

17 July 2019

To: Salinas Valley Basin Groundwater Sustainability Agency (GSA) Advisory Committee

Re: July 18, 2019 meeting

Chapter 9 of the 180/400 GSP

This comment letter is submitted on behalf of the Orradre and Scheid interests.

DRAFTS LACK MANDATORY REGULATORY CONTENT

While in many respects draft Chapter 9 is innovative and strategic, it suffers from a fatal flaw. As numerous commentators have pointed out on multiple occasions with respect to Chapter 6 (water budgets), the GSP for the 180/400 fails to *quantify* the overdraft to be mitigated to achieve sustainability. In its current iteration, draft Chapters 6 and 9 do not meet minimum regulatory requirements.

Emergency Regulation § 354.44(b)(2) states:

(b) Each Plan shall include a description of the projects and management actions that include the following:

* * *

(2) 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.

Regulation § 354.18 is titled “water budget.”

(b) The water budget shall quantify the following, either through direct measurements or estimates based on data:

* * *

(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.

Bulletin 118 (2003) provides a definition and discussion of overdraft at pages 96 and 97.

Groundwater overdraft is defined as the condition of a groundwater basin or subbasin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years, during which the water supply conditions approximate average conditions (DWR 1998).

* * *

For example, when groundwater levels decline in coastal aquifers, seawater fills the pore spaces in the aquifer that are vacated by the groundwater, indicating that the basin is being overdrafted.

Neither Chapter 6 nor Chapter 9 refer to the specific regulations above. The word “overdraft” is used in text a single time in Chapter 6 but no number/figure/quantity in any table is so labeled. The 180/400 basin is designated by the DWR as in a critical condition of overdraft, of course.

The current iteration of Chapter 9 also recites “overdraft” a handful of times -- section 9.7 is prominently labeled as a list of projects and actions for the “mitigation of overdraft” but one cannot find the quantity of overdraft to be mitigated, which renders of questionable value any projection of how much water is provided or mitigated by a given action or project. The current draft GSP for a basin in critical overdraft does not disclose the current quantity of overdraft. That lacuna will make the Plan non-compliant, no matter its other merits.

Absent the quantity of overdraft to be mitigated to achieve sustainability, one is hard-pressed to make intelligent fiscal decisions about choosing one project or action over the other. Chapter 9 (including the oral presentations at the Planning Committee) is explicit that the priority projects may be insufficient to meet sustainability and one or more alternative projects are needed. The total amount of water *just CSIP Projects 2, 3, 4, and 5* may develop appears to be 40,300 AF. By force of logic, one can *guess* the current overdraft in the 180/400 exceeds that 40,300 AFY figure. But the public should not need to guess or rely on back of cocktail napkin calculations. The total amount of overdraft to be mitigated to achieve sustainability must be explicitly identified for the GSP to meet minimum requirements.¹

ACCEPTING THE “FRAMEWORK” IS NOT APPROVAL OF THE LATER DETAILS

Draft Chapter 9 and the oral presentation provided thus far acknowledge that many details need to be worked out at later stages. One concern for interests such as the Orradres and Scheid is that partial or full acquiescence to the proposed “framework” may be perceived or taken as a willingness to accept the later “details.” Well before any GSP chapter was drafted, they reminded the GSA that in 2003/04 they and certain others from the southern parts of the Valley

¹ Whether the quantification of overdraft is the best or most useful approach to planning for sustainability is beside the point. The regulations set minimum standards.

obtained judgments based on hard-fought settlements in multiple validation actions. Those validation judgments limit the fiscal contribution of certain lands to efforts addressing the northern coastal overdraft and seawater intrusion issues. That the GSA was created after the date of the judgments does not immunize it from honoring the judgment terms.

To put in somewhat practical terms, while the proposed slate of CSIP projects/actions in Chapter 9, may have certain merit, their fiscal aspects remain subject to the limitations of the prior judgments/settlements. The list of “details to be developed” may be expanded to include the “detail” that the Valley is not a *tabula rasa* when it comes to determining which lands are legally obligated/exempt from paying for what projects/benefits.

Very truly yours,

Thomas S. Virsik

Thomas S. Virsik

Salinas Valley Water Coalition

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September 10, 2019

Dear

Thank you for this opportunity to comment on Chapter 9 of the Salinas Valley Basin Groundwater Sustainability Agency's ("SVBGSA") Groundwater Sustainability Plan ("GSP") for the 180/400 Foot Aquifer Subbasin ("180/400 Subbasin"). Our comments are summarized below and detailed in the body of this letter.

- This GSP should not set forth any basin-wide commitments since the other subbasins within the Salinas Valley Groundwater Basin ("SVGB") have not benefited from any thorough analysis.
- Water charges framework should require voter approval for funding of projects consistent with Proposition 218.
- All of the Priority Management Actions in Chapter 9 can be supported by the Coalition for further consideration and analysis to address seawater intrusion and overdraft in the 180/400 Subbasin. That said, these Priority Management Actions should be evaluated for their appropriateness for the other Subbasins of the SVGB *only* at the time the respective GSPs are prepared for these Subbasins.
- The Coalition strongly supports further consideration and analysis of Priority Management Action 3, Reservoir Reoperation. This Management Action should be evaluated not only for valley-wide benefits but also for environmental (fishery flow) benefits.
- The Coalition supports further evaluation and analysis of the following Priority Projects in Chapter 9 in order to address seawater intrusion and overdraft in the 180/400 Subbasin: invasive species eradication; optimize Castroville Seawater Intrusion Project ("CSIP") operations; maximize existing Salinas River Diversion Facility ("SRDF") diversion; modify Monterey One Water recycled water plant; and expand area served by CSIP.
- The Coalition supports further evaluation and analysis of the following Priority and Alternative Projects in Chapter 9 for consideration and potential implementation to address sustainability issues, if any, in the Subbasins other than the 180/400 Subbasin: winter releases (coupled with reservoir infrastructure upgrade) and 11043 Diversion Facilities Phase 1 and Phase II.
- Any "new water" the Salinas Valley Water Project ("SVWP") generates as part of any related projects such as "optimize CSIP operations" and "maximize existing SRDF diversion" must be shown to be over that amount already produced by the previously approved SVWP and must not be double counted. The SVWP is currently funded by special assessments which must be taken into consideration when determining a Prop 218 vote for its expansion or optimization.
- Nitrate issues are already addressed through other governmental processes, and those processes should be referenced to avoid duplicative efforts.

A. The GSP Should Not Set Forth Any Basin-Wide Commitments Since the Other Subbasins Have Not Benefited from Any Thorough Analysis.

The GSP is solely for the 180/400 Subbasin, which is the only basin within the SVGB that has been determined to be in critical overdraft. Accordingly, this Subbasin requires particularly focused analyses and management actions to mitigate the overdraft and halt seawater intrusion. The other subbasins do not have the same challenges. In fact, the consultants preparing the GSPs for SVBGSA have repeatedly stated in public forums that the Upper Valley Subbasin is currently sustainable.

Each Subbasin within the SVGB was identified as being hydrologically distinct by the Department of Water Resources ("DWR") in Bulletin 118. For the purposes of the Sustainable Groundwater Management Act ("SGMA"), each subbasin within the SVGB falls within the definition of "basin". Specifically, "basin" is defined under SGMA as "a groundwater basin or subbasin identified and defined in Bulletin 118..." (Water Code §10721(b).) In the GSP for each basin, specifically-tailored analysis and management actions must be developed in order to meet the objective of achieving "the sustainability goal for the basin for the long-term beneficial uses of groundwater." (Water Code §10727.1) Projects and Management Actions in Chapter 9

Mission Statement: The water resources of the Salinas River Basin should be managed properly in a manner that promotes fairness and equity to all landowners within the basin. The management of these resources should have a scientific basis, comply with all laws and regulations, and promote the accountability of the governing agencies.

should focus on what actions and projects are needed to provide sustainability for the critically overdrafted 180/400 Subbasin. Discussions of basin-wide actions and projects are inappropriate at this time until further analyses have been performed for each Subbasin.

Specifically, the water charges framework set forth in Chapter 9, which includes pumping allowances and fees, may be appropriate for the 180/400 Subbasin, but may not be appropriate for the other Subbasins within the SVGB which haven't had the benefit of any thorough analysis. For example if any one of those Subbasins is already determined to be sustainable, as has been stated regarding the Upper Valley Subbasin, pumping allowances and fees may not be appropriate for that Subbasin. We request that all references in the GSP for basin-wide water charges and pumping allowances be stricken. Such sentences as "A similarly structured water charges framework will be implemented in all Salinas Valley subbasins in Monterey County" is inappropriate since the other Subbasins have not had the benefit of a thorough analysis in order to determine the proper management actions needed for those Subbasins. The appropriate time to discuss the management actions for these other Subbasins is at the time a GSP is being prepared for these Subbasins.

B. Water Charges Framework Requires Voter Approval.

Chapter 9 sets forth extraction fees in a tiered system, and the revenues generated from the fees would be used either for projects or for administration, which includes the development and maintenance of a complicated banking system to keep track of extractions, hold overs and transfers. We appreciate that Chapter 9 recognizes and states that the fee structure and allowances "will not be uniform across the Salinas Valley subbasins", and that "different subbasins in the Salinas Valley will be subject to different fee and pumping allowance structures". However, Chapter 9 also states that "a similarly structured water charges framework will be implemented in all Salinas Valley subbasins in Monterey County." As previously stated, the water charges framework may not be appropriate for all subbasins. While it might be appropriate to state that "a similar structured water charges framework will be considered for implementation in all Salinas Valley subbasins", it is NOT appropriate to say that they will be, in fact, implemented. That said, in order to implement the water charges framework, the SVBGSA must seek voter approval pursuant to Proposition 26 or Proposition 218.

In general, Proposition 26 prohibits a local government from enacting, increasing, or extending any levy, charge, or exaction of any kind without voter approval unless an exception can be identified. An applicable exception may be any charge imposed for a specific benefit conferred or privilege granted or service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege. Proposition 218, on the other hand, allows for special assessments to be charged to those property owners who receive (proportional) special benefits which are not received by the public at large.

Since portions of the extraction fees would be used to fund projects and to administer a banking system, there must be voter approval of the fees and taxes pursuant to Proposition 26 and Proposition 218, with fees allocated proportionate to the benefit received. To make this manageable and to reduce the risk of voter rejection, each subbasin requiring projects or extraction fees should be a separate assessment district.

C. All of the Priority Management Actions in Chapter 9 can be supported by the Coalition for further consideration and analysis to address seawater intrusion and overdraft in the 180/400 Subbasin. That said, these Priority Management Actions should be evaluated for their appropriateness for the other Subbasins of the SVGB *only at the time the respective GSPs are prepared for these Subbasins.*

Many of the Priority Management Actions outlined in Chapter 9 are key to addressing seawater intrusion and overdraft in the 180/400 Subbasin. The following are specific comments to the Management Actions proposed in Chapter 9.

- Priority Management Action 3: Reservoir Reoperation - The reservoirs must be reoperated to provide benefits for the entire Salinas Valley, and the reoperation must be done in a manner that considers, and is consistent with, the benefits promised to the rate payers in the Subbasins for the voter approved SVWP. Under SGMA, management actions taken for one basin cannot result in harm to an adjacent basin. Thus, in determining the proper reoperation of the reservoirs, consideration must be made to share the resource: (1) to recharge of Upper Valley and Forebay subbasins; (2) for delivery to CSIP; and (3) for fishery flows. We support the stated two goals of this Management Action, with the following recommended revision:
 1. Allow surface flow release to recharge groundwater in the various Salinas Valley subbasins **almost every** winter
 2. Allow summer flows to better reach the SRDF diversion

We believe the implementation of this Priority Management Action could be expedited as it was evaluated in the original SVWP's EIR.

- Priority Management Action 4: Restrict Pumping in CSIP Area – Chapter 9 states that the primary benefit received from restricting CSIP pumping is to manage extractions from the Subbasin. It goes on to state that a second benefit received from restricting CSIP pumping is to halt the decline or raise of groundwater elevations. It then goes on to state that “CSIP pumping restrictions will only be implemented after the CSIP optimization projects are implemented, providing a reliable supply of water to growers in the CSIP area.” That statement fails to recognize the restrictions and regulations that are already in place to reduce groundwater pumping in the CSIP area. These existing regulations have failed to be enforced; thus, exacerbating seawater intrusion in the 180/400 Subbasin. According to the Engineer's Report for the SVWP, the project was intended to deliver up to 12,800 AFY via SRDF to CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from spillway modifications of the Nacimiento Dam and reoperations of the reservoirs. In exchange for providing surface water at the SRDF to CSIP, individual wells in the CSIP area were to be destroyed, and the MCWRA's supplemental wells were to be used only occasionally. Instead, only about ¼ of the maximum delivery to the SRDF has occurred, individual wells continue to be used in addition to MCWRA supplemental wells; thus, resulting in the continued advancement of seawater intrusion.

Individual actions that also caused the SVWP/CSIP projects to fail to slow down seawater intrusion include the rejection of the recycled water from Monterey One Water by growers in the CSIP area and the continued pumping of individual wells and MCWRA's supplemental wells. Regulations, which includes destruction of individual wells, and regulatory enforcement are key to restricting pumping in the CSIP area.

Immediate implementation and enforcement of these regulations must be considered rather than delayed. It is shortsighted to state that the CSIP pumping restrictions will only be implemented after the CSIP optimization projects are implemented. What if the CSIP optimization projects fail to be implemented and/or fail to be implemented in a timely manner so that seawater intrusion is further exacerbated? What are the potential impacts of proceeding in this manner?

D. The Coalition Supports MCWRA's Restrictions on Additional Wells in the Deep Aquifer, Which Restrictions Must be Enforced.

Similar to the management actions for restricting pumping in the CSIP area, regulations, which not only prohibit new wells but also replacement wells in the deep aquifer, along with regulatory enforcement, are key to stopping the depletion of groundwater in the deep aquifer.

E. The Coalition supports further evaluation and analysis of the following Priority Projects in Chapter 9 in order to address seawater intrusion and overdraft in the 180/400 Subbasin: Invasive Species Eradication; Optimize CSIP Operations; Maximize Existing SRDF diversion; Modify Monterey One Water Recycled Water Plant; and Expansion Area Served by CSIP.

Several of the Priority Projects discussed in Chapter 9 have already been analyzed and approved by Monterey County Water Resources Agency and Monterey County and should be implemented based on prior analysis and approvals. The Priority Projects supported by the Coalition are discussed below.

- Optimize CSIP operations; improve SRDF diversion, modify Monterey One Water Recycled Water Plant; and expand area served by CSIP – As stated before, the SVWP was intended to deliver up to 12,800 AFY via SRDF to CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from the spillway modifications of the Nacimiento Dam and reoperations of the reservoirs. In exchange for providing surface water at the SRDF to CSIP, individual wells in the CSIP area were to be destroyed, and the MCWRA's supplemental wells were to be used only during those times when surface water wasn't available. The SRDF has failed to be utilized to the maximum extent as intended, and instead, only about ¼ of the maximum delivery to the SRDF has occurred, individual wells continue to be used in addition to MCWRA supplemental wells-- thus, resulting in the continued advancement of seawater intrusion.

