

MINUTES
BORREGO SPRINGS WATERMASTER BOARD MEETING
Conducted In-Person at Borrego Springs Library, with virtual attendance option
Wednesday, April 16, 2025, 3:00 p.m.

The following individuals were present at the meeting:

Directors Present	Chair Dave Duncan – Borrego Water District (BWD)
	Vice Chair Tyler Bilyk – Agricultural Sector
	Rich Pinel – Recreational Sector (alternate)
	Mark Jorgensen – Community Representative
	Jim Bennett – County of San Diego
Watermaster Staff Present	James M. Markman, Legal Counsel
	Samantha Adams, Executive Director, West Yost
	Andrew Malone, Lead Technical Consultant, West Yost
	Lauren Salberg, Staff Geologist, West Yost
Others Present	David Garmon
	Diane Johnson, BWD Board Member
	Geoff Poole, BWD General Manager
	Holly Smit Kicklighter, Borrego Valley Stewardship Council
	Jessica Clabaugh, BWD Finance Officer
	Jim Dax, Board Alternate – Community Representative
	Jim Dice
	Laurel Brigham, UCI
	Nikki Fiore, UCI
	Peter McRae
	Steve Anderson, BB&K, representing BWD
	Tammy Baker, BWD Board Member
	Travis Huxman, UCI

Please visit the [Watermaster's Website](#)¹ to access the Agenda Packet, recording, and presentation for the April 16, 2025 Meeting.

I. Opening Procedures

- A. Chair Duncan called the meeting to order at 3:04 PM at which time the meeting recording was started.
- B. Chair Duncan led the meeting participants in the Pledge of Allegiance.
- C. Samantha Adams, Executive Director (ED) called roll and confirmed that a quorum of all members of the Board were present.
- D. Approval of Agenda.

Motion: Motioned by Vice Chair Bilyk, seconded by Director Jorgensen to approve the Agenda.
Motion carried unanimously by voice vote (5-0-0).

¹ <https://borregospringswatermaster.com/past-watermaster-meetings/>

II. Public Correspondence

- A. Correspondence Received. ED Adams referenced the correspondence included in the agenda package.
- B. Public Comments. Chair Duncan called for public comments. Public comment was made by Diane Johnson, Jim Dax, and Tammy Baker.
 - Diane Johnson summarized her correspondence sent to the Watermaster Board, which was included in the public correspondence portion of the agenda package (Agenda Item II.A).
 - Jim Dax noted that it was difficult to find public correspondence in the agenda package. Ms. Johnson's public correspondence was included in the agenda package distributed on Friday, April 14, 2025.
 - Tammy Baker thanked the Board for meeting in-person.

III. Consent Calendar.

Chair Duncan called for any discussion on the Consent Calendar items included in the April 16, 2025 agenda package. There were no public comments or Board discussion.

Motion: Motioned by Director Bennett, seconded by Vice Chair Bilyk to approve the Consent Calendar. *Motion carried unanimously by roll-call vote (5-0-0).*

IV. Groundwater Dependent Ecosystem (GDE) Identification, Assessment, and Monitoring Program.

Travis Huxman (UCI) gave a presentation summarizing the draft GDE report linked in the agenda package. At the conclusion of the presentation, Chair Duncan opened the floor to public comment, followed by Board discussion. Public comment was made by Jim Dax, Holly Smit Kicklighter, and Diane Johnson.

Public questions and comments, including Board and staff response if any, included:

- Could the health of the low productivity mesquite be improved?
 - Mr. Huxman: Yes, based on data collected in the bosque, some mesquite in the north side of the Borrego sink have recovered.
- The 2011 Community Plan for Borrego Springs identifies the mesquite bosque as a resource conservation area (RCA), but also suggested other areas to be protected such as ocotillo and wildflowers.
- Are changes to flood flows in Coyote Creek responsible for supporting the growth of new mesquite?
 - Mr. Huxman: while flood flows can help drive recruitment and germination, this was not explicitly studied as part of this project.
- Are there records of the migration of Coyote Creek flood channels?
 - Director Jorgensen: Aerial photos dating back to 1953 show the undisturbed flow patterns of Coyote Creek.
 - Mr. Huxman: While the aerial images that Director Jorgensen referenced were not used in this study, other aerial images and digital elevation models were reviewed to analyze changes to flood flows.

The Board had the following questions for Mr. Huxman:

- What is meant by "productivity"?
 - Mr. Huxman: Productivity is synonymous with the health of the mesquite.

