

MINUTES
TECHNICAL ADVISORY COMMITTEE
BORREGO SPRINGS WATERMASTER
Meeting Conducted via GoToMeeting
Monday, May 2, 2022, 10:00 a.m.

I. Opening Procedures

Andy Malone (Lead Technical Consultant, Borrego Springs Watermaster) called the meeting to order at about 10:00 a.m. and recognized 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	Robert Wagner, PE (Principal Water Resource Engineer, Wagner & Bonsignore)
	Tom Watson, PG (Principal Geologist, Aquilogic)
	Trey Driscoll, PG, CHG (Principal Hydrogeologist, Dudek)
	Jim Bennett (County of San Diego and Watermaster Board Member)
	Andy Malone, PG (Principal Geologist, West Yost)
Watermaster Staff	Samantha Adams, Executive Director (West Yost)
	Lauren Salberg, Staff Scientist (West Yost)
	Eric Chiang, Principal Engineer (West Yost)
Others Present	Robert Staehle
	Leanne Crow
	Leonardo Urrego-Vallowe
	Michele Staples
	Shannon Smith (Vice Chairman of the Board)
	Jim Markman

II. Public Comments

Michele Staples made a comment regarding Dudek’s scope of work on the update to the Borrego Valley Hydrologic Model (BVHM). She wanted to make it clear that the Watermaster Parties want West Yost to make an independent evaluation of the BVHM and not rely on Dudek to make the evaluation.

III. Status Update: DWR Monitoring Well Funded through the DWR’s Technical Support Services Grant

Mr. Malone provided an update on the Borrego Water District’s (BWD) Technical Support Services (TSS) grant from the California Department of Water Resources (DWR) to construct a monitoring well in the Borrego Springs Subbasin. The TAC previously discussed the monitoring well and has recommended a general location in the northern portion of the North Management Area as appropriate to fill an important gap in the monitoring network.

The main points from the update were:

- DWR informed BWD and the Watermaster that the Watermaster can act as the “COOPERATOR” under its required Land Use Agreement which will permit the Watermaster to access the site for long term monitoring and maintenance of the well(s). Watermaster will also be responsible for the ultimate well destruction after the useful lifetime of the monitoring well.
- Watermaster staff, Dudek staff (representing BWD), and DWR staff held a meeting with the landowner (T2 Borrego) where the monitoring well could be constructed in the North Management Area. A specific location for the monitoring well on T2 Borrego property was tentatively agreed upon. Mr. Malone provided a map.
- Possible roles and responsibilities of the DWR, BWD, and the Watermaster in project implementation.

The following was the general consensus of the TAC:

- The tentative location for the monitoring well on the land owned by T2 Borrego is acceptable and will fill an important gap in the monitoring network.
- The Watermaster should collaborate with DWR on the well design and construction but should depend on DWR staff to execute the onsite technical oversight to minimize the cost to the Watermaster.
- Watermaster staff should prepare a cost estimate for: (i) collaboration with the DWR on well design and construction, (ii) Watermaster efforts for annual monitoring and maintenance, and (iii) the ultimate well destruction.

IV. Status Update: Update of the Borrego Valley Hydrologic Model (BVHM) to Support the Update of the Sustainable Yield in 2025

Lauren Salberg and Eric Chiang of West Yost provided a progress update on the efforts to extend the BVHM through water year (WY) 2021 and compare model-simulated pumping to metered pumping. Main points from the progress update included:

- All of the model packages have been extended from 2016 to 2021, except the streamflow package.
- Updates to the Farm Process Package included changes to land use (e.g., 2,200 acres of land have been fallowed) and extension of records for precipitation and ET.
- Next steps include:
 - Use the current methodology to extend the streamflow package through WY 2021
 - Run the extended BVHM through WY 2021
 - Perform QA/QC of model results and coordinate with Dudek on any potential problems
 - Compare BVHM-estimated pumping to metered pumping for WY 2021
 - Prepare recommendations for modeling work in WY 2023
 - Prepare draft and final technical memoranda

V. Methodology to Estimate Annual Storage Change in the Borrego Springs Subbasin

Mr. Malone provided an overview of the methods that were employed to estimate the annual change in groundwater in storage in the Borrego Springs Subbasin for the period Spring-2020 to Spring-2021. The results were published in the WY 2021 Annual Report to the DWR. Mr. Malone stated that the interpolation methods to generate groundwater elevation contours and rasters could be improved.

