From: Tim Barnett [tbarnett-ul@ucsd.edu] Sent: Friday, April 27, 2007 10:13 AM To: strategies@lc.usbr.gov Cc: tbarnett-ul@ucsd.edu Subject: Objections: Colorado EIS

Importance: High

4/13/2007

TWIMC....

I was

>reviewing the USBR EIS* on operating rules for the Colorado in times of >water shortage. The results of that EIS are practically useless and, if implemented, will put the public interest at risk. My reasons for this statement are as follows:

>Essentially, they use a river/reservoir model forced by 50 years chunks >of actual Colorado River flow. These runs under different river flow >scenarios are used to estimate the likely range of future levels of >Lake Mead (say); the probability the Lake will be full or empty. In >fact, their simulations show a disturbingly large range of >possibilities from full pool to a level near dead pool. Just how the >Lake is operated depends on these probabilistic estimates of future >elevation.

>

But the analysis done by USBR to date and the one on which the >EIS is omits one huge factor. Essentially, their analysis to date >assumes the past climatic variations in rainfall, snow levels,
 >evaporation, etc are good estimates of what the future will be >like..past river flows are good estimates of future river flows. In >their case, this is a fatal error that, in my view, negates the basis >of the EIS.

>Numerous studies over the last 10 years have shown the climate of the >Colorado drainage will change markedly in the next few decades (it is >already!). There will be less rain, snow pack will disappear earlier, >increase temperatures will increase evaporation, etc. In short, the >EIS is defined for the past, not the future. As such it is largely >unreliable for decision makers.

>

> I believe the model forcing changes could be estimated from >existing information. They could be added to the existing simulations >and the whole probability structure of future possibilities be made >available to decision makers.at least then we would be taking a fairly >realistic look at the future of the Colorado system under the climate >change scenario. Given that the system is uncomfortably close to >failure now, we need the best look at what to expect. >

> One other item along the same lines:

>while USBR talks about inflow, outflow, etc in the EIS, they never
>factor in increasing population. The 20 million more folks expected to
>rely on Colorado water by 2030 will need something like 3 maf MORE than
>is required today. This is order 20-30% the typical inflow to Lake
>Powell today. And as we have seen, numerous studies all show that
>inflow will decrease in a greenhouse world. So where does that extra
>water come from?

Thank you for your consideration. Dr. Tim Barnett, Climate research Div, Scripps Inst Oceanography, La Jolla, CA

>

>

>

>* Draft EIS Feb, 2007. Colorado River Interim Guidelines for lower
>Basin shortages and coordinated operations for Lakes Mead and Powell.
>--