From:	John Lindquist
To:	FCGMA
Cc:	Maryam Bral; Christofer Coppinger; Bram Sercu; Zachary Hanson; Guardado, Mauricio; Tracy O
Subject:	RE: FCGMA 5-Year GSP Evaluation Draft Documents – Comments from United Water Conservation District
Date:	Monday, October 7, 2024 4:20:24 PM
Attachments:	image001.png image003.png 2024 GSP 5-yr Update Comments by United_Oct2024.pdf

FCGMA staff;

Attached (in a PDF document) please find United staff's comments on the 5-Year GSP Evaluation Draft Documents for the Oxnard and Pleasant Valley Basins.

Regards,

John Lindquist, Water Resources Supervisor
United Water Conservation District
[redacted]
1701 N. Lombard Street, Suite 200
Oxnard, CA 93030

October 7, 2024

Dr. Farai Kaseke, Asst. Groundwater Manager
Fox Canyon Groundwater Management Agency
L#1610, Ventura, CA 93009

Subject: Comments on Oxnard Subbasin, Pleasant Valley Basin, and Las Posas Valley Basin 5-Year GSP Evaluation Draft Documents dated August 2024

Dear Dr. Kaseke:

United Water Conservation District (United) appreciates the opportunity to review the August 2024 drafts of Fox Canyon Groundwater Management Agency's (FCGMA) *First Periodic Evaluations* of the Groundwater Sustainability Plans (GSPs) for the Oxnard Subbasin, Pleasant Valley (PV) Basin, and Las Posas Valley (LPV) Basin (the *5-Year GSP Evaluation Draft Documents*), prepared by your consultant, Dudek, and released for public review and comment on September 6, 2024. United appreciated the opportunity to significantly contribute to development of these evaluations through the groundwater flow modeling we conducted for the FCGMA, and appreciated the helpful, cooperative engagement with your staff and Drs. Jones and Weinberger of Dudek during that effort. And finally we are impressed with the content and quality of the documents, as well as the presentations given by FCGMA and Dudek staff at the related workshops hosted by FCGMA. In the spirit of cooperation and collaboration, United staff respectfully submit the following comments and questions on the 5-Year GSP Evaluation Draft Documents with the hope that the FCGMA and Dudek will find them helpful in producing the highest-quality final documents possible.

General Comment for Oxnard and Pleasant Valley Basin Documents:

1. Because of the efforts made by United, Pleasant Valley County Water District (PVCWD), Camrosa Water District, the Cities of Oxnard, Camarillo, and Ventura, and FCGMA to aggressively design and implement new water supply sources since release of the original GSPs in 2020, sustainable yields of the Oxnard and PV (OPV) basins have improved significantly, as noted in the 5-Year GSP Evaluations. Additionally, the recent two years of high rainfall (wet years) certainly helped groundwater elevations move upward toward the measurable objectives (MOs) and minimum thresholds (MTs) established in the GSPs, as did reductions in pumping in the basins.

   Furthermore, the 5-Year GSP Evaluations showed that there is one (and only one) path forward—the "Future Baseline with EBB" scenario—that can achieve sustainability in the OPV basins, halt and reverse seawater intrusion in the southern Oxnard basin, while avoiding a rampdown of pumping that would likely cause significant harm to the people,

businesses, and other stakeholders in Ventura County. The projects included in this scenario also will bring improvements to the reliability (resilience) of local supplies, groundwater quality, and our ability to adapt to potential climate-change impacts in the coming years.

We encourage the FCGMA to emphasize in its statements and documents that groundwater conditions in the OPV basins are improving substantially thanks to the efforts of several agencies, and to support the one future scenario—"Future Baseline with EBB"—that is demonstrated to achieve groundwater sustainability without requiring a harmful rampdown in groundwater supply.

