

Name	Comment
Barbara Evoy	<p>Section 6 Water Budgets Line 211 Table 6-4 Lines 130-210 Provide specifics of the data sets for calculating the current water budgets. However, starting with Table 6-4, Tables list Projected Condition Water Budget with Climate Change. There is no discussion of how Climate Change was analyzed. The document cited in the earlier tables (as the 2015 UWMs) does not include climate change analysis discussion either. This is a major flaw in the document and needs to be corrected in order to provide the reviewer an understanding of the assumptions and the modeling effort. See summary comments above.</p>
Barbara Evoy	<p>Section 5 Groundwater Conditions Line 94. It would be useful to be clear throughout the document as to timeframe. The statement "some wells have still not fully recovered" (from 2012-2016 pumping) is not clear without knowing whether this is 2018, 2019 or 2020 /2021 data (referencing separate file Appendices makes this clunky). In the context of the current drought crisis, it is important to know whether this conclusion includes the most recent dry years. It is not possible to read the axis of the hydrographs in Figure 5-3. See also line 123, line 131, line 149. Line 489 There is no mention of an effort to address the hexavalent chromium nor a source. Is there a known source for this contaminant or is follow-up investigation warranted? Line 506 The paragraph discusses the process for coordination with others on NDMA but not what levels of NDMA have been detected in Feb. 2004 and beyond. It would be useful to know how significant the problem is and whether or not the coordinated process is having any effect on the levels detected in the last 17 years. Line 652 New information presented recently (Lewis and Burgy 1964 study) to the South American GSP working group suggests root depth analysis for GDEs should use a depth of 80 feet, not the 30 feet used in the GSPD. In addition, The Nature Conservancy (TNC) is about to publish a study indicating root depths for certain oak species are 25 meters. In addition, a recent TNC study identifies the inability of oak woodlands to reproduce when ground water levels are too low. Therefore, a determination of appropriate root depths to maintain GDEs should be included as a potential data gap and for priority Management Action in the final GSP. Line 659 Given the number of monitoring wells with incomplete construction details in Appendix C, is there no need for further investigation as to the screened intervals?</p>
Barbara Evoy	<p>Section 3.8.2 Line 422-475 Given the number of historic curtailments in 2021, the document should be updated to provide some idea of the security of the water allocations discussed. Simply saying there is a post 1914 water right does not provide an idea of reliability. Many of the current 2021 curtailments are 1880s -1920s water rights or earlier. It is unclear how much of the regional supply is in jeopardy in the now drier water supply climate. As climate change continues to drive watershed systems to less snow and drier early spring/summers, water rights should not be discussed as a given allocation. They are subject to curtailment and are likely to be curtailed earlier and more frequently. To develop a regional budget, clear analysis of the surface water supplies is needed. Lack of surface water (cited as a little more than half of the regional supply (line 812)) will directly impact the groundwater demand. Figure 3-13 The Figure: Density of Domestic Wells Per Square Mile provides a very good attempt at a graphic depiction of the number of domestic wells in Disadvantaged and Severely disadvantaged community areas (although it is difficult to identify the enclosing boundaries along the water courses). This highlights the need to very carefully monitor the effects of GSA activities on these vulnerable areas. The South American Subbasin plans to institute a vulnerable well program to protect primarily shallow domestic users. This need is amplified where there are significant areas of disadvantaged community wells. We recommend that the NASb GSA consider instituting a similar program. Figure 3-16 Groundwater Level Monitoring Network. It appears to be some of the largest gaps in the Northeast corner of the GSA where there are some of the greatest densities of domestic wells and disadvantaged communities (Figure 3-13). Similarly, there does not appear to be good coverage in the southern part of the subbasin in high density domestic well areas. Figure 3-19 See typo in title Section 3 Line 827-834 As noted in the general comments, it is important to include the Water Accounting Framework in the accounting of the GSP gross input/output modeling. If specific allocations are to be considered in future water