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July 19, 2010

Ray Alvarado
Water Information Section Chief
Colorado Water Conservation Board
1580 Logan Street, Suite 200
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RE: Comments on the Draft Colorado River Water Availability Study Phase I Report

Dear Mr. Alvarado:

The Wyoming State Engineer's Office provides the following comments on the draft Colorado River Water Availability Study Phase 1 Report (hereafter draft CRWAS report). The *Technical Approach and Findings* section includes a description of the methodologies used for this study, which included assessment of historical hydrologic records, paloehydrologic analyses, and the use of climate-adjusted hydrology. Our comments primarily focus on the results of the climate-adjusted hydrologic evaluation.

Figure 3-37, entitled "Future Water Available for Future Consumptive Use by Colorado (MAF)" shows a very large range of potential outcomes as to the amount of water available for future use by Colorado. In fact, the climate-adjusted evaluation can be read to indicate that, under certain assumptions, Colorado may have no remaining water to develop. Such a finding becomes headline news, even though the analyses are qualified in the *Conclusions and Recommendations* section of the draft CRWAS report (Executive Summary, page VII) which recognizes that:

> "The primary underlying drivers for the broad range of Phase I results are: 1) the inherent uncertainties in the available global climate models in projecting the magnitude and nature of future greenhouse gas emissions; 2) the complexity of modeling atmospheric circulation; and 3) down-scaling the resulting effects of changed temperature and precipitation on natural flows in an area the size of the Colorado River Basin."

We note that the report (Executive Summary, page II) states that "Phase I of the CRWAS presents the amount of water that may be available for future consumptive use in Colorado solely for the purposes of this Study and is neither the State of Colorado's nor any party's compact interpretation." We appreciate that statement, and opine that neither must it affect, by association, Wyoming's interpretation of our compact entitlements. Presenting data and stating that the lower range of water availability for future Colorado consumptive use "suggests that Colorado may have no or limited additional water available for development..." (Executive Summary, page VII) can convey a message to other interests in the Colorado River Basin that is problematic when viewed in terms of the mutual interests of the Upper Division States. We will not allow an analysis done in Colorado to, in any way, imply that Wyoming agrees to or is similarly bound by the results.

The context of that message is further compounded by this being the Phase I draft CRWAS study (that purposely has limited water uses to current levels of water demands served by perfected water rights). Some readers may presuppose that the upcoming Phase II study (which will assess water availability to meet future water needs) cannot possibly come up with any other conclusion except that – at the lower range of availability – Colorado has already overdeveloped beyond what its water supply can support. Such a finding would be troubling for both our states.

Consider too that article IX(a) of the Upper Colorado River Basin Compact (1948), which allows diversion of water in one signatory state for use in another, requires that such an action involve water "…which is within the apportionment to such State by this Compact." Any finding of no additional developable water for Colorado under the Compact, even as one of several alternative analyses designed for planning purposes, seems to complicate any project conceived along such lines.

Thank you for the opportunity to provide these review comments.

Regards,

Patrick T. Tyrrell
Wyoming State Engineer

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