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August 23, 2021

Bryan Bondy, PG, CHG
Mound Basin Groundwater Sustainability Agency
P.O. Box 3544
Ventura, CA 93006-3544

Via Email

SUBJECT: Comments on Preliminary Draft Mound Basin Groundwater Sustainability Plan

Dear Mr. Bondy:

Fox Canyon Groundwater Management Agency (Agency or FCGMA) provides these comments on the Preliminary Draft Mound Basin Groundwater Sustainability Plan (GSP). Mound Basin borders the Oxnard Subbasin on its southern boundary, which is managed by the Agency.

Executive Summary

Page ES-v: There is a typo "The principal aquifers are believed to be ~~projected~~ *protected* from seawater...."

Page ES-vii: Discussion of "increasing the sustainable yield of the Mound Basin" includes additional production that could impact the sustainable management of the adjacent basin, so that increased pumping is "not included in the sustainable yield estimate at this time." Does this mean additional pumping may be considered in the future? If so, that pumping must be assessed to determine impacts to adjacent basins, consistent with CCR Title 23 §354.28.

Page ES-xviii: There is a typo "Fox Canyon Groundwater Management Area *Agency*."

Section 3.3 – Water Budgets

Section 3.1.1.3 Imported Water: Discussion is missing of groundwater imported from the Oxnard Subbasin into the Mound Basin by Jam Mutual Water Company, Coastal Berry Farms and operators of the farmland owned by The Nature Conservancy which straddles the boundary separating the basins.

Jam Mutual Water Company (JMWC) has been in existence since at least 1975 and is currently associated with a 318- acre service area which is split approximately 50/50 between the Mound and Oxnard subbasins. JMWC operates two wells in the Oxnard subbasin to provide water for irrigation within its service area. Since 1985 the average annual groundwater extractions from the Oxnard Subbasin are 555.371 acre-feet per year (AFY).

Coastal Berry Farms is a FCGMA recognized exporter of groundwater extracted from the Oxnard Subbasin and used to irrigate approximately 29 acres in the Mound Subbasin. Coastal Berry Farms has been exporting water to the Mound Subbasin since before the establishment of the FCGMA.

The land owned by The Nature Conservancy and operated by Ocean Breeze Ag Management LLC irrigate approximately 93 acres, split approximately 50/50 between the subbasins, utilizing groundwater extracted from the Oxnard and Mound subbasins.

Page 37: There is a typo in the first paragraph of the bullet at the top of the page “Fox Canyon Groundwater Management Area Agency.”

Page 73 Imported Water: The first sentence mentions that groundwater is imported from adjacent basins, but the remainder of the paragraph discusses surface water imported by water purveyors. There is no direct discussion of water imported from the Oxnard Subbasin. Groundwater pumped in the Oxnard Subbasin and imported to the Mound Basin is not specifically called out in any of the water budget tables.

Table 3.3-03: Average flow between the Mound Basin and the Oxnard Subbasin in the Upper Aquifer System (UAS) matches reasonably well between the models used for each GSP. The Oxnard Subbasin GSP indicates average flow from 1986-2015 is 207 AFY from Oxnard to Mound. The Mound Basin GSP indicates average flow from 1986-2015 is 983 AFY from Mound to Oxnard. The two GSPs are off by about 1,200 AFY on average. The discrepancy appears to occur during drought years when the Mound Basin GSP shows higher outflows to the Oxnard Subbasin than the Oxnard GSP reports as inflows. Overall, the Mound Basin inflows / outflows are more varied in the Mound GSP than in the Oxnard GSP.

