



State of Idaho

DEPARTMENT OF WATER RESOURCES

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JAMES E. RISCH
Governor

KARL J. DREHER
Director

March 8, 2007

MITCHELL SORENSEN
3871 W 2500 N
MOORE, ID 83255

Re: Letter of February 21, 2007 RE: 2006 Water Diversions in WD34

Mr. Sorensen,

In your letter of February 21, 2007, you ask for a total volume of "additional water" diverted below Mackay Reservoir during the 2006 irrigation season. As we discussed during our phone conversation on February 20, 2007, during the period between May 1 and July 10, 2007, water was delivered to users beyond their natural flow water rights and available rotation credit. These deliveries were recorded by the ditch riders, so users were assessed for these deliveries by Water District No. 34. Furthermore, during this period, the Big Lost River Irrigation District (BLRID) did not charge those deliveries against the users' storage accounts. As such, this "additional water" is natural flow water rather than storage water.

Delivery of this "additional water" was recorded on the ditch rider logs and was also accounted for by the Idaho Department of Water Resources Big Lost River Water Rights Accounting (BLRWRA) program.

The 2006 WD34 assessment calculations utilized the ditch rider logs provided by the BLRID. These calculations indicate that, during the period between May 1, 2007 and June 30, 2007, approximately 1,920 cfs-days (about 3,800 acre-feet) of natural flow water were delivered as "additional water" to users below Mackay Reservoir. Additionally, these calculations indicate that approximately 761 cfs-days (1,522 acre-feet) of rotation water were released from Mackay Reservoir during this period. Therefore, the total deliveries in excess of natural flow water rights between May 1 and June 30 is an estimated 2,682 cfs-days (5,364 acre-feet). This volume of water represents the amount of water in excess of the natural flow rights that was delivered to canal headings during this period. A comparison of this volume estimate with the accounting results is presented below to check that the estimate is similar to the accounting.

The BLRWRA program does not account for rotation credit deliveries, and it does not "know" that Mackay Reservoir is the only source of storage water. Because of this, any canal diversions that exceed the total of the in-priority rights are accounted for by the program as a storage delivery, regardless of whether the program is indicating that Mackay Reservoir is releasing storage. Although the first date the accounting program indicated a negative change in reservoir contents was on June 30, 2007, the accounting program was tracking "storage" deliveries prior to June 30 under the field titled "Year to date storage used". During the May 1 to June 30 period, the

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output from the BLRWRA program indicates that about 2,461 cfs-days (4,887 acre-feet) of "storage" water was used below the reservoir. This volume includes rotation credit water deliveries, and any "additional water" natural flow deliveries.

The approximately 475 acre-feet difference between the volume estimated using the ditch rider logs, and the volume generated by the BLRWRA program equates to about eight acre-feet (or about 2.3 acres of irrigation) per day during the 60-day period under consideration. Considering the total flow at Mackay Dam during this period averaged over 1,000 cfs, and given the averaging and other assumptions that go into the accounting program, this difference is small. Therefore, the total storage + rotation water delivered to canal headings can be estimated as about 2,600 cfs-days, or about 5,100 acre-feet. If we assume that about 1,500 acre-feet of rotation delivery occurred, the total "additional water" is approximately 3,600 acre-feet.

Please call if you have questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Nick Miller', is written over a horizontal line.

Nick Miller
Water Distribution Section

cc:
IDWR Eastern Region
Bob Schafer, WD34 Watermaster – PO Box 53 Mackay, ID 83251
Big Lost River Irrigation District, 101 S Main Ave Mackay, ID

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