We appreciate the discussion and identification of the need to look at the timing of supply and demand for the use of recycled water. One of the reasons why maximum delivery has not been achieved is due to physical constraints of the developed project. The physical constraints include an 80-acre pond which receives as first priority the recycled water from Monterey One Water before the pond can then receive surface water, even if the surface water is readily available. Additional limitations include the sizes of pumps and pipelines

and the extent of the pipelines in the CSIP area which make the maximum delivery infeasible. These physical constraints (as well as the management actions discussed above) need to be addressed.

Many of the Priority Projects in Chapter 9 (i.e., optimize CSIP operations, improve SRDF diversion, expand area served by CSIP) related to the SVWP were not only analyzed and approved as part of the SVWP, but also included as policies in the Monterey County's 2010 General Plan and analyzed in its EIR; therefore, these Priority Projects can be implemented in an expedited manner

F. The Coalition Supports Further Evaluation and Analysis of the Following Priority and Alternative Projects in Chapter 9 for Consideration and Potential Implementation to Address Sustainability Issues, if any, in the Subbasins Other Than the 180/400 Subbasin (Except as Noted): SRDF Winter Flow Injection, Winter Releases (coupled with reservoir infrastructure upgrade) and 11043 Diversion Facilities Phase 1 and Phase II.

- 11043 Diversion Facilities - The MCWRA has not taken proper actions to protect their water rights under Permit #11043, and it is our understanding that the permit is currently subject to a notice of proposed revocation by the State Water Resources Control Board ("SWRCB"). This is despite the extensive stakeholder involvement in 2013____ to determine the proper projects for utilizing the water rights. The SVBGSA should consider the recommendations made by the Regional Advisory Committee ("RAC") when determining the appropriate projects to be developed under Permit #11043. We believe the use of Permit #11043 is better suited for the Eastside Subbasin rather than the 180/400 Subbasin. The RAC's recommendations are included as Exhibit A.
- SRDF Winter Flow Injection - This Priority Project should be considered for potential implementation in the GSP for the 180/400 Subbasin as well as other Subbasins' respective GSPs, such as for the Eastside Subbasin. During the presentation to the SVBGSA BOD, your consultant stated that the largest issue with implementing this project will be water rights related issues and that the water rights held by the MCWRA need to be better understood. The MCWRA's water rights are clearly set forth in the SWRCB permits. MCWRA has an obligation to bypass natural inflow of the Nacimiento and San Antonio rivers to satisfy the superior downstream riparian and overlying water right holders. Bypassing natural flows until the river reaches the lagoon prior to storage in the reservoirs would allow the SVGB to be full, reducing waste through evaporation. Storage in the aquifer also allows for ready releases to the SRDF. Bypassing natural inflows would not require a change in the MCWRA's water rights permits. However, there may need to be clarification of the MCWRA's water right permit as to timing and amount of diversion at the SRDF.
- Winter Releases (Coupled with Changes to Reservoir Operation Infrastructure) – As discussed above, the reservoirs must be reoperated to provide benefits for the entire Salinas Valley, which includes not only delivery to the CSIP area, but also recharge to the Upper Valley and Forebay subbasins. Winter releases would allow water to be stored in the aquifers, thus, reducing waste through evaporation, and allowing for ready releases to the SRDF in the Spring.

Additionally, modifications to the Nacimiento Dam could also benefit releases to CSIP. Of particular interest are the low-level gates at the Nacimiento Reservoir, which we are told have an operating capacity of 460 cfs. Because San Antonio and Nacimiento reservoirs are operated together, increasing the capacity of these low-level gates at the Nacimiento Reservoir would allow for greater flow capacity in order to provide conservation releases and releases to the SRDF while meeting the mandatory release to the lagoon as required in the MCWRA's water rights permits.

Any "new water" generated as part of any project related to the SVWP (e.g., "optimize CSIP operations", "maximize existing SRDF diversion", etc.) must be shown to be over that amount already generated by the previously approved SVWP and not be double counted. The SVWP is currently funded by special assessments which must be taken into consideration when determining a Prop 218 vote for its expansion.

As stated previously, the Engineer's Report for the SVWP stated that the project was intended to deliver up to 12,800 AFY as part of the CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from spillway modifications at Nacimiento Dam and reoperations of the reservoirs. The additional water generated by the SVWP of 29,000 afy should not be considered "new water" for the purposes of this GSP since that water is already accounted and paid for by Zone 2C landowners.

The SVWP was successfully approved by the landowners within Zone 2C, an assessment district. Yet, the project that was analyzed for the purpose of determining the special assessments in its Engineer's Report is not the same project as the project that was constructed and implemented. As described previously, the SVWP was downsized, and the operations of the reservoirs from that described in the Engineer's Report and EIR were significantly modified. Simply stated, the special assessments that continue to be paid by Zone 2C landowners do not match the special benefits conferred onto the landowners as analyzed in the Engineer's Report. This issue should be addressed before any expansion of the SVWP is considered.

E. Nitrate Issues Are Already Addressed Through Other Processes.

Although water quality issue, in particular nitrate, was raised during the meeting you held on July 18, 2019, we would like to note that this particular issue is being addressed through: (1) installation of treatment systems; (2) Irrigated Lands Program of the Regional Water Control Board ("RWQCB"); and (3) basin-wide Settlement Agreement with the RWQCB and SWRCB, which requires providing replacement water to water systems with nitrate issues. The GSP would only need to reference the above actions when addressing the water quality problems associated with nitrates. Seawater intrusion, on the other hand, requires management actions and projects.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "N. Isakson". The signature is fluid and cursive, with the first letter of the last name being a large, stylized 'N'.

Nancy Isakson, President



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Dear Mr. Peterson and Mr. Williams,

Thank you for taking the time to meet with us and our SGMA consultant EKI Environment & Water, Inc. regarding Draft Chapter 9 (Projects and Management Actions) of the 180/400 Foot Aquifer Subbasin Groundwater Sustainability Plan (180/400 Subbasin GSP) on 10 July 2019. Based upon further review of Draft Chapter 9, we have expanded our comments beyond those discussed during the meeting. This letter provides MCWD GSA's initial comments on Draft Chapter 9. We realize that the actions and projects described in Chapter 9 will be refined and new actions and projects added through an iterative process involving all of the stakeholders.

1. Pumping Allowance (Section 9.2.2)

As written, the document implies that municipalities may not receive a sustainable pumping allowance and will need to pay more than agricultural users to pump their base amount. Municipal water purveyors, such as MCWD, have acquired appropriative rights through pumping, which pumping has prescribed against overlying rights. The GSP needs to provide that MCWD's MCWRA groundwater allocations are the sustainable pumping allowances for Fort Ord Lands and Marina Area Lands pursuant to the annexation agreements described below.

1993 Fort Ord Lands Annexation Agreement: On September 21, 1993, the U.S Government, as represented by the U.S. Army, entered into the Agreement between the United States of America and the Monterey County Water Resources Agency concerning Annexation of Fort Ord into Zones 2 and 2A of the Monterey County Water Resources Agency (1993 Annexation Agreement). The annexed Fort Ord Lands consisted of all lands within the then existing boundaries of Fort Ord, which included all of the lands that were later transferred to the Fort Ord Reuse Authority. MCWRA allocated 6,600 AFY of groundwater within the then defined Salinas Basin for use within the Fort Ord Lands and recognized withdrawals from the Seaside Basin by Fort Ord of 424 AFY. In consideration for the annexation, the U.S. Government paid MCWRA an annexation fee of \$7,400,000. Federal lands were exempt from Zone 2 and 2A assessments, but lands transferred for non-Federal uses, such as for Base Reuse, were required to pay those assessments.

The MCWRA Backstop: Section 4g stated, “Should future litigation, regulation or other unforeseen action diminish the total water supply available to the MCWRA, the MCWRA agrees that it will consult with the Fort Ord/POM Annex Commander. Also, in such an event, the MCWRA agrees to exercise its powers in a manner such that Fort Ord/POM Annex/RC shall be no more severely affected in a proportional sense than the other members of the Zone.”

Section 4i recognized that the Federal Government was “considering transferring the ownership and operation of the Fort Ord wells and water distribution system to a successor water purveyor, utility, or agency. Under such a transfer, the MCWRA agrees that the ***Government, in its sole discretion, may transfer its applicable water rights under this agreement to the successor water purveyor, utility, or agency.***” [Emphasis added.] By quitclaim deed dated October 23, 2001, the Federal Government transferred all of the Government’s ownership in the Fort Ord water system infrastructure and 4,871 AFY of 6,600 AFY of groundwater under the 1993 Annexation Agreement to the Fort Ord Reuse Authority (FORA). On October 24, 2001, FORA in turn quitclaimed all of that infrastructure and the 4,871 AFY of groundwater to MCWD.

MCWD intends to use the 4,871 AFY of groundwater to provide water service to those jurisdictions within MCWD’s Ord Community Service Area, which are entitled to water service under those rights pursuant to the Fort Ord Base Reuse Plan.

1996 Marina Area Lands Annexation Agreement: In March 1996, the Monterey County Water Resources Agency, MCWD, the J.G. Armstrong Family Members, RMC Lonestar (now CEMEX), and the City of Marina entered into the Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands. Section 1.1 states,

“The purpose of this Agreement and Framework is to help reduce seawater intrusion and protect the groundwater resource and preserve the environment of the Salinas River Groundwater Basin through voluntary commitments by the Parties to limit, conserve and manage the use of groundwater from the Salinas River groundwater basin, and to provide the terms and conditions for the annexation of certain territory in the Marina area to the Monterey County Water Resources Agency’s benefit assessment Zones 2 and 2A as a financing mechanism providing additional revenues to the Monterey County Water Resources Agency to manage and protect the groundwater resources in the Salinas River Groundwater Basin and to reduce seawater intrusion.”

The agreement provided for a potable groundwater allocation of 3,020 AFY for use by MCWD for its Central Marina service area. The agreement also provided for 920 AFY for non-agricultural use on the Armstrong Ranch upon annexation to Zones 2 and 2A. Under the 1996 Annexation Agreement, Lonestar agreed to limit its overlying groundwater right to not more than its historic use of 500 AFY of non-potable water on the overlying CEMEX property in exchange for MCWRA agreement on specified annexation fees when Lonestar requested annexation to the Zones.

The 1996 Annexation Agreement established “a contractual process for the exercise of regulatory authority by the MCWRA under Water Code App. Section 52-22, and the MCWD under Water Code section 31048.” (MCWRA Negative Declaration re: Annexation of Marina Area Lands to Zones 2/2A, dated February 21, 1996, at p. 4.)

The 1996 Annexation Agreement (Sec. 5.9) required MCWD to pay a \$2,849,410 annexation fee to MCWRA less a credit of \$400,000. Standby charges and assessments were then levied and collected by the MCWRA on an annual basis on all Marina Area Lands. Section 8.4, Use of Annexation Fees, states,

“Annexation fees from the MCWD service area, the Armstrong Ranch and the Lonestar Property shall be used by MCWRA to pay the costs of a BMP [Salinas River Basin Management Plan] process that includes mitigation plans for the Marina Area based on the planning guidelines contained in this Agreement and Framework. Such annexation fees shall also be used for management and protection of the ‘900-foot aquifer.’”

In 2003, Zones 2 and 2A were replaced by a new Zone 2C to collect assessments for the operation and maintenance of Nacimiento and San Antonio Dams to reduce flooding impacts on the Salinas River and provide water conservation with consideration given to recreation, and for dam administration, Salinas River Channel maintenance, construction of the Salinas River Diversion Facility (rubber dam), and cloud seeding.

The Fort Ord Lands and the Marina Area Lands have yet to receive any direct benefits from the Nacimiento and San Antonio Reservoirs.

MCWRA’s Obligation to Protect the Deep Aquifer for MCWD’s Use: Section 5.3, Management of 900-foot aquifer, provides, “The Parties agree that the ‘900-foot’ aquifer should be managed to provide safe, sustained use of the water resource, and to preserve to MCWD the continued availability of water from the ‘900-foot’ aquifer.” Section 5.9 further stated that the annexation fees paid by MCWD “shall also be used for management protection of the ‘900-foot aquifer.’”

Section 8.1, Equal treatment by MCWRA and MCWD, provides in part, “MCWRA shall not at any time seek to impose greater restrictions on water use from the Basin by MCWD, Armstrong or Lonestar than are imposed on users either supplying water for the use or using water within the city limits of the City of Salinas.”

For the above reasons, the SVBGSA needs to assign as the sustainable pumping allowances for Fort Ord Lands and Marina Area Lands the groundwater allowances provided in the 1993 and 1996 Annexation Agreements.

As agreed upon during our meeting, the GSP should state that the appropriative and prescriptive groundwater rights of municipal water purveyors, previous water management agreements with the MCWRA, as well as previous payments to zones of benefit will be considered in the development of sustainable allowances for municipalities.

2. Water Charges Framework (Section 9.2)

The water charges framework outlined in Section 9.2 states that:

A similarly structured water charges framework will be implemented in all Salinas Valley subbasins in Monterey County. However, details such as pumping allowance quantities, pumping fees, and tier structures will be different for each subbasin. These differences will reflect the fact that each subbasin’s water charges framework is based on the specific hydrogeology and conditions of that subbasin.

Sustainable Pumping Allowances are a base amount of groundwater pumping assigned to each non-exempt groundwater pumper. The sum of all sustainable pumping allowances is the sustainable yield of the subbasin after all projects have been implemented.

The sustainable pumping allowances cannot be tied to “sustainable yield of the subbasin after all projects have been implemented”, because some projects will have more localized benefits and/or losses to certain subbasins versus others. For example, if water is recharged or extracted from a given subbasin as part of a large-scale basin-wide project, that project will significantly impact the sustainable yield of that subbasin. Therefore, SVBGSA could effectively determine the sustainable yield of a subbasin depending upon which projects are implemented. Further, given existing inland cross boundary flows, subbasins such as the Monterey Subbasin, could be allocated no sustainable yield. We recommend that SVBGSA consider using some estimate of the “natural safe yield” within each subbasin (i.e. pre-groundwater extraction) to determine the sustainable pumping allowance for each basin. This methodology has been used in multiple adjudications throughout California and is being utilized as part of SGMA within the Kern Subbasin.

3. Management Actions, Projects, and Alternative Projects (collectively, Actions/Projects); Replenishment Water

It is universally agreed that a major key to achieving groundwater sustainability within an overdrafted subbasin is Replenishment Water to the extent Replenishment Water can be made available.

It is recommended that the primary objectives of the Actions/Projects should be:

- (1) Provide Replenishment Water to North County in substitution for groundwater. For example, a 10% substitution by 2030 and a 25% substitution by 2040.
- (2) Repeal seawater intrusion – a mission that the MCWRA has had since the 1940’s.

The Chapter 9 list of Actions/Projects are a good start. However, there are combinations of Actions/Projects that appear to produce greater synergy, i.e., Actions/Project when implemented in combination appear to be more water-efficient and cost-effective in reducing undesirable results and producing Replenishment Water for use within the 180/400 Foot Aquifer Subbasin with benefits for the Monterey, Eastside, and potentially Seaside Subbasins. In other words, synergistic combinations of Actions/Projects, consisting of Chapter 9 and other projects, could produce “more bang for the buck.” The “bang” is producing and delivering Replenishment Water and reducing undesirable results.