banking, it will affect the ability of others to withdraw water. Without this allocation within the overall budget, it is not possible to determine whether the management actions will be sufficient to address future groundwater level changes. This is especially important when there is the possibility of out of the basin transfers. Line 897 States that "Most of the land within the Subbasin is currently developed to some use and conversion from agricultural uses to urban uses is not anticipated to increase demand." This does not seem consistent with the fact that the draft stated on ES -1 that that 30 percent of the GSP area is either native vegetation or fallowed farmland. How does non irrigated land conversion to urban uses not increase water use? Line 920 Given modeling that indicates well levels overall are expected to remain near their current levels, it is understandable the conclusion is that there could be little to no impacts to domestic wells. Given that there are a) 2, 563 known domestic wells, b) 6, 471 Other/Abandoned/Unknown wells, and water purveyors in the area that expect to withdraw banked water in certain areas, it would be prudent to have a backup approach to ensure domestic and disadvantaged community wells do not run dry. We suggest the North American Subbasin consider this possibility and consider a vulnerable well program such as the South American Subbasin is developing. At a minimum, there should be a commitment to include robust monitoring as part of the Water Bank proposal. The discussion of the Water Accounting Framework includes no discussion of how the program may be operated to ensure no wells will run dry. There are similar concerns with the conclusions on GDEs in the area of potential water banking activities. (Line 926). Line 980-982 The draft GSP points out a very significant gap in the regional well permitting system - None of the well permitting agencies coordinates with county or city land developers. There are no setbacks or special investigation requirements for construction of supply wells near rivers or tributaries. It would be useful for this statement to point to the suggested action section.</p>
Barbara Evoy	<p>Executive Summary ES 80-87 This paragraph is awkward and should be edited for clarity. The layperson will have difficulty understanding the intent with the current sentence structure. ES 93 The sentence should specify generally stable over X timeframe reviewed. Same with statement on line 97. Perhaps starting the section with "Groundwater levels were analyzed over the time period of X to", as a way to clearly frame the conclusions of overall declines/recovery. ES 106 GDE depth to groundwater (see summary comments). ES 146 Without an explanation of how the climate change model was run, Table ES-1 has no context when "with Climate Change" is used. See summary comments on Climate Change. Table ES-2 The NASb is proposing a better definition of chronic lowering of groundwater levels, reduction in storage, and depletion of surface water undesirable results, with more clarity, than the South American Subbasin. Kudos.</p>

<p>Jeff Litton</p>	<p>How much will the groundwater drop if Nevada Irrigation District(NID) achieves their plan to construct Centennial Dam, divert 221,400 acre feet of water from Bear River above Camp Far West Reservoir, and sell huge amounts of that water to Southern California entities through the California Aqueduct as they have clearly demonstrated to be their plan? They paid to be part of a study showing how they can legally take water from South Sutter Water District and sell it to the highest bidders south of the delta. They paid to be part of a study for the Association of California Water Agencies showing their marketability to Southern California buyers. Releases are made down the Bear River to augment system-wide supply when CVP South-of-Delta agricultural water service contract allocations are below 20 percent. <a href="https://www.acwa.com/wp-content/uploads/2017/06/2017-06-05-ACWA-Integrated-Storage-Final-Report.pdf">https://www.acwa.com/wp-content/uploads/2017/06/2017-06-05-ACWA-Integrated-Storage-Final-Report.pdf</a> NID literally has no way to pay for the dam without selling that water on the water market. Can SSWD compete against L.A.? NID is not measuring how much extra water there is in the Bear River watershed below the Camp Far West diversions, they are only measuring how much water can be legally stolen from SSWD. NID considers all water going to SSWD as excess water. They are planning to use 1927 water rights under application 5634 to over-allocate the Bear River supply, and create shortage for SSWD users that is their plan. NID would have shortchanged South Sutter Water District 13 out of the previous 18 years studied, or 8 of the previous 10 years studied. Simply look at the amount spilled below Camp Far West Reservoir diversions, and subtract 221,400 AF. 1999, not enough water. 