Borrego Springs Watermaster
Regular Board Meeting
November 19, 2025 @ 3:00 p.m.
Meeting Available by Remote Access Only*

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Instructions for Public Comment

The public may address the Board on items within the Watermaster's Jurisdiction that are included or not included on the meeting agenda.

To address the Board on items that are not included on the meeting agenda, the public may request to speak during ***Agenda Item II – Public Correspondence***. Comments may be limited to three minutes per speaker.

To address the Board on items that are included on the meeting agenda, the Board Chairperson will call for public comments immediately following the agenda item's staff report presentation and prior to Board discussion.

AGENDA

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

I. OPENING PROCEDURES (Chair)

A. Call to Order and Begin Meeting Recording
B. Pledge of Allegiance
C. Roll Call
D. Approval of Agenda

II. PUBLIC CORRESPONDENCE/COMMENT (Chair)

The Board may direct staff to include topics brought forward during Public Correspondence and Comment on a future meeting agenda. No action or discussion is otherwise taken by the Board. Written correspondence includes items received between October 9, 2025 and November 5, 2025.

A. Correspondence Received
   i. November 3, 2025 Letter from David Garmon .....**Page 4**

B. Public Comment

III. **CONSENT CALENDAR (Chair)**

Action Item: All items may be approved with a single motion

V. REPORTS

VII. BOARD MEMBER COMMENTS

VIII. NEXT MEETINGS OF THE BORREGO SPRINGS WATERMASTER

A. Regular Board Meeting – Wednesday, December 17, 2025 at 3:00 pm

B. Regular Board Meeting – Wednesday, January 21, 2026 at 3:00 pm

IX. ADJOURNMENT

Tubb Canyon Desert Conservancy

November 3, 2025

Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

VIA EMAIL ONLY

Dear Members of the Watermaster Board,

I write today to express confidence that in the very near future it will be clear to all stakeholders that the UCI GDE Study represents the Best Available Science regarding our subbasin's mesquite bosque. Ultimately, the "gravitational force" of truth and scientific rigor proves to be irresistible.

Best Available Science has a long history of struggling for broad acceptance and of being at odds with vested interests. For example, at the dawn of the scientific revolution the Church refused to accept Copernicus's scientific discovery that the earth orbits the sun. It took a while, but eventually we got there.

In modern times, the tobacco industry did everything in its power to squash the scientific knowledge that cigarette smoking increases the risk of lung cancer. But we eventually got there.

More recently, the fossil fuel industry has tried to suppress the scientific knowledge that our climate is changing as a result of human activity. Fortunately, with the sad exception of the United States, most of the rest of the world has gotten there.

I am pleased to report today there is new evidence that we, as a community, are "getting there" as it pertains to the scientific knowledge created by the UCI GDE Study. In a public meeting of the Borrego Water District within the last three weeks, the author of Appendix D4 of the GMP publicly stated the UCI GDE study is the Best Available Science on the Mesquite Bosque. He did not say the study was perfect or infallible. No science claims to be perfect or infallible. The author noted new data has been generated since the conclusion of the study and that additional study of the bosque will improve our understanding even more. But, at present, the UCI GDE study is the Best Available Science, according to the author of Appendix D4.

230 West Palm St., San Diego, CA 92103
Phone 858 535-9121 Fax 858 535-9156

I trust this board will absorb the importance of Mr. Driscole's statement. This board would be in an awkward position if it continued to consider Appendix D4 to be Best Available Science on Groundwater Dependent Ecosystems … when the author of D4 does not. Such a position would be untenable. Further, continued reliance on D4 would violate the Watermasters Best Available Science policy, at least according to the Author of D4.

Appendix D4, which was created in 30 days with no budget by a hydrogeologist, has been superseded by a robust, million-dollar, three-year study performed by preeminent scholars with profound expertise in the requisite fields. I continue to believe this board will soon avail itself of the scientific knowledge contained in the UCI report, thereby enabling this board to get on with the business of leading our community to sustainable yield. I hope this board will do so without delay and without incurring unnecessary expense.

Sincerely yours,

J. David Garmon, M.D.
President, TCDC

230 West Palm St., San Diego, CA 92103
Phone 858 535-9121 Fax 858 535-9156

MINUTES
BORREGO SPRINGS WATERMASTER BOARD MEETING
Conducted In-Person at the Borrego Springs Library and via GoToMeeting
Wedneseday, October 15, 2025, 3:00 p.m.

The following individuals were present at the meeting:

Directors Present	Chair Tyler Bilyk – Agricultural Sector
	Vice Chair Jim Bennett – County of San Diego
	Treasurer Shannon Smith – Recreational Sector
	Secretary Gina Moran – Borrego Water District (BWD)
	Mark Jorgensen – Community Representative
Watermaster Staff Present	James M. Markman, Legal Counsel
	Samantha Adams, Executive Director, West Yost
	Andrew Malone, Lead Technical Consultant, West Yost
	Lauren Salberg, Staff Geologist, West Yost
Others Present	David Garmon
	Diane Johnson, BWD Board Member
	Geoff Poole, BWD General Manager
	George Peraza, DWR
	Jim Dax, Board Alternate – Community Representative
	Kathy Dice, Board Alternate - BWD
	Rich Pinel, Board Alternate – Recreational Sector
	Rodney Bruce, Rams Hill
	Steve Anderson, BB&K, representing BWD
	Tammy Baker, BWD Board Member
	Travis Huxman, UCI
	Trey Driscoll, Intera, TAC Member representing BWD

Please visit the Watermaster's Website[1] to access the Agenda Packet, recording, and presentation for the October 15, 2025 Meeting.

I. **Opening Procedures**

A. Chair Bilyk called the meeting to order at 4:01 PM at which time the meeting recording was started.
B. Chair Bilyk led the meeting participants in the Pledge of Allegiance.
C. Samantha Adams, Executive Director (ED) called roll and confirmed that a quorum of all members of the Board were present.
D. Approval of Agenda.

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

[1] https://borregospringswatermaster.com/past-watermaster-meetings/

II. **Election of WY 2026 Board Officers.** Current officers from WY 2025 are Directors Bilyk (Chair), Bennett (Vice Chair), and Smith (Secretary, Treasurer). Chair Bilyk requested each current Board officer to state if they were/were not interested in keeping their positions for WY 2026.

Motion: Motioned by Director Smith, seconded by Director Jorgensen to elect the following slate of Board Officers in WY 2026: Chair Tyler Bilyk, Vice Chair Jim Bennett, Secretary Gina Moran, and Treasurer Shannon Smith. Motion carried unanimously by voice vote (5-0-0).

III. **Public Correspondence**

A. Correspondence Received. None.

B. Public Comments. Chair Bilyk called for public comments. There were no public comments.

IV. **Consent Calendar.** Chair Bilyk called for any discussion on the Consent Calendar items included in the October 15, 2025 agenda package. There were no public comments. Board comments included:

- The financial report on page 12 of 211 of the agenda package reflects a difference in the amount of the grant reimbursement assumed and the actual reimbursements received, which ED explained was a difference in timing of the vendor estimates and when certain expenses were actually billed to DWR. The differences net out in the end.

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

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

A. *Selection of Peer Reviewer for the UCI GDE Study Report.* Andy Malone provided a summary of proposals received to perform a peer review of the Groundwater Dependent Ecosystem (GDE) Study Report, as included in the agenda package. At the conclusion of the presentation, Chair Bilyk opened the floor to public comment, followed by Board discussion. Public comment was made by David Garmon.

The key points of discussion by the Board included:

- Based on the review of TAC comments on the GDE Study Report, TAC members have identified that there are additional questions to address beyond the question of if this report is “best available science”.
- Based on Board direction from its August 2025 Board meeting, the request for proposal (RFP) sent to each candidate asked them to review the GDE Study Report and determine if it represents “Best Available Science” (BAS). Based on the TAC comments received, the Board discussed that the peer reviewer will need to do more than just answer “Is this report BAS”.
- The Board discussed the proposals received to perform the peer review of the GDE Study Report:
    - The USGS proposal was the most detailed and most technically strong. It was also the most expensive. There were concerns that the current federal shutdown would delay the USGS schedule, also noting that the USGS has its own internal review process that could extend the schedule.

  - Rhode has SGMA experience, but there was concern about Rhode's advocacy background.
  - Northern Arizona University and UC Riverside provided limited detail in their proposals.
  - Mixed views were expressed on selecting University of California Riverside given that another UC campus (University of California Irvine) prepared the study. Some Board members viewed this as a conflict of having two UC schools prepare and review the report, others noted UC campuses operate independently and would not be a conflict of interest. UC Riverside was recognized for familiarity with southern California.
- The Nature Conservancy offered supported to whoever is selected as the Peer Reviewer; alleviating previously discussed concerns since they would be providing support, not leading the review.
- Cost estimates among proposals vary widely ($6,000–$100,000), raising concerns if all the reviewers would perform the same level of work and provide the Watermaster with information it can use to make management decisions. Emphasis on the need to ensure peer reviewers can address all TAC questions.
- The pros and cons of hiring an external consultant vs. hiring the Watermaster's Technical Consultant to (TC) perform the review of the GDE Study Report.
- The $14,500 cost estimate for the TC effort includes review and coordination with the TAC, EWG, and peer reviewer. The TC has not provided a cost estimate for additional work to perform the peer review and prepare a recommendation report to the Board.
- Director Jorgensen has reviewed the GDE Study Report and considers the report to represent BAS.
- Additional time is needed before making a selection to consider the following:
  - What are the costs and schedule if West Yost were to perform the review?
  - Do the Peer Reviewer proposals need to be refined based on the level of detail included in the TAC comments on the GDE study report?

Following the discussion, the Board directed staff to:

1. Develop a cost estimate and schedule for West Yost to perform the peer review of the GDE Study Report
2. Share TAC and EWG comments on the GDE Study Report with the peer reviewers and confirm the peer reviewer's ability to (i) review the GDE Study Report and evaluate if it represents BAS, *and* (ii) address TAC/EWG comments. If needed, the peer reviewers may:
   a. Meet with Director Bennett and Mr. Malone to discuss scope refinements.
   b. Refine their scope, cost, and schedule based on the TAC/EWG comments and resubmit their proposal.
3. Schedule a special Board meeting in approximately two weeks to review the updated peer reviewer proposals and proposal from West Yost and select the peer reviewer to perform the review of the GDE Study Report.

B. Transfers of BPA and Carryover – Short-Term Approach and Formal Policy Development. ED Adams provided a summary included in the agenda package. At the conclusion of the presentation, Chair Bilyk opened the floor to public comment, followed by Board discussion. Public comment was made by Steve Anderson, Tammy Baker, Jim Dax, and Geoff Poole.

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

- There is a $500 per acre-foot Overproduction penalty fee if the Overproduction is not addressed.
- Restricting the location of transfers as a short-term solution will set a concerning precedent for a long-term approach.
- Tammy Baker summarized recommendations from the BWD Board:
    - Resolving WY 2025 Overproduction should be uncoupled from the topic of Undesirable Results. Overproduction represents water that has already been pumped and BWD recommends the Watermaster approve any transfers to cure Overproduction in WY 2025.
    - Recent model results are important and may influence business decisions but BWD disagrees with the concept that limiting transfers between management areas is the only solution. Restricting transfers could reduce the number of potential buyers and sellers of water rights.
- Steve Anderson, Legal Counsel to BWD, clarified that BWD's purchase of the Bauer property was to maintain existing BWD demands during the Rampdown, not to increase BWD pumping. He cautioned that restricting transfers could reduce BWD's ability to meet its water needs and encouraged the Board to consider other options under the Water Code rather than placing the burden solely on Parties engaged in transfers.

The key points of discussion by the Board included:

- Fallowing requirements related to the transfer of water rights.
- The complexity of transfers of BPA associated with multiple parcels and the unique transfer agreement between D. Bauer and BWD.
    - Concern about setting a precedent for future transfers and that someone could transfer to avoid fallowing responsibilities.
- Recommendation to develop and run an additional model projection scenario that evaluates the sustainability of the Basin under the Judgment allocation of water rights to determine if the Judgment allowed pumping is sustainable. If results indicate that the Judgment is unsustainable, responsibility lies with the entire Basin, not just the Transferor or Transferee to address the issue. This model run should be completed as part of the 5-Year Groundwater Management Plan (GMP) update.
- Concern that restricting transfers could have Basin-wide economic consequences.
- The 286 AF of Overproduction in WY 2025 has already occurred and approving transfers of Carryover to resolve the Overproduction would not exacerbate current Basin conditions.

- Some of the Overproduction to be cured in these transfers is Overproduction that occurred during the first three years of the Rampdown, in which Pumpers were given a grace period to cure until the end of WY 2025.
- Several Parties with outstanding transfers to cure Overproduction have consistently overpumped. Their Overproduction is likely to increase as the Rampdown schedule continues.
- Pumpers are notified in their mid-year pumping reports if they are at-risk of Overproduction.
- The Board should develop a policy related to water rights transfers to help inform future transfer decisions.

Motion: Motioned by Director Smith, seconded by Chair Bilyk to:

1. Approve the pending transfers of Carryover for WY 2025 without respect to the location of the Transferor or Transferee.
2. Notify Parties with Overproduction balances that the transfers approved this year are not setting a precedent for the upcoming year.
3. Prepare a scope, budget, and schedule to run an additional model scenario that could be used by the Board to support a long-term policy approach and included in the 5-Year GMP update.

Motion carried unanimously by roll-call vote (5-0-0).

C. *Consideration of Approval of November 2025 TAC Agenda.* Mr. Malone presented the proposed agenda for the upcoming TAC meeting. At the conclusion of the presentation, Chair Bilyk opened the floor to public comment, followed by Board discussion. There were no public comments.

The key points of discussion by the Board included:

- The item to review and discuss the updated Sustainable Management Criteria (SMC) at the November TAC meeting is on-track with the schedule developed to complete the 5-year assessment of the GMP report.
- Clarification that the results from Scenario 1C will be shared with the Board at its November 2025 Board meeting.

Motion: Motioned by Vice Chair Bennett, seconded by Director Moran, to approve the TAC meeting agenda with the correction that the review of the Scenario 1C pumping projections will be reviewed during the November 2025 Board meeting. *Motion carried unanimously by roll-call vote (5-0-0).*

D. Overview of Public Comments Received on Sustainable Management Criteria during October 15, 2025 Open House. ED Adams provided a summary of the public comments received during the Stakeholder Open House, which was focused on discussing updates to the SMC. At the conclusion of the presentation, Chair Bilyk opened the floor to public comment, followed by Board discussion. Public comment was made by Steve Anderson and Diane Johnson.

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

- There is additional opportunity for BWD to provide comments on the SMC. The TAC will discuss additional feedback at its November TAC meeting, which will be shared with the Board at its December 2025 Board meeting.
- Recommendation to include a brief summary of the current successes and challenges at the start of each Board meeting for the public new to Board meetings.

The key points of discussion by the Board included:

- Discussion on future Open Houses, including the number per year, length of event, and best times of the year.

No Board action was taken.

VI. **Reports.**

A. Legal Counsel Report. Mr. Markman complimented the Board on its sophisticated discussion on the water rights transfers topic (Item V.B), describing his experiences with other Basins.

B. Technical Consultant Report. Mr. Malone reported on the items listed in the agenda package memo (see slides 32 through 33 of the Board presentation slides). There were no additional topics discussed.

Board questions and comments included:

- Discussion on how the current model projections account for Parties that currently over-pump.
- The assumptions and discussions with BWD and T2 used to develop Scenario 1C will be shared with the TAC and the Board.

Executive Director Reports. ED Adams reported on the items listed in the agenda package memo (see slides 34 through 42 of the Board presentation slides). There were no additional topics discussed. Board questions and comments included:

- Clarification on how pumping is classified by sector for total pumping and if the classifications change based on transfers of water rights.
- Request for Board action at a future meeting to add additional signatories to the Watermaster bank account.
- Director Moran volunteered to be added as a signatory to the bank account.
- Chair Bilyk and Vice Chair Bennett summarized their experiences on the Borrego Springs Panel at the 2025 Western Groundwater Congress.

C. Chairperson's Report. Chair Bilyk complimented the Board on its ability to navigate tough topics and conversations. He emphasized that the Board allows logic to prevail and that they have a good track record of what's been accomplished over the past five years.

VII. **Approval of Agenda Items for November 17, 2025 Board Meeting.** ED Adams reviewed the potential agenda items for the next Board meetings listed in the agenda package. The Board discussed items to be included on the November 17, 2025 Board meeting agenda, in addition to items listed in the Agenda package. Discussion included:

- ED Adams updated the proposed Agenda for the November 17, 2025 meeting on the meeting screen based on discussion, noting it now includes the following items:
  - Final Water Year 2025 Water Rights Accounting and Transfers of Water Rights
  - Final Water Year 2025 Budget Status Report
  - Consideration of approval to engage with C.J. Brown & Company, CPAs to Perform the WY 2025 Annual Financial Audit
  - GMP Assessment and Update Workshop:
    - RCA #6: Land Subsidence
    - RCA #2: Domestic Well Mitigation
  - Resolution on the Bank Signatory
  - Discuss performing an additional model scenario that simulates the water rights afforded in the Judgment at an upcoming Board meeting
  - GDE Study Report Review

Motion: Motioned by Director Jorgensen seconded by Director Moran, to approve the November 17, 2025 agenda presented. *Motion carried unanimously by roll-call vote (5-0-0).*

VIII. **Board Member Comments.** Chair Bilyk called for comments.

- Director Bennett commented that the County of San Diego is performing a review of the fallowing methods developed as part of the SGM grant funded project and will provide comments within 60 days. Their review is focused on fire and flood control.
  - The EWG meeting will be further postponed until the County completes its review since the only agenda topic for the October EWG meeting was a discussion and review of the sand fences.

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

X. **Adjournment.** Chair Bilyk adjourned the meeting at 7:30 PM.

Recorded by:
Lauren Salberg, Staff Geologist, West Yost

Attest:
Gina Moran, Secretary of the Board

MINUTES
BORREGO SPRINGS WATERMASTER SPECIAL BOARD MEETING
Conducted Virtually via GoToMeeting
Monday, November 3, 2025, 10:00 a.m.

The following individuals were present at the meeting:

Directors Present	Chair Tyler Bilyk – Agricultural Sector
	Vice Chair Jim Bennett – County of San Diego
	Treasurer Shannon Smith – Recreational Sector
	Secretary Gina Moran – Borrego Water District (BWD)
	Mark Jorgensen – Community Representative
Watermaster Staff Present	James M. Markman, Legal Counsel
	Samantha Adams, Executive Director, West Yost
	Andrew Malone, Lead Technical Consultant, West Yost
Others Present	David Garmon
	Diane Johnson, BWD Board Member
	Jim Dax, Board Alternate - Community Representative
	Kathy Dice, Board Alternate for BWD, BWD Board Member
	Tammy Baker, BWD Board Member
	Trey Driscoll, Intera, TAC Member representing BWD
	Other unidentified participants (2)

Please visit the Watermaster's Website[1] to access the Agenda Packet and presentation for the November 3, 2025 Meeting. NOTE: ***A recording of the meeting is not available due to technical issues with the meeting platform***.

I. **Opening Procedures**
   A. Chair Bilyk called the meeting to order at 10:02 AM. The start of the meeting was delayed due to technical (audio) issues with the meeting platform.
   B. Chair Bilyk led the meeting participants in the Pledge of Allegiance.
   C. Samantha Adams, Executive Director (ED) called roll and confirmed that a quorum of all members of the Board were present.
   D. Approval of Agenda. The agenda was approved by voice vote (5 in favor)

II. **Public Correspondence**
   A. Correspondence Received. No correspondence was received.
   B. Public Comments. Chair Bilyk called for public comments. Public Comment was made by David Garmon regarding Item IIIA. of the Agenda – Selection of a Peer Reviewer for the UCI GDE Study Report.[2]

III. **Items for Board Consideration and Possible Action**
   A. *Selection of a Peer Reviewer for the UCI GDE Study Report.* Mr. Malone presented the updated peer review options presented in the Board Package. The Board asked questions along the way for clarification of the details. At the conclusion of the presentation, Chair Bilyk opened the floor

[1] https://borregospringswatermaster.com/past-watermaster-meetings/
[2] Mr. Garmon subsequently submitted a written comment letter, with similar comments that will be published in the regular meeting agenda package for November 19, 2025.

to public comment, followed by Board discussion. Additional public comment was made by David Garmon.

The following is a summary of the points of discussion by the Board:

- Two Board members (Bilyk and Smith) favored the detailed approach by the USGS, while acknowledging that the schedule is challenging due to the government shutdown. Pros included not interfering with Watermaster Staff capacity, thoroughness of the proposal, and having third-party independence on the matter at hand. Cons are the cost to the pumpers, but the investment would be worth a thorough review that helps move the Watermaster forward without lingering questions about how best to use the GDE Study Report.
- Three Board members (Jorgensen, Bennett, Moran) favored the West Yost approach due to local knowledge, past experience on the subject matter, and Staff's existing working relationship with the TAC and EWG.
- Concerns about the time it takes USGS to complete technical work due to internal review processes, which is exacerbated by the current government shut down.
- General concerns about scope creep. Given the complexity of work, there have been examples where the scopes of work to complete studies have been expanded due to new questions or challenges that arise, such as TAG recommendations. The robustness of the USGS proposal may be less likely to be subject to scope creep.
- Comparison and discussion of the number of labor hours assumed in each proposal to complete the Peer Review:
  - UC Riverside – 160 hours
  - USGS – 16 weeks (assumed this meant 640 hours at 40 hours per week)
  - Rhode Environmental – 120 hours
  - West Yost – 167 hours
- The involvement of the TAC and EWG in the review process and development of next steps recommendations to the Board, as envisioned in the West Yost scope of work.
- How the UCI research team would be involved to respond to questions.
- Concern about West Yost's capacity to perform the peer review and keep up with the workload already assigned. Mr. Malone committed that he would do the majority of the work and has the capacity to add the peer review to his workload.
- Discussion of what would happen if additional work were to be requested by the Board to complete the GDE Study Report review. West Yost reported that requesting additional work beyond the scope of work presented in the agenda package would result in the need for additional budget and would very likely cause a delay in completing the work – additional work would risk having to push completion of the review until after the GMP 5-Year Assessment work is completed in June.
- A motion was made to select West Yost as the peer reviewer. Based on the discussion thus far, the motion was poised to fail to achieve the required Supermajority vote of 4 of 5 Board members. Despite favoring the USGS proposal, concerns with West Yost capacity, and other stated concerns, Direct Smith decided to vote in favor of the motion to ensure that the peer review can move forward without further delay.

Motion: Motioned by Director Bennett, seconded by Director Jorgensen, to select West Yost as the Peer Reviewer of the UCI GDE Study Report. *Motion carried unanimously by roll-call vote (4-1-0).* Director Bilyk voted no. Motion passed with Supermajority requirement.

IV. **Board Member Comments.** Chair Bilyk called for comments. No comments were made.

V. **Next Meetings of the Borrego Springs Watermaster.** Chair Bilyk reviewed the meetings listed in the agenda package.

VI. **Adjournment**

A. Chair Bilyk adjourned the meeting at 11:06 AM.

Recorded by:
Samantha Adams, Executive Director, West Yost

Attest:
Gina Moran, Secretary of the Board

3:17 PM

10/30/25

Accrual Basis

Borrego Springs Watermaster
Profit & Loss for Fiscal Year 2024-2025
October 2024 through September 2025

	Oct 24	Nov 24	Dec 24	Jan 25	Feb 25	Mar 25	Apr 25	May 25	Jun 25	Jul 25	Aug 25	Sep 25	TOTAL
Ordinary Income/Expense													
Income													
DWR Grant Reimbursement t	0.00	408,323.49	0.00	0.00	239,810.24	0.00	0.00	0.00	295,756.68	0.00	302,065.05	333,103.20	1,579,058.66
Meter Read Reimbursement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7,025.28	0.00	0.00	0.00	0.00	7,025.28
Pumping Assessment	(824.30)	164,335.46	0.00	0.00	0.00	0.00	0.00	175,021.24	0.00	0.00	0.00	0.00	338,532.40
Services Rendered	0.00	0.00	0.00	2,691.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,996.25	9,688.00
WY 2024 - Expected Grant Reimb v	0.00	(408,323.49)	0.00	0.00	(239,810.24)	0.00	0.00	0.00	(295,964.79)	0.00	0.00	0.00	(944,098.52)
WY 2025 - Expected Grant Reimb v	136,962.85	49,880.97	62,393.97	224,085.28	212,398.73	202,775.65	11,675.70	(144.50)	0.00	0.00	(249,237.79)	(384,522.61)	266,268.25
Total Income	136,138.55	214,216.43	62,393.97	226,777.03	212,398.73	202,775.65	11,675.70	181,902.02	(208.11)	0.00	52,827.26	(44,423.16)	1,256,474.07
Expense													
Audit	0.00	0.00	6,448.00	806.00	0.00	844.00	0.00	0.00	0.00	0.00	0.00	0.00	8,098.00
Bank Service Charges	0.00	0.00	27.00	25.00	0.00	27.00	0.00	0.00	0.00	27.00	0.00	25.00	131.00
Consult Serv Land IQ-Grant Reim **	40,541.61	22,282.97	13,094.22	78,843.89	30,072.97	23,245.55	(182.55)	0.00	0.00	0.00	0.00	0.00	207,898.66
Consult Serv WY-Grant Reim **	96,421.24	27,598.00	49,299.75	132,526.39	182,325.76	177,815.10	11,858.25	(144.50)	0.00	0.00	0.00	0.00	677,699.99
Consulting Services *	27,124.75	27,751.35	18,892.27	17,707.75	11,272.19	11,814.48	31,425.43	29,158.05	28,174.50	47,459.25	40,788.50	40,837.50	332,406.02
Consulting Services- Meter Read	517.50	(155.25)	51.75	161.25	303.00	107.50	107.50	1,193.50	974.75	0.00	107.50	752.50	4,121.50
Insurance	3,579.54	3,579.54	3,579.54	3,579.54	3,579.54	3,579.54	3,579.54	3,579.50	3,946.02	3,946.02	3,946.02	3,946.02	44,420.36
Interest Expense	5,897.50	5,691.39	5,249.59	3,092.56	3,526.73	4,700.21	6,882.68	6,474.39	6,269.58	4,647.70	3,044.12	2,204.54	57,680.99
Legal	4,500.00	4,865.00	3,000.00	13,210.00	8,312.50	3,901.25	540.00	5,034.25	5,805.00	3,427.50	9,311.84	8,918.75	70,826.09
Meter Accuracy Test--Grant Reim **	0.00	0.00	0.00	12,715.00	0.00	1,715.00	0.00	0.00	0.00	0.00	0.00	0.00	14,430.00
Meter Read Expenses	0.00	0.00	0.00	1,188.22	0.00	0.00	1,190.20	0.00	0.00	1,190.20	0.00	1,190.20	4,758.82
Reimbursed to BWD for GSP	0.60	0.00	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.26
Total Expense	178,582.74	91,613.00	99,646.78	263,855.60	239,392.69	227,749.63	55,401.05	45,295.19	45,169.85	60,697.67	57,197.98	57,874.51	1,422,476.69
Net Ordinary Income	(42,444.19)	122,603.43	(37,252.81)	(37,078.57)	(26,993.96)	(24,973.98)	(43,725.35)	136,606.83	(45,377.96)	(60,697.67)	(4,370.72)	(102,297.67)	(166,002.62)
Net Income	**(42,444.19)**	**122,603.43**	**(37,252.81)**	**(37,078.57)**	**(26,993.96)**	**(24,973.98)**	**(43,725.35)**	**136,606.83**	**(45,377.96)**	**(60,697.67)**	**(4,370.72)**	**(102,297.67)**	**(166,002.62)**

* Represents Consulting services by West Yost that are not grant reimbursable.

** Represents expenses that can be reimbursed with grant funding from DWR.

t Reflects actual reimbursement received from DWR.

v Reflects reversal of estimated reimbursement amounts.

3:07 PM

10/30/25

Accrual Basis

Borrego Springs Watermaster
Balance Sheet for Fiscal Year 2024-2025
As of September 30, 2025

	Sep 30, 25
ASSETS	
Current Assets	
Checking/Savings	
US Bank	738,996.64
Total Checking/Savings	738,996.64
Accounts Receivable	
Accounts Receivable	9,330.16
Total Accounts Receivable	9,330.16
Other Current Assets	
Accrued Grant Reimburse 2025	266,268.25
Prepaid Expenses	31,568.11
Total Other Current Assets	297,836.36
Total Current Assets	1,046,163.16
TOTAL ASSETS	**1,046,163.16**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	99,249.33
Total Accounts Payable	99,249.33
Total Current Liabilities	99,249.33
Total Liabilities	99,249.33
Equity	
Retained Earnings	1,112,916.45
Net Income	-166,002.62
Total Equity	946,913.83
TOTAL LIABILITIES & EQUITY	**1,046,163.16**

3:16 PM

10/30/25

Accrual Basis

Borrego Springs Watermaster
Expense Distribution Detail
September 2025

Type	Date	Num	Memo	Account	Amount
Borrego Water Dist					
Bill	09/30/2025	22512	September 2025 Meter reads	Meter Read Expenses	1,190.20
Total Borrego Water Dist					1,190.20
Land IQ, LLC					
Bill	09/30/2025	LandIQ Int Sep25 Est	September 2025 Estimated Interest	Interest Expense	121.40
Credit	09/30/2025	CR_LandIQ Int Sep25	Credit for September 2025 Final Interest, Including Payments	Interest Expense	(2.98)
Total Land IQ, LLC					118.42
RWG Law					
General Journal	09/01/2025	113R	RWG Estimate for August 1, 2025 to August 31, 2025	Legal	(7,000.00)
Bill	09/12/2025	254915	Services rendered through August 31, 2025	Legal	7,757.50
Bill	09/30/2025	255263	Services rendered through September 30, 2025	Legal	8,161.25
Total RWG Law					8,918.75
West Yost & Associates					
General Journal	09/01/2025	113R	WY Estimate for August 1, 2025 to August 31, 2025	Consulting Services	(40,189.25)
General Journal	09/01/2025	113R	WY Estimate for August 1, 2025 to August 31, 2025	Consulting Services- Meter Read	(107.50)
Bill	09/26/2025	2064359	West Yost Consulting Services August 1, 2025 to August 31, 2025	Consulting Services	39,478.25
Bill	09/26/2025	2064359	West Yost Consulting Services August 1, 2025 to August 31, 2025	Consulting Services- Meter Read	107.50
Bill	09/30/2025	Interest Sep25 Est	September 2025 Estimated Interest	Interest Expense	1,829.51
Bill	09/30/2025	Interest Sep25 Final	September 2025 Final Interest, Including Payments	Interest Expense	256.61
General Journal	09/30/2025	117	WY Estimate for September 1, 2025 to September 30, 2025	Consulting Services	49,102.50
General Journal	09/30/2025	117	WY Estimate for September 1, 2025 to September 30, 2025	Consulting Services- Meter Read	752.50
General Journal	09/30/2025	117R	WY Estimate for September 1, 2025 to September 30, 2025	Consulting Services	(49,102.50)
General Journal	09/30/2025	117R	WY Estimate for September 1, 2025 to September 30, 2025	Consulting Services- Meter Read	(752.50)
Bill	09/30/2025	2064825	West Yost Consulting Services September 1, 2025 to September 30, 2025	Consulting Services	41,548.50
Bill	09/30/2025	2064825	West Yost Consulting Services September 1, 2025 to September 30, 2025	Consulting Services- Meter Read	752.50
Total West Yost & Associates					43,676.12
TOTAL					**53,903.49**

Borrego Springs Watermaster

Register: US Bank
From 09/01/2025 through 09/30/2025
Sorted by: Date, Type, Number/Ref

Date	Number	Payee	Account	Memo	Payment	C	Deposit	Balance
9/4/2025			-split-	Deposit		X	1,085.10	667,837.21
9/15/2025			Bank Service Charges	Service Charge	25.00	X		667,812.21
9/16/2025			Undeposited Funds	Deposit		X	424.78	668,236.99
9/25/2025			DWR Grant Reimbursement	Deposit		X	333,103.20	1,001,340.19
9/30/2025	2208	Land IQ, LLC	Accounts Payable		15,668.82			985,671.37
9/30/2025	2209	RWG Law	Accounts Payable		10,539.34			975,132.03
9/30/2025	2210	West Yost & Associates	Accounts Payable		236,135.39			738,996.64

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 9/30/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2062349	3/31/2025	$ 176,727.47				$ 176,727.47
	4/30/2025		9.50%	$ 1,379.93	$ 176,727.47	$ 178,107.40
	5/20/2025	$ (16,050.48)	9.50%	$ 927.13	$ 162,056.92	$ 162,984.05
	5/31/2025		9.50%	$ 466.63	$ 162,984.05	$ 163,450.68
	6/27/2025	$ (1,276.26)	9.50%	$ 1,148.63	$ 162,174.42	$ 163,323.05
	6/30/2025		9.50%	$ 127.53	$ 163,323.05	$ 163,450.58
	7/25/2025	$ (1,318.80)	9.50%	$ 1,063.55	$ 162,131.78	$ 163,195.32
	7/31/2025		9.50%	$ 254.85	$ 163,195.32	$ 163,450.18
	8/12/2025	$ (78,413.63)	9.50%	$ 510.50	$ 85,036.55	$ 85,547.05
	8/31/2025		9.50%	$ 423.05	$ 85,547.05	$ 85,970.10
Int Rate Adjust	9/18/2025		9.25%	$ 392.16	$ 85,970.10	$ 86,362.26
	9/30/2025		9.25%	$ 262.64	$ 86,362.26	$ 86,624.90
2062724	4/30/2025	$ 30,244.18				$ 30,244.18
	5/31/2025		9.50%	$ 244.02	$ 30,244.18	$ 30,488.20
	6/27/2025	$ (389.30)	9.50%	$ 214.25	$ 30,098.90	$ 30,313.16
	6/30/2025		9.50%	$ 23.67	$ 30,313.16	$ 30,336.83
	7/25/2025	$ (244.77)	9.50%	$ 197.40	$ 30,092.06	$ 30,289.45
	7/31/2025		9.50%	$ 47.30	$ 30,289.45	$ 30,336.76
	8/12/2025	$ (244.77)	9.50%	$ 94.75	$ 30,091.99	$ 30,186.74
	8/31/2025		9.50%	$ 149.28	$ 30,186.74	$ 30,336.02
Int Rate Adjust	9/18/2025		9.25%	$ 138.38	$ 30,336.02	$ 30,474.40
	9/30/2025		9.25%	$ 92.68	$ 30,474.40	$ 30,567.07
2062725	4/30/2025	$ 5,836.00				$ 5,836.00
	5/31/2025		9.50%	$ 47.09	$ 5,836.00	$ 5,883.09
	6/27/2025	$ (93.03)	9.50%	$ 41.34	$ 5,790.06	$ 5,831.40
	6/30/2025		9.50%	$ 4.55	$ 5,831.40	$ 5,835.95
	7/25/2025	$ (47.09)	9.50%	$ 37.97	$ 5,788.86	$ 5,826.84
	7/31/2025		9.50%	$ 9.10	$ 5,826.84	$ 5,835.94
	8/12/2025	$ (47.09)	9.50%	$ 18.23	$ 5,788.85	$ 5,807.07
	8/31/2025		9.50%	$ 28.72	$ 5,807.07	$ 5,835.79
Int Rate Adjust	9/18/2025		9.25%	$ 26.62	$ 5,835.79	$ 5,862.41
	9/30/2025		9.25%	$ 17.83	$ 5,862.41	$ 5,880.24

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 9/30/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2062726	4/30/2025	$ 2,171.75				$ 2,171.75
	5/31/2025		9.50%	$ 17.52	$ 2,171.75	$ 2,189.27
	6/27/2025	$ (34.61)	9.50%	$ 15.38	$ 2,154.66	$ 2,170.05
	6/30/2025		9.50%	$ 1.69	$ 2,170.05	$ 2,171.74
	7/25/2025	$ (17.52)	9.50%	$ 14.13	$ 2,154.22	$ 2,168.35
	7/31/2025		9.50%	$ 3.39	$ 2,168.35	$ 2,171.74
	8/12/2025	$ (17.52)	9.50%	$ 6.78	$ 2,154.22	$ 2,161.00
	8/31/2025		9.50%	$ 10.69	$ 2,161.00	$ 2,171.69
Int Rate Adjust	9/18/2025		9.25%	$ 9.91	$ 2,171.69	$ 2,181.60
	9/30/2025		9.25%	$ 6.63	$ 2,181.60	$ 2,188.23
2063431	5/31/2025	$ 31,067.05				$ 31,067.05
	6/30/2025		9.50%	$ 242.58	$ 31,067.05	$ 31,309.63
	7/25/2025	$ (494.70)	9.50%	$ 203.73	$ 30,814.93	$ 31,018.66
	7/31/2025		9.50%	$ 48.44	$ 31,018.66	$ 31,067.10
	8/12/2025	$ (250.66)	9.50%	$ 97.03	$ 30,816.44	$ 30,913.47
	8/31/2025		9.50%	$ 152.87	$ 30,913.47	$ 31,066.34
Int Rate Adjust	9/18/2025		9.25%	$ 141.71	$ 31,066.34	$ 31,208.05
	9/30/2025		9.25%	$ 94.91	$ 31,208.05	$ 31,302.96
2063576	6/30/2025	$ 30,236.50				$ 30,236.50
	7/31/2025		9.50%	$ 243.96	$ 30,236.50	$ 30,480.46
	8/12/2025	$ (245.93)	9.50%	$ 95.20	$ 30,234.53	$ 30,329.73
	8/31/2025		9.50%	$ 149.99	$ 30,329.73	$ 30,479.72
Int Rate Adjust	9/18/2025		9.25%	$ 139.04	$ 30,479.72	$ 30,618.76
	9/30/2025		9.25%	$ 93.11	$ 30,618.76	$ 30,711.87
2063924	7/31/2025	$ 48,058.50				$ 48,058.50
	8/31/2025		9.50%	$ 387.76	$ 48,058.50	$ 48,446.26
Int Rate Adjust	9/18/2025		9.25%	$ 220.99	$ 48,446.26	$ 48,667.25
	9/30/2025		9.25%	$ 148.00	$ 48,667.25	$ 48,815.26

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 9/30/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2064359	8/31/2025	$ 39,585.75				$ 39,585.75
Int Rate Adjust	9/18/2025		9.25%	$ 180.58	$ 39,585.75	$ 39,766.33
	9/30/2025		9.25%	$ 120.93	$ 39,766.33	$ 39,887.26

Total Invoices (Less Pymts)	**$ 264,741.04**		
Current Month Interest (*Estimated*)		**$ 1,829.51**	
Current Month Interest (*Final, including payments*)		**$ 2,086.13**	
Prior Month Interest Adjustment		**$ -**	
Adjusted Monthly Interest		**$ 256.61**	
Total Interest Charges		**$ 11,236.75**	
Grand Total			**$ 275,977.75**

Land IQ
2020 L St, Suite 210
Sacramento, CA 95811

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 9/30/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
6718	3/31/2025	$ 16,096.71				$ 16,096.71
	4/30/2025		9.50%	$ 125.69	$ 16,096.71	$ 16,222.40
	5/29/2025	$ (130.88)	9.50%	$ 122.45	$ 16,091.52	$ 16,213.96
	5/31/2025		9.50%	$ 8.44	$ 16,213.96	$ 16,222.40
	6/26/2025	$ (126.67)	9.50%	$ 109.78	$ 16,095.73	$ 16,205.51
	6/30/2025		9.50%	$ 16.87	$ 16,205.51	$ 16,222.38
	7/31/2025		9.50%	$ 130.89	$ 16,222.38	$ 16,353.27
	8/4/2025	$ (130.89)	9.50%	$ 17.03	$ 16,222.38	$ 16,239.41
	8/15/2025	$ (802.95)	9.50%	$ 46.49	$ 15,436.46	$ 15,482.95
	8/31/2025		9.50%	$ 64.48	$ 15,482.95	$ 15,547.43
Int Rate Adjust	9/18/2025		9.25%	$ 70.92	$ 15,547.43	$ 15,618.35
	9/30/2025		9.25%	$ 47.50	$ 15,618.35	$ 15,665.85

Total Invoices (Less Pymts)	**$ 14,905.32**	
Current Month Interest (*Estimated*)		**$ 121.40**
Current Month Interest (*Final, including payments*)		**$ 118.42**
Prior Month Interest Adjustment		**$ -**
Adjusted Monthly Interest		**$ (2.98)**
Total Interest Charges		**$ 760.53**
Grand Total		**$ 15,665.84**

11:27 AM

11/05/25

Accrual Basis

Borrego Springs Watermaster
Profit & Loss for Fiscal Year 2025-2026
October 2025

	TOTAL
Ordinary Income/Expense	
Expense	
Bank Service Charges	25.00
Consulting Services *	78,630.25
Consulting Services- Meter Read	215.00
Insurance	3,946.02
Interest Expense	1,044.69
Legal	5,000.00
Total Expense	88,860.96
Net Ordinary Income	(88,860.96)
Net Income	**(88,860.96)**

* Represents Consulting services by West Yost that are not grant reimbursable.

11:13 AM

11/05/25

Accrual Basis

Borrego Springs Watermaster
Balance Sheet for Fiscal Year 2025-2026
As of October 31, 2025

	Oct 31, 25
ASSETS	
Current Assets	
Checking/Savings	
US Bank	745,967.89
Total Checking/Savings	745,967.89
Accounts Receivable	
Accounts Receivable	2,333.91
Total Accounts Receivable	2,333.91
Other Current Assets	
Accrued Grant Reimburse 2025	266,268.25
Prepaid Expenses	27,622.09
Total Other Current Assets	293,890.34
Total Current Assets	1,042,192.14
TOTAL ASSETS	**1,042,192.14**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
Accounts Payable	100,294.02
Total Accounts Payable	100,294.02
Other Current Liabilities	
Accrued Payables	83,845.25
Total Other Current Liabilities	83,845.25
Total Current Liabilities	184,139.27
Total Liabilities	184,139.27
Equity	
Retained Earnings	946,913.83
Net Income	-88,860.96
Total Equity	858,052.87
TOTAL LIABILITIES & EQUITY	**1,042,192.14**

8:43 AM

11/10/25

Accrual Basis

Borrego Springs Watermaster
Expense Distribution Detail
October 2025

Type	Date	Num	Memo	Account	Amount
Land IQ, LLC					
Bill	10/31/2025	LandIQ Int Oct25 Est	October 2025 Estimated Interest	Interest Expense	123.07
Credit	10/31/2025	CR_LandIQ Int Oct 25	Credit for October 2025 Final Interest, Including Payments	Interest Expense	(35.72)
Total Land IQ, LLC					87.35
RWG Law					
General Journal	10/31/2025	119	RWG Estimate for October 1, 2025 to October 31, 2025	Legal	5,000.00
Total RWG Law					5,000.00
West Yost & Associates					
Bill	10/31/2025	Interest Oct25 Est	October 2025 Estimated Interest	Interest Expense	2,168.13
Credit	10/31/2025	CR_Int Oct25 Final	Credit for October 2025 Final Interest, Including Payments	Interest Expense	(1,210.79)
General Journal	10/31/2025	119	WY Estimate for October 1, 2025 to October 31, 2025	Consulting Services	78,630.25
General Journal	10/31/2025	119	WY Estimate for October 1, 2025 to October 31, 2025	Consulting Services- Meter Read	215.00
Total West Yost & Associates					79,802.59
TOTAL					**84,889.94**

Borrego Springs Watermaster

Register: US Bank
From 10/01/2025 through 10/31/2025
Sorted by: Date, Type, Number/Ref

Date	Number	Payee	Account	Memo	Payment	C	Deposit	Balance
10/15/2025			Bank Service Charges	Service Charge	25.00	X		738,971.64
10/16/2025			Undeposited Funds	Deposit		X	6,996.25	745,967.89

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 10/31/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2062349	3/31/2025	$ 176,727.47				$ 176,727.47
	4/30/2025		9.50%	$ 1,379.93	$ 176,727.47	$ 178,107.40
	5/20/2025	$ (16,050.48)	9.50%	$ 927.13	$ 162,056.92	$ 162,984.05
	5/31/2025		9.50%	$ 466.63	$ 162,984.05	$ 163,450.68
	6/27/2025	$ (1,276.26)	9.50%	$ 1,148.63	$ 162,174.42	$ 163,323.05
	6/30/2025		9.50%	$ 127.53	$ 163,323.05	$ 163,450.58
	7/25/2025	$ (1,318.80)	9.50%	$ 1,063.55	$ 162,131.78	$ 163,195.32
	7/31/2025		9.50%	$ 254.85	$ 163,195.32	$ 163,450.18
	8/12/2025	$ (78,413.63)	9.50%	$ 510.50	$ 85,036.55	$ 85,547.05
	8/31/2025		9.50%	$ 423.05	$ 85,547.05	$ 85,970.10
Int Rate Adjust	9/18/2025		9.25%	$ 392.16	$ 85,970.10	$ 86,362.26
	9/30/2025		9.25%	$ 262.64	$ 86,362.26	$ 86,624.90
	10/16/2025	$ (86,976.14)	9.25%	$ 351.25	$ (351.24)	$ 0.00
2062724	4/30/2025	$ 30,244.18				$ 30,244.18
	5/31/2025		9.50%	$ 244.02	$ 30,244.18	$ 30,488.20
	6/27/2025	$ (389.30)	9.50%	$ 214.25	$ 30,098.90	$ 30,313.16
	6/30/2025		9.50%	$ 23.67	$ 30,313.16	$ 30,336.83
	7/25/2025	$ (244.77)	9.50%	$ 197.40	$ 30,092.06	$ 30,289.45
	7/31/2025		9.50%	$ 47.30	$ 30,289.45	$ 30,336.76
	8/12/2025	$ (244.77)	9.50%	$ 94.75	$ 30,091.99	$ 30,186.74
	8/31/2025		9.50%	$ 149.28	$ 30,186.74	$ 30,336.02
Int Rate Adjust	9/18/2025		9.25%	$ 138.38	$ 30,336.02	$ 30,474.40
	9/30/2025		9.25%	$ 92.68	$ 30,474.40	$ 30,567.07
	10/16/2025	$ (30,589.18)	9.25%	$ 123.94	$ (22.11)	$ 101.84
2062725	4/30/2025	$ 5,836.00				$ 5,836.00
	5/31/2025		9.50%	$ 47.09	$ 5,836.00	$ 5,883.09
	6/27/2025	$ (93.03)	9.50%	$ 41.34	$ 5,790.06	$ 5,831.40
	6/30/2025		9.50%	$ 4.55	$ 5,831.40	$ 5,835.95
	7/25/2025	$ (47.09)	9.50%	$ 37.97	$ 5,788.86	$ 5,826.84
	7/31/2025		9.50%	$ 9.10	$ 5,826.84	$ 5,835.94
	8/12/2025	$ (47.09)	9.50%	$ 18.23	$ 5,788.85	$ 5,807.07
	8/31/2025		9.50%	$ 28.72	$ 5,807.07	$ 5,835.79
Int Rate Adjust	9/18/2025		9.25%	$ 26.62	$ 5,835.79	$ 5,862.41
	9/30/2025		9.25%	$ 17.83	$ 5,862.41	$ 5,880.24
	10/16/2025	$ (5,880.45)	9.25%	$ 23.84	$ (0.21)	$ 23.63

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 10/31/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2062726	4/30/2025	$ 2,171.75				$ 2,171.75
	5/31/2025		9.50%	$ 17.52	$ 2,171.75	$ 2,189.27
	6/27/2025	$ (34.61)	9.50%	$ 15.38	$ 2,154.66	$ 2,170.05
	6/30/2025		9.50%	$ 1.69	$ 2,170.05	$ 2,171.74
	7/25/2025	$ (17.52)	9.50%	$ 14.13	$ 2,154.22	$ 2,168.35
	7/31/2025		9.50%	$ 3.39	$ 2,168.35	$ 2,171.74
	8/12/2025	$ (17.52)	9.50%	$ 6.78	$ 2,154.22	$ 2,161.00
	8/31/2025		9.50%	$ 10.69	$ 2,161.00	$ 2,171.69
Int Rate Adjust	9/18/2025		9.25%	$ 9.91	$ 2,171.69	$ 2,181.60
	9/30/2025		9.25%	$ 6.63	$ 2,181.60	$ 2,188.23
	10/16/2025	$ (2,188.29)	9.25%	$ 8.87	$ (0.06)	$ 8.81
2063431	5/31/2025	$ 31,067.05				$ 31,067.05
	6/30/2025		9.50%	$ 242.58	$ 31,067.05	$ 31,309.63
	7/25/2025	$ (494.70)	9.50%	$ 203.73	$ 30,814.93	$ 31,018.66
	7/31/2025		9.50%	$ 48.44	$ 31,018.66	$ 31,067.10
	8/12/2025	$ (250.66)	9.50%	$ 97.03	$ 30,816.44	$ 30,913.47
	8/31/2025		9.50%	$ 152.87	$ 30,913.47	$ 31,066.34
Int Rate Adjust	9/18/2025		9.25%	$ 141.71	$ 31,066.34	$ 31,208.05
	9/30/2025		9.25%	$ 94.91	$ 31,208.05	$ 31,302.96
	10/16/2025	$ (31,303.67)	9.25%	$ 126.93	$ (0.71)	$ 126.22
2063576	6/30/2025	$ 30,236.50				$ 30,236.50
	7/31/2025		9.50%	$ 243.96	$ 30,236.50	$ 30,480.46
	8/12/2025	$ (245.93)	9.50%	$ 95.20	$ 30,234.53	$ 30,329.73
	8/31/2025		9.50%	$ 149.99	$ 30,329.73	$ 30,479.72
Int Rate Adjust	9/18/2025		9.25%	$ 139.04	$ 30,479.72	$ 30,618.76
	9/30/2025		9.25%	$ 93.11	$ 30,618.76	$ 30,711.87
	10/16/2025	$ (30,468.65)	9.25%	$ 124.53	$ 243.22	$ 367.75
2063924	7/31/2025	$ 48,058.50				$ 48,058.50
	8/31/2025		9.50%	$ 387.76	$ 48,058.50	$ 48,446.26
Int Rate Adjust	9/18/2025		9.25%	$ 220.99	$ 48,446.26	$ 48,667.25
	9/30/2025		9.25%	$ 148.00	$ 48,667.25	$ 48,815.26
	10/16/2025	$ (48,427.50)	9.25%	$ 197.94	$ 387.76	$ 585.69

West Yost Associates
2020 Research Park Drive, Suite 100
Davis, CA 95618

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 10/31/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
2064359	8/31/2025	$ 39,585.75				$ 39,585.75
Int Rate Adjust	9/18/2025		9.25%	$ 180.58	$ 39,585.75	$ 39,766.33
	9/30/2025		9.25%	$ 120.93	$ 39,766.33	$ 39,887.26
	10/16/2025	$ (301.51)	9.25%	$ -	$ 39,585.75	$ 39,585.75

Total Invoices (Less Pymts)	**$ 28,605.65**	
Current Month Interest (*Estimated*)		**$ 2,168.13**
Current Month Interest (*Final, including payments*)		**$ 957.30**
Prior Month Interest Adjustment		**$ 0.04**
Adjusted Monthly Interest		**$ (1,210.79)**
Total Interest Charges		**$ 12,194.05**
Grand Total		**$ 40,799.70**

2020 L St, Suite 210
Sacramento, CA 95811

To: Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, CA 92618

Interest Schedule: 10/31/2025

Invoice No.	Invoice Date / Payment Date	Invoice Amount	Prime Rate (Plus 2%)	Interest Charge	Starting Balance	Ending Balance
6718	3/31/2025	$ 16,096.71				$ 16,096.71
	4/30/2025		9.50%	$ 125.69	$ 16,096.71	$ 16,222.40
	5/29/2025	$ (130.88)	9.50%	$ 122.45	$ 16,091.52	$ 16,213.96
	5/31/2025		9.50%	$ 8.44	$ 16,213.96	$ 16,222.40
	6/26/2025	$ (126.67)	9.50%	$ 109.78	$ 16,095.73	$ 16,205.51
	6/30/2025		9.50%	$ 16.87	$ 16,205.51	$ 16,222.38
	7/31/2025		9.50%	$ 130.89	$ 16,222.38	$ 16,353.27
	8/4/2025	$ (130.89)	9.50%	$ 17.03	$ 16,222.38	$ 16,239.41
	8/15/2025	$ (802.95)	9.50%	$ 46.49	$ 15,436.46	$ 15,482.95
	8/31/2025		9.50%	$ 64.48	$ 15,482.95	$ 15,547.43
Int Rate Adjust	9/18/2025		9.25%	$ 70.92	$ 15,547.43	$ 15,618.35
	9/30/2025		9.25%	$ 47.50	$ 15,618.35	$ 15,665.85
	10/22/2025	$ (15,668.82)	9.25%	$ 87.34	$ (2.97)	$ 84.37

Total Invoices (Less Pymts)	**$ (763.50)**		
Current Month Interest (*Estimated*)		**$ 123.07**	
Current Month Interest (*Final, including payments*)		**$ 87.34**	
Prior Month Interest Adjustment		**$ 0.01**	
Adjusted Monthly Interest		**$ (35.72)**	
Total Interest Charges		**$ 847.87**	
Grand Total			**$ 84.37**

RWG LAW

T 213.626.8484
F 213.626.0078
Fed. I.D. No. 95-3292015

350 South Grand Avenue
37th Floor
Los Angeles, CA 90071

Approved November 12, 2025

BORREGO SPRINGS WATERMASTER
C/O SAMANTHA ADAMS, EXECUTIVE DIRECTOR
WEST YOST
25 EDELMAN, SUITE 120
IRVINE, CA 92618

Invoice Date: September 30, 2025
Invoice Number: 255263
Matter Number: 13056-0001

Re: 13056-0001 GENERAL LEGAL SERVICES

For professional services rendered through September 30, 2025

Time Detail

Date	Initials	Description	Hours
09/02/25	JLM	GENERATE CONTRACT TEMPLATE FOR USE IN OBTAINING PEER SERVICES ON DEPENDENT PLANTS	1.70
09/03/25	JLM	DRAFT AND PROVIDE TEMPLATE CONSULTANT'S AGREEMENT TO STAFF	0.50
09/05/25	JLM	E-MAILS ON CONTRACT FOR PEER REVIEW OF GDVS	0.30
09/08/25	JLM	REVIEW PROPOSED CHANGES TO PEER REVIEW AGREEMENT	1.60
09/09/25	JLM	REVIEW AND RESPOND TO E-MAILS ON QUESTION OF ENDING WATER TRANSFER	1.00
09/10/25	JLM	REVIEW SUMMONS LETTER; REVIEW E-MAIL ON HALTING TRANSFER	1.50
09/12/25	JLM	ZOOM MEETING WITH CLIENT STAFF ON RESPONSE TO DWR	1.50
09/12/25	JCM	COMMUNICATIONS WITH MR. MARKMAN AND MS. ADAMS REGARDING FINAL JOINT STATUS CONFERENCE STATEMENT	0.20
09/15/25	JLM	REVIEW BOARD MEETING AGENDA MATERIALS; REVIEW NEW DOLJANIN COMPLAINT	2.00
09/15/25	SLF	REVIEW BOARD METING AGENDA PACKET	0.20
09/17/25	JLM	REVIEW USGS FORMAT CONTRACT; ATTEND BOARD MEETING	4.20

Client: BORREGO SPRINGS WATERMASTER
Matter: GENERAL LEGAL SERVICES

Invoice Date: September 30, 2025
Invoice Number: 255263
Matter Number: 13056-0001

Date	Initials	Description	Hours
09/18/25	JLM	ATTEND MEETING ON NEW DOLJANIN FILING IN FEDERAL COURT; REVIEW AGENDA FOR TAC MEETING	1.20
09/19/25	JLM	PHONE CALL FROM ESCROW OFFICE ON RECORDED JUDGMENT	0.30
09/22/25	JLM	E-MAILS ON TRANSFER	0.50
09/23/25	JLM	BEGIN REVIEW OF CONTRACT FOR PEER REVIEW WORK	1.00
09/24/25	JLM	REVIEW DRAFT METER READING AGREEMENT	0.50
09/25/25	JLM	PHONE CALL ON TRANSFER ISSUE	0.20
09/26/25	JLM	REVIEW MS. ADAMS E-MAILS AND MEETING ON TRANSFER FOR CARRYOVER TO NORTH PARTS OF BASIN	1.60
09/30/25	JLM	CALL TO MS. SALBERG ON AGREEMENT OF BWD TO READ METER	0.40
Total			**20.40**

Timekeeper Summary

Name	Hours	Rate	Amount
JACOB C. METZ	0.20	275.00	55.00
JAMES L. MARKMAN	20.00	400.00	8,000.00
STEVEN L. FLOWER	0.20	350.00	70.00
Total	**20.40**		**$8,125.00**

Cost Detail

Date	Description	Amount
09/19/25	FIRST LEGAL NETWORK, LLC - ATTORNEY SERVICE - FILING/OCSC-SANTA ANA 8/22/25	36.25
Total		**$36.25**

Client: BORREGO SPRINGS WATERMASTER
Matter: GENERAL LEGAL SERVICES

Invoice Date: September 30, 2025
Invoice Number: 255263
Matter Number: 13056-0001

CONFIDENTIAL

This material is subject to the attorney-client privilege and/or attorney work product protection, or otherwise is privileged or confidential. Do not disclose the contents hereof. Do not file with publicly-accessible records.