Draft Chapter 9 mentions implementing combinations of Actions/Projects. The following are first cut, suggested combinations of Actions/Projects for consideration for inclusion in Chapter 9:

3.1. Direct Replenishment Water - Actions/Projects #1: The following are suggested combinations of Actions/Projects to reduce groundwater pumping in the 180/400 Foot Aquifer Subbasin by the direct use of recycled water and surplus Salinas River water during the irrigation season (Direct Replenishment Water):

- MA2: Reservoir Reoperation
- PP1: Invasive Species Eradication
- PP2: Optimize CSIP Operations

- PP3: Improve SRDF Diversion (including installing Radial Collectors to increase ability to divert more water when water is available)
- PP5: Expand Area Served by CSIP
- PP6: 11043 Diversion Facilities
- PP5: Expand Area Served by CSIP

The Salinas Valley has evolved over time to become dependent upon groundwater for approximately 95% of the water use within the Salinas Valley and upon the Salinas River and the Nacimiento and San Antonio Reservoirs to provide river flows to seep into the groundwater aquifers for recharge and not for direct irrigation and municipal and industrial uses. As stated in MA2, that type of operation mostly benefits the Upper Valley and Forebay Subbasins, which are closest to the reservoirs, and with little benefits to either the East Side (subbasin with the highest CASEGEM score) or the Critically Overdrafted 180/400 Foot Aquifer Subbasins, yet all non-Federal landowners within the Pressure Zone pay benefit assessments to the MCWRA for Nacimiento and San Antonio Reservoirs.

Salinas River water operations to provide seepage flows for groundwater recharge is diametrically different from water operations in the Sacramento Valley and the North San Joaquin Valley where direct delivery of surface water for irrigation is the core agricultural water source for farms within agricultural water districts. For example, within the Modesto Subbasin and Turlock Subbasin, the Modesto, Turlock, and Oakdale Irrigation Districts in average water years will divert approximately 1,000,000 AF of Tuolumne and Stanislaus River water for delivery to their farmers. MCWD's general counsel Griffith & Masuda is also general counsel to the Turlock Irrigation District.

The synergy of Reservoir Reoperation, Invasive Species Eradication, Improve SRDF Diversion, and 11043 Diversion Facilities could efficiently and effectively provide additional river Replenishment Water for the 180/400 Foot Aquifer Subbasin thereby reducing pumping and assisting in halting seawater intrusion without reducing benefits to the Upper Valley and Forebay Subbasins.

Section 9.4.4.7, Preferred Project 6: 11043 Diversion Facilities, incorrectly states that diversions under this permit can only occur at the two diversion locations (near Soledad (within Forebay Aquifer) and Chualar) identified in the original July 11, 1949 Water Rights Application 13225. Points of diversions under a permit can be changed or a new point of diversion added with the filing of a change petition pursuant to Water Code Sections 1701.2, et seq. MCWRA's Amended Water Rights License 7543, Amended License 12624, and Amended Permit 21089 already designate the SRDF Diversion as an authorized point of redistribution. Those licenses and permits were amended to comply with the NMFS' Biological Opinion. Therefore, water stored under those water rights is already authorized to be diverted at the SRDF. The Reservoir Reoperation Management Action already has the stated goal of operating the two reservoirs so as to "Allow both natural and surplus flows to better reach the SRDF diversion." Adding the SRDF as an additional point of diversion under Permit 11043 would conform that permit with the authorized points of redistribution in MCWRA's other water rights licenses and permit and comply with the Biological Opinion. As the result of the SWRCB's action to revoke Permit 11043, under new permit terms granted by the SWRCB on September 18, 2013, the MCWRA has submitted a petition for an extension of time to put the water under the permit to beneficial use. A petition to add a new point of diversion could be added to that petition.

3.2. Indirect Replenishment Water - Actions/Projects #2: The following are the Actions/Projects that would use winter treated sewer flows and winter Salinas River flows for groundwater recharge to be later extracted for agricultural and municipal uses:

- PP3: Improve SRDF Diversion
- PP6: 11043 Diversion Facilities
- PP5: Expand Area Served by CSIP
- AP2: Winter Potable Reuse Water Injection
- AP3: Extract Winter Flows Using Radial Collector(s) and Inject into 180- and 400-Foot Aquifers
- AP5: Use the Upper Portion of the 180/400 Foot Aquifer Subbasin for Seasonal Storage

These are complementary projects to Actions/Projects #1. This synergy of these Actions/Projects is to use winter water, e.g., treated sewer flows and winter Salinas River flows, for groundwater recharge during the winter and to later extract that water for delivery in the summer. Any water to be injected must be treated. MCWD has performed a feasibility study on constructing a water treatment plant and spreading basins at its Armstrong Ranch property near the SRDF. That study will be made available to the SVBGSA. Treated water could also be conveyed north across the river to the Castroville area.

3.3. Seawater Intrusion/Replenishment Water - Actions/Projects #3: The following are suggested combinations of Actions/Projects to stop and reverse seawater intrusion and to produce Replenishment Water:

- PP8: Seawater Intrusion Pumping Barrier
- AP1: Desalinate water from the Seawater Barrier Extraction Wells

Combined Projects PP8 and AP1 are discussed in detail in Section 4 below.

3.4. Regulatory - Actions/Projects #4: The following are the regulatory Actions/Projects listed in Chapter 9:

- MA1: Agricultural Land and Pumping Allowance Retirement
- MA3: Restrict Pumping in CSIP Area
- MA4: Support and Strengthen MCWRA Restrictions on Additional Wells in the Deep Aquifer

MA1 is a “willing seller, willing buyer” program, which MCWD GSA can support. Proposed MA3 as described is to prevent all agricultural pumping in the CSIP Area. We would observe that during the 25% driest water years, some agricultural pumping may very well be necessary. Formation of pump improvement districts or private community pumps for designated areas within CSIP could be considered for use during the driest water years. MCWD GSA comments on MA4 is in Section 5 below.

4. Combined Seawater Intrusion Pumping Barrier (PP8) with Desalinate Water from the Seawater Barrier Extraction Wells (with or without reinjection) (AP1) Project.

a. Combined Project Description from draft Chapter 9:

Chapter 9 describes the combined project as follows:

[PP8] Seawater intrusion will be arrested using a pumping barrier along the coast. The barrier will be approximately 8.5 miles in length between Castroville and Marina. The intrusion barrier comprises 22 extraction wells; although this number may change as the project is refined. Supplemental water to replace the extracted water would come from one or a number of other sources such as those identified in Preferred Project 3 or Alternative Projects 1, 2, 4, and 5.

* * * Alternatively, the extracted water or a portion thereof could be conveyed to a new or existing desalination facility where it can be treated for potable and/or agricultural use. The water extracted from these wells will be brackish due to historical seawater intrusion, therefore, the extraction will serve to remove the brackish water and allow replacement for fresh water from other sources, most likely a combination of desalinated water, excess surface water from the Salinas River, and/or purified recycled water.

* * * The project will stop and reverse seawater intrusion, helping to remediate and restore the 180/400-foot aquifer subbasin.

* * * [AP1] This project would treat water extracted from the seawater intrusion barrier and allow for its reinjection in the 180-Foot Aquifer and 400-Foot Aquifer.

Injection barriers are the most common method employed to halt seawater intrusion. Injection barriers have been used in Southern California basins to control saltwater intrusion for over 30 years. They are the most common, technically demonstrated method employed to stop seawater intrusion around the world. But they add another layer of costs and infrastructure.

A pure extraction barrier project with no reinjection of treated water, with similar groundwater hydrology to North County, may not exist. Alameda County Water District's Newark Desalination Facility could be studied to determine if it can possibly be used as a model for the Pumping Barrier. ACWD's Desalination Facility is part of ACWD's Aquifer Reclamation Program which began in 1974 with the goal of reclaiming those portions of the Niles Cone Groundwater Basin affected by saltwater intrusion from San Francisco Bay in the early 20th century. The District pumps brackish water from the groundwater basin so that freshwater from other parts of the basin can move in to take its place. A key component of this project has been the addition of replenishment water to the basin, which brought mean water levels above sea level prior to the initiation of extraction. Since 2003, brackish water which was once allowed to flow back into San Francisco Bay is now diverted to the Desalination Facility so that it can be put to beneficial use in the Tri-City area.

b. Project Phasing:

There is a lot of uncertainty relating to costs, who pays, where are the optimum locations for the extraction wells, and whether an injection barrier would also be needed as envisioned in AP1. It is suggested that the combined project be broken up into possibly 4 phases with each phase consisting of 4 to 6 extraction wells and a modular brackish water desalination plant with the 1st Phase starting at the northern end of the 180/400-Foot Aquifer Subbasin.

A study would be performed during 2020 and 2021 to determine the specific depths, locations, spacing and rates of extraction of the brackish water extraction wells to make the project most effective, and to assess, among other things, (1) the effectiveness of these wells to halt salt-water intrusion, (2) evaluate other potential subbasin impacts, and (3) the best location for the brackish water desalination plant.

A majority of the project area has been the subject of intense hydrogeological study within the last decade and most recently the focus of a high-quality Airborne Electromagnetic (AEM) survey (data-collection effort) that has generated valuable information about subsurface conditions over a significant section of the coastline and inland areas and is available for use in project design and implementation. MCWD conducted its first AEM overflight in May 2017 (AEM 1.0) and its second in April 2019 (AEM 2.0). Both AEM studies covered the North County area and should be used to focus well locations and well design that would target the main pathways of seawater intrusion into and within the multi-aquifer system of the 180/400 Foot Aquifer Subbasin. The use of this technology has grown to be an effective tool in California as shown by other AEM studies that have been conducted in Tulare County, Eastern Kern County, and Butte and Glenn Counties.

The MCWD GSA plans to request Proposition 68 funding to facilitate the development of a numerical model that can account for variable density of seawater and fresh water to further evaluate the Pumping Barrier project. The modeling will be utilized to evaluate the potential effects of the barrier on groundwater flow within the Monterey Subbasin. The model will be used to evaluate alternative well spacing and design within the Monterey Subbasin to allow independent removal of groundwater containing lower concentrations of total dissolved solids (TDS) from the Dune Sand Aquifer and Upper 180-Foot Aquifer for potential treatment and potable use. Prioritizing treatment of groundwater with lower concentrations of TDS is likely to be more cost effective and reduce brine discharge quantities. Salinity information obtained from the AEM Study and Fort Ord well sampling will be utilized in the development of the numerical model and aid in the design of the barrier wells within the Monterey Subbasin. The results of these numerical analyses will be shared with SVBGSA to aid in the evaluation and potential design of the Pumping Barrier.

c. **Potential Project Benefits:** The potential project benefits could be considerable, including: (1) stop and reverse seawater intrusion within the 180/400 Foot Aquifer Subbasin and Monterey Subbasin; (2) provide supplemental drinking water to Castroville; (3) provide supplemental drinking water to the City of Salinas to decrease the known pumping depressions within the Eastside Subbasin and to help restore seaward gradients and groundwater flow within the 180 Foot Aquifer and 400 Foot Aquifer; (4) provide supplemental drinking water to Marina, Fort Ord and the Monterey Peninsula, and potentially groundwater recharge within the Seaside Subbasin; (5) provide desalinated water for an injection barrier located landward of the extraction barrier and inland of the seawater intrusion front to increase the benefit of the extraction barrier and halt the further inland movement of seawater; and (6) avoid pumping and building new infrastructure within Environmentally Sensitive Habitat Areas (ESHA).

d. **Project Elements:**

Location of Brackish Water Extraction Wells:

PP8 proposes a Pumping Barrier of approximately 8.5 miles in length between Castroville and Marina. Assuming that the project will be phased, it is recommended that the Phase 1 extraction wells be located west of Castroville for the protection of the area that suffers both seawater intrusion and the counter flow of groundwater east to the East Side pumping depressions.

Location of Brackish Water Desalination Plant: The location of the desalination plant will need to be determined by an optimization study using various factors, including identified Project Benefits and their prioritization. For example, a plant located north of the Salinas River would be located (1) nearer to Castroville, (2) nearer to the City of Salinas and the East Side pumping depressions, and (3) within the North County agricultural area. However, it would be further away from the Monterey Peninsula. In contrast, a plant located south of the Salinas River would be located nearer to the Monterey Peninsula but further away from, Castroville, City of Salinas, and the North County agricultural area. AP1 lists the following possible desalination plants: Monterey Peninsula Water Supply Project (MPWSP) (6.4 mgd/ 7,100 AFY); Deep Water Desalination Plant (22 mgd/ 25,000 AFY); and People Water Supply Project (12 mgd/ 13,400 AFY).

Desalination Capacity of Brackish Water Plant: The desalination capacity of the brackish water plant will initially depend upon the pumping capacity of the extraction wells and how the plant's product water will be allocated among Project Benefits c(2) through (5) or any other uses. It is common for these types of facilities to be constructed for future expansion in a modular design that will allow for incremental growth as additional feedwater is made available. The design capacities of the pipelines bringing brackish water in and of the pipelines carrying product water out will need to take into consideration future expansion for the ultimate project buildout.

e. **Groundwater Rights Issues:** Because the 180/400-Foot Aquifer Subbasin has been designated as a Critically Overdrafted Subbasin, the necessary groundwater rights that would support the project will need to be assessed. Returning water to the Salinas Valley Groundwater Basin to comply with the Monterey County Water Resources Agency Act's export prohibition does not confer a groundwater right, only compliance with the Agency Act.

5. Restriction on Additional Wells in the Deep Aquifer (Priority Management Action 4)

MCWD supports implementation of Priority Management Action 4: Support and Strengthen MCWRA Restrictions on Additional Wells in the Deep Aquifer. As presented in our comments for Chapter 8, groundwater elevations in the Deep Aquifer are below sea level and declining, suggesting that extraction from this aquifer exceeds the sustainable yield of this aquifer zone.

This issue is very important to MCWD because in the 1996 Annexation Agreement, MCWRA agreed to protect the Deep Aquifer for MCWD's use, but MCWRA did not take any protective action until the recent adoption of Ordinance 5302. Section 5.3, Management of 900-foot aquifer, of the 1996 Annexation Agreement provides, "The Parties agree that the '900-foot' aquifer should be managed to provide safe, sustained use of the water resource, and to preserve to MCWD the continued availability of water from the '900-foot' aquifer." Section 5.9 further stated that the annexation fees paid by MCWD "shall also be used for management protection of the '900-foot aquifer.'"

MCWD will work with MCWRA pursuant to the 1996 Annexation Agreement on MCWRA's Deep Aquifer study.

6. Winter Potable Reuse Water Injection (Alternative Project 2)

For Alternative Project 2: Winter Potable Reuse Water Injection, the document should include an option (or separate alternative) for year-round potable reuse water injection by MCWD, as described in its Grant Application, provided to SVBGSA on 20 June 2019. MCWD has rights to recycled water on a year-round basis. Per discussions during the meeting on 11 July 2019, MCWD provided the following language for inclusion in the GSP:

“MCWD is currently conducting a feasibility study on injection of purified recycled water into the Monterey Subbasin. The project proposes to use purified recycled water available to MCWD from the AWPf, some of which is available year-round per the district's agreement with M1W, for indirect potable reuse and prevention of further seawater intrusion. This project is consistent with and can readily be implemented in conjunction with the winter potable reuse project identified herein.”

