

TO: Water Resources Advisory Committee  
FROM: David Chipping, Environmental At-Large Member

## HOW WELL DOES THE PASO ROBLES SUBBASIN GROUNDWATER SUSTAINABILITY PLAN STAND UP TO SCRUTINY?

The Sustainable Groundwater Management Act is designed to force an end to groundwater depletion but does not actually 'kick in' till 2040. A required Plan to create a Sustainability Plan for the Paso Robles Subbasin Groundwater Basin (henceforth called The Plan) was submitted by the County, rejected, and then resubmitted. Here we will look at some of the basic information provided by the latest plan. The Plan had to select a target for conservation and the 2017 water storage levels were chosen, probably because that was when the Memorandum of Agreement was signed by parties to the Plan. It also had to choose a representative 20-year period (1991-2011) that would ostensibly record past conditions that could be applied to future planning.

If you take apart the data from 1991-2011, a generally consistent trend can be seen. During the two dry periods the basin lost stored water at a bit under 40,000-acre-feet per year. This is close to the amount gained in wet years, which is also about 40,000 AFY. As there have been more dry years than wet years, during the 20 years the basin has lost 350,000 AF of storage. The updated Plan makes pains to not include the last few extremely dry years in the calculations as being, by the Plan's definition, atypical.

If the plan intends to bring the basin back to 2017 levels, it has already mined the basin to far below that level. Why was 2017 chosen? The only reason seems to be that the Memorandum of Understanding between the Plan's responsible parties, even though the basin in 2017 was far below the levels at the start of the 20-year study period. The company GSI (Groundwater Solutions Inc.), showed that 236 wells went dry between 2013-2017, and 95 more between 2018 and 2022, so the 2017 basin conditions were already causing considerable harm.

So one might think the signatories to the MOA would be looking to apply the brakes on water extraction, like plugging holes in a sinking ship. Not so. The Plan's "Future Groundwater Budget" shows that in 2040, the calculated inflow to storage in the basin will be 69,500 AFY but extractions are 83,000 AFY (74,000 AFY from pumping). THE GSP accepts a progressive depletion in basin storage of 13,700 AFY over the next 20 years of the 'implementation period. The concept of 'Sustainable' seems to have been ignored.

Are significant water savings to be made elsewhere in the basin? The current City of Paso Robles Urban Water Management Plan shows that extractions in 'River Wells' will increase from 3,609 AFY in 2020 to 4,200 AFY in 2040, and deep basin wells increase from 954 AFY to 2,378 AFY over the same period. The County has also predicted a county-wide increase in rural residential water demand of 2.3%/year. So if the urban sector is going to use more, and as the dominant user is agriculture, one might expect the Plan to explain how it would institute a reduction in pumping.

In regard to any proposed savings in the agricultural, one might reasonably turn to the Paso Basin Land Use Management Area (PBLUMA) Planting Ordinance. While citing the ordinance as a vehicle for the County to have some say in agricultural land use, and while being disliked by many influential agricultural organizations, the terrible part is the way it deals with the groundwater issues. The temporary ordinance that will sunset as PBLUMA comes in had a 5 AFY allowance for any property owner to increase water use. PBLUMA multiplies this 5 times... 25 AFY additional pumping allowance per parcel for landowners.

PBLUMA's Draft EIR states "... The proposed ordinance would also exempt new or expanded crop plantings with an estimated total water demand of 25 acre-feet per year (AFY) or less per site." and "This would equate to an annual increase in groundwater use of approximately 450 AFY, for a total increase of 9,900 AFY by January 31, 2045. This increase in irrigated acreage is based on an estimated issuance of 25-AFY groundwater per site exemptions."

So every sector aims to take out more water, apparently hoping for a wetter climate. What are the chances that we will return to wetter conditions? The State of California's *Fourth Climate Change Assessment* shows that

climate prediction models put us between a drier southern California and a wetter northern California, but the models all agree that we will be much hotter (by 2,5-2,7 degrees F by 2039). So water demand will be up. There is no certainty that rainfall will increase, although other studies predict infrequent years of extreme rainfall, much of which would not contribute to groundwater recharge unless runoff is captured.

Based on the data and climate history used in The Plan, it is 17 years till 2040. If we use the 1984-1991 dry period as a guide, basin losses would be 37,500 AFY, and the 1992-1998 wet period gives us gains of 42,850 AFY. So if we're to make up the 17 years with 8 wet years and 9 dry years, there would be a net gain in the basin of 5,300 AF over the total 17 years. However, adding more extraction makes that surplus vanish.

If we are more realistic and keep the historic balance of 38% wet years to 62% dry years, we end up with a deficit of 123,260 AF over the 17 years. The ship will have sunk.

So where exactly is the management part of the Groundwater Sustainability Plan? The GSP itself has calculated that between 2020 and 2040 the groundwater will be depleted at a rate of 13,700 AFY or 274,000 AF over the span of 20 years of the "implementation period". The water levels of 2017 will be a distant memory, and as every sector is aiming to increase extractions over this period, the only hope is extra water from unknown sources, to be brought in by an unknown date. Drought will hit all alternative sources, so a real crisis is likely in the not-too-distant future