Current Legal Fees.....$8,125.00
Current Client Costs Advanced.....$36.25

Total Current Fees and Costs.....$8,161.25

RWG LAW

T 213.626.8484
F 213.626.0078
Fed. I.D. No. 95-3292015

350 South Grand Avenue
37th Floor
Los Angeles, CA 90071

BORREGO SPRINGS WATERMASTER
C/O SAMANTHA ADAMS, EXECUTIVE DIRECTOR
WEST YOST
25 EDELMAN, SUITE 120
IRVINE, CA 92618

Invoice Date:	September 30, 2025
Invoice Number:	255263
Matter Number:	13056-0001

Re: 13056-0001 GENERAL LEGAL SERVICES

For professional services rendered through September 30, 2025

Fees	8,125.00
Costs	36.25
Total Amount Due	**$8,161.25**

TERMS: PAYMENT DUE UPON RECEIPT

PLEASE RETURN THIS PAGE WITH YOUR REMITTANCE TO

RICHARDS, WATSON & GERSHON
350 South Grand Avenue, 37th Floor
Los Angeles, CA 90071

WEST YOST
Water. Engineered.

Remit Payment To:
PO Box 2158
Davis, CA 95617

September 30, 2025

Invoice Number: 2064825

Accounts Payable	Client Project:	Work Order No. 7
Borrego Springs Watermaster	WY Project No:	940-80-24-09
c/o West Yost Associates	Contract Amount:	339,833.00
25 Edelman, Suite 120	Job Name:	WY 2025 Admin and Technical Services
Irvine, CA 92618		

Professional Services from September 1, 2025 to September 30, 2025

Approved November 12, 2025

Previously Billed :	**294,226.52**
Total This Period :	**42,301.00**
Total Amount Billed to Date including This Invoice :	**336,527.52**
Amount Remaining in Contract :	**3,305.48**

Professional Personnel

	Hours	Rate	Amount
Eng/Scientist/Geologist Manager I			
Adams, Samantha	24.00	352.00	8,448.00
Principal Eng/Scientist/Geologist II			
Chiang, Eric	1.00	338.00	338.00
Malone, Andy	33.50	338.00	11,323.00
Associate Eng/Scientist/Geologist I			
Salberg, Lauren	68.50	237.00	16,234.50
Engineer/Scientist/Geologist II			
Kelty, Clay	16.50	215.00	3,547.50
Martinez, Charles	4.50	215.00	967.50
Engineer/Scientist/Geologist I			
Serafin, Leslie	.50	185.00	92.50
Administrative IV			
Ehresman, Leah	1.25	168.00	210.00
Administrative III			
Mendoza-Tellez, Maria	7.50	152.00	1,140.00
Totals	157.25		42,301.00
Total Labor			**42,301.00**
		Total this Invoice	**$42,301.00**

Description of Services:

Please see attached description of services

Project	940-80-24-09	WY 2025 Admin and Technical Services	Invoice	2064825

Outstanding Invoices

Number	Date	Balance
2064359	8/31/2025	39,585.75
Total		**39,585.75**

Please direct questions to:

Project Manager Samantha Adams
Principal Greg Chung GKC

Description of Services Rendered
Project 940-80-24-09
Watermaster Administrative and Technical Services – Portion of Services not Reimbursable by DWR Prop 68 Grant
Invoice Period: September 1, 2025 to September 30, 2025

The services billed in this invoice are those Watermaster administrative and technical services that are not reimbursable through the DWR Prop 68 grant.

TASK 1 – MEETINGS AND COURT HEARINGS

The work performed for this task includes preparing for and attending Watermaster Board Meetings and Court Hearings. The work performed in this reporting period included:

BOARD MEETINGS

- Corresponded with Watermaster Board officers and legal counsel throughout the month to coordinate meeting agenda items and other Watermaster activities.
- September 2025 Regular Board Meeting:
    - Prepared meeting minutes from August 2025 Board meeting.
    - Prepared, reviewed, and formatted agenda package content. This work included:
        - Organized, compiled, and formatted the public correspondence and consent calendar items.
        - Performed work, including coordination, preparation, and/or review of staff memos or other materials to support the following agenda items:
            - WY 2026 calendar of activities and approval of WY 2026 Board Meeting dates
            - Watermaster Meter Reading Program
            - Borrego Valley Hydrologic Model (BVHM) pumping projections
            - TAC meeting agenda
            - Workshop on Addressing DWR Comments on the Judgment/GMP: Water Quality
            - Legal Counsel report
            - Technical Consultant report
            - Executive Director report
            - October 2025 meeting agenda
    - Compiled the final agenda package and distributed via the stakeholder distribution list and Watermaster website.
    - Prepared PowerPoint Presentation to support the Board meeting discussion.

  - Responded to questions from Board members via email and phone calls regarding the Board package items.
  - Attended the virtual Board meeting on September 17, 2025. The meeting was attended by Samantha Adams, Andy Malone, and Lauren Salberg.
- October 2025 Board Meeting Preparation:
  - Prepared punch list of action items for the Board meeting. Created meeting link and coordinated assignments for preparing the package.
  - Prepared meeting minutes from September 2025 Board meeting.
  - Began work on agenda packet materials, including:
    - Draft Board agenda
    - TAC meeting agenda
    - Executive Director report
    - November 2025 meeting agenda

TAC MEETINGS (POST GRANT PERIOD – APRIL TO SEPTEMBER 2025)

- Prepared the September 22, 2025 TAC agenda package and distributed to the TAC and public distribution list via email.
- Prepared PowerPoint Presentation to support the September 22, 2025 TAC working meeting.
- Conducted a working TAC meeting on September 22, 2025. The meeting attendees were Andy Malone, Samantha Adams, and Lauren Salberg.
- Prepared draft meeting minutes from the September 22, 2025 TAC meeting.
- Following the TAC meeting, emailed TAC members with schedule for submitting comments and request to review meeting minutes.

COURT HEARINGS

- No work performed during the reporting period.

TASK 2 – WATERMASTER ADMINISTRATION

The Executive Director, with support from staff, will organize, oversee, and/or perform the administrative and management aspects of running the Watermaster and administering the Judgment, Rules and Regulations, and GMP. The work performed in this reporting period included:

PREPARE THE WATERMASTER ANNUAL BUDGET

- This task is complete.

INSURANCE, ACCOUNTING, AND FINANCIAL SERVICES

- Prepared the August 2025 Financial Report.
- Processed accounts receivable into QuickBooks.
- Processed accounts payable into QuickBooks.
- Drove to US Bank to deposit checks.
- Cut checks for accounts payable and mailed for signature.

- Prepared the August 2025 final interest statement and estimated September 2025 interest statement for West Yost and other vendors.
- Communicated with vendors on reporting estimates of billings for inclusion in monthly financials.
- Processed DWR Reimbursement #8 for payment to vendors.
- Contacted Parties with past due invoices to remind of payment due.
- Researched bank requirements for adding second signatory to Watermaster bank account.
- Coordinated with C.J. Brown regarding performing WY 2025 financial audit.
- Coordinated with BWD on status and wire transfer of DWR Reimbursement #9.

MAINTAIN WEBSITE AND GRANT COMMUNICATIONS (POST GRANT PERIOD – APRIL TO SEPTEMBER 2025)

- Posted the following materials to the Watermaster website:
  - Meeting materials for the September TAC meeting
  - Board meeting materials
  - WY 2026 Board Meeting dates
  - Resolution 25-01
- Updated Watermaster website with upcoming dates for Board and TAC meetings.
- Updated Watermaster homepage with information on October 2025 Stakeholder Open House.
- Set up section for WY 2026 Board meeting dates and materials on Watermaster Board Meetings webpage.

RESPOND TO AND TRACK PUBLIC INFORMATION REQUESTS

- Regularly checked Borrego inbox and provided general as-requested support to the public throughout the month by responding to emails on the following topics:
  - Requirements for drilling a new well in the Basin, acquiring water rights, and Watermaster meter requirements

AS-NEEDED SUPPORT TO THE BPA PARTIES

- At the request of BPA Parties, assisted with the following:
  - Prepared summary of historic Water Rights Accounting for two Parties interested in clarifying the calculation of their current Overproduction balance and the potential assessment owed.
  - Prepared summary of pumping-to-date in WY 2025 compared to Annual Allocation.

AS-NEEDED ADMINISTRATION OF THE TERMS OF THE JUDGMENT, RULES & REGULATIONS, AND GROUNDWATER MANAGEMENT PLAN

- Prepared redline draft of Meter Read Agreement between Borrego Springs Watermaster and BWD, including updated and new exhibits to agreement. Sent materials to Legal Counsel for review.

- Communicated with Legal Counsel on Judgment requirements for transfers in the Basin to support recommendations for developing a more detailed Watermaster Policy on transfers.

General administration and project managements tasks

- Performed monthly project management tasks including budget, schedule, and scope of work progress evaluations.
- Reviewed amount received from SGM grant reimbursement request #9 and coordinated with BWD.
- Coordinated with RWG on review and update of July 2025 invoice.

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 2025 that are not reimbursable by the DWR Prop 68 Grant. The work performed in this reporting period included:

Groundwater Pumping Monitoring - Monthly Collection and Processing of Meter Read Data (Post Grant Period – April to September 2025)

- Cataloged and processed August 2025 monthly meter reads.
- Calculated August 2025 pumping by well for remaining wells.
- Performed QA/QC of August 2025 pumping data.

Non-Reimbursable Costs for Groundwater Monitoring Program

- Began preparing for the Fall 2025 monitoring event:
    - Ordered bottles from Clinical Laboratory for groundwater-quality sample analysis.
    - Began internal team coordination of action items to prepare for the monitoring event.

Non-Reimbursable Costs for Addressing Abandoned Wells

- This task is complete.

Cooperator Data Collection, Data Management, and Reporting Data to DWR Portals (Post Grant Period – April to September 2025)

- No work performed during the reporting period.

As-needed technical support for implementation of the Judgment, Rules and Regulations, and Groundwater Management Plan

- No work performed during the reporting period.

Address Ad Hoc Requests of TAC from the Board

- No work performed during the reporting period.

Develop TAC Scope of Work and Budget for WY 2026-2029

- This task is complete.

Description of Services
940-80-24-09
Page 5

AMENDED SCOPE (APPROVED JUNE 2025): ADDITIONAL WORK TO ADVANCE 5-YEAR GMP ASSESSMENT/UPDATE (INCLUDING BOARD-APPROVED BVHM RUNS)

- Continued work to run additional pumping projection scenarios using the Borrego Valley Hydrologic Model (BVHM).
    - Per Board direction, prepared an accounting analysis of water rights and pumping projections for an additional projection scenario, in which no future water rights transfers are simulated. Summarized and documented results of the analysis and emailed to the Board for their review ahead of the September Board meeting.
    - Began organizing and formatting tables documenting total annual pumping projections under Scenarios 1A/B.
    - Documented methods, results, and findings from the comparison of water rights and pumping projections in Scenarios 1A/B vs. an additional projection scenario with no transfers to discuss with the Watermaster Board.
    - Developed scope, schedule, and budget to run additional pumping projections using the BVHM, including (i) simulation in which no future water rights are simulated, (ii) simulation in which a total of approximately 1,800 acre-feet of pumping is shifted to the North Management Area (NMA) (Scenario 1C), and (iii) simulation in which all water rights currently afforded in the Judgment are simulated (as-is).
    - Set up meeting with BWD to discuss pumping assumptions to use in Scenario 1C, in which 1,800 afy of pumping is shifted to the NMA.
- Continued work to advance the 5-year GMP Assessment/Update, including:
    - Began implementing scope to address DWR Recommended Corrective Actions (RCAs) #5 on improvements to Sustainable Management Criteria (SMC) for groundwater quality, including:
        - Discussed methods to update and refine SMCs for groundwater quality.
        - Developed methodology to respond to DWR comments and updating SMC for groundwater quality.
        - Developed draft figures to support method for updating SMCs for groundwater quality, including maps of wells with historical exceedances of nitrate, arsenic, and TDS.
        - Documented methods for updating groundwater level and storage SMCs.
        - Incorporated TAC feedback to refine methods to update SMCs for groundwater levels and storage.
    - Began implementing scope to address DWR RCA #1 to improve understanding and use of Management Areas in the Basin, including:
        - Discussed DWR comments and an approach to respond to comments.
    - Began implementing scope to address DWR RCA #6 on how the Judgment/GMP should address the potential for land subsidence to cause Undesirable Results in the Basin:

- Analyzed recent and potential future land subsidence within the Basin using data from InSAR and a Continuous Global Positioning System (CGPS) station in the Basin. Prepared figures and time-series charts documenting the changes in land surface elevation, including:
  - Total vertical ground motion that occurred across the Basin between June 2015 and June 2024.
  - Annual vertical ground motion that occurred across the Basin between June 2023 and June 2024.
  - Potential future subsidence that could occur within the Basin over the SGMA implementation period of 2015-2040.
- Developed draft recommendation for a method to address RCA #6, including development of an annual land subsidence monitoring and reporting program.
- Prepared memorandum documenting on RCA #6, characterization of historical, current, and future subsidence, methods to address RCA #6, and comparing proposed method with DWR guidance on land subsidence.
- Incorporated TAC feedback to refine methods for addressing RCA #6.

- Continued implementing scope to address DWR Recommended Corrective Actions (RCAs) 3 and 4 on improvements to SMC for groundwater levels and storage, including:
  - Met with a TAC member to discuss their request to update Use Thresholds for groundwater elevations at specific wells and further discuss the SMC for groundwater storage.
  - Incorporated TAC feedback to refine methods to update SMCs for groundwater levels and storage.
  - Updated documentation on the methods for updating groundwater level and storage SMCs (based on TAC feedback) and prepared for Board Workshop to discuss updated SMCs.
  - Fulfilled additional data request from a TAC member for all known information on De Minimis wells in the Basin (including wells with/without well construction information).
- Continued implementing scope to address DWR RCA 7 to improve understanding of the relationship of the Judgment and GMP.
- Prepared materials for Stakeholder Open House and Board Workshop to discuss updates to SMCs for groundwater level, quality and storage.

TASK 4 – ENVIRONMENTAL WORKING GROUP

The objective of this task is to support the activities of the EWG in WY 2025 that are not part of the DWR Prop 68 Grant.

EWG MEETINGS

- Per Board direction, to advance review of the UCI Groundwater Dependent Ecosystem (GDE) Study report, performed the following:

- Prepared for and conducted discussion with staff at The Nature Conservancy to assess their ability/interest to perform a peer review of the UCI GDE study.
- Finalized a Request for Proposal (RFP), including scope of work, schedule, and budget to perform the GDE study review.
- Emailed RFP to four peer reviewer candidates.
- Coordinated and corresponded with peer reviewer candidates throughout the month regarding the RFP.
- Emailed the EWG and TAC to:
  - Assign members to review and comment on the UCI GDE Study Report as "best available science."
  - Request members to evaluate and rank the peer reviewer proposals received to perform an independent review of the UCI GDE Study Report.
- Provided the Watermaster Board with periodic updates on (i) the assignment of the review of the GDE Study Report to the TAC and EWG and the comments received, and (ii) the status and receipt of RFPs.
- Reviewed and catalogued comments from the TAC and EWG on their:
  - Review and comments on the GDE Study Report as "best available science".
  - Evaluation and ranking of the proposals received to perform the peer review of the GDE Study Report.
- Coordinated with Legal Counsel to discuss negotiation with preparing a PSA with a peer reviewer.

TASK 5 - STAFF SERVICES BILLED TO WATERMASTER RELATED TO MANUAL-READ METERS

The objective of this task is to coordinate the monitoring and collection of meter data from the parties with manual-read meters. This work is reimbursed by only those Parties with manual-read meters. The work performed in this reporting period included:

- Followed-up with parties with manual read meters who had not yet sent August 2025 self-reporting of meter reads.
- Sent email reminders to BWD to perform official meter read in September 2025.
- Coordinated with a Party experiencing manual meter read problems. Coordinated with these Parties and meter vendor to discuss fixing meter.

PARTY-FUNDED REQUESTS FOR INFORMATION (RFI)

- There are no open requests for information.

West Yost Budget Status Report for Technical and Administrative Services that are not Grant Reimbursable - WY 2025

As of September 2025 Billing Period (Month 12 of 12)

Task	Approved Budget	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Total Spent	Remaining Budget[1]	Estimated Cost to Complete	Estimated Total Cost at Completion	Estimated Remaining Budget at Completion	Notes
Totals	$339,833	$29,146.60	$23,069.82	$23,351.45	$16,212.94	$12,428.62	$10,825.11	$30,244.18	$31,067.05	$30,236.50	$41,062.25	$39,585.75	$42,301.00	$329,531.27	$10,301.73	$0	$329,531	$10,302	
Task 1 - Meetings and Court Hearings	$127,554	$8,261.75	$9,921.25	$13,118.45	$8,441.75	$7,650.75	$6,003.00	$16,338.50	$11,196.00	$8,595.75	$11,118.75	$12,431.25	$14,058.50	$127,135.70	$418.30	$0	$127,136	$418	
Board Meetings	$106,600	$8,261.75	$9,921.25	$13,118.45	$7,939.00	$7,474.75	$6,003.00	$12,711.50	$8,308.75	$8,595.75	$8,261.25	$8,613.50	$9,448.00	$108,656.95	($2,056.95)	$0	$108,657	($2,057)	
TAC Meetings (Post Grant Period - April to Sep. 2025)	$17,444	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3,627.00	$2,887.25	$0.00	$2,857.50	$3,817.75	$4,610.50	$17,800.00	($356.00)	$0	$17,800	($356)	
Court Hearings	$3,510	$0.00	$0.00	$0.00	$502.75	$176.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$678.75	$2,831.25	$0	$679	$2,831	
Task 2 - Watermaster Administration and Management	$76,699	$8,013.00	$4,843.00	$4,910.25	$6,079.75	$3,779.50	$2,623.25	$6,275.00	$13,334.25	$8,786.25	$6,387.25	$6,914.75	$5,812.00	$77,758.25	($1,059.25)	$0	$77,758	($1,059)	
Prepare Watermaster Budget for WY 2025	$11,580	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,717.25	$7,484.00	$2,250.50	$0.00	$0.00	$0.00	$11,451.75	$128.25	$0	$11,452	$128	This task is complete.
Insurance, Accounting, and Financials Services	$24,564	$2,844.00	$2,969.00	$3,486.75	$2,426.00	$2,537.00	$1,650.00	$1,978.00	$2,704.00	$1,984.00	$2,122.00	$2,240.00	$1,526.00	$28,466.75	($3,902.75)	$0	$28,467	($3,903)	Run rate expected to decrease after Audit is complete in March.
Maintain Website and Grant Communications (Post Grant Period - April to Sep. 2025)	$5,278	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$177.75	$355.50	$515.75	$507.25	$474.00	$2,030.25	$3,247.75	$0	$2,030	$3,248	
Track/Respond to Public Communications and Requests	$2,184	$0.00	$55.25	$0.00	$0.00	$59.25	$0.00	$355.50	$59.25	$118.50	$0.00	$474.00	$296.25	$1,418.00	$766.00	$0	$1,418	$766	
As-needed support to the BPA Parties	$11,016	$1,729.00	$221.00	$126.25	$1,049.00	$0.00	$206.50	$650.00	$1,609.25	$1,298.25	$882.00	$1,151.00	$709.25	$9,631.50	$1,384.50	$0	$9,632	$1,385	
As-requested admin. of the Judgment, Rules & Regs, and GMP	$10,779	$2,033.00	$797.25	$329.00	$1,389.75	$59.25	$0.00	$479.00	$265.75	$736.25	$0.00	$440.00	$854.75	$7,384.00	$3,395.00	$0	$7,384	$3,395	
General administration and project managements tasks	$11,298	$1,407.00	$800.50	$968.25	$1,215.00	$1,124.00	$766.75	$1,095.25	$1,034.25	$2,043.25	$2,867.50	$2,102.50	$1,951.75	$17,376.00	($6,078.00)	$0	$17,376	($6,078)	Additional work to address DWR comments and questions on grant reimbursement requests to close out grant.
Task 3 - Technical Services	$126,256	$12,664.85	$8,037.25	$5,219.25	$1,583.94	$641.62	$2,091.36	$7,523.18	$4,523.55	$10,625.25	$20,750.25	$17,750.50	$18,159.25	$109,570.25	$16,685.75	$0	$109,570	$16,686	**At its June 18th 2025 Board meeting, the Board approved the use of surplus budget to advance work on the 5-year Assessment and DWR Comments at a cost of $65,000. The total budget on other tasks was reduced so there was no net increase in total West Yost Budget.**
Address Ad Hoc Requests from the Board	$0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0	$0	$0	
Groundwater Pumping Monitoring - Monthly Collection and Processing of Meter Read Data (Post Grant Period - April to Sep. 2025)	$11,045	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,930.75	$1,516.00	$1,516.00	$1,886.75	$1,860.50	$1,764.00	$10,474.00	$571.00	$0	$10,474	$571	
Non Reimbursible for C7 Cat (d) Task 7/8: GW Level and QualMon	$14,361	$2,475.25	$0.00	$0.00	$0.00	$0.00	$2,091.36	$3,929.18	$1,255.05	$3,603.75	$0.00	$0.00	$822.75	$14,177.34	$183.66	$0	$14,177	$184	
Cooperator Data Collection, Data Management, and Reporting Data to DWR Portals (Post Grant Period - April to Sep. 2025)	$5,578	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,663.25	$1,287.00	$296.25	$592.50	$573.75	$0.00	$4,412.75	$1,165.25	$0	$4,413	$1,165	
Non Reimubursible for C7 Cat (c) Task 5: Address Abandoned Wells	$1,000	$53.10	$0.00	$0.00	$442.19	$641.62	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,136.91	($136.91)	$0	$1,137	($137)	This task is complete.
As-needed support for implementation of the Judgment, Rules & Regs, and GMP	$14,000	$1,593.00	$3,498.00	$2,858.00	$1,141.75	$0.00	$0.00	$0.00	$465.50	$3,835.25	$0.00	$0.00	$0.00	$13,391.50	$608.50	$0	$13,392	$609	
Develop TAC Scope & Budget for WY 2026-2029	$15,272	$8,543.50	$4,539.25	$2,361.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$15,444.00	($172.00)	$0	$15,444	($172)	This task is complete.
ADDITIONAL WORK TO ADVANCE 5-YEAR GMP ASSESSMENT/UPDATE (INCLUDING MODELING)	$65,000	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,374.00	$18,271.00	$15,316.25	$15,572.50	$50,533.75	$14,466.25	$0	$50,534	$14,466	The work to be completed includes Board-approved next steps on the 5-year Assessment Report, responding to DWR Recommended Corrective Actions, and Pumping Projections
Task 4 - Environmental Working Group	$6,381	$0.00	$164.82	$0.00	$0.00	$0.00	$0.00	$0.00	$397.25	$1,677.00	$2,806.00	$2,381.75	$3,518.75	$10,945.57	($4,564.57)	$0	$10,946	($4,565)	
EWG Meetings	$6,381	$0.00	$164.82	$0.00	$0.00	$0.00	$0.00	$0.00	$397.25	$1,677.00	$2,806.00	$2,381.75	$3,518.75	$10,945.57	($4,564.57)	$0	$10,946	($4,565)	At its August 20, 2025 meeting, the Board authorized up to $5,000 over-budget amount to complete solicitation of peer-review of GDE Study.
Task 5 - Staff Services Billed to Watermaster to be Reimbursed by Parties with Manual-Read Meters	$2,943	$207.00	$103.50	$103.50	$107.50	$356.75	$107.50	$107.50	$1,616.00	$552.25	$0.00	$107.50	$752.50	$4,121.50	($1,178.50)	$0	$4,122	($1,179)	
Coordinate Manual-Read Metering with BWD/Parties	$2,943	$207.00	$103.50	$103.50	$107.50	$356.75	$107.50	$107.50	$1,616.00	$552.25	$0.00	$107.50	$752.50	$4,121.50	($1,178.50)	$0	$4,122	($1,179)	
Requests For Information to Be Reimbursed by Parties	$7,000	$0	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$6,996.25	$0.00	$0.00	$6,996.25	$3.75	$0	$4	$6,996	**Total Amount to be Reimbursed through RFI Process**
Pumping Projections - Scenario 1A (T2/Rams Hill Funded Effort)	$7,000	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$6,996.25	$0.00	$0.00	$6,996.25	$3.75	$0	$4	$6,996	RFI Approved for $7k. This task is complete.
Total Billed - Watermaster Cost + RFI		$29,147	$23,070	$23,351	$16,213	$12,429	$10,825	$30,244	$31,067	$30,237	$48,059	$39,585.75	$42,301.00						

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—ordered by the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be permanently transferred by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Sections III.I and III.J prior to completing this form.

Section 1. Overview and Signature. To be filled out by Parties* to the Permanent Transfer of BPA Rights
a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Permanent Transfer*

Bagdasarian Farms LLC ("Transferor") has assigned and permanently transferred to T2 Borrego LLC ("Transferee") BPA rights in the amount of 1142 acre-feet.

The transfer of rights is a (select one):

- ☑ Permanent Transfer with [ ] full or [ ] partial land conveyance with associated change to assignment of BPA. Attach deed (or comparable instrument) and water rights restrictive covenant(s) per Section III.I.(6) of the Judgment documenting BPA allocations. Fill out Section 2 of this form.
- ☐ Permanent Transfer separate from BPA Parcel transfer: Assignment of BPA that originated from water credits conversion to BPA Parcel and Wells. Fill out Sections 2 and 3 of this form.
- ☐ Permanent Transfer separate from BPA Parcel transfer: Permanent fallowing of all or a portion of an original BPA Parcel and transfer of BPA rights to a different BPA Parcel/Wells. Fill out Sections 2 and 4 of this form.

The BPA transferred is assigned for use at the following parcel(s) and well(s). If Transferee is already an owner of BPA listed in Exhibit 4 of the Judgment, and the assignment is to the entirety of the parcels and wells already listed, need only state below *"Those parcel(s) and well(s) listed in Exhibit 4 for Transferee".*

Parcel(s)**: Those parcels and wells currently listed in Exhibit 4 for Transferor.

Well(s)**:

***attach additional sheets if necessary to list all parcels and wells*

I hereby certify that I have read and reviewed Sections III.I and III.J of the Stipulated Judgment, the conditions of Sections III.I.(6) and III.I.(7) have been satisfied, and I understand the means by which the Judgment requires groundwater pumping be permanently reduced to achieve sustainability of the Borrego Springs Subbasin.

Transferor Signature
Its: CEO
Date: 5/8/25

Transferee Signature
Its: Vice President
Date: 5-8-2025

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee

☑ Yes ☐ No Transferee is a Party to the Judgment

☑ Yes ☐ No Transferor is in good standing with the Watermaster

If not, explain: _____

☑ Yes ☐ No Transferee is in good standing with the Watermaster

If not, explain: _____

☐ Yes ☑ No The transfer is subject to restrictions based on location of Transferee's BPA Parcel per evidence-based findings published by the Watermaster.

☑ Yes ☐ No Watermaster was notified of transfer for approval pursuant to III.I.(7).

Anti-Speculation Considerations.

☐ Yes ☑ No Transferee is subject to anti-speculation considerations. Provide explanation:

These are original BPA parcels, which were sold/transferred along with corresponding water rights. The full parcels were transferred along with 100% of the corresponding BPA. See attached deed, recorded on or around 5/9/2025.

If Yes, Transferee:

☐ Yes ☐ No Provided Eligibility Proof pursuant to III.I.(2).b

☐ Yes ☐ No Meets Eligibility Requirement

Section 3. Information for Transfers of BPA Converted from Water Credits

☐ Yes ☐ No Has Watermaster issued Transferor with a status letter converting the water credits to BPA?

If no, attach (1) water rights restrictive covenant and (2) detailed evidence that fallowing has been completed to minimum standards in Exhibit 3 of the Judgment.

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 4. Information for Transfers Involving Permanent Fallowing of BPA Parcels

☐ Yes ☐ No Has BPA parcel been fallowed prior to execution of this transfer to satisfy the minimum fallowing requirements described in Exhibit 3 of the Judgment?

If Yes:

☐ Yes ☐ No Has documentation been provided to and confirmed by Watermaster that the fallowing standards have been satisfied? If no, attach:

(1) water rights restrictive covenant
(2) detailed evidence that fallowing has been completed to minimum standards in Exhibit 3 of the Judgment.

If No:

Indicate which of the following methods will be utilized to ensure fallowing is completed within 12 months of the transaction:

☐ Deposit to Watermaster of 120% of the funds needed to complete the fallowing

☐ Security or performance bond secured in favor of the Watermaster in an amount equal to 120% of the anticipated cost of the fallowing

☐ Escrow account opened with a reputable title company with a holdback from the purchase price equal to 120% of the anticipated cost of fallowing, payable to the Watermaster if not timely completed within 12 months of the transaction.

Section 5. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Permanent Transfer is:

☐ approved without requirement of further action

☐ approved subject to curing the criteria listed in the attached finding of an Eligibility Violation. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer pursuant to Section III.I.(3) of the Judgment.

Following execution of this form, the transfer will be formally recorded by updating Watermaster's records and Exhibit 4 of the Judgment. The updated Exhibit 4 will be posted to the Watermaster website and published with the next Annual Report to the Court (due April 1st of each year).

_____	_____
Executive Director Signature	Legal Counsel Signature
Name: _____	Name: _____
Date: _____	Date: _____

DOC# 2025-0127958

May 15, 2025 08:00 AM
OFFICIAL RECORDS
JORDAN Z. MARKS,
SAN DIEGO COUNTY RECORDER
FEES: $1,249.00 (SB2 Atkins: $0.00)
PCOR: YES
PAGES: 6

RECORDING REQUESTED BY AND WHEN RECORDED MAIL DOCUMENT AND TAX STATEMENTS TO:

T2 Borrego LLC
4582 S. Ulster St, Ste. 1410
Denver, CO 80237
Attn: Legal Dept

Space Above This Line for Recorder's Use Only

A.P.N.: 140-070-15-00; 140-070-20-00; 140-070-28-00 File No.: NCS-1225587-WA1

1st AM

The Undersigned Grantor(s) Declare(s):
DOCUMENTARY TRANSFER TAX $ 1,210.00 ;
CITY TRANSFER TAX $_____;
SURVEY MONUMENT FEE $ 10.00
[X] computed on the consideration or full value of property conveyed, OR
[ ] computed on the consideration or full value less value of liens and/or encumbrances remaining at time of sale,
[XX] unincorporated area; [ ] City of _____, and
[ ] Exempt from transfer tax; Reason:

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Bagdasarian Farms, LLC, a Delaware limited liability company ("**Grantor**"), hereby GRANTS to T2 Borrego, LLC, a Colorado limited liability company ("**Grantee**") the following described real property in the unincorporated area of the County of San Diego and State of California:

See **Exhibit A** attached hereto and incorporated herein (the "**Real Property**"), together with all improvements thereon and all rights and appurtenances thereto (i) all buildings, fixtures, mechanical systems and other improvements located on the Real Property, (ii) all roads, streets, alleys, gaps and gores, and privileges, association rights and easements belonging or appurtenant to the Real Property; (iii) all rights and interests, including adjudicated groundwater rights, held by Seller pertaining to, or arising from, the Real Property, or any portion thereof, as set forth in that certain judgment entered in the Superior Court of California, County of Orange on April 8, 2021 (as the same may be amended or supplemented from time to time, "**Borrego Springs Judgment**"), in the action bearing Case No. *37-2020-00005776* and titled *Borrego Water District v. All Persons Who Claim a Right To Extract Groundwater in The Borrego Valley Groundwater Subbasin No. 7.024-01 Whether Based on Appropriation, Overlying Right, or Other Basis Of Right, And/or Who Claim A Right to Use of Storage Space In The Subbasin et al.* which includes without limitation, the Baseline Pumping Allocation (as defined in the Borrego Springs Judgment) totaling 1,142 acre-feet, and any Carryover (as defined in the Borrego Springs Judgment) attributable to such Baseline Pumping Allocation; and (iv) any other water rights, whether rights to surface water or groundwater, that are either appurtenant to, relate to, or arise from prior water use on the Real Property, whether based on appropriation, overlaying right, or other basis of right (collectively, the "**Property**");

This grant is made expressly subject to the covenants, conditions, easements, encumbrances and other matters set forth in **Exhibit B** attached hereto and incorporated herein by this reference.

[*Signature Page Follows*]

WITNESS THE EXECUTION HEREOF as of the 9th day of May, 2025.

GRANTOR :

BAGDASARIAN FARMS, LLC,
a Delaware limited liability company

By: One Tree Farms, LLC,
a Delaware limited liability company,
its Sole Member

By: _____
Name: John Gless
Its: Chief Executive Officer

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)SS

COUNTY OF Riverside)

On May 2 2025, before me, Amy C Walling, Notary Public, personally appeared John Gless, the chief executive officer of One Tree Farms, LLC, a Delaware limited liability company, Sole Member of Bagdasarian Farms, LLC, a Delaware limited liability company, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Amy C Walling

AMY C. WALLING
Notary Public - California
Riverside County
Commission # 2409591
My Comm. Expires Jul 29, 2026

This area for official notarial seal

EXHIBIT "A"

LAND DESCRIPTION

The Land referred to herein below in situated in the unincorporated area of the County of San Diego, State of California, and is described as follows:

TRACT I (APN 140-070-15-00):

PARCEL 1:

THE NORTH HALF OF SECTION 9, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, MAY 14, 1885.

EXCEPTING THEREFROM THE WEST 240 ACRES THEREOF.

PARCEL 2:

AN EASEMENT FOR PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS OVER, ALONG AND ACROSS THE NORTHERLY 30 FEET OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 9, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, MAY 14, 1885.

PARCEL 3:

AN EASEMENT FOR PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS OVER, ALONG AND ACROSS THE NORTHERLY 30 FEET OF THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, MAY 14, 1885.

PARCEL 4:

AN EASEMENT FOR PEDESTRIAN AND VEHICULAR INGRESS AND EGRESS OVER, ALONG AND ACROSS THE NORTHERLY 30 FEET OF THE WEST HALF OF THE NORTHWEST QUARTER OF SECTION 9, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, MAY 14, 1885.

TRACT II (APN 140-070-20-00):

PARCEL A:

THE NORTHEAST ONE-QUARTER OF THE NORTHWEST ONE-QUARTER OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL B:

THE SOUTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL C:

THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL D:

AN EASEMENT FOR INGRESS AND EGRESS AND UTILITIES OVER THE NORTHERLY 20 FEET AND THE EASTERLY 40 FEET OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL E:

A NON-EXCLUSIVE EASEMENT FOR PUBLIC ROAD AND UTILITY PURPOSES AND FOR PURPOSES OF INGRESS AND EGRESS TO BE USED IN COMMON WITH OTHERS OVER THE SOUTHERLY 50.00 FEET OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 8, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

PARCEL F:

AN EASEMENT FOR INGRESS AND EGRESS, UTILITIES, OPERATING A WELL OPERATING AGREEMENT AND TO BUILD AND MAINTAIN UNDERGROUND PIPELINES, PUMPING PLANT, WELL, AND ROADS AND NECESSARY DEVICES AND APPURTENANCES THERETO OVER/UNDER, ALONG AND ACROSS THE NORTHERLY 20 FEET OF THE NORTH HALF OF THE NORTHEAST QUARTER OF SECTION 17, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

TRACT III (~~APN 140-070-25-00~~): **(APN 140-070-28-00)**

THE NORTH HALF OF THE SOUTH HALF OF THE SOUTHEAST QUARTER OF SECTION 8, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO UNITED STATES GOVERNMENT SURVEY.

BEING DESCRIBED AS PARCEL A OF DPL CASE NO.: 3720-12-0001 IN CERTIFICATE OF COMPLIANCE RECORDED FEBRUARY 22, 2012 AS INSTRUMENT NO. 2012-0100431 OF OFFICIAL RECORDS.

EXHIBIT "B"

Permitted Encumbrances

1. General and special taxes and assessments for the fiscal year 2025-2026, a lien not yet due or payable.

2. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code as a result of changes in ownership or new construction occurring on or after Date of Policy

3. Water rights, claims or title to water, whether or not shown by the public records.

4. The terms and provisions contained in the document entitled "Court-Ordered Notice of Impact of Judgement" recorded January 25, 2022 as Instrument No. 2022-0035605 of Official Records.

5. Any facts, rights, interests or claims that may exist or arise by reason of the following matters disclosed by an ALTA/NSPS survey made by BLEW & ASSOCIATES, P.A. on October 14, 2020, designated PROJECT NO. 20-05-0382-22:

    a. Water valves are located in the westerly portion of the property.

    b. An apparent ditch is located in the northeast portion of the property.

6. An easement for pedestrian and vehicular ingress, egress and incidental purposes, recorded September 13, 1991 as Instrument No. 1991-0470236 of Official Records.

7. An easement for public utilities, ingress, egress and incidental purposes, recorded April 27, 1990 as Instrument No. 90-229560 of Official Records.

8. Grant of Easement recorded April 11, 1997 as Instrument No. 1997-0166418 of Official Records, as amended by that certain Amendment to and Partial Termination of Grant of Easement dated May 9, 2025 and recorded May 13, 2025 as Instrument No. 2025-0125050.

9. An easement for public utilities, ingress, egress and incidental purposes, recorded October 27, 1948 as Book 2998, Page 224 of Official Records.

10. An easement for public utilities, ingress, egress and incidental purposes, recorded October 06, 1951 as Book 4274, Page 273 of Official Records.

11. An easement for county highway, Road Survey 1039 (Di Georgio Road) and incidental purposes, recorded December 02, 1955 as Book 5891, Page 563 of Official Records.

12. An easement for public utilities, ingress, egress and incidental purposes, recorded April 27, 1990 as Instrument No. 90-229560 of Official Records.

13. The terms and provisions contained in the document entitled "Certificate of Compliance" recorded February 22, 2012 as Instrument No. 2012-0100431 of Official Records.

14. Any facts, rights, interests or claims that may exist or arise by reason of the following matters disclosed by an ALTA/NSPS survey made by BLEW & ASSOCIATES, P.A. on November 12, 2020, designated PROJECT NO. 20-05-0382-21:

    a. Fuel Tanks and Water Valve are located on Parcel C.

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—ordered by the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be permanently transferred by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Sections III.I and III.J prior to completing this form.

Section 1. Overview and Signature. To be filled out by Parties* to the Permanent Transfer of BPA Rights
**a Transferee who is not a Party to the Judgment must intervene as a Party as a condition of completing any Permanent Transfer*

Borrego Nazareth LLC ("Transferor") has assigned and permanently transferred to T2 Tiling T LLC ("Transferee") BPA rights in the amount of 1,462 acre-feet.

The transfer of rights is a (select one):

☑ Permanent Transfer with [X] full or [ ] partial land conveyance with associated change to assignment of BPA. Attach deed (or comparable instrument) and water rights restrictive covenant(s) per Section III.I.(6) of the Judgment documenting BPA allocations. Fill out Section 2 of this form.

☐ Permanent Transfer separate from BPA Parcel transfer: Assignment of BPA that originated from water credits conversion to BPA Parcel and Wells. Fill out Sections 2 and 3 of this form.

☐ Permanent Transfer separate from BPA Parcel transfer: Permanent fallowing of all or a portion of an original BPA Parcel and transfer of BPA rights to a different BPA Parcel/Wells. Fill out Sections 2 and 4 of this form.

The BPA transferred is assigned for use at the following parcel(s) and well(s). If Transferee is already an owner of BPA listed in Exhibit 4 of the Judgment, and the assignment is to the entirety of the parcels and wells already listed, need only state below *"Those parcel(s) and well(s) listed in Exhibit 4 for Transferee"*.

Parcel(s)**: Those parcels and wells currently listed in Exhibit 4 for Transferor.

Well(s)**: Those parcels and wells currently listed in Exhibit 4 for Transferor.

***attach additional sheets if necessary to list all parcels and wells*

I hereby certify that I have read and reviewed Sections III.I and III.J of the Stipulated Judgment, the conditions of Sections III.I.(6) and III.I.(7) have been satisfied, and I understand the means by which the Judgment requires groundwater pumping be permanently reduced to achieve sustainability of the Borrego Springs Subbasin.

Signed by:
Maiser Aboueag
09FCD2FC8421430...
Transferor Signature

Its: Manager

Date: 7/16/2025

Transferee Signature

Its: Vice President

Date: 7-16-2025

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee

☐ Yes ☑ No Transferee is a Party to the Judgment

☑ Yes ☐ No Transferor is in good standing with the Watermaster

If not, explain: _____

☐ Yes ☐ No Transferee is in good standing with the Watermaster

If not, explain: n/a Transferee will be added as a party

☐ Yes ☑ No The transfer is subject to restrictions based on location of Transferee's BPA Parcel per evidence-based findings published by the Watermaster.

☐ Yes ☑ No Watermaster was notified of transfer for approval pursuant to III.I.(7).

Anti-Speculation Considerations.

☑ Yes ☐ No Transferee is subject to anti-speculation considerations. Provide explanation:

Note that complete BPA Parcels and full BPA are being transferred, so Section III.I.(7) is inapplicable. See attached deed showing transfer of ownership from Transferor to Transferee, which satisfies the Judgment criteria. Transferee will intervene in the Judgment upon owning the underlying real property.

If Yes, Transferee:

☑ Yes ☐ No Provided Eligibility Proof pursuant to III.I.(2).b

☑ Yes ☐ No Meets Eligibility Requirement

Section 3. Information for Transfers of BPA Converted from Water Credits

☐ Yes ☐ No Has Watermaster issued Transferor with a status letter converting the water credits to BPA?

If no, attach (1) water rights restrictive covenant and (2) detailed evidence that following has been completed to minimum standards in Exhibit 3 of the Judgment.

TRANSFER OF WATER RIGHTS:
PERMANENT TRANSFER OF BPA

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 4. Information for Transfers Involving Permanent Fallowing of BPA Parcels

☐ Yes ☐ No Has BPA parcel been fallowed prior to execution of this transfer to satisfy the minimum fallowing requirements described in Exhibit 3 of the Judgment?

If Yes:

☐ Yes ☐ No Has documentation been provided to and confirmed by Watermaster that the fallowing standards have been satisfied? If no, attach:

(1) water rights restrictive covenant
(2) detailed evidence that fallowing has been completed to minimum standards in Exhibit 3 of the Judgment.

If No:

Indicate which of the following methods will be utilized to ensure fallowing is completed within 12 months of the transaction:

☐ Deposit to Watermaster of 120% of the funds needed to complete the fallowing

☐ Security or performance bond secured in favor of the Watermaster in an amount equal to 120% of the anticipated cost of the fallowing

☐ Escrow account opened with a reputable title company with a holdback from the purchase price equal to 120% of the anticipated cost of fallowing, payable to the Watermaster if not timely completed within 12 months of the transaction.

Section 5. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Permanent Transfer is:

☐ approved without requirement of further action

☐ approved subject to curing the criteria listed in the attached finding of an Eligibility Violation. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer pursuant to Section III.I.(3) of the Judgment.

Following execution of this form, the transfer will be formally recorded by updating Watermaster's records and Exhibit 4 of the Judgment. The updated Exhibit 4 will be posted to the Watermaster website and published with the next Annual Report to the Court (due April 1st of each year).

_____	_____
Executive Director Signature	Legal Counsel Signature
Name: _____	Name: _____
Date: _____	Date: _____

Recording Requested By:
First American Title Company
Homebuilder Services Division

DOC# 2025-0193623

Jul 17, 2025 01:19 PM
OFFICIAL RECORDS
JORDAN Z. MARKS,
SAN DIEGO COUNTY RECORDER
FEES: $1,566.00 (SB2 Atkins: $0.00)
PCOR: YES
PAGES: 5

Recording Requested By And
When Recorded Mail To:

Brownstein Hyatt Farber Schreck, LLP
675 15th Street, Suite 2900
Denver, CO 80202
Attn: Nicole R. Ament, Esq.

Mail Tax Statement To:
T2 Tilting T LLC
4582 S. Ulster St., Ste. 1410
Denver, Colorado 80237

Order #6075300

Space Above this Line for Recorder's Use

APN: 198-021-08-00; 198-270-18-00; 199-010-16-00 THROUGH 199-010-19-00, 199-010-23-00 THROUGH 199-010-26-00; 199-080-10-00; 199-011-04-00; 199-100-24-00; 199-080-20-00 THROUGH 199-080-23-00, 199-080-15-00 THROUGH 199-080-17-00, 199-290-10-00 THROUGH 199-290-12-00, 199-290-19-00, 199-310-02-00, 199-310-04-00, 199-310-27-00, 199-330-04-00, 199-330-05-00, 199-330-30-00, 199-330-35-00, 199-330-37-00, 199-330-38-00, 199-330-39-00, 199-330-18-00, 199-310-29-00, 199-310-30-00, 199-310-32-00, 199-310-33-00, 199-310-10-00, 199-310-13-00 AND 199-310-16-00; 199-350-09-00, 199-360-01-00 THROUGH 199-360-05-00, 199-360-11-00 THROUGH 199-360-16-00, 199-360-22-00 THROUGH 199-360-44-00, 199-380-01-00 THROUGH 199-380-06-00, 199-380-08-00 THROUGH 199-380-43-00, 199-350-17-00 AND 199-400-01-00

GRANT DEED

The undersigned grantor declares: County **Documentary Transfer Tax** is $1,540.00

[_x_] Computed on the full value of the property conveyed, or

[__] Computed on full value less value of liens and encumbrances remaining at time of sale.

[_X_] Unincorporated Area of San Diego

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, BORREGO NAZARETH, LLC, a Georgia limited liability company ("Grantor"), hereby GRANTS to T2 TILTING T LLC, a Colorado limited liability company ("Grantee"), the real property in the Borrego Springs area of the County of San Diego, State of California, more particularly described on Exhibit A attached hereto ("Property")

THIS GRANT DEED is made and accepted upon all covenants, conditions, restrictions, reservations, easements and exceptions of record.

Date: July 17, 2025

[SIGNATURE PAGE FOLLOWS]

GRANTOR

BORREGO NAZARETH, LLC, a Georgia limited liability company

By: _____
Name: Maiser Aboneaaj
Title: Manager

ACKNOWLEDGMENT

STATE OF Georgia)
) ss.
COUNTY OF Gwinnett)

The foregoing instrument was acknowledged before me this 15th day of July, 2025 by Maiser Aboneaaj, as Manager of BORREGO NAZARETH, LLC, a Georgia limited liability company.

Witness my hand and official seal.

My commission expires: 09/16/2026

_____
Notary Public

SCOTT DUNCAN NOTARY PUBLIC GWINNETT COUNTY GEORGIA SEPTEMBER 16, 2026 EXPIRES

File Number: DTR-6075300

Exhibit "A"

Legal Description

Real property in the unincorporated area of the County of San Diego, State of California, described as follows:

PARCEL A: (APN: 198-021-08-00)

THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 5, TOWNSHIP 11, SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

PARCEL B: (APN: 198-270-18-00)

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 11, SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM ONE-SIXTEENTH OF ALL COAL, OIL, GAS AND OTHER MINERAL DEPOSITS CONTAINED IN ALL SAID LAND, AS PROVIDED BY AN ACT OF THE LEGISLATURE, APPROVED MAY 25, 1921, CHAPTER 303, STATUTES OF CALIFORNIA 1921 AND AMENDMENTS THERETO AND AS RESERVED IN PATENT FROM THE STATE OF CALIFORNIA, DATED MAY 15, 1929 AND RECORDED JUNE 14, 1929 IN BOOK 15, PAGE 123 OF PATENTS.

ALSO EXCEPTING THEREFROM THAT PORTION DESCRIBED IN PARCEL 2 OF THAT CERTAIN DEED TO BORREGO SPRINGS PARK COUNTY WATER DISTRICT, RECORDED DECEMBER 20, 1963 AS FILE NO. 227242 OF OFFICIAL RECORDS.

PARCEL C: (APN: 199-010-16-00 THROUGH 199-010-19-00, 199-010-23-00 THROUGH 199-010-26-00)

THE SOUTH HALF OF SECTION 4, TOWNSHIP 11 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS PARK ANNEX UNIT NO. 1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5555, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, APRIL 7, 1965.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS PARK ANNEX UNIT NO. 2, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5613, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 17, 1965.

PARCEL D: (APN: 199-080-10-00)

ALL THAT CERTAIN REAL PROPERTY LOCATED IN SECTION 9, TOWNSHIP 11 SOUTH, RANGE 6 EAST, SAN BERNARDINO BASE AND MERIDIAN, DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTER OF WELL NO. 1, DESCRIBED IN PARCEL G HEREOF; THENCE NORTH 17°30'00" EAST, A DISTANCE OF 15.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 72°30'00" EAST, A DISTANCE OF 15.00 FEET; THENCE SOUTH 17°30'00" WEST, A DISTANCE OF 30.00 FEET; THENCE NORTH 72°30'00" WEST, A DISTANCE OF 30.00 FEET; THENCE NORTH 17°30'00" EAST,

A DISTANCE OF 30.00 FEET; THENCE SOUTH 72°30'00" EAST, A DISTANCE OF 15.00 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL E: (APN: 199-011-04-00)

THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 11 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

PARCEL F: (APN: 199-100-24-00)

LOT 38 OF BORREGO SPRINGS PARK UNIT NO. 1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5242, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 20, 1963.

PARCEL G: (APN: 199-080-20-00 THROUGH 199-080-23-00)

ALL OF SECTION 9, TOWNSHIP 11 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF.

EXCEPTING THEREFROM THAT PORTION DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF TILTING T DRIVE WITH THE CENTER LINE OF MARKER LANE AS SHOWN ON BORREGO SPRINGS PARK UNIT NO. 1, ACCORDING TO MAP THEREOF NO. 5242 ON FILE IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY; THENCE NORTH 0°58'00" WEST, 50.00 FEET ALONG THE NORTHERLY PROLONGATION OF THE CENTER LINE OF SAID MARKER LANE TO THE NORTHERLY LINE OF SAID TILTING T DRIVE WHICH IS ALSO THE ARC OF A 1780.00 FOOT RADIUS CURVE, CONCAVE SOUTHERLY THE CENTER LINE OF WHICH BEARS SOUTH 0°58'00" EAST; THENCE EASTERLY ALONG THE ARC OF SAID 1780.00 FOOT RADIUS CURVE THROUGH A CENTRAL ANGLE OF 22°39'35", A DISTANCE OF 703.97 FEET; THENCE NORTH 21°30'00" EAST, A DISTANCE OF 1076.61 FEET; THENCE NORTH 68°30'00" WEST, A DISTANCE OF 138.00 FEET; THENCE NORTH 72°30'00" WEST, A DISTANCE OF 450.00 FEET; THENCE SOUTH 62°30'00" WEST, A DISTANCE OF 78.23 FEET; THENCE NORTH 52°47'00" WEST, A DISTANCE OF 136.00 FEET; THENCE NORTH 1°04'20" EAST, A DISTANCE OF 25.17 FEET TO THE CENTER OF AN EXISTING WELL KNOWN AS WELL NO. 1; THENCE NORTH 17°30'00" EAST, A DISTANCE OF 15.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 72°30'00" EAST, A DISTANCE OF 15.00 FEET; THENCE SOUTH 17°30'00" WEST, A DISTANCE OF 30.00 FEET; THENCE NORTH 72°30'00" WEST, A DISTANCE OF 30.00 FEET; THENCE NORTH 17°30'00" EAST, A DISTANCE OF 30.00 FEET; THENCE SOUTH 72°30'00" EAST, A DISTANCE OF 15.00 FEET TO THE TRUE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS PARK GREENS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5558, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, APRIL 14, 1965.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS PARK ANNEX UNIT NO. 1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5555, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, APRIL 7, 1965.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS UNIT NO. 1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5242, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 20, 1963.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS UNIT NO. 2, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5248, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 28, 1963.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN BORREGO SPRINGS PARK ANNEX UNIT NO. 2, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5613, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 17, 1965.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE COUNTY OF SAN DIEGO IN DEED RECORDED JULY 21, 1995 AS INSTRUMENT NO. 1995-0311516 OF OFFICIAL RECORDS.

ALSO EXCEPTING THEREFROM THAT PORTION LYING WITHIN COUNTY OF SAN DIEGO TRACT NO. 5011-1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 13362, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, SEPTEMBER 25, 1996.

ALSO EXCEPTING THEREFROM THAT PORTION GRANTED TO THE BORREGO SPRINGS PARK COMMUNITY SERVICES DISTRICT, A COMMUNITY SERVICES DISTRICT FORMED UNDER THE COMMUNITY SERVICES DISTRICT LAWS IN DOCUMENT RECORDED DECEMBER 26, 2014 AS INSTRUMENT NO. 2014-0570440 AND RE-RECORDED JANUARY 07, 2015 AS INSTRUMENT NO. 2015-0006486, BOTH OF OFFICIAL RECORDS.

PARCEL H: (APN: 199-080-15-00 THROUGH 199-080-17-00)

LOTS 1, 2 AND 3 OF COUNTY OF SAN DIEGO TRACT NO. 5011-1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 13362, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, SEPTEMBER 25, 1996.

PARCEL I: (APN: 199-290-10-00 THROUGH 199-290-12-00)

LOTS 7, 8 AND 9 OF BORREGO SPRINGS PARK GREENS, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO A MAP THEREOF NO. 5558, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, APRIL 14, 1965.

