

Borrego Springs Interim Watermaster  
Special Board Meeting  
November 12, 2020 @ 4:30 p.m.

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**AGENDA**

*Items with supporting documents in the Board Package are denoted with a page number.*

**I. OPENING PROCEDURES**

- A. Call to Order
- B. Pledge of Allegiance
- C. Roll Call
- D. Approval of Agenda

**II. PUBLIC CORRESPONDENCE**

- A. Correspondence Received - none
- B. Public Comments (may be limited to 3 min per person)

*This is an opportunity for members of the public to address the Watermaster on matters within the Watermaster’s jurisdiction.*

**III. CONSENT CALENDAR**

(Action Item: All items on Consent Calendar may be approved with a single motion)

- A. Approval of Minutes:
  - i. Regular Meeting – October 8, 2020.....Page 4
  - ii. Special Meeting – October 19, 2020.....Page 8

**IV. ITEMS FOR BOARD CONSIDERATION AND POSSIBLE ACTION**

- A. Technical Advisory Committee Report.....Page 10
  - i. TAC Meeting Minutes – October 27, 2020.....Page 12

**Recommendation:** Receive and file TAC meeting minutes.

- ii. Metering Program Recommendation.....Page 16  
**Recommendation:** Direct staff to (1) implement the TAC recommended meter reading program for November 2020 through April 2021 and (2) reconvene the TAC in April 2021 to review and revise the program.
  
- B. Environmental Working Group.....Page 21  
**Recommendation:** Form a subcommittee of the Board, including appointment of two Directors, to develop a recommendation to the Board on the formation of the EWG and its scope of work for WY 2021.
  
- C. Administrative and Technical Services Statement of Work and Budget for Remainder of Water Year 2021 .....Page 23  
**Recommendation:** (1) Approve an amendment to Exhibit A of the WEI PSA to include the SOW and \$55,132 budget for *Task 3.3 – Implement Interim Groundwater Monitoring Program* as defined in Statement of Work No. 2 and (2) Direct staff to bring the remainder of the SOW and budget for Board consideration at its Regular meeting on December 10, 2020

**V. REPORTS**

- A. Executive Director Reports – *verbal*
  - i. Accounting Update – Bank account and assessments
  - ii. CASGEM Implementation
  - iii. Following Standards Verification for Conversion of Water Credits to BPA
- B. Legal Counsel Report – *verbal*
- C. Chairperson’s Report – *verbal*
- D. Status of Stipulated Judgment – Steve Anderson, BBK – *verbal (if available)*

**VI. BOARD MEMBER COMMENTS**

**VII. NEXT MEETINGS OF THE BORREGO SPRINGS WATERMASTER**

- A. Regular Board Meeting – Thursday, December 10, 2020 at 4:30 pm
  - i. Potential Agenda Items:
    - 1. Administrative and Technical Services: Finalize Statement of Work and Budget for WY 2021
    - 2. Following Standards Verification for Conversion of Water Credits to BPA
    - 3. Environmental Working Group – status update, if available
    - 4. Watermaster Local Office for Post-COVID Operations

- B. Regular Board Meeting – Thursday, January 14, 2021 at 4:30 pm
  - i. Potential Agenda Items:
    - 1. Environmental Working Group
    - 2. Data sharing and privacy protocols

**VIII. ADJOURNMENT**

**MINUTES**  
**BORREGO SPRINGS INTERIM WATERMASTER REGULAR BOARD MEETING**  
**Conducted Virtually via GoToMeeting**  
**Thursday, October 8, 2020, 4:30 p.m.**

**I. Opening Procedures**

- A. Director Duncan called meeting to order at 4:30 p.m.
- B. Director Duncan led the meeting participants in the Pledge of Allegiance.
- C. Samantha Adams (Executive Director) called roll and confirmed that all members of the Board were present. The following individuals were present at the meeting:

<b>Directors Present</b>	Chairman Dave Duncan – Borrego Water District
	Vice Chairman Shannon Smith – Recreational Sector
	Mike Seley – Agricultural Sector
	Jim Bennett – County of San Diego
	Mark Jorgensen – Community Rep.
<b>Watermaster Staff Present</b>	James M. Markman, Legal Counsel
	Samantha Adams, Executive Director (WEI)
	Kristan Culbert – Staff Scientist, WEI
<b>Others Present</b>	Michele Staples, Jackson Tidus
	Kathy Dice, BWD Board Member (Board Alternate)
	Lyle Brecht, BWD Board Member
	Rebecca Falk
	Cathy Milkey, Rams Hill
	Rich Pinel, Roadrunner Club and Springs RV and Golf Resort
	Geoff Poole, BWD General Manager
	Diane Johnson, BWD Board Member
	Tammy Baker
	Trey Driscoll, Dudek
	Leanne Crow (Board Alternate) – County of San Diego
	Martha Deichler (Board Alternate) – Community Rep.
	Mark Stevens, BSUSD
	David Garmon
	Scott Morgan
Gary Worobec	
Anita Regmi, DWR	

- D. Approval of Agenda.

Executive Director Adams requested addition of a new agenda item (IV.C), Consideration of Approval of Resolution 20-08 to establish a bank account.

**Motion:** Motioned by Director Smith, seconded by Director Jorgensen to add Resolution 20-08 to the Agenda as item IV.C. *Motion carried unanimously (5-0-0).*

**II. Public Correspondence**

- A. Correspondence Received – None reported.

B. Public Comments.

- Lyle Brecht addressed the Board regarding the potential for impact to groundwater in Borrego Springs associated with the Hemp Ordinance being considered for approval by the Riverside County Board of Supervisors.
- Gary Worobec addressed the Board regarding the potential for impact to groundwater in Borrego Springs associated with the Hemp Ordinance being considered for approval by the Riverside County Board of Supervisors and stated that he would send additional information to Executive Director Adams on the issue.
- Rich Pinel addressed the Board to request an opportunity to ask questions during the agenda item to discuss the status of the Stipulated Judgement.

**III. Consent Calendar**

The Consent Calendar for the October 8, 2020 meeting included:

- A. Approval of Minutes for Special Meeting on September 24, 2020.

Section VI.B of the minutes from the September 24, 2020 meeting should be corrected as follows:

“Ms. Falk noted that the official location of the WMB local office should be ~~established~~ **discussed further** since the discussion was not completed at the last meeting. Director Duncan asked that this be added for consideration on the next meeting’s agenda.”

**Motion:** Motioned by Director Smith, seconded by Director Bennet to accept Consent Calendar with noted corrections to the meeting minutes. *Motion carried unanimously (5-0-0).*

**IV. Items for Board Consideration and Possible Action**

- A. *Consideration of Adoption of a Resolution to Establish Financial Reporting Protocols (Resolution 20-07).* Executive Director Adams provided an overview of Resolution 20-07 in the Board package. A discussion ensued.

**Motion:** Motioned by Director Smith, seconded by Director Jorgensen to approve Resolution 20-07 to Establish Financial Reporting Protocols. *Motion carried 5-0-0 by roll call vote.*

- C. *Interim Borrego Springs Watermaster to Establish a Bank Account to Support Implementation of the Settlement Agreement and Assign Authorized Signatures (Resolution 20-08).* Chairman Duncan requested to hear this item before Item IV.B. Executive Director Adams introduced the item and explained that Resolution 20-08 is intended to assign check-signing authority to two Board Members and the Executive Director and establishes the Executive Director as the contracting officer on the account. Resolution 20-08 supersedes the Board’s direction on check-signing authority as defined in Resolution in 20-06. Ms. Adams requested the Board to name two directors with check signing authority for the Watermaster bank account as part of the motion to approve the resolution. accepted check-signing authority, and Executive Director Adams will follow up with Directors Duncan and Jorgensen via email.