7. Extract Winter Flows using Radial Collectors and Inject into 180- and 400-Foot Aquifers (Alternative Project 3)

Alternative Project 3 is the winter extension of Preferred Project 3, Improve SRDF Diversion. While under Alternative Project 3, the new radial collector system would only operate from November through March, the system would be operated from April through October under Preferred Project 3. There may be even steelhead benefits to also operating the system during April through October in conjunction with the SRDF.

Section 9.4.5.3 correctly observes that a significant volume of water may be available for diversion or extraction from the Salinas River during the winter. However, securing and clarifying water rights is not a constraint on this proposed project. As discussed above, MCWRA's Amended Water Rights License 7543, Amended License 12624, and Amended Permit 21089 already designate the SRDF Diversion as an authorized point of rediversion. Those licenses and permits were amended to comply with the NMFS' Biological Opinion. Therefore, water stored and released under those water rights is already authorized to be diverted at the SRDF. The Reservoir Reoperation Management Action already has the stated goal of operating the two reservoirs so as to “Allow both natural and surplus flows to better reach the SRDF diversion.” Adding the SRDF as an additional point of diversion under Permit 11043 pursuant to a change petition under Water Code Sections 1701.2, et seq., would conform that permit with the authorized points of rediversion in MCWRA's other water rights licenses and permits and comply with the Biological Opinion.

Salinas River provided to CSIP is not required to be treated, but river water to be injected must first be treated and those costs must be included where applicable.

Additionally, an alternative should include direct piping of SRDF radial collector water to MCWD during winter months. This alternative may be less expensive than injection. We suggest that benefits discussion of this project to be slightly modified to:

“This project could benefit other subbasins, such as the Monterey and East Side subbasins by providing treated potable water to these subbasins for direct recharge and/or municipal potable use.”

Gary Petersen & Derrik Williams

1 August 2019

Page 11 of 11

Thank you for this opportunity to provide these comments. We look forward to working with you to discuss, evaluate, and refine the proposed Chapter 9 actions and projects.

Sincerely,

A handwritten signature in blue ink, appearing to read 'K Van Der Maaten', with a stylized, flowing script.

Keith Van Der Maaten

General Manager, Marina Coast Water District

Salinas Valley Water Coalition

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TRANSMITTED VIA EMAIL

Salinas Valley Groundwater Sustainability Agency
Atten: Mr. Gary Petersen, General Manager

September 10, 2019

Re: SVBGSA 180/400 Aquifer GSP

Dear Mr. Petersen

Thank you for this opportunity to comment on Chapter 9 of the Salinas Valley Basin Groundwater Sustainability Agency's ("SVBGSA") Groundwater Sustainability Plan ("GSP") for the 180/400 Foot Aquifer Subbasin ("180/400 Subbasin"). Our comments are summarized below and detailed in the body of this letter.

- This GSP should not set forth any basin-wide commitments since the other subbasins within the Salinas Valley Groundwater Basin ("SVGB") have not benefited from any thorough analysis.
- Water charges framework should require voter approval for funding of projects consistent with Proposition 218.
- All of the Priority Management Actions in Chapter 9 can be supported by the Coalition for further consideration and analysis to address seawater intrusion and overdraft in the 180/400 Subbasin. That said, these Priority Management Actions should be evaluated for their appropriateness for the other Subbasins of the SVGB *only* at the time the respective GSPs are prepared for these Subbasins.
- The Coalition strongly supports further consideration and analysis of Priority Management Action 3, Reservoir Reoperation. This Management Action should be evaluated not only for valley-wide benefits but also for environmental (fishery flow) benefits.
- The Coalition supports further evaluation and analysis of the following Priority Projects in Chapter 9 in order to address seawater intrusion and overdraft in the 180/400 Subbasin: invasive species eradication; optimize Castroville Seawater Intrusion Project ("CSIP") operations; maximize existing Salinas River Diversion Facility ("SRDF") diversion; modify Monterey One Water recycled water plant; and expand area served by CSIP.
- The Coalition supports further evaluation and analysis of the following Priority and Alternative Projects in Chapter 9 for consideration and potential implementation to address sustainability issues, if any, in the Subbasins other than the 180/400 Subbasin: winter releases (coupled with reservoir infrastructure upgrade) and 11043 Diversion Facilities Phase 1 and Phase II.
- Any "new water" the Salinas Valley Water Project ("SVWP") generates as part of any related projects such as "optimize CSIP operations" and "maximize existing SRDF diversion" must be shown to be over that amount already produced by the previously approved SVWP and must not be double counted. The SVWP is currently funded by special assessments which must be taken into consideration when determining a Prop 218 vote for its expansion or optimization.
- Nitrate issues are already addressed through other governmental processes, and those processes should be referenced to avoid duplicative efforts.

A. The GSP Should Not Set Forth Any Basin-Wide Commitments Since the Other Subbasins Have Not Benefited from Any Thorough Analysis.

The GSP is solely for the 180/400 Subbasin, which is the only basin within the SVGB that has been determined to be in critical overdraft. Accordingly, this Subbasin requires particularly focused analyses and management actions to mitigate the overdraft and halt seawater intrusion. The other subbasins do not have the same challenges. In fact, the consultants preparing the GSPs for SVBGSA have repeatedly stated in public forums that the Upper Valley Subbasin is currently sustainable.

Each Subbasin within the SVGB was identified as being hydrologically distinct by the Department of Water Resources ("DWR") in Bulletin 118. For the purposes of the Sustainable Groundwater Management Act ("SGMA"), each subbasin within the SVGB falls within the definition of "basin". Specifically, "basin" is defined under SGMA as "a groundwater basin or

Mission Statement: The water resources of the Salinas River Basin should be managed properly in a manner that promotes fairness and equity to all landowners within the basin. The management of these resources should have a scientific basis, comply with all laws and regulations, and promote the accountability of the governing agencies.

subbasin identified and defined in Bulleting 118...” (Water Code §10721(b).) In the GSP for each basin, specifically-tailored analysis and management actions must be developed in order to meet the objective of achieving “the sustainability goal for the basin for the long-term beneficial uses of groundwater.” (Water Code §10727.1) Projects and Management Actions in Chapter 9 should focus on what actions and projects are needed to provide sustainability for the critically overdrafted 180/400 Subbasin. Discussions of basin-wide actions and projects are inappropriate at this time until further analyses have been performed for each Subbasin.

Specifically, the water charges framework set forth in Chapter 9, which includes pumping allowances and fees, may be appropriate for the 180/400 Subbasin, but may not be appropriate for the other Subbasins within the SVGB which haven’t had the benefit of any thorough analysis. For example if any one of those Subbasins is already determined to be sustainable, as has been stated regarding the Upper Valley Subbasin, pumping allowances and fees may not be appropriate for that Subbasin. We request that all references in the GSP for basin-wide water charges and pumping allowances be stricken. Such sentences as “A similarly structured water charges framework will be implemented in all Salinas Valley subbasins in Monterey County” is inappropriate since the other Subbasins have not had the benefit of a thorough analysis in order to determine the proper management actions needed for those Subbasins. The appropriate time to discuss the management actions for these other Subbasins is at the time a GSP is being prepared for these Subbasins.

B. Water Charges Framework Requires Voter Approval.

Chapter 9 sets forth extraction fees in a tiered system, and the revenues generated from the fees would be used either for projects or for administration, which includes the development and maintenance of a complicated banking system to keep track of extractions, hold overs and transfers. We appreciate that Chapter 9 recognizes and states that the fee structure and allowances “will not be uniform across the Salinas Valley subbasins”, and that “different subbasins in the Salinas Valley will be subject to different fee and pumping allowance structures”. However, Chapter 9 also states that “a similarly structured water charges framework will be implemented in all Salinas Valley subbasins in Monterey County.” As previously stated, the water charges framework may not be appropriate for all subbasins. While it might be appropriate to state that “a similar structured water charges framework will be considered for implementation in all Salinas Valley subbasins”, it is NOT appropriate to say that they will be, in fact, implemented. That said, in order to implement the water charges framework, the SVBGSA must seek voter approval pursuant to Proposition 26 or Proposition 218.

In general, Proposition 26 prohibits a local government from enacting, increasing, or extending any levy, charge, or exaction of any kind without voter approval unless an exception can be identified. An applicable exception may be any charge imposed for a specific benefit conferred or privilege granted or service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege. Proposition 218, on the other hand, allows for special assessments to be charged to those property owners who receive (proportional) special benefits which are not received by the public at large.

Since portions of the extraction fees would be used to fund projects and to administer a banking system, there must be voter approval of the fees and taxes pursuant to Proposition 26 and Proposition 218, with fees allocated proportionate to the benefit received. To make this manageable and to reduce the risk of voter rejection, each subbasin requiring projects or extraction fees should be a separate assessment district.

C. All of the Priority Management Actions in Chapter 9 can be supported by the Coalition for further consideration and analysis to address seawater intrusion and overdraft in the 180/400 Subbasin. That said, these Priority Management Actions should be evaluated for their appropriateness for the other Subbasins of the SVGB only at the time the respective GSPs are prepared for these Subbasins.

Many of the Priority Management Actions outlined in Chapter 9 are key to addressing seawater intrusion and overdraft in the 180/400 Subbasin. The following are specific comments to the Management Actions proposed in Chapter 9.

- Priority Management Action 3: Reservoir Reoperation - The reservoirs must be reoperated to provide benefits for the entire Salinas Valley, and the reoperation must be done in a manner that considers, and is consistent with, the benefits promised to the rate payers in the Subbasins for the voter approved SVWP. Under SGMA, management actions taken for one basin cannot result in harm to an adjacent basin. Thus, in determining the proper reoperation of the reservoirs, consideration must be made to share the resource: (1) to recharge of Upper Valley and Forebay subbasins; (2) for delivery to CSIP; and (3) for fishery flows. We support the stated two goals of this Management Action, with the following recommended revision:

1. Allow surface flow release to recharge groundwater in the various Salinas Valley subbasins **almost every** winter
2. Allow summer flows to better reach the SRDF diversion

We believe the implementation of this Priority Management Action could be expedited as it was evaluated in the original SVWP's EIR.

- Priority Management Action 4: Restrict Pumping in CSIP Area – Chapter 9 states that the primary benefit received from restricting CSIP pumping is to manage extractions from the Subbasin. It goes on to state that a second benefit received from restricting CSIP pumping is to halt the decline or raise of groundwater elevations. It then goes on to state that “CSIP pumping restrictions will only be implemented after the CSIP optimization projects are implemented, providing a reliable supply of water to growers in the CSIP area.” That statement fails to recognize the restrictions and regulations that are already in place to reduce groundwater pumping in the CSIP area. These existing regulations have failed to be enforced; thus, exacerbating seawater intrusion in the 180/400 Subbasin. According to the Engineer's Report for the SVWP, the project was intended to deliver up to 12,800 AFY via SRDF to CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from spillway modifications of the Nacimiento Dam and reoperations of the reservoirs. In exchange for providing surface water at the SRDF to CSIP, individual wells in the CSIP area were to be destroyed, and the MCWRA's supplemental wells were to be used only occasionally. Instead, only about ¼ of the maximum delivery to the SRDF has occurred, individual wells continue to be used in addition to MCWRA supplemental wells; thus, resulting in the continued advancement of seawater intrusion.

Individual actions that also caused the SVWP/CSIP projects to fail to slow down seawater intrusion include the rejection of the recycled water from Monterey One Water by growers in the CSIP area and the continued pumping of individual wells and MCWRA's supplemental wells. Regulations, which includes destruction of individual wells, and regulatory enforcement are key to restricting pumping in the CSIP area.

Immediate implementation and enforcement of these regulations must be considered rather than delayed. It is shortsighted to state that the CSIP pumping restrictions will only be implemented after the CSIP optimization projects are implemented. What if the CSIP optimization projects fail to be implemented and/or fail to be implemented in a timely manner so that seawater intrusion is further exacerbated? What are the potential impacts of proceeding in this manner?

D. The Coalition Supports MCWRA's Restrictions on Additional Wells in the Deep Aquifer, Which Restrictions Must be Enforced.

Similar to the management actions for restricting pumping in the CSIP area, regulations, which not only prohibit new wells but also replacement wells in the deep aquifer, along with regulatory enforcement, are key to stopping the depletion of groundwater in the deep aquifer.

E. The Coalition supports further evaluation and analysis of the following Priority Projects in Chapter 9 in order to address seawater intrusion and overdraft in the 180/400 Subbasin: Invasive Species Eradication; Optimize CSIP Operations; Maximize Existing SRDF diversion; Modify Monterey One Water Recycled Water Plant; and Expansion Area Served by CSIP.

Several of the Priority Projects discussed in Chapter 9 have already been analyzed and approved by Monterey County Water Resources Agency and Monterey County and should be implemented based on prior analysis and approvals. The Priority Projects supported by the Coalition are discussed below.

- Optimize CSIP operations; improve SRDF diversion, modify Monterey One Water Recycled Water Plant; and expand area served by CSIP – As stated before, the SVWP was intended to deliver up to 12,800 AFY via SRDF to CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from the spillway modifications of the Nacimiento Dam and reoperations of the reservoirs. In exchange for providing surface water at the SRDF to CSIP, individual wells in the CSIP area were to be destroyed, and the MCWRA's supplemental wells were to be used only during those times when surface water wasn't available. The SRDF has failed to be utilized to the maximum extent as intended, and instead, only about ¼ of the maximum delivery to the SRDF has occurred, individual wells continue to be used in addition to MCWRA supplemental wells-- thus, resulting in the continued advancement of seawater intrusion.

We appreciate the discussion and identification of the need to look at the timing of supply and demand for the use of recycled water. One of the reasons why maximum delivery has not been achieved is due to physical constraints of the developed project. The physical

constraints include an 80-acre pond which receives as first priority the recycled water from Monterey One Water before the pond can then receive surface water, even if the surface water is readily available. Additional limitations include the sizes of pumps and pipelines and the extent of the pipelines in the CSIP area which make the maximum delivery infeasible. These physical constraints (as well as the management actions discussed above) need to be addressed.

Many of the Priority Projects in Chapter 9 (i.e., optimize CSIP operations, improve SRDF diversion, expand area served by CSIP) related to the SVWP were not only analyzed and approved as part of the SVWP, but also included as policies in the Monterey County's 2010 General Plan and analyzed in its EIR; therefore, these Priority Projects can be implemented in an expedited manner

F. The Coalition Supports Further Evaluation and Analysis of the Following Priority and Alternative Projects in Chapter 9 for Consideration and Potential Implementation to Address Sustainability Issues, if any, in the Subbasins Other Than the 180/400 Subbasin (Except as Noted): SRDF Winter Flow Injection, Winter Releases (coupled with reservoir infrastructure upgrade) and 11043 Diversion Facilities Phase 1 and Phase II.

