These written comments by Rick Mauthe have been submitted on April 6th, 2025 to Brian Ragan via email at brian.ragan@idwr.idaho.gov regarding the Matter of the Proposed Expansion of the Eastern Snake Plain Aquifer Area of Common Ground Water Supply to Include the Big Lost Tributary Basin

Please consider the following concerns, issues, facts and recommendations before making a decision about adding the Big Lost River Tributary, either in whole or part to the Snake River Plain Area of Common Ground Water Supply. It may appear I am being overly critical of the Idaho Department of Water Resources in their actions and decisions. I admit I am to a degree but am offering constructive input which, I hope will be considered. After the public hearing on March 24th, 2025 regarding the decision to add Lost River Tributary to the Snake River Plain Area of Common Ground Water Supply I had the following concerns with the proceedings and impending decision:

Bill 1341and 42-233c

How and why did the addition of Big Lost River Valley, up to the Mackay Reservoir Dam get added to the Snake River Plain Area of Common Ground Water Supply as of July 1, 2024? Was this based on some little advertised and available update to the Snake River Plain Model? I'm sure the attorneys for the Department of Water Resources will disagree with me on this, but as I read Bill 1341 and the subsequent implementation of the verbiage into the Idaho statues it tells me the legislature gives the authority to the Director to execute the process to add tributaries to the Area of Common Ground Water Supply. I do not see any specific verbiage stating that the Director, by authority of Bill 1341, and without process of a hearing to consider public input, allow IDWR the capricious ability to expand the Area of Common Ground Water Supply into the Big Lost River Valley. It makes little sense that within a short period after the passing of the bill well owners in the Big Lost River Valley were notified that they are now included in the Snake River Plain Area of Common Ground Water Supply and subject to curtailment.

What makes even less sense is that the Bill specifically authorizes the Director to consider adding tributaries to the Area of Common Ground Water Supply. Why jump the gun and add ground which '*may'* be added as authorized in clear language by the Bill. While it is appreciated that IDWR conducted the hearing and allowed the affected public the opportunity to be heard. Unfortunately, it's pretty apparent that the low turnout for the hearing demonstrates the public's level of apathy who believe it doesn't matter as the decision is already pre-determined and the hearing is merely a procedural show. The hearing should have been visually recorded so you could see the body language and facial expressions of indifference from the department personal when the public asked questions and presented testimony. After the hearing several attendees mentioned to me the inattentive attitude and body language exhibited by the IDWR representatives.

Data -

I asked at the hearing what the confidence level was in the data used in the model development and for decision making. The answer from the IDWR experts present at the hearing was they did not know. This was disturbing. Any analyst worth their salt knows low confidence in your data strongly supports the adage "Garbage in, Garbage out". I continue to hear it's the best data we have available. If you lack confidence in your data, why would you press forward without determining root cause of suspected or known issues with your data sources; then taking corrective actions to raise confidence levels in the data. Is it inadequate sampling rates, sampling frequencies, faulty sampling procedures or a myriad of other potential reasons to step back and consider why you're willing to accept data you ultimately know may be flawed but press ahead to meet deadlines or leadership mandates.

When asked to see the data the answer is always "it's out there and available". Perhaps a little more transparency and communication about modeling committee involvement, data attributes, data location, explanations about what's going on etc. would be greatly appreciated. Telling me, or anyone who inquires that 'it's available' without a push out of a link, location, etc. gives the impression that someone doesn't want the information to be seen and possibly scrutinized and challenged. Perhaps sharing the model and underlying data would generate too much interest and the Department just doesn't have the manpower to field all the inquiries. I, for one, would like to see a meeting where the 'experts' show and explain the model and corroborating data. It may be too technically deep for some of the pumpers effected by the potential action, but all of us should be offered the opportunity to witness the evidence which is the basis for the injury claim.

