Salinas Basin Water Alliance

"Preserve and Protect Salinas Valley Water"

July 3, 2025

VIA ELECTRONIC MAIL — MCWATER@COUNTYOFMONTEREY.GOV

Monterey County Water Resources Agency
Board of Directors
c/o Clerk of the Board
1441 Schilling Pl., North Bldg.
Salinas, CA 93901

RE: Concerns Regarding Monterey County Water Resources Agency's April 2025 Update to Historic Benefits Assessment of Water Infrastructure Projects for Salinas Valley

Dear Mr. Azhderian and Honorable Directors:

The Salinas Basin Water Alliance ("Alliance") is a California nonprofit mutual benefit corporation formed to preserve the viability of agriculture and the agricultural community in the greater Salinas Valley. Alliance members include agricultural businesses and families that own and farm more than 80,000 acres within the Salinas Valley. To that end, the Alliance has a significant interest in the long-term sustainability of the water supplies in the Salinas Valley, supports the integrated and equitable management of both surface and groundwater resource to achieve sustainability, and has diligently worked with the Monterey County Water Resources Agency ("Agency") and other stakeholders to achieve these critical goals.

We submit these comments to express our concerns regarding the Agency's April 2025 Update to its Historic Benefits Assessment of Water Infrastructure Projects for Salinas Valley ("HBA Update"). Specifically, the HBA Update does not accurately reflect the proportional benefits/burdens of the operation of the Agency's water infrastructure projects across all users in the system and contains a variety of technical issues. Accordingly, the Alliance respectfully requests the Agency revise the HBA Update to address the Alliance's concerns as articulated in the questions and comments provided in this letter.

I. The HBA Update must reflect an accurate accounting of the proportional benefits and burdens of the Agency's Water Infrastructure Projects.

A. The Agency should evaluate water infrastructure project benefits individually

1. The analysis should consider the various components of the Salinas Valley Water Project—i.e., the reservoirs, CSIP, the rubber dam—separately.
    a) The HBA Update states: "ESUs in the northwest part of the Basin (ESUs 1 through 4) experienced little effect from the Projects until 1998 when CSIP started operating. For instance, in ESU-3, the Projects resulted in less than a foot of groundwater level increase by the end of WY 1997, with substantial impact starting in WY 1998 when CSIP came online." This begs the question—how much did ESUs 1 through 4 pay for operation of the reservoirs without experiencing corresponding water supply benefits?
    b) This analysis is required as the Agency may consider projects in the future that only pertain to a component of the Project, which may only benefit certain portions of the Valley.
    c) Benefits pre-1998 should be modeled and analyzed in comparison to benefits post-1998. This would equitably identify which areas of the basin benefited during the respective time periods.
2. Alternatively, the HBA Update should compare costs paid by each of the ESUs since construction of the reservoirs, compared to the benefits each ESU received.

B. The Agency should reevaluate its criteria for assessing Well Replacement Benefits

1. The Well Replacement Benefit criteria skews the assessment of economic benefits associated with the dams. The criteria should be modified to account for the value of the added water supply from the dams—in other words, what benefit is derived from having dry season flows in each of the ESUs?
    a) The HBA Update should account for the Forebay / Upper Valley (FB/UV) groundwater level benefits of not having to drill deeper wells because of reservoir release recharge.
        1. In 2017, the Salinas Valley Water Coalition filed a complaint against the Agency and alleged the following: "[T]he groundwater aquifer in the Upper Valley is shallow, narrow, and tight against the Salinas River and, according to the Agency, at most receives minor subsurface inflow contributions from the upper Salinas Basin in San Luis Obispo County. That means Upper Valley

Subarea wells are more directly and immediately affected by the Agency's reservoir release operations than wells located farther downstream in the Valley, where the groundwater aquifer system is deeper, broader and holds far more groundwater in subterranean storage to buffer against cuts or delays in the historic pattern of reservoir recharge releases." This value for the FB/UV should be included in the HBA Update.

