

BLM_NV_NVSO_GWProjects

From: DAVID SEGGERN <vonseg1@sbcglobal.net>
Sent: Sunday, October 09, 2011 8:43 PM
To: BLM_NV_NVSO_GWProjects
Subject: comments on SNWA water EIS
Attachments: GBG_SierraClub_comments_waterEIS.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

I have also mailed my comments, but wanted to be sure they made it in time. Please download the attached PDF.

David von Seggern



**Great Basin Group
Sierra Club
P.O. Box 8096
Reno, Nevada 89507**



The Bureau of Land Management
Groundwater Projects Office
P.O. Box 12000
Reno, NV 89520-0006

Dear BLM Staff:

On behalf of the Great Basin Group of the Sierra Club and our over 2,500 members in northern Nevada, I am submitting comments on the *Clark, Lincoln, and White Pine Counties Groundwater Development Project Draft Environmental Impact Statement (DEIS)*, issued June 2011.

Our members recreate in eastern Nevada, quite often at Great Basin National Park, and have been involved in many past issues affecting one or more of the counties addressed in this DEIS. Preserving a healthy landscape and ecosystem in Nevada is one of the club's foremost goals for local members in Nevada. The impacts of this project are of serious concern for our local club members.

General Comments:

The BLM, and its cooperating agencies, have done a laudable job in bringing forth this document. The analysis of environmental impact is deep and thoughtful and in most cases is adequate for public understanding. The level of detail in many parts of the documents is highly commendable. Overall, the document is commensurate with the scope of the proposed action.

The DEIS documents likely environmental impacts which are enormous, significant, and, I believe, unprecedented in scope for a single project in Nevada. Nearly all of the impacts are to public land. In the face of such overwhelming documentation and the dubiousness of SNWA's claims of "need", **I can only support the No Action alternative and ask that the BLM do likewise.**

Specific Comments:

Executive Summary Table ES-13, pp. ES-72 to ES-74. Some of the figures for the No Action alternative are difficult to accept. For instance, how can the No Action alternative cause nearly as many acres of private land to be in the drawdown area as the proposed action ("Land Use" item). Again, how can the No Action alternative cause about 6 times as many acres of public lands identified for disposal to fall into the drawdown area as the proposed action ("Socioeconomics" item).

Executive Summary, p. ES-75. The BLM has no Preferred Alternative. Surely the FEIS will contain a Preferred Alternative?

Chapter 1, Sec. 1.6, p. 1-12. The graph of population growth is mere speculation. We are virtually certain that Clark County population has leveled or decreased since 2008. The underlying bases for growth have been literally mined out, and it is just as reasonable to claim that Clark County will have zero growth in the 2010-2020 decade as the projected growth in the graph. This graph should be replaced by a more realistic assessment of growth.

Chapter 1, Sec. 1.6.1, p. 1-12 to 1-13. It is stated that "The Water Resource Plan (Appendix A) forecasts water demands through 2060 based on the June 2008 Clark County Population Forecast prepared by the University of Nevada Las Vegas Center for Business and Economic Research (CBER) (2008)." In reality, the current growth rate of Clark County is most likely negative. There is no reasonable basis to use the growth rate estimate of 2008, a forecast made before the financial collapse of autumn 2008 and the recession that followed, with continuing negative impact on the population of Las Vegas, its construction industry, the gaming industry, and the water consumption rates. To retain this projection as a basis for justifying the enormous impacts that will result from the proposed action is simply not acceptable, and the final EIS should adjust this according to the best and most current data. Of course, this alone would surely call for a change in the proposed action. (See also my comments on Appendix A below.)

It is imperative that SNWA provide figures on total annual water delivery between 1999 and 2010. The GPCD figure uses the variables of annual delivery and of population. What are the separate numbers they used for these two variables over the years? We cannot make a sensible assessment of the need without these separate figures.

While I applaud SNWA's seemingly impressive conservation progress, one asks if more could not have been done? Tucson, another city in a very dry desert area, uses only 177 GPCD, compared to 248 for Las Vegas. It could be argued that the current projected "need" of SNWA rests largely on a conservation effort that is a failure, not a success.