- 11043 Diversion Facilities - The MCWRA has not taken proper actions to protect their water rights under Permit #11043, and it is our understanding that the permit is currently subject to a notice of proposed revocation by the State Water Resources Control Board ("SWRCB"). This is despite the extensive stakeholder involvement in 2013____ to determine the proper projects for utilizing the water rights. The SVBGSA should consider the recommendations made by the Regional Advisory Committee ("RAC") when determining the appropriate projects to be developed under Permit #11043. We believe the use of Permit #11043 is better suited for the Eastside Subbasin rather than the 180/400 Subbasin. The RAC's recommendations are included as Exhibit A.
- SRDF Winter Flow Injection - This Priority Project should be considered for potential implementation in the GSP for the 180/400 Subbasin as well as other Subbasins' respective GSPs, such as for the Eastside Subbasin. During the presentation to the SVBGSA BOD, your consultant stated that the largest issue with implementing this project will be water rights related issues and that the water rights held by the MCWRA need to be better understood. The MCWRA's water rights are clearly set forth in the SWRCB permits. MCWRA has an obligation to bypass natural inflow of the Nacimiento and San Antonio rivers to satisfy the superior downstream riparian and overlying water right holders. Bypassing natural flows until the river reaches the lagoon prior to storage in the reservoirs would allow the SVGB to be full, reducing waste through evaporation. Storage in the aquifer also allows for ready releases to the SRDF. Bypassing natural inflows would not require a change in the MCWRA's water rights permits. However, there may need to be clarification of the MCWRA's water right permit as to timing and amount of diversion at the SRDF.
- Winter Releases (Coupled with Changes to Reservoir Operation Infrastructure) – As discussed above, the reservoirs must be reoperated to provide benefits for the entire Salinas Valley, which includes not only delivery to the CSIP area, but also recharge to the Upper Valley and Forebay subbasins. Winter releases would allow water to be stored in the aquifers, thus, reducing waste through evaporation, and allowing for ready releases to the SRDF in the Spring.

Additionally, modifications to the Nacimiento Dam could also benefit releases to CSIP. Of particular interest are the low-level gates at the Nacimiento Reservoir, which we are told have an operating capacity of 460 cfs. Because San Antonio and Nacimiento reservoirs are operated together, increasing the capacity of these low-level gates at the Nacimiento Reservoir would allow for greater flow capacity in order to provide conservation releases and releases to the SRDF while meeting the mandatory release to the lagoon as required in the MCWRA's water rights permits.

Any "new water" generated as part of any project related to the SVWP (e.g., "optimize CSIP operations", "maximize existing SRDF diversion", etc.) must be shown to be over that amount already generated by the previously approved SVWP and not be double counted. The SVWP is currently funded by special assessments which must be taken into consideration when determining a Prop 218 vote for its expansion.

As stated previously, the Engineer's Report for the SVWP stated that the project was intended to deliver up to 12,800 AFY as part of the CSIP based on an additional capture of 29,000 afy (average over hydrologic record) from spillway modifications at Nacimiento Dam and reoperations of the reservoirs. The additional water generated by the SVWP of

29,000 afy should not be considered “new water” for the purposes of this GSP since that water is already accounted and paid for by Zone 2C landowners.

The SVWP was successfully approved by the landowners within Zone 2C, an assessment district. Yet, the project that was analyzed for the purpose of determining the special assessments in its Engineer’s Report is not the same project as the project that was constructed and implemented. As described previously, the SVWP was downsized, and the operations of the reservoirs from that described in the Engineer’s Report and EIR were significantly modified. Simply stated, the special assessments that continue to be paid by Zone 2C landowners do not match the special benefits conferred onto the landowners as analyzed in the Engineer’s Report. This issue should be addressed before any expansion of the SVWP is considered.

E. Nitrate Issues Are Already Addressed Through Other Processes.

Although water quality issue, in particular nitrate, was raised during the meeting you held on July 18, 2019, we would like to note that this particular issue is being addressed through: (1) installation of treatment systems; (2) Irrigated Lands Program of the Regional Water Control Board (“RWQCB”); and (3) basin-wide Settlement Agreement with the RWQCB and SWRCB, which requires providing replacement water to water systems with nitrate issues. The GSP would only need to reference the above actions when addressing the water quality problems associated with nitrates. Seawater intrusion, on the other hand, requires management actions and projects.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "N. Isakson". The signature is fluid and cursive, with the first letter of the last name being a large capital 'N'.

Nancy Isakson, President



September 9, 2019

Steve McIntyre, Chairperson
Members of the Board of Directors
Salinas Valley Basin Groundwater Sustainability Agency
P.O. Box 1350
Carmel Valley, CA 93924
Via email peterseng@svbgsa.org, camela@svbgsa.org

Subject: Comments on Groundwater Sustainability Plan (GSP) 180/400-foot Chapter 9
Projects and Management Actions

Dear Chair McIntyre and Members of the Board of Directors:

LandWatch appreciates the opportunity to comment on the 180/400-Foot Subbasin
Groundwater Sustainability Plan, Chapter 9, Projects and Management Actions.

Summary of comments

LandWatch supports the conceptual Water Charges Framework, although much work remains to implement it. However, to attain sustainability the Salinas Valley Basin Groundwater Sustainability Agency (SVGBGSA) cannot rely on voluntary pumping reductions in response to water charges. The SVGBGSA does not currently have the information to set water charges at a level that would ensure demand does not exceed available supply. This would require knowing (1) the sustainable yield, (2) the cost, timing, and financing of new water projects sufficient to meet demand, and (3) the elasticity of demand, i.e., the total amount of new water supplies users would be willing to buy at the marginal price per acre-foot.

Instead, the SVGBGSA should limit water use in the 180/400-Foot Aquifer Subbasin by ordinance. The ordinance should allocate to users the total sustainable yield, as conservatively estimated today, plus the new water made available by specific Management Actions and Projects. That new water should only be allocated to users when it actually becomes available. There are various equitable methods to allocate newly produced water (e.g., auction, assignment by formula, with or without a secondary market). Regardless of the method chosen to allocate newly produced water, the SVGBGSA must ensure that total pumping does not exceed current sustainable yield plus the total of newly produced water.

The Water Charges Framework must be based on groundwater pumping, not on acreage. What matters in attaining sustainability is actual groundwater pumping, which

should be measured through an enforceable ordinance requiring well registration, annual reporting, flow meters, and annual calibrations.

The proposed Transitional Allowance should be ramped down as quickly as feasible unless there is substantial evidence that a longer period is consistent with attaining sustainability by 2040. And the Transitional pumping surcharge should be based on the best estimate of future supplemental fees since that Transitional surcharge is also intended to reduce pumping and provide funds for new projects.

The Plan proposes as a Management Action that SVGBGSA supports MCWRA's Deep Aquifer study. However, because MCWRA has not had the resources to complete that study, SVGBGSA should fund and undertake the study itself. Development of this information is part of SVGBGSA's mandate under SGMA to manage the Deep Aquifer sustainably. Until this study is completed, SVGBGSA should restrict new wells; inspect existing wells to assure they are properly engineered to prevent seawater intrusion from the 180/400-foot aquifers; and decommission any well that is not so engineered.

Section 9.6 of Chapter 9 does not provide the mandated quantification of the mitigation of overdraft because it fails to quantify the benefits of Management Actions, assigns all of the Basin-wide Project benefits to the 180/400-Foot Aquifer Subbasin, double counts some benefits, and contains an arithmetic error. This must be corrected.

De minimis wells on fallowed land should be limited to only those wells needed to support the residential use that is currently permitted by right. Permitting more wells on fallowed agricultural land to support higher residential density would improperly interfere with general plan land use designations, which SGMA enjoins.

Finally, we look forward to more complete project descriptions and costs during implementation of the 180/400 Foot Subbasin GSP.

Our detailed comments follow.

- 1. The SVGBSA cannot rely on voluntary reductions to ensure sustainability because it does not have the information needed to set water prices that would limit water demand to the available supply. The SVGBGSA should initially limit pumping to sustainable yield plus transitional allowance until new water supplies are firmly in place. When new water supplies are produced, the SVGBGSA should then limit pumping to sustainable yield plus those new water supplies.**

The water charges framework is based on different fees for pumping at three different levels. It distinguishes three levels of fees:

- A "regulatory" fee for pumping a user's "sustainable pumping allowance,"
- A "surcharge" for a user's "transitional pumping allowance," where the transitional pumping allowance is based initially on current pumping and then declines to zero over a period of time, and
- A "supplementary fee" for "supplemental pumping," i.e., pumping in excess of the sustainable and transitional allowance.

This water charge framework is “designed to achieve” two objectives: “to promote voluntary pumping reductions” and “to fund water supply projects.” (Chapter 9, § 9.2.)

However, there is no evidence that the fees can be or will be set at a level that attains sustainability if pumping reductions remain voluntary. A purely voluntary scheme can only work to attain sustainability if (1) the fees are set at a level that pays for water projects that make additional water available in excess of sustainable yield (“new water”) and (2) that fee level also happens to effectively incent users to limit their cumulative pumping to an amount equal to current sustainable yield plus that new water. Setting a fee for the new supplemental water that ensures that demand equals available supply would require SVGBGSA to know the incremental cost of new water from a suite of potential Projects and Management Actions, and the elasticity of demand, and the point at which the marginal cost of new water equals its marginal benefit.

In short, voluntary reductions would not work unless the SVGBGSA has a lot more information than it can possibly generate before this plan must be implemented.

Chapter 9 admits that most of the details of the water charges framework must be deferred due to lack of information. (See section 9.2.8 for a partial list of what has been deferred.) For example, there is no estimate of costs and benefits per acre/foot of new water for some of the Management Actions. There is no allocation of the estimated benefits of the Basin-wide Management Actions and Projects to users of the 180/400-Foot Aquifer Subbasin. There is no information as to the elasticity of demand that would enable the SVGBGSA to determine what feasible Projects and Management Actions, priced to users at an equitably determined cost per acre/foot, should be implemented in order to satisfy demand. However, in a voluntary pumping reduction regime in which users remain free to pump at any level, establishing the supplementary charges for new water that would limit pumping to sustainable levels would require this cost/benefit information and a determination as to how much supplementary water users will be willing to pay for, i.e., a determination as to when the supplementary water charges will become so high that users will not be willing to pump more water.

Implementation of the water charge framework will also require critical compromises about technical matters and benefit allocation among affected parties, with vastly different interests by subbasin and by the type of user. This information will not be available by 2020 or perhaps for many years thereafter.

In sum, there is no prospect to get to an agreement, especially by 2020, on supplementary water charges that would pay for needed projects and induce users to keep total pumping within the level of sustainable yield plus new water. Even if the SVGBGSA can determine the precise cost per acre/foot of new water, it is unlikely to know the point at which the benefits and costs of that next acre-foot of new water are equal. As long as pumping reductions remain voluntary, there is a significant probability that pumping will exceed sustainable yield.

Accordingly, as a practical matter, the Plan cannot rely on voluntary pumping reductions. Instead, the SVGBGSA must restrict pumping in excess of the user's allowance of sustainable yield (plus transitional allowance) unless and until there is an actual committed, funded Management Action or Project that will deliver the new water.

When new water is produced, the SVGBGSA should continue to restrict total pumping to the total of current sustainable yield plus new water. To ensure this, when a Management Action or Project is committed and funded, the SVGBGSA should distribute the new water by selling specific allowances of the new water to users.¹

If demand for new water exceeds supply, the SVGBGSA could allocate the new water allowances through several means. For example, it could sell the new water by auction, e.g., a French auction in which the supply is sold at the lowest bid price above the cost of production that would clear the market. Alternatively, the right to purchase new water at the cost of production could be assigned to users according to some pre-determined formula, e.g. pro-rata, based on their initial allowances of the current sustainable yield.² There are other equitable ways to allocate new water. Regardless, the objective of the allocation system should be to recover at least its production cost, to dispose of all of the new water, and to prevent pumping in excess of the sustainable yield plus the amount of new water.

2. Transitional Allowances should be ramped down as quickly as feasible because there is no substantial evidence that a longer period is consistent with attaining sustainability by 2040.

The water charges framework proposes to allow "transitional" pumping in excess of sustainable yield for "10 to 15 years." (Chapter 9, § 9.2.3) Transitional pumping is apparently recent (2012-2017) actual pumping. Users would pay a "surcharge" fee for this pumping to the extent it exceeds sustainable yield.

Chapter 9 says that the transitional allowance "may" be reduced over time to get to sustainable pumping, implying that it may not be reduced and that users would not make any cuts at all, but simply continue existing overdraft pumping while waiting for water from new Projects or Management Actions. Permitting any future overdraft would increase the amount of cumulative overdraft in the 180/400 Foot Aquifer Subbasin, lowering groundwater levels and thereby inducing additional seawater intrusion. This is inconsistent with the sustainability mandate, which requires that the Plan avoid such an undesirable result and meet the measurable objectives. For example, any increase in the amount of cumulative overdraft would likely render it impossible to meet the seawater intrusion minimum threshold, which is set as the seawater intrusion line defined by MCWRA in 2017. (Chapter 8, § 8.8.1.) There is no evidence that seawater intrusion can be reversed, so if the Plan permits continued overdraft it cannot meet its adopted seawater intrusion minimum threshold.

¹ A Management Action or Project should not be deemed funded and committed until it has been approved by the implementing agency and until all needed funding is in place, including fee ordinances and Proposition 218 votes as needed.

² Users with an allowance of the existing sustainable water supply or an allowance of new water could be permitted to sell an allowance to other users. This secondary market in water allowances would ensure the water goes to the most valued use and would establish price signals that would inform SVGBGSA of users' willingness to pay for future new water supply projects.

In the absence of any evidence that a 10-15-year transition period is consistent with attaining sustainability by 2040, and considering the evidence to the contrary, the transition period should be set as the minimum feasible period to ramp down existing pumping to sustainable yield. GSP should contain a firm commitment to phase out any transitional allowance as quickly as feasible. LandWatch suggests at most a 3-5-year time frame for elimination of transitional pumping.

3. The Transitional pumping surcharge should be based on the best estimate of future supplemental fees. Supplementary allowances and supplementary fees should not be implemented until new water is developed, priced, and allocated.

Whereas in theory the "supplementary" fees for new water could (or, under Prop 218, must) be determined with reference to an engineering study that looks at costs of delivering new water and who is benefitted by it, the Plan document now provides no basis whatsoever for setting the "transitional" pumping surcharge.

According to Chapter 9, both the supplementary fees for new water and the transitional surcharge are intended to discourage pumping in excess of sustainable yield and to fund future Projects and Management Actions. Accordingly, the transitional surcharge should be set at the best current approximation of the eventual supplemental fees so that users have proper incentives immediately and funding needed for projects and management actions is collected from inception of the GSP implementation period.

For example, Section 9.4 identifies 9 priority projects with a cost per acre-foot ranging from \$90 to \$880. Based on the data in Chapter 9, if all nine projects were completed, they would cost \$49,702,000 and yield 81,600 acre-feet per year.³ The average cost per acre-foot would come to \$609. If this were the best estimate of the cost, the yield, and the need for projects to attain sustainability at the time the Plan is implemented, the SVGBGSA should set the transitional surcharge at \$609 per acre-foot.

Figure 9-1 implies that the SVGBGSA will be able to separately assess regulatory fees, the transitional surcharge, and the supplementary fees from the first year of the GSP implementation. This is highly unlikely because it would require that SVGBGSA know at the first year of GSP implementation (1) the sustainable yield, (2) the total pumping allowed under the transitional pumping allowance, and (3) the total pumping allowed for sustainable yield plus new water, i.e., the amount of new water that will be provided and the allocation of its cost.