2. In section 3.1.2 in the HBA Update's discussion of "Avoided well construction / replacement costs," there is no distinction between well replacement and well deepening. The report asserts that "declines in groundwater head and storage have the potential to negatively affect the ability of groundwater wells to operate, particularly when head falls below the bottom of a well's intake screen or within the impact zone between the top and bottom of the screen." However, when this occurs, well deepening should have been included and analyzed as an option, as opposed to restricting analysis to well replacement only.
3. In ESU 3, the Agency does not specify how much of the "avoided replacement" of wells benefit is due to CSIP's in-lieu water distribution to 12,000 acres. The HBA draft cites 26 wells as avoiding replacement in ESU 3 but if those wells occurred specifically in the CSIP area, landowners already pay for this benefit fees via Zone 2B fees.
4. Conversely, the remainder of ESU 3 outside CSIP has seen a large increase in new Deep Aquifer wells, which explicitly do not avoid "costs from reduced agricultural pumping and pumping lift." On the contrary, their pumping lift costs are higher than all other wells. However, ESU 3 has still been assigned a disproportionately high value for its supposed Well Replacement Benefit.

C. *The Agency should distribute Flood Protection Benefits equally across economic sectors and demographics*

1. In FSUs 2-7 (Pressure and East Side Areas):
    a) There are 10,749 structures; 8,813 of these are considered residential (82%).
    b) Total structural, contents of buildings, and vehicle avoided flood damages of $202,216,000.
    c) Avoided crop damage in 2017 of $2,173,000.
    d) Land cleanup costs of $3,044 per acre.

2. In FSUs 8-12 (Forebay and Upper Valley Areas):
    a) There are 6,325 structures; 5,461 of these are residential (86%).
    b) Total structural, contents of buildings, and vehicle avoided flood damages of $8,302,000.
    c) Avoided crop damage in 2017 of $1,942,000.
    d) Land cleanup costs of $4,025 per acre.
3. Although there is considerably more agricultural acreage than residential acreage in the Salinas Valley, 74% of structural, contents of buildings, and vehicle avoided flood damages are residential. Whereas avoided agricultural losses are about the same in the North as in the South, the North misleadingly appears to receive more flood protection benefits than the South, because most of the avoided damage is to structure, etc., (which is predominantly residential). Given the precise geographic concentration of structures in the Salinas Valley cities, perhaps each valley city should each be given their own FSU to more equitably assess and distribute the economic benefits of flood protection.
4. In addition to questions of benefit formulation, how did the Agency calibrate the estimated total of $9,563,000 of vehicle damage over the 51-year period? Vehicles tend to be portable, a quality that calls into question this level of loss. During the flood of 2023, the worst flood since 1995, the Alliance does not recall any vehicles lost.
5. Finally, the study does not analyze the benefit value of avoidance of environmental loss due to flood damage. This is a general public good that should be assessed and distributed valley-wide across the general public.

D. The Agency must re-evaluate its assessment of reduced seawater intrusion crop yield losses

1. The HBA draft outlines crop impacts due to decreased seawater intrusion in the range of $21.7M to $86.9M. The Agency will need to quantify this benefit with more care and precision moving forward with this HBA draft and ensure it is not relying on flawed analysis assuming seawater intrusion risk alone is responsible for production changes as opposed to other economic factors that result in similar outcomes.
2. The framework for the HBA double counts CSIP benefits without replacing the existing funding mechanisms and fees that stakeholders already pay for those project benefits outside of the SVWP. On page 18 of the HBA Update discussing the impacts of reduced seawater intrusion on agricultural productivity, the report states that such “impacts could range from $21.7 to $86.9 M over the 51-year analysis period . . . . Most of this benefit

largely accrued to growers beginning in 1998, coinciding with deliveries of recycled water from CSIP." The report itself acknowledges that the benefit specifically and mostly accrued to the acreage within the CSIP delivery area itself, as opposed to a blanket benefit to ESU 3 in general. Acreage that was previously laboring along with salty wells and was unable to grow lettuces, suddenly could grow lettuces, etc., due to receiving the CSIP delivered water. This benefit was paid for and is being paid for via Zone 2B fee. If the Agency folds it into the SVWP, it must assess the entire area for CSIP and replace existing funding structures.