- Why does the study focus exclusively on mesquite?
 - Mr. Huxman: Mesquite were studied in this project because they are the only species that use groundwater in the Basin and aren't riparian. The mesquite in the Basin are a keystone species that support a range in biodiversity.
- Is mesquite reproduction occurring? And, what are the demographics of the trees (old vs. young populations)?
 - Mr. Huxman: Yes, reproduction is occurring because seedlings have been encountered in the study. Based on the class size of the mesquite, there is a range in plant ages, implying that natural recruitment is occurring. However, this hasn't been explicitly studied or documented (this is observation based).
- Are specific Minimum Thresholds recommended for the mesquite?
 - Mr. Huxman: UCI has identified thresholds that may be important for management action.
- What are the spatial patterns of change observed in the mesquite?
 - Mr. Huxman: The draft report documents the changes and declines observed in the Basin. Generally, there's been a widespread reduction in the most productive mesquite.
- Is NDVI used to categorize productivity?
 - Mr. Huxman: Yes, NDVI dating back to the 1980s and aerial imagery dating back to the 1950s-60s were used.
- Does the land ownership complicate the path towards sustainability?
 - Mr. Jorgensen: Ownership prevents a linear strategy and may be a huge amount of time and effort to work with all the different landowners.
- What is the total evapotranspiration (ET) consumed by the mesquite?
 - Mr. Huxman: The total estimated ET consumed by the mesquite is approximately 650 acre-feet per year (afy). A previous report based on prior work estimated that the average ET consumption by the mesquite was 450 afy, which helps create a range of reasonable estimates (from 450 afy to 650 afy).²
- Was there enough time to collect data using the ET sensors placed in the mesquite bosque?
 - Mr. Huxman: The ET sensors are still installed and will continue to be monitored. The conclusions and recommendations in the report are based on multiple lines of evidence, not just the data from the ET sensors. ET data from the sensors can be used to compare against other estimates of ET use from OpenET and/or the BVHM.

Following questions to Mr. Huxman, the Board discussed potential next steps regarding the GDE Report:

- Director Duncan recommended that the Board should instruct the EWG and TAC to review and comment on this report. Additionally, he stated that this report should be considered new information and be considered in the 5-year Assessment Report. He voiced concern on waiting until WY 2026 for the TAC and EWG to review the report and the ability to incorporate the

² The final Groundwater Dependent Ecosystem (GDE) Identification and Monitoring Program Report included a range in groundwater transpiration estimates, specifically: "groundwater transpiration was estimated at 130 - 771 acre feet per year from 2015 - 2023 across the 1,850-acre mapped mesquite bosque habitat using OpenET's ensemble model." (UCI, 2025).

results in the 5-year Assessment Report. He also voiced concerns that this report will get pushed aside, despite its significant findings.

- Director Jorgensen recommended that the Board needs to act now based on the results of the GDE study, stating that there's been considerable degradation of the mesquite bosque that continues today. Although there's a lot of work on the docket, the report shows that damage is being done and Board action cannot be brushed aside for another year or two.
- ED Adams reminded the Board that the Judgment requires the Board to approve a scope of work for the 2030 Sustainable Yield, which it did during its December 2024 Board meeting. The approved scope includes the review of the GDE study results beginning in WY 2026. The TAC will meet to discuss the proposed scope of work for WY 2026 at its May 1st meeting. At the next Board meeting in May 2025, staff will provide the Board with the TAC recommended scope and budget for the Board's consideration in approving the WY 2026 budget.
- A request that the draft WY 2026 budget include minimum, maximum, and range of costs based on all the potential tasks that could be included, including a minimum cost that doesn't require any changes to the Pumping Assessment.

V. Items for Board Consideration and Possible Action

A. *Overview of Work Completed with SGM Grant Funding.* ED Adams presented a summary of the memo included in the agenda package which summarized the work completed using Sustainable Groundwater Management (SGM) grant funding. At the conclusion of the presentation, Chair Duncan opened the floor to public comment, followed by Board discussion. There was no public comment.

The key points of discussion by the Board included:

- The amendment request to transfer budget from the Component 7 to Component 6 project was approved by DWR.
- The final Grant Reimbursement Request Reports and a final Grant Completion Report are still due to DWR. Grant administrative funding will be used to complete the outstanding reports.
- Although grant defunding has been in the news recently, there is no reason to be concerned that final SGM grant funding won't be received since it is funded by the state of California and not the federal government.

