180/400-Foot Aquifer Subbasin Groundwater Sustainability Plan: 2022 Update

Comment Letters

Gularte. 20211221

Farrow. 20211230

Virsik. 20220107

Cremers. 20220120

Farrow. 20220208

NOTICE OF PERMISSION TO USE GROUNDWATER

(Civil Code SubSec. 813)

To: Salinas Valley Basin Groundwater Sustainability Agency; County of Monterey; State of California; and to any other appropriator of groundwater in the Salinas Valley Groundwater Basin.

1. Notice is hereby given by the undersigned, Wayne Gularte, the holder of record title completely or undividedly to the real property described below:
   Monterey County of the State of California, assessor parcel numbers 139-085-020, 139-086-006, 139-431-019, 167-032-011, 167-033-001, 223-011-015, 223-011-016 and 223-011-021.
   These properties overlie what is commonly known as the Salinas Valley Groundwater Basin. My lessees and I now extract and will continue to extract groundwater from the Salinas Valley Groundwater Basin for reasonable beneficial use on overlying land, based on overlying right to that groundwater.

2. The right of the public and any person to make any use whatsoever of the groundwater described above or any portion of it is by permission, and subject to control, of owner: (SubSection 813, Civil Code).

3. I am not aware of credible scientific studies of the Salinas Valley Groundwater basin which shows an overdraft. However, to the extent that a condition of groundwater overdraft is found to exist now or in the future, this notice is given in accordance with Civil Code SubSection 813, to establish conclusive evidence that subsequent use of the groundwater during the time this notice is in effect by the public or any user for any purpose is permissive and with consent in any judicial proceeding involving the issue as to whether all or any portion of such groundwater has been dedicated to public use or whether any user has a prescriptive right in such groundwater or any portion of it.

4. Such consent to the use for the purpose described is given subject to the right of the undersigned, pursuant to Civil Code Subsection 813, to revoke such consent by notice to the County of Monterey, State of California recorder's office.

Dated: 12/20/2021

Signed: Wayne Gularte

Witness: [illegible]

m | r | wolfe
& associates, p.c.
attorneys-at-law

December 30, 2021

Via email

Members of the 180/400-Foot Aquifer Subbasin Committee
Salinas Valley Basin Groundwater Sustainability Agency
P.O. Box 1350
Carmel Valley, CA 93924

Re: **Proposed change to storage reduction Sustainable Management Criteria**

Dear Committee Members:

I write on behalf of LandWatch Monterey County regarding the proposed change to the sustainable management criteria (SMC) for reduction in groundwater storage. LandWatch asks that the 180/400 GSP continue to specify the minimum threshold for reduction in groundwater storage in terms of extractions and be set at the "total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results," as is required by the SGMA regulations. (23 CCR, § 354.28(c)(2).)

A. SGMA requires the groundwater storage SMC's to be specified in terms of extractions. Staff have not clarified the intent of the proposed storage SMCs or explained how they would be used to manage the subbasin.

Currently the minimum threshold (MT) and measurable objective (MO) are based on extractions and set at the level of 112,000 AFY. (180/400 GSP, p. 8-26.) An undesirable result would occur if extractions exceeded the MT/MO in an average hydrological year.

Staff has now proposed that the MT be based instead on groundwater level changes for the non-seawater-intruded area plus seawater intrusion for the seawater-intruded area.[1] Staff has not proposed actual numeric levels for the proposed thresholds other than that they be of "similar intent to original GSP." Staff do not specify the intent of the existing SMCs except to note that the existing SMCs provide "a logical basis for managing extractions" and "direct implementation of regulations that state pumping is the metric to use."[2] Again, the regulation in question is 23 CCR section 354.28(c)(2), which expressly provides that the MT must be specified as "a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable

[1] See Montgomery & Associates, Technical Memorandum, December 24, 2021, available at pdf pages 8-10 of https://d3n9y02raazwpg.cloudfront.net/svbgsa/e2b432e9-634c-11ec-85e3-0050569183fa-ed9fe6eb-9410-446c-8e20-bb140a046169-1640737167.pdf; see also or presentation slides at pdf pages 39-43.

[2] Id., pdf page 40.

results." The obvious management intent of this regulation is to provide a basis for pumping allocations. Allocations remain a central part of the 180/400 GSP.

