



**State of Idaho**

**DEPARTMENT OF WATER RESOURCES**

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**PHILIP E. BATT  
GOVERNOR**

**KARL J. DREHER  
DIRECTOR**

October 14, 1998

Howard Hall  
Byron Allen  
McCammon Ditch Co.  
McCammon, ID

Re: Portneuf River Tour

Dear Gentlemen:

The meeting and river tour that I attended with you, watermaster Arlin Olson and other users on October 8 identified a number of issues or items which need further attention. These items are enumerated below.

- Assignment of Losses to Delivery of Portneuf Marsh Valley (PMV) Storage Water  
As McCammon Ditch Co. representatives, you indicated that McCammon would only pursue this issue through the Snake River Basin Adjudication (SRBA) court and process. I assume therefore that McCammon is willing at least to withdraw this issue from its Petition For Enforcement of Decree and Order filed in January of 1996.

I indicated to you that if time and resources are available, I will try to assemble some additional delivery and gage data and derive river gains in an attempt to understand this issue better.

- Portneuf Marsh Valley (PMV) Canal Co. Reservoir  
IDWR confirmed that the Chesterfield Reservoir survey was complete. A map of the survey will be forwarded to McCammon Ditch Co. (McCammon). IDWR and PMV representatives agreed that a staff gage or other reservoir level measuring device is still needed at the reservoir. IDWR indicated that the sloping steel staff gage needs replacement. PMV indicated that they had an engineer at the site last month and that they are considering how to complete the installation of a staff gage or some alternate reservoir level gaging device that can tie into the reservoir survey.

PMV and IDWR agreed that it would be difficult to install a new gage that is similar to the existing one without draining the reservoir. We acknowledged that there are maintenance and accuracy problems associated with an outside gage due to weathering, ice build-up and potential vandalism. Reading the outside gage is also difficult due to wave and wind action. IDWR plans to forward some information to PMV with perhaps some recommendations concerning measuring and recording of reservoir levels. A measuring and recording device located within the reservoir gage house or stilling well may be a better alternative to an outside gage. The gage

house does pose a challenge however because the outlet gate is located in the middle of the outlet pipe and at the bottom of the well, thus causing some draw-down effect when water is being released.

IDWR will work with PMV over this non-irrigation season toward finding a suitable plan for measuring reservoir level. IDWR's goal is to have a workable reservoir level device in place during the early part of the 1999 irrigation season.

- **PMV Outlet Flume**

PMV, IDWR and McCammon representative all acknowledged that there is water level fluctuation in the Parshall flume that measures the reservoir outflow. Although IDWR believes that the watermaster is both very cautious and consistent in his readings of this flume, we do agree that the installation of a stilling well would be beneficial. PMV officials agreed at the meeting in Lava Hot Springs that they would install a stilling well. IDWR will correspond with PMV and request that the stilling well be installed prior to the 1999 irrigation season, or prior to reservoir irrigation releases.

- **Continuous Recorders on Major Canal Diversions**

The local water rights decree requires installation of 'automatic registers' or continuous stage recorders on canals that divert in excess of 30 cfs. McCammon Ditch Co. installed such a device in 1998 and advocates installation of similar devices on other large canals. There was some debate among the users and IDWR as to whether to make such installation mandatory for other canals. IDWR does support additional monitoring efforts and collecting more data but there are legitimate questions about the use of the data, the objectives and cost of the effort. I personally had some questions about whether this would significantly improve day to day delivery of water since the watermaster has to measure mostly natural flow diversions each morning and set head gates accordingly. This contrasts other districts in the state where recorders are frequently used to compute mean daily flows for 'after-the-fact' water right accounting or adjusting of storage use and storage water accounts.

IDWR agreed to review the McCammon data and compare it with the daily watermaster readings in order to further evaluate the benefits. Upon review of the data, IDWR will discuss the matter with McCammon, PMV and Portneuf Irrigating Co. (PIC). IDWR will delay any decision at this time regarding required installation of recorders.

- **PMV-PIC Shared Canal and PIC Diversions/Canal**

During the meeting and river tour, some discussion centered on McCammon's concerns about monitoring and measuring of diversions owned by PIC share holders which are located on the shared portion of the PMV-PIC Canal. IDWR learned that one or more PIC shareholders are diverting a total of 6 cfs of water from the PMV canal below the split with the PIC canal. Apparently, this is an increase in the amount that had been moved below the split several years ago. This activity of moving shares between the canals raises questions about changes in place of use under the PIC water right that would normally require an approved water right transfer. IDWR is now contacting PIC and investigating whether this movement of canal shares requires a transfer. If a transfer is required, IDWR will prohibit the diversion of this water until a transfer is

approved or the water reverts back to its original place of use.

Several suggestions are offered to address McCammon's concerns about the PIC canal:

a) Under Section 42-909, Idaho Code, the watermaster may appoint a lateral manager to measure and regulate diversions on the shared portion of the PMV-PIC canal. The watermaster may appoint himself as lateral manager. Such an appointment may also include a requirement to install measuring devices on turnouts within this reach of canal. Any water not diverted by these turnouts, as well as PIC turnouts below the split, should be made available for use by PIC or else returned to the river and made available for appropriation by junior rights as long as junior rights remain unfulfilled. The lateral manager would also make at least daily readings of the PIC flume located at the split with PMV.

b) Same as option (a) above except that where measuring devices are impractical or burdensome, the lateral manager would note on/off times and estimate turnout diversions instead of requiring measuring devices. Estimates must be made in a manner acceptable to the Department. When estimates are less than the total shares and/or turnouts are off for one day or more, the unused water must be made available to PIC or turned out to the river and made available for appropriation by junior rights as long as junior rights remain unfulfilled. This option may require IDWR to modify its existing order which required measurement of these turnouts. After one season, IDWR and the water district can evaluate the success of a lateral manager and estimation methods. IDWR or the lateral manager could insist on installation of measuring devices after the first year if necessary.

