Nov 4, 2019 draft GSP comments

Heather,

Thank you for the opportunity to comment on the Nov 4 draft GSP.

Disclaimer: The comments below are my personal comments. They have not been endorsed by the IWV Water District or anyone else. If you have questions, call me at cell: 760-793-6854.

1. The public has been waiting for three years to find out the financial impact of the GSA and GSP. The GSP should identify the financial impact on the various classes of water users. Since the IWV Water District is by far the largest class of residential water users, the GSP should be as specific as possible regarding WD district customer impact. The GSP should also state the financial impact on Kern County and the City of Ridgecrest.

2. There has been a lot of controversy the last thirty or more years regarding untapped water resources in the southwest, i.e., the El Paso Sub basin, and the northwest. According to the GSA schedule there is going to be an effort to use TSS resources to explore water availability in the southwest. I have found nothing in the GSP that acknowledges that effort. It needs to be included.

3. Paragraph 5.3.2 is entitled: Project No. 2: Optimize Use of Recycled Water. Optimization can mean many different things. The performance index used for the optimization needs to be well defined. My initial reaction to this project is the project was designed to maximize cost to rate payers and minimize benefit. As a minimum, the GSP needs to provide a cost/benefit analysis for all projects.

3.a. Figures 5.3 and 5.4 show the location of the recycled water being at the Navy sewage site. The City of Ridgecrest has not yet selected the cite for the new wastewater treatment plant. The two sites are the Navy cite and the older City cite. Not including both options in the trade study may well skew the results.

3.b. As I stated in my comments sent to Stetson on September 12, 2019, the recycled water generated by the wastewater treatment plant is the property of the wastewater fund, an enterprise fund. The recycled water is a commodity that should be sold to defray the cost of the wastewater treatment. That commodity cost does not appear to be included in any of the GSP cost analysis. It needs to be included in the analysis.

3.c. Recycled Water Subproject 1 is for landscape irrigation of Ridgecrest and China Lake. Assuming a thirty-year loan for the capital expense at 2% interest, the yearly cost of the project is $2,295,811. Based upon the latest “Sustainable Yield Allocation” chart the city pumps either 115 AFY or 339 AFY of groundwater. Assuming 115 AFY of pumped groundwater, the cost of reducing ground pumping one AFY is $19,964. Assuming 339 AFY of pumped groundwater, the cost of reducing ground pumping one AFY is $6,772. Either number appears to be a nonstarter. Has the City agreed to fund the over two million dollars per year? How does the City expect to get the money?

3.c.1. The GSP discussion indicates that a portion of the recycled landscape water is to be used by the Navy. Has the Navy committed to sharing the cost of the project?

3.c.2. The GSP states the combined irrigation needs of the City and the Navy is 930 AFY with the large majority of the irrigation occurring in the City. This disagrees with the latest Sustainable Yield Allocation that has a maximum City allocation of 339 AFY. There is a major disconnect somewhere. The numbers are not consistent. It is totally unclear how much groundwater is saved by subproject 1.

3.d. Recycled Water Subproject 2 is for groundwater recharge. Assuming a thirty-year loan for the capital expense at 2% interest, the yearly cost of the project is $1,493,544. Since this project provides an alternative water supply of 352 AFY, the cost is $4,243 per acre-foot. Comparing that cost with the cost of importing water, the feasibility of this effort needs to be questioned.

3.d.1. It appears the primary reason for the cost of the groundwater recharge being so high is the small quantity of water being recharged. The analysis should be done parametrically looking at capacities of 1000, 1500, 2000, and 2500 AFY.

3.d.2. My calculations show availability of roughly 2,200 to 2,400 AFY of recycled wastewater that could be recharged. The most recent Sustainable Yield Allocation shows the IWVWD needs 2,046 AFY water augmentation. It is pretty obvious that the first 2,100 AFY of recycled water should be dedicated to augmenting the WD water supply. This is a simple matter of beneficial use priority.

3.e. Paragraph 5.3.2.2, Project Benefits and Mitigation of Overdraft, provides nothing more than motherhood and apple pie. This paragraph needs to be expanded to provide quantitative benefits of all projects and subprojects. That is, how much groundwater is saved; how much water is provided as an alternative source, etc.

4. Paragraph 5.3.3.1 states the GA will encourage additional voluntary and rebate-based conservation efforts for domestic beneficial uses. The entire valley has been encouraged for the last ten years to conserve water. That effort has been very successful with a large segment of the local residents. Unfortunately, voluntary conservation has also been largely unsuccessful with a large segment of local residents. Our valley has a history of kicking the can down the road whenever it is inconvenient to make hard decisions. The current year WD water production appears to show a slight decrease, but I suggest we are probably close to the limit of what can be attained by voluntary conservation.

4.a. We are on the verge of investing tens if not hundreds of millions of dollars on projects to make our valley sustainable. It would be nice to understand the true magnitude of problem before committing our citizens to spending money not absolutely required.

4.b. The State is in the process of formulating mandatory conservation ordinances. Indoor water usage regulations are already formulated. Outdoor water regulations are being formulated. The GA should be able to use available information to form a rough estimate of water the State will force us to conserve.

4.c. As I stated in my comments sent to Stetson on September 12, 2019, the impact of the water fee structure of the various water purveyors can have a major role encouraging or discouraging water conservation. The laws of supply and demand will always apply. This needs to be addressed in the GSP. The impact of fees paid by both de minimus and non de minimus well owners also needs to be discussed relative to conservation.

5. Paragraph 5.4.2, Direct Potable Reuse Project, gives the impression that Direct Potable Reuse is a futuristic concept that is not compatible with the IWV timetable. We need to be sustainable by 2040, more than 20 years from now. DPR is a State priority. We need to ensure that initial projects we fund are compatible with future integration with a DPR strategy. Appropriate synergism should be described.

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11/12/2019