

June 28, 2022

<u>Via email</u> Board of Directors Salinas Valley Basin Groundwater Sustainability Agency P.O. Box 1350 Carmel Valley, CA 93924

Re: Environmental Justice and Cost Apportionment Considerations in Planning Projects and Management Actions

Dear Members of the Board:

Should Disadvantaged Communities and lower income households bear the significant financial burden of balancing groundwater basins that have been overdrafted from 70 years of unregulated agricultural pumping?

This is a fundamental question that faces the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) as it deliberates about cost apportionment and assesses project feasibility.

As this letter explains, the risk of losing drinking water in the four northern subbasins poses important environmental justice issues. These subbasins include the cities of Salinas and Marina and urbanized communities of Castroville, Spreckels, Prunedale, and Boronda. Many areas in the northern subbasins are classified as Disadvantaged Communities or Severely Disadvantaged Communities. The water that these communities drink is at risk because of groundwater overdraft and seawater intrusion. This means there is a health risk. But there is also a significant financial risk because of the uncertainty of how much cost will fall on Disadvantaged Communities to address a problem they largely did not cause.

In addition, reliable and affordable water supplies are needed for existing lower income housing in all of the northern subbasin communities, and for new lower income housing that the State requires through the Regional Housing Needs Allocation planning process. Urban uses represent a minority share of the northern subbasins' pumping – only 15% of the total pumping – with agriculture making up the remaining 85%. Yet, to date the

SVBGSA has not addressed the environmental justice issue posed by the enormous disparity in historic use between urban and agricultural users, and the potential inequities in planning for large, capital-intensive projects that Disadvantaged Communities and lower income households may not be able to afford.

Indeed, this is the same dynamic that has played out on the Monterey Peninsula with CalAm pursuing desalination, the costliest water supply option, rather than advanced wastewater recycling, the least costly option. Big, shiny capital projects marketed relentlessly by entrenched, self-interested billion-dollar companies have a way of distracting policy-makers and conflating public needs and private benefits. Solving the Salinas Valley's groundwater issues will require a laser-focus on prioritizing projects by costs and benefits. To date, such cost/benefit analysis has been sorely lacking.

In the Salinas Valley Basin, there is a very wide range of costs for the proposed projects and management actions the SVBGSA is considering to attain sustainability. Some recharge and in lieu recharge projects would cost in the vicinity of \$500-\$1500 per acrefoot, whereas other projects, like the pumping barrier/desalination project are more than \$4,000 per acrefoot.

The economic feasibility of these projects depends on users' willingness and ability to pay the shares of project costs apportioned to them. A fair and legally defensible cost apportionment must resolve the longstanding dispute between northern and southern subbasins about responsibility to mitigate groundwater problems in the north. Unless the southern subbasins have a legal obligation to address these problems, project costs cannot be apportioned to them.

SGMA must respect water rights, and as the SVBGSA has already acknowledged through the Water Charges Framework, project costs should be apportioned in accordance with pumping in excess of water rights. Unless the southern subbasins are pumping in excess of their water rights, they may have no obligation to pay for project costs. This issue may be resolved with reference to common law principles governing allocation of pumping rights from interconnected basins.

However, the SVBGSA has not begun to evaluate this critical water rights issue, despite the implementation schedule that calls for project feasibility assessments, selection, and funding plans within the next two years. The relatively expensive project options such as desalination may be infeasible if the northern subbasins alone must pay for them.

Project cost apportionment must also must reflect the priority of urban suppliers' water rights under the common law doctrine of prescription and the statutory priority for domestic uses. Urban users should not be expected to fund projects to replace

groundwater they are entitled to use before any water is supplied for agricultural use. Asking the minority share water users in Disadvantaged Communities and lower income housing to pay \$4,000 per acre-foot for desalinated water to replace groundwater to which they have a priority claim in order to mitigate a problem that they did not cause is both legally indefensible and fundamentally unfair.

Accordingly, we urge the SVBGSA to develop work plans this summer for the 2023-2024 budget year that focus on economically realistic projects and management actions. The SVBGSA should focus its work plans on

- determining proportional responsibility for mitigation costs by northern subbasins, southern subbasins, and northern urban users,
- assessing the least-cost water supply options that may actually be feasible based on an econometric study of the willingness and ability to pay by those users that actually have mitigation responsibility, and
- assessing and planning the implementation of demand management, including fallowing and pumping allocations.

These points are developed below.

# A. Water supply uncertainty in the northern subbasins is an environmental justice issue because it puts Disadvantaged Communities and lower income households at risk.

The SVBGSA's most critical sustainability issues, overdraft and seawater intrusion, affect the four northern subbasins: the 180/400, Monterey, Langley, and Eastside subbasins. The 180/400 and Eastside GSPs identify overdrafts of 10,900 AFY and 10,000 AFY respectively.<sup>1</sup> Seawater intrusion affects the 180/400 and Monterey subbasins.

