

October 21, 2021

Fillmore and Piru Basins Groundwater Sustainability Agency
c/o United Water Conservation District
Attn: Ms. Eva Ibarra
1701 N. Lombard St., Suite 200
Oxnard, CA 93030

Subject: Piru Basin Groundwater Sustainability Plan Public Review Draft

Dear Ms. Ibarra:

Ventura County Public Works Agency, Watershed Protection (VCPWA-WP) appreciates the opportunity to review the Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA) *Piru Basin Groundwater Sustainability Plan Public Review Draft* (Draft) dated August 20, 2021. Following are our comments.

On page ES-1, it is recommended that the sustainability criteria be renamed to match the terminology used in the regulations:

1. Chronic Lowering of Groundwater Levels
2. Reduction of Groundwater Storage
3. Seawater Intrusion
4. Degraded Water Quality
5. Land Subsidence
6. Depletions of Interconnected Surface Water.

On page ES-1, the rationale for exclusion of the sustainable management criteria (SMC) for Interconnected Surface Water because it is “not applicable due to significant effect of droughts that deplete rising groundwater areas” should be explained in more detail. There is interconnected surface water as well as groundwater dependent ecosystems (GDEs) supported by rising groundwater, all of which are influenced by the hydrology, including groundwater pumping. This comment applies to all portions of the Draft where interconnected surface water and GDEs are discussed, and the SMC is excluded, particularly in Section 3 (SMC).



There are references to the groundwater model in Appendix E throughout the text body. It would be helpful to include a summary discussion on the model in the Draft text rather than requiring the reader to review the detailed modeling appendix.

On page ES-2, line 57 states “Water quality changes in the basin are not expected due to the implementation of the GSP.” It should be noted if there are water quality impacts from upstream wastewater effluent disposal.

In Section 2.1.2.2, recommend listing the conjunctive use programs between the Upper Santa Clarita Water District and United Water Conservation District that would provide greater operational flexibility of groundwater resources within the Basin.

In Section 2.2.1.3, the description of the interface of the water-bearing alluvium and underlying consolidated material of the San Pedro Formation implies that the basin bottom is not clearly defined. There is no discussion of how this could affect the estimated sustainable yield or basin storage.

Section 2.2.1.4 lists the two principal aquifers in the Subbasin (unconfined Main Aquifer and the semi-confined Deep Aquifer). There are subsequent references to Aquifer Zones A, B and C per United (2021a). Discussion of the relationship between the principal aquifers and the Aquifer Zones is not introduced until Section 3.5.1.2.2. It would be helpful to the reader to introduce this relationship in Section 2.2.1.4 and when discussing Aquifer Zones in other parts of the text. Further, it would be helpful to include the relative depths (and thickness) of these aquifers and the aquitard separating them found in Section 2.2.1.4.2 to better support Section 2.2.1.3.

Section 2.2.1.4.4 states that 316 wells have at least one historical water quality sample. Are these wells still active and can they be sampled?

In Sections 2.2.1.4.4 and 2.2.2.5.1, elevated chloride and sodium levels in groundwater east of Piru Creek could be attributed to wastewater effluent discharged to the Santa Clara River from upstream Santa Clarita wastewater treatment plants (WWTPs). Have there been any actions or orders from the Los Angeles Regional Water Quality Control Board (LARWQCB) to reduce chloride and sodium in these effluents?

In Section 2.2.1.5.6, it would be informational to include an estimate of the quantities of water diverted by each listed entity.

In Section 2.2.2.5.2, elevated nitrate levels could be attributed to upstream discharges from septic systems and agricultural fertilizers and chemicals.

Section 2.2.2.5.3 states that the water percolated by the Piru WWTP percolation ponds likely does not have sufficient volume to impact the groundwater quality in the basin. Has a comparison been made between COC concentrations of the effluent discharged by the Piru WWTP to other WWTPs in Santa Clarita? Additional monitoring wells



located on the eastern boundary of the basin might provide further data pertaining to the influx of chloride and other COCs from upstream sources.

On page 2-62, lines 9 and 18, recommend explaining how the surface water diversions are accounted for in the groundwater model.

On page 2-63, line 7 states “The Basin water budget is estimated based on flows calculated from the calibrated VRGWF (United, 2021a).” It would be beneficial to elaborate on the main components of the groundwater and surface water budgets.

On page 2-63, lines 26–28 state “underflow from the East Santa Clara River Valley basin is modelled as essentially zero in the groundwater model because the outside hydrogeology is significantly less permeable and the aquifer material...is thin.” Has the underflow been quantified or estimated?

On page 2-64, line 28 states “the maximum ET flux was increased to 0.014 feet per day (5.2 feet per year) in order to account for...” This reference is from the groundwater model. Are other groundwater model assumptions used as components of the water budget?

In Table 2.2-8 and lines 5–7, “United’s allocation of imported SWP water deliveries varies from between zero and 60% (of the 3,150 AFY allocation for Santa Clara River Valley basins) during dry years, to more than 60% and even more than 100% during above average and wet years.” There may be more recent estimates of average deliveries. The 2019 SWP Delivery Capability Report has reported Table A deliveries at 52-58%.

In table 2.2-9, a note should be added for the years that are represented as “historical.” The text later indicates 1988-2015 for groundwater budget on Table 2.2-10. Is this the same period for surface water? What is the relationship between the values from the surface water budget and the groundwater budget?

On page 2-70, lines 11-13 state “Higher average pumping rates during dry periods (Figure 2.2-34) is biased largely due to wells that pumped during the early 1990s drought but have since become inactive or destroyed.” How does this affect pumping in future scenarios?

An explanation should be provided regarding how the annual flow for Mountain Front Recharge is calculated/estimated in Tables 2.2-10, 2.2-12 and 2.2-14. Is this based on stream exchange data?

On page 3-5, Section 3.2.3.1, more rationale should be provided on the criteria to define undesirable results (i.e., drop below well screen in 25% of the representative monitoring sites or groundwater elevations drop below the minimum threshold (MT) [not yet discussed] equivalent to the critical water level of 10 feet below fall of 2011 conditions.



Section 3.3.1 indicates that no dry wells have occurred in Ventura County, according to the DWR Household Water Supply Shortage Reporting System. Does FPBGSA plan to survey wells to assess if any have become dry?

In Section 3.3.5, the rationale for the establishment of the subsidence MT should be explained.

Is there an available and up-to-date evapotranspiration map available for the Basin and/or the adjacent Fillmore Basin? Figure 2.1-3 is a Land Use Map listing various crops in the Basin, but it would be helpful to develop an evapotranspiration figure based on the various crops.

Sections 3.5.4.1.1 and 3.5.4.4.2 state that there is a potential monitoring point data gap in the eastern portion of the Basin and there are a limited number of wells that access deep groundwater from the Deep Principal Aquifer. Does FPBGSA plan to install additional monitoring points to address these gaps?

In Section 4.5, water quality monitoring wells should be installed to monitor shallow groundwater quality, especially entering the eastern boundary of the Basin.

If you should have any questions, please contact me at james.maxwell@ventura.org or (805) 654-5164.

Sincerely,



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