E. Environmental benefits

The HBA Update provides no assessment of value derived from environmental/biological flows despite the fact that County water infrastructure is being used to "ensure adequate instream flows in the Salinas River for wildlife migration and habitat." Wildlife migration and habitat are a public good, as evidenced by the number of agencies and sheer body of law and regulation the government devotes to their protection. As the County's water infrastructure is partially being operated on behalf of species and habitat due to the general public good assigned to them, the general public needs to be assessed for this cost, as this benefit is not being carried out for the sole good of the landowners and homeowners of the Salinas Valley.

F. The Agency should include water reliability and crop improvement as an additional economic benefit

1. While the HBA assesses benefit of increased water quality in the Pressure / 180/00 Subbasin, it fails to assess the economic benefit of improved crop quality and crop yields in the FB/UV due to improved water quality from consistent river recharge from reservoir releases. Page 12 of the HBA Update acknowledges that "the reservoirs could be expected to have positive effects on groundwater quality in the Basin because of increased recharge in the riparian area [but that impacts on groundwater quality] are not valued as part of the economic assessment."
2. Additionally, the HBA Update fails to assess the economic benefit of improved reliability in ground water supply in the FB/UV from river recharge from reservoir releases. This extends the potential growing season of the FB/UV, extends groundwater recharge into dry years due to reservoir storage, keeps shallow FB/UV aquifers topped up through the growing season due to consistent releases, all resulting in the ability to farm an area more intensively and with reliability than would otherwise be possible, in effect eliminating the impact of dry years.
3. Conversely, the HBA Update fails to assess the overall impact on the Salinas River of more intensive farming in UV/FB. According to historic Agency data, consistent pumping in the

UV/FB corresponds with more than 70% of river discharge losses occurring between the Bradley and Gonzales gauges on the Salinas River. This has an impact on the so-called benefits afforded to other ESUs, including groundwater recharge and well drilling in the North.

II. The HBA Update contains a variety of modeling issues that must be addressed.

A. The Salinas Valley Integrated Hydrologic Model ("SVIHM"), which was used to determine hydrologic benefits, is seriously flawed. Furthermore, a provisional version of this flawed model was used for the HBA Update, which is also seriously flawed.

1. Tile drains:
    a) Agricultural tile drains are known to exist only in the northern, coastal areas of Salinas Valley (i.e., they are not widespread across the entire valley).
    b) However, SVIHM contains drain boundary conditions in **every cell** of model layer 1.
    c) There are also drain boundary conditions in the south and valley margins in layers 7, 8, and 9, which are deep underground and below the aquifer(s).
    d) It appears that water removed from the subsurface by these drain boundary condition cells may become surface flow or used to meet water demand, but that is not certain.
    e) Therefore, although the model appears to be "calibrated," it is "right" for the wrong reasons and will need to be fixed and recalibrated (M&A).
    f) The HBA scenarios will need to be re-run with the revised, recalibrated model.
2. Stream channel geometry:
    a) Much if not most of the stream channel bottoms in SVIHM are at elevations far above the land surface.
    b) It is unknown what impact this error has on model results and calibration, which renders model results unreliable.
3. Finally, there are several additional flaws in SVIHM, which render the results highly uncertain.

B. The HBA Update states that modeled groundwater levels are high enough in many places that crops are able to access groundwater directly via their roots, thereby reducing groundwater pumping. Table 3.2 illustrates the increase in drain discharge associated with projects. Overall net recharge appears very low due to the increase in drain discharge.

1. The high modeled groundwater elevations likely caused the USGS to improperly include the drain boundary condition cells.

2. The process of direct use of groundwater by crops (similar to phreatophytes/riparian vegetation) is not known to occur in Salinas Valley. Such high water levels would ruin most crops (which is the reason growers sometimes use real tile drains!).

In conclusion, although no model or formula is perfect, the HBA draft contains a considerable amount of contradiction and inaccuracy. Accordingly, the Alliance respectfully requests that the Agency revise the HBA Update to address these questions and concerns regarding the allocation of benefits and burdens of the Agency's Water Infrastructure Projects and address the modeling flaws in the SVIHM to reach a more accurate calculation of hydrological and economic values. We look forward to working with you to accomplish a more reliable and equitable framework to fund the vital projects in our Valley for decades to come.

Respectfully submitted,

Christopher Bunn

President, Salinas Basin Water Alliance