These issues confront two very different kinds of water users. The majority water users are the growers, who account for 85% of water use in the northern subbasins.<sup>2</sup> The minority water users, accounting for the other 15%, include those who rely on urban suppliers for drinking water and other municipal uses.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> 2020 180/400 GSP, pp. 3-11, 6-40, 6-42; Eastside GSP, pp. 6-21, 6-25, 6-26.

<sup>&</sup>lt;sup>2</sup> MCWRA, 2020 Groundwater Extractions Summary Report, July 2021, available at <u>https://www.co.monterey.ca.us/home/showpublisheddocument/105304/637677507531170000</u>.

<sup>&</sup>lt;sup>3</sup> *Id*.

As the GSPs acknowledge, many of these minority users are members of Disadvantaged Communities or Severely Disadvantaged Communities, i.e., communities in which the Median Household Income is under 80% or 60% of the statewide median household income:

Many of the communities in the Salinas Valley Groundwater Basin are classified as Disadvantaged Communities (DACs) and Severely Disadvantaged Communities (SDACs), as well as Economically Distressed Areas (EDAs). The SVBGSA jurisdictional area has well documented DAC-designated areas including seven Census Designated Places (CDPs), 60 Block Groups, and 20 Tracts. Additionally, work conducted by the Greater Monterey County Integrated Regional Water Management (IRWM) Program identified 25 small disadvantaged, severely disadvantaged, and suspected disadvantaged communities in unincorporated areas of the IRWMP region (Greater Monterey County Regional Water Management Group, 2018), which includes the entire SVBGSA area. As many of these communities are dependent on groundwater for drinking water, they face challenges associated with drinking water quality.<sup>4</sup>

DWR identifies extensive areas around Salinas, Castroville, Marina, Seaside, Spreckels, and Prunedale as Disadvantaged Communities.<sup>5</sup>

In addition to current needs, reliable long-term water supplies are needed to support provision of new lower income housing for these communities. For just the next 8 years, the 6th Cycle Regional Housing Needs Analysis allocates 2,155 lower income units to Salinas, Marina, and Seaside; and a substantial portion of Monterey County's 1,655 lower income units will need to be supplied in the northern Salinas Valley.<sup>6</sup>

Over the longer term, through 2040, Cal Water's Salinas District will need 4,509 AFY to support existing and planned lower income housing, representing 47% of Cal Water's

<sup>&</sup>lt;sup>4</sup> 180/400 GSP, 2020, Appendix 11E, available at <u>https://svbgsa.org/wp-</u> <u>content/uploads/2020/04/SVBGSA-Combined-GSP-2020-0123-rev-032520-1.pdf</u>; see also Eastside GSP, p. 2-17 and App. 2E; Monterey GSP, p. 2-5; Langley GSP, p. 2-17, and Appendix 2E.

<sup>&</sup>lt;sup>5</sup> See DWR, Disadvantaged Communities Mapping Tool, available at <u>https://gis.water.ca.gov/app/dacs/</u>.

<sup>&</sup>lt;sup>6</sup> AMBAG, Draft 6th Cycle Regional Housing Needs Allocation Plan 2023-203, April 2022, available at <u>https://www.ambag.org/sites/default/files/2022-04/AMBAG%20RHNP%202023-2031\_Draft.PDF-Apdf.pdf</u>.

residential use.<sup>7</sup> Marina Coast Water District will require 1,169 AFY in 2040 for existing and planned lower income housing, representing 22% of its residential use.<sup>8</sup> Castroville Community Service District, which serves a Disadvantaged Community with 7,000 customers, now pumps 780 AFY from wells that are threatened with seawater intrusion.<sup>9</sup> The Castroville Community Plan provides for doubling its customer base by adding 1,655 new residential units, many of which would be intended to support lower income families.

Even though minority urban water users are responsible for only a small percentage of the pumping that causes seawater intrusion and overdraft conditions, their water supplies are at risk. Cal Water reports that its water supply is uncertain due to seawater intrusion:

Additionally, in order to address the significant seawater intrusion occurring within the 180/400- Foot Aquifer Subbasin due to persistent inland groundwater gradients, the 180/400-Foot Aquifer Subbasin GSP stated that there may need to be temporary pumping reductions to achieve necessary rises in groundwater elevation. . . . The [Salinas Valley Basin Groundwater Sustainability Agency] SVBGSA recognizes that, dependent on the success of various proposed projects and management actions, there may be a number of years when pumping must be held below the sustainable yield to achieve necessary rises in groundwater elevation. . . . The exact terms and implementation mechanism of the planned pumping allowance program, and how the allowances may handle urban versus agricultural uses, is currently uncertain and may have significant impacts to Salinas District's water supply.<sup>10</sup>

MCWD reports that advancing seawater intrusion "may eventually degrade water quality in the Marina Area Subbasin where MCWD's wells are located and render all or a number of them unfit for domestic water supplies."<sup>11</sup> MCWD has been moving wells inland to avoid seawater intrusion in the 180-Foot and 400-Foot Aquifers since 1960.<sup>12</sup> MCWD is

<sup>&</sup>lt;sup>7</sup> Cal Water, Salinas District 2020 Urban Water Management Plan, pp. 41, 36, available at <u>https://www.calwater.com/docs/uwmp2020/SLN\_2020\_UWMP\_FINAL.pdf</u>.

