



## State of Idaho

# DEPARTMENT OF WATER RESOURCES

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C. L. "BUTCH" OTTER  
Governor

DAVID R. TUTHILL, JR.  
Director

March 5, 2009

Water District 11F  
C/O Joel Teuscher  
PO Box 74  
Geneva, ID 83238-0074

And

Rodney Boehme  
2277 Wood Canyon Road  
Geneva, ID 83238

RE: Measurement plan for Water District 11F

Dear Water User:

I would like to thank you for the submittal of the measurement for the water users in Water District 11F (District). The District has come a long way in a very short period of time. Our office has reviewed the plan and has deemed it acceptable for the 2009 irrigation season. However, there is some additional information we would like to receive to assist you in the installations, so the water user will be in compliance with the measurement requirements of the Idaho Department of Water Resources (Department).

First of all the Department would like to address the water users installing Acoustic Doppler Flow Meters (ADFM). During recent testing of these devices, the Department has found some possible problems with the Star Flow ADFM meters. At this time, we do not know the extent of these problems, **so we would like to extend the installation deadline for these meters until we can attain a better understanding of these meters.** Other brands of this type of flow meter may be acceptable, but we would like to encourage all of these users to hold off installing these meters until the Department attains more confidence in these types of flow meters. If the water users decide to install these meters anyway, please inform us of the name brand, type, and location of the flow meter, so we can run tests on the ADFM to ensure their accuracy.

Secondly, **we would like to ask if the water users could give us the brand name and type of magnetic meters being installed.** There are basically two types of magnetic flow meters. One is bolted into the mainline using flanges and the other is inserted into the mainline. We are continually calibrating and testing the flow meters that are being installed. The water in Thomas Fork has a unique chemistry and speed of water flow, so this would be an excellent opportunity to monitor these units under these types of circumstances.

Finally, **we would like to know the types of flumes and weirs being installed, and their location.** With the changes in elevations or fall in the Thomas Fork, we would like to make sure that the type of device chosen will provide adequate data. If the water user is having another entity install the device, then this entity should send us the construction diagrams or as built diagrams including the fall of the stream at that location for review. We are especially concerned about the ruler and headgate proposal of the Hamilton Dam Diversion (#16). We will need to know exactly how this proposal is going to work and how they plan to achieve a flow measurement with a ruler. I think that they may need to research this measurement device a little further, and give a more detailed explanation and rating table for their measurement device. All of the weirs and flumes should have a rating table showing how the flow is monitored. The watermaster should receive a copy of the rating table for each device.

The District has made major strides this year in the formulation of this plan, and I would like to congratulate you on a job well done. Not all of the information requested above can be provided immediately, but we would appreciate it if the individual water users could send the information to me as soon as they have it available. You or your water users may contact me directly at (208) 287-4918 regarding.

Respectfully,

A handwritten signature in black ink, appearing to read "Dan Nelson", with a long, sweeping horizontal line extending to the right.

Dan Nelson

Staff Hydrologist, Water Distribution Section