It is unclear how the GSA would use storage SMCs based on groundwater levels changes and seawater intrusion data to manage the subbasin or pumping volumes. Staff acknowledge that under the new method it is "almost impossible to show a significant correlation between groundwater elevations and 'a total volume that can be extracted.'"[3] As staff have acknowledged, the regulations "state pumping is the metric to be used."[4] The regulations facilitate basin management by directly connecting allowed extractions to undesirable results. Before changing the existing storage SMC's the GSA must explain how the proposed GSP would be used for subbasin management.

B. The GSA should not set a groundwater reduction SMC that is based on groundwater levels below sea level.

As LandWatch has previously objected, the 180/400 GSP improperly sets groundwater level SMCs below sea level, and thus at a value that fails to support attainment of the SMCs for seawater intrusion. i.e., halting intrusion at the 2017 line of advancement.

SGMA requires that each minimum threshold must avoid *each* undesirable result because it requires that "basin conditions at each minimum threshold will avoid undesirable results for each of the sustainability indicators." (23 CCR § 354.28(b)(2), emphasis added.) For example, the groundwater level minimum threshold must be "supported by" the "[p]otential effects on other sustainability indicators." (23 CCR § 354.28(c)(1)(B), emphasis added.) This means that each minimum threshold, especially the groundwater level minimum threshold, must be coordinated to ensure that all undesirable results are avoided.

The existing GSP acknowledges that its extraction-based SMC for storage reduction is based on its estimate of the long term sustainable yield of the subbasin and that, to halt seawater intrusion, "there may be a number of years when pumping might be held below the minimum threshold to achieve necessary rises in groundwater elevation." (180/400 GSP, p. 8-26.) The GSP explains that the existing storage reduction SMC set at long-term sustainable yield would not hinder maintenance of the seawater intrusion SMC:

> Pumping at or below the sustainable yield will maintain or raise average groundwater elevations in the Subbasin. Therefore, the minimum threshold for reduction in groundwater storage will not result in a significant or unreasonable increase in seawater intrusion.

(180/400 GSP, p. 8-27.)

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[3] Id., pdf page 42.
[4] Id., pdf page 40.

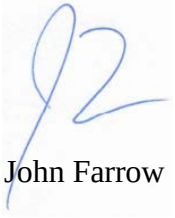
However, the proposed change to the groundwater storage SMCs that would rely on groundwater elevations instead of extractions may result in an SMC that would hinder attainment and maintenance of the seawater intrusion – if it permits groundwater levels below sea level. This would further commit the GSA to the proposed capital-intensive pumping barrier project, a project which the GSA has not yet found to be feasible technically or economically.

As LandWatch has objected, the GSP deferred the identification of the projects or management actions to halt seawater intrusion by equivocating between (1) the "temporary pumping reductions . . . necessary to achieve the higher groundwater elevations that help mitigate seawater intrusion" or (2) a $102 million coastal pumping barrier requiring perpetual pumping with an annual $9.8 million O&M budget to avoid these temporary pumping reductions. (180/400 GSP, pp. 8-26, 9-52 to 9-55, 9-87.) Under the barrier scenario, the GSP claims that sustainability can be attained with groundwater levels below sea level without the temporary pumping reductions needed to restore protective groundwater elevations. (180/400 GSP, response to comment 8-139.)

Staff's current proposal to abandon the existing extraction-based SMCs appears to facilitate adoption of the pumping barrier project by effectively setting different MTs for storage reduction for the seawater-intruded area and the non-seawater-intruded area. If the storage reduction SMCs for the non-seawater intruded area were based on the existing groundwater levels SMCs, which are below sea-level, then the storage reduction SMC would also fail to support the protective elevation approach to attainment of the seawater intrusion SMC. Even if such a change were lawful, the GSA should not adopt it without understanding and justifying the GSA's commitment to the potentially infeasible pumping barrier approach.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.



John Farrow

JHF:hs

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180/400 GSP Amendment Chapter 6 draft

1 message

Thomas S. Virsik <thomasvirsiklaw@gmail.com> Fri, Jan 7, 2022 at 4:13 PM
To: GSPcomments@svbgsa.org

The within comment is based on the materials available for the 6 January 2022 180/400 Committee meeting. Chapter 6 was not addressed at the meeting and will be on the agenda of a later special meeting. Nevertheless, please note the following concerns based on the material as published:

The overall comment is that certain implicit math involved in the multiple water budgets (in the draft Chapter and in the PP) lack integrity. The premise of these comments is that a water budget is at its core a series of inputs and outputs or positive and negative values that result in a sum or delta seen as a gain or loss.

