

MEMORANDUM

Date: April 29, 2014
To: Water Right File 37-8389
From: medl
Re: permit condition o.

The following condition, labeled o., has been applied to permit 37-8389.

Prior to placing water to beneficial use under this permit, the permit holder must determine the rate of loss within his facilities using a procedure approved by the Director of the Department of Water Resources, and provide a source of augmentation water to mitigate all losses.

I have reviewed the file contents of 37-8389 and have found that the permit holder is not in compliance with this condition. The water right file does not contain a procedure for determining the rate of loss or a provision for water to mitigate the predicted losses. However, I am recommending this permit be licensed in spite of the lack of compliance with this condition.

Some seepage through Magic Dam has occurred throughout its life. Weirs, to measure that seepage, and a monitoring plan are in place. Operation personnel routinely record water levels and the leakage rates. IDWR and FERC dam safety inspectors have found the seepage monitoring satisfactory.

The outlet control valves were not completely water-tight before the existing inlet/outlet pipe was fitted with the penstock addition in 1988-1989. I compared stream channel discharge records for periods before and after the powerhouse was installed and I found no significant change in the discharge recorded below the dam. Please refer to the attached spreadsheet of January 1980 and January 1990 daily average flow data from USGS station #13142500, Big Wood River bl Magic Dam nr Richfield ID.

I reviewed the IDWR dam safety inspection reports which were completed in 1988, just prior to the approval of the permit, and the FERC and IDWR dam safety inspection reports which were completed in April 1989, after the permit was issued but before the first generation date. There was no mention of extraordinary water losses through the hydropower facility in any of those reports.

I also questioned the contemporary manager of the Big Wood Canal Company, and senior IDWR personnel to collect background information or historical context for the condition. The consensus from that group was that the condition was likely applied to the permit to protect downstream senior irrigators from seepage losses introduced by the hydropower project.

In summary, I have found that the lack of compliance has not impacted downstream senior water right holders. Water leaks through the inlet/outlet pipe and seeps through the dam in quantities very similar those recorded before the powerhouse was constructed so no mitigation water is needed.

Edl, Michele

From: Peppersack, Jeff
Sent: Friday, September 20, 2013 3:18 PM
To: Edl, Michele
Subject: FW: (permit 37-8389) Magic Reservoir Hydroelectric

fyi

From: Merritt, Allen
Sent: Friday, September 20, 2013 2:59 PM
To: Peppersack, Jeff
Subject: RE: (permit 37-8389) Magic Reservoir Hydroelectric

I do not recall being involved in the issuance of this permit. Probably something Norm or Glen dreamed up. I can only speculate that maybe the BWCC was concerned about seepage caused by installation of the power plant works. Since they were not the owners of the facility maybe it was a place holder for causing the developer to mitigate for any potential loss. I do not think that Lynn Harmon was manager when the permit was processed (maybe he worked for them at the time). If there was additional loss caused by the power plant it would only tend to hurt the storage for BWCC shareholders. If the BWCC is agreeable which is probably to their advantage since they likely have a monetary interest in this I would be up for removing it.

From: Peppersack, Jeff
Sent: Friday, September 20, 2013 1:57 PM
To: Edl, Michele
Cc: Merritt, Allen
Subject: RE: (permit 37-8389) Magic Reservoir Hydroelectric

Michele,
I don't know the source of the condition. I'm copying Allen Merritt for his input.

Jeff

From: Edl, Michele
Sent: Friday, September 20, 2013 10:20 AM
To: Peppersack, Jeff
Cc: Saxton, Craig
Subject: FW: (permit 37-8389) Magic Reservoir Hydroelectric

Jeff,
I met with Magic Reservoir Hydroelectric personnel Tuesday morning (9/17/2013) to complete the 'field' exam for the 3 permits for power use at that facility. These are 1980's vintage permits and one of them has a special condition that I need to deal with. The permit holder is not in compliance with it.

In preparation for drafting an order which addresses the condition, I asked BWCC's Mr. Harmon (see below) if he could provide me some context. From his response, I am inferring that he doesn't know of a loss within the facility.

Do you or Gary have any memory of circumstances in 1989 at Magic which would have necessitated this condition?
Thank you
Michele

From: Lynn Harmon [<mailto:lynn.harmon@cableone.net>]
Sent: Wednesday, September 18, 2013 4:09 PM
To: Edl, Michele
Subject: RE: (permit 37-8389) Magic Reservoir Hydroelectric

Michele,

The only leakage I am aware of is the measured leakage through the seepage weirs at the base of the dam. There are two small weir west of the power house and one at the east end of the dam. The one on the east end of the dam when the reservoir is between ½ and full runs up to 5 cfs. The two small weirs total in the neighborhood of maybe 1 cfs combined. These have been there since the dam was constructed. Thanks Lynn Harmon

From: Edl, Michele [<mailto:Michele.Edl@idwr.idaho.gov>]
Sent: Wednesday, September 18, 2013 2:24 PM
To: lynnharmon@cableone.net
Subject: (permit 37-8389) Magic Reservoir Hydroelectric

Mr. Harmon,

I need to access your corporate memory again.

Earlier this week I met with Mr. Bill Trent about the three permits for power at Magic Reservoir. As you know, Mr. Trent is the operator at the Magic Reservoir hydroelectric facility but he has only been there a couple years.

One of the permits (Permit 37-8389) has a non-standard condition which states,

Prior to placing water to beneficial use under this permit, the permit holder must determine the rate of loss within his facilities using a procedure approved by the Director of the Department of Water Resources, and provide a source of augmentation water to mitigate all losses.

I must review all the conditions of the permit for compliance before issuing a license. I find no information in the water right file which provides me context for this condition. And I find no procedure determining the rate of loss and mitigating for it. Mr. Trent hasn't been involved with operations at Magic long enough to have any knowledge of the circumstances which provoked this condition.

Can you or your staff enlighten me? Was there uncontrolled leakage at the powerhouse when it was built?

Permit 37-8389 was issued in January 1989 just prior to the first power generation in May 1989. It authorized year-round power use. The other two permits were issued in September 1987 for use during the irrigation season only.

Thank you in advance

Michele Edl

Water Rights Section

IDWR's state office

208-287-4946