

MEETING MINUTES
TECHNICAL ADVISORY COMMITTEE
BORREGO SPRINGS WATERMASTER
Meeting Conducted via GoToMeeting
Monday, December 18, 2023, 10:00 a.m.

I. Opening Procedures

Andy Malone (Lead Technical Consultant, Borrego Springs Watermaster) called the meeting to order at 10:03 a.m., at which time he confirmed the meeting was being recorded.

Mr. Malone called roll and confirmed that all five 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) <i>representing AAWARE</i>
	Tom Watson, PG (Principal Geologist, Aquilogic) <i>representing T2 Borrego</i>
	Trey Driscoll, PG, CHG (Principal Hydrogeologist, INTERA) <i>representing Borrego Water District</i>
	Jim Bennett, PG, CHG (County of San Diego and Watermaster Board Member) <i>representing County of San Diego</i>
	John Peterson, PG, CHG (retired) <i>representing Roadrunner Golf and Country Club</i>
Watermaster Staff	Andy Malone, PG (Principal Geologist, West Yost)
	Eric Chiang (Principal Engineer, West Yost)
	Samantha Adams (Executive Director, West Yost)
	Lauren Salberg, GIT (Staff Geologist, West Yost)
Others Present	Leanne Crow (Board Alternative – County of San Diego)
	David Peterson (Wagner & Bonsignore)
	Tyler Bilyk (Watermaster Board member)
	Anita Regmi (DWR)
	Ethan Steiner (County of San Diego)
	Shannon Smith (Watermaster Board member)
	Bob Abrams (Aquilogic)

TAC Meeting Guidelines. Mr. Malone covered the guidelines for TAC meetings, which specify that TAC meetings are open to the public and individuals are allowed three minutes each for comments during the public comment periods at the beginning and end of each TAC meeting.

II. Public Comments

There were no public comments.

III. Final Technical Memorandum: Task 3 to Redetermine the Sustainable Yield by 2025 – Correct Errors Identified in the 2021 BVHM (begins at 04:24 in the [meeting recording](#)). Lauren Salberg presented a summary of the final TM of Task 3 – *Correct Errors in the BVHM* and TAC comments on Task 3 (see Agenda Package). Discussion and recommendations included:

- During Task 4, West Yost will update the historical on-farm efficiency (OFE) values to be more reflective of historical irrigation methods, which will improve the Farm Process's (FMP) historical estimation of groundwater pumping and irrigation return flows (and therefore, recharge).

IV. Task 4 to Redetermine the Sustainable Yield by 2025 – Model Recalibration (begins at 20:46 in the [meeting recording](#)) West Yost staff presented a summary of the draft TM on the proposed methods to perform Task 4 – *Model Recalibration* and reviewed a TAC comments on Task 4 (see Agenda Package). Discussion and recommendations included:

- Trey Driscoll recommended calibrating the BVHM through WY 2022 and to perform model validation prior to the next redetermination of the Sustainable Yield in 2030.
- Bob Wagner recommended further discussion on the appropriate calibration period, noting that a shorter, more recent period may be more representative of present and future conditions.
- West Yost stated that a shorter calibration period may be considered after review of the data availability when selecting calibration targets.
- Bob Wagner presented a summary of his comments distributed to the TAC on December 15, 2023 (see slide 20 in the [meeting presentation](#)).
- Tom Watson and Bob Wagner voiced concerns about using the FMP to estimate pumping, considering the differences between FMP-estimated pumping and metered pumping in WY 2021 and 2022.
- A discussion ensued regarding the use of the FMP in the BVHM. The discussion included:
 - The current scope-of-work to redetermine the Sustainable Yield by 2025 was recommended by the TAC and approved by the Watermaster Board. During the scoping discussions, the TAC agreed to continue using the FMP to redetermine the Sustainable Yield in 2025, but that alternative methods should be considered prior to the redetermination of the Sustainable Yield in 2030. By then, the Watermaster will have several more years of measured pumping data and alternative modeling methods should then be considered.
 - In performing Task 2 – *Update Water-Use Factors*, the FMP was “manually calibrated” by adjusting OFE and crop coefficient (KC) values to improve the ability of the FMP to estimate pumping during WY 2021 and 2022 (years with metered pumping data). The results of Task 2 are documented in a memo available on the [Watermaster's website](#).
 - Bob Wagner recommended comparing OpenET data to the FMP results. Mr. Wagner began this comparison and expressed concern that the FMP could also be underestimating recharge from irrigation return flows.
 - The TAC discussed scheduling a special meeting in January to continue the conversation regarding the FMP, but this was decided against considering the time constraints to complete this task.
 - Although the BVHM is not perfect, significant improvements are being made to improve the ability of the FMP to estimate pumping and the water budget of the Basin.
 - The Judgment requires the BVHM be used to redetermine the Sustainable Yield.
 - Jim Bennett, Trey Driscoll, and Tom Watson expressed comfort with proceeding with Task 4.