B. *2nd Quarter WY 2025 Budget Status Review.* ED Adams provided a summary of the memo included in the agenda package. At the conclusion of the presentation, Chair Duncan opened the floor to public comment, followed by Board discussion. Public comment was made by Tammy Baker. There was no Board discussion.

Public questions and comments, including Board and staff response if any, included:

- How much has been spent on interest payments for West Yost to finance the SGM grant? ED Adams noted that there's a line in Table 1 for "Interest on Vendor Terms During Prop 68 Grant" that reports the total interest for the current quarter but would need to report back for the cumulative amount spent over the grant period. This will be done when the outstanding balance is fully paid off.

No Board action was taken.

C. *Use of the BVHM to Evaluate Sustainability of Future Pumping in the Borrego Springs Subbasin.*

Andy Malone provided a summary of the memo and technical memorandum included in the agenda package. At the conclusion of the presentation, Chair Duncan opened the floor to public comment, followed by Board discussion. Public comment was made by Jim Dax, David Garmon, Travis Huxman, Diane Johnson, Trey Driscoll, Peter McRae, and Tammy Baker.

Public questions and comments, including Board and staff response if any, included:

- Is the aquifer in the South Management Area a closed system or is it connected to the North and Central Management Areas?
 - Mr. Malone: The Basin is one, interconnected groundwater system. However, its known that the hydrogeology of the South Management Area differs from the North and Central Management Areas.
- Mr. Garmon noted his thoughts on the relationship to the GDE project.
- Could the results from the model be accurate?
 - Mr. Malone: We do not believe that the model projections are accurate because the results indicate unreasonable estimates of drawdown relative to what we have observed and know about the wells (*i.e.* model projected drawdown does not match observed drawdown in these wells).
- Is the under-pumping issue present in both the short and long term? Could it be a result of the time step used in the model?
 - Mr. Malone: The under-pumping discrepancy is not the result of a time step issue in the model. The under-pumping is present throughout the projection period and compounds over time.
- Ms. Johnson noted that John Peterson (TAC member) has observed cavitation in the Rams Hill wells, suggesting that these wells may not be pumping at a sustainable rate and commented that there is a mindset that sustainability of the Basin is only related to groundwater levels and storage, but there are other indicators that the DWR brought up in their assessment, such as groundwater quality.
- Trey Driscoll (TAC member) recommended staff reach out to Scott Boyce at the United States Geological Survey (USGS) to discuss MODFLOW One-Water Hydrologic Flow Model (MF-OWHM) version 1.0 as I believe that new versions of the model code have corrected known issues with the multi-node well (MNW2) package.
- Are the results of the model projections indicating that the Sustainable Yield does not lead to the sustainability of the Basin?
 - Mr. Malone: The model results reveal that there may be localized sustainability issues, where groundwater levels may increase in the North Management Area but decline in the South Management Area.
- Does the model project future concentrations in salinity and drinking water quality?
 - Mr. Malone: No, groundwater quality is a different sustainability indicator and the model is not capable of projection future groundwater quality.

The key points of discussion by the Board included:

- The increase in pumping is driven by an increase in demands projected by Rams Hill and the Borrego Water District (BWD) in the Central MA. The increased demand by Rams Hill is simulated as being pumped by BWD wells in the projection period (*i.e.* pumping does not increase in Rams Hill wells in the projection period).
- Examples of new information that could be used to update the hydrogeologic conceptual model (HCM) include the Airborne Electromagnetic (AEM) survey data from DWR and well construction information from the Rams Hills wells.
- The cost estimate presented in the agenda memo is inclusive of reviewing new information, such as the AEM data, and updating the AEM. To date, West Yost has not been tasked to review the AEM data but Trey Driscoll (TAC member) has done a preliminary review of the data.
- The discovery of the wells pumping less than their assigned rates occurred while reviewing the results of the pumping projections and projected groundwater levels.
- The costs associated with the recommendations presented in the TM are concerning as it will increase the pumping assessment. There is no additional grant funding, so the costs will become the burden of the ratepayers and pumpers.
- Could the results of UCI's presentation, that the mesquite is a groundwater dependent ecosystem (GDE) should be considered a beneficial user and is already experiencing undesirable results, be tie into the additional recommended work?
- Groundwater in storage is evaluated Basin-wide, but groundwater levels are assessed at specific wells. Based on the projected groundwater-levels, the preliminary model results indicate Undesirable Results may occur in certain areas and wells and, therefore, management or mitigation actions may be needed in these areas to address long term drawdown.
- The Board needs feedback from the TAC before making a decision.
- Staff should have focused on completing the GMP assessment report instead of preparing the TM documenting this issue. Staff clarified that the 2022 BVHM TM was prepared as a deliverable to meet grant requirements and this was done in addition to work that was possible to complete on the GMP assessment report.
- If additional modeling efforts occur, they should consider new scenarios for where pumping may occur. For instance, BWD has expressed interest in shifting pumping to the North Management Area. This pumping scheme should be accounted for in any future simulations.