Specific Comments on 5-Year GSP Evaluation Draft Document for Oxnard Subbasin:

2. Page ES-2, second paragraph: For clarity, we suggest adding "for United's conjunctive use and groundwater recharge operations" at the end of the existing sentence that reads "The wetter than average 2023 and 2024 water years resulted in increased availability of Santa Clara River surface water diversions."
3. Page ES-2, third paragraph: The last sentence of this paragraph includes the statement "As anticipated in the GSP, numerical modeling data suggests that since 2015, approximately 140,000 acre-feet of groundwater was added to the Subbasin..." It would be helpful to include an ending year in the statement (e.g., "from 2015 through 2022" or whatever year is appropriate), because significantly more than 140,000 acre-feet of groundwater was recharged to the Oxnard subbasin since 2015 if the most recent two years (2023 and 2024) are included.
4. Page ES-3, second paragraph: The first sentence of this paragraph states "Since adoption of the GSP, agencies in the Subbasin, with support from FCGMA, have begun delivering recycled water for agricultural irrigation." United's understanding is that recycled water has been delivered by Oxnard for agricultural irrigation since 2016, three years prior to the 2019 adoption of the GSP for Oxnard subbasin.
5. Page ES-3, last paragraph: This paragraph summarizes changes in sustainable yield and overdraft. We suggest adding a sentence at the end of this paragraph along the lines of "This is an improvement from the state of overdraft as of 2020, due largely to…" and then explain why current estimates of overdraft are significantly smaller than estimated overdraft as of 2019.
6. Table 1-1: Under the "Future Projects" section of this table, "Purchase of Supplemental State Water Project (SWP) Water" is listed. United has been purchasing supplemental SWP water since 2017; therefore, we recommend moving this project up to the "Projects that are currently being implemented" section of Table 1-1.
7. Page 22, last paragraph: To be more precise, we suggest changing the first sentence of this paragraph to "UWCD's updated interpretation indicates that the saline water impact front migrated landward from 2015 to 2020." United's interpretation did not include evaluation of migration of the seawater intrusion front after 2020.
8. Page 25, last paragraph: In the second sentence of this paragraph, it would be helpful to specify whether the listed nitrate concentrations are as nitrogen, or as nitrate. Both

reporting bases are commonly used in water quality analysis, but the significance of the results can be quite different depending on which reporting basis is used

9. Page 38, first paragraph of Section 3.1.2.4.1: We recommend adding "to be used in lieu of groundwater pumping" at the end of the first sentence, to inform the reader of the value of surface-water deliveries in improving groundwater conditions.

10. Table 3-2: For Project 7, the Laguna Road Recycled Water Pipeline Interconnection, United is now forecasting completion of Phase 1 in early 2025, rather than 2024. This is new information from United, not a mistake in the document.

11. Page 45: In Section 3.2.2.2, under "Expected Benefits," line 4, we recommend removing the word "additional." The PTP system has not previously received recycled water.

12. Page 46, Section 3.2.3.1: United has updated information regarding the EBB project, as follows. United's current description of EBB design and construction phasing includes the monitoring well construction as part of the design phase. Phase 1 is considered the construction of the initial extraction well field and discharge facilities. Approximately seven (7) wells will be constructed in the Phase 1 extraction well field. The field will be operated to produce and average of approximately 3,500 AFY in total. Design production from each individual well will be based on conditions observed during drilling. The second phase of EBB consists of design and construction of the treatment plant, conveyance system to distribute treated water, a connection to the Calleagus Salinity Management Pipeline, and expansion of the extraction wellfield to accommodate approximately 10,000 AFY of extraction. Currently, United anticipates thirteen (13) additional wells will be required.

13. Page 47, first paragraph of Section 3.2.4.2: Consider modifying the second sentence of this paragraph to the following, which more accurately reflects United's purchases of supplemental SWP water since 2019: "Between 2019 and 2023, UWCD purchased an additional 29,329 AF of supplemental State Water (transfers, exchanges and Article 21 water). This water was released from Lake Piru and Castaic Lake for recharge in the Santa Clara River Valley basins (Piru, Fillmore and Santa Paula) and for recharge and delivery in the Oxnard Subbasin and PVB.