<sup>&</sup>lt;sup>8</sup> MCWD, 2020 Urban Water Management Plan, available at <u>https://www.mcwd.org/docs/engr\_files/edfp/uwmp/MCWD\_2020\_UWMP\_20210630.pdf</u>.

<sup>&</sup>lt;sup>9</sup> CCSD, Annual Financial Report and Supplemental Information with Independent Auditor's Report Thereon, June 30, 2021, available at <u>http://www.castrovillecsd.org/files/136595871.pdf</u>.

<sup>&</sup>lt;sup>10</sup> Cal Water, Salinas District 2020 Urban Water Management Plan, App. G, p. G-8; see also *id.*, p. 76.

<sup>&</sup>lt;sup>11</sup> *Id.* at 50.

<sup>&</sup>lt;sup>12</sup> *Id*.

concerned that increasing pumping of the Deep Aquifers, of which MCWD had been the only significant user until about 2003, may lead to seawater intrusion of that water supply and to increased seawater intrusion of the upper aquifers.<sup>13</sup> The Castroville Community Service District has also lost a well to seawater intrusion and is now facing the need to drill a new well into the Deep Aquifers.<sup>14</sup> However, coincident with the rapid growth in agricultural pumping in the Deep Aquifers, groundwater levels in the Deep Aquifer have begun to decline since 2014.<sup>15</sup>

In sum, the water supplies for Disadvantaged Communities and for lower income housing units is imperiled by seawater intrusion and long-term overdraft conditions in the northern subbasins.

### B. Preliminary assessments show a broad range of costs for projects and management actions to attain and maintain sustainability

SGMA requires that the SVBGSA ensure sustainable groundwater use by 2040, which will require pumping within sustainable yield and halting seawater intrusion. The GSP's have identified a broad range of <u>potential</u> projects and management actions to do this, but the SVBGSA has not yet assessed the feasibility, costs, and benefits of these options in sufficient detail to select the most effective, lowest cost combination of projects and management actions. However, through the GSPs and the SVBGSA's two-year work plan, the SVBGSA has committed to complete the assessment, selection, and funding plan in the next two years.<sup>16</sup>

<sup>&</sup>lt;sup>13</sup> MCWD, 2020 Urban Water Management Plan, pp. 55, 37.

<sup>&</sup>lt;sup>14</sup> CCSD, Annual Financial Report and Supplemental Information with Independent Auditor's Report Thereon, June 30, 2021.

<sup>&</sup>lt;sup>15</sup> Monterey County Water Resources Agency (MCWRA), Recommendations to Address the Expansion of Seawater Intrusion in the Salinas Valley Groundwater Basin: 2020 Update, May 2020, p. 31, <u>https://www.co.monterey.ca.us/home/showdocument?id=90578</u>; see also Monterey County Water Resources Agency (MCWRA), Well Permit Application Activities Update, prepared for May 17, 2021 MCWRA Board of Directors meeting, <u>https://monterey.legistar.com/View.ashx?M=F&ID=9381226&GUID=34ED34CD3A39-</u> <u>4851-87A3-298BE70D383C</u>.

<sup>&</sup>lt;sup>16</sup> GSPs for Langley, Eastside, Forebay, Upper Valley, and Monterey, Figures 10-1 [calling for completion of "Project Selection, Planning, and Funding" by year-end 2023]; SVBGSA, Two-Year Work Plan, Apr. 14, 2022 available at <u>https://legistarweb-</u>

production.s3.amazonaws.com/uploads/attachment/pdf/1324619/5.b.\_Work\_Plan.pdf [identifying "Critical work that should be completed" as "Project feasibility assessment including engineering analysis and refinement of cost and benefits estimates;" "Further stakeholder engagement through Subbasin Implementation Committees on project preferences and timelines;" "Prioritization of projects and actions;" and "Conducting a funding analysis"].

The potential projects and management actions identified by the GSPs to address seawater intrusion and overdraft in the northern subbasins include four basic approaches: local recharge, using surface or recycled water in lieu of pumping, a seawater intrusion pumping barrier doubled with a desalination facility, and pumping reductions. As summarized in Tables 9-1 of the four northern GSPs, the costs and benefits of the proposed projects and management actions vary widely. Attachment 1 provides a summary of most of the GSPs' proposed projects expected to yield more than 1,000 AFY and for which the GSPs indicate cost per acre-foot (AF).

- Recharge projects would cost \$60 to \$1,280 per AF, yielding from 4,590 to 22,680 AFY
- Provision of surface or recycled water in lieu of groundwater pumping or to recharge groundwater via Aquifer Storage and Recovery (ASR) would cost \$1,070 to \$3,300 per AF, yielding 30,310 AFY
- A seawater intrusion pumping barrier coupled with desalination would cost \$4,033 to \$4,146 per AF, pumping 30,000 AFY of brackish water to yield 15,000 AFY of water supply.
- Reductions in groundwater pumping via fallowing would cost \$590 to \$1,900 per AF. Potential yield is not specified.