**Motion:** Motioned by Director Smith, seconded by Director Jorgensen to approve Resolution 20-08 with Directors Duncan and Jorgensen assigned check-signing authority. *Motion carried unanimously by roll call vote (5-0-0).*

B. *Agenda for the Inaugural Watermaster Technical Advisory Committee Meeting.* Executive Director Adams asked presented the item and invited the Board to provide for additional items for the TAC Agenda. A discussion ensued, with the following key points:

- Director Duncan requested (1) information about the status of the SGMA funding for water quality monitoring, (2) the status of water quality sampling in 2020, and (3) the addition of the Groundwater Quality Monitoring Plan to the TAC agenda.
  - Michele Staples identified that the Settlement Agreement provides for funding of the monitoring program through March 2020 and inquired if that funding is still available.
  - Director Bennett explained that the monitoring program funding was exhausted as part of the fall 2019 sampling event. He also noted that the draft Statement of Work being prepared for Watermaster staff includes tasks to continue to perform the monitoring semi-annually and that approval of the Statement of Work is anticipated at the November Board meeting.
  - Trey Driscoll reported that the spring 2020 water quality monitoring was not performed due to COVID but that BWD funded the semi-annual water level monitoring event.
  - Ms. Adams reported that the Judgment establishes the timeline for developing an updated Groundwater Quality Monitoring Plan.
  - The Board directed Ms. Adams to research the due date for the updated Groundwater Quality Monitoring Plan and, if due within one year, add the item to the TAC agenda.
- It was clarified that the TAC meetings are open to the public and will be noticed to the distribution list and website.

## V. Reports and Updates.

### A. Executive Director Report.

- *Meter Verification Progress and Meter Reading Update.* Executive Director Adams provided a detailed update on the status of meter certifications and the initial WY 2021 meter reads for the Settling Parties, reporting that meter reads were recorded for 51 out of 52 active wells. Ms. Adams thanked the BWD Board and Staff for the work to ensure the manual meter reads were completed timely. Directors Smith, Bennett, and Deichler offered their thanks to all involved in the efforts to accomplish this milestone. Director Smith requested that status reports on the remaining information be continued in future meetings.
- *CASGEM Monitoring and Reporting.* Executive Director Adams reported that she is coordinating with BWD staff on the CASGEM monitoring and reporting program and noted that budget is available to support CASGEM efforts of the BWD.
- *Fallowing Standards Verification for Conversion of Water Credits to BPA.* Executive Director Adams informed the Board that staff has initiated the process of addressing fallowing standards verification.
- *Data Transfer to initiate HydroDAVE Database.* Executive Director Adams informed the Board that WEI has received the data transfer from Dudek and that these efforts are moving forward.

- B. Legal Counsel Report. Mr. Markman noted that he would be able to assist the Board in addressing the concerns on the Hemp Ordinance, if needed.
- C. Chairperson’s Report – *none*.
- D. Status of Stipulated Judgement – Steve Anderson, Best Best & Krieger (BBK) provided an overview of the status and answered questions from the Board and public.

**VI. Board Member Comments.**

- A. Chairman Duncan raised the issue of the potential impacts to water use in Borrego due to the Hemp Ordinance. The Board discussed the need for a special meeting to discuss the impacts of the ordinance. Mr. Markman explained that the Chairman would need to formally call the Special Meeting via a specific Process. The Board directed staff to proceed with the process to schedule a Special meeting.
- B. Director Jorgensen inquired about the purpose of the Environmental Working Group (EWG), and asked where additional information can be found. Mr. Anderson (BBK) clarified that the Judgment has limited direction regarding the in order to allow flexibility.

**VII. Upcoming Borrego Springs Watermaster Board Meetings.**

The next regularly-scheduled Board meeting will be held on Thursday, November 12, 2020 at 4:30 pm.

Potential agenda items could include:

- TAC Recommendations on Meter Reading Program
- Watermaster Banking and Assessment Invoices
- HydroDaVE Database updates
- Following Standards Verification for Conversion of Water Credits to BPA
- CASGEM Monitoring and Reporting
- Environmental Working Group
- Additional items noted in prior agenda items

**VIII. Adjournment.**

Director Duncan adjourned the Board meeting at 6:16 p.m.

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Recorded by: Kristan Culbert  
Wildermuth Environmental, Inc.

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Attest: Shannon Smith, Board Secretary

**MINUTES**  
**BORREGO SPRINGS INTERIM WATERMASTER SPECIAL BOARD MEETING**  
**Conducted Virtually via GoToMeeting**  
**Monday, October 19, 2020, 11:30 a.m.**

- A. Chairman Duncan called meeting to order at 11:30 a.m.
- B. Chairman Duncan led the meeting participants in the Pledge of Allegiance.
- C. Samantha Adams (Executive Director) called roll and confirmed that all members of the Board were present. The following individuals were present at the meeting:

<b>Directors Present</b>	Chairman Dave Duncan – Borrego Water District
	Vice Chairman Shannon Smith – Recreational Sector
	Jim Bennett – County of San Diego
	Mike Seley – Agricultural Sector
	Mark Jorgensen – Community Rep.
<b>Watermaster Staff Present</b>	James M. Markman, Legal Counsel
	Samantha Adams, Executive Director (WEI)
	Andy Malone, Technical Consultant (WEI)
	Kristan Culbert – Staff Scientist, WEI
<b>Others Present</b>	Kathy Dice, BWD Board Member (Board Alternate)
	Lyle Brecht, BWD Board Member
	Rebecca Falk
	Geoff Poole, BWD General Manager
	Trey Driscoll, Dudek
	Gary Worobec
	Timothy Ross, DWR
	Nancy Karas
Alec-Michele	

- D. Comments from the Public on Items on the Agenda – *none*.
- E. Discussion of providing a letter to the Riverside County Board of Supervisors on its ordinance concerning Hemp growing and any impact it may have on Borrego water supplies. Chairman Duncan introduced the item and opened the discussion to the Board. A discussion ensued, with the following key points:
  - A letter to the Board of Supervisors is warranted.
  - Mr. Malone explained that the Anza-Terwilliger Water Basin (ATWB) lies upgradient from the Borrego Springs Groundwater Subbasin, but the subbasins are separated by fractured rock. Mr. Malone pointed out that there is not enough data available to understand the potential impacts of hemp farming on the Borrego Springs Subbasin, but any increase in groundwater use in the ATWB could reduce surface or groundwater outflows to adjacent basins, including Borrego Springs.



- Mr. Malone noted that the ATWB is not subject to SGMA compliance.
- The letter should focus the communication as a concern over increased groundwater use and its impacts on the Borrego Springs Groundwater Subbasin.
- The letter should address the need to study and monitor the ATWB to enable assessment of impacts from groundwater pumping.
- Director Bennett volunteered to support Executive Director Adams in drafting the letter.

**Motion:** Motioned by Director Smith, seconded by Director Jorgensen to Direct Executive Director Adams to Send a Letter to the Riverside County Board of Supervisors Reflecting the Concerns of the Interim Borrego Springs Watermaster. *Motion carried unanimously (5-0-0).*

F. Adjournment. Chairman Duncan adjourned the meeting at 11:49 am.

Unapproved

**Interim Borrego Springs Watermaster  
Board of Directors Meeting  
November 12, 2020  
AGENDA ITEM IV.A**

**To:** Board of Directors  
**From:** Samantha Adams (WEI), Executive Director  
Andy Malone (WEI), Lead Technical Consultant  
**Date:** November 9, 2020  
**Subject:** Technical Advisory Committee (TAC) Report – Meeting Summary and Recommended Metering Program

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<input checked="" type="checkbox"/> <b>For Action</b>	<input type="checkbox"/> <b>Fiscal Impact</b>	<input type="checkbox"/> <b>Funds Budgeted</b>
<input type="checkbox"/> <b>Information Only</b>	<input type="checkbox"/> <b>Cost Estimate:</b>	<b>\$</b>

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**Recommended Actions**

1. Receive and file October 27, 2020 TAC meeting minutes.
2. Approve the TAC-recommended meter reading program for November 2020 through April 2021 and direct Staff to implement it.

Fiscal Impact: Pumpers with manual-read meters bear the cost of installing, maintaining, and reading meters (discussed below). The Watermaster budget provides for implementing the meter reading program.

**Background and Previous Actions by the Board**

At its September 24, 2020 Special Meeting, the Board directed Watermaster Staff to convene the TAC and notify all Settling Parties with BPA of their right to appoint a representative to the TAC.

**Technical Advisory Committee Meeting and Recommendations to the Board**

The inaugural TAC meeting was held on October 27, 2020. The meeting was held virtually and was open to the public. All TAC members appointed to date by the Settling Parties were in attendance. The minutes of the meeting, which have been reviewed by the members of the TAC, are enclosed for Watermaster’s records. The minutes include information about the members of the TAC.

At the request of the Board, the TAC discussed and has prepared a recommendation for the Watermaster metering program, which is detailed in the attached memo to the Board. Lead Technical Consultant, Andy Malone, will be available to provide the Board with an overview of the TAC meeting and the details of the TAC’s metering program recommendation.