PARCEL J: (APN: 199-290-19-00, 199-310-02-00, 199-310-04-00, 199-310-27-00, 199-330-04-00, 199-330-05-00, 199-330-30-00, 199-330-35-00, 199-330-37-00, 199-330-38-00, 199-330-39-00, 199-330-18-00, 199-310-29-00, 199-310-30-00, 199-310-32-00, 199-310-33-00, 199-310-10-00, 199-310-13-00 AND 199-310-16-00)

LOTS 5, 14, 16, 28, 33, 34, 50, 55, 57, 58, 59, 66, 69, 70, 72, 73, 79, 82 AND 85 OF BORREGO SPRINGS PARK ANNEX UNIT NO. 1, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5555, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, APRIL 07, 1965.

EXCEPTING THEREFROM ALL WATER AND MINERAL RIGHTS AS EXCEPTED OR RESERVED IN VARIOUS DEEDS OF RECORD IN LOTS 33, 34, 50, 55, 57, 58, 59, 66, 69, 70 AND 85.

PARCEL K: (APN: 199-350-09-00, 199-360-01-00 THROUGH 199-360-05-00, 199-360-11-00 THROUGH 199-360-16-00, 199-360-22-00 THROUGH 199-360-44-00, 199-380-01-00 THROUGH 199-380-06-00, 199-380-08-00 THROUGH 199-380-43-00, 199-350-17-00 AND 199-400-01-00)

LOTS 90, 104 THROUGH 125, 127 THROUGH 180, 193 AND 194 OF BORREGO SPRINGS PARK ANNEX UNIT NO. 2, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 5613, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, AUGUST 17, 1965.

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.

a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

Borrego Nazareth LLC ("Transferor") has transferred rights to

T2 Tilting T LLC ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

all acre-feet of Transferor's Annual Allocation of BPA

all acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

This transfer is related to a corresponding BPA and land transfer from Transferor to Transferee in July 2025. The Parties intend that all water rights transfer from Transferor to Transferee.

Carryover Rights for Transfer of Annual Allocation:

☑ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) 100% percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☑ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee **after BPA is transferred to Transferee**

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)

☑ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Signed by:
Maiser Aboueaag
997CD2EC6421480...
Transferor Signature

its: Manager

Date: 7/16/2025

Transferee Signature

its: Vice President

Date: 7-16-2025

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☐ Yes ☑ No Transferee is a Party to the Judgment

☑ Yes ☐ No Transferor is in good standing with the Watermaster
If not, explain: _____

☐ Yes ☑ No Transferee is in good standing with the Watermaster
If not, explain: n/a Transferee to intervene as a party

☑ Yes ☐ No The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☐ approved without requirement of further action

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

_____
Executive Director Signature

Name: _____

Date: _____

_____
Legal Counsel Signature

Name: _____

Date: _____

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westvost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.

a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

~~T2 Borrego LLC~~ T2 Palms, LLC ("Transferor") has transferred rights to

T2 Borrego LLC ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

_____ acre-feet of Transferor's Annual Allocation of BPA

~~163.73~~ 122.70 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation: ☐ n/a for this transfer

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☐ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)
And transferred from Transferor's parcels as approved by Watermaster.

☐ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments
Transferor has already paid pumping fees for the Carryover water transferred here.

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Transferor Signature
Its: Vice President
Date: 9/30/2025

Transferee Signature
Its: Vice President
Date: 9/30/2025

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No	Transferee is a Party to the Judgment
☑ Yes ☐ No	Transferor is in good standing with the Watermaster If not, explain: _____
☑ Yes ☐ No	Transferee is in good standing with the Watermaster If not, explain: _____
☑ Yes ☐ No	The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☒ approved without requirement of further action **See below Note #1 inserted by Watermaster*

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Executive Director Signature

Name: ***Samantha Adams***

Date: ***October 29, 2025***

Legal Counsel Signature

Name: James L. Markman

Date: October 30, 2025

Note #1 - Transfer from T2 Palms LLC to T2 Borrego LLC moves the location of pumping northward

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.

a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

T2 ~~Borrego LLC~~ T2 Tilting T, LLC ("Transferor") has transferred rights to

Carpenter Family Trust 12-11-07 ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

_____ acre-feet of Transferor's Annual Allocation of BPA

8 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation: ☐ *n/a for this transfer*

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☐ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant) And transferred from Transferor's parcels as approved by Watermaster.

☐ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments
Transferor has already paid pumping fees for the Carryover water transferred here.

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Transferor Signature
Its: _____

Transferee Signature
Its: Susan Carpenter

Date: 10/27/2025

Date: _____

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No Transferee is a Party to the Judgment **see below Note #1 inserted by Watermaster*

☑ Yes ☐ No Transferor is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No Transferee is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☒ approved without requirement of further action **See below Note #2 inserted by Watermaster*

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Executive Director Signature

Name: **Samantha Adams**

Date: **October 29, 2025**

Legal Counsel Signature

Name: [illegible]

Date: 10-30-2025

Note #1 - T2 Tilting T owns BPA Parcels and rights, Intervention is in progress pending for Court Approval

Note #2 - Transfer from T2 Tilting T to Carpenter moves the location of pumping northward.

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.

a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

~~T2 Borrego LLC~~ T2 Tilting T, LLC ("Transferor") has transferred rights to

Gamini D. Weerasekera ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

_____ acre-feet of Transferor's Annual Allocation of BPA

100 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation: ☐ n/a for this transfer

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☐ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)
And transferred from Transferor's parcels as approved by Watermaster.

☐ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments
Transferor has already paid pumping fees for the Carryover water transferred here.

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Transferor Signature

Its: Vice President

Date: 10/29/2025

Transferee Signature

Its: GAMINI D. WEERASEKERA

Date: 10/16/25

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No Transferee is a Party to the Judgment **see below Note #1 inserted by Watermaster*

☑ Yes ☐ No Transferor is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No Transferee is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☒ approved without requirement of further action **See below Note #2 inserted by Watermaster*

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Executive Director Signature

Name: **Samantha Adams**

Date: **October 29, 2025**

Legal Counsel Signature

Name: James L. Markman

Date: 10-30-2025

Note #1 - T2 Tilting T owns BPA Parcels and rights, Intervention is in progress pending Court Approval

Note #2 - Transfer from T2 Tilting T to Weerasekera moves the location of pumping northward.

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.
a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

~~T2 Borrego LLC~~ T2 Tiny 1, LLC ("Transferor") has transferred rights to

Soli Organic Inc. ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

_____ acre-feet of Transferor's Annual Allocation of BPA

58 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation: n/a for this transfer

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☑ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☑ ☐ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)
And transferred from Transferor's parcels as approved by Watermaster.

☐ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments
Transferor has already paid pumping fees for the Carryover water transferred here.

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Transferor Signature

Its: Vice President

Date: 10/30/2025

Transferee Signature

Its: CEO

Date: 10/31/2025

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No — Transferee is a Party to the Judgment (Pendg Intervention) *See Note #1 below

☑ Yes ☐ No — Transferor is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No — Transferee is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No — The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

X ☐ approved without requirement of further action *See Note #2 below

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Samantha Adams
Executive Director Signature

James L. Markman
Legal Counsel Signature

Name: Samantha Adams

Name: James L. Markman

Date: October 31, 2025

Date: October 31, 2025

Note #1 - T2 Tilting T owns BPA Parcels and rights, Intervention is in progress & pending court approval

Note #2 - Transfer from T2 Tilting T to Soli moves the location of pumping northward

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties* to the Transfer.

a Transferee who is not a Party to the Judgment **must intervene as a Party as a condition of completing any Lease or Transfer*

T2 Borrego LLC ("Transferor") has transferred rights to

CWC Casa del Zorro LLC ("Transferee"). The Transfer is effective in

Water Year 2025 and the transferred amount includes:

0 acre-feet of Transferor's Annual Allocation of BPA

~~11~~ 20 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation: n/a for this transfer

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☑ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)
And transferred from Transferor's parcels at APNs 140-010-10 and 140-070-02.

☑ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments
Transferor has already paid pumping fees for the Carryover water transferred here.

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Transferor Signature

Its: Vice President

Date: 10 29 2025

Transferee Signature

Its: MANAGER

Date: 10/29/25

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No	Transferee is a Party to the Judgment
☑ Yes ☐ No	Transferor is in good standing with the Watermaster If not, explain: _____
☑ Yes ☐ No	Transferee is in good standing with the Watermaster If not, explain: _____
☑ Yes ☐ No	The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☒ approved without requirement of further action **see Note #1 below*

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Executive Director Signature

Name: Samantha Adams

Date: October 31, 2025

Legal Counsel Signature

Name: James L. Markman

Date: October 31, 2025

Note #1 - Transfer from T2 Borrego LLC, Rams Hill to CDZ shifts pumping northward in SMA

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@wsinyost.com

Pursuant to Section III.I of the Stipulated Judgment—filed in the Superior Court of the State of California, County of Orange on April 8, 2021 (Case No. 37-2020-00005776)—all Baseline Pumping Allocations (BPA) may be transferred or leased by and among Parties to the Judgment who are in good standing with the Watermaster. Carefully review Section III.I prior to completing this form.

Section 1. Transfer Overview and Signature. To be filled out by Parties to the Transfer.*

**a Transferee who is not a Party to the Judgment must intervene as a Party as a condition of completing any Lease or Transfer*

GARY BAILEY ("Transferor") has transferred rights to

GAMINI D. WEERASEKERA ("Transferee"). The Transfer is effective in

Water Year 2026 and the transferred amount includes:

_____ acre-feet of Transferor's Annual Allocation of BPA

2 acre-feet of Transferor's Carryover Rights**

*** Transferred Carryover rights are subject to all relevant terms and conditions of the Judgment applicable to Carryover*

Carryover Rights for Transfer of Annual Allocation:

☐ Transfer of Annual Allocation includes Carryover rights. Transferee may make an election of Carryover for any unpumped Annual Allocation transferred, up to a maximum of (choose one) _____ percent or _____ acre-feet of the eligible Carryover rights. Transferor may make an election for purchase of any eligible Carryover not elected for purchase by Transferee.

☐ Transfer excludes Carryover rights. Only Transferor may make an election to purchase Carryover for any unpumped Annual Allocation afforded by the Lease.

The transferred rights are assigned for use at:

☑ Those parcel(s) and well(s) listed in Exhibit 4 for Transferee

☐ The parcel(s) and well(s) listed in the attached map or exhibit (prepared by applicant)

☐ Transferor ☐ Transferee is responsible for payment of applicable pumping assessments

I hereby certify that I have read and reviewed Section III.I of the Stipulated Judgment and am in compliance with all terms of the Judgment pertaining to metering and reporting of pumping.

Gary Bailey
Transferor Signature

Its: _____

Date: 10/31/25

Gamini D Weerakera
Transferee Signature

Its: Gamini D. Weerasekera

Date: 10/31/25

TRANSFER OF WATER RIGHTS:
TRANSFER OF ANNUAL ALLOCATION OR CARRYOVER

BORREGO SPRINGS WATERMASTER
23692 Birtcher Drive, Lake Forest, CA 92630,
Tel. 949-420-3030, BorregoSpringsWM@westyost.com

Section 2. General Information on Transferor and Transferee. To be filled out by Parties* to the Transfer.

☑ Yes ☐ No — Transferee is a Party to the Judgment

☑ Yes ☐ No — Transferor is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No — Transferee is in good standing with the Watermaster
If not, explain: _____

☑ Yes ☐ No — The transferred amounts are viable based on the available pumping rights of the transferor

Section 3. Watermaster Review and Signature. To be completed by Watermaster Staff.

I hereby certify that I have reviewed the documents and confirmed the information provided by the Transferor and Transferee. By signature below, it is deemed that the Transfer of Annual Allocation or Carryover is:

☑ approved without requirement of further action **See below Note #1*

☐ approved subject to curing the criteria listed in the attached finding. Failure to address these criteria within the stated Cure Period, will result in reversal or potential forfeiture of the Transfer.

I hereby certify that I have reviewed the documents and information provided and verified that the terms of the lease comply with the terms laid out in Stipulated Judgment Section III.I.

Samantha Adams
Executive Director Signature

James L. Markman
Legal Counsel Signature

Name: Samantha Adams

Name: James L. Markman

Date: October 31, 2025

Date: October 31, 2025

Note #1 - Transfer keeps pumping within North Management Area, moves pumping southward

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.A

To: Board of Directors

From: Samantha Adams, Executive Director

Date: November 14, 2025

Subject: Water Rights Accounting for WY 2025

✓ Recommended Action **☐ Provide Direction to Staff** **☐ Information and Discussion**

☐ Fiscal Impact **☐ Cost Estimate: $**

Recommended Action

Approve the WY 2025 Water Rights Accounting and direct Staff to issue WY 2025 Assessment invoices.

Fiscal Impact: Approval of the WY 2025 Water Rights Accounting will enable Watermaster staff to prepare the WY 2026 Pumping Assessment invoices. Pursuant to the Judgment, the invoices must be issued by November 30, 2025.

Background

The purpose of this memo is to provide the Board with a summary of water rights accounting for Water Year (WY) 2025[1] and to report the WY 2026 Pumping Assessment in dollars per acre-foot ($/af). The results will be reported to the Court as part of the WY 2025 Annual Report which is due April 1, 2026. The water rights accounting process has been performed pursuant to the process and schedule outlined in Section IV.E.(3) of the Judgment.[2]

Summary

The high-level summary of water rights accounting for WY 2025 is as follows:

- Total Pumping (metered and estimated): **10,208.95 acre-feet** (af)
    - This is 6% less than total pumping in WY 2024 of **10,892.30 af**
- Total Carryover eligible for Election: **13,728.53 af**
- Total Carryover elected by Parties: **8,557.42 af**
    - This is 62% of eligible Carryover. In WY 2024 Parties elected 82% of eligible Carryover.

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[1] WY 2025 is the period of October 1, 2024 through September 30, 2025.

[2] Judgment is available on the Watermaster's website at: https://borregospringswatermaster.com/wp-content/uploads/2021/06/stipulated-judgment-04-08-2021_bookmarked.pdf

- Total Adjusted Pumping Calculation: **10,505.67 af**
- Assessment Rate: **$33.32/af** (*= $350,000 / 10,505.67 af*)
    - This is 38% greater than the WY 2024 Assessment Rate of $24.06

Summary of WY 2025 Pumpers, Metering, and Pumping

The status of metering is as follows:

- As of October 1, 2024, there are a total of 45 Parties with pumping rights defined in the Judgment (43 Parties with Exhibit 4 Baseline Pumping Allocation (BPA) rights[3] and 2 Parties with other non-De Minimis pumping rights). The two parties with non-De Minimis pumping rights are the Anza Borrego Desert State Park (ABDSP) and Borrego Springs Unified School District (BSUSD). The ABDSP and BSUSD rights are described in Sections III.D.1 and III.D.2 of the Judgment, respectively.
- Of the 45 Parties with pumping rights:
    - 28 Parties (62%) are confirmed, active Pumpers.
    - 16 Parties (36%) are inactive Pumpers.
    - 1 Party (2%) is an active Pumper but is not cooperating in the metering program and their well status and information is unknown.
- Among the cooperating active Pumpers, there are a total of 62 active pumping wells. Of these 62 pumping wells:
    - 15 wells have smart meters installed. Full access to read the smart meters via telemetry has been provided to Watermaster staff at all 15 smart meters.
    - 47 wells have manual-read meters installed. Full cooperation to read the meters through a combination of official Watermaster reads and self-reporting was provided to WM for the entire WY.

Total pumping in WY 2025 was 10,208.95 af. Of the total pumping for WY 2025:

- 10,194.71 af was calculated from meter read records (99% of total pumping).
- 13.04 af was estimated based on partial-year meter read records, for 1 Party (1 well). The pumping was estimated due to problems with the meter equipment, which prevented an accurate meter read in September 2025. Pumping was estimated for this well for August and September 2025; metered data was available for the remainder of the WY.
- 1.20 af was fully estimated. Pumping was estimated for only 1 Party that has not responded to Watermaster outreach to get in compliance with the Judgment. For this well, pumping is estimated using the water duty method used in the Groundwater Management Plan (GMP). A community representative has offered to facilitate discussions with the Party, but the Party still has not engaged.

[3] Exhibit 4 was updated October 1, 2025 and is available on the Watermaster's website at: https://borregospringswatermaster.com/documents

Water Rights Accounting

Exhibit 1, attached, provides the detailed accounting of water rights for each Party with BPA or other non-De Minimis pumping rights (e.g. ABDSP and BSUSD).

Table 1, below, summarizes and aggregates the information provided in the attached Exhibit 1. Table 1 includes:

- The column title and identifier of each column of data presented in Exhibit 1. The identifier is a letter assigned to each column to support communication of how certain values in the table are calculated.
- A description of the information reported in each column of data in Exhibit 1 and any calculations made based on other columns of data using the column identifiers.
- Aggregate WY 2025 totals reported in Exhibit 1 for all Parties.

Table 1 – WY 2025 Water Rights Accounting Overview

Exhibit 1 Column Title and Identifier		Description of Information Reported in Exhibit 1	Totals for WY 2025, including Sub-totals for BPA and Non-DeMin Parties *(All values in af)*
BPA Party or Party with Other Non-De Minimis Water Rights		This is the name of the Party with pumping rights, as listed in Exhibit 4 of the Judgment.	na
BPA or Other Non-De Minimis Rights as of Sep 30, 2024	a	This is the total BPA (or maximum pumping allotment in the case Non-De Minimis Water Rights holders) for each Party as of the end of the prior WY (WY 2024).	**24,335** *BPA = 24,293* *Non-DeMin = 42*
Permanent Transfer of BPA effective in WY 2025	b	This column indicates if a Party permanently transferred BPA effective in WY 2025. A negative value indicates that a Party transferred its BPA to another Party. A positive value indicates that a Party received a transfer of BPA from another Party. *Note:* Non-BPA rights of Other Non-De Minimis Parties cannot be transferred.	**0 (net transfer)** 2,606.75 acre-feet of water was permanently transferred between BPA Parties in WY 2025.
BPA or Other Non-De Minimis Rights as of Oct 1, 2024	c	This is the total BPA for each Party as of the start of WY 2025, accounting for permanent transfers *(c) = (a) + (b)* *Note:* The total amount of BPA and Non-De Minimis Rights never changes and should equal column (a) in aggregate.	**24,335** *BPA = 24,293* *Non-DeMin = 42*
Maximum Allowable Carryover Account Balance	d	This is each BPA Party's maximum allowable Carryover balance. The maximum balance is two times the BPA. *(d) = 2 x (c).* *Note:* The rights of Other Non-De Minimis Parties are not subject to Carryover provisions.	**48,586** *BPA = 48,586* *Non-DeMin = na*
Carryover Account Balance as of Oct 1, 2024	e	This is the Carryover Account Balance available to each Party as of the start of WY 2025.	**24,959.93** *BPA = 24,959.93* *Non-DeMin = na*

Exhibit 1 Column Title and Identifier		Description of Information Reported in Exhibit 1	Totals for WY 2025, including Sub-totals for BPA and Non-DeMin Parties *(All values in af)*
Total Balance of Overproduction to Resolve Effective WY 2025	f	This is the portion of Overproduction incurred in prior WYs that must be resolved by the end of the current WY (WY 2025) to avoid issuance of an Overproduction Penalty Assessment and includes: (1) Overproduction incurred in WYs 2021 through 2023 that did not exceed the three-year cumulative Maximum Overproduction Limit[4], plus (2) Overproduction incurred in WY 2024.	**327.54** *BPA = 327.54* *Non-DeMin = 0*
WY 2025 Annual Allocation per Rampdown	g	This is the WY 2025 Pumping Allocation for each BPA Party. The WY 2025 pumping allocation is equal to 75% of BPA.[5] *(g) = 0.75 x (c).* *Note:* The rights of Other Non-De Minimis Parties (ABDSP and BSUSD) are not subject to rampdown.	**18,270** *BPA = 18,228* *Non-DeMin = 42*
Leased or Transferred Annual Allocation Effective in WY 2025	h	This column indicates if a Party leased or transferred Annual Allocation in WY 2025. A negative value indicates that a Party transferred allocation to another Party. A positive value indicates that a Party received a transfer of Annual Allocation from another Party.	**0** (none in WY 2025)
Transferred Carryover Effective in WY 2025	i	This column indicates if a Party transferred Carryover in WY 2025. A negative value indicates that a Party transferred Carryover to another Party. A positive value indicates that a Party received a transfer of Carryover from another Party.	**0 (net transfer)** 1,475.53 acre-feet was transferred between Parties in WY 2025.
Total Allowable Pumping for WY 2025	j	This is each Party's total allowable pumping for the WY, based on the sum of Annual Allocation, Carryover Account Balance, transferred rights, and unresolved Overproduction balance. *(j) = (e) + (g) + (h) + (i) - (f)*	**42,902.39** *BPA = 42,860.39* *Non-DeMin = 42*
Total Pumping in WY 2025	k	This is the total pumping (metered and estimated) for WY 2025.	**10,208.95** *BPA = 10,180.77* *Non-DeMin = 28.18*

[4] The Judgment provides that in the first three years of operation, a Party can pump in excess of its Annual Allocation without incurring an immediate Overproduction penalty, so long as the total cumulative Overproduction in those three years does not exceed the cumulative Maximum Overproduction Limit for the three-year period.

[5] The Rampdown schedule to the 2025 Sustainable Yield is available on the Watermasters website at: https://borregospringswatermaster.com/wp-content/uploads/2025/11/Rampdown-Schedule-to-2025-SY.pdf

Exhibit 1 Column Title and Identifier		Description of Information Reported in Exhibit 1	Totals for WY 2025, including Sub-totals for BPA and Non-DeMin Parties *(All values in af)*
WY 2025 Pumping was Metered or Estimated	l	"Metered" values are based on metered data. "Estimated (P)" values were estimated for parties with partial year metered data (the available data was used to estimate pumping for the WY based on the data available). "Estimated" values are for Parties with insufficient or no meter data available, in which case the pumping was estimated based on the method used in the Watermaster's Groundwater Management Plan (GMP) or other more accurate data, if available. "na" values represent parties who are not actively pumping and have no operable wells for which to report pumping.	na
Carryover Pumped in WY 2025	m	Pursuant to Judgment Section III.G.1 "The first Groundwater produced by a Party during any Water Year will be deemed to be an exercise of any Carryover." *If (e) >0, then (m) = minimum of [(e)+(i)] or (k)*	**8,260.70** *BPA = 8,260.70* *Non-DeMin = 0*
Was Overproduction prior to WY 2025 Resolved?	n	"Yes" identifies if a Party with Overproduction at the start of WY 2025 resolved their Overproduction either through: 1) purchase of Carryover or Annual Allocation (columns *h* and *i*), or 2) under-pumping their Annual Allocation (column *j*) "na" identifies Parties with no Overproduction balance due at the start of WY 2025 and, therefore, had nothing to resolve.	All Overproduction due by end of WY 2025 was resolved
Balance of Overproduction to Resolve by end of WY 2026	o	This is the amount of Overproduction incurred during WY 2025 that must be resolved by September 30, 2026 (end of WY 2026). *If (k) > (j), (o) = (k) - (j), otherwise 0*	**101.64** *BPA = 101.64* *Non-DeMin = 0*

Exhibit 1 Column Title and Identifier		Description of Information Reported in Exhibit 1	Totals for WY 2025, including Sub-totals for BPA and Non-DeMin Parties *(All values in af)*
Pumping Allocation Eligible for Carryover	p	This is the amount of each Party's eligible for Carryover from WY 2025. Parties who are not in good standing with the Watermaster (either are not reporting pumping or have unpaid assessments) are not eligible for Carryover and are listed as "ne". *If no Overproduction, (p) = (g) + (h) – [(k) - (m)]* *If amount eligible > Maximum Allowable Carryover (see column d), (p) = (d) – [(e) + (i) - (m)]*	**13,728.53** *BPA = 13,728.53* *Non-DeMin = na*
Carryover Election by Party	q	This is the amount of Carryover elected. If Staff was not contacted by a Party prior to the October 31, 2025 reporting deadline, Carryover was assumed to not be elected.	**8,557.42** *BPA = 8,557.42* *Non-DeMin = na*
Carryover Account Balance as of Oct 1, 2025	r	This is the new Carryover Account balance after election of eligible Carryover. *(r) = (e) + (i) - (m) + (q)*	**24,970.16** *BPA = 24,970.16* *Non-DeMin = na*
Adjusted Pumping Calculation	s	This is the portion of "pumping" used to calculate the WY 2026 pumping assessment rate, pursuant to the formula in Judgment Section IV.E.4. The Adjusted Pumping Calculation accounts for water pumped in the current water year, use of Carryover that was paid for prior WYs, new Carryover Elections, and leases/transfers of Annual Allocation. *(s) = (k) - (m) - (h) + (q)*	**10,505.67** *BPA = 10,477.49* *Non-DeMin = 28.18*

Overview of Assumptions and Special Notes

Exhibit 1. includes detailed footnotes that describe special cases that arose during the WY 2025 Water Rights Accounting process – the notes are labeled with letters (A through B) and are listed following the general footnotes numbered 1 through 11 that explain the columns of the table. The assumptions and special cases included in Notes A and B are provided as follows:

- *Note A.* In WY 2025, T2 Tilting T, LLC acquired the BPA parcels/rights and remaining Carryover water owned by the Borrego Nazareth, LLC. To exercise the BPA rights, T2 Tilting T, LLC must intervene into the Judgment. This process is in progress with the Court. For the purpose of the water rights accounting, T2 Tilting T, LLC is shown as the transferee holding the BPA rights, though this remains subject to Court approval of the intervention.

- *Note B.* In WY 2025, T2 Borrego LLC acquired the BPA parcels/rights and remaining Carryover water owned by Bagdasarian Farms, LLC. T2 Borrego LLC is an existing Party to the Judgment. The BPA rights in this purchase remain attached to the associated BPA parcels.

Adjusted Pumping Calculation and Assessment Rate

The Adjusted Pumping Calculation is the basis of establishing each Party's share of the annual Pumping Assessment. In accordance with the Judgment the Adjusted Pumping Calculation is calculated as follows:

+ Total Pumping in WY 2025 →	+ 10,208.95
- Carryover Pumped in WY 2025 →	- 8,260.70
- Leased Annual Allocation Pumped →	- 0
+ Elected Carryover →	+ 8,557.42
= Total Adjusted Pumping WY 2025	**= 10,505.67**

The uniform pumping assessment is then calculated based on the total of all Parties' Adjusted Pumping Calculations as follows:

Total Watermaster Assessment for WY ($) →	**$350,000**
÷ Total Adjusted Pumping (af) →	÷ **10,505.67**
= Pumping Assessment Rate ($/af)	**= $33.32/af**

The final Pumping Assessment of each Party is then computed as follows:

Party's Adjusted Pumping Calculation (af)
x Pumping Assessment Rate ($/af)
= Party's Pumping Assessment ($)

Next Steps

Upon direction from the Board that the WY 2025 Water Rights Accounting can be finalized, Staff will proceed with the following next steps:

- **Notice of WY 2026 Assessments and Allowable Pumping**. Watermaster staff will issue the first installment of the WY 2026 assessments to each party by November 30, 2025. The assessment communication will include:
    - A final water rights accounting summary based on the Party's Carryover Election or intent to forego pumping.
    - Notification of the penalties for failure to timely pay assessments pursuant to Section V.3 of the Judgment.

- **Remedy of Overproduction.** Staff will provide additional communication to those parties who have pumped groundwater in excess of their rights, so they understand the potential liability to pay Overproduction Penalty Assessments if the Overproduction is not timely remedied for the WY 2026 accounting by October 31, 2026.
- **Final Documentation of Water Rights Accounting in WY 2025 Annual Report.** The water rights accounting will be documented in the Watermaster's 2025 Annual Report.

Enclosures

Exhibit 1. WY 2025 Water Rights Accounting Summary for the Borrego Springs Subbasin

Exhibit 1 - WY 2025 Water Rights Accounting Summary for the Borrego Springs Subbasin - (all values in acre-feet)

BPA Party or Party with Other Non-De Minimis Water Rights [1]	BPA or Other Non-De Minimis Rights as of Sep 30, 2024[1]	Permanent Transfer of BPA[1,2] effective in WY 2025	BPA or Other Non-De Minimis Rights as of Oct 1, 2024	Maximum Allowable Carryover Account Balance [3,1]	Carryover Account Balance as of Oct 1, 2024[3,1]	Total Balance of Overproduction to Resolve Effective WY 2025[4]	WY 2025 Annual Allocation per Rampdown: 75% of BPA[5]; 100% of non-BPA rights[6,1]	Leased or Transferred Annual Allocation Effective in WY 2025[2]	Transferred Carryover Effective in WY 2025[2]	Total Allowable Pumping for WY 2025[7]	Total Pumping in WY 2025	WY 2025 Pumping was Metered or Estimated[8]	Carryover Pumped in WY 2025[9,1]	Was Overproduction prior to WY 2025 Resolved?	Balance of Overproduction incurred in WY 2025 to Resolve by end of WY 2026[10]	Pumping Allocation Eligible for Carryover[11]	Carryover Election by Party	Carryover Account Balance as of October 1, 2025	WY 2025 Adjusted Pumping Calculation
	(a)	*(b)*	*(c) = (a) + (b)*	*(d) = 2 x (c)*	*(e)*	*(f)*	*For BPA Parties: (g) = 0.75 x (c) For other Parties: (g) = (c)*	*(h)*	*(i)*	*(j) = (e) + (g) + (h) + (i) - (f)*	*(k)*	*(l)*	*(m)* [10]	*(n)*	*(o) = (k) - (j)* [11]	*(p)* [13]	*(q)*	*(r) = (e)+(i)-(m)+(q)*	*(s)= (k)-(m)-(h)+(q)*
TOTALS	**24,335**	**0.00**	**24,335**	**48,586**	**24,959.93**	**327.54**	**18,270**	**0.00**	**0.00**	**42,902.39**	**10,208.95**		**8,260.70**		**101.64**	**13,728.53**	**8,557.42**	**24,970.16**	**10,505.67**
BPA Parties																			
BPA Party Subtotal	***24,293***	***0***	***24,293***	***48,586***	***24,959.93***	***327.54***	***18,228***	***0.00***	***0.00***	***42,860.39***	***10,180.77***		***8,260.70***		***101.64***	***13,728.53***	***8,557.42***	***24,970.16***	***10,477.49***
Agri-Empire	574	0	574	1,148	0.00	0.00	431.00	0.00	0.00	431.00	**0.00**	Metered	0.00	na	0.00	431.00	0.00	0.00	0.00
Rick and Joan Anson, co-trustees of the Anson Family Trust 08-1 8-08	2	0	2	4	0.00	0.00	2.00	0.00	0.00	2.00	**0.00**	na	0.00	na	0.00	2.00	0.00	0.00	0.00
Alan & Tracy Asche	5	0	5	10	10.00	0.00	4.00	0.00	0.00	14.00	**1.13**	Metered	1.13	na	0.00	1.13	1.13	10.00	1.13
Gary D. & Darlis A. Bailey	7	0	7	14	3.87	0.00	5.00	0.00	-2.00	6.87	**4.55**	Metered	1.87	na	0.00	2.32	2.32	2.32	5.00
David and Juli Bauer, co-trustees of the D&J Bauer Family Trust 11-18-04	1,411	0	1,411	2,822	0.00	0.00	1,058.00	0.00	0.00	1,058.00	**506.00**	Metered	0.00	na	0.00	552.00	26.00	26.00	532.00
BWD (Purchase from D & J Bauer and attached only to APN 140-070-18)	415	0	415	830	685.00	0.00	311.00	0.00	0.00	996.00	**0.00**	na	0.00	na	0.00	145.00	145.00	830.00	145.00
BWD (Purchase from W. Bauer and attached only to APN140-010-08)	670	0	670	1,340	1,340.00	0.00	503.00	0.00	0.00	1,843.00	**0.00**	na	0.00	na	0.00	0.00	0.00	1,340.00	0.00
Borrego Air Ranch Mutual Water & Improvement Co.	12	0	12	24	13.23	0.00	9.00	0.00	0.00	22.23	**6.59**	Metered	6.59	na	0.00	9.00	9.00	15.64	9.00
Borrego Nazareth LLC[(A)]	1,462	-1,462	0	0	1,330.83	0.00	0.00	0.00	-1,330.83	0.00	**0.00**	na	0.00	na	0.00	0.00	0.00	0.00	0.00
T2 Tilting T LLC[(A)]	0	1,462	1,462	2,924	0.00	0.00	1,097.00	0.00	1,164.83	2,261.83	**45.36**	Metered	45.36	na	0.00	1,097.00	1,097.00	2,216.47	1,097.00
Borrego Water District	2,588	2.75	2,591	5,182	2,926.83	0.00	1,943.00	0.00	0.00	4,869.83	**1,369.44**	Metered	1,369.44	na	0.00	1,943.00	1,943.00	3,500.39	1,943.00
Carpenter Family Trust 12-11-07	6	0	6	12	0.00	5.34	5.00	0.00	8.00	7.66	**11.42**	Metered	2.66	Yes	3.76	0.00	0.00	0.00	8.76
Tenaja Ranch, LP	4,741	0	4,741	9,482	4,026.18	0.00	3,556.00	0.00	0.00	7,582.18	**2,664.04**	Metered	2,664.04	na	0.00	3,556.00	0.00	1,362.14	0.00
Desert Farm LLC, Crumrine Family Trust 04-19-06	21	0	21	42	4.12	0.00	16.00	0.00	0.00	20.12	**16.80**	Metered	4.12	na	0.00	3.32	3.32	3.32	16.00
CWC Casa Del Zorro LLC	22	0	22	44	27.33	0.00	17.00	0.00	20.00	64.33	**24.28**	Metered	24.28	na	0.00	17.00	17.00	40.05	17.00
De Anza Desert Country Club	957	0	957	1,914	601.15	0.00	718.00	0.00	0.00	1,319.15	**712.04**	Metered	601.15	na	0.00	607.11	607.11	607.11	718.00
John B. & Silvia H. Hogan	8	0	8	16	6.42	0.00	6.00	0.00	0.00	12.42	**5.33**	Metered	5.33	na	0.00	6.00	6.00	7.09	6.00
T2 Palms, LLC	887	0	887	1,774	930.60	0.00	665.00	0.00	-122.70	1,472.90	**22.75**	Metered	22.75	na	0.00	665.00	665.00	1,450.15	665.00
Genus L.P.	112	0	112	224	0.00	0.00	84.00	0.00	0.00	84.00	**0.00**	na	0.00	na	0.00	84.00	0.00	0.00	0.00
JM Roadrunner, LLC	1,595	0	1,595	3,189.74	2,464.22	0.00	1,196.00	0.00	0.00	3,660.22	**804.34**	Metered	804.34	na	0.00	1,196.00	1,196.00	2,855.88	1,196.00
Robert Larkins	2	0	2	4	0.00	0.00	2.00	0.00	0.00	2.00	**0.00**	na	0.00	na	0.00	ne	0.00	0.00	0.00
Michael Maiter & John Savittieri	1	0	1	2	2.00	0.00	1.00	0.00	0.00	3.00	**0.00**	na	0.00	na	0.00	0.00	0.00	2.00	0.00
Gamini D. Weerasekera	103	0	103	206	0.00	101.10	77.00	0.00	102.00	77.90	**144.22**	Metered	0.90	Yes	66.32	0.00	0.00	0.00	143.32
Daniel Lee Fetzer and Jennifer Fay Fetzer	14	0	14	28	8.26	0.00	11.00	0.00	0.00	19.26	**0.00**	na	0.00	na	0.00	11.00	11.00	19.26	11.00
Doug & Patricia Munson	1	0	1	2	2.00	0.00	1.00	0.00	0.00	3.00	**0.00**	na	0.00	na	0.00	0.00	0.00	2.00	0.00
Ronald Pecoff	114	0	114	228	35.72	0.00	86.00	0.00	0.00	121.72	**56.34**	Metered	35.72	na	0.00	65.38	0.00	0.00	20.62
The Roadrunner Club at Borrego, LP	520	0	520	1,040	369.88	0.00	390.00	0.00	0.00	759.88	**448.44**	Metered	369.88	na	0.00	311.45	311.45	311.45	390.01
RTA Borrego, LLC	12	0	12	24	0.00	0.00	9.00	0.00	0.00	9.00	**0.00**	na	0.00	na	0.00	9.00	0.00	0.00	0.00

Exhibit 1 - WY 2025 Water Rights Accounting Summary for the Borrego Springs Subbasin - (all values in acre-feet)

BPA Party or Party with Other Non-De Minimis Water Rights [1]	BPA or Other Non-De Minimis Rights as of Sep 30, 2024[1]	Permanent Transfer of BPA[1,2] effective in WY 2025	BPA or Other Non-De Minimis Rights as of Oct 1, 2024	Maximum Allowable Carryover Account Balance [3,1]	Carryover Account Balance as of Oct 1, 2024[3,1]	Total Balance of Overproduction to Resolve Effective WY 2025[4]	WY 2025 Annual Allocation per Rampdown: 75% of BPA[5]; 100% of non-BPA rights[6,1]	Leased or Transferred Annual Allocation Effective in WY 2025[2]	Transferred Carryover Effective in WY 2025[2]	Total Allowable Pumping for WY 2025[7]	Total Pumping in WY 2025	WY 2025 Pumping was Metered or Estimated[8]	Carryover Pumped in WY 2025[9,1]	Was Overproduction prior to WY 2025 Resolved?	Balance of Overproduction incurred in WY 2025 to Resolve by end of WY 2026[10]	Pumping Allocation Eligible for Carryover[11]	Carryover Election by Party	Carryover Account Balance as of October 1, 2025	WY 2025 Adjusted Pumping Calculation
	(a)	*(b)*	*(c) = (a) + (b)*	*(d) = 2 x (c)*	*(e)*	*(f)*	*For BPA Parties: (g) = 0.75 x (c) For other Parties: (g) = (c)*	*(h)*	*(i)*	*(j) = (e) + (g) + (h) + (i) - (f)*	*(k)*	*(l)*	*(m)* [10]	*(n)*	*(o) = (k) - (j)* [11]	*(p)* [13]	*(q)*	*(r) = (e)+(i)-(m)+(q)*	*(s)= (k)-(m)-(h)+(q)*
Jose G. & Maria E. Sanchez	4	0	4	8	0.00	0.00	3.00	0.00	0.00	3.00	**1.20**	Estimated	0.00	na	0.00	ne	0.00	0.00	1.20
Seley Ranches, L.P.	2,226	0	2,226	4,452	1,856.48	0.00	1,670.00	0.00	0.00	3,526.48	**1,219.27**	Metered	1,219.27	na	0.00	1,670.00	1,219.27	1,856.48	1,219.27
Soli Organic Inc.	61	0	61	122	0.00	57.35	46.00	0.00	58.00	46.65	**78.21**	Estimated (P)	0.65	Yes	31.56	0.00	0.00	0.00	77.56
Max Siefker	2	0	2	4	0.00	0.00	2.00	0.00	0.00	2.00	**0.00**	na	0.00	na	0.00	ne	0.00	0.00	0.00
Brian Siefker Trust 12-18-01	3	0	3	6	0.00	0.00	2.00	0.00	0.00	2.00	**0.00**	na	0.00	na	0.00	ne	0.00	0.00	0.00
Smith Kent R. Revocable Living Trust 01-04-90	50	0	50	100	100.00	0.00	38.00	0.00	0.00	138.00	**0.00**	na	0.00	na	0.00	0.00	0.00	100.00	0.00
The Springs RV and Golf Resort, LP	262	0	262	523	142.91	0.00	196.00	0.00	0.00	338.91	**284.76**	Metered	142.91	na	0.00	54.15	54.15	54.15	196.00
T2 Borrego, LLC	965	0	965	1,930	1,930.00	0.00	724.00	0.00	0.00	2,654.00	**0.00**	na	0.00	na	0.00	0.00	0.00	1,930.00	0.00
T2 Borrego, LLC - Ram's Hill	2,536	0	2,536	5,072	5,072.00	0.00	1,902.00	0.00	-20.00	6,954.00	**789.37**	Metered	789.37	na	0.00	809.37	789.37	5,052.00	789.37
T2 Farms LLC	485	-2.75	482.25	965	741.71	0.00	362.00	0.00	0.00	1,103.71	**92.06**	Metered	92.06	na	0.00	314.85	314.85	964.50	314.85
Bagdasarian Farms, LLC	1,142	-1,142	0	0	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	na	0.00	na	0.00	0.00	0.00	0.00	0.00
T2 Borrego, LLC (Purchase from Bagdasarian Farms LLC and attached to APNs 140-070-15, 140-070-20, 140-070-28)	0	1,142	1,142	2,284	0.00	163.75	857.00	0.00	122.70	815.95	**815.95**	Metered	0.00	Yes	0.00	0.00	0.00	0.00	815.95
Joel Vanasdlen	36	0	36	72	34.00	0.00	27.00	0.00	0.00	61.00	**0.00**	na	0.00	na	0.00	27.00	0.00	34.00	0.00
Steven L. Phillips Separate Property Trust (Ward BPA Property)	82	0	82	164	164.00	0.00	62.00	0.00	0.00	226.00	**17.72**	Metered	17.72	na	0.00	17.72	17.72	164.00	17.72
Wisdom Gabriel B & Weiss-Wisdom Diana Family 2008 Trust 08-01-08	1	0	1	2	2.00	0.00	1.00	0.00	0.00	3.00	**0.00**	na	0.00	na	0.00	0.00	0.00	2.00	0.00
Steven L. Phillips Separate Property Trust (Wright BPA Property)	158	0	158	316	92.93	0.00	119.00	0.00	0.00	211.93	**36.43**	Metered	36.43	na	0.00	119.00	119.00	175.50	119.00
Ashley Bilyk and Lee Tyler Bilyk	18	0	18	36.26	36.26	0.00	14.00	0.00	0.00	50.26	**2.73**	Metered	2.73	na	0.00	2.73	2.73	36.26	2.73
Parties with Other Non-De Minimis Water Rights																			
Other Party Subtotal	***42***	***0***	***42***	***na***	***na***	***0.00***	***42***	***0.00***	***0.00***	***42***	***28.18***		***0.00***		***0.00***	***na***	***na***	***na***	***28.18***
Borrego Springs Unified School District	22	na	22	na	na	0.00	22.00	0.00	0.00	22.00	**21.25**	Metered	0.00	na	0.00	na	na	na	21.25
Anza Borrego Desert State Park	20	na	20	na	na	0.00	20.00	0.00	0.00	20.00	**6.93**	Metered	0.00	na	0.00	na	na	na	6.93

(1) The Judgment establishes separate, non-BPA pumping rights for two entities—the Anza Borrego Desert State Park (ABDSP) and the Borrego Springs Unified School District (BSUSD). These non-BPA rights are not subject to pumping Rampdown, Carryover, or transfer (to other Parties), but are subject to all other substantive provisions of the Judgment, including paying pumping assessments based on annual pumping and the ability to purchase/lease Annual Allocation or Carryover to cover Overproduction.

(2) A negative transfer value indicates rights transferred to another Party. A positive value indicates rights transferred from another Party. Non-BPA rights cannot be transferred. Parties with Other Non-De Minimis Water Rights may receive a lease/transfer of annual allocation or Carryover to resolve Overproduction. The sum of all transfers across all Parties will always be 0.

(3) Carryover only applies to BPA rights; non-BPA rights are not eligible for Carryover. The maximum Carryover balance is two times the BPA (= 2 x BPA). Balance as of October 1, 2024 is based on the final WY 2024 water rights accounting, unless adjustments have been made and documented since publishing the prior year accounting.

(4) The balance of Overproduction as of October 1, 2024 is based on the final WY 2024 water rights accounting, unless adjustments have been made and documented since publishing the prior year accounting. Overproduction can be remedied through under-pumping of the Annual Allocation or transfers and leases of BPA/Annual Allocation/Carryover.

(5) The Annual Allocation in each WY is determined by multiplying the Party's BPA by the Pumping Percentage in effect for that WY, based on the pumping Rampdown percentage then in effect pursuant to the Judgment. For example, in WY 2025 the Pumping Percentage is 75 percent, which is a 25 percent Rampdown from BPA. Annual Allocation is rounded to the nearest whole af. The subtotal and totals across all Parties are the sum of each Party's rounded Annual Allocation value.

(6) The Rampdown applies only to BPA Parties. For BPA Parties the WY 2025 pumping allocation is 75% of BPA, rounded to the nearest whole number. For BSUSD and ABDSP, the rights are not subject to Ramp down and annual allocation is always equal to the pumping right defined in the Judgment.

(7) The total allowable pumping for the WY is the sum of the Carryover account balance (e) plus the Annual Allocation (g) plus any leased/transferred Allocation or Carryover less the total balance of Overproduction (f). Allowable (j) = (e) + (g) + (h) + (i) - (f)

(8) "Estimated (P)"" values were estimated for Parties with partial year metered data (the available data was used to estimate pumping for the WY based on the data available). "Estimated" values are for Parties with no meter data available in which case the pumping was estimated based on the method used in the GMP, or using other more accurate data, if available. "na" values represent parties who are not actively pumping and have no operable wells.

(9) Pursuant to Judgment Section III.G.1 "The first Groundwater produced by a Party during any Water Year will be deemed to be an exercise of any Carryover." If (e) >0, then (m) = minimum of [(e)+(i)] or (k)

(10) This is the balance of Overproduction incurred in WY 2025 that must be resolved by September 30, 2026 (end of WY 2026): (o) = If (k) > (e) + (g) + (h) + (i) - (f), then (k) - [(e) + (g) + (h) + (i) - (f)], otherwise 0

(11) If the Party has no Overproduction balance , then the eligible Carryover is the minimum value of (p) = (g) +(h) - [(k) - (m)) or (p) = (d) – [(e)+(i)]-(m). Parties who are not in good standing with the Watermaster (either are not reporting pumping or have unpaid assessments) are not eligible for Carryover; in this case (p) is shown as "ne".

Other Notes:

(A) In WY 2025, T2 Tilting T, LLC acquired the BPA parcels/rights and remaining Carryover water owned by the Borrego Nazareth, LLC. To exercise the BPA rights, T2 Tilting T, LLC must intervene into the Judgment. This process is in progress with the Court. For the purpose of the water rights accounting, T2 Tilting T, LLC is shown as the transferee holding the BPA rights, though this remains subject to Court approval of the intervention.

(B) In WY 2025, T2 Borrego LLC acquired the BPA parcels/rights and remaining Carryover water owned by Bagdasarian Farms, LLC. T2 Borrego LLC is an existing Party to the Judgment. The BPA rights in this purchase remain attached to the associated BPA parcels.

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.B

To: Board of Directors

From: Samantha Adams, Executive Director

Date: November 14, 2025

Subject: Consideration of Approval to Contract with C.J. Brown & Company, CPAs to Perform the WY 2025 Annual Financial Audit

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✓ Recommended Action **☐ Provide Direction to Staff** **☐ Information and Discussion**

☐ Fiscal Impact **✓ Cost Estimate: $8,812**

Recommended Action

Approve $8,812 proposal to perform the financial audit and direct Staff to engage with C.J. Brown & Company, CPAs to perform the work.

Fiscal Impact: None. The Water Year 2026 budget assumed an expenditure of $8,812 for performing the WY 2025 financial audit.

Background and Discussion

Section E.5 of the Judgment requires the Watermaster to file an Annual Report with the Court, based on the Water Year (WY). Among other topics, the Annual Report must include a financial audit of all assessments and expenditures for the reporting period.

In 2023, Watermaster staff requested quotes from various auditors and based on the quotes and interviews, C.J. Brown & Company, CPAs was selected to perform the WY 2023 financial audit. The 2023 quote provided was for five years of services at the following rates for the subsequent four years from WY 2024 through WY 2026: $8,650, $8,812, $9,064, and $9,340. C.J. Brown & Company, CPAs have completed both the WY 2023 and WY 2024 audits on-time and within budget.

Watermaster staff recommends retaining C.J. Brown & Company, CPAs to perform the financial audit for WY 2025. Attached for your review and consideration is C.J. Brown & Company, CPAs engagement letter to perform the WY 2025 financial audit at the quoted cost of $8,812.

If approved, Watermaster staff will execute the engagement letter with C.J. Brown & Company and kickoff the audit process.

Enclosures

C.J. Brown & Company, CPAs engagement letter to perform the Borrego Springs Watermaster financial audit for WY 2025

C.J. Brown & Company CPAs
An Accountancy Corporation

Christopher J. Brown, CPA, CGMA
Jonathan Abadesco, CPA
Jeffrey Palmer

Cypress Office:
10805 Holder Street, Suite 150
Cypress, California 90630
(657) 214-2307

Riverside Office:
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Riverside, California 92507
(657) 214-2307

October 3, 2025

To Management and the Board of Directors

Borrego Springs Watermaster
c/o West Yost Associates
25 Edelman, Suite 120
Irvine, California 92618

Dear Ms. Samantha Adams:

The following represents our understanding of the services we will provide the Borrego Springs Watermaster.

You have requested that we audit the business-type activities of the Borrego Springs Watermaster (Watermaster), as of September 30, 2025, and for the year then ended and the related notes, which collectively comprise Watermaster's basic financial statements as listed in the table of contents. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter.

The objectives of our audit are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the United States of America (GAAS) will always detect a material misstatement when it exists. Misstatements, including omissions, can arise from fraud or error and are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

Accounting principles generally accepted in the United States of America, (U.S. GAAP,) as promulgated by the Governmental Accounting Standards Board (GASB) require that management's discussion and analysis be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the GASB, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the required supplementary information (RSI) in accordance with auditing standards generally accepted in the United States of America, (U.S. GAAS). These limited procedures will consist primarily of inquiries of management regarding their methods of measurement and presentation and comparing the information for consistency with management's responses to our inquiries. We will not express an opinion or provide any form of assurance on the RSI. The following RSI is required by U.S. GAAP. This RSI will be subjected to certain limited procedures but will not be audited:

- Management Discussion and Analysis

Auditor Responsibilities

We will conduct our audit in accordance with GAAS. As part of an audit in accordance with GAAS, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of controls.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Conclude, based on the audit evidence obtained, whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Watermaster's ability to continue as a going concern for a reasonable period of time.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS.

Our responsibility as auditors is limited to the period covered by our audit and does not extend to any other periods.

Compliance with Laws and Regulations

As previously discussed, as part of obtaining reasonable assurance about whether the basic financial statements are free of material misstatement, we will perform tests of the Watermaster's compliance with the provisions of applicable laws, regulations, contracts, and agreements. However, the objective of our audit will not be to provide an opinion on overall compliance and we will not express such an opinion.

Management Responsibilities

Our audit will be conducted on the basis that management and, when appropriate, those charged with governance acknowledge and understand that they have responsibility:

a. For the preparation and fair presentation of the basic financial statements in accordance with accounting principles generally accepted in the United States of America;
b. For the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of basic financial statements that are free from material misstatement, whether due to error, fraudulent financial reporting, misappropriation of assets, or violations of laws, governmental regulations, grant agreements, or contractual agreements;

Management Responsibilities

c. To provide us with:
   i. Access to all information of which management is aware that is relevant to the preparation and fair presentation of the basic financial statements such as records, documentation, and other matters;
   ii. Additional information that we may request from management for the purpose of the audit;
   iii. Unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence.
   iv. A written acknowledgement of all the documents that management expects to issue that will be included in the annual report and the planned timing and method of issuance of that annual report; and
   v. A final version of the annual report (including all the documents that, together, comprise the annual report) in a timely manner prior to the date of the auditor's report.
d. For including the auditor's report in any document containing basic financial statements that indicates that such basic financial statements have been audited by us;
e. For identifying and ensuring that the entity complies with the laws and regulations applicable to its activities;
f. For adjusting the basic financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the current year period(s) under audit are immaterial, both individually and in the aggregate, to the basic financial statements as a whole; and
g. For acceptance of nonattest services, including identifying the proper party to oversee nonattest work;
h. For maintaining adequate records, selecting and applying accounting principles, and safeguarding assets;
i. For informing us of any known or suspected fraud affecting the entity involving management, employees with significant role in internal control and others where fraud could have a material effect on the financials; and
j. For the accuracy and completeness of all information provided.

As part of our audit process, we will request from management, written confirmation concerning representations made to us in connection with the audit.

Nonattest Services

With respect to any nonattest services we perform, we will prepare the financial statements based on the trial balance provided by the Watermaster. We will not assume management responsibilities on behalf of the Watermaster. However, we will provide advice and recommendations to assist management of the Watermaster in performing its responsibilities.

The Watermaster's management is responsible for (a) making all management decisions and performing all management functions; (b) assigning a competent individual to oversee the services; (c) evaluating the adequacy of the services performed; (d) evaluating and accepting responsibility for the results of the services performed; and (e) establishing and maintaining internal controls, including monitoring ongoing activities.

Nonattest Services, continued

Our responsibilities and limitations of the nonattest services are as follows:

- We will perform the services in accordance with applicable professional standards.
- The nonattest services are limited to the preparation of financial statements. Our firm, in its sole professional judgment, reserves the right to refuse to do any procedure or take any action that could be construed as making management decisions or assuming management responsibilities, including determining account coding and approving journal entries.

Reporting

We will issue a written report upon completion of our audit of the Watermaster's basic financial statements. Our report will be addressed to the Board of Directors. Circumstances may arise in which our report may differ from its expected form and content based on the results of our audit. Depending on the nature of these circumstances, it may be necessary for us to modify our opinion, add an emphasis-of-matter or other-matter paragraph(s) to our auditor's report, or if necessary, withdraw from the engagement. If our opinion on the basic financial statements are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed an opinion, we may decline to express an opinion or to issue a report as a result of this engagement.

Other

We understand that your employees will prepare all confirmations we request and will locate any documents or support for any other transactions we select for testing.

If you intend to publish or otherwise reproduce the basic financial statements and make reference to our firm, you agree to provide us with printers' proofs or masters for our review and approval before printing. You also agree to provide us with a copy of the final reproduced material for our approval before it is distributed.

Regarding the electronic dissemination of audited financial statements, including financial statements published electronically on your Internet website, you understand that electronic sites are a means to distribute information and, therefore, we are not required to read the information contained in these sites or to consider the consistency of other information in the electronic site with the original document.

Professional standards prohibit us from being the sole host and/or the sole storage for your financial and non-financial data. As such, it is your responsibility to maintain your original data and records and we cannot be responsible to maintain such original information. By signing this engagement letter, you affirm that you have all the data and records required to make your books and records complete.

Provisions of Engagement Administration, Timing, and Fees

During the course of the engagement, we may communicate with you or your personnel via fax or e-mail, and you should be aware that communication in those mediums contains a risk of misdirected or intercepted communications.

The timing of our audit will be scheduled to start approximately November-December 2025 and the audit report will be issued no later than February 2026. Jonathan Abadesco is the engagement partner for the audit services specified in this letter. His responsibilities include supervising C.J. Brown & Company, CPAs – An Accountancy Corporation services performed as part of this engagement and signing or authorizing another qualified firm representative to sign the audit report.

Provisions of Engagement Administration, Timing, and Fees, continued

Our fees are based on the amount of time required at various levels of responsibility, plus actual out-of-pocket expenses. Invoices will be rendered every month and are payable upon presentation. We estimate that our fee for the audit will not exceed $8,812 (with out-of-pocket expenses not exceeding $500). We will notify you immediately of any circumstances we encounter that could significantly affect this initial fee estimate. Whenever possible, we will attempt to use the District's personnel to assist in the preparation of schedules and analyses of accounts. This effort could substantially reduce our time requirements and facilitate the timely conclusion of the audits. Further, we will be available during the year to consult with you on financial management and accounting matters of a routine nature.