The GSPs identify pumping allocation and controls as a potential management action, but they do not assign a cost per acre-foot. Arguably, that cost would be similar to the fallowing cost since it would reflect the same marginal opportunity costs to growers not to use that water to farm.

In sum, the costs per AF of the projects and management actions proposed in the GSPs range from less than \$1,000 per AF for some fallowing and recharge options, to \$1,000 to \$3,000 per AF for projects to provide surface or recycled water in lieu of pumping, to over \$4,000 per AF for the pumping barrier/desalination proposal. The data in the GSPs are preliminary, but there is no reason to suppose that a wide range of costs per AF will not persist in more detailed subsequent analyses. Because the SVBGSA should implement the least-cost suite of needed projects and management actions, it should complete a sufficient analysis of all of the reasonable options before committing itself to any of the higher cost options.

For example, before making further commitments to the most expensive option, the \$4,000+ per AF pumping barrier/desalination option, the SVBGSA should evaluate the feasibility of the less expensive options that provide similar or greater benefits. Notably, a

total of 27,600 AFY could be provided at less than \$1,500 per AF by three projects: CSIP Expansion, Seasonal Releases with ASR, and the Diversion of 11043 Water Rights at Chualar. Pumping reductions or other projects might supplement this supply augmentation to meet sustainability goals. If the identified fallowing costs represent opportunity costs for not using water, pumping reductions would cost less than half as much per AF as the desalination proposal, calling into question any potential use by agriculture of desalinated water. As explained below, urban users and southern subbasins may have little or no obligation to pay for desalination.

## C. Project feasibility depends on users' willingness to pay for their fairly apportioned costs. Apportionment must reflect urban suppliers' priority rights, and it must resolve inter-subbasin mitigation responsibility.

Unless users are willing and able to pay for their fairly apportioned cost share, projects and management actions will not be feasible. Agricultural users are not willing to pay more than the marginal productivity of water. For example, studies of agricultural users' willingness to pay for SGMA compliance water projects in the San Joaquin Valley indicate that farmers there would be willing to pay at most \$300-\$500 per AF for water supplied by new projects.<sup>17</sup> After that, San Joaquin Valley farmers would prefer to attain SGMA compliance via pumping reductions because the marginal productivity of water does not justify higher costs. Thus, even if marginal agricultural value of water is five times higher per acre in the Salinas Valley than in the San Joaquin Valley, it may be unrealistic to expect agricultural users to pay more than \$1,500 to \$2,500 per AF for projects to avoid pumping reductions. This would rule out projects like the pumping barrier/desalination.

Users' shares of project costs depend on the size of the assessment base over which costs are apportioned. However, the SVBGSA has not articulated any principled basis for cost apportionment despite stakeholders' interest in establishing a common understanding of who must pay for SGMA compliance. Fairness, Proposition 218, and political accountability require that the SVBGSA apportion these costs based on the proportional benefit to users using a principled and transparent methodology. A user who has no legal obligation for mitigation obtains no benefit from mitigation projects.

Mitigation responsibility may vary by location of users and by priority of water rights. First, users located in subbasins that do not cause overdraft and seawater intrusion may arguably have no mitigation responsibility for these problems in other subbasins; and even if these subbasins cause some lesser amount of the problem, their mitigation responsibility

<sup>&</sup>lt;sup>17</sup> Hanak et al, Water and the Future of the San Joaquin Valley, p. 22, Feb. 2019, available at <u>https://www.ppic.org/wp-content/uploads/water-and-the-future-of-the-san-joaquin-valley-february-</u>2019.pdf.

should arguably be proportional. Second, urban users with priority water rights should bear no mitigation responsibility for the amounts pumped within their priority rights. These two mitigation responsibility concepts are discussed below.

### **1.** Project cost apportionment among subbasins must reflect mitigation responsibility, which must in turn must reflect water rights as between interconnected subbasins.

The SVBGSA must determine what responsibility, if any, the subbasins with positive water balances bear for SGMA compliance costs in other subbasins. Southern subbasin stakeholders have suggested that they should bear no compliance cost to rectify seawater intrusion or overdraft in northern subbasins. Northern subbasins stakeholders have disagreed.

