY & JESSICA MC NELLIS FAMILY TRUST  
PO BOX 834  
RANCHO SANTA FE CA 92029

THE BANK OF COMMERCE  
FBO CLAYNE A HANSON IRA  
3543 E 630 N  
MENAN ID 83434

THE JEANA MARIE DONALDSON-THOMAS TRUST  
1620 CUSTER AVE  
ODESSA TX 79761

KAMI THIMONS  
14 STRAWBERRY LN  
SALMON ID 83467

DORENE THOMAS  
5697 S FAR VISTA DRIVE  
SALT LAKE CITY UT 84118

C LYNN AND HEATHER THOMAS  
PO BOX 215  
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KIM GEORGE THOMAS  
PO BOX 375  
SALMON ID 83467

KARLA AND LARRY THOMPSON  
15141 OSPREY PL  
CALDWELL ID 83607

JOANNE S TINGLE  
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SALMON ID 83467

RONALD D TOBIAS  
PO BOX 13  
LEMHI ID 83465-0013

DAVID R TOMCHAK  
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IDAHO FALLS ID 83401

CHRISTOPHER L AND DANIEL LEE TONSMEIRE  
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EASTPOINT FL 32328
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<td>Steve WATTS</td>
<td>454 10TH ST</td>
<td>IDAHO FALLS ID 83404</td>
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<td>CHRISTINE AND JAMES WEBB</td>
<td>PO BOX 706</td>
<td>SPRINGVILLE CA 93265</td>
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<td>Jessica S AND KEVIN L WEIKERT</td>
<td>401 POWELL WAY</td>
<td>CORVALLIS MT 59828-9372</td>
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<td>JAC WEINHEIMER</td>
<td>55 VALLEY LN</td>
<td>BUFFALO WY 82834</td>
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<tr>
<td>RULON G WELLEARD</td>
<td>15 THREE MILE LN</td>
<td>SALMON ID 83467</td>
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<tr>
<td>C Richard, Charles, Jo E AND TERRI WENGER</td>
<td>189 LEMHI RD</td>
<td>SALMON ID 83467</td>
</tr>
</tbody>
</table>
COURTESY COPY SENT TO:

JERRY ELZINGA
WATER DISTRICT 74C
700 MONROE
SALMON ID 83467

BEN ARMSTRONG
WATER DISTRICT 74J
PO BOX 486
SALMON ID 83467-0486

DEREK PAPATHEODORE
WATER DISTRICT 74W
PO BOX 82
LEADORE, ID 83464-0082

PAUL MAUGHAN
WATER DISTRICT 74Z
PO BOX 64
LEADORE ID 83464-0064
The water source, diversion structure and conveyance system must be adequately evaluated prior to selection of a measuring device. Surface water sources such as streams, springs and drains are commonly diverted into open channels, ditches or canals. Closed conduits such as pipes or culverts are also used to convey surface water. Ground water is more commonly diverted into pipes (closed conduits) which convey water from the well to system discharge points such as irrigation sprinkler systems. Ground water may also discharge from a well through a short section of pipe to open channels, ditches or ponds. When required by IDWR, measuring devices must be installed at or very near the point of diversion to ensure the watermaster can accurately determine the amount of water diverted from the public water source. The standards below are intended to qualify measuring devices that are “acceptable to the Department”, and to assist water users and watermasters in the proper selection and installation of such devices when required pursuant to Section 42-701, Idaho Code.

I. MEASUREMENT IN OPEN CHANNELS
The following requirements are applicable to diversions from surface water sources. Measurement of a ground water diversion with an open channel measuring device must be specifically approved by IDWR.

A. Industry Standard Open Channel Measuring Devices
All open channel surface water diversions must be measured using one of the following industry standard (standard) open channel flow measuring devices:

- **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 Orifices**: submerged rectangular orifice, constant head orifice
- **Current Meter/Acoustic Profiler**: acoustic Doppler flow meter (ADFM), acoustic Doppler current profiler

Construction, installation and operation of these devices must be consistent with water measurement guidelines, published by the United States Bureau of Reclamation\(^1\) or the United Stated Geological Survey\(^2\). Measuring devices, associated rating tables and specifications contained in these publications are considered by IDWR to be industry standard.