During the course of the audit we may observe opportunities for economy in, or improved controls over, your operations. We will bring such matters to the attention of the appropriate level of management, either orally or in writing.

You agree to inform us of facts that may affect the basic financial statements of which you may become aware during the period from the date of the auditor's report to the date the financial statements are issued.

We agree to retain our audit documentation or work papers for a period of at least seven years from the date of our report.

At the conclusion of our audit engagement, we will communicate to the Board of Directors the following significant findings from the audit:

- Our view about the qualitative aspects of the entity's significant accounting practices;
- Significant difficulties, if any, encountered during the audit;
- Uncorrected misstatements, other than those we believe are trivial, if any;
- Disagreements with management, if any;
- Other findings or issues, if any, arising from the audit that are, in our professional judgment, significant and relevant to those charged with governance regarding their oversight of the financial reporting process;
- Material, corrected misstatements that were brought to the attention of management as a result of our audit procedures;
- Representations we requested from management;
- Management's consultations with other accountants, if any; and
- Significant issues, if any, arising from the audit that were discussed, or the subject of correspondence, with management.

The audit documentation for this engagement is the property of C.J. Brown & Company, CPAs – An Accountancy Corporation and constitutes confidential information. However, we may be requested to make certain audit documentation available to regulators pursuant to authority given to them by law or regulation, or to peer reviewers. If requested, access to such audit documentation will be provided under the supervision of C.J. Brown & Company, CPAs – An Accountancy Corporation personnel. Furthermore, upon request, we may provide copies of selected audit documentation to regulators. Regulators may intend, or decide, to distribute the copies of information contained therein to others, including other governmental agencies.

Please sign and return the attached copy of this letter to indicate your acknowledgment of, and agreement with, the arrangements for our audit of the basic financial statements including our respective responsibilities.

We appreciate the opportunity to be your financial statement auditors and look forward to working with you and your staff.

Respectfully,

C.J. Brown & Company, CPAs

C.J. Brown & Company CPAs – An Accountancy Corporation

****

RESPONSE:

This letter correctly sets forth our understanding.

Borrego Springs Watermaster

Acknowledged and agreed on behalf of the Borrego Springs Watermaster by:

Management signature: _____
Title: _____
Date: _____

Governance signature: _____
Title: _____
Date: _____

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.C

To: Board of Directors

From: Samantha Adams, Executive Director

Date: November 14, 2025

Subject: Final Water Year 2025 Budget Status

☐ **Recommended Action**	☐ **Provide Direction to Staff**	✓ **Information and Discussion**
☐ **Fiscal Impact**	☐ **Cost Estimate: $**	

Recommended Action

Board discussion.

Fiscal Impact: None.

Background and Previously Related Actions by the Board

On June 13, 2024, the Board adopted the water year (WY) 2025 Budget. The budget was amended once, and on two occasions the Board authorized changes to WY spending for specific line items planned in the Budget.

- The budget was amended on January 15, 2025 to carry forward unspent grant-related funds from WY 2024.
- At its June 18, 2025 meeting, the Board authorized an amendment to the West Yost WY 2025 Statement of Work (SOW No. 7) to approve the use of up to $65,000 of underspent budget across various technical tasks within SOW No. 7 to advance the 5-Year Assessment and address DWR comments on the Groundwater Management Plan (GMP). The approved reallocation of funds allowed for a total spending of up to $171,292[1] on the GMP Assessment/Update, so long as total West Yost expenditures would not exceed the total budget established in SOW No. 7, as amended in January 2025. This authorization did not increase to the previously approved SOW No. 7 budget of $1,022,874.
- At its August 20, 2025 meeting, the Board authorized West Yost to spend up to $5,000 above the approved EWG budget to advance the process to procure a Peer Reviewer to review of the UCI GDE Study Report.

[1] This is the sum of tasks 3.9 and 3.11 in Amended SOW No. 7, and includes performing additional BVHM runs.

The purpose of this memo is to report the final budget status for WY 2025 as of September 30, 2025 as compared to the amended WY 2025 Budget.

WY 2025 Budget Status

Table 1, enclosed, compares the amended WY 2025 Budget to the final actual as of September 30, 2025. The table shows:

- The Watermaster budget categories and the relevant line items in the WY 2025 Budget, including: revenues, expenditures (administrative services, legal services, technical/ engineering services, Environmental Working Group, services to Parties with manual read meters), liabilities on Payment Terms, and cash reserves
- The amended WY 2025 Budget amount for each category and the associated line-item detail
- The final values as of September 30, 2025
- The percent of budget expended to date for each category and line item (computed as actual divided by budget)
- The variance of actual compared to budget for each category and line item (computed as budget minus actual)
- Any pertinent notes that explain the budget variances

As of September 30, 2025 (end of WY 2025):

- 99% of planned revenues were accrued.
- $1,422,476.69 of planned expenditures (96%) were spent:
  - 100% of the administrative services budget was expended
  - 67% of the legal services budget was expended
  - 97% of the technical services budget was expended
  - 98% of the EWG budget was expended
  - 121% of meter read services budget was expended
- In total, the Watermaster underspent planned expenditures by $53,560.91
- Watermaster has a payment liability totaling $291,644.
- Cash reserves are $738,997, which represents about 11.6 months operating expenditures for WY 2026.

West Yost 2025 Expenditures

As of September 30, 2025, West Yost's total WY 2025 expenditure relative to the amended SOW No. 7 was as follows:

Amended SOW No. 7 Budget	Total West Yost Expenditure	Unspent SOW No. 7 Budget
$1,022,874	$1,007,231.26	$15,642.74

Relative to the June 2025 authorization to spend up to $171,292 on the GMP Assessment and Update, West Yost spent a total of $156,825.75. Thus, $14,466 was unspent. As described in Agenda Item IV.F of this Agenda Package, West Yost is requesting the Board consider allowing Carry Forward of this amount to WY 2026 to complete the full scope of planned work in WY 2026.

Lastly, the total West Yost expenditure on the EWG line item was $10,945.57, which was $4,564.57 over the approved EWG budget of $6,381. This budget overage was less than the authorized amount of up to $5,000.

Next Steps

Staff has prepared a budget amendment to carry forward a portion of unspent budget from WY 2025 for consideration of approval as part of Agenda Item IV.F.

Enclosures

Table 1. Borrego Springs Watermaster Budget Status Report for WY 2025 as of September 30, 2025.

Table 1. Final Borrego Springs Watermaster Budget Status Report for WY 2025
as of September 30, 2025 (4th Fiscal Quarter)

Revenues, Expenditures, and Reserves	Approved WY 2025 Budget (as Amended)	Actual WY 2025 (Final)	Percent (%) of Budget	Variance to Date *(Budget minus Actual)*	Notes
Revenues	**$ 1,263,380**	**$ 1,256,474.07**	**99%**	**$ 6,905.93**	
Pumping Assessments Invoiced	**$ 350,000**	**$ 338,532.40**	**97%**	**$ 11,467.60**	*Variance due to reduction of assessment based on corrected pumping records for a Party with estimated reads in 2021, 2022, and 2023*
payments received		*$ 338,503.52*	*97%*		
Bad Debt (non-payment on Assessments)	**$ (2,500)**	**$ -**	**0%**	**$ (2,500.00)**	*Have not recorded bad debt*
Overproduction Penalty Assessments	**$ -**	**$ -**		**$ -**	
Invoiced for Pass thru Expenses	**$ 7,316**	**$ 16,713.28**	**228%**	**$ (9,397.28)**	*Includes Meter Read Invoices, Field Support for UCI, and a Pumper-reimbursed RFI*
payments received		*$ 16,713.28*	*228%*		
DWR Prop 68 Grant Reimbursements Accrued	**$ 908,564**	**$ 901,228.39**	**99%**	**$ 7,335.61**	*All reimbursements have been accrued. Grant period ended 4/30/25.*
Total Expenditures	**$ 1,476,038**	**$ 1,422,476.69**	**96%**	**$ 53,560.91**	
Administrative Services	**$ 421,598**	**$ 422,960.61**	100%	**$ (1,363.01)**	
Watermaster Staff Admin Services	***$ 290,796***	***$ 291,199***	**100%**	**$ (403.15)**	
Board Meetings	*$ 106,600*	*$108,656.95*	*102%*	*$ (2,057.35)*	
Technical Advisory Committee Meetings	*$ 52,444*	*$53,445.00*	*102%*	*$ (1,001.00)*	
Court Hearings	*$ 3,510*	*$678.75*	*19%*	*$ 2,831.25*	
Stakeholder Outreach/Workshops	*$ 12,543*	*$11,976.25*	*95%*	*$ 566.75*	
Administration and Management	*$ 78,699*	*$79,855.30*	*99%*	*$ (1,156.30)*	
Prop 68 Project Admin and Grant Reporting	*$ 37,000*	*$36,586.50*	*99%*	*$ 413.50*	
Other Administrative or Vendor Services	***$ 130,802***	***$ 124,760.35***	**95%**	**$ 6,041.65**	
Financial Audit	*$ 8,560*	*$ 8,098.00*	*95%*	*$ 462.00*	
Insurance	*$ 45,401*	*$ 44,420.36*	*98%*	*$ 980.64*	*Note: This is a pre-paid expense - to date value reflects balance sheet amount*
Misc. Expenses	*$ 2,500*	*$ 131.00*	*5%*	*$ 2,369.00*	
Meter Accuracy Testing Vendors	*$ 13,500*	*$ 14,430.00*	*107%*	*$ (930.00)*	
Interest on Vendor Terms During Prop 68 Grant Period	*$ 60,841*	*$ 57,680.99*	*95%*	*$ 3,160.01*	
Pass Through Expenses	***$ -***	***$ 7,001.51***		**$ (7,001.51)**	
Reimbursement to BWD for GSP	*$ -*	*$ 5.26*		*$ (5.26)*	
Pumper-Funded Request for Information	*$ -*	*$ 6,996.25*		*$ (6,996.25)*	*RFI funded by T2/Rams Hill to complete Scenario 1A BVHM projection*
Legal Services	**$ 105,000**	**$ 70,826**	**67%**	**$ 34,173.91**	

Table 1. Final Borrego Springs Watermaster Budget Status Report for WY 2025
as of September 30, 2025 (4th Fiscal Quarter)

Revenues, Expenditures, and Reserves	Approved WY 2025 Budget (as Amended)	Actual WY 2025 (Final)	Percent (%) of Budget	Variance to Date *(Budget minus Actual)*	Notes
Technical/Engineering Services	**$ 701,942**	**$ 683,746.44**	**97%**	**$ 18,195.56**	
General Technical Consultant Services	***$ 445,524***	***$ 426,625.94***	**96%**	***$ 18,898.06***	
Coordinate/Implement meter reading program	*$ 30,440*	*$ 27,179.25*	*89%*	*$ 3,260.75*	
Groundwater Monitoring Program	*$ 124,060*	*$ 97,468.33*	*79%*	*$ 26,591.67*	
Data Management and Reporting Data to DWR	*$ 20,265*	*$ 14,628.25*	*72%*	*$ 5,636.75*	
Annual Report to the Court and DWR	*$ 51,188*	*$ 51,552.95*	*101%*	*$ (364.95)*	
Address Inactive Wells via Abandonment/Conversion	*$ 203,273*	*$ 222,405.66*	*109%*	*$ (19,132.66)*	*Though over the WY 2025 Budget, expenditure was within grant approved budget and was approved by DWR for full grant reimbursement*
As-needed technical support	*$ 16,298*	*$ 13,391.50*	*82%*	*$ 2,906.50*	
Consulting Services with TAC Support/Input	***$ 256,418***	***$ 257,120.50***	**100%**	***$ (702.50)***	
Technical Work to Support Sustainable Yield Updates	*$ 90,590*	*$ 84,850.75*	*94%*	*$ 5,739.25*	
Develop Scope and Budget for WY 2026-2029 for Sustainable Yield Updates	*$ 15,272*	*$ 15,444.00*	*101%*	*$ (172.00)*	
5-Year Update of the GMP (required by DWR)	*$ 140,508*	*$ 156,825.75*	*112%*	*$ (16,317.75)*	*In June 2025, the Board approved a reallocation of funds between tasks within West Yost's WY 2025 Statement of Work to allow spending of up to $171,292 on the GMP Assessment/Update.* ***West Yost underspent the planned spending under this authorization by $14,466 and will request to Carry Forward this amount to WY 2026 to complete the work.***
Address Ad Hoc Requests from the Board	*$ 10,048*	*$ -*	*0%*	*$ 10,048.00*	
Environmental Working Group	**$ 240,182**	**$ 236,063.23**	**98%**	***$ 4,118.77***	
Biological Restoration of Fallowed Lands	*$ 233,801*	*$ 225,117.66*	*96%*	*$ 8,683.34*	
Ad Hoc EWG Meetings/Requests	*$ 6,381*	*$ 10,945.57*	*172%*	*$ (4,564.57)*	*In August 2025, the Board authorised West Yost to spend up to $5k above the EWG budget to advance the process to procure a Peer Reviewer to review the UCI GDE Study Report.*
Services to Parties with Manual Read Meters	**$ 7,316**	**$ 8,880.32**	**121%**	**$ (1,564.32)**	
Liabilities on Payment Terms					
Beginning Balance	**$ 587,501**	**$ 587,501.03**		***$ (0)***	
Year-End Balance (Budget) and Current Balance	**$ 278,432**	**$ 291,643.59**	**105%**	***$ (13,211.59)***	
Cash Reserves					
Beginning Cash Reserves	**$ 839,254**	**$ 839,254.81**			
Average Target Reserve and Actual Reserve	**$ 660,488**	**$ 738,996.64**	**112%**	**$ (78,508.64)**	
Target/Actual No. Months Operating Reserve	*7.00*	*11.57*			The Average 9-month Reserve Target for WY 2026 is $574,764

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.D

To: Board of Directors

From: Andy Malone, Technical Consultant

Date: November 14, 2025

Subject: Results of Scenario 1C: Prospective Northward Shift in Projected Pumping

☐ **Recommended Action**	☐ **Provide Direction to Staff**	✓ **Information and Discussion**
☐ **Fiscal Impact**	☐ **Cost Estimate: $**	

Recommended Action

Board discussion.

Fiscal Impact: None.

Background and Previously Related Actions by the Board

The Borrego Valley Hydrologic Model (BVHM) is being used to predict future groundwater conditions in the Basin under the pumping Rampdown to the 2025 Sustainable Yield by 2040 and beyond. Specifically, the projections are used to determine if the following Sustainability Goals defined in the Groundwater Management Plan (GMP) are expected to be met:

- Trends in groundwater levels are stable or increasing by 2040 and thereafter
- Groundwater levels are always at sufficient elevations to not cause Undesirable Results

Thus far, three projection scenarios for the period 2023-2070 have been developed, run, and evaluated using a future climate condition that is a of historical climatic conditions that occurred during 1975-2022. The three scenarios are:

- **Scenario 1A – Baseline Scenario.** This scenario represents the Pumpers current best estimate of planned future pumping. The model results indicated that groundwater levels were projected to increase and stabilize in the North Management Area (NMA), but continuously decline through 2070 in the southern Central Management Area (CMA) and South Management Area (SMA).
- **Scenario 1B – Northward Shift of BWD Pumping.** Scenario 1B assumes the same volume of pumping as in Scenario 1A, but approximately 920 acre-feet per year (afy) of pumping was shifted from BWD wells in the CMA to two wells in the NMA to evaluate if the shift could achieve stabilization of groundwater levels across the Basin. The results indicated that the

northward shift of pumping resulted in higher groundwater levels in the southern CMA (compared to Scenario 1A), but groundwater levels were still projected to continuously decline through 2070 in both the southern CMA and SMA.

- **Scenario 1C – Northward Shift of BWD and Rams Hill Pumping.** Scenario 1C assumes the same volume of pumping as in Scenario 1A/1B, but approximately 1,800 afy of pumping was shifted from BWD and Rams Hill wells in the CMA and SMA to four wells in the NMA to evaluate if an additional shift in pumping could achieve stabilization of groundwater levels across the Basin by 2040.

The purpose of this memo is to report the methods and results of Scenario 1C.

Development of Scenario 1C

Watermaster staff worked with BWD and T2 to develop the pumping projections for Scenario 1C and identify which wells could be used to test the shift of pumping from the SMA/CMA to the NMA. In Scenario 1C, an average of 1,876 afy was shifted from BWD and Rams Hill wells in the SMA/CMA to four wells in the NMA during the period WY 2030 to 2070:

- 1,476 afy was shifted from BWD wells in the CMA
- 400 afy shifted from Rams Hill wells in the SMA

See attached presentation slide #9 for a map showing the spatial distribution of pumping in Scenario 1C and slide #10 for a map comparing the spatial distribution of pumping in Scenario 1A vs. 1C.

Results and Interpretations from Scenario 1C

The attached presentation provided to the Technical Advisory Committee (TAC) at its November 12, 2025 meeting documents the results of Scenario 1C. It includes time-series charts of BVHM-simulated groundwater levels at representative wells in the NMA, northern portion of the CMA, southern portion of the CMA, and the SMA over the period 1945-2070 (see slides 14-21). The model results and interpretations are described below.

- **NMA**. Groundwater levels are projected to stabilize over the period 2030-2070. ***Interpretation***: Shifting over 1,800 afy of pumping to the NMA can still result in stabilization of groundwater levels in the NMA.
- **CMA.** Groundwater levels are relatively stable over the period 2030-2070 and are the highest levels simulated in all three scenarios (Scenarios 1A-1C). ***Interpretation***: A future shift in pumping from the CMA to the NMA will assist in stabilizing groundwater levels in the CMA.
- **SMA**. In some wells (like Rams Hill wells), groundwater levels increased over the projection period. In other wells, like MW-5A near the Borrego Sink, groundwater levels continuously decline over the projection period. ***Interpretation***: A future shift in pumping from the SMA to NMA may result in stabilization of groundwater levels in some parts of the SMA (mainly, the Rams Hill wellfield), but not across the entire SMA.

- **BVHM Discrepancies**. It should be noted that discrepancies have previously been identified in the BVHM in the southern portion of Basin (i.e., southern CMA and SMA). These discrepancies may be related to model errors, incomplete understanding of the hydrogeologic conceptual model (HCM) in this area of the Basin, and/or incorrect representation of the HCM in the BVHM. Hence, there is uncertainty in the accuracy of the BVHM results in this southern portion of the Basin. These discrepancies in the BVHM should be addressed before using the BVHM to finalize the evaluation of potential northward shifts in pumping.

TAC Feedback

Watermaster staff presented the results and interpretations from Scenario 1C to the TAC at its November 12, 2025 meeting. TAC discussion and feedback are being documented in its meeting minutes and are summarized below:

- Recommendation to consider well-specific differences in measured vs. modeled groundwater levels to refine SMC.
- Observed declines in groundwater levels at MW-5A may reflect regional trends observed in adjacent Basins by a TAC member.
- Reiterating that the model is not well calibrated in certain areas of the CMA, as evidenced by the comparison of measured vs. modeled groundwater levels at well ID1-12.

Next Steps

The Board requested to perform an additional model scenario that simulates the pumping of all Judgment-allowed water rights to be considered along with Scenarios 1A through 1C. A cost estimate to perform this scenario is included as Agenda Item IV.E.

If approved, the "Judgment Scenario" will be developed and run in November/December. Following completion of the Judgment Scenario, Staff will prepare a Technical Memorandum (TM) to document the modeling results, interpretations, and groundwater management recommendations. The TM will be subject to TAC and Board review. Upon finalization it will be submitted to DWR to replace the March 2025 reported results as part of the SGM grant deliverables, and the findings and recommendations will be incorporated in the 5-Year Assessment Report.

Enclosures

Presentation slides from the November 12, 2025 TAC Meeting

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Borrego Springs Watermaster

Technical Advisory Committee Meeting

November 12, 2025

TAC Agenda

II. Public Comment

III. Updated Sustainable Management Criteria – Groundwater Levels, Storage, and Quality

IV. Scenario 1C BVHM Simulation Results: Northward Shift of Future Pumping

V. Public Comment

Use of the BVHM to Evaluate Sustainability of Future Pumping

- Three projection scenarios have been run to-date:
  - **Initial Scenario –** Performed using SGM grant funding. Superseded by Scenario 1A.
  - **Scenario 1A** – New "Baseline" Scenario → reduced BWD demands
  - **Scenario 1B** – Shifted ~920 afy of pumping from the CMA to the NMA
- Each projection scenario was run through WY 2070 using the BVHM, where:
  - Pumping projections were assigned to wells based on plans of all major Pumpers
  - Future land uses were updated based on plans of all major Pumpers
  - Future climate/hydrologic conditions were based on a repeated historical hydrology (1975-2022)
- "Sustainability" of future groundwater-level conditions was defined as:
  - Trends in groundwater levels are stable or increasing by 2040 and thereafter
  - Groundwater levels are always at sufficient elevations to not cause Undesirable Results

Results and Recommendations from Scenarios 1A/1B

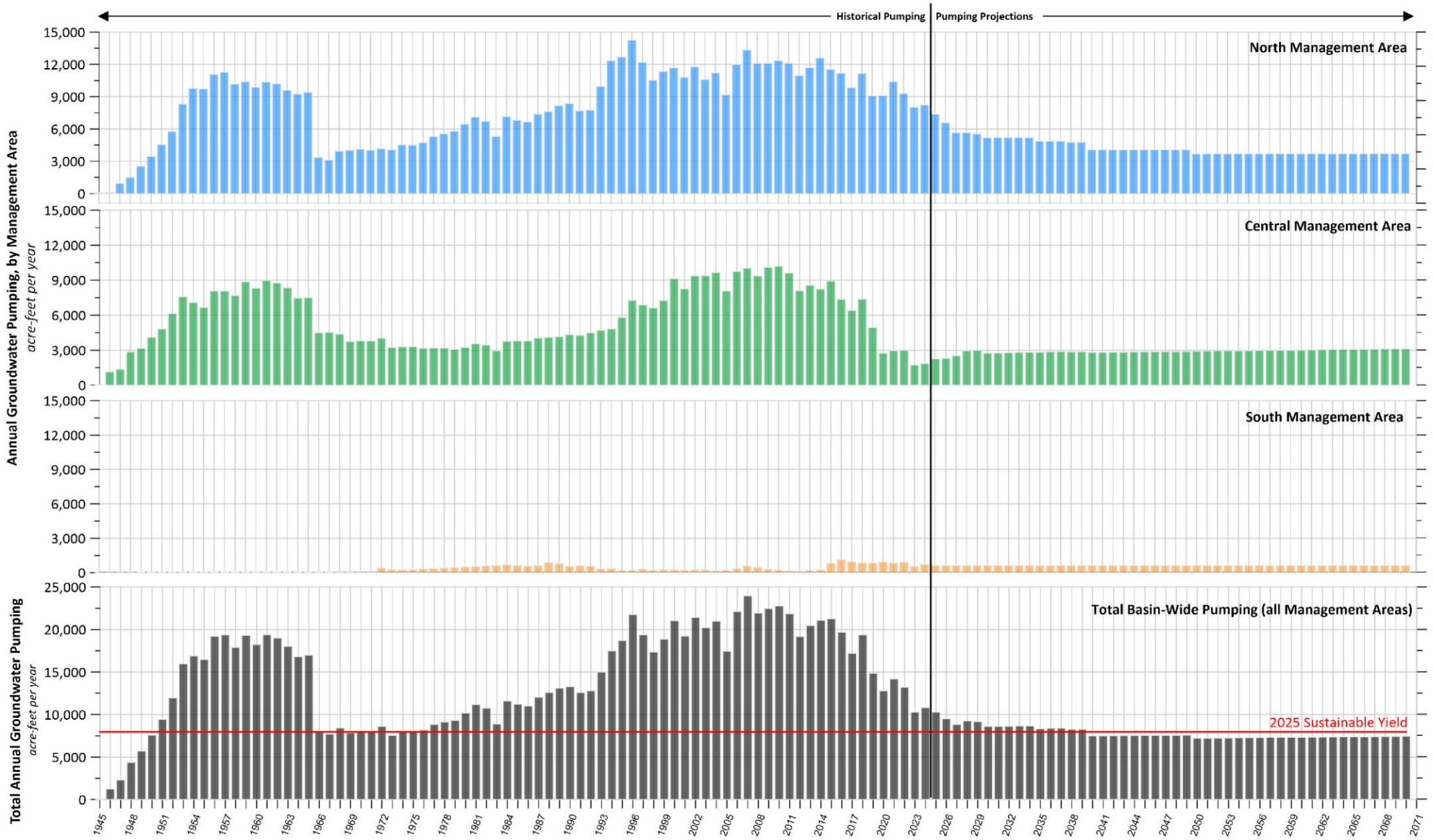
- **Results**:
  - NMA: Future groundwater levels increased and then stabilized by WY 2040
  - CMA and SMA: Future groundwater levels declined continuously through WY 2070
    - However, shifting pumping from the CMA to NMA can assist in stabilizing groundwater levels in the CMA (Scenario 1B)
    - Additional pumping may need to be shifted from CMA to NMA
- **Recommendation**: Continue exploring a northward shift of BWD pumping
  - Board directed shifting a total of ~1,800 afy to the NMA ("Scenario 1C")
  - ***Objective***: better balance pumping and groundwater levels across the Basin

Scenario 1C Assumptions

- Coordinated with T2 and BWD to develop a new pumping projection scenario
- **Scenario 1C** → Average of 1,876 AFY shifted to NMA (WY 2030-2070)
  - Of the 1,876 AFY shifted to the NMA:
    - 1,476 AFY is shifted from the CMA (BWD wells)
    - 400 AFY is shifted from the SMA (Rams Hill wells)
  - No change in total pumping compared to Scenarios 1A/1B (only pumping locations change)

Water Year	Planned Pumping (Scenarios 1A-1B) *(a)*	Planned Pumping *(Scenarios 1C)* *(b)*	Difference in Planned Pumping (Scenario 1C - 1A/B) *(c) = (b) - (a)*
2025	**10,270**	**10,270**	**0**
2026	9,513	9,513	0
2027	8,818	8,818	0
2028	9,247	9,247	0
2029	9,164	9,164	0
2030	**8,585**	**8,585**	**0**
2031	8,604	8,604	0
2032	8,622	8,622	0
2033	8,641	8,641	0
2034	8,651	8,651	0
2035	**8,332**	**8,332**	**0**
2036	8,381	8,381	0
2037	8,392	8,392	0
2038	8,240	8,240	0
2039	8,251	8,251	0
2040	**7,496**	**7,496**	**0**
2041	7,507	7,507	0
2042	7,518	7,518	0
2043	7,529	7,529	0
2044	7,540	7,540	0
2045	**7,550**	**7,550**	**0**

Pumping Projections – Scenario 1A



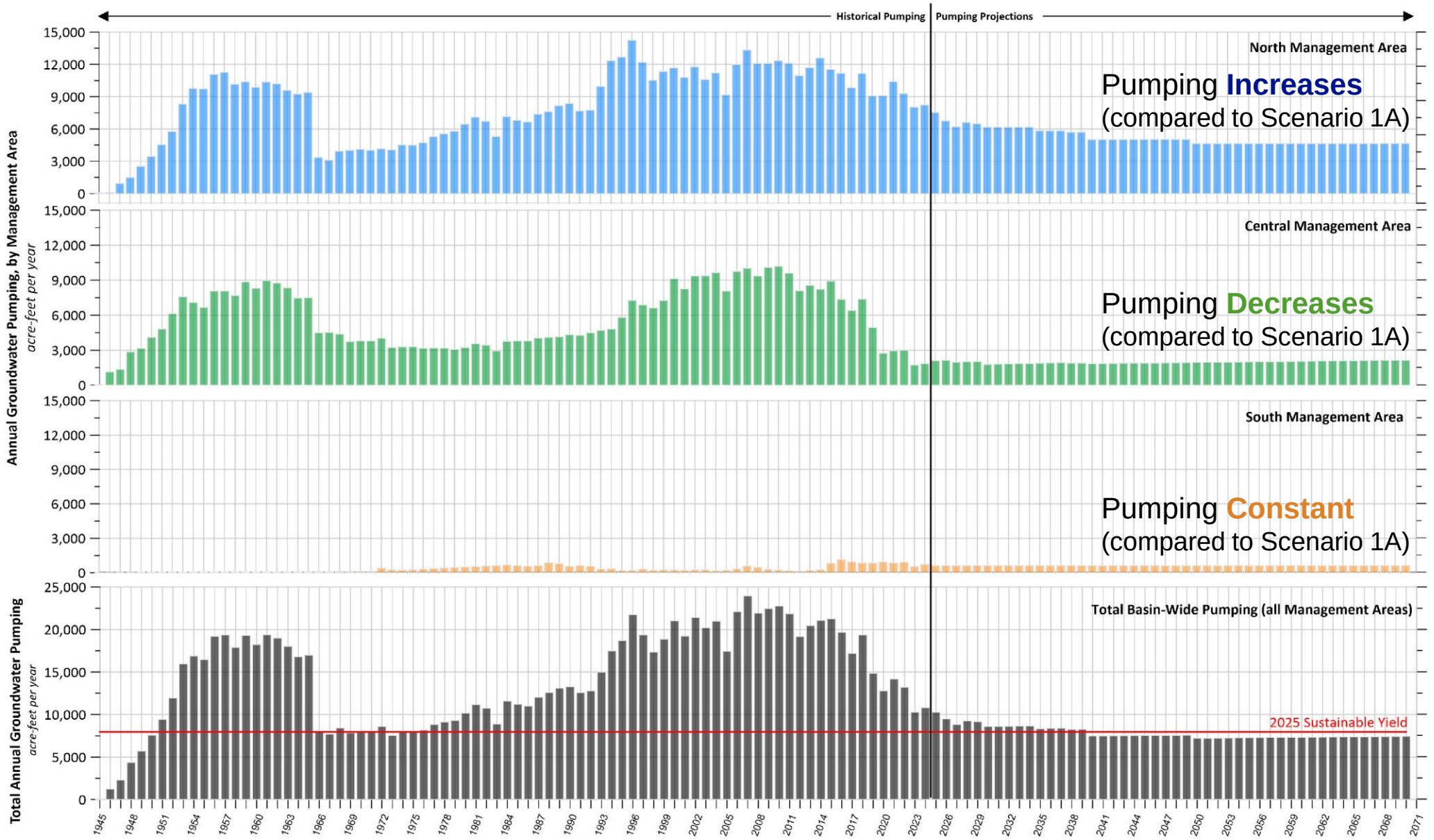
Avg. Basin-wide Pumping (2030 – 2070)

NMA = 4,108 AFY

SMA = 2,926 AFY

SMA = 632 AFY

Pumping Projections – Scenario 1B



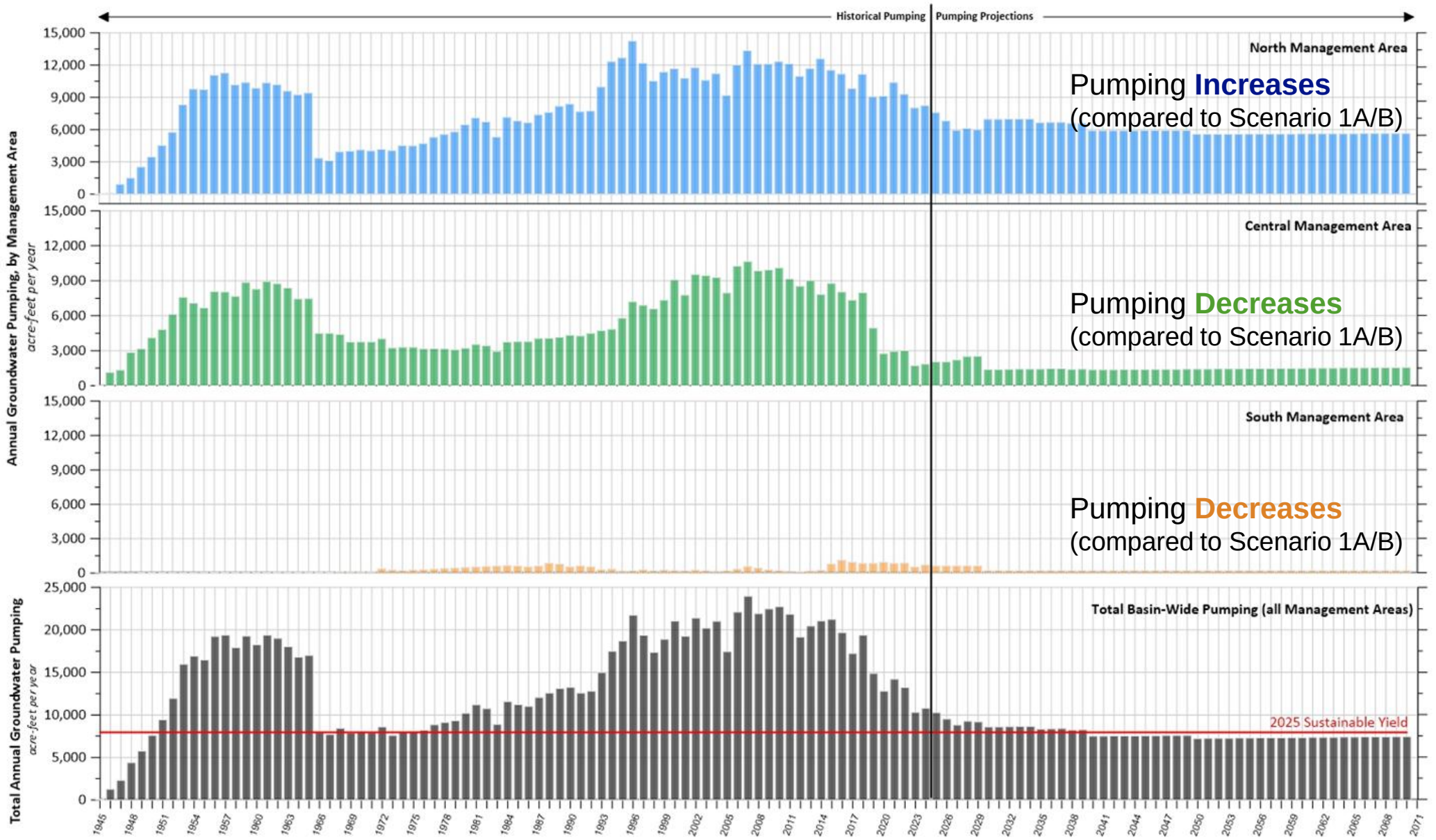
Avg. Basin-wide Pumping (2030 – 2070)

NMA = 5,070 AFY

CMA = 1,965 AFY

SMA = 632 AFY

Pumping Projections – Scenario 1C



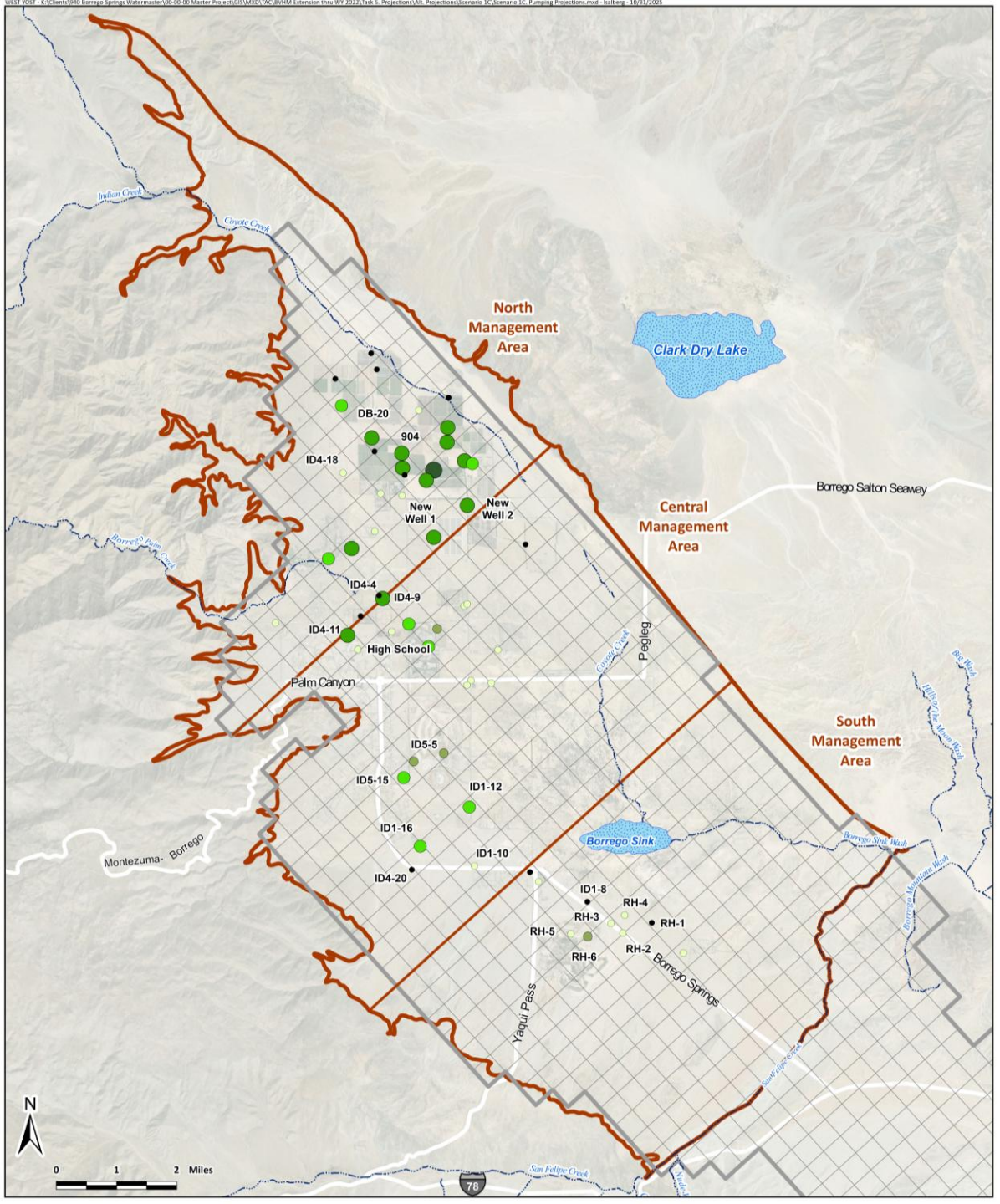
Avg. Basin-wide Pumping (2030 – 2070)

NMA = 5,984 AFY

CMA = 1,450 AFY

SMA = 232 AFY

Scenario 1C
Pumping Projection



Scenario 1C Minus 1A

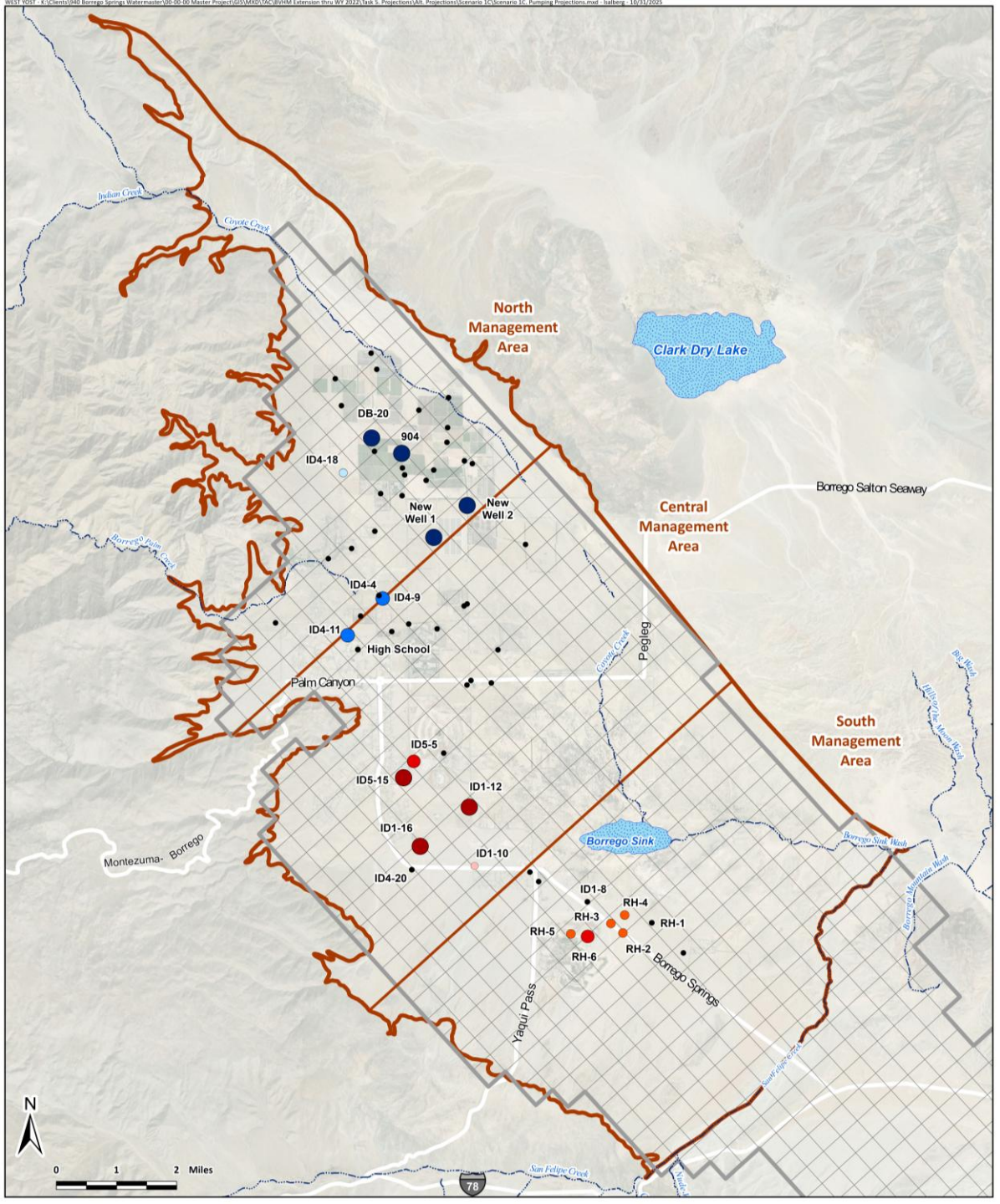
Difference in Annual Average Pumping (afy)
Scenario 1C Minus Scenario 1A

- 250 - 450
- 100 - 250
- 25 - 100
- < 25

Increased Pumping in Scenario 1C

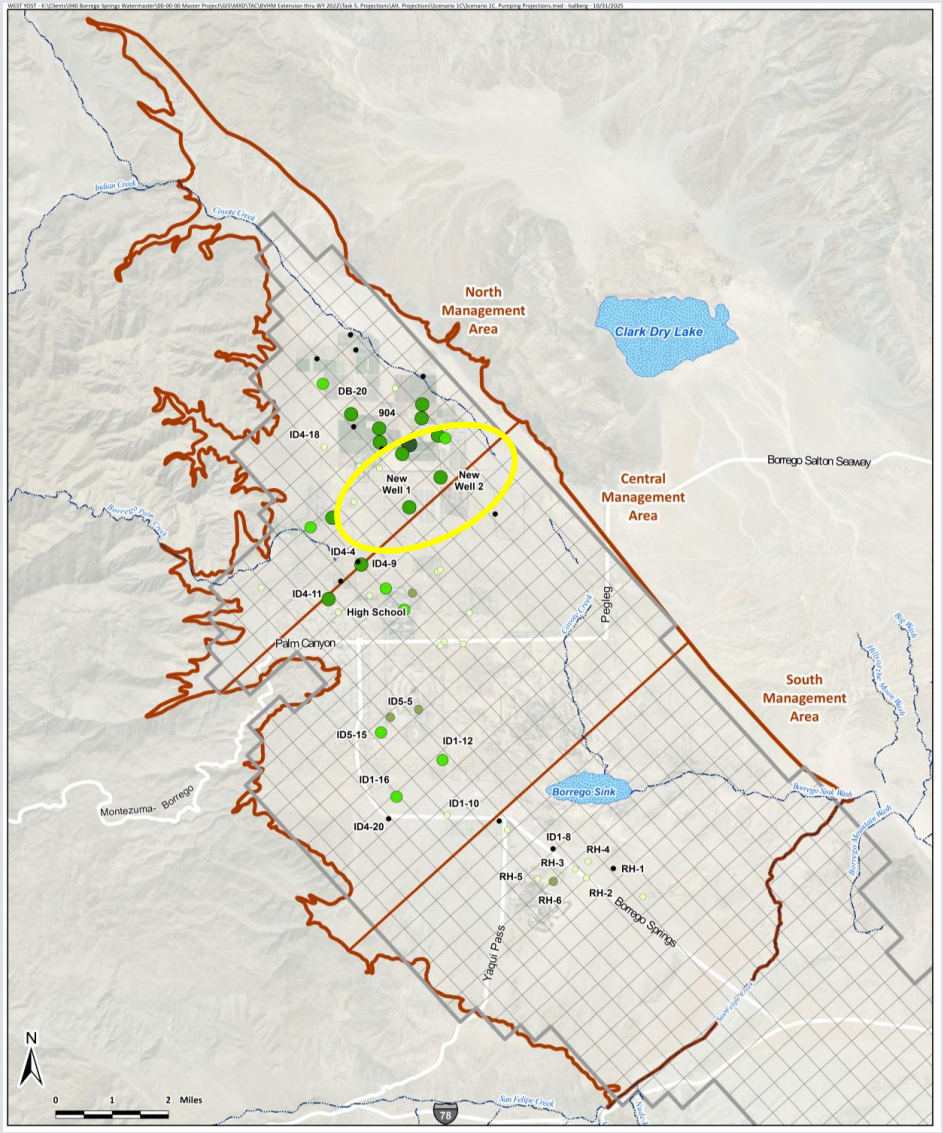
- 0 (no change)
- < -25
- - 100 - -25
- -250 - -25
- -600 - -250

Decreased Pumping in Scenario 1C



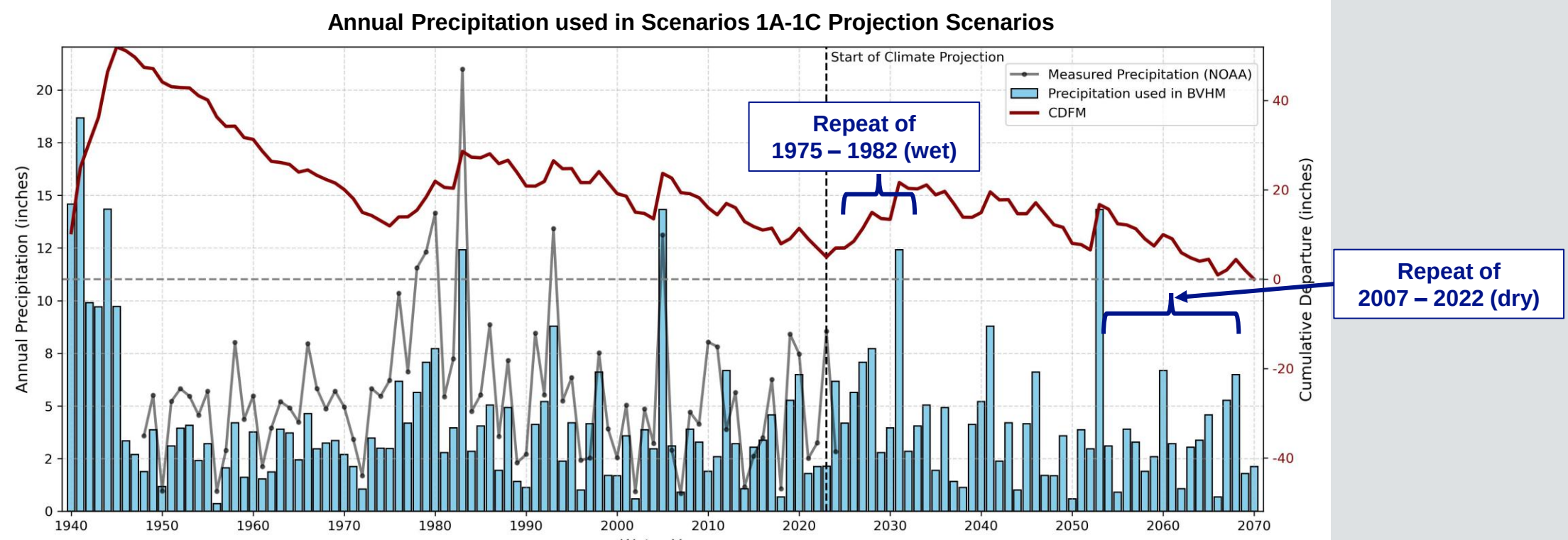
Modeling Work Completed:

- Added two new theoretical wells in the NMA to the BVHM
- New theoretical NMA wells were:
  - Sited based on proximity to other future pumping wells (i.e. not located near major pumping centers)
  - Screened in Layers 2 and 3 of the BVHM
- Updated future assigned pumping in the MNW2 package (no other changes to other input files)



Ran Scenario 1C using the BVHM

- Like other Scenarios, Scenario 1C simulates:
  - Pumping Rampdown to 2025 Sustainable Yield by 2040
  - *Repeated Hydrology*: 47-year climate period of WY 1975-2022 was repeated for WY 2023-2070
    - Repeated hydrology begins with repeat of a wet period and ends with a prolonged drought period

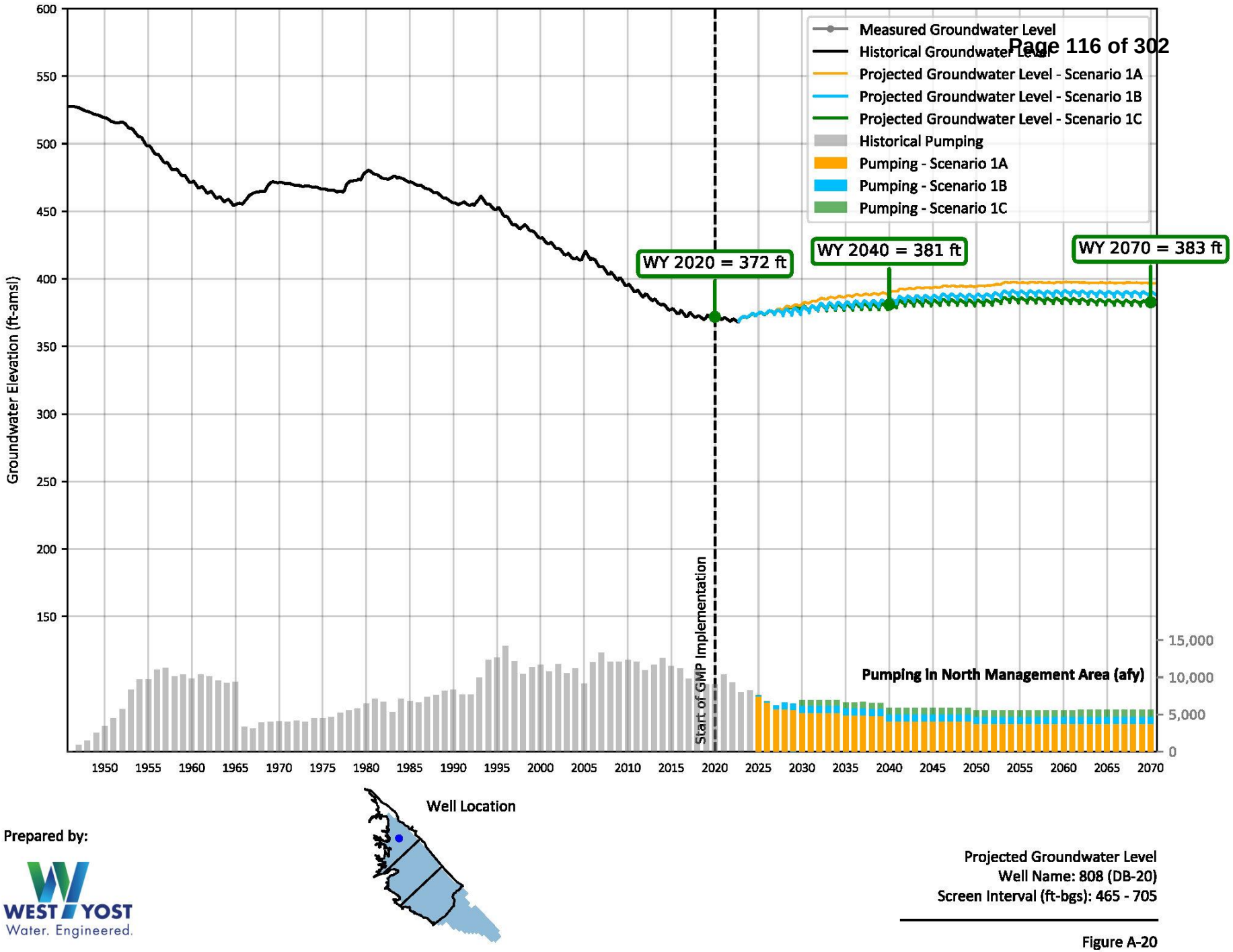


Reviewed Model Results

- Compared general trends in groundwater-levels by Management Area across all scenarios
- Reviewed hydrographs
- Reviewed water budget
- Reviewed maps of change in groundwater elevation (2020-2040) for each scenario
  - Changes over time
  - Comparisons between Scenarios (Scenario 1A vs. 1C)

NMA:

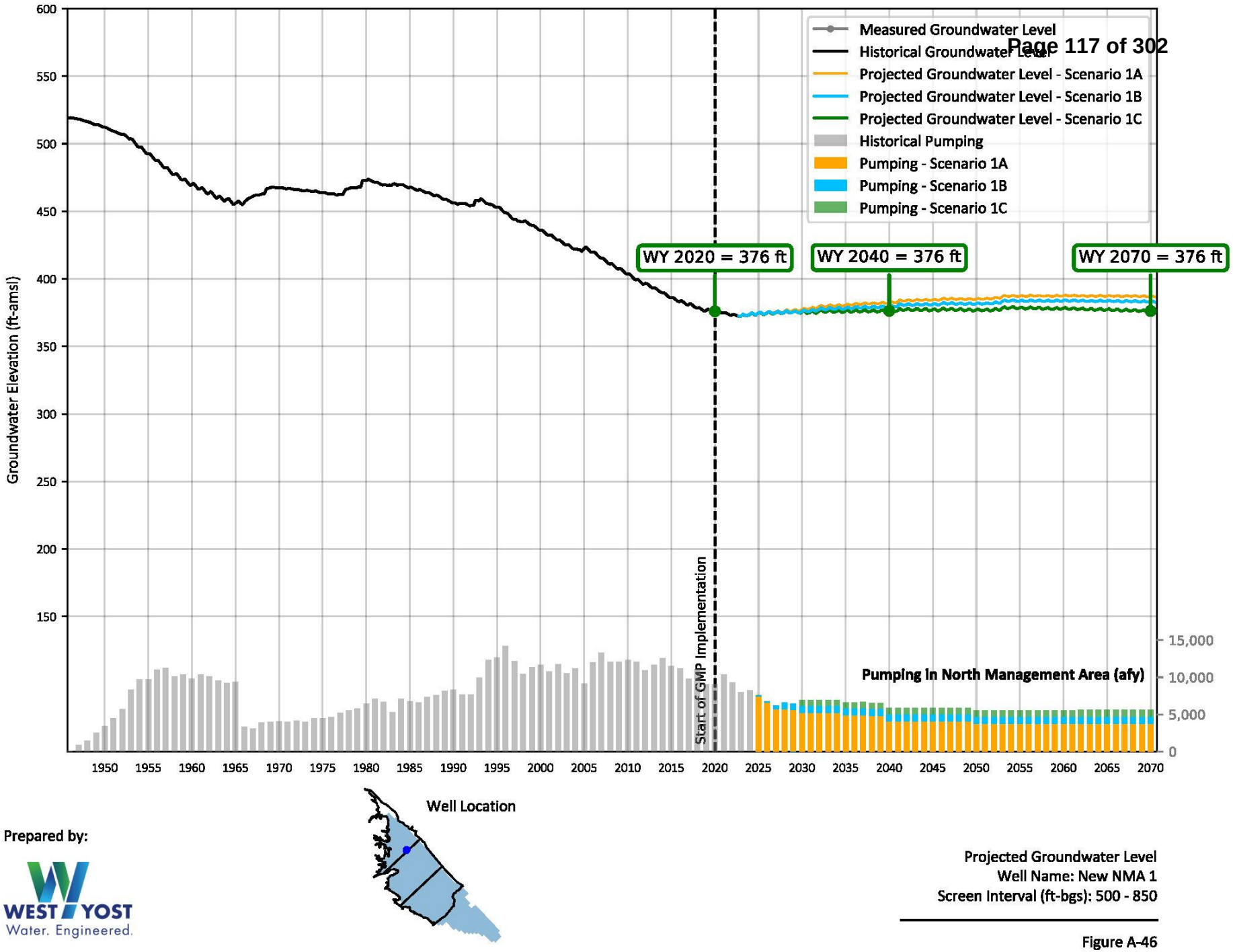
- In all scenarios, groundwater levels begin to recover during GMP implementation and then stabilize after 2040
- Scenario 1C GWE are lowest of all three scenarios, but still “stable” in WY 2040+



