



State of Idaho

DEPARTMENT OF WATER RESOURCES

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C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

RECEIVED

MAR 31 2014

Department of Water Resources
Eastern Region

March 25, 2014

Re: Final Order Requiring Controlling Works and Measuring Devices in Water District No. 74J, Withington Creek.

Dear Water User,

The Idaho Department of Water Resources (Department or IDWR) has issued the enclosed order requiring installation of controlling works and measuring devices for diversions of water rights within Water District No. 74J, Withington Creek by June 1, 2014. Certain diversions may be exempted from the measuring device requirement if the diversion will not divert water during the time the watermaster is regulating deliveries. Measuring devices and controlling works are necessary to ensure the watermaster has the ability to adequately deliver water and protect water rights in priority. The enclosed order is a Final Order pursuant to Section 67-5246, Idaho Code. Any party may file a petition for reconsideration of a final order as explained in the enclosed information sheet.

The order requires users to submit measurement plans to the watermaster by April 11, 2014. Plans should include a description of the proposed or existing control works and measuring device, including dimensions and approximate locations on the diversion system. The watermaster will review the plans and consult with IDWR to determine whether the plan is acceptable. 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 Internet site at the following address:

http://www.idwr.idaho.gov/WaterManagement/WaterMeasurement/water_measurement.htm

If you have questions concerning this order, please contact the Water Distribution Section at the IDWR State Office, 208-287-4958 or the Water District 74J watermaster at 208-940-0215.

Respectfully,

Nick Miller
Water Distribution Section

Enclosures:

Final Order Requiring Measuring Devices in Water District 74J Dated March 25, 2014 (3 pages)

Explanatory Information to Accompany a Final Order (1 page)

IDWR Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices (2 pages)

Cc: Jeremy Drake, Watermaster, Water District 74J
IDWR Eastern Region

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

IN THE MATTER OF REQUIRING MEASURING)	
DEVICES AND CONTROLLING WORKS)	FINAL ORDER
IN WATER DISTRICT No. 74J,)	
WITHINGTON CREEK AND TRIBUTARIES)	
)	

On March 7, 2014, the Idaho Department of Water Resources (“Department” or “IDWR”) received a request from the Watermaster of Water District No. 74J, Withington Creek and tributaries (“the District”), requesting IDWR to require installation of controlling works and measuring devices for all diversions in the District.

A primary purpose of a water district is the administration of water rights within the water district by a water master. A water master administers water rights by reading measuring devices and adjusting head gates or other controlling works to deliver the authorized flowrate to the water right holder. Controlling works and measuring devices required under this order will assist the watermaster in administering water rights within the District.

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 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.

ORDER

IT IS HEREBY ORDERED AS FOLLOWS:

1. Prior to June 1, 2014, water right owners or water users identified with each diversion listed in Attachment A of this order shall install and maintain a measuring device and a functional, lockable controlling works of a type acceptable to the Department. The controlling works and measuring device for each point of diversion listed on Attachment A shall be installed at, or in reasonable proximity, to the point where water is diverted from Withington Creek.

2. All water users diverting water from Withington Creek at the points of diversion listed on Attachment A must submit plans for proposed or existing measuring devices and controlling works to the Water District 74J watermaster no later than April 11, 2014. Plans shall be

reviewed by the watermaster or the Department to determine whether proposed measuring devices and controlling works are of a type acceptable to the Department. The Water District 74J watermaster or the Department may exempt a diversion from the measuring device requirement if that diversion will not be in use while the watermaster is regulating deliveries.

3. The watermaster shall shut off and refuse to deliver water to any diversion listed on Attachment A that does not have an adequate measuring device and/or lockable controlling works at any and all times subsequent to June 1 2014.

Dated this 25th day of March, 2014.