Both options above would require that at least PMV and PIC pay any additional charges for the services of a lateral manager. Since McCammon may be a beneficiary of a lateral manager and improved management on this lower end of the river, it may at least be a good gesture if McCammon shared in some of the expense of a lateral manager.

Option (b) above may be preferable since it does not require the additional expense and effort associated with installation and maintenance of measuring devices. Some of the turnout diversions are admittedly difficult to measure. IDWR can assist the watermaster or lateral manager in determining acceptable methods of estimation and also make a set of one-time measurements that could be used for future estimations. The IDWR measurements may be accomplished using accurate and portable measuring devices owned by the Department.

One of the concerns of either of these approaches is that the watermaster or lateral manager may have to spend a lot of time adjusting the river head gates in order to turn out up to 11 cfs of water that PIC may not demand. Adjustments of only a few cfs may be difficult relative to the derived benefits and would be well within the error of the measuring devices of either canal. Perhaps the lateral manager and canal companies could agree on turning water out to the river only if the amount of unused water exceeds some lower limit, like three or four cfs. This concern could be eased if a head gate and pipe was installed in the PMV canal in order to turn the unused water directly into the McCammon Ditch or the river above the McCammon Ditch. Such a structure would allow greater flexibility and expedite

turning the unused water out to McCammon or the river. A measuring device would probably be installed on the pipe to assure proper return of the unused amount of water. McCammon could perhaps share in the cost of installing such a return flow structure and measuring device.

IDWR would welcome any additional suggestions or proposals from McCammon, PMV and PIC regarding this issue. We believe that these entities may be able to reach some agreement over this matter since the companies already have certain agreements involving the hydro plant operation, including the sharing of hydro plant royalties.

- Diversion on King Creek

IDWR and the watermaster has received several inquiries or complaints in the past regarding an unregulated pipe line diversion on King Creek. This diversion has a 1902 priority right but frequently diverts water at times when 1902 rights are cut. The watermaster has reasoned in the past that cutting this diversion would result in a futile call, i.e.; the water not diverted during times of regulation would not reach the Portneuf River. Although the watermaster's assessment of this matter may be correct, there appeared to be little evidence that there had ever been any attempt to regulate the diversion and verify that any call was indeed futile. IDWR recommends that the watermaster regulate this diversion next year and determine if such action results in a futile call. IDWR will send instructions to the watermaster concerning this recommendation.

- Dempsey-Topaz Canal and Fish Creek Diversion

IDWR believes that some improvements should be made with the diversion of water from Fish Creek into the Dempsey-Topaz Canal. I would specifically recommend that a short ditch diversion be cut that connects Fish Creek to the Dempsey-Topaz Canal instead of the direct confluence between the creek and canal that currently exists. The short ditch should be fitted with controlling works and a measuring device so that the Fish Creek diversion is measured separately. An improved control structure should also be placed in the Dempsey-Topaz Canal to prevent additional diversion of Fish Creek water when the canal is not conveying water. Since the Dempsey-Topaz River right (i.e.; canal water above the Fish Creek confluence) is fairly late in priority and junior to McCammon's right, it is probably not necessary to require fluming the Fish Creek water over the canal because regulating the Fish Creek diversion should only be an issue after the canal water is shut off.

IDWR plans to correspond with the appropriate ditch companies this fall regarding improvements to the Fish Creek diversion and confluence with the Dempsey-Topaz Canal. I have already discussed this matter with Gene Fagnant, secretary of Topaz Irrigation Co.

- Dempsey Creek Measuring Devices

IDWR found that there is at least one ditch diversion on Dempsey Creek where a measuring device has not been installed. IDWR plans to issue a Notice of Violation to the owners of this ditch and require installation of a device prior to next irrigation season or else the owners risk complete regulation and shut down of the ditch, as well as possible monetary fines.

IDWR also found that water from the Dempsey-Topaz Canal is injected to Dempsey Creek


and then re-diverted at the Topaz Canal. The points of injection and re-diversion are very close together, but Dempsey Creek water is still commingled with the Dempsey-Topaz Canal water. The water injected to Dempsey Creek is not measured. IDWR will advise Topaz Irrigation Co. To install a measuring device to measure the injected or returned water from its' canal. The Topaz Canal is limited to the injected water plus its' natural flow right from Dempsey Creek. We found that the Topaz Canal Parshall Flume measuring device was not set evenly. We will also advise Topaz Irrigation Co. to re-set the canal.

- Other Measuring Device Deficiencies

IDWR learned that several measuring devices in the upper river reach may not be functional or have been removed. Diversions requiring attention include the K.V. Hansen pump, the Perkins river pump, the Perkins diversion from Toponce Creek to the Chesterfield Reservoir-Toponce Feeder Canal, and the Chesterfield Reservoir siphon pipe/ditch. IDWR plans to correspond with these users again this winter and remind them of their measuring device responsibilities. Failure to install or maintain adequate measuring devices in 1999 will result in the issuance of Notices of Violation.

IDWR will delay implementing most of the items above until after the scheduled hearing of October 20, 1998. Please contact me at 327-7864 if you have questions regarding this correspondence.

Sincerely,



Tim Luke

cc: James Spinner, Attorney, McCammon Ditch Co.  
Gary Spackman, IDWR  
Arlin Olson, Watermaster

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