Page 192 contains a historical water budget where math suggests the delta is more than a negative 30K. The future water budgets on page 193 reflect even greater deltas of approximately negative 46 and 49 K. Those delta or summation values are not included in the water budget presentations, however (the same chart data appears in several other locations).

Page 229 (Table 6-13) from draft Chapter 6 shows the future water budgets, this time with a storage loss sum of a negative (loss) of 600 -- orders of magnitude different than what the math reflects. The notes to Table 6-13 explain that model error was unacceptably high and thus one can conclude the 600 was not a model-generated value, but I have been unable to find how the 600 delta was actually calculated. Leaving aside issues of accuracy of the model or of the 600 figure, Table 6-13 comes across as unreliable or worse. That the model is not sufficiently accurate (so far) is one thing, but a "600" af loss in a table that reflects tens of thousands of acre-feet of deficit even on a casual glance is jarring.

The narrative at page 230 about the historical overdraft of 600 - even if taken at face value -- does not provide justification for concluding it must be the same number when the inputs and outputs substantially change in the future. The tables and lack of explanation challenge credibility that the same loss occurs when conditions change in the future, especially when that is not true for other GSP's.

That the projected loss may in reality be closer to some amount of thousands is highly germane to considering projects and actions in later chapters, not to mention implementation issues such as costs and feasibility of design and financing. To fix a 600 AAF problem one may need only to impose nearly imperceptible controls on overall water use whereas a loss of thousands requires different tools.

I urge the GSA to review especially the projected water budgets and their seemingly arbitrary reliance on a value chosen when considering a different set of inputs and outputs. Also or in the alternative, the justification for the 600 number may need to be better detailed and then applied, if justified, to the future water budgets.

Thank you for your consideration.

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Gmail

Emily Gardner <gardnere@svbgsa.org>

numbers question

Grant Cremers <Grant.Cremers@delicato.com> Thu, Jan 20, 2022 at 12:40 PM
To: Emily Gardner <gardnere@svbgsa.org>
Cc: Donna Meyers <meyersd@svbgsa.org>

Emily,

I did not want to go too into the weeds today, but there are a few other numbers that look interesting. The water year 2016 was a dry-normal year but the deep percolation of water was about 33% more than the historic average. This is hard for me to understand and if this number is incorrect it is on the plus side and is then understating the true deficit of the sub-basin. The other interesting number is the 9,000 acre feet of tile runoff. I don't know how many acres of tiled ground there is, but my guess is that it is 30,000 or more. A total of only 9000 acre feet of out flow seems low. If this number is erroneously low it would further contribute to a larger deficit. I bring these items up because the loss of storage number had a wide range and these areas could be contributing. Also, we don't have a real understanding of how much water we need to solve our problems. Once we have that number it needs to tie back to the other numbers in the water budget and it will give us direction on what we need to do to solve the problem.

Grant

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February 8, 2022

Via email
Members of the 180/400-Foot Aquifer Subbsasin Committee
Salinas Valley Basin Groundwater Sustainability Agency
P.O. Box 1350
Carmel Valley, CA 93924
GSPcomments@svbgsa.org

Re: 180/400-Foot Aquifer GSP Update – Chapters 5-6 re Groundwater Conditions and Water Budget

Dear Committee Members:

I write on behalf of LandWatch Monterey County regarding Chapters 5 and 6 of the 2022 180/400-Foot Aquifer GSP Update. Chapter 5 describes groundwater conditions and Chapter 6 provides historical and future water budgets.

The water budget chapter purports to provide the historical water budget in Table 6-8 based on the Salinas Valley Integrated Hydrologic Model (SVIHM) and to provide the future water budget in Table 6-13 based on the Salinas Valley Operational Model (SVOM). However, the water budget chapter rejects the modeled results for critical parameters, including groundwater pumping, seawater intrusion, and storage loss, and substitutes "adjusted" figures instead. It remains unclear how the calibration of the model's other parameters could possibly remain valid after these adjustments. The bottom line results for loss of storage in Tables 6-8 and 6-13 based on these adjusted values are simply inconsistent with the other values in these tables. The tables do not add up; and the water balances are not balanced.

Furthermore, Chapter 6 ultimately does not even use its modeled results to determine either historic or future sustainable yields. All of the values used in determining sustainable yields are based on estimates made outside of the modeling process.

In effect, the modeled results are meaningless.