The pie charts offered at the hearing are just too high a level of aggregation without explanation of the measuring methods, frequency of sampling and influences of other variables. I heard 30 years of data collection at the hearing. I can offer examples of surface and ground water measurements that are blatantly erroneous year after year. I know USGS measured wells in the water district. I tried to find the results of that effort as I assume it is data utilized in the model(s) and reports. Most of us are too busy trying to make a living to spend days attempting to extract evidence against us. That evidence should be presented to us, in detail, not in a high-level pie chart with numbers we are expected to believe and accept.

Where did the numbers come from for the volume of underflow water shown in the pie chart. We all know it is not possible to accurately measure that flow. I assume it is somehow derived from a/the model based on the potentially error contaminated data of input and diverted flows, evapotranspiration, surface flow, calculated shrink and other factors, so whatever is remaining is best guessed and considered the underflow? This is the method or model that the ditch riders use to make their logs 'work' in this basin. If they can't account for some of the diverted water, they call it shrink, or just 'cook the books'. If they can't find your well to read your meter, which has happened in dozens of cases I'm not

sure where the numbers come from for some ground water diversion readings. Bottom line is there is no empirical data for underflow leaving this tributary. The underflow data is theoretical and circumstantial at best as well as to where that underflow eventually ends up. In the past it was always said that it went to thousand springs, now the party line is that it goes to Blackfoot. We've all been told that the best guess theory holds up in court. I would speculate the data may possibly corroborate a depletion of the local aquifer in the Big Lost basin, but it's pretty much a pseudo-scientific stretch to tie our local aquifer to the Snake River Aquifer with best guess theory. Are we contributing to the underground aquifer outside the Lost River Valley? Possibly? Too little? Too Much? Let's quit guessing. I have not heard a definitive answer to what my impact is to an injury claimant. I hate to think it's going to be based on a scientific theory which cannot be definitively verified.

Models -

It is a well-known fact, whether it is acknowledged consciously or not by modelers involved in developing models for the department's objectives, that in the words of a prominent model expert "All models are wrong, but some are useful". In my professional experience of models, data analysis and reporting, in the beginning of projects an objective is stated consciously or unconsciously by leadership. Unfortunately, whether stated and documented outright the desired outcome is understood and the effort is made to achieve the desired outcome. The verification of that premise lies in the lack of inclusion or exclusion of the effected parties.

I lack knowledge of the involvement of affected pumpers in the initial model for the Snake River Aquifer, but I have repeatedly asked who and how were pumpers in the Lost River Valley involved in the expansion of the existing model, and now what appears to be an over lapping new model for the Lost River Tributary.

As far as I have been able to determine, one person from the Ground Water District involved himself, however it is common sentiment that this one individual does not represent most pumpers interests in the tributary, but only represents his own interests. I'm sure he would probably dispute that presumption.

How does the ongoing ditch lining and piping of surface water affect the data fed into the model? It's probably premature to have substantive sampling since these projects are fairly recent.

How is the interim nature of the Big Lost River addressed in the model? Just as limited flow, which we all know is the nature of a designated interim stream.

I was extremely concerned when, during the Water District 34 annual meeting earlier this year David H. stated (not verbatim) that they looked at nine models for the Lost River Tributary and picked the one that best suited the objective. I'm not sure there is an out of the box simulation model which successfully addressees all the desired attributes without

significant customization. Is that happening? Hence my point regarding a predetermined outcome to achieve the Department's objective. What about the overlap in the models? You heard there is significant interest in the models at the hearing. I'm perplexed by the lack of openness about the evidence which will be the basis for a decision.

Mitigation and Financial Impacts –

The connection between surface and ground water is conceded. Conjunctive management is a good and valid concept, except when you insert a means of circumventing the priority doctrine. Introduce mitigation to allow junior ground water pumpers to continue to withdraw ground water by compensating demonstratively injured senior right holders, mostly by supplying compensating water commensurate with the ground water withdrawn by the junior right holder. Great concept if you can unequivocally demonstrate a direct connection between the injured party and the accused injuring party.