The TAC recommendation includes performing official Watermaster meter reads on a bi-monthly basis through March 2021. Should the Board adopt the TAC recommendation, Staff recommends that Watermaster continue to contract with the Borrego Water District (BWD) for meter-reading services at the manual-read meters. No specific action is required by the Board as a contract with BWD is already executed. Some Settling Parties have requested additional options for the meter-reading

services, the costs for which they are solely responsible. To address this request, Staff recommends providing the Settling Parties with the option to select either BWD or WEI to perform the meter reads. The options will clearly identify the differences in cost between BWD and WEI. The WEI costs are expected to be about three times greater than that of the BWD due to higher labor rates and longer travel time.

**Encl.**

IV.A.i -- October 27, 2020 TAC Meeting Minutes

IV.A.ii -- November 9, 2020 TAC Memo: *Recommended Watermaster Meter Reading Program*

**MINUTES**  
**TECHNICAL ADVISORY COMMITTEE**  
**BORREGO SPRINGS INTERIM WATERMASTER**  
**Meeting Conducted Virtually via GoToMeeting**  
**Tuesday, October 27, 2020, 9:00 a.m.**

**I. Opening Procedures**

- Andy Malone (Lead Technical Consultant, Borrego Springs Watermaster) called the meeting to order at 9:00 a.m.
- Samantha Adams (Executive Director, Borrego Springs Watermaster) called roll and confirmed that all members of the Technical Advisory Committee were present. The following individuals were present at the meeting:

<b>TAC Committee Members</b>	Jim Bennett, County of San Diego (and Watermaster Board Member)
	Robert (Bob) Wagner, Representing AAWARE
	Thomas (Tom) Watson, Representing Rams Hill
	Trey Driscoll, Representing Borrego Water District
<b>Watermaster Staff</b>	Andy Malone, Lead Technical Consultant (WEI)
	Samantha Adams, Executive Director (WEI)
	James M. Markman, Legal Counsel
	Kristan Culbert – Staff Scientist (WEI)
<b>Others Present</b>	WMB Member Dave Duncan – Watermaster Chairman, Borrego Water District
	WMB Member Shannon Smith – Watermaster Vice Chairman, Recreation Representative
	WMB Member Mark Jorgensen – Watermaster Representative, Community Rep.
	Michele Staples, Jackson Tidus, Representing AAWARE (Agriculture)
	Geoff Poole, General Manager – Borrego Water District
	Steve Anderson, BBK, Representing Borrego Water District
	Rebecca Falk
	Cathy Milkey, Rams Hill
	Geoff Poole, BWD General Manager
	Tammy Baker
	Leonardo Urrego-Vallowe
	Leanne Crow (Board Alternate) – County of San Diego
	Timothy Ross, DWR
	Anita Regmi, DWR

- Committee Member Introductions. The Committee members appointed thus far introduced themselves:
  - Bob Wagner, PE (Principal Water Resources Engineer, Wagner & Bonsignore) – representing AAWARE. Mr. Wagner has over 30 years of experience in water resources engineering. He currently serves as the Watermaster Engineer for the Mojave Basin Area Watermaster.
  - Tom Watson, PG (Principal Geologist, Aquilogic) – representing Rams Hill. Mr. Watson has over 35 years of experience in environmental and groundwater management. He was previously involved in overseeing all of the water resources management programs

for the City of Santa Monica and is currently involved in the development of Groundwater Sustainability Plans (GSP) for numerous clients in California.

- Trey Driscoll, PG, CHG (Principal Hydrogeology Project Manager, Dudek) – representing Borrego Water District. Mr. Driscoll has 20 years of experience in hydrogeology and groundwater management. He was the project manager from Dudek (consultant to the County of San Diego) for the development of the GSP for the Borrego Springs Groundwater Subbasin and has been involved in technical work in the Borrego Springs for over five years.
- Jim Bennett, PG, CHG (County of San Diego) – representing the County. Mr. Bennett has 23 years of experience in hydrogeology. He was the manager of the development of the GSP for the Borrego Springs Groundwater Subbasin. He sits on the Borrego Springs Watermaster Board, representing the County of San Diego.
- Andy Malone, PG (Principal Geologist, WEI) – representing the Borrego Springs Watermaster. Mr. Malone has 25 years of experience in geology and groundwater management. He also serves as the principal-in-charge for engineering services for the Chino Basin Watermaster; in this role he leads numerous technical committees including the Ground Level Monitoring Committee and the Prado Basin Habitat Sustainability Committee.

Mr. Malone covered the guidelines for the Committee meeting, which specify that (a) Committee meetings are open to the public, and (b) three minutes are allowed for public comments at the beginning and end of each Committee meeting.

**II. Public Comments. The following persons addressed the TAC:**

- Tim Ross (Branch Manager, Southern Region Office). Informed the TAC that the DWR has begun is semi-annual groundwater monitoring event in the Borrego Springs taking place from October 27, 2020 to October 29, 2020. His office remains available to provide technical resources and introduced that Anita Regmi (DWR) is the Borrego Springs subbasin point of contact.
- Watermaster Chairman Dave Duncan thanked the committee members for their service.
- Rebecca Falk addressed the TAC regarding two items:
  - Requested the TAC to address the expansion of the water quality monitoring program to fill data gaps in the east and northeast areas of the Basin, noting that information on a potential well has been provided to staff.
  - The requirement to redetermine the Sustainable Yield of the Basin: does the redetermination happen regardless of whether it is requested by the Board?
- Tammy Baker addressed the TAC regarding two items:
  - The need to have high-frequency meter reads for monitoring pumping (every two months is prudent).
  - How best to provide questions to the TAC.
    - Ms. Adams recommended to send an email, chat message, or arrive at meetings a few minutes early to indicate interest in addressing the TAC.
- Cathy Milkey thanked the TAC for their work and their attendance during today’s meeting.

**III. Objectives and Operation of the Technical Advisory Committee.** Mr. Malone provided an overview of the TAC’s purview and duties as defined by the Judgement and Rules & Regulations and provide recommended operating procedures for TAC meetings and reporting to the Watermaster Board. There was no discussion from the TAC on this item.

**IV. Meter Reading Program.** Mr. Malone outlined the TAC’s assignment of developing a recommendation to the Board on a meter reading program that will produce pumping data to support the technical requirements of the Judgement and GMP. A discussion ensued that resulted in a consensus draft recommendation to the Board<sup>1</sup>. Mr. Malone explained that the next steps are to develop a formal memorandum to the Board documenting the recommendation. Mr. Malone proposed to prepare the draft memorandum and circulate it amongst the TAC for review and editing. The final recommendation will be submitted to the Board as part of the agenda package for the November 12, 2020 Regular Board meeting.

**V. TAC Schedule for FY 2021.** Mr. Malone outlined the TAC’s assignment of recommending the general schedule and technical topics for subsequent TAC meetings. A discussion on the TAC’s purview and duties as defined by the Judgement and Rules & Regulations ensued, the key points of which included:

- The recommended technical scope of work and technical budget for water years 2022 and 2023 to address the update of the Sustainable Yield is due by June 1, 2021. This topic will require an extensive discussion and will be guided by language in the Judgement and the approved Watermaster estimated budget. It will be helpful if Watermaster staff first prepares a recommendation for the TAC to review and comment on before the TAC meets to discuss. The recommendation should be distributed two to three weeks before the TAC meeting.
- The TAC has already identified that a meeting in April will be needed to revise the meter reading program as discussed in the prior agenda item.
- The Groundwater Quality Monitoring Plan is due two years after entry of the Judgment and there will be monitoring performed in the interim. The most critical issue related to the monitoring plan is to fill data gaps. This discussion is also likely to be extensive.
- Ms. Adams clarified that prior to the adoption of a new Groundwater Quality Monitoring Plan, the Watermaster will continue to implement the existing semi-annual monitoring program.

Based on the discussion, the TAC recommended the following meeting dates and topics:

- April 2021
  - Update the meter reading program recommendation
  - Review and discuss the technical scope of work and budget for water years 2022 and 2023 to address the update of the Sustainable Yield
- May 2021 (TENTATIVE)
  - As needed follow-up meeting to continue discussion of the technical scope of work depending on the outcome of the April 2021 meeting.