Finally, Chapter 6 fails to provide a clear statement of the overdraft condition. SGMA requires that the water budget provide a clear statement of the magnitude of the overdraft. (23 CCR, § 354.18(b)(5).) The overdraft figure must be clearly stated because SGMA requires that the GSP include a "quantification of demand reduction or other methods for the mitigation of overdraft." (23 CCR, § 354.44(b)(2).) Chapter 6 repeatedly implies that the overdraft is only 600 AFY. This implication is inconsistent with the estimate in

Chapter 5 that the overdraft includes both that 600 AFY storage loss that is estimated based on groundwater elevation changes south of the seawater intruded area and an additional 12,600 AFY storage loss that is estimated based on the average annual volumes of seawater intrusion. The water budget must include this total overdraft, as defined by Bulletin 118.

Detailed comments follow.

1. **Historical budget**

"ADJUSTED" PUMPING DATA ARE INTERNALLY INCONSISTENT: The historical water budget discussion states that somehow the SVIHM "estimates only approximately 71% of the pumping reported in the GEMS database." (Section 6.3.2.) Since Table 6-2 identifies the source of the SVIHM input data for groundwater pumping as "reported data for historical, municipal, and agricultural pumping," it is difficult to understand how model only "estimates" 71% of these reported data.

It is also difficult to understand how any of the modeled results, particularly the bottom line net storage gain or loss in the Table 6-8 historical budget, could remain accurate after the SVIHM's estimated 94,300 AFY of pumping is simply adjusted to 132,800 AFY in the tables purporting to reflect the modeled results. (Tables 6-5, 6-6, 6-8.) Presumably the SVIHM model should be calibrated so that its modeled results are consistent with reported data. It is difficult to understand how any of the SVIHM's results that cannot be directly correlated to measured data can be taken seriously when there is apparently a 38,500 AFY error in its "estimated" groundwater pumping. For example, both percolation of irrigation water and evapotranspiration would presumably increase substantially if pumping were increased by 38,500 AFY. However, the tabulated results for evapotranspiration was not changed after the "adjustment" for actual pumping was made (Table 6-5), and there is no indication that percolation of irrigation water was adjusted either (Table 6-4).

SEAWATER INTRUSION IS INCONSISTENT WITH THE LEVEL ADOPTED BY THE GSP: The historic budget presented in Table 6-8 uses the "preliminary" SVIHM estimate of seawater intrusion of 2,900 AFY. (Section 6.3.2.) However, based on the change in the mapped seawater intruded area analyzed in Chapter 5, "this GSP considers 12,600 AF/yr. to be the annual rate of storage loss due to seawater intrusion."[1] (Section

[1] Chapter 5 separately estimates storage loss for areas south of the seawater intruded area based on groundwater level declines, arriving at an average annual storage loss for this area of 560 AFY (rounded to 600 AFY in Chapter 6). (Chapter 5, p. 5-27.) It is clear that Chapter 5 treats both the 12,550 AFY volume of seawater intrusion and the 600 AFY based on groundwater level declines as forms of storage declines: the "total annual average change in groundwater storage is the sum of the changes in groundwater storage due to groundwater elevation changes and seawater intrusion." (Chapter 5, p. 5-

6.3.2.) The 12,600 AFY figure is the rounded seawater intrusion value taken from Chapter 5:

> This analysis considers the average historic change in storage due to seawater intrusion to be -12,550 AF/yr., which is the total of the 180- Foot and 400-Foot Aquifers storage changes. This storage loss is in addition to the change in groundwater storage due to changes in groundwater elevations.

(Chapter 5, p. 5-37.) It is difficult to understand why the Table 6-8 historical water budget relies on the SVIHM's preliminary estimate of 2,900 AFY of seawater intrusion instead of the 12,600 AFY seawater intrusion figure that "this GSP considers . . . to be the annual rate of storage loss due to seawater intrusion." (Section 6.3.2.)

And again, it appears that the SVIHM model was not calibrated to the data that can be measured.

STORAGE LOSS IS INTERNALLY INCONSISTENT: The bottom line storage loss in the historic budget presented in Table 6-8 is 600 AFY. This number apparently represents the "decline in groundwater storage based on measured groundwater elevations from 1944 through 2019 . . . estimated to be 600 AF/yr. in the Subbasin, as described in Section 5.2.2." (Section 6.3.2.) Again, this number excludes the loss of storage due to seawater intrusion, which Chapter 5 estimates to represent 12,550 AFY. (Chapter 5, p. 5-37.)

