MEETING MINUTES
TECHNICAL ADVISORY COMMITTEE
BORREGO SPRINGS WATERMASTER
Meeting Conducted via GoToMeeting
Tuesday, February 25, 2025, 9:00 a.m.

I. Opening Procedures

Andy Malone (Lead Technical Consultant, Borrego Springs Watermaster) called the meeting to order at 9:04 a.m., at which time he confirmed the meeting was being recorded.

Mr. Malone called roll and confirmed that all six Technical Advisory Committee (TAC) members were present at the start of the meeting. The following individuals were present at the meeting:

Technical Advisory Committee Members	Bob Wagner, PE (Principal Water Resources Engineer, Wagner & Bonsignore) – *representing AAWARE*
	Tom Watson, PG (Principal Geologist, Aquilogic) – *representing T2 Borrego*
	Trey Driscoll, PG, CHG (Principal Hydrogeologist, INTERA) – *representing Borrego Water District*
	Jim Bennett (County of San Diego) – *representing County of San Diego*
	John Peterson, PG, CHG (retired) – *representing Roadrunner Golf and Country Club*
	Dr. Russell Detwiler (University of California, Irvine) – *representing the Borrego Springs Community*
Watermaster Staff	Andy Malone, PG (Principal Geologist, West Yost)
	Samantha Adams (Executive Director, West Yost)
	Lauren Salberg, PG (Staff Geologist, West Yost)
Others Present	Leonardo Urrego-Vallowe (Wagner & Bonsignore)
	Diane Wagner (Borrego Water District Board member)
	George Peraza (DWR)

II. Public Comments

There were no public comments.

III. Pumping Projections for Simulations in the BVHM

West Yost staff described the methods for preparing pumping projections to simulate the Rampdown of future pumping to the 2025 Sustainable Yield (7,952 afy) using the Borrego Valley Hydrologic Model (BVHM) and using the results of projection scenarios to predict future Basin conditions and compare against Sustainable Management Criteria (SMC) in the GMP. TAC discussion included:

- Mr. Driscoll observed that the projected Carryover account balances appear to be a tool for the pumpers to meet demands in future dry year conditions. He also asked if the Carryover account balances presented in the presentation were incorporated in the Carryover Analysis performed in December 2024. Watermaster staff clarified that not all conversations with

Pumpers in the Basin had occurred by the time the Carryover Analysis was performed last year, and therefore, wasn't included in that analysis.

- Why is the total pumping in 2040 projected to be 7,996 afy and not the Sustainable Yield of 7,952 afy? The total pumping in 2040 includes the 7,952 afy of pumping by BPA-holders in the Basin who are subject to Rampdown to the 2025 Sustainable Yield, plus the 42 afy from non-*de minimis* pumpers who are not subject to Rampdown.
- The BVHM is being used only to evaluate for Undesirable Results for groundwater-level and groundwater in storage. It is not being used to evaluate Undesirable Results for groundwater-quality. Undesirable Results for groundwater-quality are not a topic on the agenda for this TAC meeting but will be a topic at a future meeting.

IV. Discussion of the 5-Year GMP Assessment Report

West Yost staff presented on the work completed to-date to prepare the 5-Year Groundwater Management Plan (GMP) Assessment Report, followed by a description of: (i) the current SMC in the GMP and the methods used to set the SMC; (ii) the reasons for recommending updates to the SMC; and (iii) proposed methods to utilize "new information" to recommend the updates to the SMC in the GMP. The steps presented to recommend SMC updates included:

1. Develop groundwater pumping projections for all major pumpers for the period WY 2023-2070.
2. Perform BVHM runs for the period WY 2023-2070 to predict future groundwater conditions under variable future climate conditions:
    a. Repeated Hydrology. 47-year historical climate period of WY 1975-2022 is repeated to simulate the future 47-year period of WY 2023-2070.
    b. Repeated Hydrology with 2030 DWR Climate Change Factors
    c. Repeated Hydrology with 2070 DWR Climate Change Factors
    d. Repeated Hydrology with Drought Conditions from 2023-2040. Offset the 47-year historical climate to simulate "drought conditions" → 20th percentile of total precipitation over all 17-year periods → WY 2012- 2023 followed by 1950-1959.
3. Check all model scenario results to evaluate for groundwater sustainability by 2040 (and through 2070). The checks would include:
    - Trends in groundwater levels and storage are predominantly stable or increasing
    - Groundwater levels are at sufficient elevations to not cause undesirable results. Undesirable results would be defined as the inability of wells to pump enough water to meet their demands and serve their beneficial use(s). A map was presented to demonstrate the proposed method for checking for undesirable results. The map illustrated the saturated thickness of wells screens in fall 2024 and demonstrated that very few wells had less than 50 ft of saturated well screens. The 50 ft of saturated well screens was proposed as the minimum saturated thickness necessary for a well to pump its demands. A similar map could be prepared for 2040 projected conditions to check for undesirable results.

