



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF WATER RIGHTS

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April 19, 2002

George Douglass
 Deep Creek Mountains Ranch
 Callao Star Route Box 380
 Wendover, Utah 84083

Dear George:

Enclosed is a copy of the letter that I sent to Jim White and the letter that I sent to Glen Allred. Hopefully Jim will respond quickly and then we can figure out where we stand.

At the meeting yesterday, Buck brought up the same concern that you had expressed to me about the discrepancy between some flow measurement readings that he had taken at Allred's Granite Creek diversion and the flows that were reported from the aquapod data that Glen sent us. The one that we discussed specifically was the measurement that he took on June 4, 2001. I forget what flow Buck said that he had measured but I believe that it was somewhere around 8 cfs. The aquapod report shows an average flow for that day of 3.70 cfs. I suggested at the meeting that the difference may be due to a diurnal variation in the streamflow.

I checked the data that we received from Glen for June 4th and thought that I would let you know what I found out. It appears that the aquapod is set up to make four readings a day which are six hours apart. I had thought that it was taking more readings than that. During most of the summer that is probably adequate, however, I might talk to Glen about getting hourly readings during those periods of the year when the stream flow is increasing or decreasing significantly.

Here is the aquapod information for June 4th:

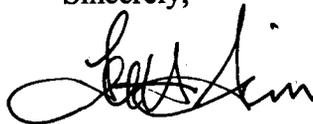
<u>Time</u>	<u>Water Level Reading</u>	<u>Flow Rate</u>
12:34 am	0.81	4.56 cfs
6:34 am	0.25	0.80 cfs
12:34 pm	0.81	4.56 cfs
6:34 pm	0.84	<u>4.86 cfs</u>
	Average	3.70 cfs

From this information, it is apparent that there was no diurnal fluctuation in the steam flow on June 4th. It is also apparent there is a bad reading that day and the average flow we calculated is in error. We should have taken out that bad data point but we missed it. Instead of 3.70 cfs the average flow should have been calculated to be 4.66 cfs. This is a good example of the type of problem that can occur once in a while with the aquapod. When the data is erroneous it is obviously erroneous. However, this does not lead me to believe that the other data collected by the aquapod is in error. I can't explain why there is such a discrepancy between the measurement Buck took and the flows measured by the aquapod. There is a possibility there was some error in Buck's measurement.

Hopefully this year Jim White will agree to continue as commissioner and will be able to send in his staff gage readings. That will give us a more certain verification.\

If you have any questions, please contact me at (801)538-7380 or by e-mail at nrrwt.lsim@state.ut.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lee H. Sim', written in a cursive style.

Lee H. Sim, P.E.

Assistant State Engineer for Distribution

cc: John Mann, Regional Engineer
Glen Allred