Leonardo Urrego-Vallowe suggested that the Technical Consultant perform a sensitivity analysis (and a statistical analysis) on the interpolation methods and share the results with the TAC as part of next year's effort to estimate storage change. Trey Driscoll indicated that inverse distance weighting was the method used by Dudek for previous Annual Reports, but a sensitivity analysis can be performed. Mr. Malone committed to providing the TAC with a scope of work and cost estimate to perform the sensitivity analysis.

VI. TAC Input on the Prop 68 and DOC Grant Applications

Trey Driscoll reported that BWD is awaiting notification from the DWR on the Prop 68 grant application.

Jim Bennett provided an overview of the Department of Conservation (DOC) grant application that the County of San Diego has submitted on behalf of the Borrego Springs Subbasin. There is \$50 million of funding available for the entire state. The County submitted a \$4.5 million application to assist with the rehabilitation and restoration of fallowed agricultural land in the basin over a five-year implementation period. The County is interviewing with the DOC and the final awards should be out in May 2022.

VII. De Minimis Well Permit

Mr. Malone provide an overview of the first application that Watermaster has received for New De Minimis Pumping in the basin. The proposed well is for domestic use and is located within about 750 feet of a BWD well. Mr. Malone contended that the proposed well could lead to Undesirable Results because the well design does not include a grout seal within the annular space that would separate the shallow aquifer system (of poorer quality) from the deep aquifer system (of higher quality) and inhibit the downward migration of poorer quality water through the annular space and into the deep aquifer system. However, installation of an annular seal would increase the cost of well construction for the well owner. A discussion ensued.

Tom Watson and Leonardo Urrego-Vallowe stated concerns that the well, as designed, can pump greater than two acre-feet per year. Mr. Malone stated that pumping is expected to be seasonal and Watermaster will require the installation of a flow meter on the well and meter reading to verify annual well production.

Robert Wagner indicated that the proposed design does not completely prevent migration of the poor water quality into the deep aquifer zone.

Jim Bennett suggested that a reduced thickness of the annular seal may accomplish the same protection for groundwater quality at a reduced cost. Mr. Malone committed to analyzing this concept and reporting back to the TAC.

Trey Driscoll suggested that the well owner could connect to BWD service instead of constructing a new well, probably at a comparable cost for a new well. Mr. Driscoll said that the BWD will likely perform a cost analysis to connect to BWD service and reach out to the well owner to discuss this possibility.

VIII. Next Steps in WY 2022

Mr. Malone provided an overview of these next steps for the TAC in WY 2022, which include:

- Prepare a Water-Quality Monitoring Plan pursuant to the Judgment. This work is just beginning.
- Preparing a scope of work and budget for the TAC in WY 2023. Mr. Malone reminded the TAC of the Board memorandum from June 7, 2021 which recommended a TAC scope of work and budget for WY 2022 and WY 2023 pursuant to Section III.F. of the Judgment.

Leonardo Urrego-Vallowe suggested to include scope and budget to perform the sensitivity analyses on the groundwater-elevation interpolation methods to support the annual storage change analysis. Trey Driscoll suggested to add contingency budget for researching and applying for grant funding opportunities.

Mr. Driscoll also requested that Mr. Malone provide a schedule of milestones and deliverables for the extension of the BVHM through WY 2022. Mr. Malone stated that the Prop 68 grant application delayed some of the work on the model extension and committed to delivering this schedule of milestones and deliverables to the TAC as soon as possible.

IX. Public Comments (time permitting)

Michelle Staples asked if we are approaching triggers for undesirable results, specifically for groundwater levels, have there been any evaluations of this, and what do the results mean in terms of measurable objectives and undesirable results? Samantha Adams stated that Spring 2022 monitoring event is just wrapping up. We compared these groundwater levels and trends to the minimum thresholds, and we are not approaching the minimum thresholds. The rates of decline appear to be less than those historically.

Shannon Smith thanked the TAC for its work and for being cognizant of the costs that the Basin pumpers must take on.

X. Future TAC Meetings

The TAC will likely meet again in July 2022 to discuss progress on the BVHM extension and evaluation and the Water Quality Monitoring Plan.

XI. Adjournment

Mr. Malone adjourned the meeting at about 12:00 p.m.