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<sup>1</sup> The discussion and recommendation on the meter reading program are documented in a separate memorandum authored by the TAC.

**VI. Public Comments (time permitting). The following persons addressed the TAC:**

- Rebecca Falk expressed concern that the water quality data gaps are not being addressed yet.
  - Mr. Malone noted that water quality is critical to groundwater management and that data gaps will not be ignored by the TAC in their work.

**VII. Adjournment. Mr. Malone adjourned the meeting at 11:03 a.m.**

## Interim Borrego Springs Watermaster Technical Advisory Committee Meeting

**To:** Board of Directors  
**From:** Technical Advisory Committee (TAC)  
**Date:** November 9, 2020  
**Subject:** Recommended Watermaster Meter Reading Program

### **Objective**

The objective of this memorandum is to provide the Watermaster Board with a recommended meter-reading program to support the implementation of the Proposed Stipulated Judgment (Judgment) and the Groundwater Management Plan for the Borrego Springs Groundwater Subbasin (GMP). The program recommendation was discussed at the October 27, 2020 meeting of the Technical Advisory Committee (TAC) and finalized via email coordination. The recommendation was reached by consensus among all members of the TAC.

### **Background**

The Judgment, including the GMP constitutes the Physical Solution<sup>1,2</sup> and Groundwater Sustainability Plan Alternative for the Basin (Alternative) as overseen by the Court; provided, however, that the provisions of the Judgment control over and supersede any contrary provisions contained in the GMP. The Alternative provides a roadmap for how sustainability is to be reached in the Borrego Springs Groundwater Subbasin (Basin<sup>3</sup>).

The Judgment requires that Parties<sup>4</sup> holding a Baseline Pumping Allocation<sup>5</sup> (BPA) install and maintain meters approved by Watermaster that can electronically transmit a recording of the amount of groundwater pumped on a schedule as determined by the Watermaster. As an alternative, the Judgment allows any Party to install and maintain, at its own expense, manual-read meters approved by Watermaster on the condition that (i) the Watermaster physically read the meters on the schedule determined by the Watermaster and (ii) the Party has executed and Entry Agreement with the Watermaster (Judgment: Section VI.A). The Judgment also requires that each Party annually arrange for the meter manufacturer or qualified installer of such meters to provide written verification to the Watermaster of the ongoing accuracy of the meter readings and meter calibration (Judgment: Section IV.E.6).

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<sup>1</sup> Defined terms in the Judgment are defined in the footnotes.

<sup>2</sup> Physical Solution – the terms of the Judgment, including the GMP, attached as Exhibit “1”, which are intended to achieve Sustainable Groundwater Management for the Basin consistent with the substantive objectives of SGMA and Article X, section 2 of the California Constitution, and which may be modified over time in compliance with the procedures described in the Judgment.

<sup>3</sup> Basin – Borrego Springs Subbasin of the Borrego Valley Groundwater Basin as defined by California Department of Water Resources (DWR) Bulletin No. 118 as Subbasin No. 7-024.01. The boundaries of the Basin are set forth in DWR Bulletin 118, Subbasin No. 7-024.01

<sup>4</sup> Party (Parties) – Any Person(s) that has (have) been named and served or otherwise properly joined, or has (have) become subject to the Judgment and all their respective heirs, successors-in-interest and assigns.

<sup>5</sup> Baseline Pumping Allocation (BPA) – The maximum allowed Pumping quantity allocated to a Party to the Judgment.



As of October 2020, 100 percent of the pumping wells belonging to the Settlement Agreement Parties are metered and most of these wells (90 percent) have been assessed and verified as accurate by a meter manufacturer or qualified third-party installer. There are a total of 52 active pumping wells belonging to the Settlement Parties. Of these wells, 33 have manual-read meters and 19 have smart meters connected to telemetry. The Watermaster performed its first meter read event from September 28<sup>th</sup> through October 1<sup>st</sup> to collect the initial meter read for water year 2021, which began on October 1, 2020.

At its October 8, 2020 meeting, the Board directed that the TAC be convened to develop a recommendation for an ongoing meter reading program, including the frequency at which the meters should be read and reported and the protocols for collecting the meter reads.

### **Discussion**

The purpose of reading meters is to collect and document the information needed to calculate groundwater pumping at each active pumping well of the BPA Parties. Accurate pumping data was identified as a major data gap in the GMP and one of the sources of greatest uncertainty in the Borrego Valley Hydrologic Model (BVHM) used to estimate the Sustainable Yield<sup>6</sup> of the Basin. To improve the estimate of Sustainable Yield, the Alternative calls for collecting technical data including actual pumping data via existing or installation of new flow meters. The Alternative calls for the use of pumping data for:

- Annual reporting. Section IV.E.5(b) of the Judgment describes the contents of the Annual Report, including, among other things, a summary of aggregate pumping.
- Five-Year evaluation of the Sustainable Yield and Rampdown<sup>7</sup>. Section III.F of the Stipulated Judgment establishes a process to update the determination of the Sustainable Yield and Rampdown every five years.
- Periodic update of the groundwater model. The groundwater model is to be refined and will be used to assist in several of the activities listed above, including the re-assessment of the Sustainable Yield and Rampdown to achieve long-term sustainability goals.
- Under Watermaster Rule 4.2.9, the Watermaster Technical Consultant is to prepare and present to the Watermaster Board for approval any five-year updates to the Groundwater Management Plan required by DWR's review of the Alternative under Water Code section 10733.8, consistent with the terms of the Judgment.

In considering a recommended metering program to the Board, the TAC considered the following factors: frequency to support Alternative implementation, cost, and accuracy of meters. The following were the points of discussion:

- Annual reads are the minimum necessary to satisfy SGMA reporting requirements.

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<sup>6</sup> Sustainable Yield – The maximum quantity of water, calculated over a base period representative of long-term conditions in the Basin that can be cumulatively Pumped on an annual basis from the Basin without causing an Undesirable Result, consistent with SGMA (Wat. Code, § 10721(w)).

<sup>7</sup> Rampdown – The reduction in cumulative authorized Pumping of BPA imposed pursuant to the terms of this Judgment to alleviate the Overdraft of the Basin and achieve Sustainable Groundwater Management and the reasonable and beneficial use of the Basin's water resources.

- Meter reads will be among the key data that will be used for the update of the Sustainable Yield and Rampdown.
- A monthly time step for pumping data would allow for the best understanding of seasonal variability of basin conditions (groundwater levels, storage, recharge), which are related to the variability in pumping and seasonal recharge.
- Quarterly meter reads could also capture seasonal variability, but given the current lack of data, it may be prudent to collect monthly data for the first year and then assess if quarterly reads are sufficient to capture the variability.
- Executive Director Adams reported that:
  - The total cost for the Borrego Water District to perform the initial meter reading event at the manual read meters was about \$1,700. Based on the current number of manual-read meters (33), this works out to a cost of about \$52 per meter. The BWD has reported that future meter read events are expected to be less costly because the first meter read event included initial coordination efforts with the pumpers that will not be needed in the future if BWD continues to provide meter reading services for the Watermaster. The total cost could be about half to one-third the cost of the initial meter read event (\$600 to \$850). This estimated cost equates to approximately \$18-\$26 per meter.
  - Only pumpers with manual-read meters are incurring costs associated with meter reading. The pumpers with smart meters that read via telemetry don't incur costs for the Watermaster's remote meter reading.
- At the request of the TAC, Michele Staples (legal counsel to the parties represented by AAWARE) reported that the goal of the stipulated agreement was to incentivize the installation of smart meters that could be read at the same frequency as manual-read meters without the Watermaster physically reading, inspecting and validating the accuracy of meters. (See Judgment section VI.A.).
- Self-reporting of meter reads should be considered for costs savings, but the frequency should be balanced with the need to ensure accuracy of pumping estimates and that seasonality of the data is captured in the event that pumpers don't self-report.
- Accurate groundwater pumping data is critical information for the five-year updates of Sustainable Yield and Rampdown under Judgment section III.F. The accuracy of the meter reading program is a concern considering the errors that are sometimes associated with start-up of the new meter-reading program. The meter verification and accuracy protocols required in the Judgment will ensure the long term accuracy of the meters, however more frequent reads are prudent in the first year to assess accuracy of the pumping estimates and identify any challenges.
- Technology on the telemetry systems is rapidly evolving. Based on past work by TAC members, agencies have experienced challenges and errors with telemetry system reporting. It would be helpful to better understand the telemetry systems installed by the pumpers in Borrego and it would be prudent for owners of smart meters to perform

periodic verification in the field to compare the manual meter readouts with the telemetry reports, at least in the initial year of monitoring.

