

Sent via ELECTRONIC MAIL to sgmps@water.ca.gov

September 22, 2025

Mr. Paul Gosselin
Deputy Director of Sustainable Water Management
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236

RE: Comment Letter – Draft Land Subsidence Best Management Practices

Dear Mr. Gosselin,

The Association of California Water Agencies (ACWA) appreciates the opportunity to provide public comments to the Department of Water Resources (DWR) on its *Draft Land Subsidence Best Management Practices* (Draft BMP) document. ACWA represents approximately 470 public water agencies that collectively deliver approximately 90% of the water in California for domestic, agricultural, and industrial uses. As DWR considers how to best support groundwater sustainability agencies' (GSA) efforts to address subsidence through the development of this Draft BMP, ACWA offers the following comments.

a. General Comments

Comment 1: The Draft BMP should clearly delineate between recommended best management practices and statutory and regulatory requirements.

DWR should avoid any ambiguity between what is currently required by the Sustainable Groundwater Management Act (SGMA) and its associated regulations and what is recommended by the Final BMP. Throughout the Draft BMP it is unclear in places whether DWR is asserting existing regulatory authority or making recommendations under the umbrella of the Draft BMP. For example, at page 6-4, the Draft BMP states,

"The minimum threshold for subsidence should be reflective of local conditions. In areas that have not recently experienced land subsidence, the minimum threshold should be set to not allow the onset of subsidence. This could be zero or the measurement error of the monitoring equipment." [emphasis added]

ACWA's understanding is that the SGMA regulations do not require that GSAs prevent subsidence in basins without recent subsidence and it is a deviation from the minimum thresholds established by approved Groundwater Sustainability Plans (GSPs). In this instance the Draft BMP is suggesting that GSAs should go above and beyond what is required by law. ACWA suggests that DWR clearly indicate throughout the document where DWR is

referencing existing requirements and where it is making suggestions for the purposes of this BMP.

Comment 2: The timing of the Draft BMP poses a challenge for GSAs that have already begun work on their Periodic Evaluation.

SGMA requires GSAs to provide a Periodic Evaluation to DWR assessing their basin's GSP at least every five years. Water Code Section 10728.2 identifies the criteria that GSAs should consider when conducting their GSP evaluation and Section 356.4 of the GSP Regulations further details the components of a Periodic Evaluation. Many GSAs are currently working on their first periodic evaluation.

The Draft BMP recommends that GSAs include significant information related to subsidence in their Periodic Evaluation. The Draft BMP also recognizes that GSAs may need to adjust their project and management actions (PMA) in their GSP to address or avoid subsidence. Because so many GSAs are currently developing their Periodic Evaluation, ACWA suggests that DWR specifies in the document that the recommendations therein apply only to future Periodic Evaluations – not those currently underway.

Comment 3: The Final BMP should focus on technical guidance, not legal advice.

At page 4-13 (and other points throughout), the Draft BMP refers to liability related to subsidence. In one instance, the Draft BMP refers to a case in which a city was held liable. While this is likely intended to help GSAs, it suggests there could be exposure to liability, the assessment of which is outside the role of DWR and this BMP. The implication is concerning, because it confuses the responsibility of GSAs to manage under SGMA with liability for damages, which could only be tied to the use of groundwater.

Although GSAs have the duty to manage under SGMA, GSAs are not often groundwater water right holders and do not themselves extract groundwater and put it to beneficial use. Therefore, GSAs may take on management or mitigation under SGMA, but any such management or mitigation (or the lack thereof) can never result in liability for damages based on groundwater extractions. This is an important distinction that must be recognized in order for GSAs to continue to undertake their SGMA responsibilities. Liability is highly fact-dependent and there are not sufficient facts related to extractions for DWR to make sound conclusions or offer advice about the legal ramifications around subsidence. Although there is a disclaimer listed at the beginning of the document, these liability references are misplaced in this document. References to liability that are not based on existing law or widely agreed-upon case law should be removed to avoid confusion.

Comment 4: The Final BMP should emphasize the importance of local control.

A foundational tenet of SGMA is local determination of management decisions. SGMA appropriately recognizes that groundwater sustainability will be achieved most effectively and with the least disruption through local action that aligns with the needs and priorities of different communities around the state. There are instances in the Draft BMP that stray from this principle.

For example, at page 6-4 the Draft BMP states, "The definition of undesirable results for land subsidence should be made in conjunction with entities responsible for the operation and maintenance of the infrastructure and the specific tolerance of that infrastructure or

any mitigation that is proposed” [emphasis added]. The definition of undesirable results is a decision solely for the GSA. While ACWA agrees that consultation with other entities may be appropriate, we suggest that the document be revised to reflect that GSAs have sole decision making authority (with DWR’s review) with regard to defining undesirable results.

At page 6-6 the Draft BMP states, “In basins that have not experienced land subsidence, the measurable objective should be set at zero.” While ACWA understands this document is meant only as guidance, this statement is cause for concern. GSAs are empowered to make locally driven decisions around groundwater management. DWR should emphasize that while no measurable subsidence is ideal, there may be instances where small amounts occur and that the cost/benefit analysis of allowing small amounts of subsidence should rest solely with the GSA.

b. Section 4: Land Subsidence Fundamentals

Comment 5: Some of the concepts would benefit from clearer explanation and visual aids.

