

August 1, 2007

Daniel J. Bright
United States Geological Survey
Henderson, Nevada

Re: Written Comments Of Beaver, Millard, Juab and Tooele Counteiss, Utah
Regarding Draft USGS (BARCAS) Report

These comments are submitted on behalf of the following Counties in Utah:
Beaver County, Millard County, Juab County and Tooele County.

These are written comments on the draft report on the Basin and Range carbonate-rock aquifer system (BARCAS) study and related materials, released June 1, 2007 by the U.S. Geological Survey (USGS) for public comment (collectively referred to hereafter as the “draft USGS report”).

When the draft USGS report first came out on June 1st, I noted that comments were due 60 days thereafter. I subsequently lapsed into thinking the comments were due August 1st, failing to realize that technically speaking the 60th day falls on July 30th. I apologize for not submitting these comments by the exact 60th day from the June 1st public release of the draft USGS report, and I respectfully request that you receive these comments as they are submitted exactly two calendar months after the June 1st release of the draft USGS report.

The draft USGS report was directed by Congress in the Lincoln County Conservation, Recreation, and Development Act of 2004 (PL 108—424). Section 301(e)(1) of the Act, as amended October 10, 2004 and eventually passed, requires that a study be conducted

“to investigate ground water quantity, quality, and flow characteristics *in the deep carbonate and alluvial aquifers* of White Pine County, Nevada, and any groundwater basins that are located in White Pine County, Nevada, or Lincoln County, Nevada, and adjacent areas in Utah.”

The directive of the statute is not made in reference to given groundwater basins; rather, the directive is in reference to the *aquifers* of those groundwater basins, be they alluvial or alluvial, namely “the deep carbonate and alluvial aquifers of White

Pine County, Nevada, and any ground water basins that are located in White Pine County, Nevada or Lincoln County, Nevada, and adjacent areas in Utah.”

Two groundwater basins fit the definition of being located in either White Pine County or Lincoln County and adjacent areas in Utah. They are Snake Valley located in both White Pine County, Nevada, and Utah, and Hamlin Valley located in both Lincoln County, Nevada, and Utah. Thus the directive of the statute is clear: Investigate the deep carbonate and alluvial aquifers of Snake Valley and Hamlin Valley groundwater basins, as opposed to just the groundwater basins per se.

Thus while the study area of the draft USGS report includes the Hamlin Valley groundwater basin proper, it fails to include the following two hydrologically connected parts of the common Great Salt Lake Flow System Aquifer that lies beneath the Hamlin Valley groundwater basin: 1) Pine Valley and 2) Wah Wah Valley, both situated to the east of Hamlin Valley. And while the study area of the draft USGS report includes a major portion of the Snake Valley groundwater basin proper, it fails to include the following five hydrologically connected parts of the common Great Salt Lake Flow System Aquifer that lies beneath the Snake Valley ground water basin: 1) Tule Valley, 2) Fish Springs Flat, 3) Dugway-Govt. Creek Valley 4) Deep Creek Valley and 5) Great Salt Lake Desert immediately north of Snake Valley.

These seven areas are integral parts of the Great Salt Lake Desert Flow System aquifer that lies beneath the Hamlin Valley and Snake Valley groundwater basins. The hydrogeology of these seven areas is essential to understanding the Great Salt Lake Desert Flow System Aquifer. They are hydrologically connected to the Hamlin Valley and Snake Valley basins and could be impacted by the proposed ground-water development. Omission of these seven areas constitutes an important flaw in the study as a whole, as well as a failure to abide by the directive of the Lincoln County Land Act statute. Again, that statutory directive issued not in reference to the given groundwater basins per se, but rather in reference to the alluvial and deep carbonate aquifers of those groundwater basins. Thus for the Hamlin Valley and Snake Valley groundwater basins, the study area must include the above-mentioned seven areas in order to comply with the Statute and give an adequately complete hydro-geological picture that the Statute requires.

After all, various figures and charts the draft USGS report and associated materials themselves show convincingly that the seven areas mentioned above are all part of

the hydro-geological flow system known as the Great Salt Lake Desert Flow System Aquifer. It is perplexing, therefore, to see that these seven areas are omitted from the study area of the draft report.

For these reasons, the study area of the draft USGS report should be revised to include all of the Great Salt Lake Desert Flow System Aquifer, specifically including Pine Valley, Wah Wah Valley, Tule Valley, Fish Springs Flat, Dugway-Govt Creek Valley, Deep Creek Valley and relevant portions of the Great Salt Lake Desert on the northward extension of Snake Valley.

It should be noted that USGS' parent agency Department of Interior, in its 2006 Stipulated Agreement with Southern Nevada Water Authority ("SNWA") over SNWA's water applications in Spring Valley, Nevada, expressly agreed with SNWA to a so-called "Area of Interest" depicted in Figure 1 of that Agreement. That Area of Interest specifically includes six of the seven areas mentioned above: Pine Valley, Wah Wah Valley, Tule Valley, Fish Springs Flat, Dugway-Govt. Creek Valley and Deep Creek Valley. The Stipulated Agreement calls for the study, investigation, monitoring, protection and mitigation of impacts in the Area of Interest that may result from any SNWA groundwater pumping activities. Given that DOI bargained for the monitoring and protection of these these six areas as part of the overall Area of Interest in the Stipulated Agreement, and did so presumably because of the obvious hydrological connection as part one common groundwater aquifer, it is untenable that USGS would shrink the study area of the draft USGS report down from the Stipulated Agreement's Area of Interest and lop off these six areas for purposes of the draft USGS report, especially given the nature of the statutory directive.

Respectfully submitted,

J. Mark Ward
Utah Association of Counties
For Beaver, Millard, Juab and Tooele Counties, Utah