

MEMORANDUM

Date: May 12, 2010
To: File
From: Nick Van Dyke
Re: Analysis of Application for Transfer 76396 – Bell

Narrative: Transfer 76396 proposes to add a second point of diversion to Rights 34-418B and 34-518 (Bell's rights). The point of diversion to be added is at the Munsey Diversion (just northwest of Arco, in the NWNWNW of Sec 26, T4N R26E) and diverts water into the Munsey Ditch. Currently the recorded point of diversion for Bell's rights is roughly 2.5 miles downstream from the Arco diversion (locally the Miller Ditch). Within that distance significant losses accrue due to the nature of the Big Lost (tributary to sinks). According to the watermaster, Bell's rights in recent years have not been deliverable and irrigation has not occurred. See attached map for illustration of changes.

Authority to File: Applicant is owner per IDWR record. Both Kenneth and Cynthia Bell signed the app.

Water Right Validity: Both 34-418B and 34-518 were SRBA decreed December 14, 2001. 2005 thru 2009 satellite imagery shows various parts of the entire place of use irrigated.

Injury to Other Water Rights: None anticipated. A similar transfer was proposed by Bell for 34-518 (Transfer 4110) but was protested and rejected on 10/19/1993 for injury concerns. Administrative Rules 37.03.13 were adopted on 10/26/1994 that addressed the same injury/enlargement concerns. See email correspondence in file dated 3/18/2010 for more discussion on this. Because Administrative Rules 37.03.13 addressed the same injury/enlargement concerns that halted Transfer 4110, which was essentially the same proposal, no injury is anticipated. Important to note that there is no Big Lost River sourced point of diversion between Bell's rights historic diversion (the Miller), and the McLaughlin Diversion (what the Administrative Rules cover).

Both the watermaster for Water District 34 and the manager for the Big Lost River Irrigation District supplied written support of the transfer.

Enlargement of Use: None anticipated. No elements of the right are being changed except for an additional point of diversion.

Local Public Interest: No issues identified.

Beneficial Use/Conservation of Water Resources: No issues identified. Review of the application finds there is not clear inconsistency with criteria set forth in Section 42-222 Idaho Code preventing processing of this application.

Range 26 East, B.M. (10-26-94)

f. Moore diversion to Arco diversion located in the NW1/4NW1/4NW1/4, Section 26, Township 4 North, Range 26 East, B.M. (10-26-94)

g. Below Arco diversion to the Arco Gage. (10-26-94)

02. River Reach Computations. For each reach of the river the natural flow will be computed as the natural flow entering the reach plus gains entering the reach minus losses from the reach. The natural flow thus calculated will be allocated as described in Rule 40. (10-26-94)

03. Gage Station or Other Flow Measuring Facility. A gage station or other flow measuring facility, as approved by the director, shall be located at the Howell Gage, Chilly Bridge, 2-B Gage, Leslie Gage, Moore diversion, Arco diversion and Arco Gage. The Howell, 2-B and Arco gages shall be maintained as part of the USGS Cooperative Program, or equivalent measurement program, and operated continuously. Water District 34 shall continue to contribute to the maintenance and operation of these gage sites in the same proportion as is currently contributed. All other gages shall be operated when water diversions, other than solely storage in Mackay Reservoir, are being made from the river. The cost of installation, operation and maintenance of these other measuring facilities is the responsibility of Water District 34. (10-26-94)

026. -- 029. (RESERVED).

030. NATURAL FLOWS (RULE 30).

Natural flow shall be delivered through the natural river channel to the point of diversion of record except as provided in these rules. (10-26-94)

01. Eastside Canal. The watermaster, with the approval of the director and after consultation with the Big Lost River Irrigation District, may elect to deliver the natural flow of the river through the Eastside Canal when the following conditions are met: (10-26-94)

a. The full flow of the river, including impounded water, to be delivered downstream of the Moore diversion is not greater than the capacity of the Eastside Canal. (10-26-94)

b. More natural flow water can be delivered to calls for natural flow than could be delivered by using the natural river channel. (10-26-94)

c. No water right is injured. (10-26-94)

d. Measuring devices of a type acceptable to the director are installed and maintained where the flow leaves the river channel and where it returns to the river channel. (10-26-94)