- Executive Director Adams reported that there are two different telemetry vendors (McCrometer and SWIIM) used by the pumpers and that both could be contacted to provide information about the technology to the TAC.
- With regards to assessing the accuracy of the pumping data and as a check on assumptions made in the GMP to estimate water use (in particular, the parcel-level estimates), there should be a review process to compare the measured pumping with the pumping estimates in GMP.
- Executive Direct Adams reported that there has been a reported concern of allowing BWD to read its own meters as part of the official Watermaster meter reads of manual-read meters and she requested input on how to address this concern. Director Bennett commented that, as a public agency, there are already very strong incentives for accurate reporting and concern is limited given the protocols adopted by the Watermaster for meter reading, which include providing a picture of the meter face during the meter read event. During the annual meter accuracy testing event, the meter reads provided by the third-party vendor performing the testing could serve as a data point to verify that the meter reads are consistent with the BWD reporting.

**Recommendation to the Board**

Based on the above discussion, and subsequent coordination via email, the TAC recommends the following meter reading program:

- Watermaster should initially establish a monthly frequency for meter read reporting to support the effective implementation of the GMP based on the Water Year<sup>8</sup> (WY).
- Not all meter reads need to be performed by Watermaster. Self-reporting of meter reads is acceptable between official Watermaster meter read events.
- During the first seven months of the meter reading program (through March 31, 2021), a high frequency of meter reading is recommended as follows for manual-read and smart meters:
  - Manual-Read Meters
    - Official Watermaster meter-read events: Watermaster should perform official meter read events on a bimonthly schedule for the first six months, on or about:
      - November 30, 2020
      - January 31, 2021
      - March 31, 2021

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<sup>8</sup> Water Year – October 1st to September 30th. (Wat. Code, § 10721(aa).)

- Self-Reporting meter meter-read events: Watermaster should direct the Parties to read and self-report meter reads on or about the last day of the month in December 2020, February 2021, and April 2021. Parties with manual-read meters can provide Watermaster staff with an email of the reporting period meter read, including the date and time of the read and a time-stamped photograph of the meter face as evidence of its readout value.
    - Smart Meters
      - Official Watermaster meter-read events: Watermaster should perform official meter read events via telemetry on a bimonthly schedule for the first six months, on or about:
        - November 30, 2020
        - January 31, 2021
        - March 31, 2021
      - Self-Reporting meter meter-read events: Watermaster should direct the Parties to read and self-report meter reads on or about the last day of the month in December 2020, February 2021, and April 2021.  
  
Parties can provide Watermaster staff with a PDF print out of the meter reads from the telemetry dashboard for the reporting period, or they can request Watermaster staff to read the smart meters via telemetry.
      - Parties with smart meters should perform quarterly field verifications (manual reads) of smart meters to compare to the telemetry reported reads, and report the results (including the date and time of the manual read and a time-stamped photograph of the meter face as evidence of its readout value), on or about:
        - December 31, 2020
        - March 31, 2021
- The ongoing frequency of official Watermaster meter reads for the remainder of WY 2021 should be revisited by the TAC in April 2021 based on an assessment of the data collected through March 31, 2021 and the effectiveness of the self-reporting.
- If BWD will continue as the Watermaster contractor to perform meter reads of manual-read meters, a third-party verification of BWD meters should be done annually.

**Interim Borrego Springs Watermaster  
Board of Directors Meeting  
November 12, 2020  
AGENDA ITEM IV.B**

**To:** Board of Directors  
**From:** Samantha Adams (WEI), Executive Director  
**Date:** November 9, 2020  
**Subject:** Environmental Working Group (EWG)

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<input checked="" type="checkbox"/> <b>For Action</b>	<input type="checkbox"/> <b>Fiscal Impact</b>	<input type="checkbox"/> <b>Funds Budgeted</b>
<input type="checkbox"/> <b>Information Only</b>	<input type="checkbox"/> <b>Cost Estimate:</b>	<b>\$</b>

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**Recommended Action**

Form a subcommittee of the Board, including appointment of two Directors, to develop a recommendation to the Board on the formation of the EWG and its scope of work for WY 2021.

Fiscal Impact: None – the Watermaster budget included in the Settlement Agreement includes \$20,000 for implementation of the EWG in WY 2021.

**Background**

Section IV.H of the proposed Stipulated Judgment provides that:

*An Environmental Working Group (EWG) will be established to advise the Watermaster on GDE and any other matters approved by the Watermaster. The EWG budget, which shall be adequate for the EWG to carry out its responsibilities as directed by the Watermaster, will be included in the Watermaster Budget.*

Section 2.6.3 of the Rules & Regulations provides that:

*An EWG shall be established to advise the Watermaster on GDE and any other matters approved by the Watermaster Board.*

The interim Watermaster Budget, which was included as an attachment to the Settlement Agreement, provides a budget line-item of \$20,000 for the EWG in Water Year 2021.

**Discussion and Recommendation**

The above noted references represent the full extent of the guidance for the Watermaster in establishing the EWG. To effectively initiate and administer the EWG, the following process is recommended:

1. Establish an EWG Subcommittee of the Board (two appointees), to be supported by Watermaster’s Technical Consultant.
2. Direct the EWG Subcommittee to meet and develop a recommendation to the Board on: a process for establishing the EWG (membership, meeting protocols), a draft scope of work for

the EWG in WY 2021 (to be reviewed with the EWG before finalizing), and an agenda for the inaugural meeting.

3. The EWG Subcommittee presents its recommendation to the Board at the January Regular Board meeting (January 14, 2021).
4. The EWG Subcommittee forms the EWG pursuant to Board direction and schedules an inaugural meeting for February 2021.

**Interim Borrego Springs Watermaster  
Board of Directors Meeting  
November 12, 2020  
AGENDA ITEM IV.C**

**To:** Board of Directors  
**From:** Samantha Adams (WEI), Executive Director  
**Date:** November 9, 2020  
**Subject:** Administrative and Technical Services: Statement of Work and Budget for Water Year 2021

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<input checked="" type="checkbox"/> For Action	<input type="checkbox"/> Fiscal Impact	<input type="checkbox"/> Funds Budgeted
<input type="checkbox"/> Information Only	<input type="checkbox"/> Cost Estimate:	\$

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**Recommended Action**

1. Approve an amendment to Exhibit A of the WEI PSA to include the SOW and \$55,132 budget for *Task 3.3 – Implement Interim Groundwater Monitoring Program* as defined in Statement of Work No. 2.
2. Direct staff to bring the remainder of the SOW and budget for Board consideration at its Regular meeting on December 10, 2020.

**Fiscal Impact:** None – the Watermaster budget included in the Settlement Agreement includes funding in the amount of \$78,000 for implementing the interim groundwater monitoring program.

**Background**

At its August 13, 2020 Special Board meeting, the Board approved execution of a Professional Services Agreement (PSA) with WEI. Section 1 of the PSA provides that:

*“Consultant shall provide Watermaster with the services generally described in the Statement of Work attached hereto as Exhibit “A”, and as required herein. The Parties contemplate that additional statements of work will be agreed to in writing. Upon execution by both Parties, upon Watermaster Board approval, the work described therein will become a part of the Statement of Work and subject to the terms and conditions of this Agreement without further amendment to the Agreement...”*

The Statement of Work includes an associated budget for each administrative and technical task. The initial Statement of Work included in Exhibit A to the PSA (SOW No. 1) was intended to cover only the initial tasks envisioned as necessary for the first two to three months of Watermaster operations. The Board requested that Directors Smith and Bennett coordinate with WEI to develop an expanded Statement of Work and associated budget to cover the anticipated administrative and technical services for the remainder of WY 2021 (e.g. through September 30, 2021).

**Discussion**

Enclosed with this memo is a draft amended Statement of Work (SOW No. 2) that describes the scope and additional budget for performing the anticipated Watermaster administrative and technical services through the end of WY 2021. The tasks within the Statement of Work were defined in coordination with Directors Smith and Bennett. SOW No. 2 includes the following major tasks:

**Task 1 – Meetings and Court Hearings.** The objective of this task is to prepare for and attend Watermaster Board Meetings, TAC Meetings, Environmental Working Group (EWG) Meetings, and Court Hearings. This includes coordinating with the Board, legal counsel, TAC members, and EWG members to prepare the agenda packages, preparing presentation materials, leading the meetings, and preparing minutes. For Court hearings, the Executive Director and lead Technical Consultant will coordinate with legal counsel to prepare court submissions, prepare for the hearings, and attend the hearings.