2000, not enough water. 2001, not enough water. 2002, not enough water. 2004, not enough water. 2007, not enough water. 2008, not enough water. 2009, not enough water. 2010, not enough water. 2012, not enough water. 2013, not enough water. 2014, not enough water. 2015, not enough water, and so on. SSWD farmers would be forced to resort to pumping more groundwater, and thereby jeopardize and likely lower the North American Subbasin groundwater level. During the NID Director candidate debates of 2020, former director Scott Miller said NID would continue fighting downstream users in court and win those cases to take their(his) water. A thorough analysis should be conducted to find out the downstream impacts if NID diverts 221,400 acre feet. How many farmers will lose water? How many wells will go dry? I have been to the Colorado River delta, where a great American river dies before reaching the ocean. I've seen what over-allocation looks like. For the sake of our farmers, and our family's well in Wheatland, I hope action is taken to stop Centennial Dam before it's too late. <a href="https://yubariver.org/wp-content/uploads/2016/01/a5634X01_noticeSWRCB.pdf">https://yubariver.org/wp-content/uploads/2016/01/a5634X01_noticeSWRCB.pdf</a></p>
<p>Brian Hensley</p>	<p>20% seems rather low for the number of wells exceeding the MT... especially since many wells have a range of only 2 feet between the MO and MT. 50% would be a more reasonable number.</p>
<p>Brian Hensley</p>	<p>" Chronic lowering of groundwater levels is considered significant and unreasonable when: Section 8 North American Subbasin GSP 8-10 PUBLIC DRAFT229 20% or more of all NASb representative monitoring sites have minimum threshold 230 exceedances for 2 consecutive fall measurements (8 out of 42 wells)."Shouldn't this criteria be associated with year type? (i.e. Dry, Normal) as it seems that this scenario would likely happen in an extended drought period with agencies practicing conjunctive use and would recover in wet years...</p>
<p>Janice Mcalpine</p>	<p>Large ponds using ground water to water ski. My pump had to be lowered due to neighboring business of water ski and jet ski events. Year round pumping ground water to fill massive ponds</p>
<p>Mark Sigl</p>	<p>I hope the water &amp; power agencies are looking at using the America River as a possible battery (able to store water, power, improve fish &amp; wildlife habit, improve ground water, etc...). I was looking at the surplus or developing excess solar power availability and using that clean cheap energy to help meet the water &amp; peak power energy needs by creating a massive reverse flow water pumping / storage / energy system. I have some water &amp; power engineering background and have done a couple ground water banking sites. I was looking at a 23 to 25 mile pipeline/canal that could transfer water back up the hill to the Placerville Area (1,000 ft elev) from the Sac Regional WWTP which recycles 25k GPD &amp; Sacramento River. Recycling the water back up the hill to Placerville will allow for additional peak power needs that would pass through the 7 power sites. The additional water flow back into the basin area would also help replenish the ground water tables. Using Hwy 50 as a corridor and doing 150-200 ft lift elevations (5 to 8 stations needed) instead of one massive lift station would be more cost effecting using lower cost equipment, lower water pressures to deal with and could be done with intern storage tanks. A couple pipelines next to each other (lower construction costs since the pipelines would be smaller than using one massive one set up to be able to deliver 1-10k cfs flow. This also allows for easier maintenance &amp; lower O&amp;M costs since down time would be less and various pump combos could be operated for best use of power. This would be more beneficial to everyone (more power &amp; water) while improving several other concerns (using cheap solar power, offsetting peak power, maintaining more water in the American River System while also helps recharge the ground water table, more water for fish &amp; wildlife &amp; recreationally while not wasting or removing water since it is basically being reused and recycled pumping it back up the hill and using the Sac Regional Recycled water which normally would go out to sea. This would like keeping that recycle surplus to keep recycling the water &amp; power system using low cheap abundant solar power to help improve the system and maintain a more consistent level system. Using one technology Solar to help improve the water &amp; peak power needs for the area.</p>