e. When used for the delivery of natural flow to the Arco diversion, the Eastside Canal is considered to be the river channel for water delivery accounting purposes and the watermaster shall protect the natural flow for delivery to prior water rights. Water rights diverting water from the river channel downstream from the point the Eastside Canal returns to the river channel shall be measured at their point of diversion from the river downstream from the Eastside Canal return. (10-26-94)

f. Conveyance losses in the Eastside Canal, when considered to be the river channel, shall be proportioned between the river flow, the diversions from the Eastside and pumps that inject ground water into the Eastside Canal. The proportioning will be based upon the ratio of total Eastside diversions and injected ground water to the total inflow to the canal. (10-26-94)

02. Alternate Point of Diversion. The watermaster may elect, with the approval of the director, to deliver natural flow water rights to the alternate point of diversion described in Rule Subsection 030.02.a. below when conditions in Rule Subsections 030.02.b. through 030.02.f. below are met: (10-26-94)

a. This rule may be used to deliver water rights through the Munsey diversion located in the NW1/

4NW1/4NW1/4, Section 26, Township 4 North, Range 26 East, B.M. as an alternate point of diversion for water rights with a recorded point of diversion at the McLaughlin diversion located in the NE1/4NW1/4SE1/4, Section 12, Township 3 North, Range 26 East, B.M. (10-26-94)

b. The additional delivery losses through the natural channel to the recorded point of diversion for a water right prevents delivery of natural flow to one (1) or more other water rights then calling for water. (10-26-94)

c. The user receives the same amount of water at the field headgate from the natural flow water right that would be delivered to the field headgate had the natural flow right been delivered at the recorded point of diversion. (10-26-94)

d. Delivery of the water right at the alternate point of diversion is limited to the period of time the water right could have been delivered to the recorded point of diversion based upon the natural flow available at any time delivery is called for and the loss of the river channel at the time the alternate point of diversion began to be used for the delivery of this water right. (10-26-94)

e. No water right is injured by the use of the alternate point of diversion. (10-26-94)

f. The owner of the diversion works at the alternate point of diversion and the ditch(es) used to deliver the water to the field headgate from the alternate point of diversion concurs in the use of those facilities. (10-26-94)

031. -- 034. (RESERVED).

035. MEASURING DEVICES AND CONTROL WORKS (RULE 35).

01. Installation and Maintenance of Measuring Devices and Control Works. In addition to measuring devices or control works specifically described in the listing of the water right, each water user, except small domestic and stock water users from ground water, shall, at the water user's expense, install and maintain measuring devices and control works of a type acceptable to the director, at all points of diversion and any other points, as determined necessary by the director for the proper administration of the use of water. The director may prohibit or prevent the diversion of water by a water user who refuses or fails to comply with this rule in accordance with the provisions of Chapter 7, Title 42, Idaho Code. (10-26-94)

02. Measuring Ground Water Diversions. All ground water diversions, excluding small domestic and stock water diversions, shall be measured by one of the following methods. Any ground water diversion requiring an instantaneous flow measurement as described in Rule Subsection 035.02.a. or for checking of an in-line flow meter as described in Rule Subsection 035.02.b. which is not properly configured to permit an accurate measurement must comply with Rule Subsections 035.03.a. through 035.03.c. (10-26-94)

a. Instantaneous flow rate will be measured by the water district utilizing a polysonic flow meter or other means of measuring instantaneous flow acceptable to the director. Annual volume will be determined by electrical power consumption records which the water user must release from the electrical energy provider to the watermaster. (10-26-94)

b. Where an in-line flow meter with totalizing capabilities is installed, the meter will be periodically checked for accuracy by the water district staff. (10-26-94)

c. An open channel measuring device of a type and installed in a location acceptable to the director will be read and recorded daily by water district staff. (10-26-94)

03. System Configuration for Accurate Measurements. All ground water diversions, excluding small domestic and stock water uses, shall configure their diversion systems so that accurate measurement can be accomplished. The polysonic flow meter requires a straight and uniform section of pipe which is free from obstructions, valves and couplings for a minimum distance of ten (10) pipe diameters upstream from the measurement site and five (5) pipe diameters downstream from the measurement site. If a pump is nearby up to thirty (30) pipe diameters of a straight uniform pipe section may be required upstream from the measurement site.