**Task 2 – Watermaster Administration and Management.** The objective of this task for the Executive Director to organize, oversee, and/or perform the administrative and management aspects of the Judgment, Rules and Regulations, and GMP. This could include: preparing Watermaster budgets, accounting and financial services, maintaining a website, documents and record maintenance, responding to public information requests, supporting grant funding, as-needed administration of the terms of the Judgment, Rules & Regulations, and GMP, and general administration and project management.

**Task 3 – Technical Services.** The objective of this task is for the Technical Consulting team to perform the technical services required by the Judgment, Rules and Regulations, and GMP for WY 2021. This could include: implanting the data management system, initiating Watermaster’s metering program, collecting and tracking annual water rights accounting information, implementing the interim GMP monitoring program, CASGEM compliance, update of the Borrego Valley Hydrologic Model and sustainable yield, annual reporting to the Court and DWR, and as-needed technical support for implementation of the Judgment, Rules & Regulations, and GMP.

Included as an attachment to SOW No. 2 is a detailed line-item work breakdown structure that shows the labor and direct costs for each major task and sub-task (Exhibit 1). The costs were prepared based on the fee proposal included as Exhibit B to the PSA. Note that the labor estimates are intended to cover the maximum anticipated scope of services for each task and subtask and represent a budget-level estimate. WEI bills the Watermaster on a time- and materials-basis and will not bill for services included in the SOW that are not performed.

The following table summarizes the proposed budget for the major categories of work proposed in SOWs No. 1 and 2.



**Administrative and Technical Services Budgets for SOWs No. 1 and 2**

Task	SOW No. 1	SOW No. 2	Total
T1 – Meetings and Court Hearings	\$20,000	\$146,046	\$166,046
T2 – Watermaster Administration and Management	\$7,521	\$55,136	\$62,657
T3 – Technical Services	\$25,672	\$142,392	168,064
<b>Total</b>	<b>\$53,193</b>	<b>\$343,573</b>	<b>\$397,766</b>

**Recommendation**

Staff recognizes that that the enclosed SOW No. 2 contains a lot of information, and that the Board will need time to review, discuss, and potentially refine it. There is one line-item within the budget that warrants immediate attention by the Board: the implementation of the interim groundwater monitoring program defined in the GMP. Given that the semi-annual program was not fully implemented in the spring of 2020 due to COVID-related challenges, the Board has identified that it is critical to perform a monitoring event before the end of the 2020 calendar year. The SOW and budget for this task are as follows:

**3.3 Implement Interim Groundwater Monitoring Program.** This task includes implementing the interim groundwater monitoring program for fall 2020 and spring 2021. The monitoring program includes semi-annual field collection of groundwater-level measurements (manual and pressure transducer downloads), groundwater-quality samples<sup>1</sup>, and surface-water flow measurements as implemented by the County in prior years. The analytes for water quality sampling include arsenic, fluoride, nitrate, sulfate and total dissolved solids (TDS); and all other major anions and cations. Following the field events, the field and laboratory data will be cataloged, processed into standardized formats, reviewed for QA/QC, and uploaded to HydroDaVE. This task includes the operation and maintenance of wells, measuring devices, and/or meters necessary to monitor stream flow, precipitation, groundwater levels. This task also includes annual collection and processing of other environmental datasets relied on to manage the Basin, including precipitation, climate, surface-water quality, municipal well water quality, and others, along with inspections of fallowed land. *Budget: \$55,132*

Staff recommends that the Board review and discuss SOW No. 2 and:

- (1) approve an amendment to Exhibit A of the WEI PSA to include the Statement of Work and budget for Task 3.3 -- Implement Interim Groundwater Monitoring Program, and
- (2) direct staff to bring the remainder of the Statement of Work and budget for Board consideration at its Regular meeting on December 10, 2020.

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<sup>1</sup> Assumes BWD will collect samples at its nine active production wells.

**Encl.**

Draft Borrego Watermaster Statement of Work No. 2

Exhibit 1 to SOW No. 2: Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for the November 2020 to September 2021 Period

**Borrego Watermaster Statement of Work No. 2**

November 9, 2020

The following describes the statement of work for WEI administrative and technical services for November 1, 2020 through September 30, 2021. The budget amounts shown are in addition to the budget allocated in Statement of Work No. 1, which was approved by the Board on August 13, 2020. The attached Exhibit 1 provides the line item cost estimate detail for each task and sub-task, including labor and other direct charges.

**Task 1 – Meetings and Court Hearings.** Prepare for and attend 16 Watermaster Board (Board) Meetings, 3 TAC Meetings, 2 Environmental Working Group (EWG) Meetings, and Court Hearings through September 30, 2021. This includes coordinating with the Board, legal counsel, TAC members, and EWG members and preparing the agenda packages, preparing presentation materials, leading the TAC and EWG meetings, and preparing minutes. **Budget: \$146,046**

**Task 2 – Watermaster Administration and Management.** The Executive Director will organize, oversee, and/or perform the administrative and management aspects of the Judgment, Rules and Regulations, and GMP for Water Year 2021. This includes the following subtasks:

**2.1 Prepare the Watermaster annual budget.** In collaboration with the TAC, prepare a technical scope and budget for work through September 2024 by June 1, 2021 (Judgment Section III.F.1); prepare a draft administrative and technical budget for WY 2022 by June 31, 2021; and finalize the budget for approval by October 2021. **Budget: \$12,602**

**2.2 Insurance, Accounting and financial services.** Obtain and maintain insurance policies (e.g., liability insurance) as directed by the Board; establish initial accounts of groundwater pumpers, prepare monthly financials, banking, issuing assessment invoices, overseeing the annual audit, and other as-requested services. **Budget: \$12,761**

**2.3 Administer Baseline Pumping Allocation (BPA) Program.** Prepare and maintain a report of any transfer of BPA in accordance with data collected in Task 3.2, update Exhibit 4 to the Judgment and file with Court annually or file a statement that no transfer of BPA has occurred in the prior Water Year. **Budget: \$2,246**

**2.4 Watermaster documents and records maintenance.** Compile and catalogue all of the reference documents, official correspondence, and Watermaster files and records, and developing a system to track and catalog new records as they are received and storing a copy of all records available for public access pursuant to Section 2.7.2 of the Rules and Regulations. The documents will also be saved to a project library within HydroDaVE. Also, ensure confidential data is maintained accordingly. **Budget: \$7,508**

**2.5 Watermaster website and Notifications.** This includes procuring a website domain, hosting the website, setting up the website, maintaining the website, posting notices, determinations, requests, demands, objections, reports, and other papers pursuant to

**Borrego Watermaster Statement of Work No. 2**

November 9, 2020

The following describes the statement of work for WEI administrative and technical services for November 1, 2020 through September 30, 2021. The budget amounts shown are in addition to the budget allocated in Statement of Work No. 1, which was approved by the Board on August 13, 2020. The attached Exhibit 1 provides the line item cost estimate detail for each task and sub-task, including labor and other direct charges.

