

May 6, 2026

Borrego Springs Watermaster
Board of Directors
c/o West Yost Associates
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Irvine, CA 92618

Submitted electronically to: BorregoSpringsWM@westyost.com

Re: Public Comment for May 20, 2026 Board Meeting – UCI GDE Study Report

Dear Members of the Watermaster Board of Directors:

We thank the Board of Directors of the Borrego Springs Watermaster (Watermaster) for its efforts to develop science-informed management of groundwater dependent ecosystems (GDEs) in the Borrego Springs Groundwater Subbasin. This comment letter addresses the ongoing review of the UCI GDE Study Report, the recent Technical Consultant Recommendation Report developed by West Yost, and the upcoming Board discussion as to next steps for GDE management.

The Nature Conservancy has a long history and extensive experience developing guidance and technical resources to assist local groundwater managers and stakeholders as they implement SGMA comprehensively to sustainably manage groundwater resources for all beneficial users. To support the Watermaster in these efforts, we want to highlight - 1) the regulatory requirements under SGMA with respect to environmental beneficial users, 2) how the scientific research study completed by UCI advances understanding of GDEs in the Borrego Springs Subbasin, and 3) potential pathways towards multi-benefit solutions to achieve sustainable groundwater conditions.

Adaptive management is a key component of SGMA and provides an opportunity to iteratively adjust groundwater management strategies as our understanding of these groundwater systems is refined. In our view, the UCI GDE Study Report is a comprehensive, detailed study of ecosystem/groundwater dynamics that represents a significant advancement in the scientific understanding of local groundwater dependent ecosystems. This new information presents an opportunity to increase progress towards sustainable groundwater management in the Borrego Springs Subbasin, and we encourage the Watermaster to consider how to best adapt its management and monitoring framework to recognize, incorporate, and protect the subbasin's environmental beneficial users of groundwater.

Regulatory Requirements under SGMA

The Watermaster currently manages the Borrego Springs Subbasin pursuant to the Groundwater Management Plan (GMP) adopted on April 8, 2021, as part of the Stipulated Judgement in the subbasin's comprehensive groundwater adjudication. The GMP, submitted as an Alternative Plan to the Department of Water Resources (DWR) under Water Code § 10737.4(a)(1) as management pursuant to an adjudication, is required to satisfy the objectives of SGMA.

SGMA defines sustainable groundwater management as the "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results" [Water Code § 10721(v)]. Undesirable results are further defined in the context of SGMA as one or more of chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, or depletions of interconnected surface water occurring within a groundwater subbasin [Water Code § 10721(x)].

The development and implementation of the GMP must consider all beneficial uses and users in the Borrego Springs Subbasin, including environmental users of groundwater [Water Code § 10723.2(e)]. SGMA defines groundwater dependent ecosystems (GDEs) as "ecological communities and species that depend on groundwater emerging from aquifers or on groundwater occurring near the ground surface" [23 CCR § 351(m)]. **Importantly, GDEs may rely on groundwater to meet some of their water supply needs, and an ecosystem's use of surface water, precipitation, or soil moisture from the unsaturated zone during certain times of year or to meet a portion of its water needs does not preclude it from being a GDE.**

Groundwater plans are required to identify GDEs within the subbasin [23 CCR § 354.16(g)], include a description of impacts to GDEs [Water Code § 10727.4(l)], and consider GDEs as beneficial users of groundwater when defining what conditions would constitute a subbasin undesirable result [23 CCR § 354.26(b)(3)]. Minimum threshold descriptions must state how the threshold, if reached, may affect the interests of all subbasin beneficial users, including environmental users such as GDEs [23 CCR § 354.28(b)(5)].

Scientific Review – Comments on the UCI GDE Study Report and the West Yost Technical Consultant Recommendation Report

In our review, we found the UCI GDE Study Report to be thorough, comprehensive, and well-structured in its development of a GDE identification, assessment and monitoring program. We believe the report clearly constitutes the **best available science on GDEs** that is **readily available** for groundwater management decision-making. We strongly agree with the finding from the Technical Consultant Recommendation Report that "**the UCI GDE Study Report is a significant**

advancement in the scientific understanding of the Borrego Springs [BS] Mesquite Bosque.” While additional monitoring and scientific studies may further inform decision-making and data refinement over time, the existence of ongoing or potential future studies should not preclude near-term management actions needed to support sustainability objectives. Delaying action risks slowing progress and may result in impacts to the Mesquite Bosque that could be difficult or impossible to reverse. To our knowledge, no other scientific study or articulation of “best available science” has been presented that contradicts the conclusions of the UCI Study Report. As such, we respectfully encourage that the findings of the UCI Study be appropriately incorporated into near-term groundwater management decisions.

We would like to clarify several important points related to statewide datasets and TNC GDE guidance documents with respect to their interpretation and use for groundwater management in the Borrego Springs Subbasin.