Equally problematically, like the groundwater pumping figure, the 600 AFY loss of storage number is not derived from the SVIHM, purportedly because the model "contains significant variability and uncertainty." (Section 6.3.2.) The variability is not unexpected in a subbasin that experiences wet and dry years. The uncertainty is not explained. It should be.

Since the 600 AFY figure is simply plugged into Table 6-8, it is not consistent with the rest of the data in Table 6-8. But the point of a water budget analysis is to present set of inflows and outflows that balance. Accordingly, the net storage loss in Table 6-8 ought to represent the sum of the positive signed inflow values and the negative signed outflow values. The fact that the 600 AFY storage loss figure is inconsistent with the rest of the data is evident from the fact that the summation of the rest of the data would indicate a storage loss of 53,100 AFY, not 600 AFY. The 600 AFY value simply bears no consistent relation to the other reported values.

As discussed further below, the 600 AFY figure also dramatically understates overdraft, notwithstanding the implications in Chapter 6 that the overdraft is only 600 AFY.

37.) As discussed below, this total storage loss is a measure of overdraft ad defined by Bulletin 118.

2. Future budget

"ADJUSTED" VALUES ARE INTERNALLY INCONSISTENT: The future water budget summarized in Table 6-13 is presented as a "simulated" version and an "adjusted" version. Again, the "adjusted" version uses historical average pumping instead of the model's estimate of pumping, a 36,100 AFY difference. (Table 6-13 [compare results for adjusted and simulated future year 2030].) Again, the "adjusted" version's net storage loss of 600 AFY is simply inconsistent with the rest of the "adjusted" values, which if summed up would indicate storage loss of 46,300 AFY.

As with the historical budget, the future budgets, both simulated and adjusted, use a value for seawater intrusion that is inconsistent with the value derived in Chapter 5 by actually measuring the area subject to intrusion.

So neither the simulated nor the adjusted versions are calibrated to either the groundwater pumping measurement or the seawater intrusion estimate.

The apparent rationale for presenting the adjusted version is that the adjusted future water budget's estimate of change in storage is somehow "more reasonable" than the simulated version's:

> As described for the historical water budget, data indicate that the Subbasin has historically been in overdraft (on the order of 600 AF/yr. decline), as described in Section 5.2.2. Even though the SVOM anticipates -10,500 and -11,300 AF/yr. change in storage for 2030 and 2070, respectively, the adjusted historical decline in storage is used with the adjusted pumping estimates to provide a likely more reasonable estimate for projected sustainable yield.

(Section 6.4.3.) Chapter 6 does not explain <u>why</u> the lower 600 AFY estimate of change in storage is more reasonable. It should.

In effect, Chapter 6 presents some modeled values and some measured values and makes no effort to use them consistently in a balanced water budget for either historical or future conditions. It appears that the modeled results in Tables 6-8 and 6-13 have little if any informational value.

3. Sustainable yield

Chapter 6 determines sustainable yield without using any of the values estimated or simulated by the SVIHM or SVOM. Table 6-9 determines historical sustainable yield based on

- GEMS reported pumping values of 114,800 AFY to 136,600 AFY, not the SVIHM's estimate of 94,500 AFY;

- the 600 AFY storage loss estimated by analysis of groundwater elevation changes, not the SVIHM's estimate of 14,800 AFY; and
- the 12,600 AFY seawater intrusion estimated based on the change in the mapped seawater intruded area analyzed in Chapter 5, not the SVIHM's estimate of 2,900 AFY.

Similarly, Table 6-15's estimate of future sustainable yield uses the same data sources and takes nothing from the SVOM.

The purported rationale for ignoring the modeled values is to maintain consistency with the sustainable yield for historic conditions:

> To retain consistency with the historical sustainable yield, projected sustainable yield can be estimated by summing all the average groundwater extractions, subtracting the average loss in storage, and subtracting the average seawater intrusion. This represents the change in pumping that results in no change in storage of useable groundwater, assuming no other projects or management actions are implemented

Again, although Chapter 6 presents modeled values for some water budget components, it makes no effort to use these values to determine sustainable yield. And it fails to provide any explanation for rejecting the modeled results.

4. Overdraft

SGMA requires an express quantification of overdraft. (23 CCR, § 354.18(b)(5).) The purpose of this requirement is to ensure that the GSP actually mitigates that overdraft:

> If overdraft conditions are identified through the analysis required by Section 354.18, the Plan shall describe projects or management actions, including a quantification of demand reduction or other methods, for the mitigation of overdraft.

