

I have a number of concerns about the draft Integrated Water Master Plan that was presented to CSD by Adkins/Maddaus. I have only had limited time to look at the draft plan but two things stand out to me. I have also heard the questions and concerns that have been expressed by other people. At this point I have seen only minimal responses to those concerns and questions by CSD and by Adkins/Maddaus. The only responses I have seen were the question and responses on the CSD website (at: <a href="https://www.ranchomurietacsd.com/frequently-asked-questions.html">https://www.ranchomurietacsd.com/frequently-asked-questions.html</a>) and the responses were properly labeled 'responses' because for the most part they were NOT ANSWERS to the questions that were asked - they were merely 'responses'.

Overall, my biggest concern at this point is that the many serious questions and concerns that have been raised by the community will be ignored and that we will be saddled with a deficient and faulty IWMP and the consequences thereof. I implore you - directors and management - to do your job to ensure that the final IWMP is appropriate. To do that, the community's questions and concerns need to be addressed.

Like I said previously, I have had only limited time to look at the draft IWMP and the concerns I mention in this email are only two of the many concerns from the community that need to be addressed.

## My First Concern

My first concern is the concern that John Merchant has expressed about the accounting for seepage from the reservoirs. While Adkins/Maddaus has made assumptions about the amount of seepage/evaporation that are hard or impossible to confirm, John has used the actual reported number for the reservoirs and has concluded that seepage is significantly more than Adkins/Maddaus is using. I haven't personally reviewed and analyzed John's numbers and calculations, but he has made a cardible case. It is possible that John is wrong. However he has provided his numbers and if somebody says that his conclusions are wrong then they need to show us where John's numbers are wrong or his reasoning is wrong. At this point, John has presented his case and CSD and Adkins/Maddaus have ignored him. This would probably have a significant impact on the supply of water in Rancho Murieta and needs to be addressed. I think it would be totally unacceptable to accept the IWMP without fully responding to this concern.

## My Second Concern

My second concern is that the Adkins/Maddaus data (and/or their 'model') is simply wrong.

They have included charts in the draft IWMP (Figures 5-5, 5-6, 5-7, 5-8, and probably others) that are simply WRONG.

For anybody that is familiar with the source of water for our reservoirs and who looks critically at these charts THEY ARE VERY OBVIOUSLY WRONG and it sticks out like a sore thumb when you are aware of it.

For me, this raises very serious question about 1) Adkins/Maddaus, 2) their data, 3) their model, 4) their conclusions, and 5) the IWMP itself.

Prior to the completion of the draft IWMP, I submitted this concern to Director Booth asking to whom I could submit my question/concern and he forwarded it to General Manager Mimi Morris for a response. As is typical with the IWMP, this question/concern was not addressed and I got no response. And the error continued into the draft IWMP.

I could possibly be wrong about this error that seems so obvious to me and I have tried to figure out how I could possibly be wrong but haven't been able to do it except for one implausible explanation that I will mention later. If anybody can explain it to me then please do so.

The figures that I mentioned (Figures 5-5, 5-6, 5-7, 5-8, and probably others) seem to all be obviously off by three or four months. Below, is a copy of Figure 5-5, with three vertical red lines that I have added.



## **Reservoir Usable Supply Levels and Drought Triggers**

To state the obvious, the water in the reservoirs reflected in these figures are usually (if not always) at their maximum on May 31 of the year - the end of the pumping season when CSD makes sure the reservoirs are at their maximum level. However, the figures in the draft IWMP show the maximum levels in February and March! This seems obviously wrong to me.

Below is the actual combined water levels (in acre-feet) for Calero and Chesbro that were reported in the monthly CSD board meetings (January through July) for each of the 3 years shown in the Figures (the list shows the month of the board meeting and the effective dates of the reported volumes):

		2022	2023	2024
Jan	12/31	2732.2	2151.3	2388.3
Feb	01/31	3200.1	2857.6	3058.7
Mar	02/28	3711.3	3130.3	3223.1
Apr	03/31	3706.5	3118.6	3061.9
May	04/30	3823.5	0.0	3655.9
June	05/31	3992.2	3708.3	3708.3

## July 06/30 3114.2 3435.0 3259.0

Note that the volumes in 2022 were prior to the recent bathymetric/topographic study and are off by some fixed amount and that that all of these numbers include dead storage, however the trends are obvious with the reservoirs at their maximum volume at the end of May.

These number are as expected. The Figures in the draft IWMP do not reflect this.

The only explanation I can come up with is that Adkins/Maddaus made some wild adjustments for climate change where storms and snow melt would occur much earlier radically changing the flow of the Cosumnes. However, I suspect that isn't the explanation.

This is not acceptable and I think we need an explanation from Adkins/Maddaus. Are these just fake/dummy figures that they threw into the IWMP hoping that nobody would notice? Does this actually reflect the data that they are using, which would make us completely question their results? Or what?

I can't think of any acceptable explanation.

-- Richard Gehrs