Chapter 1, Sec. 1.7.1, p. 1-16. Although it is stated that BLM has no "regulatory authority over SNWA's demand projections", it does have sufficient authority to dismiss projects which have no substantive basis, especially when the impacts to land and water are great. There is a record of

case law which would support the BLM in not granting, willy-nilly, ROW's on public land to projects that cannot be shown to be necessary.

Chapter 2, Sec. 2.5.1.3, p. 2-21. The total power requirements for this project are estimated at 97 MW. This is an amount that could be supplied by cumulative output of solar power installations at each point of necessary power consumption along the main corridor and at well sites. I find it amazing that "solar power" or "solar energy" does not appear in Chapter 2. Many operators have already built solar power installations in Nevada, and many more are in the permitting or development stages. Solar power is competitive in Nevada. Why has SNWA not presented an alternative plan for power generation which takes into account the new economics of renewable energy? Is it the need for baseload power? If so, then emergent technology such as battery storage, flywheel storage, salt storage, and gravity storage need to be examined. I suspect that such a plan would significantly lower the number of impacted acres needed for power generation in the proposed action. This really makes sense for outlying water wells where power line impacts greatly outweigh those of a small solar installation near the wellhead. Such an alternative plan would also present a very different footprint, wherein contiguous, more or less square, areas for solar power generation and storage replace long, continuous transmission line corridors and corridors for feeder wells. Such long disturbance corridors are a path for invasive vegetation, an attraction for illegal OHV usage, and a barrier for wildlife. Moreover, solar generation does not have the visual impact of high power lines. I am sure a plan using solar energy would significantly reduce many of the impacts described in this DEIS and have also have a beneficial impact on the long-term costs for SNWA to utilize this facility.

It is noteworthy and laudable that SNWA proposes to use some hydropower; but SNWA should be asked to go back to the drawing board and produce an alternative power plan using solar and, perhaps, wind installations in addition. This should be part of the final EIS. In such a large project involving many facets, it seems reasonable to ask for alternative analysis on various facets where appropriate, even beyond the alternatives for the entire project, as listed in Sec. 2.7.

Chapter 3, Sec. 3.1.1.2, p. 3.1-5 "Prevention of Significant Deterioration". It is stated that "The visibility at the GBNP is one of the best in the nation." It is further stated that "The GBNP is a Class II area, based on the Congressional legislation that brought the park into existence." It seems that GBNP has de facto been in a Class I area since its inception. Clearly an act of Congress to acknowledge that reality is worth pursuing; but, for purposes of this EIS, it makes sense to consider GBNP as a Class I area and to measure any impact relative to standards for Class I, not to those of Class II.

Chapter 3, Sec. 3.1.2.8, p. 3.1-39 "Greenhouse Gas Emissions from Groundwater Pumping". There is something wrong in the math for the CDE here. "less than 0.0005 percent of the CDE ... emitted by the U. S. and less than 0.5 percent ... emitted in Nevada" does not make sense. This implies a factor of $0.5/0.0005 = 1000$ greater CDE for U. S. compared to Nevada. I believe that we can generally assume that CDE ~ population. The U.S. to Nevada population ratio, by

the 2010 census, is 308.7/2.7 (in millions) ~ 114. The CDE ratio is probably off by an order of magnitude -- either 0.0005 or 0.5 is wrong (maybe just a typo). These numbers should be checked in the sections for the other alternatives.

Chapter 3, Sec. 3.2.2.9, p. 3.3-102. Map of 200-yr drawdown under proposed action. This map clearly implies a huge change in the ecosystem of the basins surrounding GBNP due to 50+ feet of drawdown. GBNP was originally envisioned to be larger so as to include significant portions of basins and thereby be more representative of the Great Basin than just the mountain range. The proposed action will preclude GBNP from ever expanding under this vision. The GBNP, being Nevada's only national park, should not have its destiny be circumscribed by vast groundwater drawdowns in the adjacent basins. This will not happen under the No Action alternative. Moreover, even the area within the park is threatened with 50+ feet of drawdown. This would be a loss to the park that has real consequences and an impact to all potential visitors. I am not aware of any other comparable proposed impacts to our National Park system.