First, the January 2020 Groundwater Management Plan (GMP) for the Borrego Springs Groundwater Subbasin states that “DWR removed a previously large area [of mapped GDEs] around and north of the Borrego Sink from the NCCAG dataset because it was determined that the habitat no longer met the criteria for inclusion in the database.” (Borrego Springs GMP pg. 767). Based on TNC’s involvement in the development of the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset, we would like to help clarify that **this statement is inaccurate**. At the time the NCCAG dataset was created, the area referenced in the GMP was not included in the input datasets that were available for use. As a result, this area was not mapped in the NCCAG dataset not because it was evaluated and subsequently removed based on inclusion criteria, but because sufficient local data were not available for incorporation at that time. Accordingly, the use of the NCCAG dataset in the 2020 Borrego Springs GMP to represent the “current extent” of honey mesquite GDEs in the Borrego Springs Subbasin underestimates their extent. Other locally available mapping efforts, including those conducted by the U.S. Geological Survey, the County of San Diego, and more recent analyses documented in the UCI GDE Report, indicate a substantially larger extent of honey mesquite GDEs within the subbasin. We offer this clarification to support accurate interpretation of the NCCAG dataset and to ensure that GDEs are appropriately considered within ongoing and future groundwater management decisions.

Guidance from TNC on identifying GDEs recommends that groundwater managers “compile locally available vegetation maps, such as those found in habitat conservation plans, environmental documents, vegetative surveys conducted by local research institutions or NGOs, and plans and monitoring reports on

endangered species" to verify, add, or eliminate polygons in the statewide NCCAG dataset (TNC GDE Guidance 2018). Going forward, we recommend that local datasets are used to aid in GDE identification efforts, and we emphasize that an absence of mapped phreatophytic vegetation in the statewide NCCAG dataset does not equate to an absence of GDE existence.

Next, the 2020 Borrego Springs GMP also states that "The honey mesquite bosque... north of the Borrego Sink, is considered a pre-2015 impact. Groundwater levels have long since declined below a level which can support the estimated rooting depth of the habitat, which is estimated to be approximately 20 feet" (Borrego Springs GMP pg. 118). DWR's Assessment of the Borrego Springs Subbasin Alternative Plan quotes this section as the GMP's rationale for the lack of GDE existence in the Borrego Sink area. At the time, this was the analysis and conclusion based on the available information. However, **the UCI GDE Study Report and the Technical Consultant Recommendation Report both agree** that cited references in the UCI GDE Study report support the conclusion that "Mesquite trees in the BS Mesquite Bosque have deep tap roots that could reach the capillary fringe above the regional aquifer system". **This was determined by the Technical Consultant Recommendation report to be the best available science on Mesquite Tree Rooting Depth and Connection to Groundwater.** This determination provides updated science-based information for GDE identification and management – Mesquite trees have deep roots to tap groundwater (39 – 175 ft-bgs) which exceed current (post-2015) estimates of depth to groundwater underlying the BS Mesquite Bosque (22 – 134 ft-bgs). TNC has updated its plant rooting depth database to reflect the current references representing the best available science on Mesquite rooting depth.

The UCI GDE Report's advancement in our understanding of Mesquite tree rooting depths and ability to access groundwater fundamentally alters the basis for the 2020 Borrego Springs GMP's omission of GDEs in the Borrego Sink area. These findings indicate that the BS Mesquite Bosque is a groundwater dependent ecosystem and beneficial user of groundwater under SGMA definitions, and as such, warrants consideration and protection in groundwater management decisions for all beneficial users. This new information on the BS Mesquite Bosque should be included in the upcoming periodic review of the Borrego Springs GMP so that DWR can evaluate GMP progress with an updated understanding of GDE existence and subsequent management requirements.

A Path Forward - Recommended Next Steps

We recognize that the Mesquite Bosque habitat in the vicinity of the Borrego Sink has experienced significant degradation since the early 1900s, in both extent and health, as a result of historic observed declining groundwater levels due to

extensive groundwater pumping. Some of these impacts to the habitat occurred pre-2015 and predate SGMA regulatory requirements.

Impacts to GDEs from changing groundwater conditions can range in severity from short-term adverse impacts, such as water stress, to severe adverse impacts including irreversible ecosystem collapse. **The presence of impacts prior to 2015 does not negate the need to evaluate and address impacts occurring after 2015 or GMP adoption**, and highlights the importance of ongoing habitat evaluation and implementation of management measures and protections to help avoid future impacts. The UCI GDE Study report provides evidence demonstrating the existence of functioning GDEs that currently rely on groundwater and provide critical ecosystem services to rare plant and animal species. SGMA does not require the restoration of the BS Mesquite Bosque habitat back to its full original extent or condition, but it does require the prevention of additional impacts through sustainable groundwater management that considers all beneficial users. We encourage the Watermaster to explore targeted project and management actions that can preserve the existing GDEs and prevent additional impacts.

The newly available information describing the Mesquite Bosque as a GDE presents an opportunity for the Watermaster to adaptively improve groundwater management in the Borrego Springs Subbasin for the protection and benefit of all beneficial users. To support the Watermaster in identifying actionable next steps, we recommend the following:

- 1) Acknowledge and designate the BS Mesquite Bosque as a groundwater dependent ecosystem and a beneficial user of groundwater.
- 2) Address Recommended Corrective Action 3 from DWR's Borrego Springs Determination - "Discuss the impacts to beneficial uses and users... at the established minimum thresholds... Clarify the expected impacts to beneficial uses and users if all representative monitoring points in the Subbasin are at their respective minimum thresholds". This will enable the Watermaster to evaluate whether additional sustainable management criteria are necessary to prevent undesirable results to environmental beneficial users.
- 3) Begin conservation and restoration prioritization and planning analyses for the BS Mesquite Bosque, following the UCI GDE Study Management Recommendations #2 & 4. Restoration opportunities exist that can provide multi-benefit solutions and increase groundwater sustainability across the subbasin for all groundwater users.

Thank you for your time.
Best Regards,



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