- A TAC request that preliminary results from Task 4 – *Model Recalibration* should be disseminated to the TAC via email prior to preparation of a draft TM that documents the recalibration results.

V. Discuss Potential Methods for Task 5 to Redetermine the Sustainable Yield – *Determine the Sustainable Yield* (begins at 01:07:49 in the [meeting recording](#)). West Yost staff presented the proposed methods for performing Task 5 – *Determine the Sustainable Yield* and TAC comments on the Task 5 methods (see Agenda Package). TAC discussion and questions included:

- The modeled subsurface outflow from the BVHM domain occurs outside of the Borrego Springs Subbasin (in the Ocotillo Wells Subbasin). If the model domain used to calculate the water budget only includes the portion overlying the Borrego Springs Subbasin, the treatment of this underflow should be discussed by the TAC.
- Trey Driscoll recommended proceeding with a future pumping scenario that assigns pumping to individual wells in the Basin and does not rely on the FMP.
- Developing and modeling future climate change scenarios are required by the DWR.
- Suggestion to evaluate the variability in climate from the downscaled datasets compared to local data.
- Trey Driscoll recommended using the uncertainty analysis approach used in the GMP.
- The deadline for the TAC's comments on the Task 5 Methods memo (included in the agenda package) will be extended to Monday, January 29, 2024.

VI. Process and Report Outline for the 5-Year Assessment of the Groundwater Management Plan (begins at 01:39:25 in the [meeting recording](#)). West Yost staff presented the draft outline, process and schedule for completing the 5-Year Assessment of the Groundwater Management Plan (GMP) and the Updated GMP, along with TAC comments on the memo included in the agenda package. TAC discussion and questions included:

- DWR has not provided comments on the Judgment/GMP and comments are not expected by the end of the month (December 2023). Executive Director Adams has been in contact with Tim Godwin at the DWR.
- The Watermaster Board has directed Staff to proceed with the preparation of the 5-Year Assessment of the GMP even without DWR's comments on the Judgment/GMP.

VII. Status Update on the Expansion of the Groundwater Monitoring Program. Mr. Malone provided a brief summary of the status update on the expansion of the Groundwater Monitoring Program, and directed the TAC to review his latest presentation to the Board at its December 14, 2023 meeting.

VIII. Public Comments (begins at 01:56:42 in the [meeting recording](#))

Mr. Malone asked for public comments and any final comments from TAC members. Comments included:

- Trey Driscoll will reach out to DWR to inquire about the Airborne Electromagnetic (AEM) survey in Borrego Springs that was scheduled to occur in November 2023. He will inform the TAC via email about what he learns.
- West Yost will email the TAC with the revised deadlines for TAC comments on the Task 4, Task 5, and 5-year GMP Assessment memos.

IX. Future TAC Meetings

The next TAC meeting will be scheduled for April 2024. The proposed agenda items include:

- Review draft TM on Task 4 – *Model Recalibration*
- Discuss projection scenarios and methods for Task 5 – *Determine the Sustainable Yield*
- Review Sections 1-4 of the 5-Year GMP Assessment Report

X. Adjournment

Mr. Malone adjourned the meeting at 12:03 p.m.