NMA:

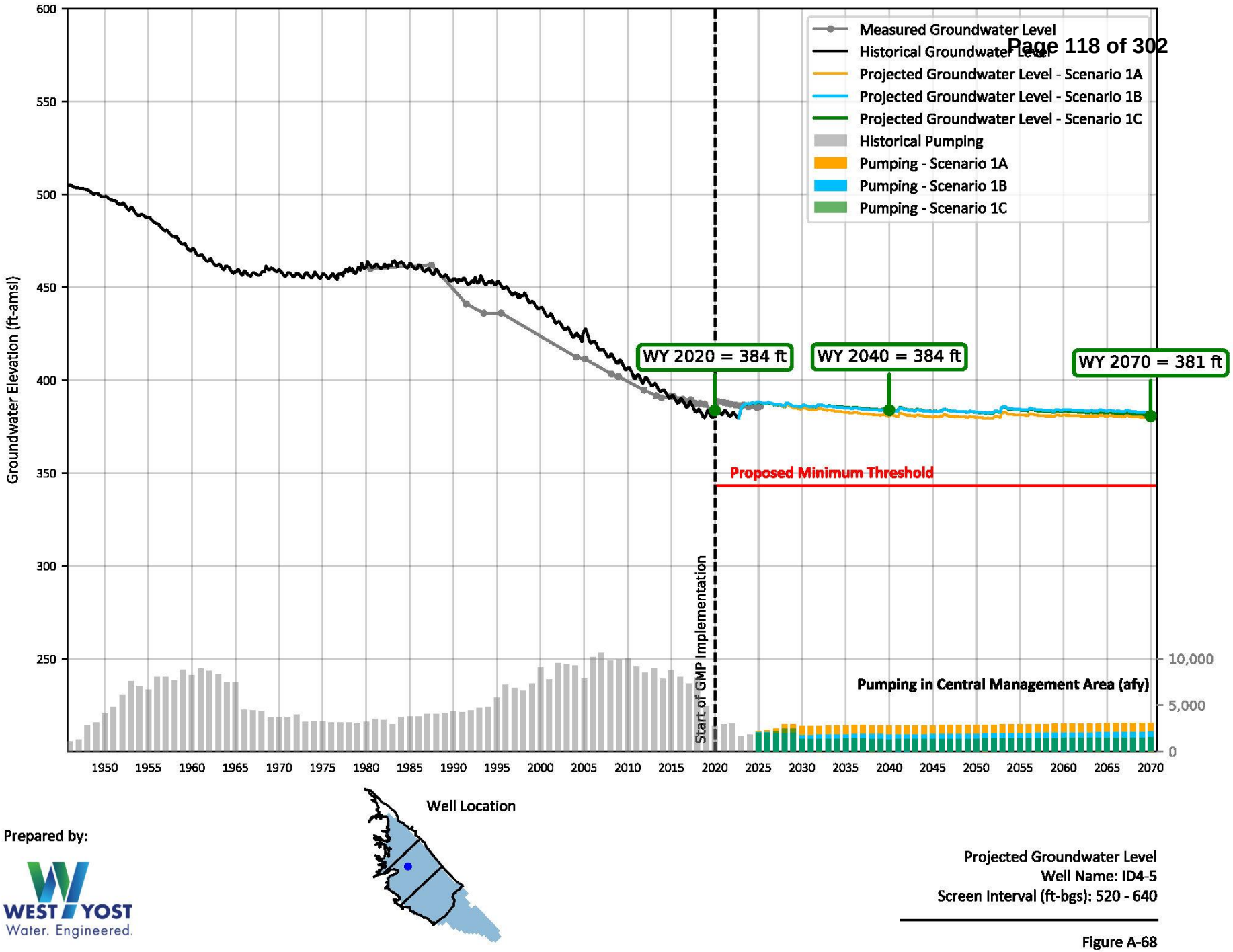
- New theoretical well* is able to pump 450 AFY in WY 2030+ without causing declines in groundwater levels

**well is not constructed but used in model projection*



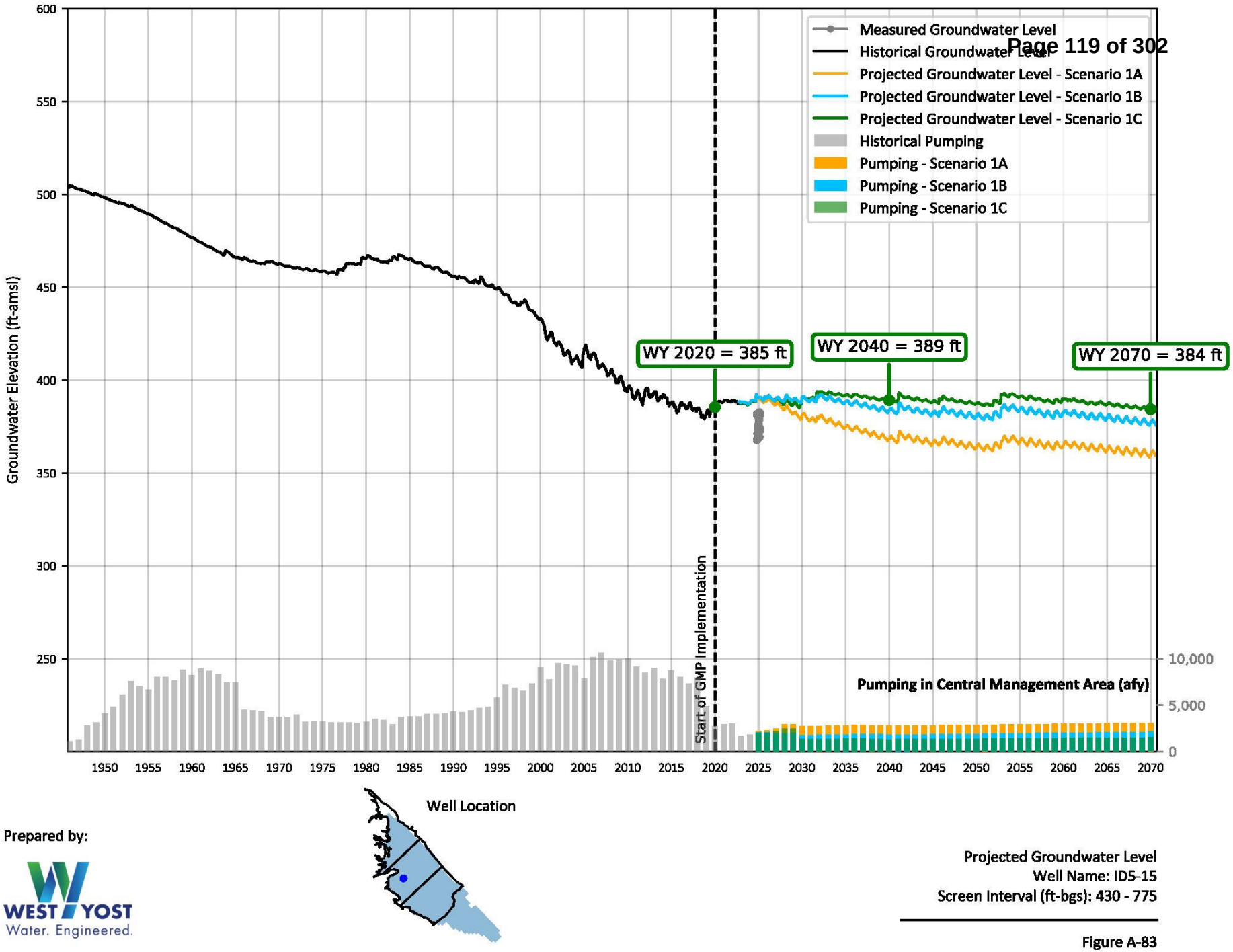
Northern part of CMA:

- Future groundwater levels are relatively stable in all three scenarios



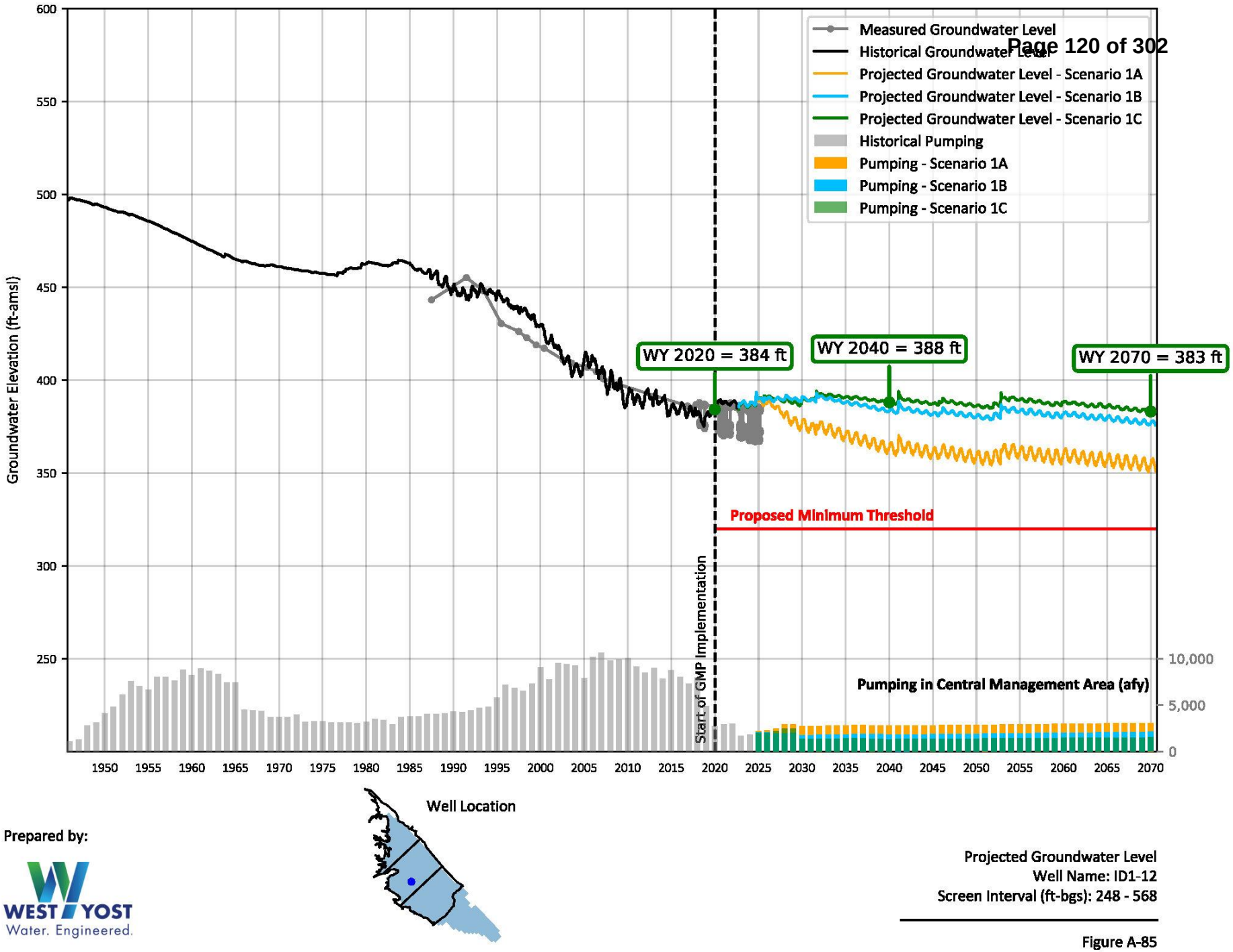
Central part of CMA:

- Of the three scenarios, groundwater elevations are projected to be highest in Scenario 1C
- Projected groundwater levels in Scenario 1C are considered "stable"



Southern part of CMA:

- Projected groundwater levels in Scenario 1C are considered “stable”
- Shifting additional pumping from CMA to NMA (Scenario 1C) helped stabilize groundwater levels in the CMA



Prepared by:

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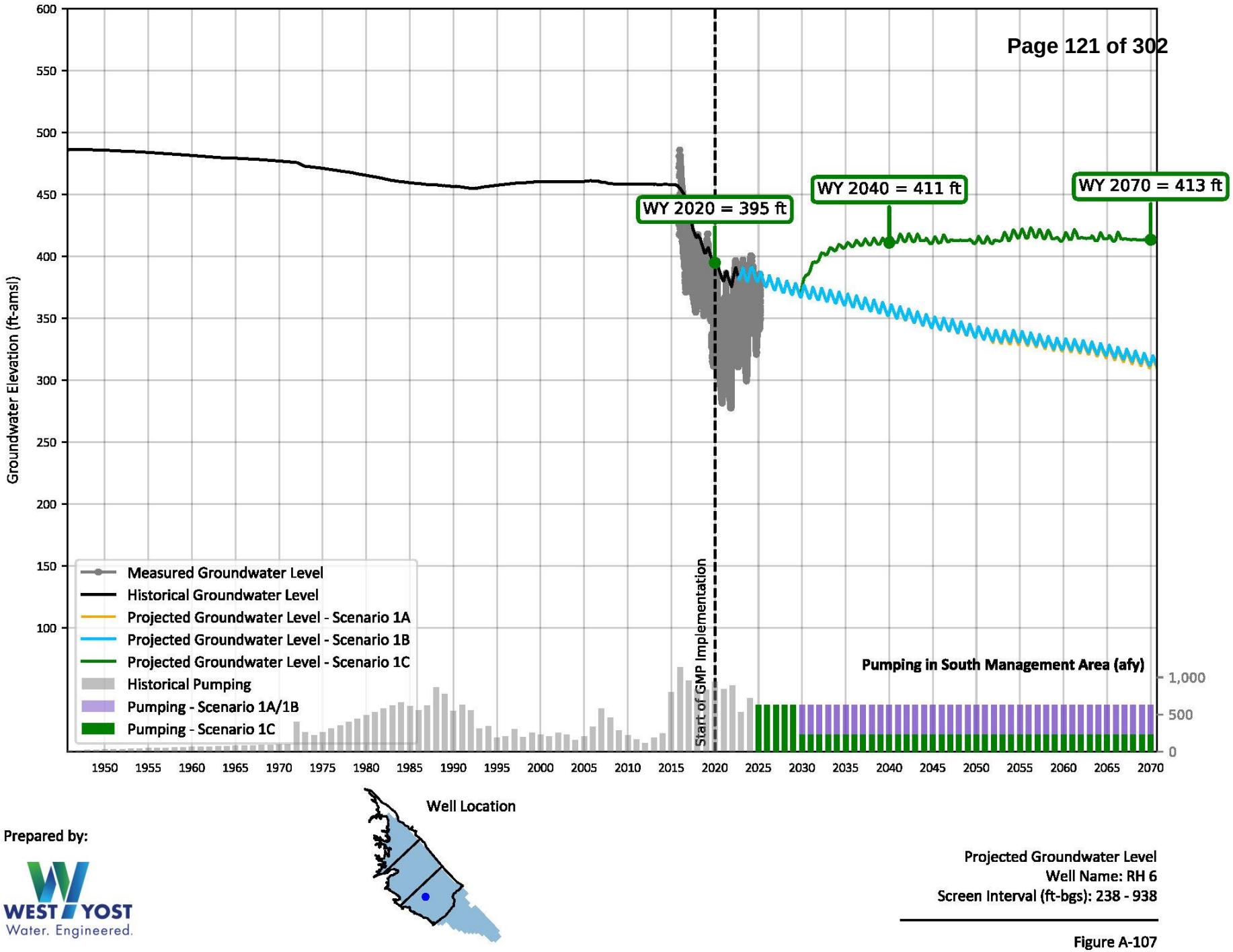
Projected Groundwater Level
Well Name: ID1-12
Screen Interval (ft-bgs): 248 - 568

Figure A-85

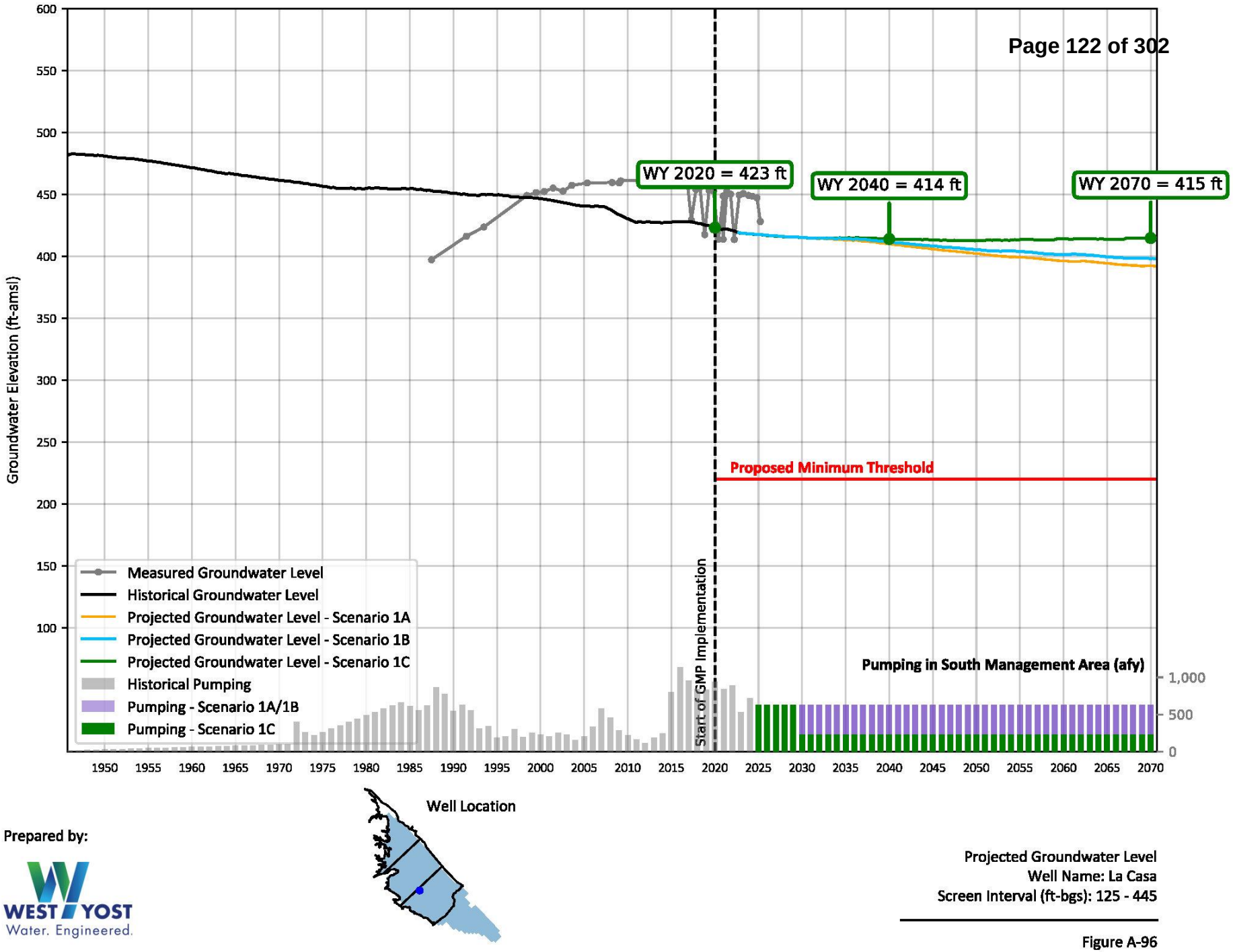
SMA:

- In Scenario 1C, groundwater levels **increase** and stabilize in WY 2030+ once Rams Hill pumping is reduced to 200 AFY



SMA:

- Groundwater levels stabilize in Scenario 1C
- This area has known calibration issues → model does not capture trends in historical groundwater levels



Prepared by:

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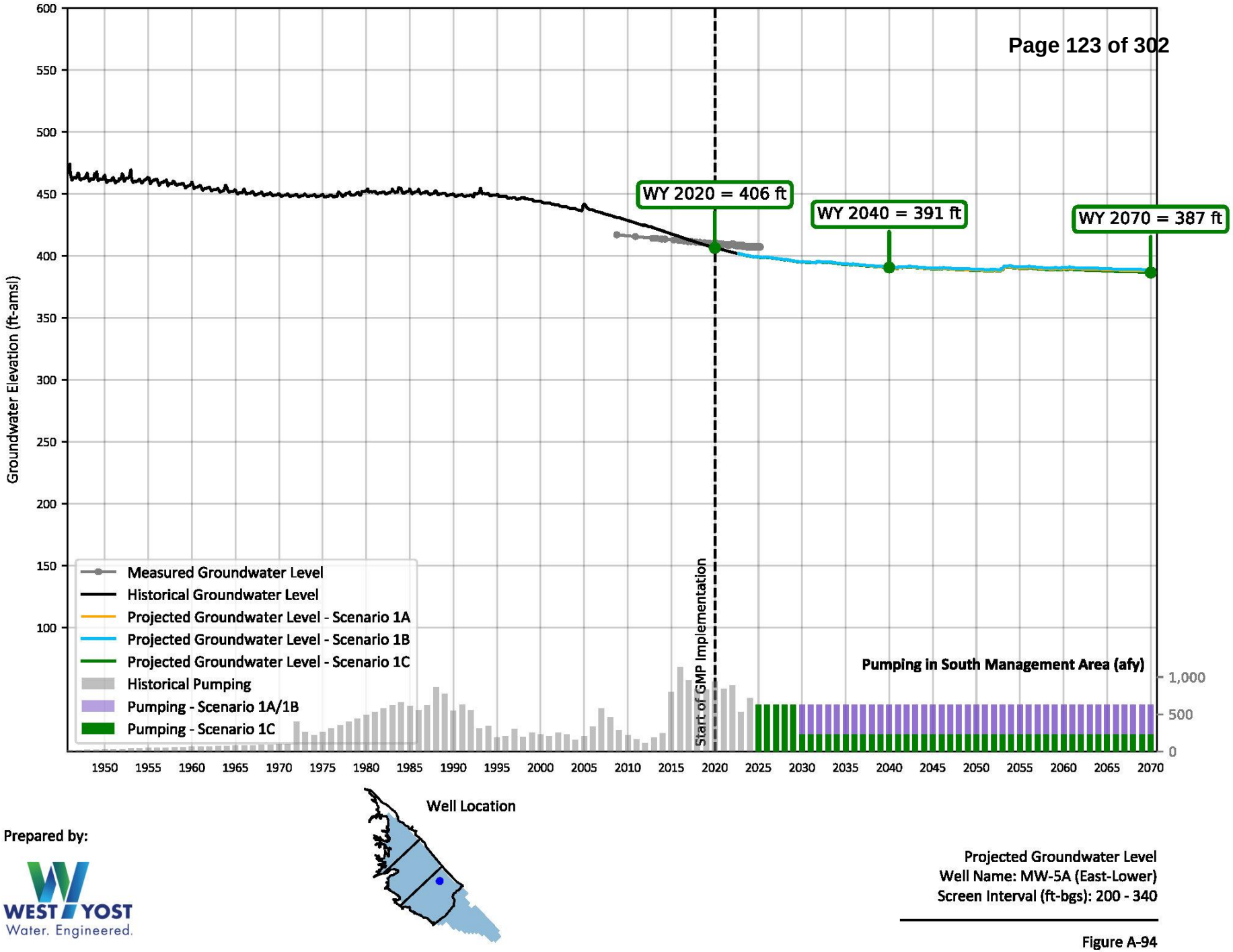
Figure A-96

SMA:

- Projected groundwater levels gradually decline through 2070 in all three scenarios
- Measured groundwater levels also decline at ~0.5-0.6 ft/yr
- *Observation*: Groundwater levels appear disconnected from influence of SMA-pumping



Prepared by:

WEST YOST
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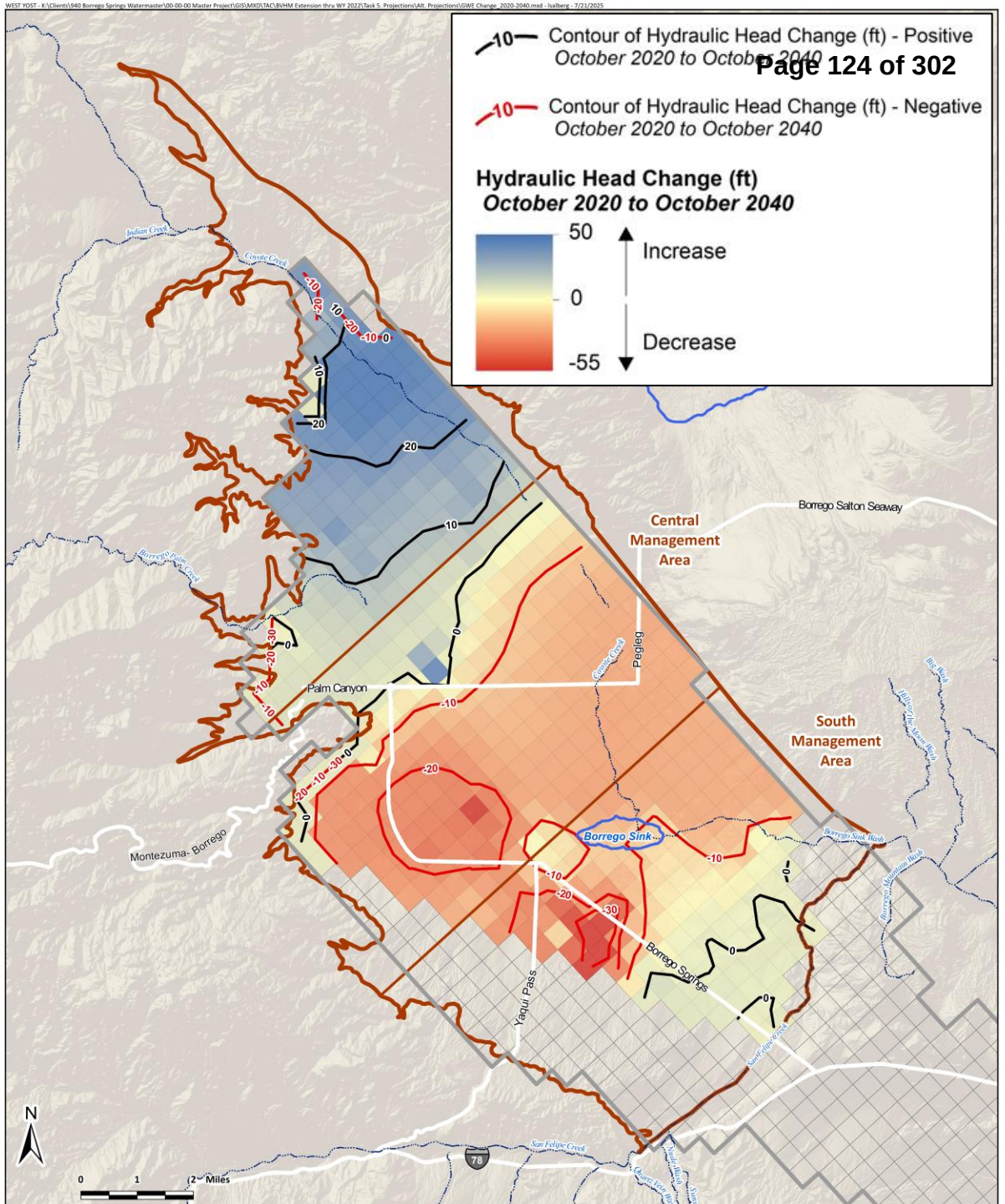
Projected Groundwater Level
Well Name: MW-5A (East-Lower)
Screen Interval (ft-bgs): 200 - 340

Figure A-94

Change in Groundwater Elevation

Scenario 1A

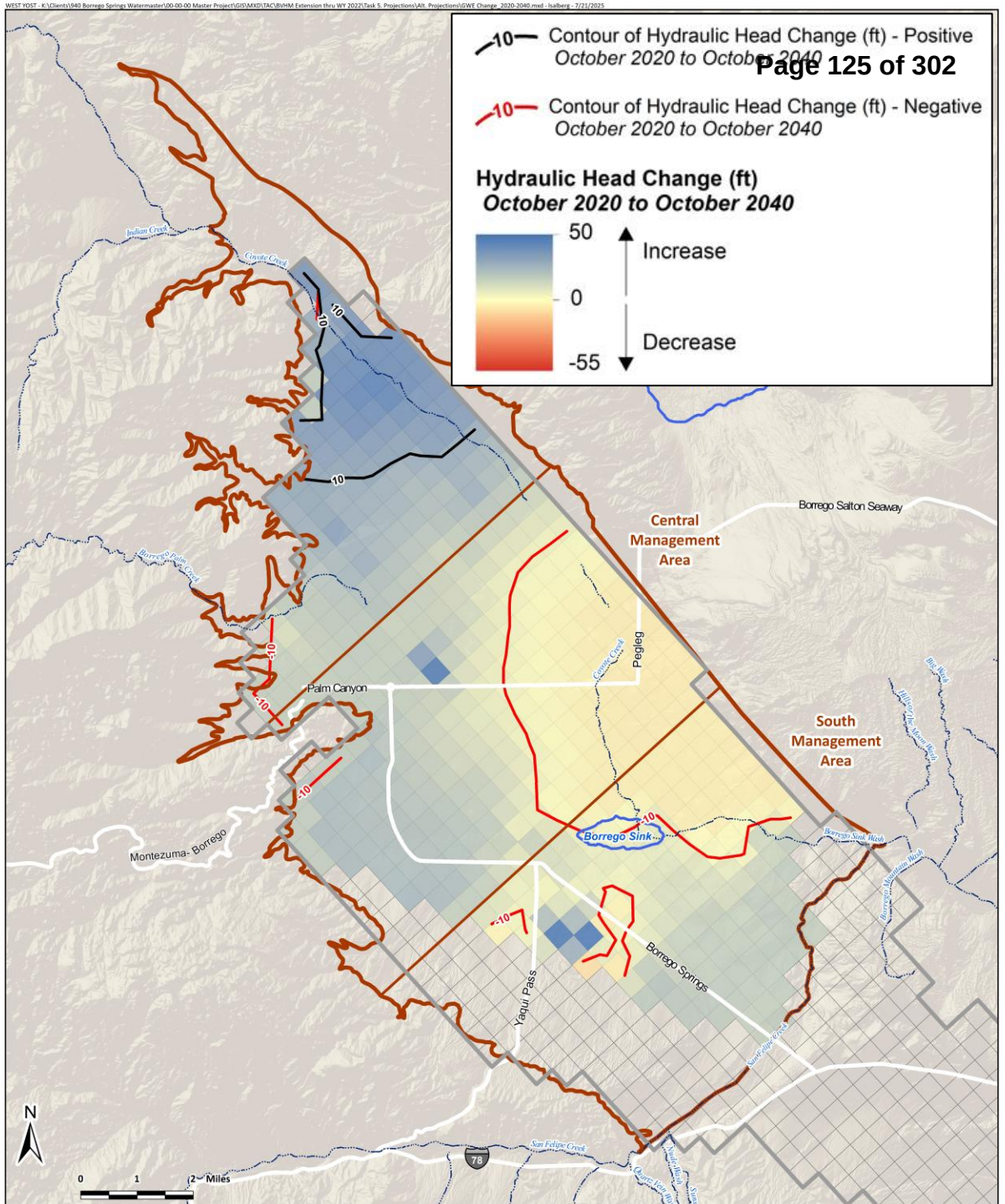
(WY 2040 minus 2020)



Change in Groundwater Elevation

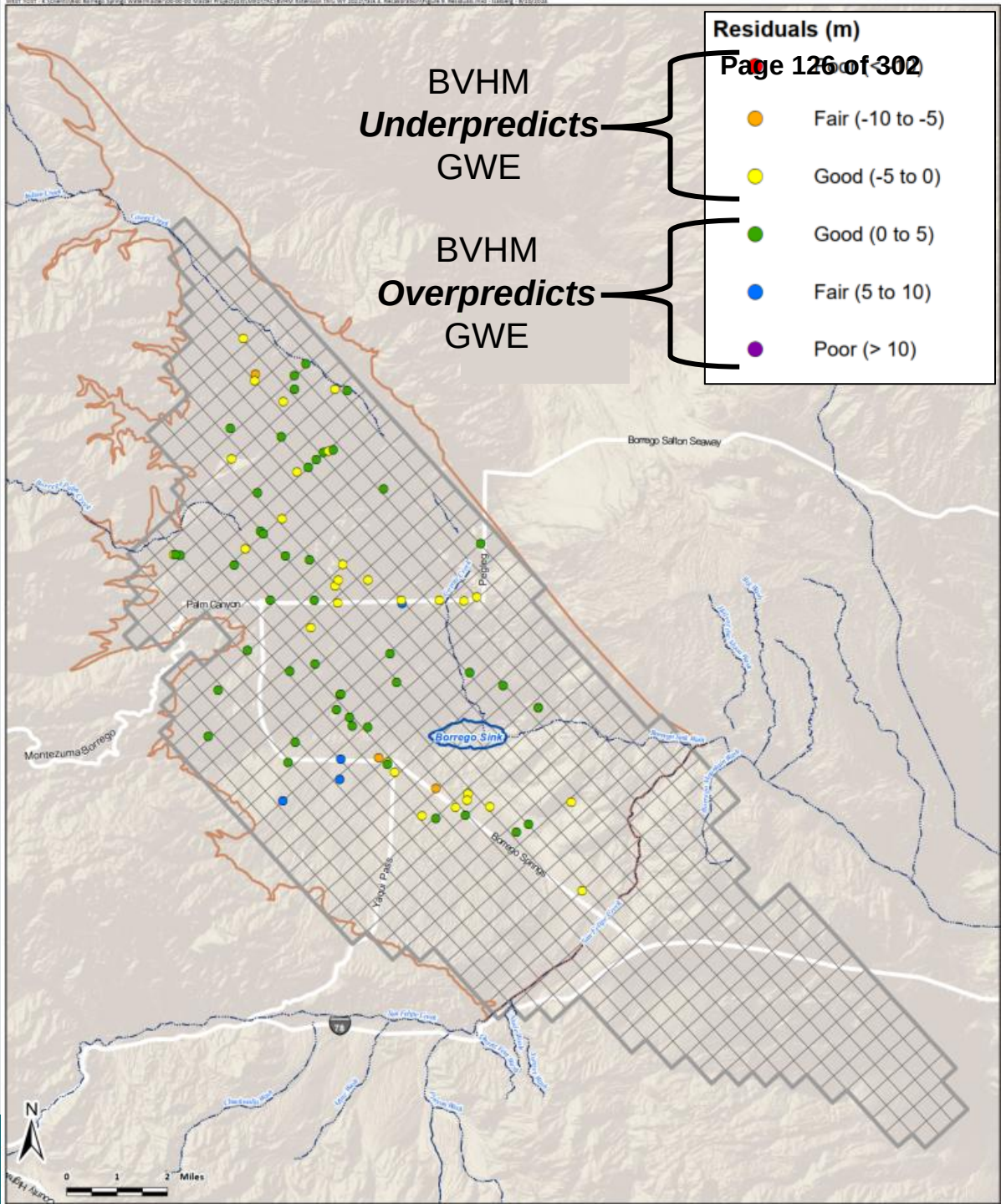
Scenario 1C

(WY 2040 minus 2020)



Measured vs. Modeled Groundwater Levels

- Model calibration identified where the BVHM under-estimates and over-estimates groundwater levels
- Simulated groundwater levels are generally within +/-5 m of measured
- Model predictions include uncertainty; results should be viewed as approximate, not absolute



Interpretations

- Scenario 1C results show:
  - Stable groundwater levels in the NMA and CMA
  - Increase in and stabilization of groundwater levels Rams Hill well field
  - Gradual decline in groundwater levels near the Borrego Sink
- Scenario 1C indicates that a shift of 1,800 afy of future pumping from the CMA/SMA to the NMA can achieve stable groundwater levels across the Basin
- The projected fluctuations in groundwater levels reflect assumptions in variable climate → simulated declines in groundwater levels (2050-2070) reflects repeat of ~20-year drought

Recommendations

- Results from Scenario 1C can be used to inform DWR of future efforts to achieve sustainability (PMA No. 6)
- There are uncertainties and known discrepancies in the model that could be affecting model results → update and recalibrate the BVHM for the 2030 redetermination of Sustainable Yield
  - HCM in the southern part of the Basin
  - Linkage between the Farm Process and Unsaturated Zone Recharge (UZF) package
  - Bugs in Zonebudget

Next Steps

- Today – Answer questions and receive any TAC feedback
- Present results and recommendations to the Board at its November meeting
- Board has requested to perform an additional BVHM projection scenario, in which water rights assigned in the Judgment are simulated (i.e. Pump full annual allocation at all BPA Parcels – even if not currently active or plans to rampdown sooner)
- Update and resubmit the SGM Memo to DWR with updated model results, including new simulation not yet performed
- Use model results to help complete the 5-year GMP Assessment Report and GMP update

Thank You!

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.E

To: Board of Directors

From: Andy Malone, Technical Consultant

Date: November 14, 2025

Subject: BVHM Projection Scenario – Simulating Future Pumping under Current Judgment Water Rights

☐ **Recommended Action**	✓ **Provide Direction to Staff**	☐ **Information and Discussion**
✓ **Fiscal Impact**	✓ **Cost Estimate: $31,144**	

Recommended Action

Provide direction to Staff on how to proceed with performing an additional BVHM projection scenario that sets pumping to the volume and location allowed by water rights afforded in the Judgment.

Fiscal Impact: $31,144. This work was not included in the approved WY 2026 Budget. How the work would be funded is TBD. Options are presented herein. A budget amendment is presented for consideration in Item IV.F of this agenda package.

Background and Previously Related Actions by the Board

As part of the Sustainable Groundwater Management (SGM) Grant scope of work, the Borrego Valley Hydrologic Model (BVHM) was used to project future groundwater conditions in the Borrego Springs Subbasin (Basin) under implementation of the Judgment-mandated Rampdown to the 2025 Sustainable Yield by 2040. The BVHM projections are used to assess whether the Sustainability Goals defined in the Groundwater Management Plan (GMP) are expected to be achieved, specifically:

- Groundwater-level trends are stable or increasing by 2040 and thereafter
- Groundwater levels remain at sufficient elevations to avoid Undesirable Results

To date, Watermaster staff have developed and simulated three projections[1] of future groundwater pumping, including:

[1] A fourth scenario, the Initial Scenario, was developed and run in early 2025 as part of the SGM grant funding. This scenario simulated future pumping under the Rampdown schedule and current Pumpers' operating plans. Pumping projections were developed based on conversations with all major Pumpers in the Basin and reflected their anticipated changes demands and locations, including planned transfers of water rights (their best guess at the time). Due to inaccurate projections that over-estimated future pumping, this scenario was superseded by Scenario 1A.

- **Scenario 1A** – In this scenario, pumping projections for the Borrego Water District (BWD) were reduced to more realistic future demands. No other changes were made to this scenario (compared to the Initial Scenario). Scenario 1A includes planned transfers of water rights.
- **Scenario 1B** – This scenario explores a northward shift of pumping in the future. Scenario 1B assumes the same pumping demands as Scenario 1A, but a portion of BWD pumping is shifted from wells in the Central Management Area (CMA) to wells in the North Management Area (NMA). In Scenario 1B, an average of 920 afy is shifted from BWD wells in the CMA to the NMA.
- **Scenario 1C -** This scenario explores a northward shift of *additional* pumping in the future. Scenario 1C assumes the same pumping demands as Scenario 1A/1B, but a portion of BWD and Rams Hill pumping is shifted from wells in the South Management Area (SMA) and CMA to wells in the NMA (including two new theoretical pumping wells). In Scenario 1C, an average of 1,880 afy is shifted from wells in the SMA and CMA to the NMA.

All of the above projection scenarios simulate anticipated pumping and transfers of water rights based on conversations with active Pumpers. The simulations do not contemplate the possibility that inactive Pumpers will become active Pumpers in the future, or that any active Party that has ramped down pumping faster than required will suddenly increase its pumping to equal the Annual Allocation.

At its October 15, 2025 meeting, the Board directed staff to develop a scope, budget, and schedule to perform an additional BVHM projection scenario that explicitly simulates pumping by all Parties according to the amount and location afforded by their water rights in the Judgment and excludes any future transfers of water rights. The objectives of running this "Judgment Scenario" are to:

- Demonstrate to the DWR that the Watermaster has evaluated the sustainability of the Judgment Rampdown.
- Establish "baseline" groundwater conditions under the Judgment-allowed water rights to determine if a future transfer of water rights would cause or exacerbate an Undesirable Result.
- Evaluate for "unexpected" pumping that isn't currently accounted for in previous model projections.

The results of the Judgment Scenario could be used by the Board to (i) understand if water rights as defined in the Judgment are sustainable; (ii) evaluate if water right transfers could cause or exacerbate Undesirable Results; (iii) support a long-term policy approach regarding water rights transfers.

This memo describes the scope, budget, and schedule to perform the Judgment Scenario and includes a description of the recommended assumptions to develop and implement it.

Using the BVHM to Simulate the Judgment Rampdown

The Judgment Scenario will be developed using a set of assumptions to ensure model inputs reflect the legal framework of the Judgment, as opposed to the plans of the Parties. The BVHM input files would be updated accordingly. The key assumptions and staff recommendations are described below.

- **Update pumping projections for <u>all</u> Parties to the Judgment.** Prior model scenarios (Scenarios 1A-C) used pumping projections based on conversations with active Pumpers about their projected demands, anticipated changes to pumping operations, and need for water transfers. Pumpers that were inactive (e.g., Agri-Empire) were assumed to remain inactive. For the Judgment Scenario, all Pumpers listed in Exhibit 4[2], plus the Anza Borrego Desert State Park and Borrego Unified School District, would (1) pump water in an amount equal to the Annual Allocation afforded based on their Baseline Pumping Allocation (BPA) and the 2025 Sustainable Yield Rampdown Schedule and (2) the water would be pumped at wells within the designated BPA parcels listed in Exhibit 4.

- **Assumptions for BWD.** The Judgment does not limit the location of BWD pumping. The pumping for BWD will be assigned to existing BWD wells in a manner similar to the distribution assumed in pumping Scenario 1 A. In the case of the BWD's BPA rights attached to BPA parcels purchased from William and David Bauer that are tied to specific BPA parcels, the water would be pumped at wells within the designated BPA parcels.

- **Assumptions for Exhibit 4 Parties without assigned BPA parcels and wells.** As described above, pumping by all Parties to the Judgment is to be simulated regardless of their current or historical pumping activities. There are five Parties to the Judgment that do not have approved BPA parcels or wells specified in Exhibit 4. The total BPA of these five parties is 19 acre-feet (af). In WY 2040 and later, the Annual Allocation for these Parties totals seven acre-feet per year (afy). We recommend including pumping by these Parties by:

    - Adding one fictious well to the CMA and assign from the five Parties without assigned parcels. The well would be sited at a location in the CMA based on best professional judgment and proximity to other De Minimis wells; but ultimately, the placement of this well is to ensure that the water rights from these Parties is accounted-for in the projection scenarios. Pumping at this well would range from 13 af in WY 2026 to 7 afy in WY 2040 to 2070. The well will be constructed in Layer 1 and 2 of the BVHM, consistent with the shallow construction of De Minimis wells in the Basin.

- **Assumptions for Exhibit 4 Parties without assigned BPA wells.** Seven inactive Parties hold BPA rights that are not assigned to wells but do have designated BPA parcels in Exhibit 4. The total BPA held by these Parties is 207 af. In WY 2040 and beyond, the Annual Allocation associated with these Parties is 67 afy. We recommend including pumping by these Parties by:

    - Adding seven fictious wells to the BVHM located on the parcels assigned to the Parties in Exhibit 4. For Parties where their BPA is assigned to multiple parcels, the well would be added to the center of the parcel(s). The wells will be constructed in Layers 1 and 2 of the BVHM, consistent with the shallow construction of De Minimis wells in the Basin.

[2] Available on the Watermaster's website at: https://borregospringswatermaster.com/wp-content/uploads/2025/11/Exhibit_4_BPA_202510-1.pdf

- **Land and Water Use Assumptions for Inactive Pumpers.** How groundwater is used impacts return flows to the Basin. If pumping is assigned an irrigation use, this use will generate return flows that will recharge the aquifer. If pumping is assigned a domestic use, this use will not generate return flows. Simulation of the Judgment Scenario will require us to make assumptions about the land and water use for inactive Parties. We recommend the following approach:
    - Pumping by Agri-Empire, a former agriculture operation, will be assigned an irrigation use in the BVHM, consistent with its historical land use. Agri-Empire historically pumped in the Basin until 2016 to irrigate potatoes but has since fallowed its land and ceased pumping. The BVHM classifies the land use type as potato until 2017, in which the land use classification changes to fallow. We would assume pumping by Agri Empire would be for irrigation of potato fields in the projection period and update the land use classification in the BVHM to match this assumption.
    - Pumping by the 12 Parties with unassigned BPA parcels and wells noted above will be assigned as domestic uses in the BHVM. Domestic uses are consistent with the relatively small BPA for most of these Parties[3].
- **Assumed Timing of Pumping the Full Annual Allocation.** The Pumpers are currently ahead of the Rampdown schedule, and the model is already set up to run actual/estimated pumping through WY 2024. The most cost-effective approach would be to begin implementing pumping in accordance with the full Annual Allocation starting in WY 2025.
- **Assumptions for the Use of Available Carryover Purchased through WY 2024.** The Judgment allows Pumpers to annually purchase Carryover (unused Annual Allocation) for future use, subject to certain limits. As of October 1, 2024 (end of WY 2024), the total Carryover account balance is 24,960 af. This is water available to Pumpers to use since they have purchased this Carryover. For those Parties with available Carryover as of October 1, 2024, we recommend simulating the use of approximately 10% of the available Carryover per year until the full balance is exhausted. Once exhausted, there is no ability to purchase and accrue additional Carryover because the full Annual Allocation is being pumped each year.

Scope, Schedule, and Budget to Complete Judgment Scenario

The steps and to complete the Judgment Scenario are:

1. Develop the Pumping Projection for each Party per the assumptions in this memo (November 2025)
2. Update the model input files to add new wells, revise land use classifications, and update pumping projections per the assumptions in this memo (December 2025)

[3] Of the 12 Parties, only three Parties have BPA above 15 af: Genus LP (112 af), Joel Vanalsden (36 af), and Smith Kent (50 af)

3. Run the Judgment scenario, export results, and QA/QC results (December 2025)
4. Present Results to the TAC to discuss how the results will inform Sustainable Management Criteria, Project & Management Actions (PMAs), and the 5-year GMP Assessment Report (early January 2026)
5. Present Results to the Board (January 2026)
6. Prepare final Technical Memorandum that documents the results of all model projections (January/February 2026)

The total estimated cost to develop and run the Judgment Scenario is $31,144.

Next Steps

Staff is seeking Board direction whether to proceed with the Judgment Scenario in WY 2026 and any feedback on the approach and assumptions recommended herein.

If the Board approves the scope of work and budget, the following additional steps are required:

- Amend the WY 2026 Budget to account for the expense and funding mechanism for the work, which were not assumed in the original WY 2026 Budget package. The November Board package also includes an agenda item (Item IV.F) to consider a Budget Amendment that could include this work.
- Amend the West Yost Contract to revise the WY 2026 Statement of Work and Budget to allow performance of the work. The Contract amendment would be brought to the December Board meeting for consideration of approval.

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM IV.G

To: Board of Directors

From: Andy Malone, Technical Consultant

Date: November 14, 2025

Subject: GMP Update Workshop – Addressing DWR Comments on Land Subsidence (RCA #6)

☐ **Recommended Action**	✓ **Provide Direction to Staff**	☐ **Information and Discussion**
☐ **Fiscal Impact**	☐ **Cost Estimate: $**	

Recommended Action

Provide direction to finalize the recommended response to DWR Recommended Corrective Action #6 regarding Land Subsidence.

Fiscal Impact: The recommended actions will result in an annual cost increase of $2,500 for the subsidence monitoring and analysis to be documented in future SGMA Annual Reports to the DWR (in $2025).

Background and Objectives

On February 25, 2025, the DWR approved the Watermaster's Judgment and Groundwater Management Plan (GMP) as an alternative Groundwater Sustainability Plan (GSP) but also listed several Recommended Corrective Actions (RCA) that should be implemented by the Watermaster to maintain the approval status of the Judgment/GMP.[1] RCA #6 relates to how the potential for land subsidence to cause Undesirable Results in the Basin is addressed in the GMP.

The objective of this memorandum is to describe the recommended approach to address RCA #6.

How the Current GMP Addresses Land Subsidence

Land subsidence is one of six Sustainability Indicators[2] defined by SGMA. To describe the historical occurrence of land subsidence in the Basin, the GMP relied on subsidence data collected and analyzed by the USGS (2015)[3] during a period of overdraft in the Basin (1978-2018).

[1] Non-Party Department of Water Resources' Assessment and Recommended Corrective Actions Approving SGMA Alternative.

[2] Sustainability Indicators are the effects caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, become Undesirable Results.

[3] USGS. 2015. *Hydrogeology, Hydrologic Effects of Development, and Simulation of Groundwater Flow in the Borrego Valley, San Diego County, California*. Scientific Investigations Report 2015-5150.

However, the current GMP does not define land subsidence as a relevant sustainability indicator for the Basin and thus does not define Sustainable Management Criteria (SMC) to avoid significant and unreasonable land subsidence. This approached was based on the following:

- Based on GPS survey measurements at numerous geodetic monuments and wells located across the Basin from 1978 to 2009 (31 years), vertical ground motion was shown to be less than +/- 0.54 feet and included both upward and downward ground motion.
- From 2003 to 2007, interferometric synthetic aperture radar (InSAR) data indicated the occurrence of seasonal fluctuations of the land surface (elastic), with a total maximum subsidence in the central part of the Basin of about 0.05 ft over the 4-year period.
- From 2015 to 2018, InSAR data provided at no cost by the DWR indicated total maximum subsidence of about 0.023 ft in the area northwest of the Borrego Sink over the 3-year period.

Based on these measured observations, which occurred during a period of continuous overdraft in the Basin, the GMP stated the following:

- "The degree of land subsidence occurring in the Plan Area is minimal, has not substantially interfered with surface land uses in the past, and is not anticipated to substantially interfere with surface land uses in the foreseeable future. The minor amount of subsidence that has occurred when compared to over a hundred feet of groundwater level decline in the northern parts of the Plan Area indicate that the subsurface strata may be less sensitive to land subsidence due to its coarse-grained nature. There is sufficient data to qualify the subsidence criterion as insignificant, and not currently an undesirable result of groundwater overdraft (USGS 2015). Given the low sensitivity of subsurface strata to land subsidence in response to historical groundwater level declines, along with the lack of infrastructure in the Plan Area that may be sensitive to subsidence (i.e., linear infrastructure such as canals and high hazard pipelines), subsidence is also not expected to become an undesirable result over the planning and implementation horizon." (see Section 2.2.2.5 of the GMP)
- "Therefore, this GMP does not propose minimum thresholds or measurable objectives specific to this sustainability indicator. If during the GMP implementation timeline, it becomes evident that minimum thresholds and measurable objectives for lowering of groundwater levels and groundwater in storage are not being met, the degree to which land subsidence may become an undesirable result will be re-evaluated." (see Section 3.2.5 of the GMP)

Recent and Potential Future Land Subsidence within the Basin

The most recent land subsidence data being collected across the Basin includes the following:

- The DWR has provided InSAR data across the Basin for the period 2015 to 2024. These data were collected by the European Space Agency Sentinel-1A satellite and processed by TRE ALTAM1RA Inc., under contract with the DWR as part of DWR's SGMA technical assistance to provide important SGMA-relevant data to GSAs for GSP development and implementation.

- Continuous Global Positioning System (CGPS) Station 486 is located on the north side of the runway at Borrego Valley Airport. This station is a USGS and NSF GAGE Facility and part of the NOTA Monitoring Network.[4] These GPS stations typically collect position data every 15 seconds, which is then processed to produce a daily and 31-day moving average position. Vertical displacement data from Station 486 are available on the SGMA Data Viewer.

Watermaster staff used these data to prepare the following:

- Figure 1 is a map that illustrates vertical ground motion that occurred across the Basin between June 2015 and June 2024. During this 9-year period, the total maximum subsidence in the Basin was estimated to be about 0.16 ft (0.017 ft/yr), which occurred in the Central Management Area just north of the Borrego Sink. Subsidence was much less or absent across the North Management Area and South Management Area. Also shown on this figure is a time-series chart of subsidence as measured by CGPS Station 486, which corroborates the InSAR estimates of subsidence at this location of about 0.072 ft (0.008 ft/yr) and illustrates that the subsidence has occurred persistently and gradually over this period, with minor seasonal fluctuations. Also shown on the time-series chart are measured groundwater elevations at a nearby well (MW-4), which illustrates the relationship between declining groundwater levels versus land subsidence.

- Figure 2 is a map that illustrates potential future subsidence that could occur within the Basin over the SGMA implementation period through 2040. This estimate assumed that the historical subsidence rates for 2015-2024 will continue to occur for the period 2024-2040. This is a conservative assumption for future land subsidence because declines in groundwater levels are expected to slow and stabilize during 2024-2040 due to the pumping Rampdown. Figure 2 shows that the total maximum subsidence over the 2015 to 2040 period is estimated to be about 0.43 ft, which is projected to occur in the Central Management Area just north of the Borrego Sink. Subsidence is expected to be much less or absent across the North Management Area and South Management Area.

RCA #6 – Land Subsidence

In its letter and Staff Report that approved the Judgement and GMP as a SGMA Alternative, the DWR made the following statements and recommendations regarding the monitoring and management of land subsidence:

- "….the decision [in the GMP] to not develop sustainable management criteria or monitor land subsidence is not supported by adequate evidence."