As discussed in section 1 above, SVGBGSA will not be able to determine supplementary fees until it evaluates and engineer the Projects and Management Actions. Furthermore, users should not be permitted to pump in excess of their transitional allowance level until new water has actually been developed and allocated. It is not at all clear that SVGBGSA will be in position to price, allocate, and deliver new water in 2020. Accordingly, as a practical matter, in the initial implementation years, the water charges should be limited to regulatory fees charged for the sustainable yield allowances plus the

³ This calculation includes the \$2,552,000 cost but not the 11,600 acre-feet/year yield from Project # 5, because the Project #5 yield is already included in Projects # 2 and #3. (Chapter 9, § 9.3.6, page 50.)

surcharge fee for the transitional water allowances. The surcharge fee should be set to approximate future supplementary fees, as discussed above.

- 4. The Plan should not assume the Monterey County Water Resources Agency (MCWRA) will complete a Deep Aquifer study; MCWRA has no funding or authorization. Instead, SVGBGSA should fund and undertake the study because development of this information is part of SVGBGSA's mandate under SGMA.**

Section 9.3.6 proposes that, as a Management Action, SVGBGSA comments on MCWRA's study of the Deep Aquifer and support and strengthen MCWRA's restrictions on additional wells in the Deep Aquifer pending the results of that study.

MCWRA does not have any funding for, or a current commitment to undertake, the Deep Aquifer study recommended by its staff in its Recommendations to Address Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin. (MCWRA, Special Reports Series 17-01, dated October 2017.) After making that recommendation, MCWRA staff held meetings with stakeholders to identify data gaps and study parameters in February 2018. Staff recommended a budget of \$1.2 to \$1.5 million for this study and sought authorization at a joint meeting of the MCWRA Directors and the County Board of Supervisors on April 2, 2018. However, in response to LandWatch's recent request, MCWRA has not produced public records demonstrating that the Deep Aquifer study has been authorized or funded.

In light of MCWRA's apparent lack of resources to conduct the Deep Aquifer study, LandWatch recommends that SVGBGSA should itself undertake it. SGMA mandates that SVGBGSA provide a hydrologic model, characterize groundwater conditions, and provide a water balance for the aquifers within the Basin, which includes the Deep Aquifer. (23 CCR §§ 354.14, 354.16, 354.18.) Chapter 6 fails to provide this information for the Deep Aquifer, which is a fundamental defect in the Plan. There is no reason to defer or delegate the development of this mandatory information to MCWRA. Indeed, SVGBGSA cannot fulfill its obligation to identify sustainable management criteria, management actions, and projects to attain sustainability for the Deep Aquifer without this information.

SVGBGSA has a clear authority to fund the Deep Aquifer study. It can and should collect fees from groundwater pumpers for this purpose pursuant to Water Code section 10730.

The best currently available scientific information indicates that any pumping in the Deep Aquifer is not sustainable. There is no recharge except in geologic time. There is also good evidence that seawater-contaminated groundwater moved into the 400-foot aquifer from the 180-foot aquifer in locations where wells and drilling weren't properly regulated. Such contamination will likely also occur in the Deep Aquifer without much better regulation and oversight. Unless and until new scientific information is available on the Deep Aquifer capacity, well construction, and seawater contamination between aquifers, SVGBGSA should restrict any new wells and develop a schedule to halt all pumping of the Deep Aquifer by 2040 when the Groundwater Sustainability Management Act requires sustainability.

5. Chapter 9 fails to provide the mandatory quantification of the mitigation of overdraft: it fails to quantify the benefits of Management Actions, assigns all of the Basin-wide Project benefits to the 180/400- Foot Aquifer Subbasin, double counts some benefits, and contains an arithmetic error.

SGMA requires that if overdraft conditions are identified in the Water Budget, the Plan must “describe projects and management actions, including a quantification of demand reduction or other methods, for the mitigation of overdraft.” (23 CCR § 354.44(b)(2).) Section 9.6 purports to provide this quantification. However, the quantification has several flaws that must be corrected.

First, Section 9.6 fails to quantify the benefits of Management Actions. The discussion in Section 9.6 and Table 9-5 address only the benefits of proposed Projects, based on the estimated quantification of benefits of each proposed Project in the discussion of projects in Section 9.4. There are no such quantified estimates of the benefits of the proposed Management Actions in Section 9.3. It is likely that the benefits of some of the proposed Management Actions could in fact be estimated. For example, the benefit of a pumping ban in the CSIP area would presumably be equal to current pumping in that area, which should be ascertainable.

Unless the SVGBGSA is prepared to supply at least a preliminary estimate of the benefits of proposed Management Actions, it is not clear that there is evidence that they would have any meaningful or reliable benefits or that there is any way to evaluate those benefits, as required by 23 CCR § 354.44(b)(5). For example, the benefits of reservoir reoperations may be too speculative to include at this point in light of the revocation of the Biological Opinion and the unfunded priority obligation for safety repairs.

At any rate, it is clear that 23 CCR § 354.44(b)(2) mandates quantification of the benefits of Projects and Management Actions.

Second, Chapter 9 states that the proposed Management Actions and Projects “constitute an integrated management program for the entire Valley,” not just the 180/400 Aquifer Subbasin. (Chapter 9, §§ 9.3.1, 9.4.3.) Despite this, Section 9.6 only discloses the overdraft for the 180/400 Aquifer Subbasin and then erroneously concludes that the mitigation proposed for the entire Valley’s overdraft is sufficient because it is greater than the overdraft in the 180/400 Foot Aquifer Subbasin.

Third, Table 5 double counts the benefits of the proposed Projects #2, 3, 4, and 5, all of which are intended to “work together to improve and expand the performance of the CSIP system” and are identified as “part of an integrated CSIP strategy.” (Chapter 9, page 31, “CSIP Projects.”) For example, the discussion of the benefits of Project # 5, Maximize Existing SRDF Diversion, states that the “estimated project yield is 11,600 AF/year. The yield for this project is the same yield that is identified in Priority Project #2 and a portion of the yield identified in Priority Project #3.” (Chapter 9, § 9.4.4.6.) Despite this, Table 9-5 lists 11,600 AF/year as additional potential yield for Project #5, over and above the yield for Projects # 2 and #3.

Fourth, Table 9-5 is not added correctly. The “total” for Table 9-5 is stated as “-58,201.” However, the sum of the elements listed in the table is 40,800 acre-feet per year of potential water available for mitigating overdraft. Eliminating the double counted 11,600 acre-feet per year for Project # 5, the total would be 29,200 AF/year.

6. De minimis wells on fallowed land should be limited to those needed to support the residential use that is currently permitted by right in order not to interfere with general plan land use designations.

Section 9.3.2 provides that the SVGBGSA be permitted to buy out agricultural pumping allowances. Any provision in its fallowing program that permits sellers who convert their land to rural residential use to retain "de-minimis wells" should be qualified to limit the de minimis wells to just those wells needed to support the existing rural residential densities permitted by right for agricultural lands under the County General Plan and Zoning Ordinance. No de minimis wells should be permitted on fallowed land to support subdivision of that land for residential use.

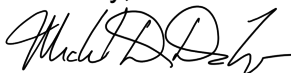
It is not sufficient that the plan states that land conversions must comply with the County General Plan. Sellers of water allowances who are fallowing land to convert to residential uses may seek higher residential densities through amendments to the General Plan, conditional use permits, or subdivisions. Water Code section 10726.4(a)(2) requires the SVGBGSA to respect the "land use designated in the city or county general plan." Section 10726.8 also precludes interference with city and county general plans. Monterey County's General Plan is intended to concentrate future residential development in so-called "focused growth areas," consisting of Community Areas and Rural Centers, not in land designated for agricultural use. (Monterey County General Plan, Land Use Element, Introduction, available at <https://www.co.monterey.ca.us/home/showdocument?id=45800>.)

If a fallowing program were to permit sellers to establish de minimis wells to support pumping in excess of the residential uses now permitted by right on agricultural lands, it would create an inducement for more intense residential development, in part by creating a financing mechanism for that development. Accordingly, the GSP should restrict de minimis wells to those required to support the residential densities now permitted by right for agriculturally designated land under the existing general plans.

7. Agricultural Best Management Practices (BMP) provisions are redundant.

As drafted sections 9.3.3 and 9.5.1 both call for promotion of BMP for agricultural water use. One section should be deleted.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael DeLapa", with a stylized flourish at the end.

Michael DeLapa
Executive Director

M1W Comment Matrix Draft SVBGSA GSP Chapter 9		
Page	GSP Chapter 9 Section	Text edits are shown in strike-out and underline; blue text indicates a general comment or question; red text indicates text edit which must be clarified and made by the author.
10	9.3.2.8 Priority Management Action 1: Estimated Cost	Land more expensive towards ocean and generally uses less water (ie. CSIP growers use about 2.0 AF/ac although they have rights to 3 AF/ac).
16-17	9.3.5.2: Priority Management Action 4: Expected Benefits and Evaluation of Benefits	A second benefit is either halting the decline <u>of</u>, or raising, groundwater elevations from the reduced pumping. • MCWRA has issued waivers to greenhouses within CSIP to not use recycled water. Will those waivers be rescinded? • MCWRA already requires all growers within CSIP (Ordinance 3790) to use recycled water within 30 days except for MCWRA Supplement Wells or Standby wells used within requirements of the Ordinance. • GSA should list acreage involved and reduced groundwater pumping assuming 2 AF/ac.
18	Priority Management Action 5: Support and Strengthen MCWRA Restrictions on Additional Wells in the Deep Aquifer	Priority Management Action 5: Support and Strengthen MCWRA
	<u>9.3.7 Priority Management Action 6: Destroy Abandoned, Dual Perforated, Improper Seals, and other Improper Construction Wells in Salinas River Basin</u>	M1W proposes that the following new Priority Management Action be explored within this chapter; MCWRA staff insight would assist in analysis. <u>9.3.7 Priority Management Action 6: Destroy Abandoned, Dual Perforated, Improper Seals, and Other Improper Construction Wells in Salinas River Basin</u> <u>Propose that abandoned, dual perforated and other improperly constructed or maintained wells be destroyed.</u> <u>Existing provisions of MCWRA Ordinance 3790 cover CSIP area wells</u> • <u>Previously (prior to CSIP certification (1.01.11 Ordinance 3790) abandoned wells shall be destroyed by the owner, or if not within two years, then by MCWRA at owner's expense (1.03.03 Ordinance 3790).</u> • <u>Contaminated and Cross-Contaminating Wells shall be destroyed by MCWRA within 2 years of CSIP startup (1.03.04 Ordinance 3790).</u> • <u>Non-exempt wells to be destroyed within three years after project start-up at MCWRA's cost (1.03.05 Ordinance 3790).</u> • <u>MCWRA should "start the clock" (1.01.11 Ordinance 3790).</u> • <u>Connected with this ordinance, all CSIP growers are required to destroy their wells.</u>
25	9.4.4.4.2 Preferred Project 1: Invasive Species Eradication	Please explain how 6,000 AFY to 36,000 AFY left in reservoirs results in 890 AFY reduction in Seawater Intrusion and a project yield of 20,000 AFY. Please explain clearly the difference between sustainability and seawater intrusion.
22	9.4.2.1 General Project Provisions:	Additionally, any project <u>must receive approval from an agency or an authorization, decision or</u> may require NEPA documentation.

	Summary of Permitting and Regulatory Processes	
23	9.4.2.2 General Project Provisions: Public Noticing	Explain the need for the formal process described in bullet points- i.e. why not just carry out the CEQA review process?
23	9.4.2.3 General Project Provisions: Legal Authority Required for Projects	What privileges does CWC 10726.2 provide GSA?
25	9.4.4.1 General Project Provisions: Assumptions used in developing projects	Third Paragraph: Land acquisition depends on type of land and PCE vs TCE Fourth Paragraph: No repair and replacement costs, or admin overhead (17%) included in cost estimates?
31	9.4.4.3 Preferred Project 2: Optimize CSIP Operations	The CSIP system is operated and maintained by M1W under a contract with MCWRA. MCWRA and M1W have has started evaluating opportunities to optimize the CSIP distribution system. - M1W is unaware of any formal plans for MCWRA to complete hydraulic modeling per #1 under general list of activities for CSIP optimization; has this been established in communications with MCWRA? - This is one of the only projects where it is stated that MCWRA and SVBGSA will fund. Figure 9-7 and the first full paragraph on page 33 should be moved to 9.3.5 Priority Management Action 4. The 2,000 AFY should be removed from the subsequent paragraph and from the cost calculation at the bottom of page 38. Figure 9-8 and the first three sentences in the second full paragraph on page 33 are only valid if Project 3 is implemented (9.4.4.4), otherwise you are double counting water. - Add priority management action #5 to fast-track existing MCWRA planned well destructions to slow vertical migration occurring from the 180- to 400-Foot Aquifers.
32	9.4.4.3 Preferred Project 2: Optimize CSIP Operations	Additional storage reservoirs will allow the CSIP system to store water <u>produced by SVRP or</u> diverted by SRDF during low demand periods for later delivery when demand is high. Reservoirs would also assist in maintaining adequate pressure in the existing system and provide more flexibility in the timing of <u>SVRP</u> and SRDF deliveries.
32	9.4.4.3 Preferred Project 2: Expected Benefits and Evaluation of Benefits	First paragraph, last sentence: Is it true that the project would benefit other areas (Monterey and Eastside subbasins) by reducing pumping that impacts neighboring subbasins? Is there flow towards the 180/400 ft aquifers?
39	9.4.4.4 Preferred Project 3: Modify Monterey one Water Recycled Water Plant – Winter Modifications	First paragraph: <u>M1W has completed a preliminary design of this project.</u> During the wet winter months, M1W cannot efficiently produce the reduced demand for tertiary treated water to supply the growers. As a result, growers turn to the groundwater basin for their irrigation needs during these months. Modifications are required at the M1W RTP in order to efficiently treat and store recycled water during these months.