Mitigation is solution to a problem created by the responsible agency who also over allocated the available water resource in the past. Over allocation is a problem solved by the priority doctrine. Strictly enforcing the priority doctrine would prove to be an economic disaster to the agriculture industry as it would shut down some if not all junior ground water right holder pumpers. On the other hand, mitigating by joining a plan which purchases water to supply to injured parties costs money and uses even more of the limited available water resource. By adding more mitigants to the 'water purchasing machine' looking for any available water is only going to escalate the price of that available water. Sooner or later available water will be exhausted, then what? How does that impact the Big Lost River Tributary? Avoiding curtailment as determined by a methodology on a distant aquifer only leaves very limited means of mitigation for the pumpers of the Lost River Basin by joining a plan and having the plan purchase additional water at a potentially higher price because of demand or purchasing your own water to supply and try to get a plan for the delivery of that water approved by IDWR, who has already stated that the odds of approving an independent mitigation plan is nearly impossible if anyone protests it. We all know the big mitigation plan salesmen will protest any competing plan. The attorney for the big mitigation machine has publicly stated that they need our money and there should only be one plan.

Also consider the collateral damage to property values.

Conclusions and Recommendations

It would be foolish to believe that one model which includes the major body of the Eastern Snake Plain Aquifer Area, and the Big Lost Basin Tributary aquifer could accurately depict and establish a useful simulation tool upon which to base substantive decisions due to the obvious differences in geology, weather, underflow, snowpack and lack of surface outflow of the main tributary. Are the two related and interconnected? One could theoretically

conclude without empirical data that yes, there appears to be a connection, however the exact connection parameters would merely be speculative. Is ground water consumption in the Lost River Basin potentially depleting the local Lost River Basin Aquifer on low runoff years? Possibly, the data collected could and should verify the depletion or recharge if it is not corrupted.

Do ground water withdrawals in the Big Lost Basin directly affect the Surface Water Coalition rights?

Is the Lost River Basin Tributary the same as the other tributaries being considered to be aggregated into the bigger, and further diverse Snake Plain Aquifer situation?

Whining that "It's unfair" by the Snake Basin Aquifer pumpers is hardly scientific validity for a premature or predetermined decision.

With many questions remaining unanswered regarding any actual injury as claimed I would propose the following:

Prior to making an 'everyone is guilty and hence punishable equally' decision I implore the Director to consider allowing the Lost River Basin groundwater pumpers to solve any local groundwater deficiencies identified by an acceptable model using local solutions approved by IDWR which can also go towards satisfying downstream claims of injury.

The Lost River Basin water users have consistently over the years made concerted efforts in groundwater recharge but have been denied credit for their efforts.

We, in this Basin have no direct means of supplying surface water to the aforementioned injured parties, but we can improve the underflow out of our tributary and hence pressure to speed Snake Plain Aquifer delivery through local conservation and mitigation methods. If it appears through sampling that we are not achieving the desired results then more global solutions may be necessary.

Our limited options for mitigating as currently thought only include purchasing limited water resource through an approved mitigation plan. That solution is only providing monetary input to the mitigation business and is not addressing the underlying resource problem.

What's to say that those pumpers directly withdrawing from the Snake Plain Aquifer are not putting negative pressure on our basin aquifer and 'sucking' it down. Then who is injured? It's just as absurd a concept as the 'accepted' theory of our connection to Thousand Springs, or is it Blackfoot now? Others may have thoughts and ideas about how to mitigate local aquifer depletion.

Given the unique parameters of our basin give us the opportunity to be involved and assist in solving this resource problem, not further penalizing and financially crimpling the basin's municipalities, schools, recreational business' and foremost the agriculture community. We are not the large corporate owned farms with deep pockets to be able to throw money at bypassing the priority doctrine.

I would like to see and participate in the model development, understand the data attributes for this tributary as well as see the larger model which is encompassing the Snake Plain Aquifer. Please advise me how I can get involved and obtain access to the models and data collection efforts and attributes, basically be afforded the opportunity to witness the detailed evidence against the water users of the Big Lost River Tributary.

I am more than willing to assist in organizing and getting the word out for a meeting where people can witness and have the evidence explained.

Thank you for your consideration of my comments, recommendations and requests.

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