In approving GSPs, DWR is required to determine "[w]hether the Plan will adversely affect the ability of an adjacent basin to implement its Plan or impede achievement of its sustainability goal."<sup>18</sup> The SVBGSA has made this rule operational by stating that if a subbasin is meeting its own Sustainable Management Criteria, "neighboring subbasins will likely not be prevented from reaching of maintaining sustainability."<sup>19</sup> Since the southern subbasin GSPs current and projected water balances indicate that they do and will meet their SMCs without any additional projects or management actions, the SVBGSA would presumably conclude that they would not be preventing other subbasins from reaching or maintaining sustainability. However, the SVBGSA has also indicated that this conclusion may change, stating that "as part of the 5-year updates, the water budgets will be updated and sustainable management criteria reviewed to account for inter-basin flows and impacts on adjoining basins or subbasins."<sup>20</sup>

Without some principled <u>legal</u> basis for determining mitigation responsibility, the hydrological determination of these "inter-basin flows and impacts on adjoining basins or subbasins" by itself cannot apportion SGMA compliance costs. One principled basis for cost apportionment would be the common law principles governing allocation of pumping rights from interconnected basins, because pumping allocations under SGMA must be

<sup>20</sup> The contemplation that GSP revisions in five years might affect responsibility for compliance costs is inconsistent with the commitment in the existing GSPs and the Two-Year Work Plan to evaluate, select, and determine funding for projects within the next two years.

<sup>&</sup>lt;sup>18</sup> 23 CCR § 355.4(b)(7).

<sup>&</sup>lt;sup>19</sup> 2022 180/400 GSP update, Response to comment letter 10.g, available at <u>https://legistarweb-</u> production.s3.amazonaws.com/uploads/attachment/pdf/1403840/180400\_Update\_Comment\_Letters\_and\_Re sponses\_060122\_2\_p.pdf.

consistent with these principles.<sup>21</sup> Pumping reductions, which must necessarily reflect these common law principles, are an alternative to expensive water projects. If the SVBGSA decides to avoid pumping reductions through water projects, arguably the cost of these projects should be borne in proportion to pumping that is in excess of water rights to a sustainable yield.

This is in effect what is required by the 180/400 GSP's "Water Charges Framework," which plans to pay for projects with pumping fees based on pumping allowances.<sup>22</sup> Even if the Water Charges Framework is abandoned, its adoption reflects the SVBGSA's principled acknowledgement that project costs should be apportioned in accordance with pumping in excess of water rights to the sustainable yield.

Although correlative agricultural overlier water rights <u>within</u> a subbasin may be of equal priority, it is not immediately clear how those water rights would be allocated <u>among</u> subbasins. Thus, for example, the Water Charges Framework identifies the equitable balance between subbasins of the pumping charges for water projects as a "detail to be developed" by 2023.<sup>23</sup> This "detail" must be consistent with water rights.

Thus, a subbasin that would not be required to reduce its pumping through a hypothetical adjudication could argue that it should bear no share of the cost of projects to address overpumping problems in another subbasin. Alternatively, if mutual reductions in multiple subbasins were the expected result of adjudication, then those expected reductions would support a proportional allocation of the costs of projects to avoid such reductions. In sum, pumping allocations made under common law water rights principles may provide a useful proxy for apportioning the costs of water projects, because building water projects is an alternative to pumping allocations.

Again, while modeling inter-subbasin flows and hydrological impacts on adjoining subbasins may be necessary, it is not sufficient to provide a principled basis for project cost apportionment consistent with common law water rights. The water rights analysis must also be undertaken.

<sup>&</sup>lt;sup>21</sup> Garner et al., The Sustainable Groundwater Management Act and the Common Law of Groundwater Rights—Finding a Consistent Path Forward for Groundwater Allocation, Journal of Environmental Law V38:2, 2020, pp. 166-167, 178-181, available at <u>https://www.edf.org/sites/default/files/documents/01JELP38-</u> 2\_Garner\_etal.pdf.

<sup>&</sup>lt;sup>22</sup> 2020 180/400 GSP, pp. 9-2 to 9-10.

<sup>&</sup>lt;sup>23</sup> 2020 180/400 GSP, p. 9-10.

Agricultural users account for over 85% of water use in the northern subbasins and over 90% across the entire Salinas Valley, but it is unclear which agricultural users have a legal obligation under SGMA to bear project costs, in large part because the SVBGSA has not determined differential mitigation responsibility by subbasin. Thus, a fundamental hurdle in determining what projects are economically feasible is uncertainty whether there is a large enough assessment base to pay for them. For example, if the southern subbasins are not legally obligated to pay to mitigate seawater intrusion and overdraft in the northern subbasins, then the assessment base may not support the most expensive proposed projects. Again, even if the marginal value of agricultural water is much higher per acre in the Salinas Valley than in the San Joaquin Valley, it may be unrealistic to expect agricultural users to pay more than \$1,500 to \$2,500 per AF for projects to avoid pumping reductions. Elimination of the southern subbasins from the assessment base for projects may by itself rule out expensive projects like the pumping barrier/desalination.

Furthermore, as discussed below, assessments against urban suppliers may be limited by the priority of their water rights and by the fact that there is no apparent justification for apportioning the cost of more expensive projects to urban users and the cost of less expensive projects to agricultural users.

## 2. Project cost apportionment must reflect priority water rights of urban users and cannot disproportionately burden urban suppliers with the cost of the more expensive projects.

In allocating compliance costs, the SVBGSA will have to recognize that existing urban users have priority in water rights over agricultural uses. Urban users should not have to pay for water projects to replace groundwater for which they have a priority claim.