Chapter 3, Sec. 3.14.2.9, p. 3.14-19 to 3.14-22. The impact of the project with respect to several of the ACEC's is very troublesome (best seen in Tables 3.14-23, -24, and -25). Although much of the construction can be purportedly mitigated, the long-term water withdrawal will bring obvious and detrimental changes to the ACEC areas for which no on-site mitigation is really possible. This will partially to wholly destroy the ACEC's. These ACEC's were set up to protect special areas from adverse human impacts and to preserve the biological character of the Great Basin, especially within riparian, wetland, and phreatophytic areas. While arguments might be made for pipeline and road construction within the ACEC's, water withdrawal on the scale of the proposed action is inherently at odds with the nature of these designations and should not be allowed.

Chapter 3, Sec. 3.14.2.9, p. 3.14-21. It is stated that "The NPS has noted that the statute that established the GBNP specifies that the purpose of the GBNP is to conserve the natural resources within the GBNP and provide for the enjoyment of those resources in a way that leaves them unimpaired for future generations." NPS states that this mandate requires that there can be no impact to GBNP resources from the proposed project." Clearly, this DEIS shows that the Proposed Action will have significant impacts on GBNP. This statement implies that the Proposed Action, and Alternatives A, B, and C, are clearly unacceptable.

Chapter 4, Sec. 4, p. 4-2 to p. 4.4. Table 4.0-1 is perhaps the most informative summary of the Proposed Action. It coldly and succinctly captures the scope of the Proposed Action's impacts in the long term. For those involved all along in the development of this DEIS, it may seem perfunctory; but for those who are really grasping the enormity of this project for the first time, it is riveting. It is therefore important that this table be stated as accurately as possible. I see the following shortfalls:

1) Air and Atmospheric Values -- Groundwater Pumping. The conclusion here is stated far too mildly and does not capture the summary of the full analysis of Sec. 3.1. Table 3.1-23, for

instance, shows a 5-fold increase in PM10 at build-out + 75 years. It is acknowledged in Sec. 3.1 that visibility in GBNP will probably be impaired due to this. The most visible effect of the Owens Valley, California drawdown by LAPWD is the barren expanse of former Owens Lake and the fugitive dust from the now dry lake bed.

2) Vegetation -- Groundwater Pumping. Chapter 3, Table 3.5-14 identifies approximately 8,000 acres of "wetland/meadow" area to have a 10+ drawdown in full-buildout + 200 yrs and approximately 191,000 acres of "basin shrubland" for the same. The summary paragraph here should incorporate these numbers as they imply a very large loss of natural vegetation in these regimes.

3) Visual Resources -- Surface Disturbance. The number of miles of transmission lines in the Proposed Action should be repeated here.

Appendix 4 of Appendix A ("Water Resources Plan"), p. 64. SNWA publishes here their own estimates of the population of Clark County. The two most recent decadal estimates of 2000 and 2010 are interesting to compare to the the US census figures:

year	SNWA	US census	SNWA/UScensus
2010	2,253,000	1,951,000	1.154 (115.4%)
2000	1,427,000	1,376,000	1.037 (103.7%)

SNWA numbers from Appendix 4, p. 64 of "Water Resources Plan", which is Appendix A of the DEIS

US census numbers from <http://quickfacts.census.gov/qfd/states/32/32003.html>

(Note that population numbers have been rounded to nearest 1,000.)

Note that the 2000 SNWA number is 3.7% larger than the US census. We may forgive them for that, but the 2010 SNWA number is a glaring 15.4% larger than the US census number. For a federal document such as an EIS, it seems compelling that US census figures be used rather than the figures of the applicant, which appear skewed to support their claims. The document in Appendix A is simply out-of-date, and current numbers would undermine SNWA's claim for future water demand. Again, SNWA must be directed to return to these figures, update them for the FEIS, and modify their proposed action accordingly.

David von Seggern, Conservation Chair,
Great Basin Group, Sierra Club