**Task 1 – Meetings and Court Hearings.** Prepare for and attend 16 Watermaster Board (Board) Meetings, 3 TAC Meetings, 2 Environmental Working Group (EWG) Meetings, and Court Hearings through September 30, 2021. This includes coordinating with the Board, legal counsel, TAC members, and EWG members and preparing the agenda packages, preparing presentation materials, leading the TAC and EWG meetings, and preparing minutes. *Budget: \$146,046*

**Task 2 – Watermaster Administration and Management.** The Executive Director will organize, oversee, and/or perform the administrative and management aspects of the Judgment, Rules and Regulations, and GMP for Water Year 2021. This includes the following subtasks:

**2.1 Prepare the Watermaster annual budget.** In collaboration with the TAC, prepare a technical scope and budget for work through September 2024 by June 1, 2021 (Judgment Section III.F.1); prepare a draft administrative and technical budget for WY 2022 by June 31, 2021; and finalize the budget for approval by October 2021. *Budget: \$12,602*

**2.2 Insurance, Accounting and financial services.** Obtain and maintain insurance policies (e.g., liability insurance) as directed by the Board; establish initial accounts of groundwater pumpers, prepare monthly financials, banking, issuing assessment invoices, overseeing the annual audit, and other as-requested services. *Budget: \$12,761*

**2.3 Administer Baseline Pumping Allocation (BPA) Program.** Prepare and maintain a report of any transfer of BPA in accordance with data collected in Task 3.2, update Exhibit 4 to the Judgment and file with Court annually or file a statement that no transfer of BPA has occurred in the prior Water Year. *Budget: \$2,246*

**2.4 Watermaster documents and records maintenance.** Compile and catalogue all of the reference documents, official correspondence, and Watermaster files and records, and developing a system to track and catalog new records as they are received and storing a copy of all records available for public access pursuant to Section 2.7.2 of the Rules and Regulations. The documents will also be saved to a project library within HydroDaVE. Also, ensure confidential data is maintained accordingly. *Budget: \$7,508*

**2.5 Watermaster website and Notifications.** This includes procuring a website domain, hosting the website, setting up the website, maintaining the website, posting notices, determinations, requests, demands, objections, reports, and other papers pursuant to

**Borrego Watermaster Statement of Work No. 2**

November 9, 2020

the Judgment; also includes providing electronic notification to Stipulated Agreement Parties when noticing required by the Judgment. *Budget: \$0 (fully funded for fiscal year 20-21 under SOW No. 1)*

**2.6 Maintain stakeholder communication list and list of Stipulated Agreement Parties.** Maintain an active list (names, affiliation, contact details) of stakeholders interested in receiving notifications regarding Watermaster activities; also maintain a current list of names and addresses of all Parties to Stipulated Agreement or their successors. *Budget: \$1,267*

**2.7 Grant Funding.** Monitor available grant opportunities and prepare grant application documents as directed by the Board. *Budget: \$0 (Placeholder for future work)*

**2.8 Respond to and track public information requests.** This includes timely response to requests for data and information from the Parties or the public. All requests will be responded to and tracked in a manner consistent with any communications policies adopted by the Watermaster. *Budget: \$3,534*

**2.9 As-needed administration of the terms of the Judgment, Rules and Regulations, and GMP.** This includes any other as-needed performance of non-routine services to implement and update the Watermaster guidance documents. *Budget: \$9,344*

**2.10 Other general administration and project managements tasks.** This includes, but is not limited to, managing staff and subconsultants, tracking task schedules and progress, and tracking budget progress. *Budget: \$5,874*

**Task 3 – Technical Services.** The objective of this task is for the Technical Consulting team to perform the technical services required by the Judgment, Rules and Regulations, and GMP for WY 2021. This includes:

**3.1 Implement HydroDaVE as centralized Watermaster database for all groundwater, surface water, and climate data.** This includes converting the existing Data Management System (DMS) to HydroDaVE managed services to manage the Watermaster data sets. The work involves collecting all relevant environmental data, including GIS shapefiles, cataloging them, and loading sites and legacy data. *Budget: \$0 (fully funded for fiscal year 20-21 under SOW No. 1)*

**3.2 Collect and track data for annual water rights accounting.** This includes program set-up and collection, QA/QC, and uploading/storing the following information: Annual Pumping Reports; information on BPA transfers, leases, and assignments (including following data); and meter calibration and accuracy reports.

Task 3.2(a) Initial data collection to support confirmation of meter installations and verification of meter accuracy. This includes start up coordination of the

**Borrego Watermaster Statement of Work No. 2**

November 9, 2020

meter verification program and collecting, QA/QC, and uploading/storing the pumping well information and initial meter calibration and accuracy reports. *Budget: \$10,414*

Task 3.2(b) Set up and implement initial meter reading event. This includes start up coordination of the meter reads, including testing telemetry login, collecting contact information, executing Entry Permits, contracting the initial meter read event, and recording and reviewing the initial meter reads. *Budget: \$5,611*

Task 3.2(c) Collect, review, and record information on transfers, leases, and assignments, including following data. *Budget: \$4,704*

Task 3.2(d) Collect and review annual meter calibration and accuracy reports, estimate pumping (as needed) at the end of WY 2021. *\$0 (fully funded for fiscal year 20-21 under SOW No. 1)*

**3.3 Implement GMP Monitoring Program.** This task includes implementing the interim groundwater monitoring program for fall 2020 and spring 2021. The monitoring program includes semi-annual field collection of groundwater-level measurements (manual and pressure transducer downloads), groundwater-quality samples<sup>1</sup>, and surface-water flow measurements as implemented by the County in prior years. The analytes for water quality sampling include arsenic, fluoride, nitrate, sulfate and total dissolved solids (TDS); and all other major anions and cations. Following the field events, the field and laboratory data will be cataloged, processed into standardized formats, reviewed for QA/QC, and uploaded to HydroDaVE. This task includes the operation and maintenance of wells, measuring devices, and/or meters necessary to monitor stream flow, precipitation, groundwater levels. This task also includes annual collection and processing of other environmental datasets relied on to manage the Basin, including precipitation, climate, surface-water quality, municipal well water quality, and others, along with inspections of fallowed land.. *Budget: \$55,132*

**3.4 Meter Reading.** Groundwater extraction metering data will be used throughout the GSP implementation period to quantitatively track compliance with prescribed pumping allocations and reductions. This task includes coordinating meter read events and collecting and performing QA/QC of meter reads on a schedule to be determined by the Board and in accordance with the Metering Plan and Section VI.A of the Judgment. Budget assumes monthly meter read data is collected by the parties. *Budget: \$12,095*

**3.5 CASGEM Compliance.** This task includes using HydroDaVE to export data using our custom CASGEM report that provides the data in the exact format required by the DWR.

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<sup>1</sup> Assumes BWD will collect samples at its nine active production wells.

**Borrego Watermaster Statement of Work No. 2**

November 9, 2020

Data will be delivered to DWR twice per year following the fall and spring monitoring events in Task 3.3. *Budget: \$1,288*

**3.6 Annual Review and Updates of Borrego Valley Hydrologic Model.** The Borrego Valley Hydrologic Model (BVHM) developed by the USGS using the numerical modeling code MODFLOW One-Water Hydrologic Flow is used by the Watermaster to support management of the Basin. Pursuant to Section III.F.2 of the Judgment, update the model to confirm Sustainable Yield in collaboration with the TAC. During the first four Water Years (2020-2021 to 2023-2024), the consultant will use additional data collected in Task 3.3 and refine the BVHM in support of annual reporting requirements to DWR. In WY 2021, this task involves collecting and review the BVHM to support future updates. *Budget: \$9,052*

**3.7 Sustainable Yield.** Revise, if necessary, the determination of sustainable yield for water years 2025/2026 through 2029/2030 (second five-year period) pursuant to Section III.F.3 of the Judgment. This task should commence after Water Year 2023-2024 and to be completed no later than December 31, 2024. The revised determination of sustainable yield will consider all sources of replenishment, including return flows and underflows, and all outflows from the Basin. It will also consider, among other data, information derived from updated runs of the BHVM conducted in Task 3.6 through Water Year 2023-2024. *Budget: \$0 (Placeholder for future work)*

**3.8 Annual Report to Court and DWR.** Prepare the draft and final annual report pursuant to the requirements of Section IV.E(5)(b) of the Judgment and Section 4.2.8 of the Rules and Regulations. The draft report will be completed by February 1, 2021 for review at a public hearing and the final report will be completed and submitted to the Court and the DWR no later than April 1, 2021. *Budget: \$25,656*

**3.9 As-needed technical support for implementation of the Judgment, Rules and Regulations, and Groundwater Management Plan.** This includes any other as-needed performance of non-routine technical services to implement and update the Watermaster guidance documents, such as updating the approved production meter list, educating the Board and TAC on Best Management Practices, or use of the BVHM. *Budget: \$18,020*



Exhibit 1

Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for the November 2020 to September 2021 Period  
Statement of Work No. 2