		- With less than 5 mgd of demand SVRP must shut down; it also must shut down for chlorine scrubber maintenance. - To be fully functional, this project should include chlorine dry scrubbers so that the system would not need to be shut down for service each year. Third paragraph: The demand for water during the winter months from SVRP will also increase with the expanded CSIP zone Preferred Project 4; increasing the potential Project Yield from 1,100 AF/year to an estimated 1,300 AF, year.
40	9.4.4.4 Preferred Project 3: Expected Benefits and Evaluation of Benefits	First paragraph: Eastside subbasin is not an anticipated beneficiary of the project?
40	9.4.4.4 Preferred Project 3: Circumstances for Implementation	M1W is not planning nor implementing this project at this time; environmental review was conducted as part of the 2015 PWM/GWR FEIR and at such time as implantation becomes feasible (financially and through necessary agreements with partner agencies) the project may move forward.
40	9.4.4.4 Preferred Project 3: Legal Authority	See comment above.
41	9.4.4.4 Preferred Project 3: Implementation Schedule	- Revise Figure 9-10 to note that CEQA is completed and there is no anticipated permitting required. - The project could be completed ½ year faster.
41	9.4.4.4 Preferred Project 3: Estimated Cost	- There are no identified sources/mechanisms for funding this project at this time. Costs quoted in second paragraph are incorrect. - Should include \$12.9M for dry scrubber system - Base project capital cost to be paid 45.1% MCWRA and 54.9 M1W. - O&M costs to be paid for through MCWRA assessments.
41	9.4.4.5 Preferred Project 4: Expand Area Served by CSIP	- If PWM expansion does not move forward, additional source waters could be provided for CSIP, pending appropriate agreements and capital investment. - If Project 4 is implemented it will increase the amount of water saved by Project 3.
42	9.4.4.5 Preferred Project 4: Expand Area Served by CSIP	Second paragraph: A new 48" transmission main would extend from the existing SVRP storage pond to the expanded service area; with the exception of a smaller diameter pipeline serving an area southwest of the M1W SVRP RTP.
45	9.4.4.5 Preferred Project 4: Expected Benefits and Evaluation of Benefits	Much of the expanded service area may be within the Marina SGMA area per map in figure 9-12 and existing pumping is in the deep aquifer.
48	9.4.4.5 Preferred Project 4: Implementation Schedule	It will take more than 5 years. The Agreements/ROW (which is assumed to include Ordinances) will easily take two year.

48	9.4.4.5 Preferred Project 4: Estimated Cost	At 3,500 acres a better number for water savings would be 7,000 AFY. Capital cost may be high. O&M costs should be within MCWRA assessment and/or water use fee.
50	9.4.4.7 Preferred Project 6: Seawater Intrusion Pumping Barrier	Use would, not will. The intrusion barrier <u>would</u> comprises 18 extraction wells; although this number may change as the project is refined.
51	9.4.4.7 Preferred Project 6: Seawater Intrusion Pumping Barrier	Third paragraph, last sentence: Assuming the 4000— Foot Aquifer has an average depth of 550 feet, and using the same relationships, the injection mound in the 400-Foot Aquifer at the coastline would need to be 13.75 feet above mean sea level to fully stop seawater intrusion Fourth paragraph, second sentence: Of this 46,500 AF/yr., 3,4500 AF/yr. would be injected into the 180/400-Foot Aquifer Subbasin. • Likely infeasible. • 30,000 AFY is given as a conservative withdrawal whereas the 180-foot number is 8,100 AFY and the 400-foot is 16,200 AFY. No estimate is given as to how much of the 24,300 AFY or 30,000 AFY is groundwater from the 180/400 aquifers and how much is seawater. What would this project do to sustainable yield? • The project seems to assume replacement of some or all of the extracted water. If replacement is required, it should be part of this project. If not, it should be a separate project. • Bottom two paragraphs on page 51 should be moved to Alternate Project #1.
52	9.4.4.7 Preferred Project 6: Circumstances for Implementation	The seawater intrusion barrier project is a preferred project and will be implemented as soon as are <u>it is</u> financially and legally possible.
52	9.4.4.7 Preferred Project 6: Estimated Cost	Capital cost is supposed to include rehabilitation of the existing M1W outfall. Please describe that work and the cost associated with it. Did O&M costs include the cost to use M1W's outfall and for CCLEAN fees?
55-56	9.4.4.8 Preferred Project 7: 11043 Diversion Facilities Phase I: Chualar	P. 55 fourth bullet point: • Should discuss this concept with the SWRCB Division of Drinking Water. Surface water treatment plant? • Infiltration basins are poor use of land that does not percolate well. Surface water treatment plants are expensive and will need to have backwash basins for injection wells. • Please explain difference between injecting or percolating 6,000 to 10,000 AFY and only reduce seawater intrusion by 660 AFY. P. 56 second bullet point: No Injection wells or treatment?

56	9.4.4.8 Preferred Project 7: Expected Benefits and Evaluation of Benefits	Why is there no direct benefit to the 180/400-Foot Aquifer Subbasin? Why not inject on the west side of Salinas?
59	9.4.4.8 Preferred Project 7: Estimated Cost	Cost estimates are too low; no treatment or injection well costs are included. Additionally, the \$45,000/acre land cost seems very low.
59	9.4.4.9 Preferred Project 8: 11043 Diversion Facilities Phase II: Soledad	• Infiltration basins are poor use of land that does not percolate well. Surface water treatment plants are expensive and will need to have backwash basins for injection wells. • Please explain difference between injecting or percolating 6,000 to 10,000 AFY and only reduce seawater intrusion by 100 AFY.
60	9.4.4.9 Preferred Project 9: 11043 Diversion Facilities Phase II: Soledad	Fourth bullet point: No chlorination treatment. Please explain difference between injecting or percolating 12,900 AFY and only reduce seawater intrusion by 1,600 AFY.
60	9.4.4.9 Preferred Project 9: Expected Benefits and Evaluation of Benefits	The primary expected benefit of Preferred Project 6-7 is to provide an alternative water supply source to recharge the Eastside groundwater basin, thereby either raising groundwater levels or lowering the rate of groundwater level decline.
64	9.4.4.9 Preferred Project 9: Estimated Cost	Estimate is low; cost should include surface water treatment plant.
65	9.4.4.10 Preferred Project 9: SRDF Winter Flow Injection	First paragraph: The Biological Opinion was revoked in 2019 and the terms/flow prescriptions will likely change. Third paragraph: Would this proposed expanded surface water treatment plant be located at M1W's RTP? Existing SRDF filtration is single-pass. Fourth paragraph: The uppermost aquifer is saturated in the vicinity.
69	9.4.4.10 Preferred Project 9: Estimated Cost	Anticipate approximately \$2m/well. Additionally, costs should include the expanded surface water treatment.
	<u>9.4.4.11 Preferred Project 10: Salinas Industrial Pond Extraction of MCWRA SRDF Water Right or 11043 Water Right Relocation</u>	M1W Proposes the addition and analysis of the feasibility of implementing the below Preferred Project 10: • Project described in cover letter. • Water could be used for City of Salinas drinking water, additional source water for SVRP/CSIP, and/or City of Salinas ASR water.

	<u>9.4.4.12 Preferred Project 11: City of Salinas ASR Wells</u>	M1W Proposes the addition and analysis of the feasibility of implementing the below Preferred Project 11: Add on to New Project 10 to allow excess winter drinking water to be injected into new wells to allow extraction during the summer.
71	9.4.5.1 Alternative Project 1: Desalinate Water from the Seawater Barrier Extraction Wells	Third Paragraph: Why is the recovery efficiency so low? The 180-Foot Aquifer is less than ¼ of the salinity of ocean water; one could anticipate a much higher efficiency rate. Much lower than 12,700 gpm of brine would be generated from brackish groundwater desalination. Fourth paragraph: An additional 9 miles of 24” pipeline would be needed to convey this desalinated water to an injection well field or recharge basin. Relevant Measurable Objectives.
73	9.4.5.1 Alternative Project 1: Estimated Cost	As a point of comparison, the 6.4-mgd Cal-Am MPWSP project has an estimated capital cost of \$226,900,000; equivalent to approximately \$35 million/mgd. Recommend using Cal Am current estimates as they have the most complete design and environmental package.
73	9.4.5.2 Alternative Project 2: Implementation Schedule	Anticipate obtaining water rights to be most time consuming activity.
	9.4.5.2 Alternative Project 2: Cost Estimate	Costs are very low. On farm recharge might be more expensive.
77	9.4.5.3 Alternative Project 3: Winter Potable Reuse Water Injection	First paragraph: Or why not include construction costs since they are understood to not substantial. Second paragraph: Pure Water Monterey Groundwater Replenishment Project is under construction and a Supplemental EIR for an expanded PWM Project is being considered is being developed. - If Cal Am does not take the AWPf Expansion water there will be no expansion and no water. - It is impossible to get 2,250 AFY only during November through March. The Pure Water Monterey Expansion Project is 2,250 AFY with delivery every month of the year. - Associated injection well facilities include backwash basins. The locations for the well are in areas where percolation is very slow. An alternate to basins, such as Blanco Drain or Reclamation Ditch might be necessary.
78	9.4.5.3 Alternative Project 3: Winter Potable Reuse Water Injection	Under this expansion, the project would provide up to 5,750 AF/yr. <u>(2,250 AF/yr. more than the base PWM Project)</u> for groundwater recharge in the Seaside Basin, 200 AF/yr. for drought reserve, and 600 AF/yr. for groundwater recharge...

		Second paragraph: <u>For example</u> In particular, MCWD is currently conducting a feasibility study on injecting purified recycled water into the Monterey Subbasin. Third paragraph: This project would involve the treatment of an additional 2.6 mgd at the SVRP-AWPF. Fifth paragraph: <u>Siting backwash percolation basins could be problematic in some areas.</u>
79	9.4.5.3 Alternative Project 3: Expected Benefits and Evaluation of Benefits	The AWPf may provide up to approximately 2,200 <u>2,250</u> acre-feet of water for direct recharge to the Subbasin.
79	9.4.5.3 Alternative Project 3: Circumstances for Implementation	The <u>Winter Potable Reuse Water Injection</u> recharge of winter AWPf water project is one of four alternative projects that may provide additional water to the Subbasin.
79	9.4.5.3 Alternative Project 3: Estimated Costs	<u>Construction cost for the expanded AWPf should be included. The unit cost of water from the AWPf is not \$1,450/AF. \$2,300 should be included.</u>
80	9.4.5.4 Alternative Project 4: Seasonal Water Storage in 180/400 Aquifer	• <u>New Preferred Project 10 seems to be related to Alternate Project 4.</u> • <u>Additional studies are needed.</u>

To: SVBGSA Board

From: Robin Lee, SVBGSA Advisory Committee

Re: Comments on GSP draft

Date: 11/14/2019

It is my opinion that the ground water level of sustainable yield has been set at an unsustainable level. The level for sustainable yield should be set at the average depth of domestic wells. This would assure a majority of residential water users would be assured of access to ground water. Ground water depths set near the end of the worst drought in California will not give ground water access to the majority of residential systems. Also, the lower level would put tremendous strains on ground water connected ecosystems.

For projects, a scalping plant should be used for the east side of Salinas. This plant would be closer to connecting the much disrupted hydrologic cycle on the east side, making the scalping plant both an economical and efficient project.

Looking at and correcting the ordinances that prevent the recommendations stated in the GSP from being implemented, should be listed as an administrative project in GSP.

Thank you.

Robin Lee, Environmental Caucus seat, Advisory Committee



Monterey One Water, City of Salinas, and California Water Service (Cal Water) request that the following be considered by the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) Board of Directors with respect to DRAFT Chapter 9 of the 180/400-Foot Aquifer Sub-basin Groundwater Sustainability Plan.

It has been noted that over 90% of the extraction of groundwater from the Salinas Valley is for agricultural use or benefit. While urban demand uses less than 10% of the extracted volume basin wide. Implementing a project that benefits the urban sector while helping reduce pumping and potentially helping to serve as a seawater intrusion barrier in the 180/400-Foot Aquifer is certainly a win-win for the basin and the SVBGSA.

We suggest that the Projects and Management Actions in Chapter 9 be listed in order of their feasibility and effectiveness for protecting groundwater elevations and water quality in the 180/400-Foot Aquifer. One measure of feasibility is the utilization of existing infrastructure which lowers project costs. Also, multiple project benefits and beneficiaries allow both a means to spread costs and attract additional grant funding.

The largest water supplier for the City of Salinas is Cal Water with a portion also served by ALCO Water Service. These utilities rely solely on groundwater to supply urban customers. If they could utilize a portion of Salinas River water to augment their supply, it would relieve some of the need for extractions from the 180/400 and deep aquifers.

We wish for the SVBGSA Board to consider a project concept with overlapping components and benefits with a number of those currently listed under the Projects section (namely, projects 4,5,6, 7 and 9). Hence, we propose adding an additional Priority Project: Extraction of River Flows at Salinas Industrial Wastewater Treatment Facility (IWTF) as described in the Attachment.

The City of Salinas owns infrastructure, land, and easements which could be leveraged to capture and convey Salinas River flows. These flows could be sent to a surface water treatment plant and then injected as seawater intrusion barrier on the west side of the City, put into aquifer storage or utilized directly in the domestic distribution system.

The benefits include protecting the existing groundwater from higher salinity water approaching municipal wells, supplying new influent to the Regional Treatment Plant to expand the Castroville Seawater Intrusion Project.

Currently water that could be put to beneficial reuse is now flowing down the river. Extracting a small portion of this flow would provide the necessary source waters to realize this project and make existing diversions more predictable overall by stabilizing flows.



Thank you for considering our proposal and suggestions. We believe that this project can help meet the integrated water resources goals of the region and could provide the ability to leverage financing. Each entity would realize multiple benefits from this project while potentially spreading the costs among the various beneficiaries. We are interested in exploring this project further and continuing discussions on its feasibility.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul A. Sciuto".

Paul A. Sciuto
General Manager

Granillo,
Brenda

Digitally signed by
Granillo, Brenda
Date: 2019.10.09
11:34:08 -0700

Brenda Granillo
District Manager

A handwritten signature in blue ink, appearing to read "Ray Corpuz".

Ray Corpuz
City Manager

Attachment - Priority Project: Extraction of River Flows and the Salinas Industrial Wastewater Treatment Facility



Attachment

Priority Project: Extraction of River Flows and the Salinas Industrial Wastewater Treatment Facility

The City of Salinas owns infrastructure, land, and permanent pipeline easements previously part of the abandoned wastewater treatment plant which discharged treated wastewater into the Salinas River. The City also owns and operates the Industrial Wastewater Treatment Facility (IWTF), a 200-acre facility north of the Salinas River and west of Davis Road with pumping facilities, aeration basin, three large percolation/evaporation ponds, and smaller drying beds. In addition, the site contains a solar array which generates enough power to offset over half the current consumption at the facility.

The proposed project would leverage these existing facilities and include the following:

- 1) Radial wells (commonly called Ranney wells) to capture and convey underflow of the Salinas River. A location near the IWTF would be sited with adequate space for up to five such wells.
- 2) Rehabilitation and/or slip-lining of the City's existing 18- and/or 33-inch pipelines, that originate near the Treatment Plant Site 1 (TP1) located on Hitchcock Road near the Animal Shelter. These pipelines could convey the water collected from radial wells at the IWTF back to TP1.
- 3) A surface water treatment plant at, or adjacent to, the TP1 site. The plant could be owned and operated by a stakeholder with the treated water used for multiple purposes.
- 4) Water collected from the radial wells could also be stored in the IWTF ponds as storage allows. A new pump station is currently under construction that will enable stored water to be diverted to M1W's Regional Treatment Plant (RTP) during the summer months for beneficial reuse in the Castroville Seawater Intrusion Project (CSIP) system.
- 5) Water collected from the radial wells in the winter months could also be sent through the surface treatment facility for potential injection as a seawater intrusion barrier on the west side of the City of Salinas or into aquifer storage and recovery well anywhere near the City. This component would protect the existing groundwater supplies from becoming contaminated by the higher salinity water approaching City municipal wells from the west. The flows from the winter diversion could also be utilized directly in the distribution system.