- "…additional information be developed and included in the GMP to at least annually monitor for subsidence using InSAR data or other reliable methods and reconsider whether and where any subsidence could adversely impact surface land uses in the Subbasin so that managers are prepared to quickly act if further overdraft during plan implementation causes unexpected increases in subsidence rate or extent."

[4] https://www.unavco.org/instrumentation/networks/networks.html

- "The Department also recommends that the Watermaster set an objective, quantitative standard for subsidence monitoring (for each management area) that, if triggered, would require further assessment of whether any undesirable results related to subsidence might be occurring and whether projects or management actions are necessary to mitigate or avoid such impacts (see Recommended Corrective Action 6)."

RCA #6 summarizes the DWR concerns and recommendations:

- "Until pumping reductions have been fully implemented to the point where overdraft is eliminated and groundwater pumping equals the sustainable yield, monitor for land subsidence and evaluate, at least every five years, whether land subsidence is interfering with property interests and surface uses or otherwise impacting beneficial uses and users (e.g., flood depths, flows, or risks, well casings or other infrastructure, etc.). Describe the amount of land subsidence or impacts that would be significant and unreasonable and therefore cause or constitute undesirable results in the basin."

Recommendations to Address RCA #6

We agree with RCA #6 that land subsidence should be monitored, at least until pumping reductions have been fully implemented to the point where overdraft is eliminated and groundwater pumping equals the sustainable yield. However, the historical data shown in Figure 1 indicate that rates of ongoing subsidence are very low and appear to be slowing[5], and the areas of the Basin experiencing the most subsidence are relatively undeveloped with minimal overlying infrastructure that could be affected by land subsidence. The TAC[6] and Technical Consultant agree that establishing formal SMC for land subsidence is not necessary at this time, and the Watermaster's limited resources are better spent on more pressing sustainability challenges (e.g., groundwater levels, water quality, GDEs, etc.). Therefore, to address RCA #6, Watermaster Staff proposes the following tasks to perform over the period 2026 to 2030:

1. **Implement an Annual Land Subsidence Monitoring/Reporting Program**. Each year, the map and chart shown on Figure 1 will be updated with the most recent subsidence and groundwater-elevation data. The figure will be augmented to show overlying beneficial uses/users that could be impacted by land subsidence (BWD pipelines, property interests, wells, etc.). The current rates of subsidence and groundwater-level changes will be compared against historical rates of subsidence and groundwater-level changes. The figure will be included in the Watermaster's annual report to the DWR, with a short section of text that describes/interprets the monitoring results. *This task directly responds to DWR's recommendation to monitor land subsidence annually*.
2. **Prepare Recommendations for the 2030 GMP Assessment Report.** The results of the land subsidence monitoring program will be analyzed and interpreted for the 2030 GMP Assessment Report. If the rates or extent of land subsidence unexpectedly increase during

[5] As shown on Figure 1, at the CGPS P486 station, the rate of subsidence from June 2005 to June 2015 was -0.010 ft/year and declined to -0.008 ft/yr during June 2015 to June 2024.
[6] TAC feedback received from its August meeting is included in Attachment A of this memo.

2026-2029 compared to the historical rates/extent of land subsidence, then this finding will trigger an investigation to determine whether land subsidence is interfering with property interests and surface uses or otherwise impacting beneficial uses and users. The scope of the investigation would be described in the 2030 GMP Assessment Report as a future Watermaster effort, and could include the following tasks:

a. Identify and map the overlying beneficial uses/users that could be impacted by land subsidence.

b. Identify experts that could help describe the thresholds for land subsidence, that if exceeded, could adversely impact the overlying beneficial uses/users.

c. Working with the beneficial uses/users or experts, set a quantitative standard for the magnitude of subsidence (in each management area) that, if exceeded, would require further assessment of whether any undesirable results related to subsidence might be occurring and whether projects or management actions might be necessary to mitigate or avoid such impacts.

Consistency with DWR Guidance

The DWR recently released a new draft guidance document for land subsidence entitled: *Subsidence Best Management Practices of the Sustainable Management of Groundwater* (DWR Subsidence BMP), which provides the following recommendations:

- Subsidence is a SGMA Sustainability Indicator and must be monitored.
- Identify infrastructure and land uses most at risk of land subsidence.
- Estimate "critical head" thresholds below which inelastic compaction may occur.
- Establish monitoring networks (InSAR, GPS, extensometers, groundwater levels).
- Conduct outreach with potentially affected parties.

The proposed methods described above (i) are consistent with the draft DWR Subsidence BMP and (ii) address RCA #6 provided by the DWR. The methods consider the current understanding of the Basin, include monitoring and outreach, acknowledges overlying beneficial uses/users and infrastructure most sensitive to subsidence, and recognizes that formal SMC may not necessary but will be evaluated during each 5-year GMP Assessment.

Next Steps

Based on Board feedback, the Technical Consultant will finalize the proposed approach to respond to DWR RCA #6, which will be documented in the GMP Assessment Report. Inclusion of land subsidence results will be incorporated into the Annual Report starting with the WY 2025 Annual Report.[7]

[7] The WY 2025 annual report will include the maps and data presented herein through June 2024. The WY 2026 annual report will include the data through June 2026.

Enclosures

Figure 1. Historical Vertical Ground Motion as Estimated by InSAR – *June 2015 to June 2024*

Figure 2. Projected Vertical Ground Motion based on InSAR – *June 2015 to June 2040*

Attachment A. includes verbal written feedback received from TAC members, including:

- Verbal feedback received during the September 22, 2025 TAC Meeting
- Written feedback received from:
    - AAWARE (represented by Leonardo Urrego-Vallowe)
    - Rams Hill (represented by Tom Watson)
    - Borrego Water District (represented by Trey Driscoll)

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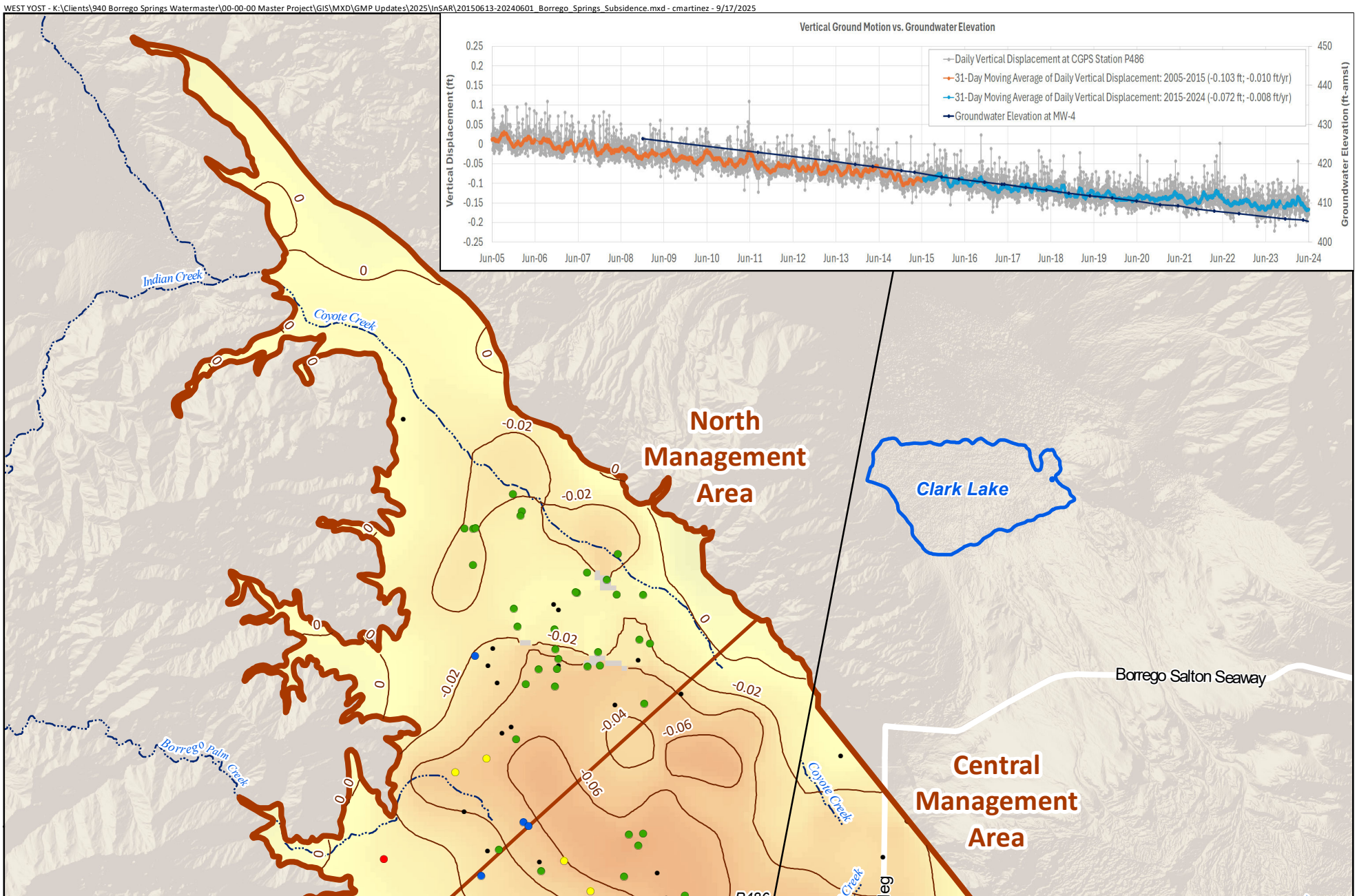

Relative Change in Land Surface Elevation as Estimated by InSAR (June 2015 to June 2024)

+0.2 ft

0 ft

-0.2 ft

Subsidence Contour (0.02 ft interval)

Wells by Sector

- Agriculture
- Recreation
- Municipal
- Other Non-Deminimis
- De Minimis

Other Features

- Borrego Springs Subbasin with Management Area Divisions
- Stream
- Dry Lake
- Wastewater Percolation Ponds
- Continuous Global Positioning System (CGPS) Station P486

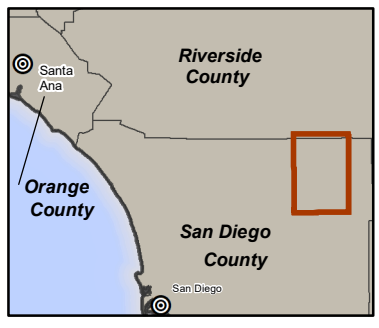

Figure 1

Vertical Ground Motion

(2015-2024)

Borrego Springs Watermaster

2025 GMP Update

Prepared by:

WEST YOST

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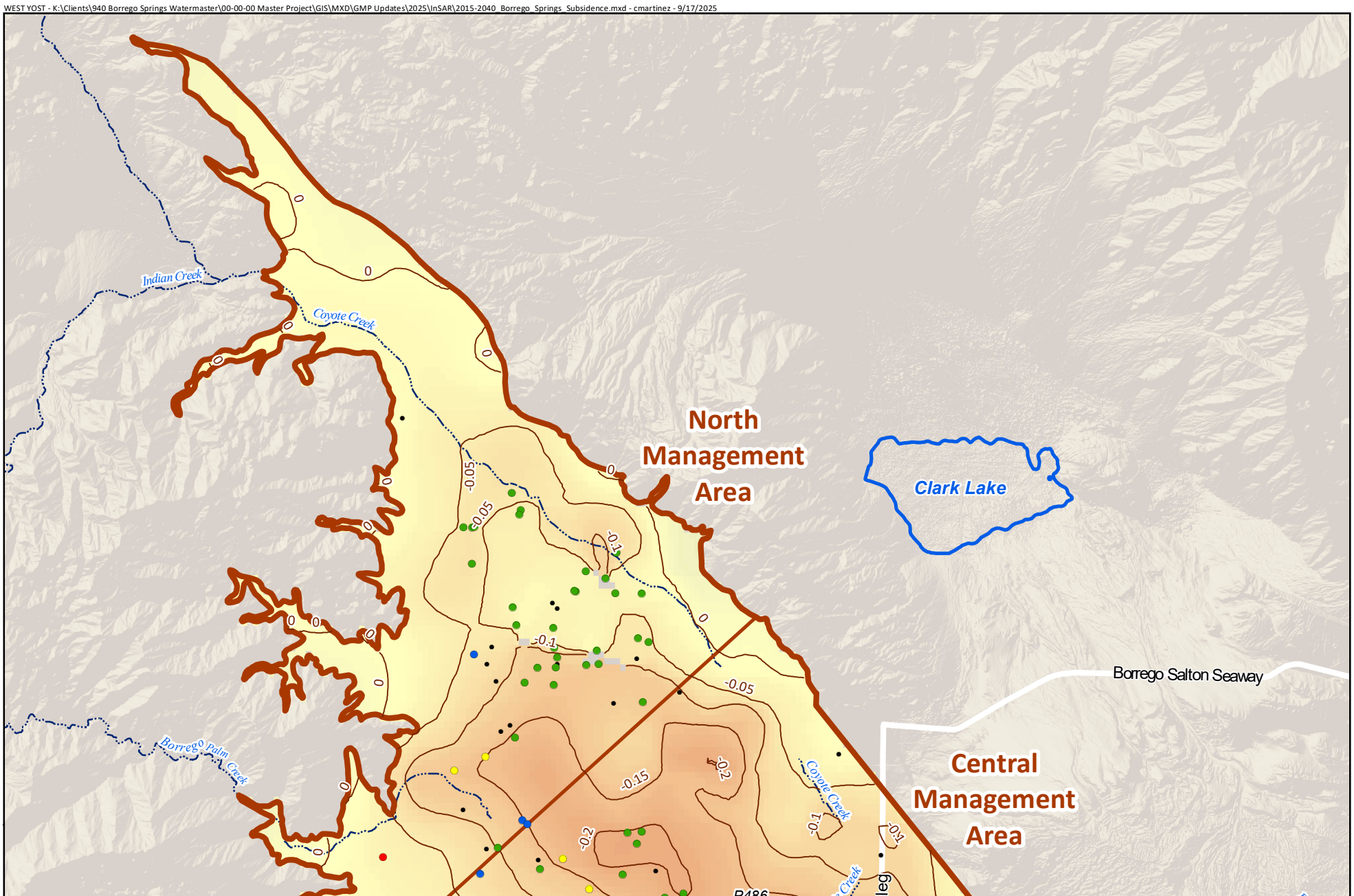

Projected Relative Change in Land Surface Elevation as Estimated by InSAR (June 2015 to June 2040)

+0.5 ft

0 ft

-0.5 ft

Subsidence Contour (0.05 ft interval)

Wells by Sector

- Agriculture
- Recreation
- Municipal
- Other Non-Deminimis
- De Minimis

Other Features

- Borrego Springs Subbasin with Management Area Divisions
- Stream
- Dry Lake
- Wastewater Percolation Ponds
- Continuous Global Positioning System (CGPS) Station P486

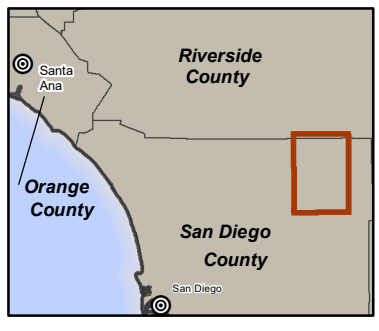

Figure 2

Projected Vertical Ground Motion
(2015-2040)

Borrego Springs Watermaster
2025 GMP Update

Prepared by:

WEST YOST

Attachment A. Verbal TAC Feedback on RCA #6 – Land Subsidence

The TAC provided verbal feedback on the proposed approach for addressing land subsidence at the September 22, 2025 TAC meeting. Verbal TAC feedback received at this meeting included:

- John Peterson (Roadrunner Club):
    - Infrastructure for the BWD and wastewater treatment plant (WWTP) is the most critical infrastructure in the Basin that could be impacted by subsidence
- Jim Bennett (County of San Diego):
    - Recommended to perform a cost-efficient planning level analysis of subsidence because historical and projected subsidence is minimal
- Trey Driscoll (BWD):
    - Recommended highlighting that the projected land subsidence is minimal and localized, and that subsidence-related impacts to BWD infrastructure is not anticipated
    - Observed that the area of projected maximum subsidence is within the 100-year floodplain when asked if the TAC had any concerns related to subsidence and flooding
    - Recommended setting MTs based on historical rates of subsidence, where an exceedance of the historical rate would trigger additional investigation

Lauren Salberg

From: Leonardo Urrego-Vallowe <lurrego@wbecorp.com>
Sent: Tuesday, September 30, 2025 10:00 AM
To: Andy Malone; Jim Bennett; John Peterson; Robert Wagner; Russ Detwiler; Tom Watson; Trey Driscoll
Cc: Samantha Adams; Bob Abrams; Lauren Salberg
Subject: RE: Follow Up: TAC Meeting

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Andy,
Please see below AAWARE follow-up comments on the September 22, 2025 TAC meeting.

Changes in Groundwater quality from proposed Groundwater Management Actions

- The nitrate and TDS values shown in the presentation in Figures 20 (Nitrate as Nitrogen) and 19 (Total Dissolved Solids) indicate that the groundwater quality of the basin meets the primary MCL values. The current water quality (TDS and nitrate) is similar to the historical water quality before 2014 (prior to SGMA's passage). There have not been any significant changes in the groundwater quality.
- Historical and existing pumping has not caused changes to the groundwater quality. Since the current and historical conditions of the basin meet title 22 and are suitable for agricultural and recreational users.

The degradation of groundwater quality might be caused by the shift in production by BWD. Other beneficial uses/users in NMA could be impacted in the future by the potential changes in location and quantity. If degraded water quality will impact future beneficial uses/users, the expense for addressing that degradation (e.g., cost for the treatment) needs to be considered. Will other pumpers and/or Watermaster be responsible for the treatment cost?
The concerns on groundwater quality degradation relies on the changes in pumping by the BWD (transfers from the CMA to the NMA). The existing pumping has not created any issues on the groundwater quality. AAWARE supports the recommendation of maintaining the current MTs and MOs for groundwater quality with the continuation of the monitoring of the groundwater quality.

Land Subsidence
We agreed with the proposed methodology to evaluate and continue to monitor land subsidence. Note that land subsidence is mostly confined to the southern part of the CMA, and not the NMA where most of the pumping occurs and BWD will shift its pumping. Because of the small magnitude and rate of land subsidence it will likely not impact BWD infrastructure or other critical infrastructure. The land subsidence should be evaluated by simply continuing to monitor and updating the maps with the information available. This will be the most cost-effective approach.

Pumping projections
AAWARE supports running Scenario 1C pumping projections, in coordination with BWD to model total 1,820 AFY shifted to the NMA.

A. Leonardo Urrego-Vallowe
Staff Engineer
Wagner & Bonsignore Consulting Civil Engineers
2151 River Plaza Drive, Suite 100
Sacramento, CA 95833
Work: (916) 619-7440
Email: lurrego@wbecorp.com

From: Andy Malone <amalone@westyost.com>
Sent: Monday, September 22, 2025 3:56 PM
To: Jim Bennett <PDS.LUEGGroundWater@sdcounty.ca.gov>; John Peterson <petersonenv@hotmail.com>; Robert Wagner <rcwagner@wbecorp.com>; Russ Detwiler <detwiler@uci.edu>; Tom Watson <tom.watson@aquilogic.com>; Trey Driscoll <tdriscoll@intera.com>
Cc: Samantha Adams <sadams@westyost.com>; Leonardo Urrego-Vallowe <lurrego@wbecorp.com>; Bob Abrams <bob.abrams@aquilogic.com>; Lauren Salberg <lsalberg@westyost.com>
Subject: Follow Up: TAC Meeting

TAC members,

Thank you for attending the TAC meeting today. The meeting presentation and recording have been posted to the Watermaster's website here.

We have the following requests:

1. **Draft TAC Meeting Minutes** are attached to this email. Please review. If you have recommended edits, please Reply All to this email with the edited Word file attached by ***Friday, September 26, 2025***.

2. **Review of the UCI GDE Study Report**

    - The four proposals from the candidates to perform the peer review of the UCI GDE Study Report are attached to this email. Please review the proposals and use the attached Excel spreadsheet to document your evaluation and ranking of the proposals. Send the completed evaluation and ranking to me by ***October 9, 2025***.
    - The Board is requesting the TAC (and EWG) to review and comment on the UCI GDE Study Report as it relates to its Policy on "best available science." Please send your comments to me by ***October 9, 2025***.

3. **Responses to DWR Comments on the Judgment/GMP.** Thank you for your verbal feedback today on these topics. If you would like to submit written feedback on these topics, please send to me by the following dates:

    - Degradation of Groundwater Quality: ***October 9, 2025***
    - Land Subsidence: ***October 22, 2025***

Thank you --- Andy and Lauren

Andy Malone

Principal Geologist II

JOIN OUR TEAM
WEST YOST
cell: 19492856908

From: Lauren Salberg <lsalberg@westyost.com>
Sent: Thursday, September 18, 2025 1:09 PM
To: Jim Bennett <PDS.LUEGGroundWater@sdcounty.ca.gov>; John Peterson <petersonenv@hotmail.com>; Robert Wagner <rcwagner@wbecorp.com>; Russ Detwiler <detwiler@uci.edu>; Tom Watson <tom.watson@aquilogic.com>; Trey Driscoll <tdriscoll@intera.com>
Cc: Andy Malone <amalone@westyost.com>; Samantha Adams <sadams@westyost.com>; Leonardo Urrego <lurrego@wbecorp.com>; Bob Abrams <bob.abrams@aquilogic.com>
Subject: TAC Meeting Agenda & Package: Monday, September 22nd at 10am

Good afternoon TAC members,

Please find attached the agenda for the next TAC meeting scheduled for **Monday, September 22, 2025 at 10:00 a.m**. The agenda and agenda package are available on the Watermaster's website at: https://borregospringswatermaster.com

Note that the meeting will be held via teleconference only using the GoTo Meeting platform. Please use the conferencing information below to join the meeting.

Borrego Springs Watermaster – Technical Advisory Committee Meeting
Monday, September 22, 2025 10:00 AM (PST)

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Lauren Salberg
Associate Geologist I

direct: 19493092671
e: lsalberg@westyost.com
a: We've Moved! 25 Edelman, Suite 120, Irvine, CA 92618

Lauren Salberg

From: Tom Watson <tom.watson@aquilogic.com>
Sent: Friday, October 3, 2025 10:30 AM
To: Andy Malone
Cc: LUEG, GroundWater, PDS; Leonardo Urrego-Vallowe; John Peterson; Russ Detwiler; Trey Driscoll; Bob Abrams; Lauren Salberg; Samantha Adams
Subject: FW: Technical Comments

Follow Up Flag: Follow up
Flag Status: Flagged

Andy,
Per your request regarding the DWR GMP recommendations pertaining to Groundwater/Management Actions and Land Subsidence we have the following comments.

Groundwater/ Management Actions:
In its list of Recommended Corrective Actions (RCA) 2, DWR states; "*Describe in detail how the GMP's mitigation process to address undesirable results of impacts to domestic and de minimis users as groundwater levels continue to decline* ***will be funded*** (emphasis added) *and implemented, including what is considered technically or financially feasible; the process in which feasibility will be determined; specific mitigation measures that will be considered or applied; and* ***who will bear the responsibility and costs*** (emphasis added) *to mitigate the undesirable result*." Our experience in another Subbasin with SWRCB on this topic has proven this item can be fraught with significant future argy-bargy and financial/legal liability. If acceptable to the TAC, it might behoove us to discuss this item at an upcoming meeting.

Land Subsidence: We concur with DWR recommendation (RCA 6) to monitor and report Basin subsidence rates and extent going forward. While not specifically required in DWR's February assessment, DWR InSAR data, which is publicly available and updated on a monthly basis, is a proven and economical methodology to monitor subsidence. To the extent feasible, we recommend that the InSAR data be ground-truthed by the Water Master against any reliable existing Basin geospatial data (e.g., GPS, survey bench marks etc.).
In addition to evaluating the nexus between observed subsidence and groundwater levels and potential effects to beneficial users (i.e., Basin management actions) we suggest that the Water Master also assess for and report on non- management action factors that may be contributing to subsidence (e.g., geologic faulting, expansive/collapsible soil types, geologic accretion/compaction of Basin sediment, and other natural processes). Such factors, if present, are outside the control of the Basin. Given the relatively low rates of subsidence observed to date, we suggest subsidence rates be monitored and reported annually (i.e., in the Annual Report).
Best,
Tom

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San Diego, CA 92106
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DRAFT TECHNICAL MEMORANDUM

To:

Technical Advisory Committee Members	Bob Wagner, PE (Principal Water Resources Engineer, Wagner & Bonsignore) – *representing AAWARE*
	Tom Watson, PG (Principal Geologist, Aquilogic) – *representing T2 Borrego*
	Jim Bennett (County of San Diego and Watermaster Board Member) – *representing County of San Diego*
	John Peterson, PG, CHG (retired) – *representing Roadrunner Golf and Country Club*
	Dr. Russell Detwiler (University of California, Irvine) – *representing the Borrego Springs Community*
Watermaster Staff	Andy Malone, PG (Principal Geologist, West Yost)
	Samantha Adams (Executive Director, West Yost)
	Lauren Salberg, PG (Staff Geologist, West Yost)
Borrego Water District	Geoff Poole, General Manager
	Jessica Clabaugh, Finance Officer

From: Trey Driscoll, PG, CHG, INTERA *(representing Borrego Water District)*
Trevor Jones, PhD, and Wesley Neely, PhD, INTERA *(representing Borrego Water District)*

Date: October 24, 2025

Re: Groundwater Quality and Land Subsidence Comments – September 22, 2025 TAC Meeting

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This Draft Technical Memorandum provides written comments on behalf of the Borrego Water District (BWD) pertaining to the degradation of groundwater quality and land subsidence topics discussed in context of proposed responses to California Department of Water Resources (DWR) Comments on the Judgment/Groundwater Management Plan (GMP) as presented at the September 22, 2025 Technical Advisory Committee (TAC) meeting.

1.0 Documentation of Comments From TAC Meeting – September 22, 2025

- Discuss DWR Corrective Actions regarding Sustainable Management Criteria – Groundwater Quality

- Mr. Driscoll inquired whether pumping allowed under the Judgment could be considered a cause of groundwater quality degradation. He noted that in other Basins, the State Water Resources Control Board (SWRCB) has considered pumping allowed under a Groundwater Sustainability Plan (GSP) and occurring after the adoption of the Sustainable Groundwater Management Act (SGMA) (post-2015) that could mobilize contaminants as a potential cause of degradation.
- Mr. Driscoll provided background on the original development of Sustainable Management Criteria (SMC) in the GMP through a stakeholder process. He noted that because there are many other complementary groundwater-quality regulations, such as Regional Board and drinking water regulations, the GMP was designed to align with these existing regulations and not develop new regulatory standards.
- Mr. Driscoll recommended that Legal Counsel provide input on the proposed SMC for groundwater quality as was done with GMP development.
- Mr. Driscoll recommended that a technical evaluation potentially be performed to determine if fluoride should continue to be a constituent of concern (COC) in the Basin[1].
- Mr. Driscoll explained that in the GMP, the technical intent was to set Title 22 standards as the minimum threshold and measurable objective and agreed that the language could be made clearer.
- Mr. Driscoll indicated that the DWR has not released a best management practice (BMP) document for groundwater quality and have not provided consensus on how to address groundwater quality under SGMA[2].

- Discuss DWR Corrective Actions regarding Sustainable Management Criteria – Land Subsidence
  - Mr. Driscoll recommended highlighting that the projected land subsidence is minimal and localized, and that subsidence-related impacts to BWD infrastructure (wells and pipeline distribution system) is not anticipated.
  - Mr. Driscoll observed that the area of projected maximum subsidence is within the 100-year floodplain.

[1] INTERA also recommends that Title 22 sampling performed every 3 years for BWD production wells be evaluated to determine if new COCs (e.g., PFAS) should be recommended to be added to the Watermaster water quality sampling program.

[2] Limited guidance regarding setting SMCs for water quality is provided in DWR's Sustainable Management Criteria Best Management Practice. In March 2023, more than 3 years after the development of the GMP (January 2020), DWR released Guidance for Sustainable Groundwater Management Act Implementation: Considerations for Identifying and Addressing Drinking Water Well Impact (March 2023).

- Mr. Driscoll recommended setting MTs based on historical rates of subsidence or critical head estimates, where an exceedance of the historical rate or critical head would trigger additional investigation.

2.0 Background

DWR has approved the GMP and Stipulated Judgment as a GSP Alternative for the Borrego Springs Subbasin (Basin)[3]. The contents of the GMP are consistent with SGMA and the GSP Emergency Regulations. DWR is concerned about how the GMP and Judgment will interact over the next 20 years. DWR provided seven (7) Recommend Corrective Actions, which should be addressed prior to DWR's review of the first Periodic Evaluation of the GSP Alternative: June 25, 2026.

Table 1. Summary of DWR Corrective Actions

Topic	No.	DWR Recommendation
Management Areas	1	• Provide additional supporting information to clarify the rationale for creating management areas • Discuss how the SMC avoid undesirable results in each management area. • Clarify which sustainability indicators/SMC apply to a specific management area.
Projects and Management Actions	2	• Describe how the mitigation measures, PMAs, and SMC would avoid undesirable results for domestic and de minimis users. • Describe how mitigation projects will be funded and implemented.
SMCs	3	Discuss impacts to beneficial uses and users, including de minimis users, at the established SMC in each management area.
	4	Provide additional information re: groundwater storage minimum thresholds and measurable objectives as they relate to the BVHM projections
	5	Quantify the water quality SMCs for irrigation wells.
	6	Monitor for land subsidence.
Judgment and GMP Coordination	7	Eliminate inconsistencies between the Stipulated Judgment and GMP, and resolve or clarify the intended role of the GMP in Basin Management

[3] Borrego Valley–Borrego Springs Subbasin [No. 7.024-01] - Assessment of Alternative Groundwater Sustainability Plan dated February 25, 2025:

The following DWR corrective actions apply to degradation of groundwater quality and land subsidence:

Corrective Action 3: Discuss the impacts to beneficial uses and users, including de minimis users, at the established minimum thresholds, interim milestones, and measurable objectives for each sustainability indicator in each management area, as applicable. Clarify the expected impacts to beneficial uses and users if all representative monitoring points in the Subbasin are at their respective minimum thresholds and interim milestones. Clarify the monitoring that will be performed in each management area that can be used objectively to track progress towards sustainability.

Corrective Action 5: Quantify the "generally accepted threshold limits for [crop] irrigation used by State Water Resources Control Board," and discuss how those limits will be used to track progress in the Subbasin to avoid undesirable results associated with degradation of groundwater quality. Describe the groundwater conditions and the associated impacts to beneficial uses and users of the Subbasin at those limits.

Corrective Action 6: Until pumping reductions have been fully implemented to the point where overdraft is eliminated and groundwater pumping equals the sustainable yield, monitor for land subsidence and evaluate, at least every five years, whether land subsidence is interfering with property interests and surface uses or otherwise impacting beneficial uses and users (e.g., flood depths, flows, or risks, well casings or other infrastructure, etc.). Describe the amount of land subsidence or impacts that would be significant and unreasonable and therefore cause or constitute undesirable results in the basin.

3.0 Updating Sustainable Management Criteria – Groundwater Quality

Comment 1: Watermaster staff's technical memorandum (TM) Workshop: Sustainable Management Criteria Updates for Degraded Water Quality provides a brief overview of historical water quality citing from the GMP Burnham, 1954; Moyle, 1983; USGS, 2015. It should be noted that substantial review of historical water quality has also been performed as part of the GMP development in Appendix D2 (Environmental Navigation Services 2018) and for BWD (Dudek 2017 and INTERA 2023). The Dudek 2017 and INTERA 2023 reports are attached to this Comment letter for ease of reference (Attachment A & B). The BWD respectfully requests that the Watermaster direct the TAC to review and comment on the Dudek 2017 and INTERA 2023 reports in accordance with the Watermaster's Policy Regarding the Use of Best Available Science. These reports should be considered as part of evaluating the potential to establish a revised SMC for water quality (arsenic) in the South Management Area (SMA) for arsenic. This information should also be evaluated and considered as part of the ongoing Periodic Evaluation.

Comment 2: Based on historical and current water quality data for several wells in the SMA, arsenic naturally exceeds the California maximum contaminant level of 10 micrograms per liter (µg/L) or 0.01 milligrams per liter (mg/L) in several wells, especially those screened in the Lower Aquifer. As indicated in Watermaster staff's TM regarding current water quality conditions, "BWD reported that a municipal supply well in the South Management Area, ID1-8, was not sampled because the well was decommissioned due to elevated arsenic concentrations". While historical exceedances of the California maximum contaminant level (MCL) at well ID1-8 are noted in the GMP, Dudek 2017 and INTERA 2023;

the BWD had been able to maintain some production meeting drinking water standards at well 1D1-8 from before 2015 until 2025 as indicated by Watermaster data (Figure 1). The BWD well ID1-8 can no longer meet the arsenic MCL and the BWD will no longer be pumping from the SMA in the future as treatment is not a cost-effective option given that the BWD has sufficient production capacity in the Central Management Area (CMA) and North Management Area (NMA) to meet demand without the need for treatment. While the BWD staff and GMP recognized that the loss of a 53 year well with low recent production did not constitute a significant or unreasonable degradation of water quality, it should be noted that the Watermaster did not investigate or determine the potential cause of groundwater quality impairment. As documented in the Groundwater Quality Risk Assessments prepared for the BWD (Dudek 2017 and INTERA 2023), the increased arsenic observed in well ID1-8 was likely attributable to increased pumping and subsequent groundwater level decline (see Figure 1).

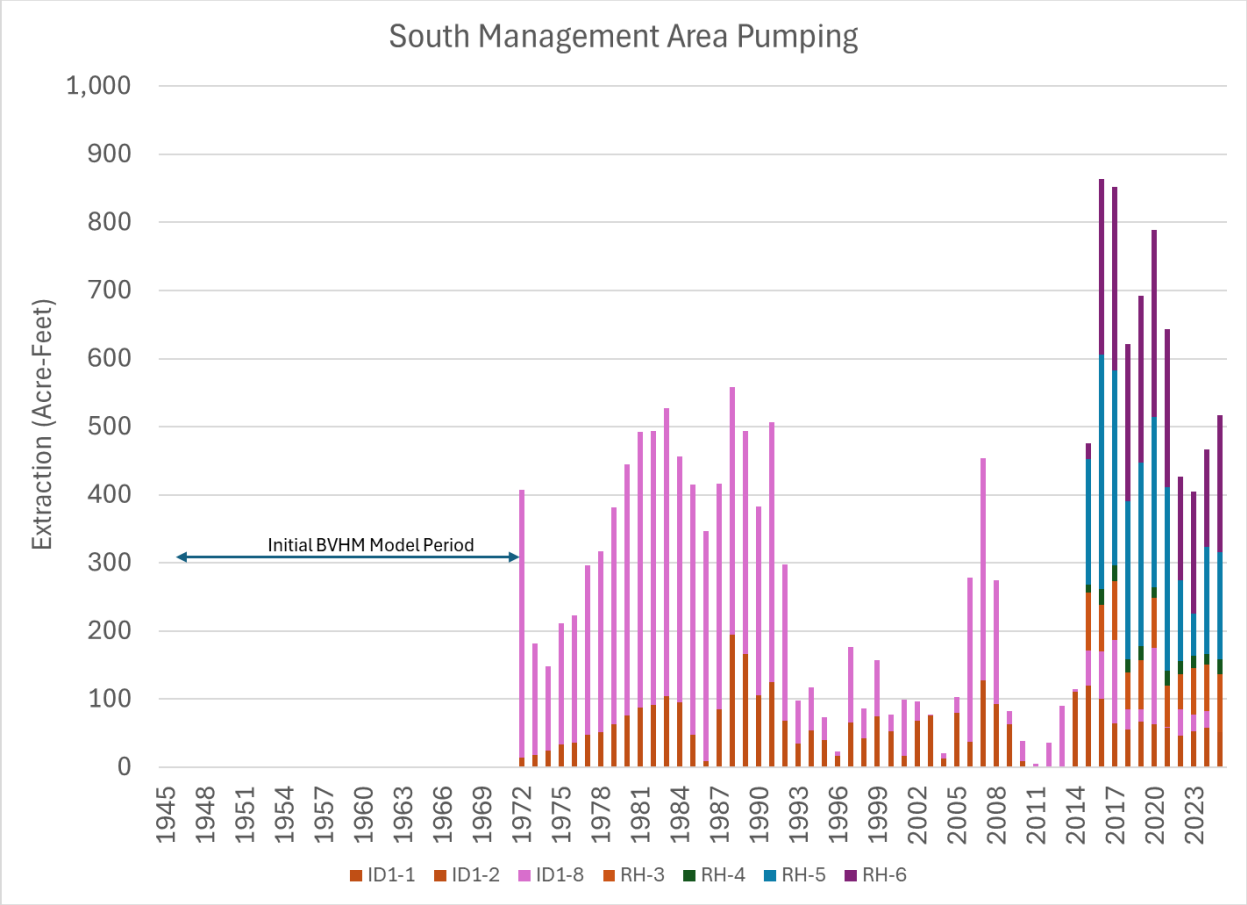

Figure 1. Approximate South Management Area Pumping (Note: data extracted from the BVHM and has not been verified with Watermaster records' wells ID1-1 and ID1-2 are owned by Rams Hill and now referred to as RH-1 and RH-2)

Comment 3: Watermaster staff's TM Potential Effects of Judgment/GMP Implementation on Groundwater-Quality Conditions list three activities 1) fallowing, 2) rampdown, and 3) shift in pumping that could have positive or negative effects on groundwater quality conditions. While the rampdown may cause groundwater levels to increase in some areas of the Basin, it may also cause localized

groundwater level declines, as observed during the last ten years since the adoption of SGMA. As documented in the GMP, declining groundwater levels may have a potential ***negative effect*** **o**f Judgement/GMP implementation on groundwater quality conditions in the Basin. This includes the potential for increased arsenic concentration from wells predominantly screened in the lower aquifer as evidenced in the SMA.

Comment 4: Watermaster staff's TM Figures 19-23 use BWD well ID1-8 to represent historical and current water quality conditions. As indicated BWD has taken this well offline for exceedance of the arsenic MCL. As such, what well does Watermaster staff recommend monitoring to continue to track groundwater quality conditions in this part of the SMA.

Comment 5: Watermaster staff's TM indicates the GMP is not explicit as to which wells in the monitoring network the SMC should apply given historical water-quality conditions. The intent of the GMP was to apply title 22 standards to municipal and domestic wells in the Basin as Title 22 regulations apply to the point of "user connection"[4] after any necessary treatment or blending rather than to the groundwater itself such as with a water quality objective listed in the Basin Plan.

Comment 6: DWR's Comments on the Borrego Springs Subbasin GSP Alternative on page 11 of 42 states that "Arsenic is naturally occurring and associated with mineral chemistry and pH. Arsenic has been detected in wells in all management areas of the Subbasin, but only some wells in the SMA are above the maximum contaminant level of 10 µg/L, with a maximum detected concentration of 22 µg/L. Although Figure 2.2-14D appears to show that exceedances of the maximum contaminant level are in wells associated with the Rams Hill Golf Course, the GMP does not explain whether these wells produce potable or non-potable water or the extent of the impacts to beneficial uses and users, if any". The GMP clearly states on page 2-64 that, "Arsenic has been detected in **non-potable** wells up to 22 µg/L in Rams Hill Golf Course well RH-4 (Dudek 2015a)".

Comment 7: INTERA recommends that we list the recommended, upper and short-term drinking water standards listed in Title 22 for total dissolved solids and sulfate and indicate that the minimum threshold shall be set and the upper MCL and the measurable objective set at the recommended MCL. Also, we recommend that we clearly distinguish between primary health-based standards and secondary aesthetic-based standards. For domestic wells, the primary concern shall be health-based standards.

Comment 8: *Redefine and clarify what constitutes and Undesirable Result.*

INTERA generally agrees with Watermaster staff's recommendation to update the definition of Undesirable Results to more explicitly describe significant and unreasonable impacts to beneficial uses and users in the Bssin. While the revised definition addresses part of DWR's Recommended Corrective Action 5, Watermaster staff have not discussed how Watermaster plans to "track progress in the Subbasin to avoid undesirable results associated with degradation of water quality" (second half of DWR's Recommended Corrective Action 5). INTERA recommends that Watermaster define the combination of minimum threshold exceedances (both number and timing) that would "*preclude the*

[4] Under Title 22 of the California Code of Regulations, drinking water standards apply at the "user connection" or point of entry into a home or building. This is the point of compliance for a public water system, meaning the water must meet all maximum contaminant levels (MCLs) up to and including this point.

use of groundwater for current and/or potential future beneficial uses" and be representative of an Undesirable Result (23 CCR §354.26). Including a quantitative definition of what constitutes significant and unreasonable conditions provides Watermaster the ability to directly measure the onset of Undesirable Results.

INTERA recommends that these conditions be defined by management area to account for differences in current water quality conditions and beneficial users and users. For the BWD, if more than two wells in the CMA and NMA required replacement or treatment to meet Title 22 drinking water standards as a result of implementation of the Judgment, this would be considered a significant and unreasonable impact to BWD if financial mitigation were not provided.

Comment 9: *Update GMP to modify PMA No. 5.*

Watermaster staff recommend modifying PMA No. 5 in the GMP to state (in part):

> *"Define a specific water quality condition/trend that would trigger Watermaster to assess whether a change in water quality is significant and unreasonable…"*

INTERA agrees that this is critical for effective groundwater quality management in the Basin and agrees that these recommendations should be developed in coordination with the TAC. INTERA recommends that revised definition of Undesirable Results for degraded water quality integrate this information. For the BWD an exceedance of a MCL or an increasing trend with concentration above one-half the MCL would be cause to trigger the Watermaster to assess the driving mechanism(s) causing change in water quality and identify potential management actions to mitigate degradation.

4.0 Updating Sustainable Management Criteria – Land Subsidence

Comment 10: Watermaster staff's TM notes the presence of Continuous Global Positioning System (CGPS) Station P486 (referred to in the Watermaster staff's TM as Station 486). Displacement time series from P486 are used to validate interferometric synthetic aperture radar (InSAR) estimates of subsidence. It should be noted that there are two other CGPS stations in the Basin (Figure 2) that may be used in similar validation exercises: Station GZKA located to the west and Station SLHG located to the southeast. INTERA recommends that information from these two additional sites be included with P486 into the Periodic Evaluation and Annual Report.

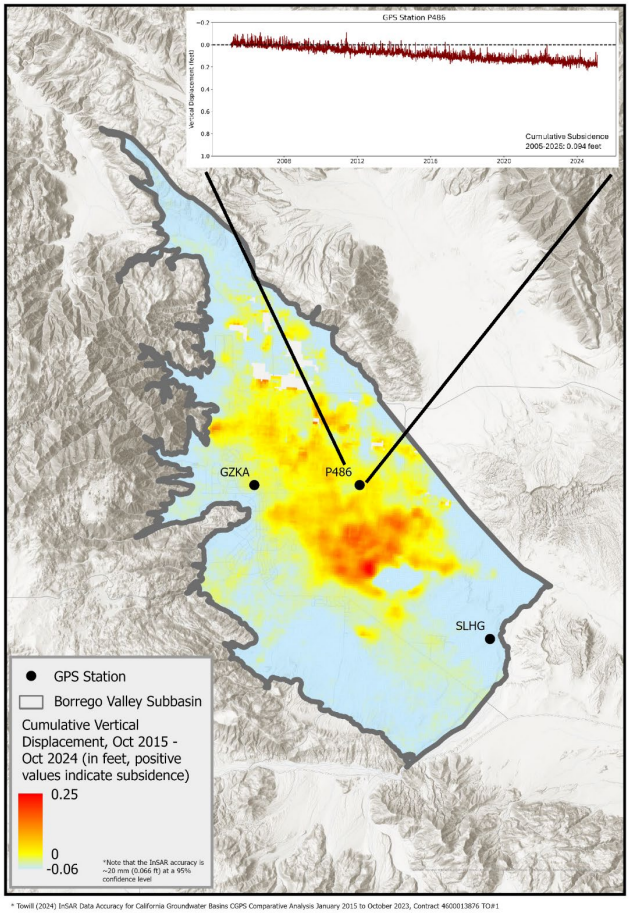

Figure 2. Extent of Land Subsidence in the Borrego Springs Subbasin October 2015 to October 2024 with CGPS Locations

Comment 11: The Watermaster staff's TM reports that total maximum subsidence observed in the Basin was about 0.16 ft (0.017 ft/yr) over the 9-year period of June 2015 to June 2024. Inspection of time series from the SGMA Data Viewer show that there are locations with higher observed magnitude. For example, InSAR pixel code AAFOO7S (Figure 3) shows a total of about 0.27 ft of subsidence between January 2015 and July 2025. Comparing to an equivalent timeframe as the Watermaster staff's TM (June 2015 to June 2024), this location experienced about 0.25 ft (0.028 ft/yr) of subsidence. The cumulative extent measured by AAFOO7S is consistent with regional maps (Figure 2) produced using the weekly time series point data provided by DWR. While these are still relatively small magnitude subsidence values, using the time series data leads to upwards of 55% increase in maximum subsidence observed. INTERA recommends that input subsidence data be quality controlled to ensure subsidence is not underestimated.

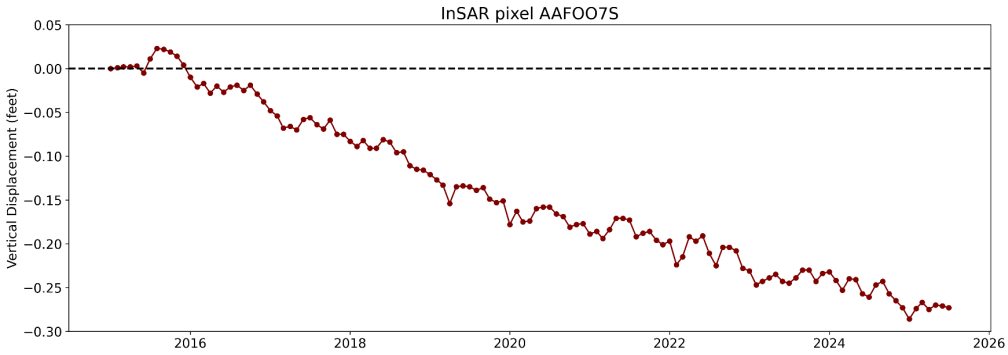

Figure 3. Displacement time series example at InSAR pixel code AAFOO7S

Comment 12: The Watermaster staff's TM acknowledges that the annual report will be "updated with the most recent subsidence and groundwater-elevation data". However, there is no explicit detail regarding how subsidence and groundwater-elevation data will be jointly analyzed. In DWR's Draft Land Subsidence BMP, it is recommended that estimates of critical head (the groundwater-elevation condition below which inelastic subsidence may occur) should be made even if they are approximate. The Subsidence BMP outlines various methods to make these estimates, and they include a trend-based analysis, empirical-based analysis, and a 1-D compaction modeling approach. INTERA recommends that an approach to linking subsidence (even if minimal) to groundwater-elevations should be discussed, and how that may inform subsidence/groundwater management actions.

Comment 13: While infrastructure in the Basin is not anticipated to be impacted by absolute subsidence, INTERA recommends that analysis regarding differential subsidence (the spatial rate of land surface elevation change) be conducted. Localized subsidence may create differential subsidence along infrastructure such as pipelines. This may exceed structural tolerances. This is an important consideration when characterizing potential impacts to local and regional infrastructure. BWD intends to review its pipeline infrastructure and provide additional information as part of the Periodic Evaluation.

Comment 14: The Watermaster staff's TM states that the "Watermaster will determine whether establishing SMC for land subsidence is warranted" based on the findings from the annual reports and 5-year GSP Assessments. However, the Sections 6.3-6.5 in the subsidence BMP states SMC for land subsidence should be established regardless of whether subsidence is occurring or not. SMC for land subsidence should be represented as rates and extents. One approach would be to project the historical rate of subsidence from 2015 to 2025 into the future and establish a minimum threshold based on this rate with interim milestones established for 2030 and 2035. The measurable objective would be established based on one-half the historical rate of subsidence. As groundwater levels in the Basin are stabilizing as a result of implementation of rampdown under the Judgment, subsidence should be minimized in alignment with the SGMA regulations. As noted in comment 12, critical head estimates should be established in the areas of greatest subsidence to confirm that logic that stabilizing groundwater levels at current levels will minimize subsidence.

Attachment A

Draft Working Technical Memorandum Borrego Springs Subbasin Groundwater Quality Risk Assessment dated June 16, 2017

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MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

DRAFT WORKING TECHNICAL MEMORANDUM

To:	Geoff Poole, General Manager, Borrego Water District
From:	Trey Driscoll, PG, CHG; Dan Ritter, PhD; and Jill Weinberger, PG, PhD
Subject:	Borrego Springs Subbasin Groundwater Quality Risk Assessment
Date:	June 16, 2017
cc:	Jim Bennett, Leanne Crow, County of San Diego
Attachment(s):	Figures 1–14

EXECUTIVE SUMMARY

The Borrego Springs Groundwater Subbasin of the Borrego Valley Groundwater Basin (BVGB) has been determined to be in "overdraft."[1, 2] Recent studies estimate that water users within the Borrego Springs Groundwater Subbasin of the BVGB currently withdraw approximately 19,000 acre-feet per year (AFY) and that the "sustainable yield" of the Borrego Springs Groundwater Subbasin is 5,700 AFY. Thus, the current estimated "overdraft" rate is 13,300 AFY. The State Groundwater Sustainability Plan mandates that the BVGB attain a long-term withdrawal rate less than or equal to the sustainable yield by the end of the prescribed 20-year water reduction period, in this case by the year 2040.[3]

This Technical Memorandum has been prepared to assess the potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water maximum contaminant levels (MCLs) in Borrego Water District (BWD) production wells due to the long-standing critical overdraft. Thus, it assesses current and historical groundwater quality data and the inter-relationship between groundwater levels and groundwater quality. Here, based on our current understanding of groundwater quality conditions, the main constituents of concern (COCs) are arsenic, nitrate, sulfate, fluoride, total dissolved solids (TDS), and radionuclides. Of primary concern is the potential for water quality degradation and the relative risk that the groundwater supply will not meet MCLs.

1 The overdraft of the BVGB was definitively established by the U.S. Geological Survey (USGS) work conducted in 1982 for San Diego County. Since 1982, the overdraft has more than doubled. See http://www.borregowd.org/uploads/BWD_Report_USGS_1982.pdf.

2 The Department of Water Resources approved BWD's request for a scientific internal modification of the BVGB into the Borrego Springs Subbasin (7-024-.01) and Ocotillo Wells Subbasin (7-024.02) in October 2016.

3 The 20-year water reduction period is promulgated in CWC Section 10727.2(b).

The U.S. Geological Survey (USGS), in cooperation with the BWD, recently published Scientific Investigation Report 2015–5150 that evaluated available groundwater quality data in Borrego Springs and Ocotillo Wells Groundwater Subbasins of the BVGB (Faunt et al. 2015). The USGS found that concentrations of TDS and nitrate exceed their respective water quality standard thresholds in portions of the upper aquifer of the Borrego Springs Groundwater Subbasin (for reference with depth the BVGB is comprised of three aquifers: upper, middle, and lower). The highest concentrations of both constituents were generally found in the northern portion of the Borrego Springs Groundwater Subbasin, and the concentration of TDS was found to increase as groundwater levels decline. Sulfate, another COC, was also found to increase in concentration as groundwater levels decline. In addition to nitrate, TDS, and sulfate, other potential COCs in the BVGB include arsenic and gross alpha radiation, though the latter appears to be confined to the Ocotillo Wells Groundwater Subbasin.

Since the compilation of available groundwater quality data by the USGS in 2015, additional data have been collected by the BWD for its active production wells in 2016 and for seven private wells located in the South Management Area (SMA) of the Borrego Springs Groundwater Subbasin. This recent data indicates that arsenic concentrations exceed the California drinking water MCL of 10 micrograms per liter (µg/L) in portions of the lower aquifer in the SMA. Additionally, review of historical arsenic data for BWD wells located in the SMA indicates an increasing arsenic trend in well ID1-2, and a linear regression analysis indicates a good correlation of fit among arsenic concentration, groundwater production, and declining groundwater levels in well ID1-8. Based on the 2-year lag linear regression of groundwater production and arsenic data from well ID1-8, groundwater production in excess of 300 AFY at well ID1-8 is predicted to exceed the arsenic drinking water standard of 10 µg/L. Thus, arsenic concentrations in the lower aquifer of the Borrego Springs Groundwater Subbasin are determined to be a primary COC. Because groundwater quality data for the Borrego Springs Groundwater Subbasin are limited, further data collection and evaluation is required to verify the predicted exceedance of the arsenic drinking water standards in well ID1-8 and potential for other wells in the Borrego Springs Groundwater Subbasin to exceed the arsenic drinking water standard or other COC.

INTRODUCTION

The BVGB is located in the northeastern part of San Diego County and the western part of Imperial County (Figure 1). The BVGB was recently divided into two subbasins: Borrego Springs Groundwater Subbasin (7-024.01) and Ocotillo Wells Groundwater Subbasin (7-024.02), based on a scientific internal basin boundary modification (DWR 2016, Dudek 2016). This Technical Memorandum is primarily focused on the Borrego Springs Groundwater Subbasin of the BVGB. The boundary of the Borrego Springs Groundwater Subbasin is generally defined by the contact of unconsolidated deposits with plutonic and metamorphic basement deposits. The

trace of the Coyote Creek fault, which trends northwest–southeast to the north and east of the Borrego Springs Groundwater Subbasin, and the San Felipe Wash to the south, which is approximately co-located with a basement high known as the Yaqui Ridge/San Felipe anticline and San Felipe fault, are recognized barriers to flow that form additional boundaries of the subbasin (Figure 1).

Groundwater pumped from the Borrego Springs Groundwater Subbasin is the sole source of supply to meet agricultural, municipal, and recreational water demands for the community of Borrego Springs. Since the 1950s when intensive groundwater pumping began, extraction has exceeded recharge. Almost 500,000 acre-feet of groundwater has been permanently removed from groundwater storage, and groundwater levels have dropped by more than 100 feet in portions of the Borrego Springs Groundwater Subbasin (Faunt et al. 2015). Today, groundwater extraction continues to exceed recharge. Water users within the Borrego Springs Groundwater Subbasin currently withdrawal approximately 19,000 AFY of groundwater, and the "sustainable yield" is 5,700 AFY. Thus, the current estimated overdraft is 13,300 AFY. Approximately a 70% pumping reduction would be required to balance extraction with long-term average recharge.

The Sustainable Groundwater Management Act was passed in September 2014 as a means of regulating groundwater use throughout the State of California. As a result of the Sustainable Groundwater Management Act, all groundwater basins designated as medium and high priority by the Department of Water Resources (DWR) must designate a Groundwater Sustainability Agency (GSA) by June 2017. The BWD and the County of San Diego have jointly formed a GSA under a memorandum of agreement.[4]

The GSA must prepare a Groundwater Sustainability Plan (GSP). As the Borrego Springs Groundwater Subbasin is in critical overdraft, the deadline to prepare a GSP is January 2020.[5] The GSP is required to address the management needs of the basin in order to avoid undesirable results. The undesirable results have been defined by DWR and include such items as the chronic lowering of groundwater levels, reduction in groundwater storage, and unreasonably degraded water quality.

