

Weaver, Mathew

From: Kinner,Roy [rkinner@idfg.idaho.gov]
Sent: Wednesday, August 27, 2008 9:35 AM
To: Weaver, Mathew; Hand,Robert
Cc: Fischer,George
Subject: RE: Tolo Lake WR Field Exam

Thanks for the update Matt, I came to the Grangeville area in 99 so I don't have use records or info prior to that. We put the corrugated pipe in the channel at the POD to try an alleviate the leakage back into Telcher Cr so water would run to the lake in about 2001. it worked for a while but still undermined and has since returned fully to the creek. Only during high flows such as spring runoff and major storm events will some of the water reach Tolo Lake. I have discussed the issue of the inadequate diversion with Joe Dupont, of Fisheries in Lewiston. We have always intended to re construct the head gate and try to efficiently get water back into the lake channel.

Tolo has some springs in the lake, but they are of minimal consequence and it is unknown to me how much they contribute to the volume of water in the lake. The lake does in fact get water through the diversion if the running water in the creek is sufficient to allow it down that particular channel.

Paul Hauger and I keep an eye on the gate and adjust the flow when needed to keep water coming to the lake. There is only about a 1 foot elevation drop from the head gate of the diversion to the lake, almost a mile away. The channel silts in very easily and is again in need of cleaning out.

At the highest flows, water still flows down the Telcher Cr side even when we try to divert all water to the lake, The head gate culvert was put in shortly after I came to Gville in about 2001 I believe, the next year, it was flowing right around and back into the creek again. With the promise of tearing out the diversion and trying again, we have not gotten to it yet. I would like to see it become a priority to get water to the lake consistently.

This year because of the late winter, heavy spring rains, and normal snow pack, the lake filled nicely and has stayed full. Normally by August, the islands in the lake are well above the surface. The diversion channel will have a depth of about 2 feet deep at its higher flows before it hits the split in the diversion, this is my best guess. Also, that is at the highest flows of spring. Even major rain events in summer won't do much to add water to the channel and make it to the lake...so essentially, the channel dries up in about July and stays dry until sufficient rains or snowmelt fill it again. Most likely that would be in Spring.

We have to be able to keep water in both Telcher Cr. and the Tolo lake creek side. Cattle from Johnston's fields use Telcher Cr to water. I hope that doesn't confuse the issue and we can resolve it soon. Tolo is a popular stopping place, and is starting to attract more fishermen and kids. Call me if I can be of further help if you need to. My biggest concern is to get the water running efficiently back to the lake to maintain a flow, if that can ever happen. Let me know if you have any questions.

Roy J. Kinner
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From: Weaver, Mathew [mailto:Mathew.Weaver@idwr.idaho.gov]
Sent: Wed 8/27/08 7:33 AM
To: Hand,Robert; Kinner,Roy
Subject: Tolo Lake WR Field Exam

Mr. Kinner,

8/27/2008

On July 9, 2008 Robert Hand and myself performed a field exam for the Tolo Lake water permit no. 79-7210. I have attached a proof report (summary document) of the permit. During the field exam I am charged with verifying the point of diversion (POD) location, the flow rate, the place of use (POU), and in this case the volume of the use. During the field exam I was able to verify the location of the POD and the POU. Robert is going to provide me a bathymetric survey of the lake in the near future (hopefully) so that I will be able to calculate the volume of the lake. All that is remaining is calculating a flow rate. During the time of the field exam I measured the flow rate of the diverted water to be approximately 0.33 cfs, however, all of this water leaked back into the main channel within 15 feet of traveling down the Tolo Lake diversion channel. It was not apparent to me at the time of the exam that water can reach Tolo Lake at all in the current state.

I was hoping you could shed some light on the picture for me. I was given your name by the local farmer who said that you are out there regularly maintaining the diversion works. The permit is asking for 5.00 cfs, at the time of my field exam I witnessed 0 cfs entering Tolo Lake. I'm sure the true value lies somewhere in between. It is hard for me to imagine that 5 cfs can ever pass through the diversion works, but then I don't have a good feel for the velocity of the channel in spring run off. On the other hand, unless there is some other source of water to Tolo Lake, the diversion must supply some water to the lake in some fashion through out the course of a year. If you could answer the following questions I would appreciate it.

- (1) Does water get to Tolo Lake annually through the diversion works pictured below and described as the POD on the permit? If so when and how?
- (2) Do you have any estimate on seasonal peak flow rates or velocities through the diversion works?
- (3) Are there any other sources of water to Tolo Lake?
- (4) Is the severe leakage in the diversion works a recent occurrence or has it always functioned in its' current state.

I certainly appreciate your help, and Roberts in resolving these issues. Once we have satisfactorily answered the question of volume and flow rate I will be able to issue the final water right license. In the unlikely event that we can not answer the above questions we may have to modify or void the permit. Please feel free to contact me with any questions.

Thank you,

Mat Weaver, PE
Staff Engineer
Idaho Department of Water Resource
(208) 287-4914

<<79-7210 WRProof Report.RTF>>