As discussed, both the Water Charges Framework and the requirement that SGMA respect water rights principles requires that project costs should be apportioned in accordance with pumping in excess of water rights. Thus, if the SVBGSA decides to build projects instead of reducing pumping, the project costs should be borne in proportion to the relief from pumping reductions that would otherwise be imposed.

Urban suppliers who have pumped in an overdrafted basin for five years have a prescriptive right that takes priority over pumping by agricultural overliers.<sup>24</sup> In an adjudication, the amount of that right is reduced by so-called "self-help" pumping by overlying landowners, and it would also likely be ramped down to reflect the "safe yield"

<sup>&</sup>lt;sup>24</sup> Garner et al., The Sustainable Groundwater Management Act and the Common Law of Groundwater Rights—Finding a Consistent Path Forward for Groundwater Allocation, Journal of Environmental Law V38:2, 2020, pp. 187, 207.

of the aquifer (similar to SGMA's "sustainable yield").<sup>25</sup> Typically, the urban supplier would have the prescriptive right to pump the same percentage of the safe yield as the percentage of total pumping it pumped during the prescription period.<sup>26</sup> Urban suppliers would have this right even if no projects were built and SGMA compliance were achieved solely via pumping reductions. Accordingly, if costs are apportioned on the basis of pumping in excess of common law water rights, urban suppliers should not have to pay for projects to avoid pumping reductions they would not have to make in an adjudcation.

Furthermore, urban suppliers may not be limited to prescriptive rights because the constitutional mandate for reasonable and beneficial use may make domestic water use a higher priority than agricultural use even without prescription.<sup>27</sup> In addition, Water Code Section 106 declares as state policy that domestic use is a higher priority than agricultural use, and one court interpreted this to require urban use even without prescription.<sup>28</sup> These constitutional and statutory priorities may further limit urban suppliers responsibility for project costs.

Urban suppliers understand their priority rights and will not be willing to forego them. Commenting on potential pumping allocations, Cal Water explains that its priority water rights and its claims under Water Code Section 106 require that its water rights be subject to less restriction than any other types of uses:

The above notwithstanding, Cal Water holds certain water rights to groundwater it has pumped and used as an overlying owner and appropriator. Cal Water's water rights have been dedicated to a public use, and Cal Water is required by the California Public Utilities Commission to provide water to all customers within its designated service area under reasonable rules and regulations. Further, under California law municipal water rights and uses have a higher priority and are entitled to more protection than other uses of water, including in connection with the Sustainable Groundwater Management Act (SGMA). Use of water for domestic purposes is recognized as the "highest use" of water in the State of California pursuant to Water Code Section 106, and the rights of urban water purveyors should be protected to the fullest extent necessary for existing and future uses, pursuant to

Id. at 189-190, 207. "Safe yield" is functionally equivalent to SGMA's "sustainable yield." (Id. at 206 n
189.)

<sup>&</sup>lt;sup>26</sup> *Id.* at 187, 207.

<sup>&</sup>lt;sup>27</sup> *Id.* at 177-178, 196-198.

<sup>&</sup>lt;sup>28</sup> *Id.* at 197. No court has yet interpreted Water Code section 106.3, declaring the human right to water for domestic purposes.

Water Code Section 106.5. SGMA was intended to preserve the security of water rights in the state to the greatest extent possible, and was not intended to determine, modify or alter any surface water or groundwater rights or priorities. (Water Code §§ 10720.1(b), 10720.5(a) and (b).) SGMA should therefore not reduce, adversely impact or limit Cal Water's present or future exercise of its domestic water rights or its obligation to serve its municipal customers, and Cal Water's rights should be subject to less restrictions and limitations than any other types of water rights or uses.<sup>29</sup>

Applying the principle that project costs should be apportioned in accordance with pumping in excess of water rights, urban water suppliers will necessarily pay a smaller share of the cost of water projects than agricultural users on a per acre-foot basis. With the possible exception of the Corral de Tierra area of the Monterey subbasin and the Langley subbasin, the amount pumped for urban use prescriptively is well below the safe or sustainable yield of the northern subbasins. Thus, under the doctrine of prescription, and even without Water Code Section 106, urban water users should not have to pay for water projects to provide their prescriptive right to existing pumping, because they would be entitled to this prescriptive right water without any reduction in a hypothetical adjudication. Urban users should pay at most an amount based on their non-prescriptive pumping, which would consist of increased pumping to accommodate future growth.<sup>30</sup> And if Water Code section 106 is given weight, urban suppliers enforceable share of project costs may be less, or zero.

Furthermore, if multiple projects and management actions are taken to attain sustainability, each with a different cost per acre-foot, urban suppliers should be required to pay only the average cost per acre-foot for their water for growth, not the highest cost. For example, even if urban suppliers were required to pay for water for growth, they should not be expected to subsidize the majority agricultural water use by paying \$4,000+ per acre-foot for drinking water while agricultural users pay less for surface water diversions or recycled water.

Thus, if a desalination/pumping barrier project goes forward, northern subbasin agriculture may be required to pay the lion's share of its cost. It is unclear that agricultural users would be willing to pay these costs for water.