In addition to developing a water quantity path to sustainability, it is essential to evaluate groundwater quality to ensure availability of potable water for both domestic and irrigation

[4] The BWD provided notice to DWR on October 27, 2015, to become a GSA for the portion of the BVGB within the boundaries of the BWD. The County of San Diego Board of Supervisors authorized the County of San Diego to become a GSA over BVGB on January 6, 2016. The BWD and County of San Diego authorized a Memorandum of Understanding for Development of a Groundwater Sustainability Plan for the Borrego Valley Groundwater Basin on October 19, 2016.

[5] The Borrego Springs Subbasin is designated as being in critical overdraft. The Final List of Designation of Critical Overdraft is available here: http://www.water.ca.gov/groundwater/sgm/pdfs/COD_BasinsTable.pdf.

supply. This technical memorandum has been prepared to assess the potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water MCLs in BWD production wells due to the long-standing critical overdraft. To date, the BWD has been able to supply customers with groundwater without the need for any additional treatment other than disinfection by chlorination as required by the State Water Resources Control Board's Division of Drinking Water (DDW). The potable groundwater served by the BWD currently meets all drinking water standards, and no water quality violations have been identified in active wells.

The groundwater system is generally subdivided by the USGS into three aquifers denoted as the upper, middle, and lower.[6] The upper aquifer is comprised of coarse sediments sourced from the Coyote Creek watershed. The thickness of the upper aquifer thins from a maximum thickness of about 643 feet where Coyote Creek enters the basin to about 50 feet near the Borrego Sink (Faunt et al. 2015) and becomes mostly unsaturated south of the Desert Lodge anticline near Rams Hill. The upper aquifer yields as much as 2,000 gallons per minute and has been extensively dewatered. The middle aquifer contains finer sediments thought to originate from lower energy sediment sources prior to the initiation of slip along the Coyote Creek fault (Faunt et al. 2015). The middle aquifer like the upper aquifer thins from the northeast to southwest and varies in thickness from about 1,000 feet to 50 feet. "The middle aquifer yields moderate quantities of water to wells, but is considered a non-viable source of water south of San Felipe Creek because of its diminished thickness" (Mitten 1988). The lower aquifer is comprised of partly consolidated continental sediments up to 3,831 feet thick and is thickest in the eastern part of the basin near the Borrego Airport. The lower aquifer yields smaller quantities of water to wells than the upper and middle aquifers. Understanding the spatial distribution of the upper, middle, and lower aquifers, as well as faulting and folding in the basin, is important to evaluate groundwater quality.

Production wells in the subbasin are generally screened in the upper, middle, or lower aquifers or cross-screened in multiple aquifers. Due to the variable thickness of the individual aquifers (i.e., thickness of aquifers generally thin to the south), BWD production wells are predominantly cross-screened in the upper, middle, and lower aquifers in the northern part of the subbasin; cross-screened in the middle and lower aquifers in the central part of the subbasin; and cross-screened in the middle and lower aquifers in the southern part of the subbasin (see Figures 6, 8, and 11).

Three management areas are proposed to better support groundwater management within the subbasin: the north management area (NMA), central management area (CMA), and south

[6] The upper, middle, and lower aquifers represent a generalized description of the Borrego Springs Subbasin stratigraphy based on work performed by Moyle (1982) and described in detail in Faunt et al. (2015).

management area (SMA).[7] These management areas are based on both subsurface geological features such as the Desert Lodge anticline that limits hydrologic communication between the southern part of the subbasin and the central part of the subbasin, as well as on differences in groundwater production demands, well screens, and pumping depressions between the southern, central, and northern parts of the subbasin.

The NMA is dominated by agricultural land use with groundwater production occurring from primarily the upper and middle aquifers. The CMA is currently the primary production area for municipal supply with groundwater production from the upper, middle, and lower aquifers. The SMA includes some municipal and domestic pumping but is currently dominated by pumping for recreational use. Pumping in the SMA only occurs in the middle and lower aquifers.

General Regulatory Drinking Water Requirements

As a public water system, the BWD is regulated by the State Water Resources Control Board's DDW. California regulations related to drinking water are contained within California Code of Regulations (CCR) Title 17 and Title 22. California drinking water MCLs that shall not be exceeded in the water supplied to the public are listed in CCR Title 22 Chapter 15. The BWD samples groundwater quality from water wells at intervals required by the DDW. While bacteriological sampling of the water system occurs frequently, sampling for general minerals, aggregate properties, solids, metals, and nutrients occurs every 3 years. The BWD groundwater quality data reviewed for the analysis includes data through the 2016 DDW sampling event. Sampling of the BWD water wells for general minerals, aggregate properties, solids, metals, and nutrients is not required again until 2019.

GROUNDWATER QUALITY

Constituents of Concern

There are both anthropogenic and natural sources of the COCs in the BVGB. Anthropogenic sources that may contribute to degradation of the current water quality in the basin include agricultural use of pesticides and fertilizers, salt accumulation resulting from agricultural irrigation practices, and household septic system return flows. Natural sources of COCs in the BVGB include the rocks and minerals that comprise the aquifer matrix material. These naturally occurring COCs include evaporite minerals, which can dissolve and increase TDS concentration

[7] "Management area" refers to an area within a basin for which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors (CCR Title 23, Division 2, Chapter 1.5. subchapter 2, Article 2, Section 351).

in the aquifer; silicate minerals, which can contribute arsenic to the groundwater; and sulfate minerals, which as their name suggests can contribute sulfate to the groundwater, All are found in differing amounts in the upper, middle, and lower aquifers. Differences in the mineralogical composition of the aquifers can result in groundwater quality differences between the aquifers.

Arsenic

Naturally occurring arsenic concentrations in groundwater are highly variable, though naturally occurring concentrations that exceed the California drinking water primary MCL of 10 µg/L are common in semi-arid and arid groundwater basins in the western United States (Welch et al. 2000, Anning et al. 2012). In these basins, groundwater recharge is limited due to low precipitation and the residence time of the groundwater in the basin is high. The long residence time of the groundwater in the basin allows for more interaction between the groundwater and the minerals that comprise the aquifer matrix material. With time, arsenic desorbs from sediments and enters the groundwater. This process is more efficient in groundwater with higher pH. The groundwater in the BVGB has a pH of 7.5 to 9.0, a range that is conducive for this transfer of arsenic from the sediment to the water.

Fluoride

Fluoride is a naturally occurring element in groundwater resulting from the dissolution of fluoride-bearing minerals from the aquifer sediments and surrounding bedrock. Brown staining or mottling of teeth and resistance to tooth decay as a result of drinking water with high concentrations of fluoride has been known since the 1930s. While drinking fluoridated water at low concentrations (i.e., 0.7 ppm) is beneficial to prevent tooth decay, excessive exposure to fluoride can result in dental and skeletal fluorosis. The California drinking water primary MCL for fluoride is 2 milligrams per liter (mg/L).

Nitrate

Sources of nitrate in groundwater are typically associated with specific land use but it can also occur naturally. Fertilizers and septic tanks are common anthropogenic sources of nitrate detected in groundwater. Potential natural sources of nitrate in groundwater may result from leaching of soil nitrate, which occurs by atmospheric deposition, and dissolution of evaporative minerals, igneous rocks, and deep geothermal fluids. In desert groundwater basins, the largest source of naturally occurring nitrates in groundwater occurs from incomplete utilization of nitrate by sparse vegetation. This nitrate accumulates in the unsaturated zone and may become mobile when surficial recharge percolates through the unsaturated zone (Walvoord et al. 2003). In arid environments, nitrate stored in the unsaturated zone may become mobilized by artificial recharge

from irrigation return flow, septic effluent, and infiltration basins. The Borrego Spring Subbasin lacks appreciable evaporitic deposits, and anthropogenic sources or mobilization as a result of artificial recharge is likely the main contributor of nitrates to the subbasin. The California drinking water primary MCL for nitrate is 10 mg/L as nitrogen (N) 45 mg/L as nitrate (NO_3).

Sulfate

Natural sulfate sources include atmospheric deposition, sulfate mineral dissolution, and sulfide mineral oxidation of sulfur. Gypsum is an important source near localized deposits such as in the Ocotillo Wells Subbasin near Fish Creek Mountains in Imperial County. Fertilizers can also be a source of sulfate in groundwater but typically do not result in exceedance of drinking water standards. The California drinking water secondary MCL for sulfate is recommended at 250 mg/L, with upper and short-term limits of 500 mg/L and 600 mg/L, respectively.

Total Dissolved Solids

TDS is a measure of all dissolved solids in water including organic and suspended particles. Sources of TDS in groundwater include interaction of groundwater with the minerals that comprise the aquifer matrix material. Over time, TDS will increase as more minerals in contact with groundwater dissolve. In desert basins, evaporative enrichment near dry lake beds (playas) is known to naturally increase TDS in groundwater. This process also occurs in plants, both in agriculture and natural systems. Anthropogenic sources include synthetic fertilizers, manure, wastewater treatment facilities, and septic effluent. The California drinking water secondary MCL for TDS is recommended at 500 mg/L with upper and short-term limits of 1,000 mg/L and 1,500 mg/L, respectively.

Radionuclides

Radionuclides are naturally occurring elements of the Earth and observed in groundwater as a result of interaction with an aquifer matrix material that contains trace levels of radioactive isotopes. Gross alpha and beta measurements are screening tools for quantification of radioactivity in groundwater, which is measured as activity units of picocuries per liter (pCi/L). The California drinking water primary MCL for gross alpha is 15 pCi/L based on a four-quarter average. Other radionuclides with California drinking water primary MCLs include radium-226 + radium-228 (5 pCi/L), strontium-90 (8 pCi/L), tritium (20,000 pCi/L) and uranium (20 pCi/L).

Below, we discuss the current distribution and trends of COCs overall and as occurs within each proposed Borrego Springs Subbasin management areas (Figure 1).

Historical Groundwater Quality

This analysis evaluates historical groundwater quality for BWD wells and seven private wells located in the SMA. Data for select groundwater quality constituents are provided in Table 1 and displayed graphically in Figures 2–5, and Figures 7, 9, 10, 12, 13, and 14.

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
North Management Area Wells							
ID4-4[c]	9/25/1954	NM	NM	1.81	418	NM	7.9
ID4-4[c]	5/16/1972	NM	0.68	70.48[d]	417	NM	7.6
ID4-4[c]	5/23/1973	NM	0.46	3.61	283	NM	7.4
ID4-4[c]	5/19/1975	<RL	0.47	0.50	127	508	7.76
ID4-4[c]	12/15/1975	<10	NM	13.10	NM	NM	NM
ID4-4[c]	4/29/1976	NM	NM	11.07	NM	NM	NM
ID4-4[c]	8/6/1976	NM	NM	14.01	NM	NM	NM
ID4-4[c]	9/30/1976	NM	NM	11.07	NM	NM	NM
ID4-4[c]	12/6/1976	NM	NM	14.91	NM	NM	NM
ID4-4[c]	8/18/1978	NM	NM	9.49	NM	NM	NM
ID4-4[c]	9/14/1978	NM	NM	10.40	NM	NM	NM
ID4-4[c]	11/9/1978	NM	NM	11.97	NM	NM	NM
ID4-4[c]	7/17/1979	NM	0.11	0.68	99	244	8.14
ID4-4[c]	9/26/1979	NM	0.18	0.79	129	360	7.84
ID4-4[c]	3/31/1980	<10	0.94	0.79	127	322	7.68
ID4-4[c]	10/24/1980	NM	NM	13.00	NM	NM	NM
ID4-4[c]	11/19/1980	3	0.20	NM	120	327	7.90
ID4-4[c]	8/18/1981	NM	NM	0.79	NM	NM	NM
ID4-4[c]	2/4/1983	<2	0.29	0.97	147	310	7.46
ID4-4[c]	12/9/1985	<5	0.41	0.86	132	326	7.82
ID4-4[c]	6/11/1991	<10	0.18	0.21	102	317	7.97
ID4-4[c]	12/28/1994	2	0.33	0.91	122	348	7.80
ID4-4[c]	9/8/1998	<2	0.16	0.91	120	312	7.73
ID4-4[c]	5/17/2001	<RL	0.20	0.90	120	350	7.80
ID4-4[c]	1/14/2002	<2	1.07	NM	NM	NM	NM
ID4-4[c]	4/15/2004	<RL	0.13	1.03	110	295	7.91
ID4-4[c]	5/8/2007	2.2	0.20	0.68	110	320	8.00
ID4-4[c]	6/3/2008	NM	NM	0.63	NM	NM	NM
ID4-4[c]	5/13/209	NM	NM	0.63	NM	NM	NM
ID4-4[c]	5/11/2010	2.2	0.20	0.61	120	340	7.90

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
ID4-4[c]	6/7/2011	NM	NM	0.54	NM	NM	NM
ID4-4[c]	5/22/2012	NM	NM	0.54	NM	NM	NM
ID4-4[c]	7/24/2013	2.7	0.20	0.59	110	330	7.80
ID4-4[c]	8/19/2014	NM	NM	0.43	NM	NM	NM
ID4-4[c]	8/11/2015	NM	NM	0.56	NM	NM	NM
ID4-4[c]	4/12/2016	2.9	0.20	0.56	110	310	7.90
ID4-11	5/17/1995	<2	0.29	0.22	125	396	8.45
ID4-11	9/8/1998	<2	0.2	0.39	114	387	7.55
ID4-11	5/17/2001	<RL	0.2	NM	110	390	7.7
ID4-11	12/27/2002	NM	0.23	NM	101	410	NM
ID4-11	12/31/2002	NM	NM	0.32	NM	NM	NM
ID4-11	12/18/2003	NM	0.25	0.39	NM	NM	NM
ID4-11	4/15/2004	<RL	0.2	0.36	98.9	318	7.78
ID4-11	4/18/2006	NM	NM	0.36	NM	NM	NM
ID4-11	5/8/2007	<2	0.3	0.43	91	390	8
ID4-11	6/3/2008	NM	NM	0.45	NM	NM	NM
ID4-11	5/13/2009	NM	NM	0.59	NM	NM	NM
ID4-11	5/11/2010	<2	0.3	0.50	95	370	7.8
ID4-11	6/7/2011	NM	NM	0.45	NM	NM	NM
ID4-11	5/22/2012	NM	NM	0.47	NM	NM	NM
ID4-11	10/24/2013	NM	0	0.56	86	340	7.8
ID4-11	2/14/2014	<2	0.3	0.61	NM	NM	NM
ID4-11	6/1/2014	2.23	NM	NM	NM	NM	NM
ID4-11	8/12/2014	NM	NM	0.61	NM	NM	NM
ID4-11	8/11/2015	NM	NM	0.61	NM	NM	NM
ID4-11	4/12/2016	<2	0.3	0.66	85	320	7.8
ID4-18	6/18/1984	5	1.2	0.12	237	594	7.04
ID4-18	12/9/1985	<2	1.1	0.08	246	562	7.96
ID4-18	6/11/1991	<10	0.68	0.04	253	617	7.61
ID4-18	12/28/1994	<2	1.03	0.32	254	617	7.37
ID4-18	9/8/1998	<2	0.85	0.50	253	604	7.43
ID4-18	5/17/2001	<RL	0.7	NM	270	620	7.5
ID4-18	12/31/2002	NM	NM	0.27	NM	NM	NM
ID4-18	4/15/2004	<RL	0.84	0.28	242	558	7.72
ID4-18	5/8/2007	<2	0.9	NM	240	590	7.8
ID4-18	5/13/2009	NM	NM	0.29	NM	NM	NM
ID4-18	5/11/2010	<2	0.8	0.36	260	620	7.7

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
ID4-18	6/7/2011	NM	NM	0.32	NM	NM	NM
ID4-18	5/22/2012	NM	NM	0.45	NM	NM	NM
ID4-18	6/10/2013	<2	1.3	0.32	250	620	7.8
ID4-18	8/12/2014	NM	NM	0.38	NM	NM	NM
ID4-18	8/11/2015	NM	NM	0.50	NM	NM	NM
ID4-18	5/16/2016	<2	0.9	0.5	250	610	7.7
MW-1	9/8/2011	3.8	NM	0.015	223	480	8.7
Central Management Area Wells							
ID4-10	6/19/1989	10[a]	0.59	1.70	66	629	8.19
ID4-10	6/11/1991	<10	0.35	1.49	17	529	7.74
ID4-10	12/28/1994	<2	0.4	2.42	26	528	7.6
ID4-10	9/8/1998	<RL	0.38	2.39	28.4	516	7.32
ID4-10	5/17/2001	<RL	0.4	2.71	27	530	7.4
ID4-10	4/15/2004	<RL	0.34	2.21	22.9	459	7.54
ID4-10	5/26/2005	NM	NM	1.74	NM	NM	NM
ID4-10	4/18/2006	NM	NM	2.06	NM	NM	NM
ID4-10	5/8/2007	<2	0.4	2.10	23	490	7.6
ID4-10	6/3/2008	NM	NM	1.92	NM	NM	NM
ID4-10	5/13/2009	NM	NM	2.10	NM	NM	NM
ID4-10	10/26/2009	0.76	0.41	2.44	25.7	NM	7.5
ID4-10	5/11/2010	<2	0.4	1.97	24	510	7.6
ID4-10	6/7/2011	NM	NM	1.81	NM	NM	NM
ID4-10	5/22/2012	NM	NM	1.97	NM	NM	NM
ID4-10	6/10/2013	<2	0.6	2.10	23	500	7.5
ID4-10	8/12/2014	NM	NM	2.48	NM	NM	NM
Wilcox	1/27/2000	7	0.6	1.90	127	267	8.27
Wilcox	5/17/2001	3	0.6	1.58	18	250	8.1
Wilcox	4/15/2004	3.4	0.51	0.40	13.8	200	8.74
Wilcox	5/26/2005	NM	NM	0.77	NM	NM	NM
Wilcox	5/8/2007	4.4	0.7	0.99	14	210	8.4
Wilcox	6/3/2008	NM	NM	0.93	NM	NM	NM
Wilcox	5/13/2009	NM	NM	1.42	NM	NM	NM
Wilcox	5/11/2010	6.1	0.8	0.36	16	220	8.7
Wilcox	6/7/2011	NM	NM	0.77	NM	NM	NM
Wilcox	5/22/2012	NM	NM	0.90	NM	NM	NM
Wilcox	3/16/2013	4.2	1	1.29	18	230	8.3
Wilcox	6/1/2014	7.8	NM	NM	NM	NM	NM

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
Wilcox	8/19/2014	NM	NM	0.68	NM	NM	NM
Wilcox	8/11/2015	NM	NM	0.45	NM	NM	NM
Wilcox	3/22/2016	4.4	0.8	0.92	16	220	8.2
ID1-10	9/26/1972	<RL	0.78	0.43	105	352	8.3
ID1-10	3/17/1988	10	0.57	1.31	73	252	7.72
ID1-10	5/22/1991	<10	0.54	1.47	63	274	7.77
ID1-10	12/28/1994	2	0.46	1.61	50.7	260	7.74
ID1-10	5/17/2001	5	0.6	1.58	96	460	8
ID1-10	12/5/2002	NM	0.54	1.47	NM	250	NM
ID1-10	12/31/2002	NM	NM	1.58	NM	NM	NM
ID1-10	4/15/2004	3.3	0.42	0.82	79	274	8.17
ID1-10	5/26/2005	NM	NM	1.49	NM	NM	NM
ID1-10	4/18/2006	NM	NM	1.40	NM	NM	NM
ID1-10	5/8/2007	5.9	0.5	1.54	47	250	8.3
ID1-10	6/3/2008	NM	NM	1.56	NM	NM	NM
ID1-10	5/13/2009	NM	NM	1.72	NM	NM	NM
ID1-10	10/27/2009	9.9	0.43	2.02	46.9	NM	8.2
ID1-10	5/11/2010	7.1	0.5	1.78	45	240	8.4
ID1-10	6/7/2011	NM	NM	1.63	NM	NM	NM
ID1-10	5/22/2012	NM	NM	1.65	NM	NM	NM
ID1-10	7/22/2013	7.5	0.7	1.63	54	280	8.2
ID1-10	6/1/2014	12.2	NM	1.85	NM	NM	NM
ID1-10	8/11/2015	NM	NM	1.27	NM	NM	NM
ID1-10	4/12/2016	4	0.5	1.40	62	340	8
ID1-12	3/17/1988	7	0.45	0.44	104	242	7.23
ID1-12	5/22/1991	<10	0.5	0.42	105	292	8.3
ID1-12	12/28/1994	3	0.47	0.50	101	290	7.96
ID1-12	9/8/1998	2	0.37	0.51	106	268	8.22
ID1-12	5/17/2001	3	0.4	0.45	97	290	8.1
ID1-12	5/13/2002	NM	NM	0.52	NM	NM	NM
ID1-12	12/18/2003	NM	0.42	0.25	NM	NM	NM
ID1-12	4/15/2004	2.2	0.34	0.39	94.9	246	8.38
ID1-12	4/18/2015	NM	NM	0.38	NM	NM	NM
ID1-12	5/8/2007	<RL	0.4	0.38	91	260	8.3
ID1-12	6/3/2008	NM	NM	0.38	NM	NM	NM
ID1-12	5/13/2009	NM	NM	0.41	NM	NM	NM
ID1-12	5/11/2010	<RL	0.5	0.38	100	240	8.2

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
ID1-12	4/3/2013	3	0.6	0.38	94	270	8.2
ID1-12	6/7/2011	NM	NM	0.34	NM	NM	NM
ID1-12	5/22/2012	NM	NM	0.38	NM	NM	NM
ID1-12	10/18/2012	2.5	0.35	0.441	93	NM	8.4
ID1-12	4/3/2013	3	NM	0.38	NM	NM	NM
ID1-12	6/1/2014	3.79	NM	0.38	NM	NM	NM
ID1-12	8/12/2014	NM	NM	0.38	NM	NM	NM
ID1-12	8/11/2015	NM	NM	0.36	NM	NM	NM
ID1-12	6/5/2016	3.1	0.4	0.38	90	300	8
ID1-16	7/15/1993	NM	NM	NM	74	312	7.76
ID1-16	2/25/1997	2	0.5	0.9	66	330	8.1
ID1-16	9/22/1998	<2	0.48	2.1	67.6	346	8.08
ID1-16	5/17/2001	<RL	0.5	1.4	64	360	7.9
ID1-16	12/13/2002	NM	NM	1.2	NM	NM	NM
ID1-16	12/18/2003	NM	0.56	1.2	68.8	NM	NM
ID1-16	3/6/2003	NM	NM	NM	NM	328	NM
ID1-16	4/15/2004	<RL	0.46	1.1	61.9	326	8.21
ID1-16	5/26/2005	NM	NM	1.1	NM	NM	NM
ID1-16	4/18/2006	NM	NM	1.1	NM	NM	NM
ID1-16	5/8/2007	2	0.6	1.1	60	320	8.2
ID1-16	6/3/2008	NM	NM	1.1	NM	NM	NM
ID1-16	5/13/2009	NM	NM	0.8	NM	NM	NM
ID1-16	5/11/2010	<2	0.5	1.2	66	340	8.3
ID1-16	6/7/2011	NM	NM	1.1	NM	NM	NM
ID1-16	5/22/2012	NM	NM	0.8	NM	NM	NM
ID1-16	12/18/2013	4.3	0.5	1.2	56	280	8.2
ID1-16	8/12/2014	NM	NM	1.1	NM	NM	NM
ID1-16	8/11/2015	NM	NM	1.1	NM	NM	NM
ID1-16	5/16/2016	3.2	0.5	0.95	56	300	8
ID5-5	3/2/2004	<RL	0.85	0.45	106	320	7.54
ID5-5	5/11/2010	<2	1.2	0.25	95	330	8.1
ID5-5	6/7/2011	NM	NM	0.43	NM	NM	NM
ID5-5	5/22/2012	NM	NM	0.47	NM	NM	NM
ID5-5	4/19/2013	2.1	1.4	0.45	100	310	8
ID5-5	8/12/2014	NM	NM	0.41	NM	NM	NM
ID5-5	8/11/2015	NM	NM	0.50	NM	NM	NM
ID5-5	3/22/2016	<2	1	0.44	95	350	7.8

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
Cocopah	9/27/2007	6	1.6	<1.0	170	410	8.8
Cocopah	3/22/2013	6.4	2.2	<1.0	170	390	8.7
MW-4[b]	1/9/2007	<2.0	0.5	2.4	330	720	7.8
MW-5A	1/9/2007	3.9	1.3	<1.0	700	1,300	8.0
MW-5B	12/18/2006	<2.0	0.8	<0.20	1,200	2,300	7.6
South Management Area Wells							
ID1-1	6/6/1972	<RL	0.8	0.50	197	560	8.3
ID1-1	3/17/1988	5	0.62	0.68	311	724	8.04
ID1-1	6/11/2014	<RL	0.3	0.99	570	1,300	8
ID1-1	6/2/2016	<RL	0.2	0.96	650	1,400	7.7
ID1-2	7/10/1972	NM	1.0	1.5	60	400	8
ID1-2	2/8/1983	2	0.51	4.7	39	496	7.86
ID1-2	3/17/1988	4	0.61	4.2	51	290	8.54
ID1-2	4/9/2014	6	0.4	3.2	32	340	8.8
ID1-2	6/2/2016	9	0.5	3.1	37	270	8.8
ID1-8	10/10/1972	NM	1.1	0.90	49	364	8.3
ID1-8	3/17/1988	14[c]	0.92	1.59	59	314	8.07
ID1-8	5/22/1991	11[c]	1.05	1.29	47	328	8.46
ID1-8	12/28/1994	5	0.68	1.88	81.4	400	7.78
ID1-8	9/22/1998	2	0.55	0.67	82	411	8.27
ID1-8	5/17/2001	5	0.6	1.79	96	460	8
ID1-8	12/5/2002	NM	0.55	1.59	120	490	NM
ID1-8	12/31/2002	NM	NM	1.74	NM	NM	NM
ID1-8	4/15/2004	4.7	0.47	1.47	119	446	8.31
ID1-8	5/26/2005	NM	NM	1.59	NM	NM	NM
ID1-8	5/8/2007	4.6	0.7	2.12	77	430	8.3
ID1-8	6/3/2008	NM	NM	2.12	NM	NM	NM
ID1-8	5/13/2009	NM	NM	2.10	NM	NM	NM
ID1-8	5/11/2010	6.8	0.7	2.10	110	460	8.2
ID1-8	6/7/2011	NM	NM	1.97	NM	NM	NM
ID1-8	5/22/2017	NM	NM	2.05	NM	NM	NM
ID1-8	4/3/2013	6.1	1	2.18	82	500	8.1
ID1-8	6/17/2013	4.8	0.67	2.37	91.1	NM	8.2
ID1-8	8/19/2014	NM	NM	2.28	NM	NM	NM
ID1-8	8/11/2015	NM	NM	2.46	NM	NM	NM
ID1-8	3/22/2016	5.3	0.7	2.0	85	490	8
RH-3	9/29/2014	15	1.4	0.60	67	310	9

Table 1
Historical Groundwater Quality

Well ID	Date	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)[a]	Sulfate (mg/L)	TDS (mg/L)	pH
RH-3	6/2/2016	15	1.1	1.3	63	290	8.9
RH-4	1/22/2015	22	1.4	0.33	45	300	8.9
RH-4	6/2/2016	18	1.1	0.43	81	360	8.9
RH-5	3/18/2015	4.6	0.6	6.6	180	770	8.5
RH-5	6/2/2016	16	1.3	3.8	120	510	8.8
RH-6	7/27/2015	15	1.3	3.2	25	290	9
RH-6	6/2/2016	15	1.2	3.3	28	300	9
Jack Crosby	6/2/2016	13	0.9	0.32	140	450	8.6
WWTP-1	4/5/2016	NM	0.3	119.52	87	690	7.8

Source: BWD 2016, Dudek 2016, DDW 2016
Notes: Not all historical laboratory reports were available to verify the reported laboratory result.
NM = not measured
<RL = less than laboratory reporting limit
a. Nitrate as N x 4.4288 = Nitrate as NO_3
b. MW-4 is not depicted on Figure 8.
c Analysis taken when well No. ID4-4 was first reactivated after several years of non-use. Waters entering well near static water level were found to be very high in dissolved minerals. These highly concentrated waters were sealed off by the Roscoe Moss Company during the summer of 1972. After several weeks of operating, salinity was reduced to acceptable levels noted in May 1973. Well No. 4 (ID4-4) was originally drilled for DiGiorgio Farms and carried in the DiGiorgio records as Well No. 10. Well ID4-4 was drilled in 1979 in the same location as Well No. 4.

The groundwater quality data are presented in the figures relative to the MCL for each of the COCs. Concentrations that lie between half of the MCL and the MCL are noted. While the concentrations are below the MCL for most of these points, increasing concentrations of many of the COCs are being observed with ongoing groundwater level decline so the upper range concentration data are highlighted in this risk assessment.

Groundwater Concentration Trend Statistical Analysis

Historical groundwater quality data that extends through early 2016 was evaluated to determine groundwater concentration trends for COCs (arsenic, fluoride, nitrate, sulfate, TDS, and pH). Radionuclides are of potential concern but limited radionuclide data available for BWD wells precluded trend analysis.

The Mann-Kendall test was applied to assess trends in groundwater quality. The Mann-Kendall test does not require regularly spaced sample intervals, is unaffected by missing time periods, and does not assume a pre-determined data distribution. The Mann-Kendall test assesses whether or not a dataset exhibits a trend within a selected significance level. A significance level of 0.05 or confidence level of 95% was selected for this analysis. Results of the Mann-Kendall test are listed in Table 2.

Table 2
Mann-Kendall Trend Analysis Results

Well ID	Arsenic (µg/L)	Fluoride (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)	TDS (mg/L)	pH
North Management Area Wells						
ID4-4	No trend	No trend	Decreasing	Decreasing	No trend	No trend
ID4-11	Insufficient data	***Increasing***	***Increasing***	Decreasing	No trend	No trend
ID4-18	Insufficient data	No trend	***Increasing***	No trend	No trend	No trend
MW-1	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Central Management Area Wells						
ID4-10	Insufficient Data	No trend	No trend	No trend	*Decreasing*	No trend
Wilcox	No trend	***Increasing***	No trend	No trend	No trend	No trend
ID1-10	No trend	No trend	***Increasing***	Decreasing	No trend	No trend
ID1-12	No trend	No trend	Decreasing	Decreasing	No trend	No trend
ID1-16	No trend	No trend	Decreasing	Decreasing	No trend	No trend
ID5-5	Insufficient data	Insufficient data	No trend	No trend	No trend	No trend
Cocopah	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
MW-4	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
South Management Area Wells						
ID1-1	Insufficient data	No trend	No trend	***Increasing***	***Increasing***	Decreasing
ID1-2	***Increasing***	No trend	No trend	No trend	No trend	No trend
ID1-8	No trend	No trend	***Increasing***	***Increasing***	***Increasing***	No trend
RH-3	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
RH-4	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
RH-5	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
RH-6	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Jack Crosby	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
WWTP-1	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data

Note: A minimum of four data points are required to calculate trend (non-detects were not used as data points in this analysis to calculate trend).
Sources: BWD 2016, Dudek 2016, DDW 2016.

Increasing groundwater concentration trends were exhibited for arsenic in well ID1-2; fluoride in the Wilcox Well; nitrate in wells ID1-11, ID1-18, ID1-10, ID4-10 and ID1-8; sulfate in wells ID1-1 and ID1-8; and TDS in wells ID1-1 and ID1-8. Decreasing groundwater concentration trends were exhibited for nitrate in ID4-4 and ID1-16; sulfate in wells ID4-4, ID4-11, ID1-10, ID1-12, and ID1-

16; TDS in well ID4-10; and pH in ID1-1. A minimum of four data points are required to calculate trend. Insufficient data indicates wells were no trend was established because either four data points were not available or data reported was less than laboratory reporting limits.

Arsenic

Arsenic concentrations have been detected above laboratory reporting limits at several wells in the Borrego Springs Subbasin since the 1980s.[8] Arsenic has been detected in non-potable wells up to 22 µg/L in Rams Hill Golf Course well RH-4. The California drinking water MCL for arsenic is 10 µg/L.

Arsenic wellhead concentrations from 2016 for the Borrego Springs Subbasin are shown in Figure 2. Arsenic concentrations for wells located in the NMA were less than half the MCL (< 5 µg/L) for wells screened in the upper, middle, and lower aquifers. NMA well information including elevation, well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 6.

Arsenic concentrations from 2016 for wells located in the CMA were less than half the MCL (< 5 µg/L) for wells predominantly screened in the middle aquifer and less than the MCL (<10 µg/L) for wells predominantly screened in the lower aquifer. CMA well information including elevation, well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 7. No recent wellhead sample is available for the upper aquifer overlying the CMA.

Arsenic concentrations from 2016 for wells located in the SMA ranged from less than half the MCL (< 5 µg/L) to greater than the MCL (>10 µg/L). The screen intervals of wells in the SMA predominantly intercept the lower aquifer though most wells are partially screened in the middle aquifer as well. No recent wellhead sample is available for the upper aquifer overlying the SMA as this portion of the aquifer is currently unsaturated.

Historical arsenic data for BWD wells ID4-4, ID4-11, ID4-18, and MW-1 located in the NMA were reviewed to determine trends (Figure 7). These wells have arsenic concentrations less than the California drinking water MCL (< 10 µg/L). These wells display no trend or there is insufficient data to determine trend as many of the arsenic results are below laboratory reporting limits.

[8] Prior to the 1980s, laboratory detection limits for arsenic where often established at 10 µg/L or 50 µg/L and results were reported as below the laboratory detection limit.

Historical arsenic data for BWD wells ID1-10, ID1-12, ID1-16, Wilcox, ID4-10, ID5-5, MW-4, and the private Cocopah well located in the CMA were reviewed to determine current lateral distribution and trends (Figures 9 and 10). These wells have arsenic concentrations less than the California drinking water MCL (< 10 µg/L), except for one non-compliance sample collected from well ID1-10 in 2014 by M.H. Rezaie-Boroon et al. (2014). Subsequent compliance sampling completed by the BWD in 2016 indicates that the well ID1-10 arsenic concentration is below the MCL at a concentration of 4 µg/L. These wells display no trend or there is insufficient data to determine trend as many of the arsenic results are below laboratory reporting limits.

Historical arsenic data for BWD wells ID1-1, ID1-2, and ID1-8 located in the SMA was reviewed to determine trend. Well ID1-8 is the only potable BWD production well located in the SMA. Wells located at the Borrego Air Ranch are also used for potable water supply in the SMA. Well ID1-2 displays an increasing arsenic concentration with time, whereas well ID1-8 arsenic concentration fluctuates over time (Figure 8).[9] Well ID1-1 typically tests below the laboratory detection limit for arsenic and has different overall water chemistry than wells ID1-2 and ID1-8. SMA well information including elevation, well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 11.

Fluoride

The USGS identified three wells with fluoride concentrations that exceed the California drinking water primary MCL of 2 µg/L. Fluoride concentrations in these wells ranged from 2.69 to 4.87 mg/L (Faunt et al. 2015).

Historical fluoride data for BWD wells ID4-4, ID4-11, ID4-18, and MW-1 located in the NMA were also reviewed to determine trends. Fluoride concentrations of the BWD wells in the NMA are below one-half the California drinking water MCL for these wells. No trend for fluoride is indicated for these wells.

Historical fluoride data for BWD wells ID1-10, ID1-12, ID1-16, Wilcox, ID4-10, ID5-5, MW-4, and the private Cocopah well located in the CMA were reviewed to determine current lateral distribution and trends. Fluoride concentrations of the BWD wells in the CMA are typically below one-half the California drinking water MCL except for ID5-5 and the Cocopah Well. Fluoride concentration in well ID5-5 is below the California drinking water MCL. One sample tested above the California drinking water standard in the Cocopah Well at concentration of 2.2 mg/L. No trend for fluoride is indicated for any of these wells.

[9] Wells ID1-1 and ID1-2 were sold by the BWD to Rams Hill golf course around 2014.

Historical fluoride data for wells ID1-1, ID1-2, and ID1-8 located in the SMA was reviewed to determine trend. Fluoride concentrations of the BWD wells in the SMA are typically below one-half the California drinking water MCL. No trend for fluoride is indicated for any of these wells.

Nitrate

The USGS found that the concentration of nitrate as nitrogen (as N) from samples throughout the BVGB ranged from less than 1 mg/L to approximately 67 mg/L. The California drinking water primary MCL for nitrate as N is 10 mg/L. (The MCL has also been historically expressed as 45 mg/L nitrate as nitrate [as NO_3], and careful review of historical data is required to verify reporting units.)[10] Only 5 of the 36 wells sampled had nitrate concentrations that exceeded the MCL. These five wells are in the vicinity of Henderson Canyon Road in the northern part of the valley, adjacent to areas of agricultural use, and three of the five wells were screened in the upper aquifer. The concentration of nitrate measured in the remaining 31 wells was less than 7 mg/L nitrate as N (Faunt et al. 2015).

Historical nitrate data for BWD wells ID4-4, ID4-11, ID4-18, and MW-1, located in the NMA, were also reviewed to determine trends. These wells are located on the fringe of current and historical agricultural production in both the upper and middle aquifers. A decreasing nitrate as N concentration trend is observed in ID4-4. Both ID4-11 and ID4-18 show an increasing nitrate as N concentration trend. Insufficient data has been recorded for MW-1 to determine a nitrate as N concentration trend (Figure 3). All concentrations of the BWD wells are below one-half the California drinking water MCL for nitrate as N.

Historical nitrate data for BWD wells ID1-10, ID1-12, ID1-16, Wilcox, ID4-10, ID5-5, MW-4, and the private Cocopah well located in the CMA were reviewed to determine current lateral distribution and trends. These wells are located in or near to the primary area of municipal groundwater production in the Borrego Springs Subbasin. Golf courses and septic return flow with limited areas of agriculture are the probable anthropogenic sources of nitrate to wells in this area of the subbasin. A decreasing nitrate as N concentration trend is noted in ID 1-16. An increasing nitrate concentration trend is observed in well ID1-10. No trend is observed for wells ID1-1, ID1-2, ID4-10, and the Wilcox well. Insufficient data exist to determine a trend for MW-4 and the Cocopah well. Concentrations in all CMA wells are below one-half the California drinking water MCL for nitrate as N (Figures 5, 9 and 10).

[10] The Division of Drinking Water recently made revisions to California drinking water standards for nitrate in California Code of Regulations Sections 64431 (MCL), 64432 (DLR), and 64482 (Health Information). The revisions specify that nitrate laboratory results must be expressed as nitrate as nitrogen. As a result, the MCL for nitrate is now expressed as "10 mg/L (as nitrogen)" instead of "45 mg/L (as nitrate)".

Historical nitrate data for wells ID1-1, ID1-2 and ID1-8 located in the SMA was reviewed to determine trend. Well ID1-8 displays an increasing nitrate as N concentration trend. No trend is observed for well ID1-2 with insufficient data available from well ID1-1. Concentrations for SMA wells are below one-half the California drinking water MCL (Figure 3). Well ID1-8 is downgradient from the Rams Hill golf course, which is potentially an anthropogenic source of nitrates in the SMA in addition to the percolation ponds at the wastewater treatment plant. Rams Hill wells RH-5 and RH-6, which are located on the old golf course, indicate elevated nitrate as N concentrations at 6.6 mg/L and 3.3 mg/L, respectively. Rams Hill will monitor water quality annually from its wells as part of the Long-Term Cooperation Agreement with the BWD. Additionally, Dudek recommends monitoring wells MW-3 and the WWTP well to determine groundwater quality in the middle aquifer.

TDS

TDS concentrations that exceed the California drinking water secondary MCL of 1,000 mg/L were detected in 8 of the 36 wells sampled by the USGS. Each of the wells that exceeded the MCL for nitrate also exceeded the secondary MCL for TDS. Additionally, two wells screened in the middle aquifer and one well screened in the lower aquifer that had concentrations of nitrate as N below 7 mg/L had TDS concentrations above 1,000 mg/L. Typically, however, the concentration of TDS in the lower aquifer was lower than that in the middle and upper aquifers for the wells analyzed as part of the USGS study (Faunt et al. 2015).

Historical TDS data for BWD wells ID4-4, ID4-11, ID4-18, and MW-1 located in the NMA were reviewed to determine trends. These wells display relatively stable TDS concentrations with no trend from the early 1980s to present (Figure 3).

Historical TDS data for BWD wells ID1-10, ID1-12, ID1-16, Wilcox, ID4-10, ID5-5, MW-4, and the private Cocopah well located in the CMA were reviewed to determine current lateral distribution and trends. These wells display stable TDS concentrations with no trend in each well for the period of record monitored (Figures 5 and 6).

Historical TDS data for wells ID1-1, ID1-2, and ID1-8 located in the SMA were reviewed to determine trend. Wells ID1-1 and ID1-8 indicate an increasing trend with respect to TDS concentrations since 1972 (Figure 8). No trend was observed for TDS in well ID1-2.

Sulfate

None of the samples analyzed as part of the USGS study had concentration of sulfate that exceeded the California secondary MCL for sulfate of 500 mg/L; however, four wells had increasing sulfate concentrations with time.[11] The USGS was not able to determine the reason for the increasing concentration trend observed in these wells, and the wells are spread throughout the valley, with no immediate geographic link to the observed trends.

Historical sulfate data for BWD wells ID4-4, ID4-11, ID4-18, and MW-1 located in the NMA were reviewed to determine trends. Wells ID4-4 and ID4-11 display a decreasing trend with respect to sulfate concentrations. No trend was observed for sulfate in well ID4-18 and insufficient data was available for well MW-1 (Figure 3).

Historical sulfate data for BWD wells ID1-10, ID1-12, ID1-16, Wilcox, ID4-10, ID5-5, MW-4, and the private Cocopah well located in the CMA were reviewed to determine current lateral distribution and trends. These wells display relatively stable sulfate concentrations for the period of record monitored in each well (Figures 5 and 6). A decreasing trend for sulfate was indicated in wells ID1-12 and ID1-16. All wells indicate concentrations below the California drinking water secondary recommended MCL of 250 mg/L, except MW-4 at a concentration of 330 mg/L and MW-5A and MW-5B at concentrations of 1,300 mg/L and 2,300 mg/L.

Historical sulfate data for wells ID1-1, ID1-2, and ID1-8 located in the SMA was reviewed to determine trends. Wells ID1-1 and ID1-8 indicate an increasing trend with respect to sulfate. No trend was indicated in well ID1-2. All wells indicate concentrations below the California drinking water secondary recommended MCL, except ID1-1 at a concentration of 650 mg/L.

Radiation

There is limited radionuclide data available for BWD wells. Gross alpha and gross beta results available for BWD indicate concentrations detected are below primary MCLs.

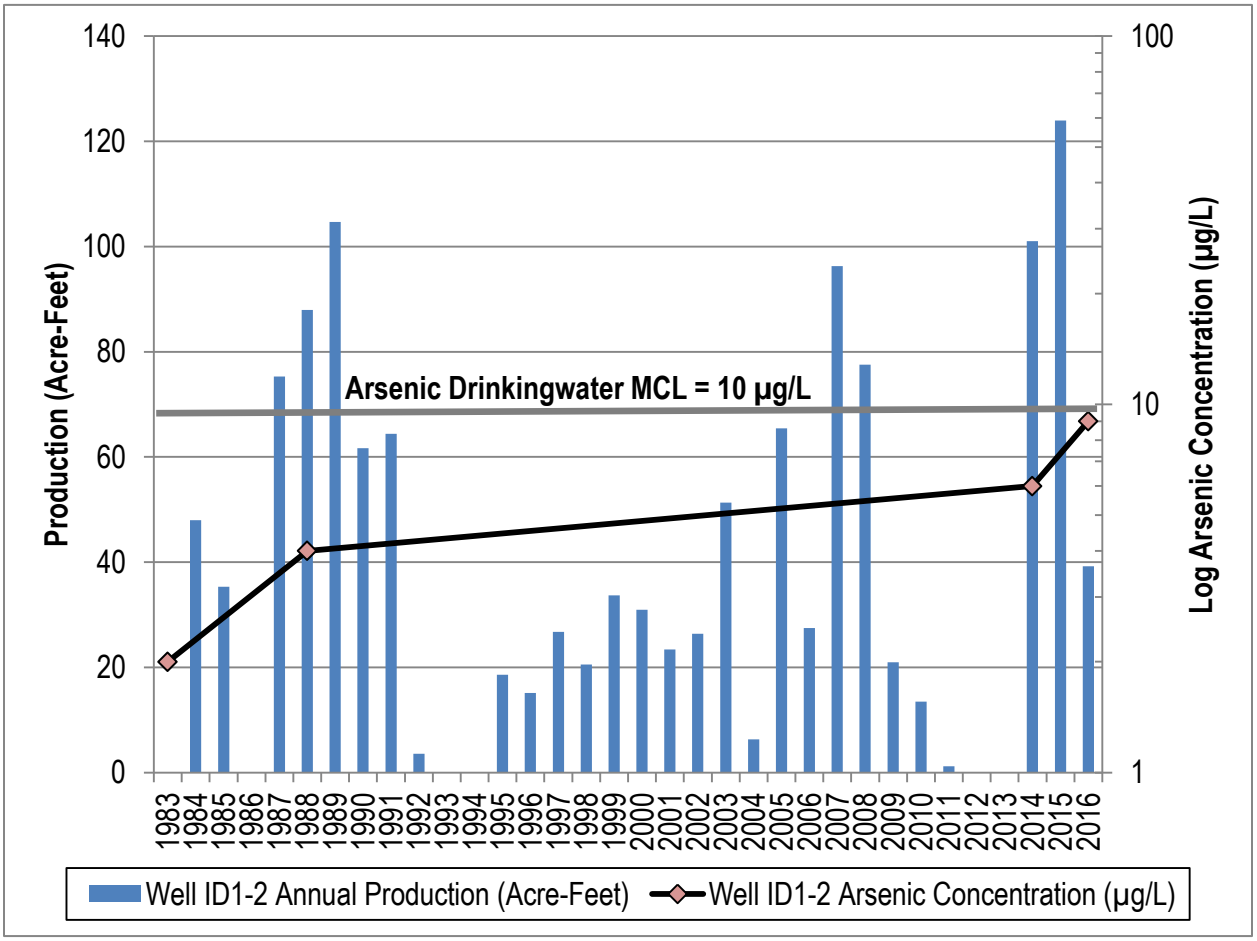
[11] The recommended, upper, and short-term California drinking water secondary MCLs for sulfate are 250 mg/L, 500 mg/L, and 600 mg/L, respectively.

Evaluation of Increasing Arsenic Concentration with Groundwater Pumping and Groundwater Levels for Wells ID1-2 and ID1-8

Well ID1-2

As indicated by the Mann-Kendall trend analysis, arsenic concentrations in Well ID1-2 has a statistically-increasing trend. Annual groundwater production at well ID1-2 was compared with available arsenic concentration data as shown in Exhibit 1.

Exhibit 1
Well ID1-2 Groundwater Production and Arsenic Data



A linear regression analysis of the dependent variable, arsenic concentration was plotted versus the independent variable, annual groundwater production for Well ID1-2. The goodness of fit for well ID1-2 linear regression was poor (R square value = 0.03).

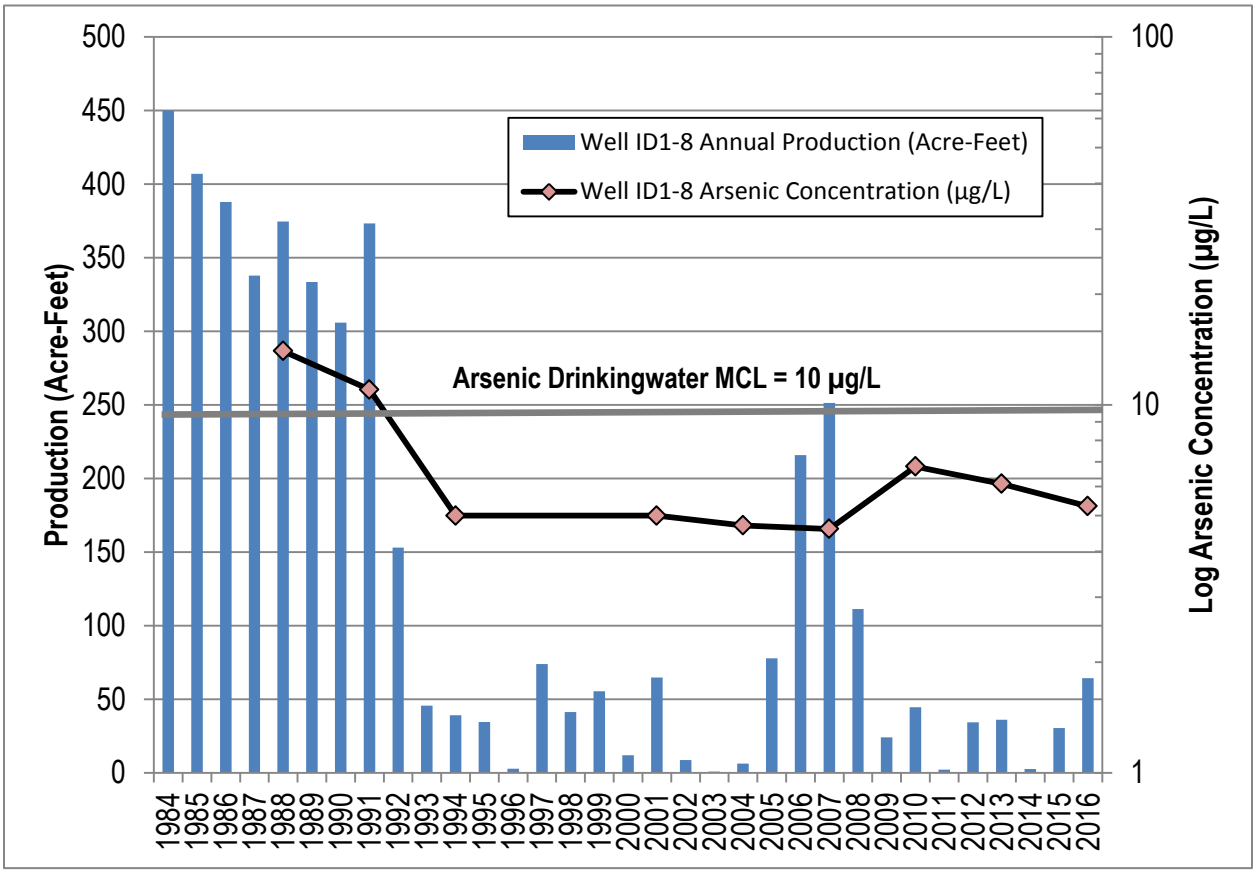
Sufficient groundwater level data is not available over the period of record to determine if there is a correlation between arsenic concentration and groundwater levels. Additional arsenic concentration, production, and groundwater level data is required to make any further correlation of the data for well ID1-2.

ID1-8

As indicated by the Mann-Kendall trend analysis, arsenic concentrations in well ID1-8 have no statistically determined trend. Visual review of the data shown in Exhibit 2 suggests that arsenic concentrations initially dropped and are now stable. However, since arsenic concentrations can vary with depth, further review of the data was conducted with respect to groundwater levels and production rates.

Annual groundwater production at Well ID1-8 was compared with available arsenic concentration data as shown in Exhibit 2.

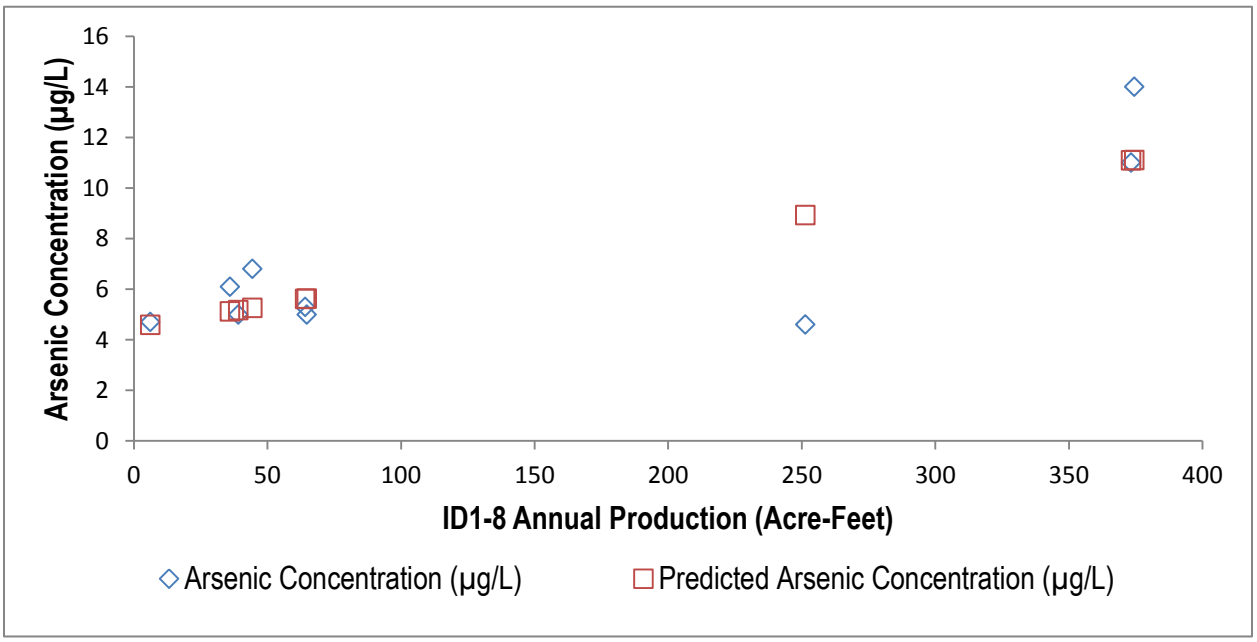
Exhibit 2
Well ID1-8 Groundwater Production and Arsenic Data



Sources: Production and groundwater quality data provided from BWD files.

A linear regression analysis of the dependent variable, arsenic concentration was plotted versus the independent variable, annual groundwater production for well ID1-8 (Exhibit 3). The goodness of fit for well ID1-8 linear regression was good (R square value = 0.65).

Exhibit 3
Well ID1-8 One-Way Linear Regression



Additional linear regression analysis was performed of the dependent variable, arsenic concentration plotted versus the independent variables, annual groundwater production, and groundwater elevation for well ID1-8 (Exhibits 4a and 4b). The goodness of fit for the two-way well ID1-8 linear regression was good (R square value = 0.66) and slightly better than the one-way linear regression.