(23 CCR, § 354.44(b)(2).)

Nowhere does Chapter 6 provide an unequivocal quantification of overdraft for either historical or future conditions. Instead, Chapter 6 repeatedly implies that the 600 AFY loss of storage, calculated based on groundwater elevation changes for the areas not yet subject to seawater intrusion, represents the entire overdraft. This approach is misleading because it omits the loss of storage due to seawater intrusion, which Chapter 5 estimates to be 12,600 AFY.

First, chapter 6 rejects the modeled estimates of overdraft, even though these estimates at least appear to be in the same neighborhood as an overdraft figure that includes both forms of storage loss: the loss represented by groundwater level declines south of the intrusion area and the loss represented by the seawater intrusion itself. Chapter 6 states

that "Averaged over the historical period, the preliminary SVIHM estimates that the 180/400- Foot Aquifer Subbasin is in overdraft by 14,800AF/yr." However, the discussion immediately characterizes this number as suspect because "this simulated overdraft contains significant variability and uncertainty." Chapter 6 does not mention the number again. Chapter 6 also claims that the future model overestimates overdraft:

> As discussed earlier, the current, preliminary version of the SVIHM, and by inference the SVOM, appears to overestimate the historical overdraft in the Subbasin and therefore underestimate the historical sustainable yield.

(Section 6.4.4.) However, Chapter 6 fails to explain why the model may be inaccurate or to provide a clear alternative statement of the magnitude of the overdraft.

Instead, Chapter 6 misleadingly implies in its note to the Table 6-8 historical budget that only the net storage change of 600 AFY estimated for the areas south of the seawater intruded areas counts as overdraft: "The net storage value is the estimated historical overdraft based on observed groundwater levels, as described in Sections 5.2.2 and 6.3.2."

And in its discussion of future conditions, Chapter 6 again implies that the overdraft is only 600 AFY:

> As described for the historical water budget, data indicate that the Subbasin has historically been in overdraft (on the order of 600 AF/yr. decline), as described in Section 5.2.2. Even though the SVOM anticipates -10,500 and -11,300 AF/yr. change in storage for 2030 and 2070, respectively, the adjusted historical decline in storage is used with the adjusted pumping estimates to provide a likely more reasonable estimate for projected sustainable yield.

(Section 6.4.3, emphasis added.) Again, this discussion implies that the only portion of the overdraft that needs to be considered is the 600 AFY storage loss in areas south of the intruded area and that the portion of the overdraft that causes seawater intrusion somehow does not count.

But pumping that causes seawater intrusion is part of the overdraft. Bulletin 118 defines overdraft as follows:

> Overdraft is "the condition of a groundwater basin or subbasin 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 the water supply conditions approximate average conditions. Overdraft can be characterized by groundwater levels that decline over a period of years and never fully recover, even in wet years.

> Moreover, groundwater overdraft can cause adverse effects including chronic decline of groundwater levels, loss of stored groundwater, intrusion of seawater into coastal basins, land subsidence, degradation of water quality, stream flow depletion, degradation of groundwater-dependent ecosystems, and increased pumping costs.

(DWR, Bulletin 118, California's Groundwater Update 2020, p. 4-24.) SGMA expressly adopts the Bulletin 118 definition of overdraft. (23 CCR, § 354.18(b)(5) [If overdraft conditions occur, as defined in Bulletin 118, the water budget shall include a quantification of overdraft over a period of years during which water year and water supply conditions approximate average conditions].)

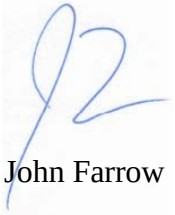
Clearly, the magnitude of the overdraft is not even approximated by the 600 AFY figure. At a minimum, Chapter 6 should acknowledge an overdraft condition based on the difference between its sustainable yield estimates and groundwater pumping since that is the amount by which pumping exceeds average long term recharge, an approach consistent with the definition of overdraft in Bulletin 118. Based on the sustainable yield data in Table 6-15, the difference between sustainable yield and pumping, i.e., the apparent overdraft, is 13,200 AFY under 2030 conditions. This is an order of magnitude higher than the 600 AFY overdraft reported for the non-seawater intruded area.

5. Intersubbasin flows

The Monterey Subbasin GSP reports subsurface flows of 9,393 to the 180/400. (Monterey GSP, p. 6-23.) Unaccountably, the 180/400 GSP reports only 1,900 AFY. (Table 6-7.) This discrepancy should be resolved.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.



John Farrow

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