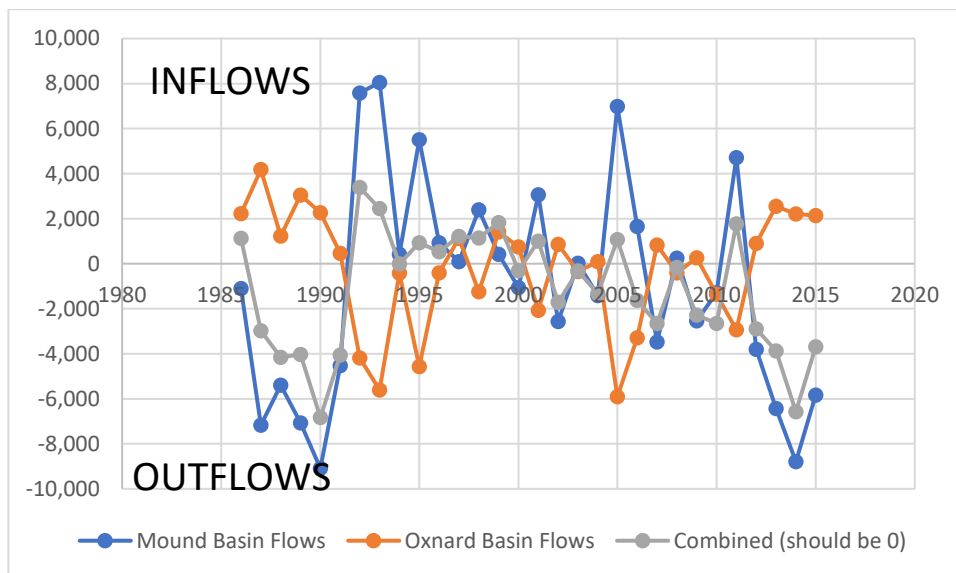


Table 3.3-08: In the Mound GSP, the average UAS flow between the Mound Basin and the Oxnard Subbasin in the future baseline scenario is anticipated to be 3,252 AFY from the Oxnard Subbasin to the Mound Basin in the first through 20th year of implementation, and 3,842 AFY from the Oxnard Subbasin to the Mound Basin in the 30-year sustaining period. However, in the Oxnard GSP scenarios the range of UAS outflows projected from the Oxnard Subbasin is ~1,000 AFY (in the baseline scenarios) to ~1,500 AFY (in the projects and reduction scenarios). This leaves ~1,500 AFY to 2,000 AFY of water that both basins appear to be relying on in the UAS. The projected flows in the Lower Aquifer System (LAS) appears to be closer, but the Mound Basin doesn't include the Fox Canyon Aquifer as a primary aquifer for the GSP.

Table 3.3-12: The average UAS flow in the 2030 climate change and sea level rise scenario is 3,180 AFY in year one through 20, and 3,841 AFY in the following 30-year sustaining period. These are similar to the flows without the climate change factors. The 2070 flows are also similar (Table 3.3-14).

Section 4.4.2.3 Minimum Thresholds in Relation to Adjacent Basins: The draft Mound GSP states “deeper groundwater levels could potentially increase underflow into the Mound Basin from the Oxnard and/or Santa Paula Basins (or decrease underflow to the Oxnard Basin), which could potentially contribute to undesirable results in those Basins.” First, the average anticipated flow in the future in the draft Mound GSP is from the Oxnard Subbasin to the Mound Basin, so decreasing underflow from the Mound Basin to the Oxnard Subbasin is less of a concern than continuing to increase the flows from the Oxnard Subbasin to the Mound Basin in the GSP scenarios. Second, the minimum thresholds for the Mound Basin adjacent to the Oxnard Subbasin are 15 to 90 feet lower than the minimum thresholds in the Oxnard Subbasin Forebay in the Oxnard GSP.

Mound Basin Well (Mound GSP)	Aquifer	Minimum Threshold (ft MSL)	Oxnard Forebay Well (Oxnard GSP)	Aquifer	Minimum Threshold (ft MSL)	Difference (ft)
02N22W19M04	Mugu	-64.19	02N22W23B07	Mugu	17	81.19
			02N21W07L06	Mugu	27	91.19
02N22W16K01	Hueneme	-98.25	02N22W23B05	Hueneme	-3	95.25
02N22W17M02	Hueneme	-18.76				15.76
02N23W24G01	Hueneme	-22.30				21.30

Note – The difference between minimum thresholds is calculated between one Mound Basin well in the Mugu Aquifer and two Mugu Aquifer wells in the Oxnard Subbasin; and between three Mound Basin wells in the Hueneme Aquifer and one Oxnard Subbasin well in the Hueneme Aquifer. The Oxnard Subbasin well in the Hueneme Aquifer is the lowest of the three screened in the Forebay, with the highest Hueneme Aquifer well in the Forebay having a minimum threshold of 17 ft MSL. Additionally, the minimum thresholds set for the Mound Basin wells listed in the table are (with the exception of 02N22W16K01) for land subsidence. The Mound GSP has lower minimum thresholds for chronic declines in groundwater levels. Presumably, if the water levels reach the thresholds for subsidence and subsidence is not observed the Mound Basin would argue that it could have water levels decline even lower.

The difference of 15 feet between the minimum thresholds in the Hueneme Aquifer is not much of a concern, but the difference of greater than 80 feet in the Mugu Aquifer and greater than 90 feet for one well adjacent to the Forebay is of concern to the Agency. There is a significant chance the proposed minimum thresholds in the Mound GSP could negatively impact the ability of the Agency achieving its sustainability goal in the Oxnard Subbasin.

If you have any questions, please contact me at kim.loeb@ventura.org or (805) 650-4083.

Sincerely,



Kimball R. Loeb, PG, CEG, CHG
Groundwater Manager

Cc: Jeff Pratt, Executive Officer