No Board action was taken.

D. *Scoping Discussion for WY 2026 Budget.* ED Adams provided a detailed presentation of the assumptions for the first draft of the Water Year 2026 budget, including revenues, expenditures, and cash reserves. At the conclusion of the presentation, Chair Duncan opened the floor to public comment, followed by Board discussion. Public comment was made by David Garmon.

Public questions and comments, including Board and staff response if any, included:

- Watermaster should consider an emphasis on the objective of the Watermaster to sustainably manage the Basin.

The key points of discussion by the Board included:

- Vice Chair Bilyk voiced that he disagrees with the mentality of spending budget because it may be available. Additionally, he noted that the WY 2026 budget should be prepared with awareness of the economic impacts to the Basin. For instance, in WY 2024, Pumpers paid a higher assessment with the promise that it would be paid back. To-date, only half of the increased assessment has been returned to Pumpers.
- Director Bennett asked for clarification on the proposed scope and schedule for reviewing the GDE project.
 - ED Adams summarized the scope and schedule presented to the Board during its December 19, 2024 Board meeting in which the Board approved the scope of work to redetermine the 2030 Sustainable Yield, stating that the review was scheduled to start in Water Year 2026 (e.g. no sooner than October 2025).
- Director Smith noted that amendments to the budget are approved via super-majority, advised that the budget should consider what must be done according to the Judgment, and advised against creating new work.

Following the discussion, the Board directed staff to prepare the draft budget for WY 2026 in consideration of the Board's input.

VI. Reports.

- A. Legal Counsel Report. Mr. Markman reported that legal activities have slowed since the Judge continued the status conference until August 2025.
- B. Technical Consultant Report. Mr. Malone reported on the items listed in the agenda package memo (see slides 63 through 66 of the [Board presentation slides](#)). There were no additional topics discussed.
- C. Executive Director Reports. ED Adams reported on the items listed in the agenda package memo (see slides 67 through 69 of the [Board presentation slides](#).) There were no additional topics discussed.
- D. Chairperson's Report. NONE

VII. Approval of Agenda Items for May 21, 2025 Board Meeting.

ED Adams reviewed the potential agenda items for the next Board meetings listed in the agenda package. The Board discussed items to be included on the May 21, 2025 Board meeting agenda, in addition to items listed in the Agenda package. Discussion included:

- ED Adams updated the proposed Agenda for the May 21, 2025 meeting on the meeting screen based on discussion, noting it now includes the following items:
 - Consideration of approval for insurance renewal
 - Report out from May TAC meeting
 - Addressing DWR Comments on Judgment/GMP
 - Draft WY 2026 Budget
 - WY 2025 Mid-Year Pumping Report

Motion: Motioned by Vice Chair Bilyk seconded by Director Bennett, to approve the May 21, 2025 agenda presented on slide 73 of the [Board presentation slides](#). *Motion carried unanimously by roll-call vote (5-0-0).*

VIII. Board Member Comments. Chair Duncan called for comments.

- Director Bennett introduced the idea of Watermaster Board members, staff, TAC members, and Pumpers participating in a panel at the Western Groundwater Conference in October 2025 in San Diego. The panel would provide insights into the paths towards sustainability in Borrego Springs, highlight successes, and identify challenges. If Watermaster Staff were to participate, the Board should provide direction and voice any concerns regarding their participation. Additional discussion on this topic included:
 - ED Adams clarified that Staff participation would not be billed to the Watermaster and that they would clarify that any comments made are not on behalf of the Watermaster.
 - Trey Driscoll (TAC member) has volunteered to submit the abstract to the conference and moderate the panel.
 - Mr. Markman encouraged participation to share the Watermaster's story and relationship with SGMA.
- Director Jorgensen thanked Mr. Huxman for his presentation on the GDE project.

IX. Next Meetings of the Borrego Springs Watermaster. Chair Duncan reviewed the meetings listed in the agenda package.

X. Adjournment

A. Chair Duncan adjourned the meeting at 6:10 PM.



Recorded by:

Lauren Salberg, Staff Geologist, West Yost



Attest:

Shannon Smith, Secretary and Treasurer of the Board