<sup>&</sup>lt;sup>29</sup> Cal Water, Salinas District 2020 Urban Water Management Plan, App. G, p. G-9.

<sup>&</sup>lt;sup>30</sup> Urban suppliers might also be required to pay for the overdraft percentage of their existing pumping. That is, if the subbasin had a 10% overdraft, their prescriptive right might be ramped down to 90% of their existing pumping.

#### 3. Project costs might be subsidized by providing surface water to the Peninsula.

Although the Agency Act bars groundwater exports from the Salinas Valley,<sup>31</sup> it does not bar provision of surface water from the Salinas Valley watershed to Peninsula cities. These cities need water, do not contain Disadvantaged Communities, and have demonstrated a willingness to pay relatively high costs per acre-foot for supplies. For example, Cal-Am and MPWMD have supported contracts for recycled water from Monterey One Water at prices in excess of \$3,000 per acre-foot.

Provision of relatively small amounts of surface water to Peninsula cities (e.g., 5,000 to 10,000 AFY) compared to the large amounts used by Valley users (e.g., 500,000 AFY) might provide a way to subsidize sustainability projects in the Salinas Valley subbasins subject to SGMA. If the Peninsula cities have no claim to the surface water, water could be provided to the Peninsula Cities at higher negotiated costs per-acre foot than the costs to Salinas Valley users for groundwater mitigation projects. For example, if the SVGBGSA implements the proposed project to convey surface water from the south to the north for direct use urban use within the Salinas Valley, it could increase the volume of water conveyed in order to provide some water to Peninsula Cities, and it could charge the Peninsula cities a higher cost per acre-foot to subsidize the rest of the project.

Indeed, a proposal was developed and considered by MPWMD and MCWRA before attention was turned to other options for the Peninsula. The SVGBGSA should revisit this concept.

# D. The SVBGSA must develop work plans promptly to determine proportional responsibility for mitigation costs and to assess pumping reductions and least-cost water supply options.

As noted above, the SVBGSA has committed itself to assess and select projects in the next two years through its GSPs. Its current two-year work plan includes the "second phase of the Integrated Implementation Plan [which] will include updates based on feasibility analysis conducted at the subbasin level for projects required to attain sustainability."<sup>32</sup> If, as previously expected, that work is to be funded largely by grants rather than regulatory fees, the SVBGSA should submit grant applications when DWR's Round Two solicitation is expected to open.<sup>33</sup> If, as recently suggested by SVGBGSA staff, the Round Two grants may be delayed or are uncertain, the SVGBGSA should develop work plans and a 2023-2024 budget funded by regulatory fees that will cover the needed feasibility studies.

In preparing grant applications and the 2023-2024 budget, the SVBGSA should focus project feasibility assessments on those projects that it can realistically expect to fund in light of the current expectation that the southern subbasins may not be legally required to fund any projects and that urban suppliers cannot be legally required to pay for water supplies for which they have prescriptive rights, or to pay more than other users pay on a per-acre foot basis for water for growth.

The SVGBGSA should also separately seek grant funding, or plan budget funding from regulatory fees, for an overarching economic feasibility study that would consider both the legal obligation and the economic willingness to pay. The study should

- clarify in principle how the obligation to pay is affected by differences in urban and agricultural water rights and at least roughly estimate senior urban use rights;
- clarify on what legal basis a subbasin would have an obligation to pay for projects to mitigate overdraft and seawater Intrusion in other subbasins and identify the hydrological studies that may be necessary to make a determination of this obligation;
- determine the willingness of agricultural users to pay for additional water supplies based on the economic value of that water.

<sup>&</sup>lt;sup>32</sup> SVBGSA, Two-Year Work Plan, April 2021, p. 2.

<sup>&</sup>lt;sup>33</sup> DWR, SGMA Grant Program website, available at <u>https://water.ca.gov/work-with-us/grants-and-</u> loans/sustainable-groundwater.

Even if the ultimate determination of payment responsibility depends on the selection of specific projects and further hydrological studies, the SVGBGSA should begin to develop a <u>principled</u> basis to make that determination.

Potential funding constraints for large capital projects suggest that the SVBGSA should also accelerate its planning for water allocations and demand reduction. Although stakeholders have expressed a general preference for water projects to augment supply rather than demand reductions, costly water projects without a broad assessment base may not be feasible. The SVBGSA Board should ensure that staff make equal progress on project feasibility assessments <u>and</u> demand management and that they seek available second round SGMA grant funding to follow up the work on the 180/400 Subbasin demand management recommendations that are to be developed using SGMA first round funding.