ACWA appreciates DWR’s work to create a shared understanding of subsidence in California, its causes, and the potential consequences. The concepts described in Section 4 of the Draft BMP are highly technical and difficult to absorb for all but the most advanced practitioners of hydrogeology and groundwater management. To the extent it is possible without overly complicating or elongating the final BMP, ACWA encourages DWR to refine Section 4 so that it is more approachable and easier to comprehend for less technical readers. While the Final BMP need not be a pop-up book, additional visual aids and clearer language would improve the Final BMP’s usability.

Comment 6: More information is needed on subsidence not caused by water extraction and other types of subsidence.

Many of the areas of the state most impacted by subsidence driven by groundwater extraction are also affected by other factors, such as oil extraction and seismic activity. While ACWA acknowledges that the overwhelming majority of subsidence is caused by the extraction of groundwater, additional guidance on how GSAs should account for oil-driven subsidence and seismic activity would be appropriate. The document could also be improved with guidance related to differential subsidence, which is currently not mentioned.

c. Section 5: Technical Assistance

Comment 7: DWR should provide additional technical assistance for GSAs to comply with the recommendations in the Final BMP.

The concepts and methods described in the Draft BMP are highly technical and complex. In some basins, complying with the recommendations of the Draft BMP could take decades of work and many millions of dollars that are not currently available to many GSAs. ACWA recommends that DWR discuss in detail the technical assistance and financial resources that will be made available to GSAs as part of following the recommendations of the Final BMP.

Comment 8: DWR should provide more information on how monitoring methods are meant to work together.

At page 5-14 DWR recommends that GSAs should rely on multiple data sources when monitoring changes in land surface elevation, such as InSAR and GPS. Section 5 of the Draft BMP would benefit from a more detailed explanation of why multiple sources are needed. This section – or the appendix – could also be improved with more detailed instructions on how groundwater managers should use multiple data sources to improve monitoring and management, including real world examples.

d. Section 6: Land Subsidence and the Sustainable Groundwater Management Act

Comment 9: DWR should provide clearer guidance on how to interface with other entities when quantifying how subsidence will impact infrastructure.

The Draft BMP suggests that GSAs coordinate with lead agencies responsible for infrastructure vulnerable to subsidence. The Draft BMP seems to assume that those lead agencies have the expertise and resources to assess how subsidence will affect infrastructure, which is not necessarily the case. Missing from this guidance is information on how to assess how subsidence impacts infrastructure. ACWA recommends including information and resources on how to contact and interact with the entities referenced, as well as guidance on how those entities should estimate subsidence impacts.

Comment 10: BMP guidance should be achievable.

At page 6-2, the Draft BMP states that “the quantitative definition of undesirable results should be based on a single exceedance of a minimum threshold anywhere in the basin.” The Draft BMP also recommends that the measurable objective for subsidence should be zero in basins that have not yet experienced subsidence (page 6-6). While ACWA shares DWR’s goal of limiting and reducing the spread of subsidence, zero tolerance for any subsidence anywhere for any reason sets GSAs up to fail. ACWA suggests revising the BMP to allow for a reasonable margin of error to better reflect the reality of groundwater management and to reflect the requirements of SGMA, which requires management to “avoid or minimize” subsidence that is “significant or unreasonable” (Water Code 10720-21.)

e. Section 7: Land Subsidence Management

Comment 11: Guidance related to mitigating the impacts of subsidence should be removed.

At page 7-9, the Draft BMP states, “The groundwater manager may consider the following actions to manage subsidence in this scenario: ... Provide mitigation for subsidence-related impacts to avoid undesirable results.” The Final BMP should focus on technical guidance to GSAs to assess and manage subsidence. Neither SGMA statute nor regulations require GSAs to mitigate the impacts of subsidence. References to mitigation throughout the document overstep the purview of a BMP and should be removed.

Comment 12: DWR should encourage GSAs in areas not historically prone to subsidence to focus on more relevant challenges.

Many GSAs are chronically under-resourced and must prioritize certain management activities and costs based on the needs of their basin. In many areas managed by GSAs,

subsidence has not historically been among the top challenges faced by groundwater managers. The limited staff and financial resources of GSAs should be put to their highest and best use, which for many GSAs is not subsidence management. As part of DWR's work to support and empower GSAs to fulfill the requirements of SGMA, ACWA strongly suggests that the Final BMP should acknowledge that subsidence management is not and should not be prioritized to the detriment of other activities in many basins.

Managing subsidence is a critical component of SGMA implementation and ACWA appreciates DWR's efforts to provide groundwater managers with guidance and support. In addition to these comments, ACWA also endorses the Groundwater Resources Association's (GRA) letter, which provides a valuable technical review of the Draft BMP. ACWA acknowledges that DWR is balancing many factors in the development of this Draft BMP and thanks you for considering our comments. Please contact me at SorenN@acwa.com if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Soren Nelson". The signature is fluid and cursive, with the first name "Soren" being more prominent than the last name "Nelson".

Soren Nelson
Senior Policy Advocate
Association of California Water Agencies