River extractions would be either Monterey County Water Resources Agency (MCWRA) Salinas River Diversion Facility (SRDF) or 11403 water rights. If the diversion location was changed from Chualar or if another diversion location was added to take advantage of the existing infrastructure, Permit 11043 water could be captured. Utilizing Permit 11043 flows by way of the radial wells is a more efficient use of the water. This is because a more consistent flow could be diverted for immediate urban use in the winter as well as using some of the peak winter river flows for potential injection as a barrier.

As noted, this project could help supply new influent to the RTP to expand Castroville Seawater Intrusion Project by enabling the use of new, filtered excess Salinas River flows during the summer months. As of this writing, the MCWRA were making releases totaling 700 cubic feet per second (cfs) from the two south county reservoirs. The USGS gauge at Spreckels measured flows over 30 cfs in late August 2019. The Salinas Valley Water Project Biological Opinion states that only 2 cfs is needed at the SRDF after July 1. According to M1W SRDF monitoring equipment, over 7 cfs was passing over/through the SRDF in late August 2019. Hence, water that could be put to beneficial reuse is flowing down the river. Extracting just 4 cfs from the river after July 1, would equate to 8 acre feet (AF) a day of water being used for urban use or additional ag supplies. This could bring the total extracted to 238 AF per month or more.

Using the radial wells to divert water from the Salinas River would allow the SRDF to work at the maximum capacity during the summer. Flows reaching the SRDF would be more predictable and excess release water would not flow past the SRDF, which is the intended destination of the dam releases.

The project would require a change to add another point of diversion for a portion of the 12,000 AF SRDF water right of the San Antonio and Nacimiento reservoir releases. Extracting excess release flows during the late summer can better utilize river water if it can be stored at the IWTF or placed into a water supply or an injection barrier. The project will also aim to extract water on Sundays from the IWTF location when water orders are rarely filled. Unused river water flows past the SRDF and eventually to the ocean.

Central Coast Regional Water Quality Control Board

September 30, 2019

Gary Petersen
General Manager
Salinas Valley Basin Groundwater Sustainability Agency
peterseng@svbgsa.org

Dear Mr. Petersen:

CENTRAL COAST WATER BOARD COMMENTS ON THE SALINAS VALLEY 180/400 FOOT AQUIFER SUBBASIN GROUNDWATER SUSTAINABILITY PLAN DRAFT: CHAPTER 9, PROJECTS AND MANAGEMENT ACTIONS

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) is a state agency that implements state and federal water quality laws within the Central Coast region. The Salinas Valley groundwater basin falls within the jurisdictional area of the Central Coast region and as such, the Central Coast Water Board has an interest in monitoring, preserving, and restoring water quality within the basin. The Central Coast Water Board has reviewed the draft Chapter 9 of the Salinas Valley 180/400 Foot Aquifer Subbasin Groundwater Sustainability Plan (GSP) on *Projects and Management Actions* and would like to provide comments on the groundwater quality-related portions of this draft chapter.

The Central Coast Water Board supports efforts to increase the capacity of regional groundwater resources. We also support and appreciate the projects developed and implemented by agencies in the Salinas Valley to manage the existing groundwater resources in a sustainable manner, control overdraft, prevent seawater intrusion, and create a reliable water supply in the short and long terms. From our perspective, a safe and reliable water supply is essential to support all designated beneficial uses, including drinking water, for current and future generations.

Regarding water recharge and storage projects, issues and considerations associated with the chemical characteristics of the recharging and stored water itself, as well as the receiving aquifer, are well-documented. With regards to Chapter 9 of the GSP, the Central Coast Water Board has concerns that implementing such projects directly on agricultural lands could exacerbate a well-documented non-point source groundwater quality problem. Specifically, due to the widespread application of fertilizers and pesticides to agricultural lands, the use of these

DR. JEAN-PIERRE WOLFF, CHAIR | JOHN M. ROBERTSON, EXECUTIVE OFFICER

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lands for surface water storage basins and groundwater recharge areas have the potential to flush even more agriculture-related chemicals from the land surface and shallow soil zone to groundwater than would make it to groundwater via typical irrigation practices and precipitation alone – particularly if the land use seasonally alternates between active farming and water storage/recharge. On the other hand, we acknowledge that in some cases managed aquifer recharge results in the dilution of constituents of concern (COCs) in groundwater; however, in these instances, the recharge areas are not sited on actively farmed acres where the source of COCs continues to be applied on a seasonal basis. The Central Coast Water Board requests that the GSA clarify plans for recharge in areas of seasonal farming and areas of poor water quality (Projects 7 and 8). During the planning process, we recommend the GSA consider the potential permitting that the Central Coast Water Board's Waste Discharge Requirement program may require for such projects. We encourage initiation of permitting discussions with Central Coast Water Board staff as early as possible.

The Central Coast Water Board thanks the GSA for the work being done to sustainably manage groundwater resources in the Salinas Valley and appreciates this opportunity to provide comments. If you have questions or would like to discuss these comments in greater detail, please feel free to reach out to James Bishop, Daniel Pelikan, or Diane Kukol at the Central Coast Water Board:

James Bishop, P.G.
Engineering Geologist
Central Coast Water Board
James.Bishop@waterboards.ca.gov
805-542-4628

Daniel Pelikan, P.G., C.Hg.
Engineering Geologist
Central Coast Water Board
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Diane Kukol, P.G.
Senior Engineering Geologist
Central Coast Water Board
Diane.Kukol@Waterboards.ca.gov
805-542-4637

Sincerely,

for John M. Robertson
Executive Officer

cc:

Matt Keeling, Central Coast Water Board, Matt.Keeling@Waterboards.ca.gov

Diane Kukol, Central Coast Water Board, Diane.Kukol@Waterboards.ca.gov

Daniel Pelikan, Central Coast Water Board, Daniel.Pelikan@Waterboards.ca.gov

James Bishop, Central Coast Water Board, James.Bishop@Waterboards.ca.gov

Natalie Stork, State Water Resources Control Board, Natalie.Stork@Waterboards.ca.gov

Andrew Renshaw, State Water Resources Control Board,

Andrew.Renshaw@Waterboards.ca.gov

John Ramirez, Monterey County Environmental Health Bureau, Ramirezj1@co.monterey.ca.us

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From: james sang <sangjames@yahoo.com>

Date: Wed, Nov 13, 2019 at 1:51 PM

Subject: SVBGSA PLAN

To: Gary Petersen <peterseng@svbgsa.org>, BoardSVBGSA <board@svbgsa.org>

Cc: Ann Camel <camela@svbgsa.org>, james sang <sangjames@yahoo.com>

To General Manager Gary Peterson and the Board of Directors:

This my idea about how to make our groundwater sustainable.

We have to rehydrate our soil and thusly our groundwater levels will go up and our aquifers will refill.

We need to build swales or ditches that run against the slope of land. These swales will collect the rainwater. The swales will lead into a pond, that is close to a monitored well. As the rainwater fills in the pond, the rainwater will percolate into the ground and raise the water table and eventually the aquifers and the well water levels.

Example 1. You Tube video "#9 Fill your well using a trench-Groundwater recharge-Tropics"

Example 2. You Tube video "#9.1 pt ii Fill your well-Groundwater recharge-Tropics"

Swales leading to pond can be done on level ground. Mr. Jack Spirko in his You Tube video said that he collected 12,000 gallons of water from one inch of rainfall!!

Example. You Tube video "Swales on so called "flat land" holding 12,000 plus gallons of water.

I would this idea to be tried on 10 currently monitored wells.

1. The ponds should be one or two acres. They should be about 36 inches deep. They should be deep enough to collect one year of rainfall.

2. The swales should be as long as possible. This will allow more rainwater to be collected. If the swales go up a hill, they should go as

high as possible to rehydrate more ground. If the swales are on a hill, Vegetation should be grown behind the swales to prevent them from breaking in a heavy rain.

3. The ponds should have floating plants(azolla, duckweed} to absorb the nitrates and other toxins. The floating plants will help prevent excessive evaporation. Evaporation is a major cause of ground moisture loss. Maybe tarps put over the pond will work.

4. The pond water can be used for irrigation and thus prevent a draw down of groundwater.

5. The pond should be build about fifty feet away from the well to allow the soil to absorb any potential toxins from entering the well.

Thank you for reading this!

James Sang (sangjames@yahoo.com)

-----Original Message-----

From: Christopher Bunn <christopher@Generalfarminvestment.com>

Sent: Thursday, July 25, 2019 3:05 PM

To: Derrik Williams <dwilliams@elmontgomery.com>; Gary Petersen - SVBGSA (peterseng@svbgsa.org) <peterseng@svbgsa.org>

Subject: comments on chapter 9

Derrik and Gary,

Thank you for all your hard work on our local SGMA process. I'd like to submit a few comments on the chapter 9 draft. These are not in any order of importance.

1. De minimis users should be required to pay some sort of fee. While I realize they can't be charged according to usage, they shouldn't get a free pass as they are benefiting from the basin and all of our hard work and capital.
2. The fallow land program should allow for a landowner to lease the land for fallowing, as opposed to simply put it in permanent deed restriction. The fallow lease could either be held by the GSA/county or secured by another landowner in order for that landowner to gain a certain portion of the fallowed land's water credits. This open-ended approach to fallowing would allow such land to come back into production if the basin achieved balance and/or surplus.
3. Reservoir re-operation (and increasing winter flows, etc) would have an adverse effect on river vegetation. This would have to be mitigated (see # 5).
4. Before completely restricting drilling and pumping in the deep aquifer, the GSA will first have to create a viable alternative (CSIP expansion does not seem to be a viable alternative yet, if it is merely to benefit the book-end months), as the county's current regs prohibit new wells in the 400 west of Davis Road.
5. The invasive species eradication project as it is written, limited to arundo, tamarisk and other negligible non-natives is too limited. Chapter 9 should amplify that eradication to species overgrowth in general in the river, as willows and several other species are what create the larger problem in the river in terms of sucking up water and blocking flow. The Salinas River Maintenance Program has permits in place that allow for that kind of maintenance, in addition to eradicating the arundo. A change from invasive to species overgrowth in general will more effectively reduce the amount of water taken by plants, in addition to allowing better flow in the river from the dams to the SRDF, radial collectors, and recharge points in between. The permits allow willows less than the 6 inches diameter at chest height to be taken without mitigation. Furthermore, if larger willows are taken (which is rarely necessary), the 2-1 replanting mitigation can be done along riverbanks and up on the levees, which many landowners are happy to do. This project, as currently written, is missing a tremendous opportunity for creating water and enabling better control of river flows, in addition to being a critical action that virtually all landowners, farmers and valley cities would be happy to see. Furthermore, if one of the projects is going to be reservoir re-operation for increased winter flows, the river will become even more choked; amplifying species eradication would mitigate this problem caused by the GSP.
6. Chapter 9 should contain a blanket statement that all viable sewage should be pursued for capture and reclamation. Spreckels should be given priority in this regard. Also, a comfortable majority of the

residents in the Toro area would be in favor of their sewage going to M1. This would not shut down CUS completely, as they would still need to capture the sewage and pipe it. The dollars involved here would be only focused on diverting it from their plant to the M1 plant, shutting down CUS' spray fields (which are a food safety problem in themselves, let alone issue of being along the river and contaminating the water). Furthermore, as the Davis Rd bridge project is on the books, this is the time to influence that project and get a suitable pipe slung under the new bridge.

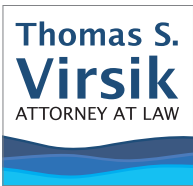
7. All old, unused wells in the CSIP area and then over to the city and Davis Road need to be destroyed. This needs to be down at landowner cost, rather than expecting MCWRA to pay for it. Set a date when it needs to be done. Sooner than later.

8. GSA needs to determine any and all pumping in the basin that is being exported out of the basin. If this is not done and policed, then the fee structures will not be honest and reflective of reality. Water export needs to stop.

9. The Salinas River Maintenance Program also includes a permit for sediment removal. This should be included in the project list as it would allow more efficient water movement in the river, either to get it to the SRDF, planned radial collectors, or to percolation points.

10. Lastly, the Jerrett Reservoir should be included on the list. Increasing water storage will allow us to move increased amounts of water more efficiently down the river to percolation points, radial collectors and the SRDF. I haven't spoken with a single farmer/landowner who disagrees with this. If we're going to include Nacimiento/San Antonio re-operation on the project list, a new reservoir would be governed by the same logic: controlling storage means controlling flow means controlling perc/extraction points.

Regards,
Christopher Bunn



7 August 2019

To: Salinas Valley Basin Groundwater Sustainability Agency (GSA) Board of Directors

Re: August 8, 2019 meeting

Public comment

Agenda Item 7.e
Chapter 9 of 180/400 GSP

Agenda Item 8.a
Billing notice language

Public comment

I respectfully suggest that when the GSA revises or supplements its posted agendas and packets, it include a flag, notation, or other explicit signal. I have downloaded two versions of the agenda packet -- both of which claim to have been posted on August 2, 2019 (in the end notes of the agenda pages). The current packet as of 6 August 2019 is 196 pages long whereas the one available a day or so earlier is 165 pages. The GSA's postings have in general been well within the applicable public notice times (typically somewhat early), but on several occasions, I discovered after reviewing an agenda packet that a modified version was now on the GSA website. On at least one occasion the GSA sent a notice via email of the new posting. Nerveless, some sort of flag, marker, or other facial indicator to the public that there exists an earlier and a revised agenda or agenda packet would contribute to the GSA's goal of transparency.

Item 7.e. -- Chapter 9 draft

Draft Chapter 10 (implementation) was discussed during the Planning Committee meeting on 1 August 2019. Based on language in that draft, I asked how the water charges framework would be applied in the 180/400 where the overall goal of the current GSP direction is to stop pumping and instead provide water from various projects or sources. The current CSIP area, for example, relies on, and is charged various levies by the MCWRA for, water that is delivered via pipes. My query contributed to a discussion of the water charges framework by those present, including comments by GSA counsel Les Girard on the complications and intricacies of regulatory fees, SGMA statutory authority, Proposition 218, and other aspects of applying the proposed framework. The

thrust of the discussion was that while a framework based on water extraction charges has certain merit, as a practical and legal matter, it may not be the only or most appropriate basis to finance projects under all circumstances. Mr. Williams suggested he would rewrite “that section” of presumably draft Chapter 10. The difficult decisions about financing and management will eventually come before the Board, but are not part of today’s agenda. Nevertheless, Chapter 9, which introduces and explains the water charges framework, states that it is the “fundamental structure for managing groundwater pumping and funding projects” and will be implemented in “all Salinas Valley subbasins in Monterey County.” § 9.2. The current draft fails to identify how the framework is geared to the 180/40, the focus of the GSP. The current Chapter 9 language may not be consistent with what one may expect in Chapter 10 about flexibility, the continuation of the current regulatory fee within or apart from the water charges framework, and how to charge extraction fees in areas (like the CSIP) that will not pump.

It may be best to hold Chapter 9 until the language in Chapter 10 is finalized so that the two do not clash.

Item 8.a -- billing notice

At the Planning Committee Meeting last week, I orally commented that the proposed billing notice and an assessor document both contained small nomenclature errors that could create confusion. In both cases, the draft language slightly misidentified the relevant state entity responsible for the interim/probationary management of a basin. It appears that the entity intended is the State Water Resources Control Board, which would manage a non-compliant basin.

Very truly yours,

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