Task and Subtask Descriptions	Footnotes	Labor Hours and Cost											Reimbursable Expenses					Total Project Costs										
		Executive Director	Lead Technical	CFO/Accounting	Principal III	Principal I	Supervising I	Senior II	Staff II	Staff Eng/Sci/Geo I	Field Technician	Tech Editor/Admin Asst.	Task Repetition Multiplier	Total Person Hours	WEI Labor Cost		Travel	Field Equip-ment Rental or Purchase	Lab-oratory	Sampling Services for Wells without Pumps	Total Reimbursable Expenses		Sub-Task	Task				
															Sub-Task	Task					Sub-Task	Task						
<b>Task 1 - Meetings and Court Hearings</b>																										<b>\$145,239</b>	<b>\$807</b>	<b>\$146,046</b>
1.1 Watermaster Board Meetings																										<b>\$95,428</b>	<b>\$557</b>	<b>\$95,985</b>
Prepare for and attend 8 Regular Board meetings (Virtual)		12	2					8	3	8	200	\$43,376														\$0	\$43,376	
Prepare for and attend 4 Regular Board meetings (In Person)		20	2					16	3	4	164	\$35,384	\$557													\$557	\$35,941	
Prepare for and attend 4 Special Board meetings (Virtual)		10	1					6	2	4	76	\$16,668														\$0	\$16,668	
1.2 Technical Advisory Committee Meetings																									<b>\$27,084</b>	<b>\$0</b>	<b>\$27,084</b>	
Prepare for and attend 3 TAC Meetings (Virtual)		6	6			2	2	4		3	60	\$14,160														\$0	\$14,160	
Prepare recommendation memos to the Board		4	8			2		4		3	54	\$12,924														\$0	\$12,924	
1.3 Environmental Working Group Meetings																									<b>\$17,387</b>	<b>\$0</b>	<b>\$17,387</b>	
Support EWG Subcommittee		3	8							1	11	\$2,937														\$0	\$2,937	
Prepare for and attend 2 EWG Meetings (Virtual)		3	6			8				2	34	\$8,486														\$0	\$8,486	
Prepare recommendation memos to the Board		2	4			6				2	24	\$5,964														\$0	\$5,964	
1.4 Court Hearings																									<b>\$5,340</b>	<b>\$250</b>	<b>\$5,590</b>	
As-needed attendance		20								1	20	\$5,340	\$250													\$250	\$5,590	
<b>Task 2 - Watermaster Administration and Management</b>																									<b>\$55,136</b>	<b>\$0</b>	<b>\$55,136</b>	
2.1 Prepare the draft and final Watermaster budget for administrative work through September 30, 2022 and technical work through September 30, 2023	a	20	20	4				6		1	50	\$12,602														\$0	\$12,602	
2.2 Insurance, accounting and financial services (initial setup; monthly financials, banking; assessments; oversee audit)		3		52						1	55	\$12,761														\$0	\$12,761	
2.3 Administer Baseline Pumping Allocation (BPA) Program		6						4		1	10	\$2,246														\$0	\$2,246	
2.4 Watermaster documents and records maintenance (set up and implementation)		4						40		1	44	\$7,508														\$0	\$7,508	
2.5 Set up and maintain Watermaster website	b									1	0	\$0														\$0	\$0	
2.6 Maintain stakeholder communication list								5	3.5	1	8.5	\$1,267														\$0	\$1,267	
2.7 Grant funding support	c									1	0	\$0														\$0	\$0	
2.8 Respond to and track public information requests		6						12		1	18	\$3,534														\$0	\$3,534	
2.9 As-needed administration of the Judgment, Rules and Regulations, and GMP	d	24					8	8		1	40	\$9,344														\$0	\$9,344	
2.10 Other general administration and project managements tasks (staff management, status reporting, oversight, etc.)		2								11	22	\$5,874														\$0	\$5,874	





Exhibit 1

Labor Hours and Fee Estimate to Provide Professional Services to the Borrego Springs Watermaster: Executive Director and Technical Consultant Services for the November 2020 to September 2021 Period  
Statement of Work No. 2

Task and Subtask Descriptions	Footnotes	Labor Hours and Cost											Reimbursable Expenses					Total Project Costs							
		Executive Director	Lead Technical	CFO/Accounting	Principal III	Principal I	Supervising I	Senior II	Staff II	Staff Eng/Sci/Geo I	Field Technician	Tech Editor/Admin Asst.	Task Repetition Multiplier	Total Person Hours	WEI Labor Cost		Travel	Field Equip-ment Rental or Purchase	Lab-oratory	Sampling Services for Wells without Pumps	Total Reimbursable Expenses		Sub-Task	Task	
															Sub-Task	Task					Sub-Task	Task			
<b>Task 3 - Technical Services</b>														<b>\$115,278</b>						<b>\$27,114</b>				<b>\$142,392</b>	
3.1 Implement HydroDaVE as centralized Watermaster database for all groundwater, surface water, and climate data (one-time event to load GIS, monitoring sites, and all legacy data)	b												0		\$0						\$0				\$0
3.2 Collect and track data for annual water rights accounting															<b>\$20,729</b>						<b>\$0</b>				<b>\$20,729</b>
a Initial data collection to support confirmation of meter installations and verification of meter accuracy		30	4					8				1	42	\$10,414							\$0	\$10,414			
b Set up and implement meter reading program		16	2						5			1	23	\$5,611							\$0	\$5,611			
c Collect, review, and record information on transfers, leases, and assignments (including following data)		8	6						6			1	20	\$4,704							\$0	\$4,704			
d Collect and review annual meter calibration and accuracy reports, estimate pumping (as needed)	b											1	0	\$0							\$0	\$0			
3.3 Implement Interim Groundwater Monitoring Program															<b>\$28,438</b>						<b>\$27,114</b>				<b>\$55,552</b>
Semi-annual field collection of groundwater level and water quality data for interim monitoring program	e							3	3	60		2	132	\$12,048		\$3,166	\$750	\$ 6,720	\$ 15,968	\$26,604	\$38,652				
Semi-annual field collection of surface flow data at 5 sites	f							1		20		2	42	\$3,694		\$450	\$60			\$510	\$4,204				
Semi-annual review, QA/QC, and upload of groundwater and surface water data to HydroDaVE (field/lab data)								6		16		2	44	\$7,912						\$0	\$7,912				
Annual collection, process, and upload of other hydrologic and water quality data (precip, climate, municipal well WQ)								4		24		1	28	\$4,784						\$0	\$4,784				
3.4 Coordinate meter reading program.		0.5								6		11	72	<b>\$12,095</b>							<b>\$0</b>			<b>\$12,095</b>	
3.5 CASGEM Compliance (fall 2020 and spring 2021 reporting)										4		2	8	<b>\$1,288</b>							<b>\$0</b>			<b>\$1,288</b>	
3.6 Collect and review the Borrego Valley Hydrologic Model					4	24	8					1	36	<b>\$9,052</b>							<b>\$0</b>	\$0		<b>\$9,052</b>	
3.7 Update Sustainable Yield	c											1	0	<b>\$0</b>							<b>\$0</b>			<b>\$0</b>	
3.8 Annual Report to the Court and DWR (due by April 1, 2021)		12	12					24	24	48	8	1	128	<b>\$25,656</b>							<b>\$0</b>			<b>\$25,656</b>	
3.9 As-needed technical support for implementation of the Judgment, Rules and Regulations, and GMP	g		24		8	8	16	8	8	4		1	76	<b>\$18,020</b>							<b>\$0</b>			<b>\$18,020</b>	
<b>Task Totals</b>		<b>436</b>	<b>166</b>	<b>56</b>	<b>12</b>	<b>32</b>	<b>104</b>	<b>46</b>	<b>30</b>	<b>444</b>	<b>160</b>	<b>56</b>	<b>898</b>	<b>\$315,653</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,921</b>				<b>\$343,573</b>	

- Notes:**
- a The technical scope of work will be prepared in collaboration with the TAC.
  - b This task was fully funded in prior statement of work.
  - c Placeholder for future work
  - d Task 2.8 covers as-needed administrative support for implementation of the Judgment, Rules and Regulations, and Groundwater Management Plan.
  - e Assumes: 44 WL wells: download of data loggers at 17 wells, manual WL measurements at 27 wells. Assumes 21 WQ wells: 14 active production wells, low flow sampling at 7 wells. Assumes BWD will monitoring its own active production wells (9 wells). Includes travel time/costs associated with 5 night stay to perform all the work. The 7 low-flow wells in the water quality monitoring program will be sampled by BlaineTech Services. These wells do not have dedicated pumps for collecting samples and specialized equipment is needed.
  - f Requires two field technicians for safety reasons.
  - g Task 3.8 covers as-needed administrative support for implementation of the Judgment, Rules and Regulations, and Groundwater Management Plan.

