

Dennis R Loucks

Re: Paso Robles Subbasin General Services Plan (GSP) Development
October 8, 2018

There are substantial concerns with regard to the contracted consultant, Montgomery & Associates performance as it relates to methodology and data that has been presented to date.

The comments listed generally pertain to the Power Point Presentation of September 12, 2018 and to comments made by Montgomery & Associated during a "Groundwater Sustainability Workshop" on October 4, 2018.

Slide 21: Estimated Sustainable Yield for GSP Area.

This slide indicated that the Estimated sustainable yield from 1981 to 2011 was 68,500 AFY.

The estimated sustainable yield from 1981 to 2016 was estimated at 62,300 AFY.

The slides were of surprise to people in attendance since prior scientific reports (Todd & Geoscience) estimated Safe Yields and Perennial Yields up to 97,700 AFY.

Why the drastic change?

When Derrick Williams was asked what his source was for these numbers; he told the group on October 4, that the source was Montgomery & Associates and as hydrologists that's what they do. That answer is insufficient. Where did the data originate? The slide also reflects groundwater pumping from 1981 to 2016 at 76,000 AFY. This figure is very close to the 76,658 AFY (Safe Yield) presented by the City of Paso Robles and County of San Luis Obispo, etal in the recent prescription trial. It should be noted that GSI Environmental (paid by citizens) in that trial estimated the safe yield at 92,000 AFY.

Historical context is in order:

2002 Fugro West Study	94,000 AFY	Paid by Taxpayers (Perennial Yield)
2005 Fugro Study	97,700 AFY	Paid by Taxpayers (Perennial Yield)
2015 Geoscience	90,215 AFY	Paid by Taxpayers (Safe Yield)
2016 Montgomery & Assoc.	62,300 AFY	Paid by Taxpayers (Sustainable Yield)
2018 GSI Environmental	92,000 AFY	Paid by Private Group, No tax dollars (Safe Yield)

As indicated, the methodology is not clear in Montgomery Assoc. figures and is contrary to accepted previous scientific studies. Supporting evidence should be required of Montgomery & Associates.

During the presentation on October 4, terms were stated that have different meanings. Example: In the Power Point the term “overdraft” is used. Derrick Williams explained that their use of “overdraft” reflected a hydrologist’s definition and not a legal definition. The other term that has been introduced is “Estimated sustainable yield” To help avoid the confusion of terms, listed below are definitions from the State Department of Water Resources.

Perennial yield — The maximum quantity of water that can be withdrawn annually from a groundwater basin over a long period of time (during which water supply conditions approximate average conditions) without developing an overdraft condition.

Safe yield — The maximum quantity of water that can be continuously withdrawn from a groundwater basin without adverse effect.

Sustainability — A sustainable system or process has longevity and resilience. A sustainable system manages risk but cannot eliminate it. A sustainable system generally provides for the economy, the ecosystem, and social equity. Water sustainability is the dynamic state of water use and supply that meets today’s needs without compromising the long-term capacity of the natural and human aspects of the water system to meet the needs of future generations. For example, planning ways to eventually eliminate drafting more groundwater than can be recharged over the long term is one approach for improving sustainability.

Groundwater overdraft — The condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years during which water supply conditions approximate average conditions.

Slide 29: Process for Establishing Measurable Objectives:

The basis for establishing measurable objectives and particularly minimum threshold objectives was based on a survey that received 111 responses. The survey asked the property owners their well water level preferences. Did they prefer current water levels? Did they prefer higher water levels?

To establish minimum well water thresholds based on a survey without factual documentation is a flawed process. In essence, you are obtaining opinions and “beliefs” that the respondents well is fine or in some cases would like to see their

water level higher, who wouldn't want more water in their wells. As we learned during the presentation of October 4, those that want more water or higher levels in their wells will have water projects presented to them that they will be expected to pay for. I don't recall that aspect being presented in the survey; perhaps it was omitted on purpose?

Considering the hundreds of thousands of dollars spent by the County, City of Paso Robles and other entities pursuing an attempted theft of water from property owners overlying the basin, tax payer funds would be better served to establish monitoring stations throughout the basin that would reflect current water levels in real time. This would be actual factual information to determine minimum well thresholds. The property owners of this basin deserve accurate information so that informed decisions can be made.

Slide 35: Measurable Objective and Minimum Threshold at Example Creston Well

What is the source of this hydrograph?

The graph indicates a number 27S/13E-28F01 (Creston) In my research, I was able to determine that the number is from the State of California, Water Data Library/CASGEM program.

I felt it was necessary to examine the groundwater elevation graph presented in Slide 35 and compare with the Groundwater Level information from the State Water Data Library. The number referenced in your slide was determined to be a Station Name/Number. The web site only referenced Water Quality Data with Station Numbers and not Groundwater Levels. (Actually, I was unable to locate any reference to the number on your slide.) Groundwater Levels, for example, Creston is number 355262N1205215W001. Why are you listing Water Quality Data reference numbers when you are presenting Groundwater Level Data?

The graph in slide 35 references a period from about 1970 to about 2016 the information from the Water Data Library/CASGEM references a period from 2012 to 2018. I was unable to retrieve additional historical data for the example Creston area. The water levels from the period 2012 to 2018 were relatively flat, and appear to be different from those indicated in slide 35.

Again, this is why reliable and indisputable accurate well level data is critical to managing the groundwater levels in the basin.

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