14. Pages 53 and 54: Both "Project No. 16" and "Project No. 17" refer to formation of seawater intrusion barriers as a result of injection of recycled water along the coast. Please provide information regarding whether these projects are distinct from each other, and whether their impacts would be additive, complementary, or alternatives that would not operate simultaneously.

15. Page 55: Who would conduct the feasibility study envisioned in "Project No. 18?" When is it anticipated to be completed, and at what cost? The discussion presented in the Draft Document states "If the project is found to be feasible and is constructed, it will increase sustainable yield in the Subbasin, and thus have a positive impact on beneficial uses and users. Project impacts are intended to increase sustainable yield for all users." It seems more consistent to consider both benefits and impacts of a paper study neutral. Actual pumping optimization may have benefits for the basin, e.g., increasing sustainable yield, but significant impact to stakeholders in areas of the basin where pumping would be curtailed.

16. Page 70, second paragraph of the "Comparison to Historical Groundwater Supplies" section: For context, it would be helpful to remind the reader that the 2016 through 2022

period was dominated by drought, and very little surface water from the Santa Clara River was available for conjunctive-use deliveries to agriculture in the Oxnard subbasin. This explains the increased groundwater extractions from the UAS relative to the 1985-2015 average period.

17. Page 77, second sentence of Section 5.1.3: Suggest modifying the text to the following to more accurately describe the model extension and recalibration: "This recalibration effort involved incremental adjustments to local hydraulic conductivity and general head boundary conditions (GHB), which resulted in better simulation of groundwater conditions along the coastline (details to be included in UWCD's Coastal Plain Model update technical memorandum)."

18. Table 5-1: We have a question and suggestions as follows:

    - The first line indicates 50,000 AFY of projected future water supply/in lieu delivery for managed aquifer recharge (MAR) by United. However, the baseline 2070 model output indicated 60,300 AFY of MAR. Why does this 10,300 AFY difference exist?
    - It looks like notes "b" and "c" should become "d" and "e."
    - Notes "b" and "c" need to be updated/included to properly note AWPF. Currently "b" and "c" refer to Camarillo Desalter.

19. Page 95: In Section 5.2.3, under "Sustainable Yield with UWCD's EBB Water Treatment Project," the following statement is made: "…the simulation with the highest overall production rate was used as the estimate of sustainable yield of the Subbasin if UWCD's EBB Water Treatment project is successfully implemented as described in Section 5.2.2.6, Extraction Barrier and Brackish Water Treatment Scenario." It would be helpful to add a sentence clarifying that the sustainable yield of the basin under this scenario is likely higher than indicated, but was limited to the maximum assumed pumping rate.

Specific Comments on 5-Year GSP Evaluation Draft Document for Pleasant Valley Basin:

20. Page ES-3, Table ES-2: Shouldn't the "Current Average (2016-2022) subtotal for groundwater be 14,470 AFY, rather than 15,000 AFY?

21. Page ES-4, third bullet under "Future Groundwater Conditions:" Suggest adding "in the PVB" following "delivery for use…"

22. Page 39, first paragraph, suggest replacing “complimentary” with “complementary.”
23. Page 73, second sentence of Section 5.1.3: Suggest modifying the text to the following to more accurately describe the model extension and recalibration: “This recalibration effort involved incremental adjustments to local hydraulic conductivity and general head boundary conditions (GHB), which resulted in better simulation of groundwater conditions along the coastline (details to be included in UWCD’s Coastal Plain Model update technical memorandum).”

Sincerely,

John Lindquist
Water Resources Supervisor

cc: Mauricio Guardado (United)
Dr. Maryam Bral (United)
Dr. Bram Sercu (United)
Chris Coppinger (United)
Dr. Zachary Hanson (United)
Tracy Oehler (United)