Yours sincerely,

Michael D. DeLapa Executive Director

Tom Wars

Tom Ward Planning/Land Use Representative to the SVBGSA Advisory Committee

Bevery & Bear

Beverly B. Bean Environmental Representative to the SVBGSA Advisory Committee

### Cathy Rívera

Cathy Rivera President, Communities for Sustainable Monterey County

Cc:

Supervisor Mary Adams, Monterey County Board of Supervisors Supervisor Luis Alejo, Monterey County Board of Supervisors Supervisor Chris Lopez, Monterey County Board of Supervisors Supervisor John Phillips, Monterey County Board of Supervisors Supervisor Wendy Root-Askew, Monterey County Board of Supervisors Mayor Ian Ogelsby, City of Seaside Mayor Bruce Delgado, City of Marina Mayor Kimbley Craig, City of Salinas Castroville Community Services District Board of Directors Eric Tynan, General Manager, Castroville Community Services District Marina Coast Water District Board of Directors Remleh Scherzinger, General Manager, Marina Coast Water District Brenda Granillo, District Manager, Cal Water, Salinas Division Donna Meyers, General Manager, Salinas Valley Basin Groundwater Sustainability Agency

Emily Gardner, Deputy General Manager, Salinas Valley Basin Groundwater Sustainability Agency

#### Attachment 1

#### Summary of Proposed Projects from GSPs expected to provide more than 1,000 AF <u>– based on Tables 9-1 of the adopted GSPs</u>

- Recharge projects \$60 to \$1,280 per AF
  - o Multi-subbasin
    - The multi-benefit Stream Channel improvements program might supply from 2,790 to 20,880 AFY, benefitting in part the Eastside, Monterey, and 180/400 Subbasins, at a cost of \$60 to \$600 per AF.
  - Local recharge programs benefitting individual subbasins
    - Managed Aquifer Recharge with Overland Flow might yield 400 AFY for each of the the Eastside and Langley subbasins at \$870 per AF.
    - Floodplain Enhancement and Recharge might yield 1,000 AFY in increased storage in the Eastside Subbasin for \$1,280 per AF.
- Provision of surface or recycled water in lieu of groundwater pumping or to recharge groundwater via Aquifer Storage and Recovery (ASR) - \$1,070 to \$3,300 per AF
  - Expansion of CSIP might provide 7,000 AFY of recycled and river water for agriculture at \$1,070 per AF, benefitting multiple subbasins, per the 2022 180/400 GSP Update.
  - Seasonal Releases with Aquifer Storage and Recovery might inject 14,600 AFY in the 180/400 Subbasin at \$2,560 per AF, per the 2022 180/400 GSP. A similar project described in the Monterey GSP would provide 12,900 AFY for ASR injection at \$1,450 per AF, or provide 3,600 AFY of that water for direct winter use by urban suppliers without ASR injection at \$1,100 AFY.
  - The diversion of surface water using the 11043 Water Rights at Chualar or Soledad at \$1,280 or \$2,110 per AF respectively might provide 6,000 AFY to the Eastside Subbasin.
  - Recycled water might yield 2,400 AFY in the Monterey Subbasin Marina area at \$3,300 per AF.
  - Check dams and surface diversions might yield 310 AFY in the Monterey Subbasin Corral de Tierra area at \$2,830 to \$3,050 per AF.
- A seawater intrusion pumping barrier coupled with desalination \$4,033 to \$4,146 per AF.
  - The proposed Regional Municipal Supply project would supply 15,000 AFY of desalinated water to north County urban and agricultural users at a cost per AF of \$4,033 to \$4,146.

- The capital cost for the desalination plant and distribution pipelines would be \$385-\$393 million. (Eastside GSP, pp. 9-50 to 9-56; see also Monterey GSP, pp. 9-31 to 9-32.) This project would only be built as a supplement to the \$102 million sea water intrusion barrier project, from which it would obtain brackish source water, so the total capital cost would be \$487-\$495 million. O&M for the desalination plant portion would be \$13.2-\$13.4 million, presumably in addition to the \$9.8 million O&M for the seawater intrusion barrier, resulting in a total annual O&M cost of about \$25 million. Over 30 years at a 3% discount rate, the present value of the cost of this 15,000 AFY project would come to \$977-985 million. The reported cost per acre-foot for this water for just the desalination plant would be from \$2,833 to \$2,946. The cost of source water provision from the seawater intrusion barrier would add \$1,200 per acre-foot, bring total cost to \$4,033 to \$4,146 per acre-foot. (Monterey GSP, p. 9-32.) The 2020 180/400 GSP Update reports the combined capital cost as from \$497-\$616 million for the same 15,000 AFY in desalinated water.
- The pumping barrier would extract 30,000 AFY but provide only 15,000 AFY in desalinated water. None of the GSPs provide an applesto-apples basis to evaluate the relative costs and benefits of the barrier/desalination project compared to an alternative set of projects that would restore protective groundwater elevations to prevent seawater intrusion. Projects that increase recharge or provide surface or recycled water as a substitute for pumping ("in lieu recharge") have the dual benefits of increasing groundwater levels to halt or slow seawater intrusion and mitigating overdraft.
- Reductions in groundwater pumping via fallowing or groundwater allocations and control \$590 to \$1,900 per AF.
  - Based on a range of local land rentals, the Eastside GSP identifies the temporary fallowing management action cost to reduce water use as from \$590 to \$1,730 per acre-foot. The other GSP's identify the similar or lower costs.