B. Non-Standard Open Channel Devices Including Rated Structures or Rated Sections
Any weir, flume or other measuring device that has not been constructed, installed or maintained to measure flow consistent with industry standard rating tables or curves shall be considered non-standard. IDWR may authorize the use of non-standard devices or rated channel sections on a case by case basis, upon the submittal and approval of a measurement plan. A measurement plan must contain an acceptable proposal, using industry standard procedures for developing a rating curve, or document that a rating curve has been fully developed for the device or section. Proposed rating plans must include provisions for periodic re-measurement and maintenance of the rating. The established rating must achieve the desired accuracy standard of plus or minus ten percent (±10%), the equivalent accuracy of a standard open channel device. All rating measurements must be conducted by a qualified individual (eg. engineer, hydrologist, certified examiner), using a standard portable open channel measuring device. If a measurement plan is not approved by IDWR, a standard device must be installed and maintained.

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\(^2\) The USGS guidelines can be found at: [https://pubs.er.usgs.gov/](https://pubs.er.usgs.gov/)
II. CLOSED CONDUIT MEASURING DEVICES

The following requirements are applicable to measurement of diversions from any water source that conveys water through a full pipe or conduit. Full pipe means that water within the pipe is under at least some positive pressure and contains insignificant amounts of air or gas.

A. Standard Closed Conduit Measuring Devices

Standard closed conduit measuring devices are flow meters that have been approved for use by IDWR based on independent third party testing. IDWR has developed and published a list of meters that have been tested and approved for use\(^3\). Tests were conducted for both accuracy and repeatability on all submitted models. The lab tested accuracy standard for flow rate is plus or minus two percent (±2%). The *IDWR List of Approved Closed Conduit Flow Meters* (approved list) may be found at: https://idwr.idaho.gov/files/water-measurement/approved-flow-meter-list.pdf

Approved full profile magnetic flow meters and spooled ultrasonic flow meters must be installed with a minimum straight pipe length equivalent of three (3) pipe diameters upstream and two (2) pipe diameters downstream measured from the center of the meter spool. Approved clamp-on and wetted ultrasonic flow meter transducers must be located with a minimum straight pipe equivalent of ten (10) pipe diameters upstream and five (5) pipe diameters downstream of the nearest transducer. All other manufacturer installation specifications (excepting up and down spacing) must be met. *Installation of an approved meter inconsistent with the requirements noted above, may be cause for IDWR to require reinstallation of the meter.*

B. Requests for Variance to Use Power Consumption, Hour Meter or Existing Meter

Requests for variance will be considered for qualifying diversions on a case by case basis only upon submittal of the appropriate “Request for Variance” form. If a water user can demonstrate that an existing flow meter or other method of measurement meets an equal standard of accuracy when compared to meters on the approved list, a variance may be granted. If a variance request is not granted, an approved meter will be required.

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,
- Use of an hour meter (time clock), or
- Use of a flow meter that was *installed prior* to the date a measurement order was issued and *is not* on the IDWR approved list.

Any alternate measurement method will require field testing using a portable ultrasonic flow meter or other meter tested and accepted by IDWR (testing meter). Field testing may be performed by any of the following:

- IDWR staff,
- a water district watermaster,
- a ground water district hydrographer,
- an irrigation district hydrographer,
- a certified field examiner, or
- as otherwise approved by IDWR

Existing flow meters must be operational and installed consistent with applicable specifications. If the testing margin of error of an installed meter when compared to the testing meter exceeds plus or minus ten percent (±10%) for mechanical type meters, or plus or minus five percent (±5%) for magnetic or ultrasonic type meters, the installed meter must be replaced with a new meter from the approved list. The owner or operator of any diversion system which requires a field measurement must provide a testing section of unobstructed straight pipe 15 pipe diameters in length.

\(^3\) Testing was conducted at the Utah Water Research Laboratory (UWRL), a National Institute of Standards and Technology (NIST) traceable lab in Logan, Utah.