4. Select new Representative Monitoring Wells based on the updated Groundwater Monitoring Network. Considerations in selecting the Representative Monitoring Wells will be:
    - Wells that are currently monitored for groundwater levels
    - Wells that have long time histories of groundwater level measurements
    - Even spatial distribution of wells across each of the three management areas
    - Wells in both the shallow and deeper aquifers of the Basin:
5. Set the minimum thresholds for groundwater elevations at the Representative Monitoring Wells based on predicted groundwater elevation at the wells in 2040 for the scenario: *Repeated Hydrology with Drought Conditions from 2023-2040*.
6. Set the measurable objectives and interim milestones for groundwater elevations at the Representative Monitoring Wells based on predicted groundwater elevation at the wells in 2025, 2030, 2035, and 2040 for the scenario: *Repeated Hydrology with 2030 DWR Climate Change Factors.*
7. Define an undesirable result for chronic lowering of groundwater levels when measured groundwater elevations decline below a minimum threshold at two or more representative monitoring wells in a management area for two consecutive years.
8. Set the minimum thresholds for groundwater storage to be the cumulative mining of storage allowed by the Judgment Rampdown.
9. Set the measurable objective and interim milestones for groundwater storage based on predicted groundwater storage in 2025, 2030, 2035, and 2040 for the scenario: *Repeated Hydrology with 2030 DWR Climate Change Factors.*
10. Define an undesirable result for reduction in groundwater storage when the cumulative estimate of total storage in the Basin declines below the minimum threshold for two consecutive years.

Lastly, West Yost contended that the GMP is missing a description of a project or management action (PMA) to address observed or potential future exceedances of minimum thresholds for groundwater levels and/or storage.

TAC discussion included:

- Why was pumping by the Rams Hill wells not simulated in the 2016 BVHM and, therefore, not included in the model results used to establish Minimum Thresholds and Measurable Objectives? Response: The Rams Hill wells were not yet drilled at the time and were not included in the BVHM scenarios.
- Mr. Driscoll described that the GMP sets the minimum threshold for Borrego Water District (BWD) wells as the top of the well screens and described the rationale for setting this minimum threshold. He recommended that BWD wells maintain this as a Minimum Threshold for groundwater levels.
- Recommendation that the saturated thickness of the wells should be more than 10 ft of water above the pump bowls.

- Shallow monitoring wells in the Borrego Sink are recommended to better understand the groundwater conditions in the area.
- Mr. Driscoll emphasized that the Project or Management Action (PMA) in the GMP related to the Rampdown was the basis for achieving sustainability and that the redetermination of the Sustainable Yield every five years establishes a system to continuously evaluate if the Basin is headed towards sustainability.
- Discussion on the proposed PMA to address exceedances of Minimum Thresholds (see slide 24 of the TAC presentation):
    - Mr. Malone and Ms. Adams described that the PMA is recommended to address any localized issues that may result from Rampdown to the 2025 Sustainable Yield. Currently, the Judgment does not have a PMA to address localized issues.
    - Defining a certain number of allowable exceedances of Minimum Thresholds may not be appropriate in a desert environment like Borrego Springs.
    - Exceedances of Minimum Thresholds should not be addressed uniformly and any PMA to address such exceedances should not be overly prescriptive, but instead should be considered on a case-by-case basis.
    - Developing new or updating existing SMC should include a public stakeholder process.
    - The distribution of pumping in the Basin is expected to change in the future, with less pumping in the North Management Area and more pumping in the Central Management Area, which could lead to localized sustainability challenges.
    - Mr. Driscoll informed the TAC that BWD will be performing pumping optimization assessments and will evaluate locations for drilling new wells, which will consider groundwater-quality. In particular, BWD is concerned about groundwater-quality in the North Management Area and the potential treatment costs.
    - Mr. Driscoll recommended reviewing and presenting qualitative Undesirable Results in the GMP, which he did not feel were expressed in the presentation. These Undesirable Results were developed through a rigorous stakeholder outreach process.
    - West Yost staff recommends that the 5-year GMP Assessment Report include better defined and quantifiable Undesirable Results and is asking the TAC to provide feedback and recommendations on how to develop these.
- The pumping projections account for future build-out and development in the Basin, based on plans that Parties have communicated to West Yost staff. The objective is to capture what future pumping may be, not to commit Parties to a future pumping scheme.
- Recommendation to perform a Zonebudget analysis to identify the pumping sustainability challenges in each management area to better understand the maximum amount of pumping that could occur in each management area before causing Undesirable Results.
- Mr. Malone committed to sending an email to the TAC requesting specific feedback by March 4, 2025.

V. Status Update: Monitoring Data Gaps and the Inactive/Abandoned Wells Conversion Program

West Yost staff provided a summary of the efforts and results to expand the groundwater monitoring network of wells for groundwater-level and groundwater-quality monitoring.

TAC discussion included:

- Mr. Peterson recommended adding a well in the Clark Dry Lake area to the monitoring program to establish and track "baseline" groundwater-level changes and offered to escort West Yost staff to this well. Mr. Peterson has been monitoring groundwater levels at this well for decades and recommends that this data be considered. He asked other TAC members to weigh-in on this recommendation. Dr. Detwiler and Mr. Wagner agreed with his recommendation.
- Mr. Bennett offered to share groundwater-level data collected by the County of San Diego in areas south and east of the Basin.

VI. Public Comments

Mr. Malone asked for public comments and any final TAC member comments.

- Mr. Driscoll and Mr. Wagner thanked everyone for their hard work.

VII. Adjournment

Mr. Malone adjourned the meeting at 10:52 a.m.