

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Tim Luke, IDWR Water Compliance Bureau

Date: July 8, 2013

RE: Water District 02 & Water Smart Grant Status Report

At the January, 2013 meeting of the Idaho Water Resources Board (IWRB or Board), Board members were briefed about the creation of Water District 02 (WD02) and a coordinated effort among district water users and both IDWR and IWRB staff to secure cost share funding through a US Bureau of Reclamation (BOR) Water Smart Grant to assist with the installation of measuring devices and telemetry equipment for diversions in the district.

WD02 was created in July, 2012. The district will provide for the administration of water rights from the Snake River between Milner and Swan Falls Dams (see attached map). Water right administration includes delivery and regulation of water rights, and measuring and reporting of water diversions. Measurement of water diversions is a critical and necessary function of the water district. Measurement and regulation of diversions in the district is one of a number of tools that the State can employ to help maintain the IWRB's minimum in-stream flow at the Murphy Gage in accordance with the Swan Falls Agreement. The Board supports the installation of measurement devices in WD02 as evidenced by policy 1H of the Idaho State Water Plan adopted by the Board in 2012 which states, "Quantification and measurement of Idaho's water supply and use is essential for sound water resource planning, management, and administration."

IDWR estimates that there are about 150 active irrigation diversions in Water District 02 that serve developments ranging in size from several acres to over 10,000 acres. More than 30 diversions are large high lift pump stations or canals serving more 1,000 acres each. There are approximately 475 irrigation rights in the water district. Nearly all of the consumptive water use diversions are for irrigation purposes, but there are also a few diversions for municipal, commercial and stock water uses.

The district held its first annual meeting in January, 2013. A district watermaster was elected (Corbin Knowles of IDWR) and an advisory committee selected for 2013. Advisory committee meetings were held on March 19 and July 10, 2013.

The IWRB, on behalf of WD02, submitted the BOR Water Smart Grant application in January, 2013. The application proposed installation of measuring devices on 22 irrigation diversions in the district, including 15 of the 30 plus large diversions. The application proposed installing telemetry equipment on the large diversions in an effort to secure real-time daily diversion data. The application was limited to only 22 diversions due to a limited application window and limited staff resources. The total grant proposal was \$341,859, with \$188,022 (55%) coming from water users and \$153,837 (45%) coming from the BOR. BOR awarded the \$153,837 to the

IWRB in May of this year. Funds will be available under the grant starting in October, 2013. IWRB and IDWR staff, including watermaster Corbin Knowles, has met several times since Jun 1 with the local BOR grant coordinator planning and scheduling IDWR anticipates working with the WD02 and the Board to submit at least one additional grant application in 2014 to address the remaining large diversions in the district.

IDWR and the Advisory Committee decided to delay discussion for issuance of a water measurement order and related compliance deadlines pending confirmation of the BOR Water Smart Grant. Approval of the grant allows the district to move forward with some certainty that measuring devices will be installed on at least the 22 diversions by the 2014 irrigation season, and will provide some time and opportunity to submit a second Water Smart grant for additional diversions in the district. Given the grant approval, IDWR anticipates issuing a measurement order over the next several months that would phase in requirement of measuring devices over the next three years with full compliance likely by the 2016 irrigation season.

The watermaster and other IDWR staff will be teaming with staff from Idaho Power Company and the USGS on July 16 and 17 to conduct a seepage study of the Snake River from above CJ Strike Reservoir to Murphy Gage. The study is part of the effort related to the Swan Falls measurement protocol process. Individual diversion and site visit data collected during the study will be helpful to the water district in planning for additional measuring device installations. Additionally, the watermaster has spent time this summer evaluating the use of ultrasonic flow meters on large diameter pipelines and penstocks. Ultrasonic meters are accurate and more economically priced meters approved by IDWR for use on larger diameter pipelines. Ultrasonic meters have been identified and budgeted for most of the large pipe diameter diversions that were included in the Water Smart Grant. IDWR had some concerns regarding the use of these meters on large pipe systems due to certain pipe conditions and lining material often found on such systems. Results from testing and evaluations made so far show that ultrasonic meters can be used on most large pipe systems.