GARY SPACKMAN
DIRECTOR

Attachment A
Divisions in Water District 74J for Which Measurement and Control are Required Under This Order

Current Owner	PLS	Water Right Number	Priority Date	Source	Diversion Rate (CFS)	Water Use List	Irrigated Acres
COLSTON, WILLARD	T20N R23E S16 NESW	74-219B	4/13/1896	WITHINGTON CREEK	1.360	IRRIGATION	56.9
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S16 NESW	74-218A	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	52
COLSTON, WILLARD	T20N R23E S16 NWNE	74-218B	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	69
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S16 NWNE	74-218A	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	52
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S16 SENW	74-218A	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	52
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S16 SWNE	74-218A	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	52
COLSTON, WILLARD	T20N R23E S16 SWSW	74-219B	4/13/1896	WITHINGTON CREEK	1.360	IRRIGATION	56.9
COLSTON, WILLARD	T20N R23E S17 SESE	74-219B	4/13/1896	WITHINGTON CREEK	1.360	IRRIGATION	56.9
TURNER, ARTHUR P	T20N R23E S20 L1	74-219D	4/13/1896	WITHINGTON CREEK	0.190	IRRIGATION	4.5
LOUCKS, ANN L; LOUCKS, ROBERT R	T20N R23E S20 L1	74-219E	4/13/1896	WITHINGTON CREEK	0.210	IRRIGATION	4.8
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S20 NESWNW	74-220A	6/1/1905	WITHINGTON CREEK	0.760	IRRIGATION	37.1
LOUCKS, ANN L; LOUCKS, ROBERT R	T20N R23E S20 SENW	74-219E	4/13/1896	WITHINGTON CREEK	0.210	IRRIGATION	4.8
PEETS, BARBARA A	T20N R23E S20 SENW	74-219A	4/13/1896	WITHINGTON CREEK	0.140	IRRIGATION	4
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S20 SENW	74-220A	6/1/1905	WITHINGTON CREEK	0.760	IRRIGATION	37.1
TURNER, ARTHUR P	T20N R23E S20 SENW	74-219D	4/13/1896	WITHINGTON CREEK	0.190	IRRIGATION	4.5
BINNING, EMILY; BINNING, GORDON	T20N R23E S20 SWNW	74-220B	6/1/1905	WITHINGTON CREEK	0.040	IRRIGATION	2.9
THOMAS, C LYNN; THOMAS, HEATHER	T20N R23E S20 SWSWNW	74-220A	6/1/1905	WITHINGTON CREEK	0.760	IRRIGATION	37.1
DAVIDSON, CHARLES; DAVIDSON, LINDA	T20N R23E S3 NWSW	74-216E	4/15/1885	WITHINGTON CREEK	0.030	IRRIGATION	1
LOGAN, RALPH G	T20N R23E S3 NWSW	74-216D	4/15/1885	WITHINGTON CREEK	0.070	IRRIGATION	3
SAGER, MAXINE; SAGER, WILLIAM N	T20N R23E S3 NWSW	74-216H	4/15/1885	WITHINGTON CREEK	0.050	IRRIGATION	3.3
PEETS, ALISA; PEETS, MORGAN	T20N R23E S4 SESE	74-1587	4/15/1885	WITHINGTON CREEK	0.040	IRRIGATION	4
STEPHENSON, ANN; STEPHENSON, THOMAS R	T20N R23E S4 SESE	74-15671	4/15/1885	WITHINGTON CREEK	0.060	IRRIGATION	6.2
STEPHENSON, ANN; STEPHENSON, THOMAS R	T20N R23E S4 SESE	74-216F	4/15/1885	WITHINGTON CREEK	0.010	IRRIGATION	1
STEPHENSON, CORAL; STEPHENSON, GORDON; STEPHENSON, JOHN; STEPHENSON, MARY	T20N R23E S4 SESE	74-15672	4/15/1885	WITHINGTON CREEK	0.790	IRRIGATION	76.3
JAKOVAC, JACK P; JAKOVAC, SHARON M	T20N R23E S9 NWNE	74-216J	4/15/1885	WITHINGTON CREEK	0.940	IRRIGATION	63.2
JAKOVAC, JACK P; JAKOVAC, SHARON M	T20N R23E S9 NWNE	74-221	7/26/1909	WITHINGTON CREEK	1.870	IRRIGATION	63.2
COLSTON, WILLARD	T20N R23E S9 NWSE	74-218B	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	69
COLSTON, WILLARD	T20N R23E S9 NWSE	74-218B	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	69
COLSTON, WILLARD	T20N R23E S9 NWSE	74-218B	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	69
COLSTON, WILLARD	T20N R23E S9 SWNE	74-218B	6/1/1888	WITHINGTON CREEK	1.400	IRRIGATION	69

**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 Orifices:** 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 Reclamation¹

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.

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