Exhibit 4A
Well ID1-8 Two-Way Linear Regression

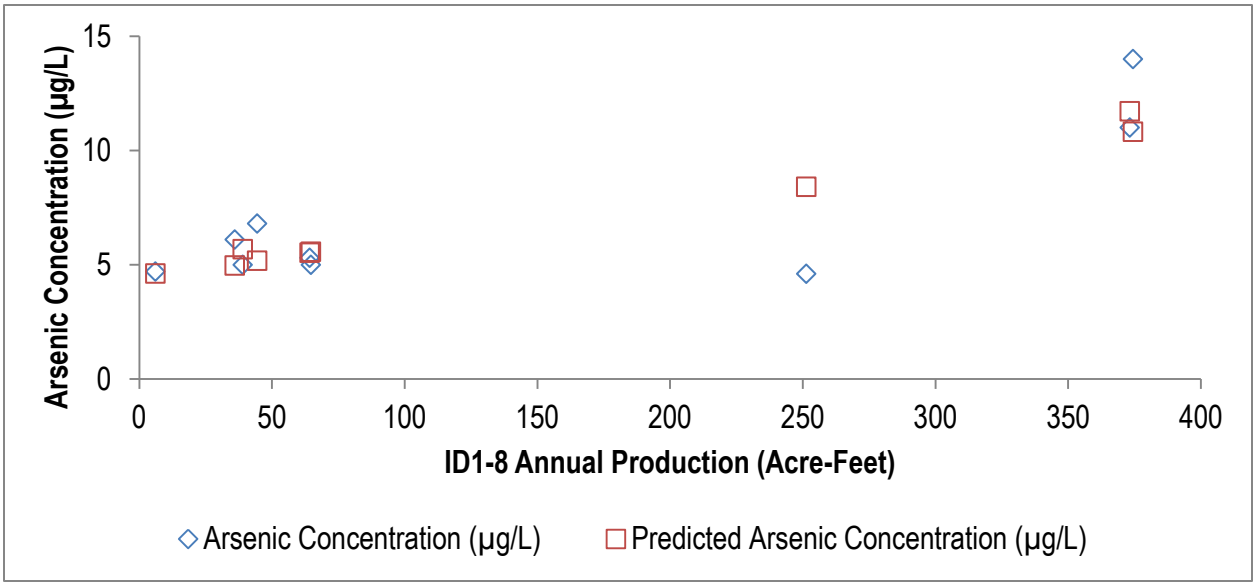
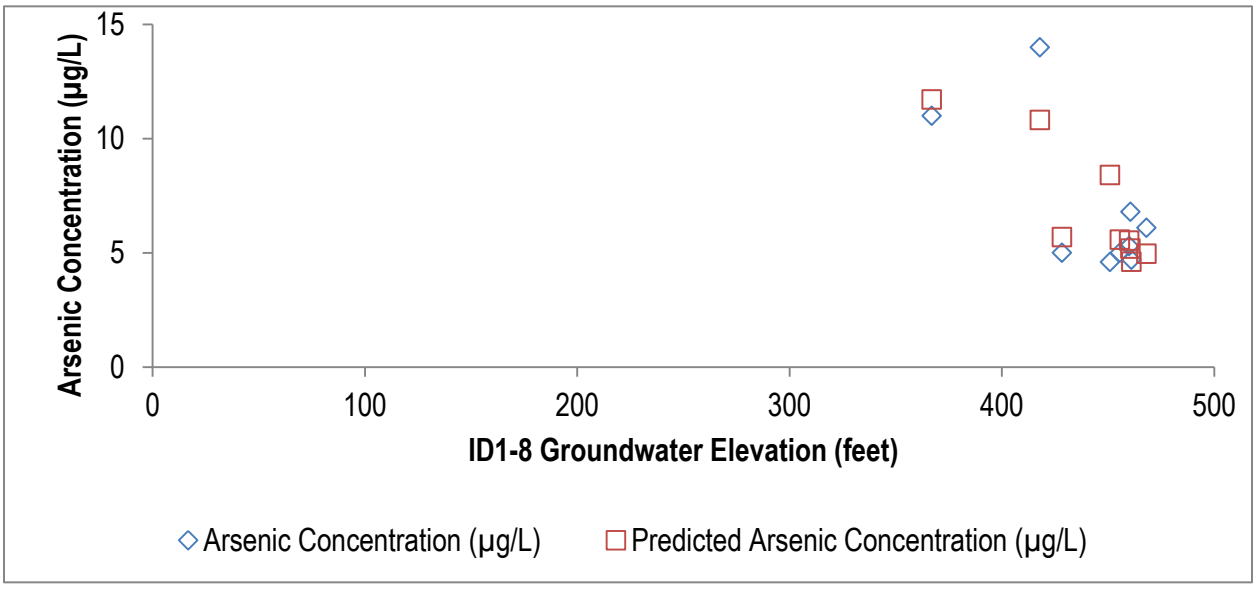


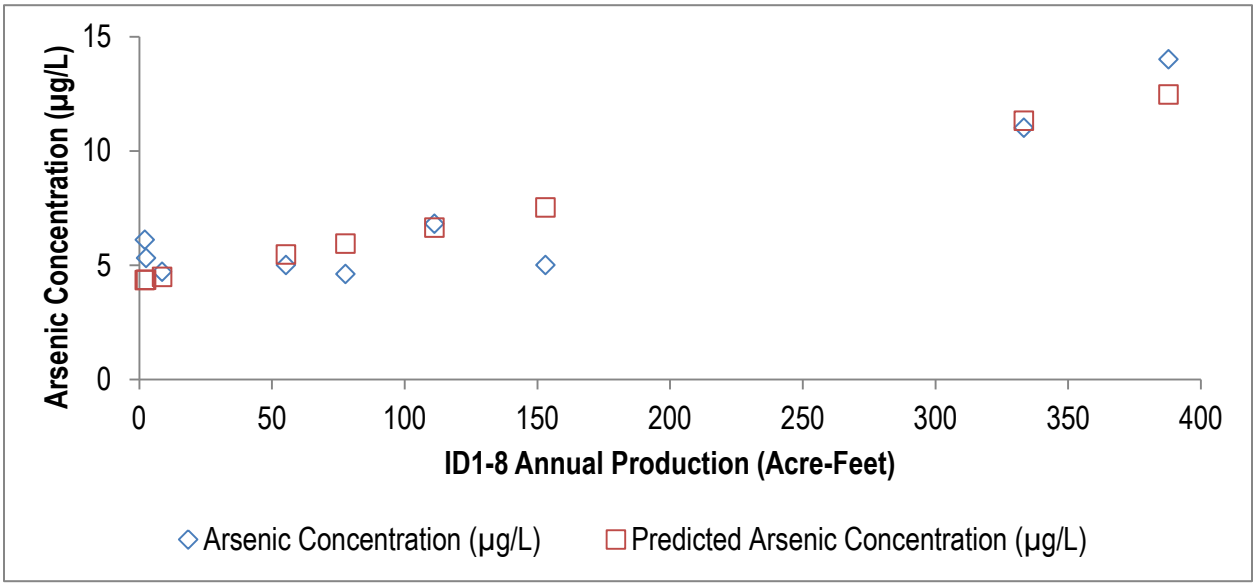
Exhibit 4B
Well ID1-8 Two-Way Linear Regression



Notes: The upper graph displays ID1-8 annual production vs. arsenic concentration linear regression while the lower graph displays ID1-8 groundwater elevation vs. arsenic concentration linear regression.
Sources: Production, groundwater level and groundwater quality data provided from BWD files.

As there appears to be about a 2-year lag in increased arsenic concentration versus pumping, an alternative linear regression was performed by forcing the data with a 2-year correction. A linear regression analysis of the dependent variable, arsenic concentration was plotted versus the independent variable, annual groundwater production with a 2-year lag applied for well ID1-8 (Exhibit 5). The goodness of fit for Well ID1-8 linear regression 2-year lag was best (R square value = 0.83).

Exhibit 5
Well ID1-8 2-Year Lag Linear Regression



Sources: Production, groundwater level and groundwater quality data provided from BWD files.

If the linear regression equation: y = Arsenic = 4.293 + (0.0177*Production Rate) from the 2-year lag regression is applied for predictive analysis, then a predicted arsenic concentration is arrived for each annual production rate (Table 3).

Table 3
2-Year Lag Predictive Arsenic Concentration ID1-8

Annual Production Rate (acre-feet)	Predicted Arsenic Concentration (µg/L)
100	6.06
200	7.83
300	9.60
400	11.37
500	13.14

Table 3
2-Year Lag Predictive Arsenic Concentration ID1-8

Annual Production Rate (acre-feet)	Predicted Arsenic Concentration (µg/L)
600	14.92
650	15.80
700	16.69
800	18.46
900	20.23
1,000	22.00

Note: The predicted arsenic concentration is based on the 2-year lag linear regression equation for pumping at ID1-8.

Based on the 2-year lag linear regression of production and arsenic data from well ID1-8, groundwater production in excess of 300 acre-feet per year at well ID1-8 is predicted to exceed the arsenic drinking water standard of 10 µg/L after approximately 2 years of production at this rate.. Assuming the 1988 and 1991 measured arsenic concentration of 14 µg/L and 11 µg/L, respectively, represent true values, there is a high probability that the current rate of groundwater production (in excess of 1,000 acre-feet) in the SMA could potentially result in exceedance of the arsenic drinking water standard at well ID1-8. Because available data is limited (only 2 years of data for newly drilled wells) in the SMA, additional analysis could not be performed.

NON-TREATMENT AND TREATMENT ALTERNATIVES

While none of the BWD's wells currently exceed California drinking water MCLs, treatment alternatives for COCs are discussed herein to explore options in the event that groundwater quality were to become impaired. Non-treatment and treatment options to meet drinking water standards typically include blending, wellhead treatment, or supplementing the impaired source of supply. In brief, the options include the following.

Switch Sources. As indicated in this Draft Working Technical Memorandum, the BWD is supplied from several wells located in the NMA, CMA, and SMA of the Borrego Springs Subbasin. If a BWD well were to exceed a drinking water standard, the likely most cost-effective option would be to switch supply to an existing water well(s).

Procurement of a New Source. If additional quantity of groundwater meeting California drinking water MCLs was required by the BWD, then acquiring existing wells or drilling new water wells in the basin may be a cost-effective option. The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and should further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Blending. If a system has supply sources with low and high concentrations of COCs, blending is a practical option if the source of supply with a low concentration of the COCs is reliable and the sources can be brought together for mixing at a common header (i.e., blending location which may occur within a pipeline). To allow for a safety margin, target concentration of the blended stream is typically set 20% below the respective MCL.

Sidestream Treatment. If COCs were to exceed a respective MCL by a small margin, then sidestream treatment could be a viable option for some COCs such as arsenic. Sidestream treatment involves splitting flow, treating one stream, and blending it with the untreated stream prior to distribution.

Wellhead Treatment. If the typically more cost-effective options above were exhausted, then wellhead treatment would be evaluated in the event that COCs were to exceed drinking water standards. The U.S. Environmental Protection Agency (EPA) identifies several best available technologies for arsenic removal, which are discussed in further detail in a previous Dudek study, *Water Replacement and Treatment Cost Analysis for the Borrego Valley Groundwater Basin* (Dudek 2015).

CONCLUSIONS AND RECOMMENDATIONS

Groundwater quality in the Borrego Springs Subbasin varies both geographically from north to south in the subbasin and with depth in the aquifer. Dudek recommends considering the designation of three groundwater quality management zones to improve management of the subbasin. These will address the geographic effects on groundwater quality and better manage water quality moving forward. Three management areas are proposed for the subbasin: North Management Area (NMA), Central Management Area (CMA), and a South Management Area (SMA). These management areas are based on both subsurface geological features such as the Desert Lodge anticline that limit hydrologic communication between the southern part of the subbasin and the central part of the subbasin, as well as on differences in groundwater production demands, well screens, and pumping depressions between the southern, central, and northern parts of the subbasin.

Potential risks were examined in this technical memorandum associated with temporal changes in groundwater quality specific to potential exceedances of drinking water MCLs in BWD production wells due to the long-standing critical overdraft. A review of available historical groundwater quality data has identified numerous COCs in the Borrego Springs Subbasin including arsenic, fluoride, nitrate, sulfate, and TDS.

- Statistical analysis of the data indicates increasing trend for arsenic, fluoride, nitrate, sulfate, and TDS in select wells. In the NMA, well ID4-11 indicates increasing trend for

fluoride, and wells ID4-11 and ID4-18 indicate increasing trend for nitrate as N. In the CMA, the Wilcox well indicates increasing trend for fluoride, and well ID1-10 indicates increasing trend for nitrate as N. In the SMA, well ID1-2 indicates increasing trend for arsenic; well ID1-8 indicates an increasing trend for nitrate as N; and wells ID1-1 and ID1-8 indicate an increasing trend for sulfate and TDS.

- Areas of the subbasin where COC concentrations exceed MCLs include arsenic in multiple wells and TDS in one well in the SMA. Historical exceedance of nitrate as N in the upper aquifer of the NMA is based on data collected from old well ID4-4. Sulfate exceeding the secondary MCL is indicated in wells MW-5A and MW-5B in the CMA at the Borrego Sink, and well ID1-1 in the SMA.
- Groundwater quality changes with depth are most pronounced in the lower aquifer of the SMA that has elevated arsenic concentrations above the California drinking water standard. Review of limited available data are uncertain as to whether arsenic or other COCs increase as a function of depth in the subbasin. Additional data collection is required to characterize groundwater quality and fill the data gap to determine whether as groundwater levels decrease if groundwater quality degrades.

Due to the limited available groundwater quality data, there is often insufficient data to determine trend, and it is recommended that BWD begin to sample wells annually rather than every 3 years as required by the DDW, at least for wells that indicated detections of COCs above one-half the drinking water MCL or where increasing concentration trend is indicated.

Groundwater quality data support that water quality decreases with depth, and it is anticipated that a greater percentage of groundwater production will be derived from the middle and lower aquifers before groundwater levels are stabilized under the GSP. However, since many of the wells have very long open screen lengths, the groundwater quality data reflect a blend of water with depth and do not clearly provide depth-specific data. It is also recommended that to better assess risks to groundwater quality and future sources of BWD supply that additional existing private wells be sampled and the potential to conduct depth-discrete sampling of existing wells and/or drilling of test/monitoring wells be evaluated.

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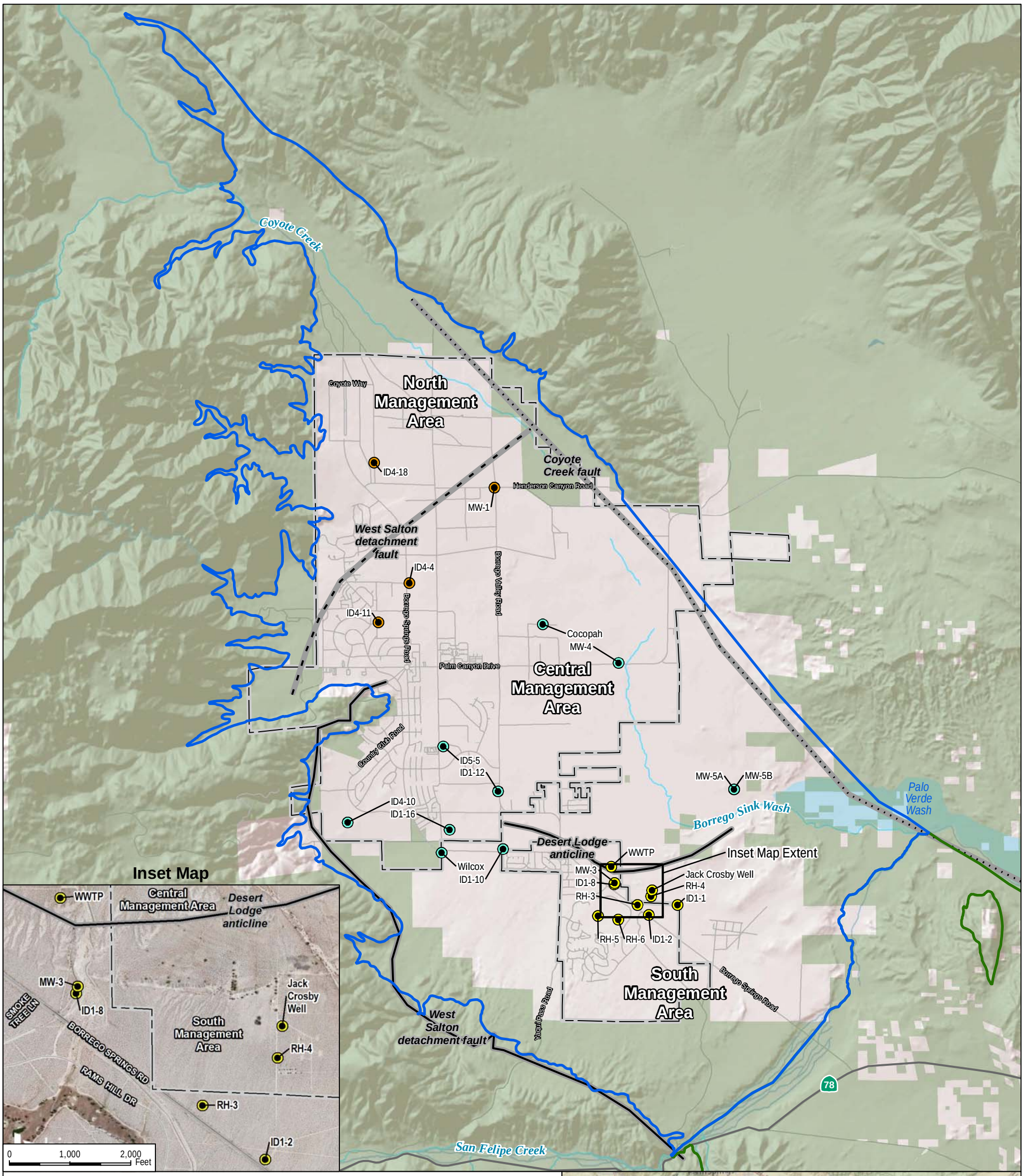
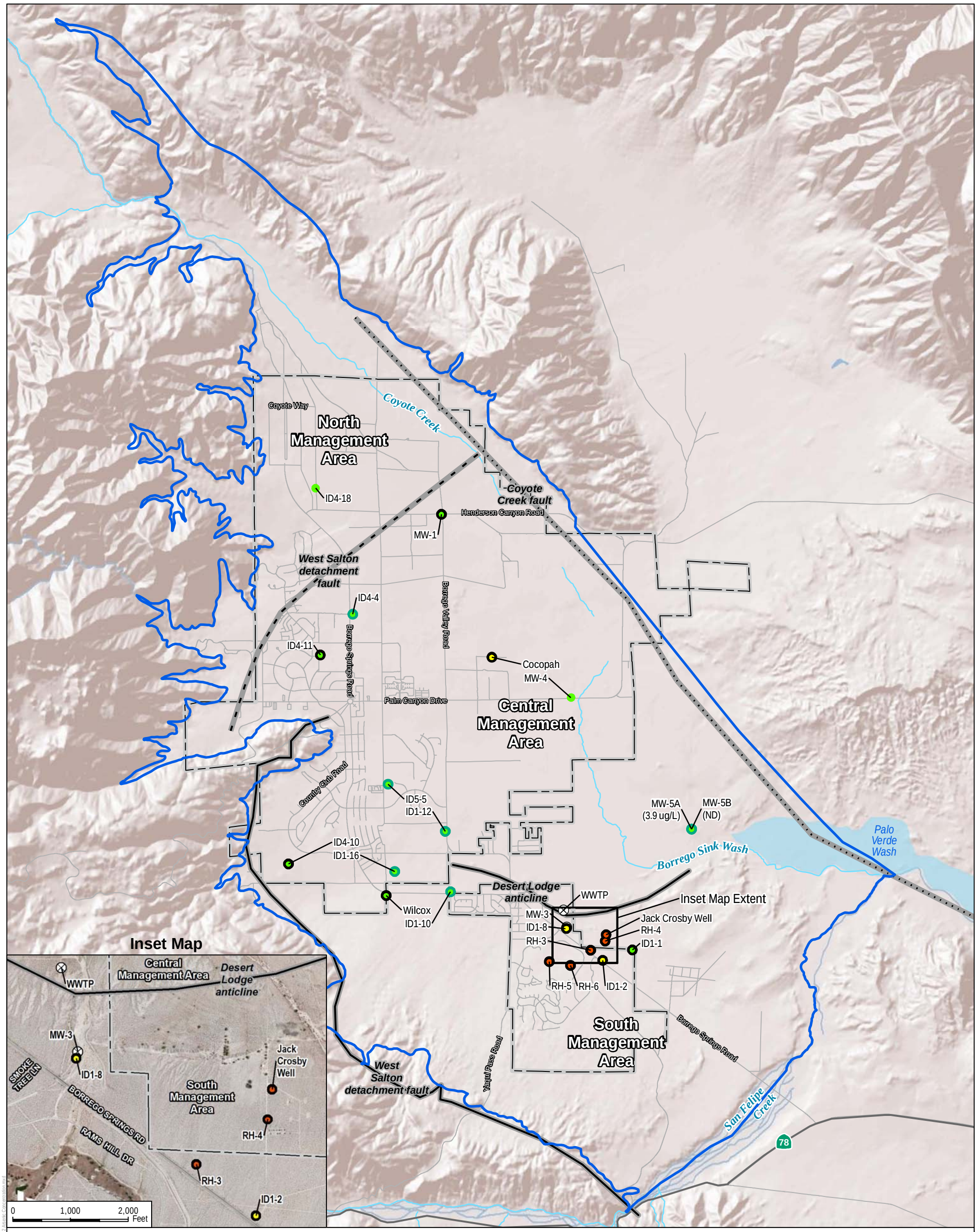


SOURCE: USGS; DWR; BWD; Steely et. al. 2009

Figure 1
Indicator Well Location Map and Proposed Management Areas



Borrego Water District

Borrego Springs Groundwater Subbasin (7-024.01)

Faults and Folds

Certain

Concealed

Un-Certain

Major Streams and Washes/Sinks

Major Stream Channels

Wash/Sink

Arsenic Wellhead Concentrations

Upper Aquifer

- Less than 1/2 the MCL (5 ug/L)

Middle Aquifer

- Less than 1/2 the MCL (5 ug/L)

Lower Aquifer

- No Sample
- Less than 1/2 the MCL (5 ug/L)
- Less than the MCL (10 ug/L)
- Greater than the MCL (10 ug/L)

Note: Many wells are screened in multiple aquifers, but wells have been designated by aquifer based on the assumed preferential pumping zone.
Wellhead concentrations are based on the most recent sampling events.

N 0 1 2 Miles

DUDEK

SOURCE: USGS; DWR; BWD; Steely et. al. 2009

Figure 2
Arsenic Wellhead Concentrations

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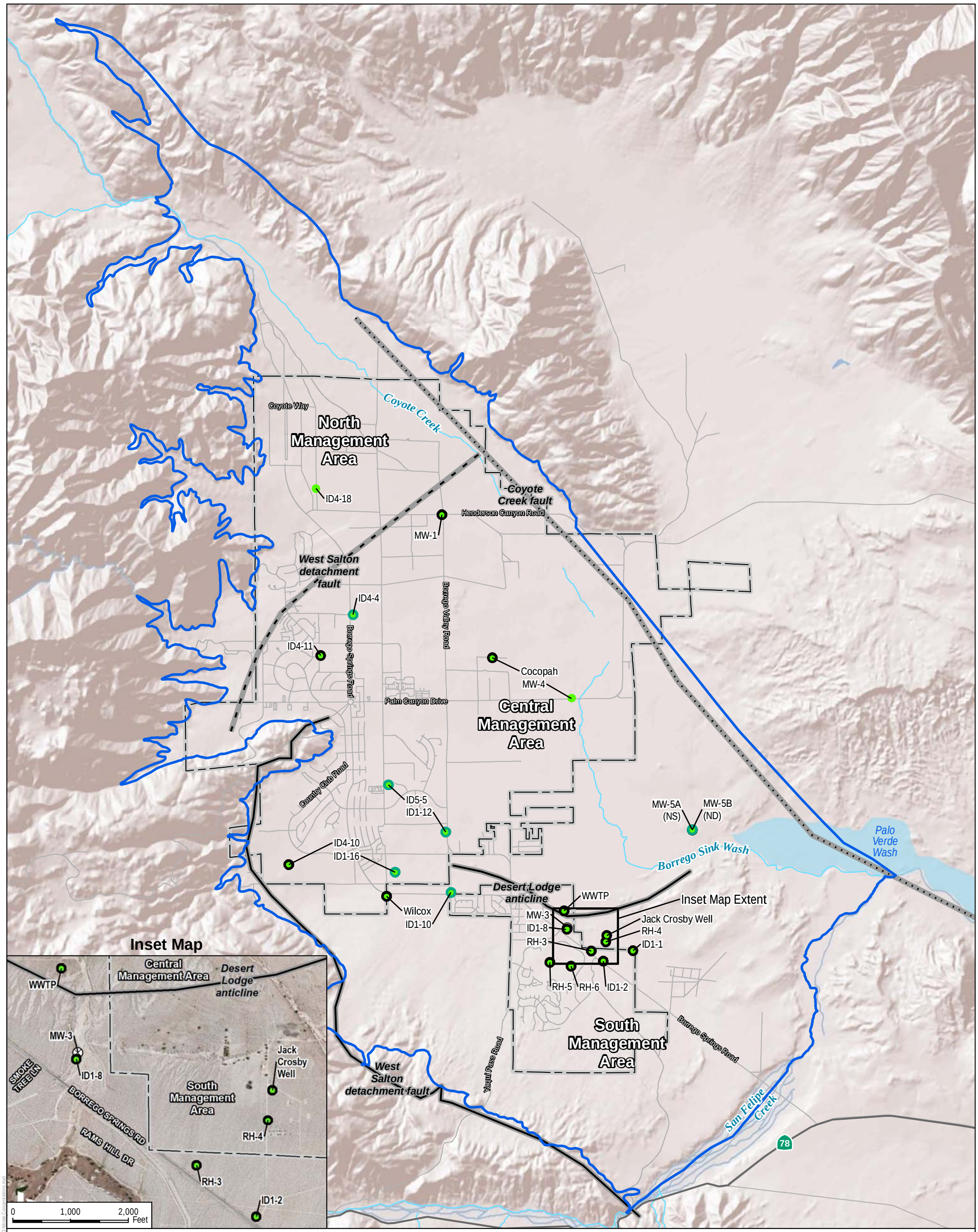


Borrego Water District

Borrego Springs Groundwater Subbasin (7-024.01)

Faults and Folds

Certain

Concealed

Un-Certain

Major Streams and Washes/Sinks

Major Stream Channels

Wash/Sink

Nitrate as Nitrogen (N) Wellhead Concentrations

Upper Aquifer

Less than 1/2 the MCL (5 mg/L)

Middle Aquifer

No Sample

Less than 1/2 the MCL (5 mg/L)

Lower Aquifer

No Sample

Less than 1/2 the MCL (5 mg/L)

Less than the MCL (10 mg/L)

Note: Many wells are screened in multiple aquifers, but wells have been designated by aquifer based on the assumed preferential pumping zone.
Wellhead concentrations are based on the most recent sampling events.

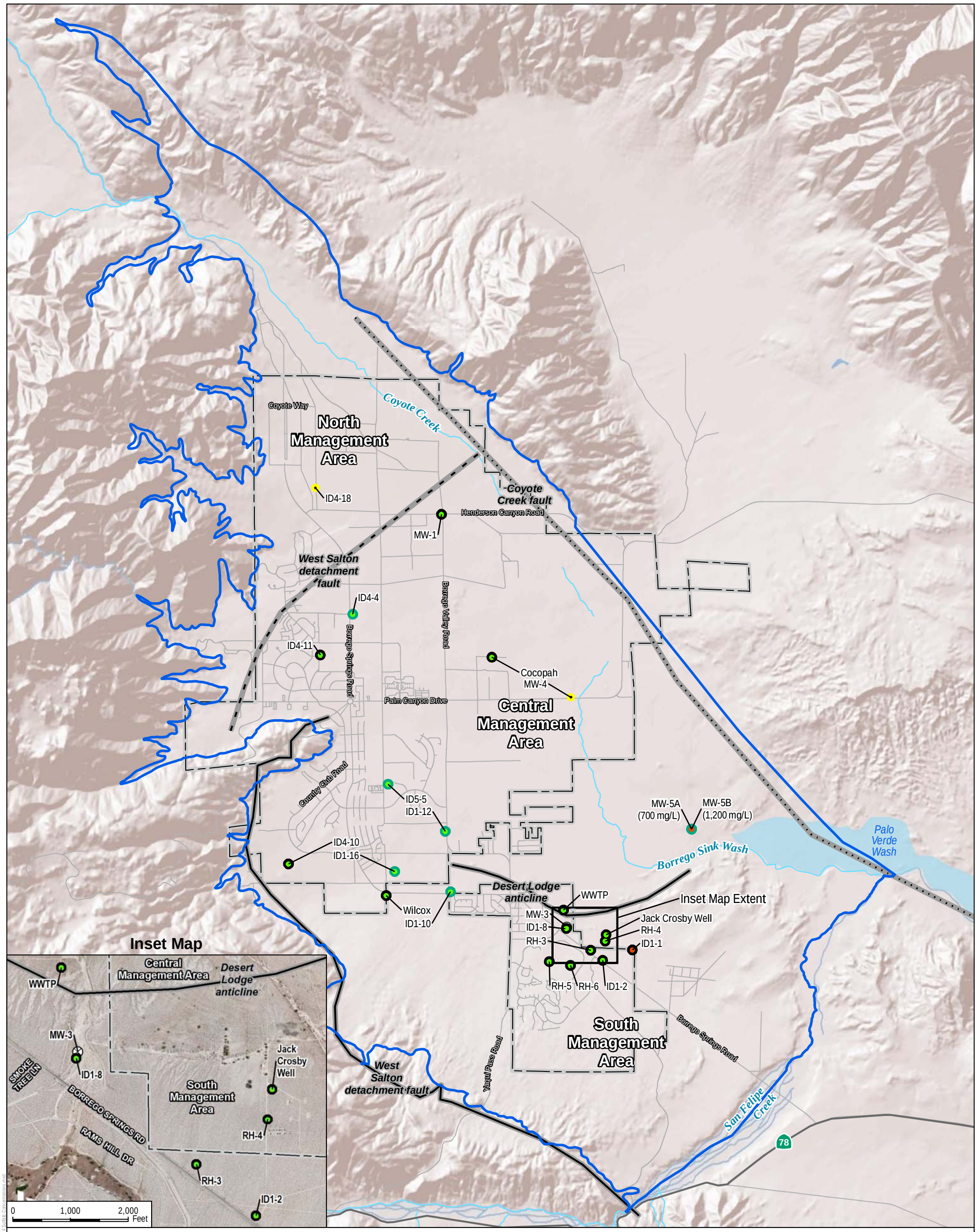
0 1 2 Miles

DUDEK

SOURCE: USGS; DWR; BWD; Steely et. al. 2009

Figure 3
Nitrate as Nitrogen (N) Wellhead Concentrations

Date: 6/7/2017 Last saved by jkellogg Path: J:\Hydro\Projects\Borrego_Water_District\MXD\EPA_MXD\Groundwater_Quality_Risk_Assessment\Figure 3 Nitrate Concentrations.mxd



Borrego Water District

Borrego Springs Groundwater Subbasin (7-024.01)

Faults and Folds

Certain

Concealed

Un-Certain

Major Streams and Washes/Sinks

Major Stream Channels

Wash/Sink

Sulfate Wellhead Concentrations

Upper Aquifer

Less than the secondary MCL (500 mg/L)

Middle Aquifer

Less than 1/2 the secondary MCL (250 mg/L)

Greater than the secondary MCL (500 mg/L)

Lower Aquifer

No Sample

Less than 1/2 the secondary MCL (250 mg/L)

Greater than the secondary MCL (500 mg/L)

Note: Many wells are screened in multiple aquifers, but wells have been designated by aquifer based on the assumed preferential pumping zone.
Wellhead concentrations are based on the most recent sampling events.

0 1 2 Miles

SOURCE: USGS; DWR; BWD; Steely et. al. 2009

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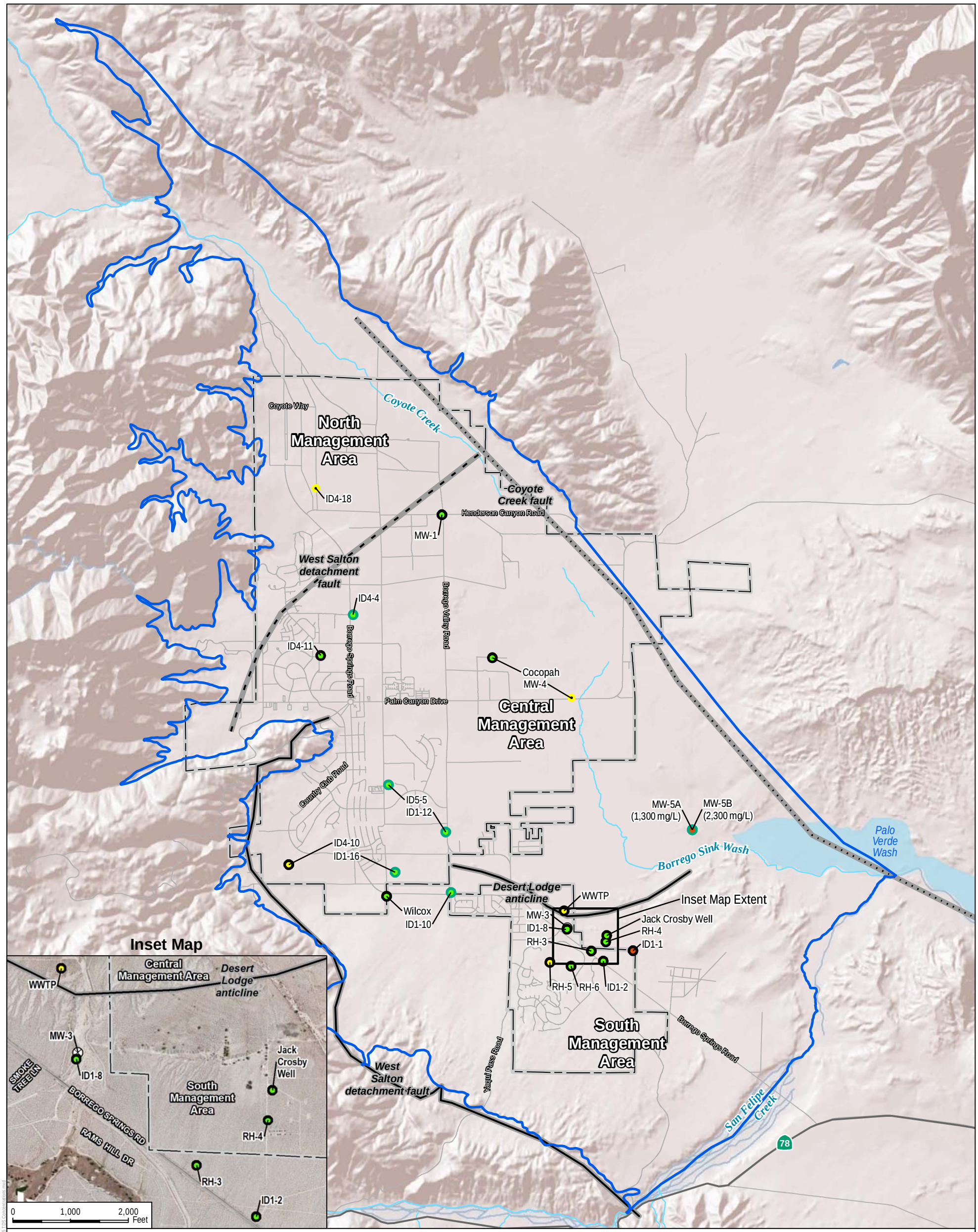
Figure 4
Sulfate Wellhead Concentrations



Borrego Water District

Borrego Springs Groundwater Subbasin (7-024.01)

Faults and Folds

Certain

Concealed

Un-Certain

Major Streams and Washes/Sinks

Major Stream Channels

Wash/Sink

Total Dissolved Solids (TDS) Wellhead Concentrations

Upper Aquifer

Less than the secondary MCL (1,000 mg/L)

Middle Aquifer

Less than 1/2 the secondary MCL (500 mg/L)

Greater than the secondary MCL (1,000 mg/L)

Lower Aquifer

No Sample

Less than 1/2 the secondary MCL (500 mg/L)

Less than the secondary MCL (1,000 mg/L)

Greater than the secondary MCL (1,000 mg/L)

Note: Many wells are screened in multiple aquifers, but wells have been designated by aquifer based on the assumed preferential pumping zone.
Wellhead concentrations are based on the most recent sampling events.

N

0 1 2 Miles

DUDEK

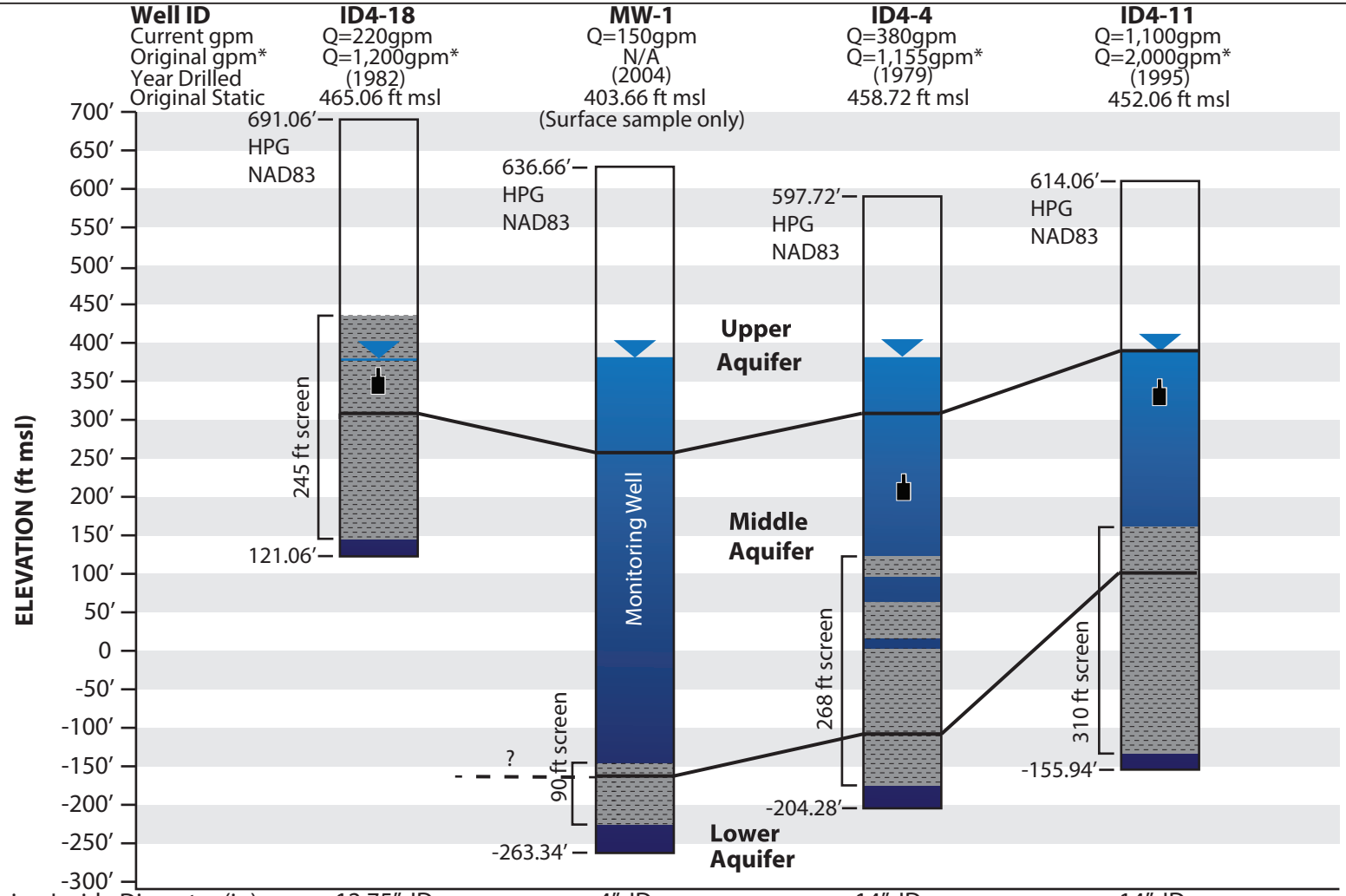
SOURCE: USGS; DWR; BWD; Steely et. al. 2009

Figure 5
Total Dissolved Solids Wellhead Concentrations

Borrego Springs Subbasin Groundwater Quality Risk Assessment

DRAFT June 2017

Date: 6/1/2017 Last saved by jkellogg Path: T:\Hydro\Projects\Borrego Water District\MXD\ENA_MXD\Groundwater Quality Risk Assessment\Figure 5 TDS Concentrations.mxd



	ID4-18	MW-1	ID4-4	ID4-11
Casing Inside Diameter (in):	12.75″ ID	4″ ID	14″ ID	14″ ID
Well Depth (ft bls):	570′ bls	900′ bls	786′ bls	770′ bls
Borehole Depth (ft bls):	699′ bls	1,238′ bls	802′ bls	800′ bls
Pump Size (HP):	50 HP	N/A	150 HP	200 HP
Pump Depth (ft msl):	251 ft msl	N/A	219 ft msl	269 ft msl
Specific Capacity (gpm/ft):	12.83 gpm/ft	00.36 gpm/ft	12.83 gpm/ft	86.95 gpm/ft
Current Production Rate (gpm):	220gpm	Monitoring Well	400gpm	1,1000 gpm
Casing Type:	Mild Steel	PVC	Mild Steel	Mild Steel

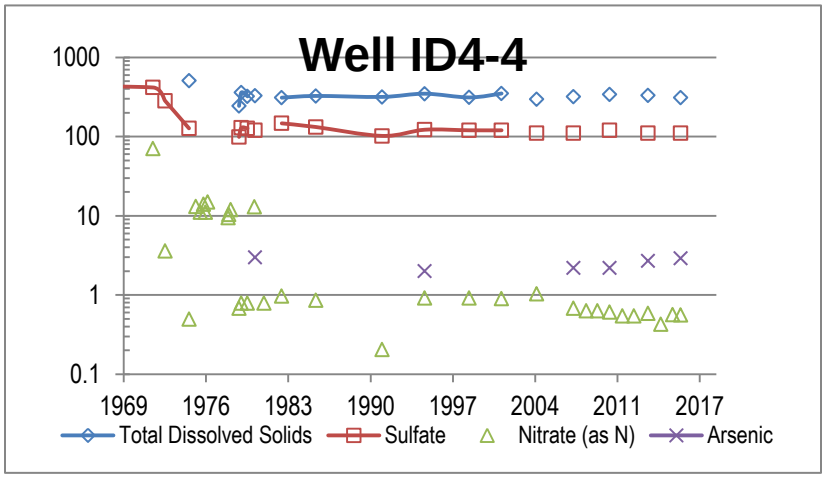
*Indicates original tested production rate when drilled

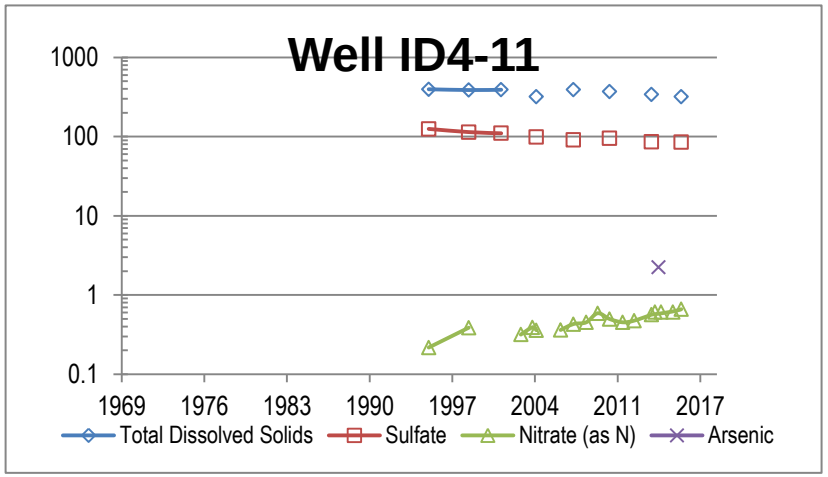
SOURCE: DWD, Pump Check 2013, DWR Well Completion Reports '79/'95/'82/'04

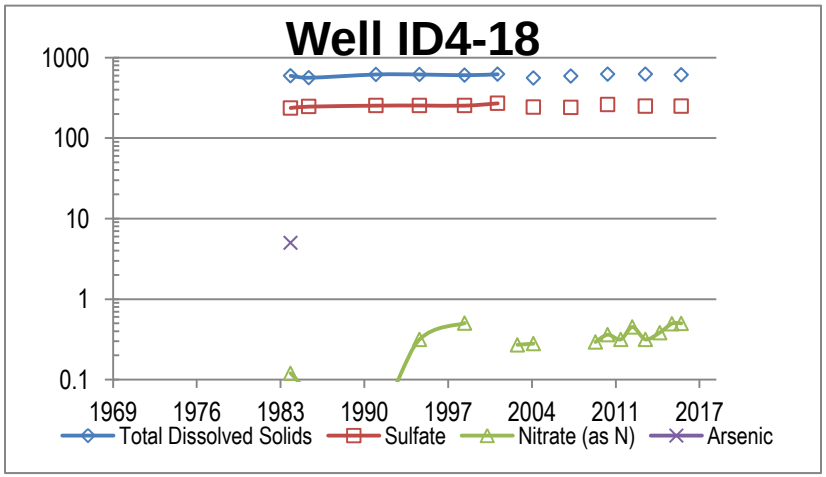
FIGURE 6

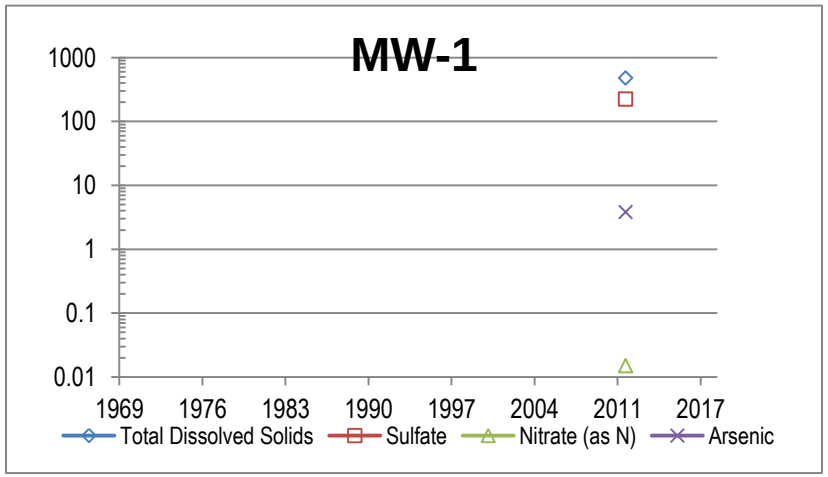
DRAFT: North Management Area Wells

Figure 7 North Management Area Groundwater Quality

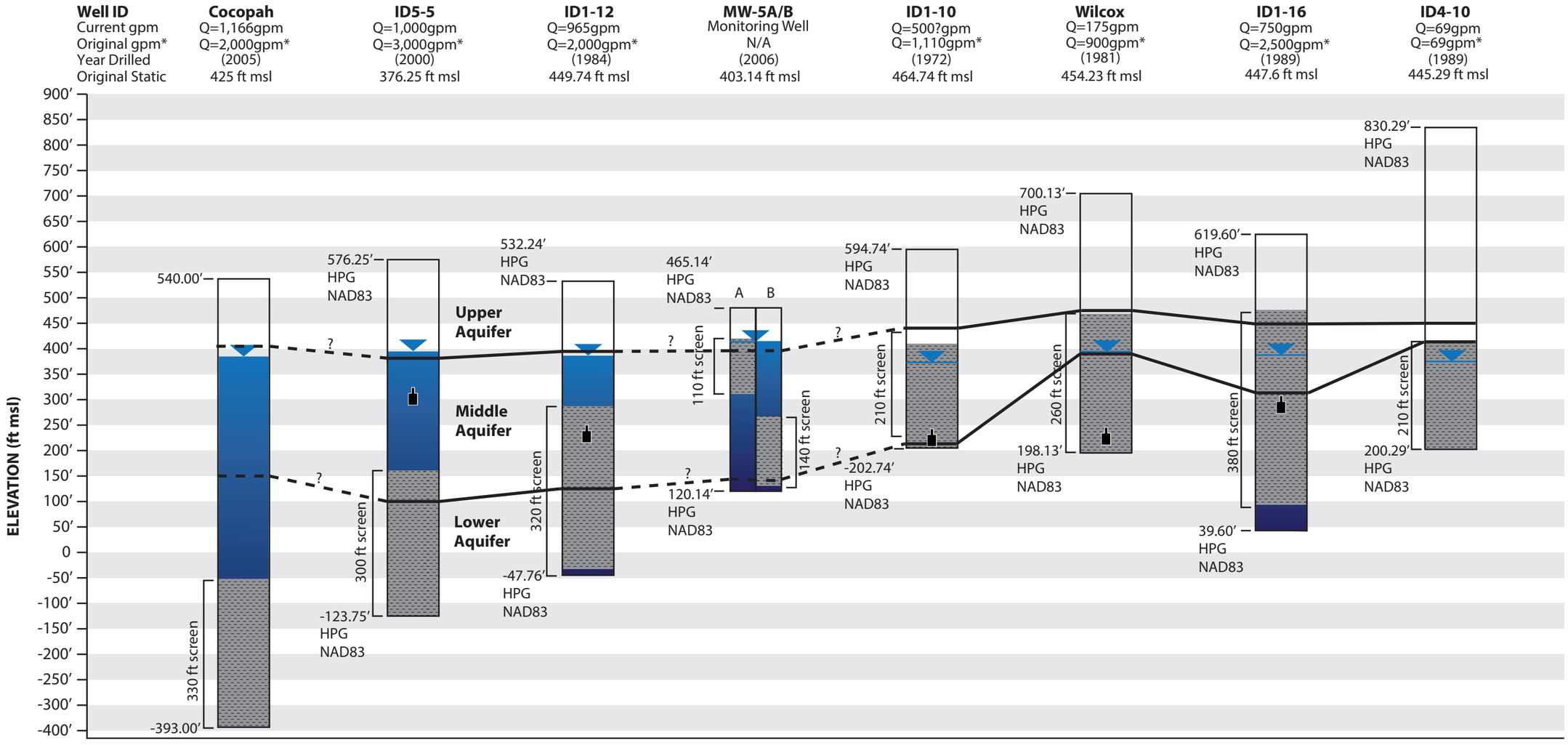








Notes: Water entering well ID4-4 near static groundwater level was found to be high in dissolved minerals and nitrate. This zone was sealed off by the Roscoe Moss Co. in 1972 and redilled in 1979.
Source: BWD 2016, USGS 1980, DDW 2017



Casing Inside Diameter (in):	14″ ID	16″ ID	14.75″ ID	4″ ID	12.75″ ID	12.75″ ID	16″ ID	8″ ID
Well Depth (ft bls):	570′ bls	700′ bls	580′ bls	900′ bls	392′ bls	502′ bls	550′ bls	630′ bls
Borehole Depth (ft bls):	699′ bls	708′ bls	726′ bls (2004)	1,238′ bls (2004)	816′ bls	502′ bls	705′ bls	630′ bls
Pump Size (HP):	160 HP	200 HP	200 HP	N/A	150 HP	80 HP	200 HP	N/A
Pump Depth (ft msl):	N/A	316 ft msl	242 ft msl	N/A	204 ft msl	225 ft msl	219 ft msl	N/A
Specific Capacity (gpm/ft):	N/A	N/A	75.4 gpm/ft	N/A	20.3 gpm/ft	26.4 gpm/ft	31.0 gpm/ft	20 gpm/ft
Current Production Rate (gpm):	1,166 gpm	1,000 gpm	965 gpm	Monitoring Well	500? gpm	350? gpm	723 gpm	N/A
Casing Type:	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
Drop Pipe:	N/A	10″	8″	N/A	8″	6″	8″	N/A

*Indicates original tested production rate when drilled.

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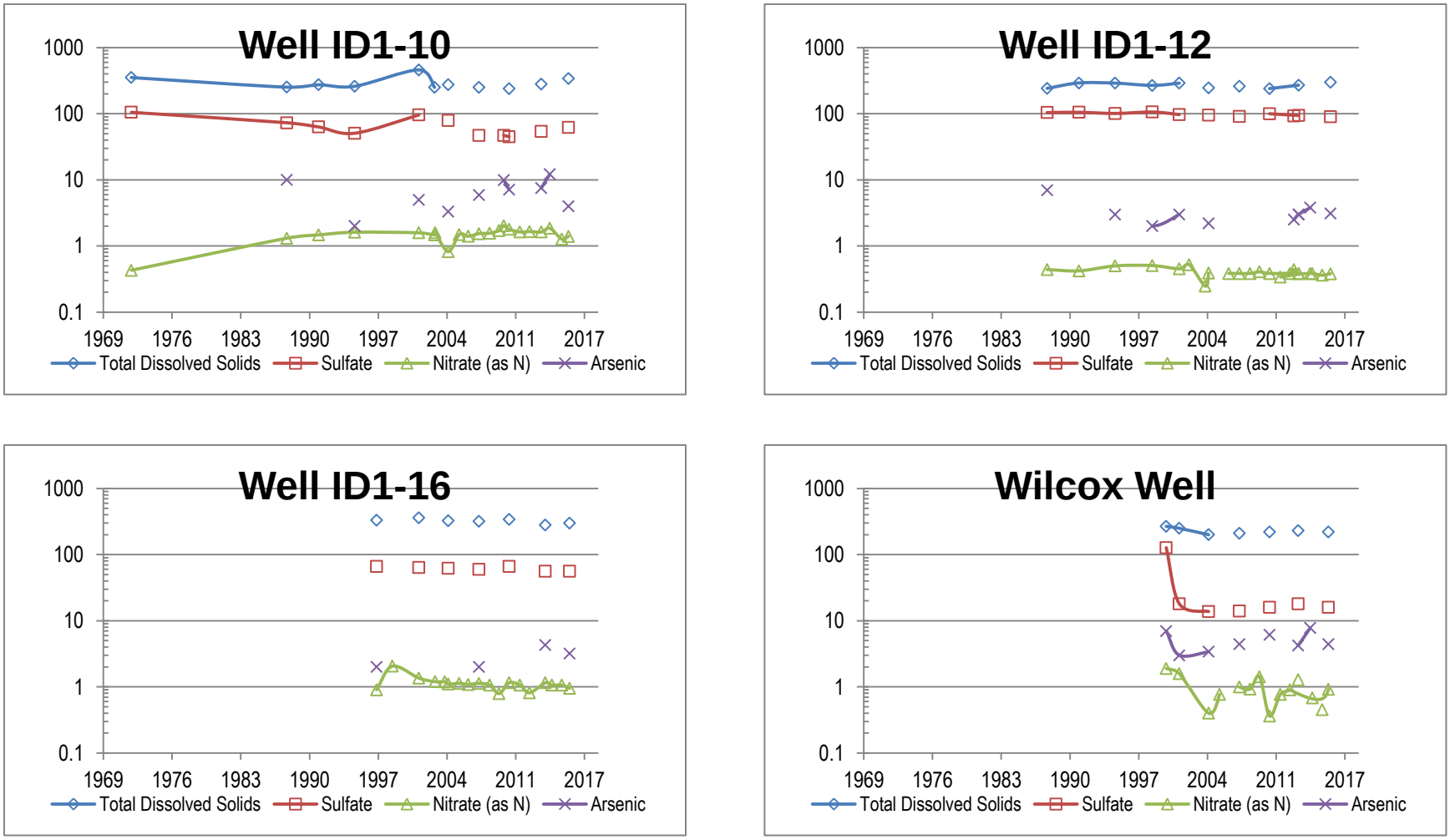
June 2017

SOURCE: DWD, Pump Check 2008, 2009, 2010, 2013, DWR Well Completion Reports '79/'95/'82/'04, USGS

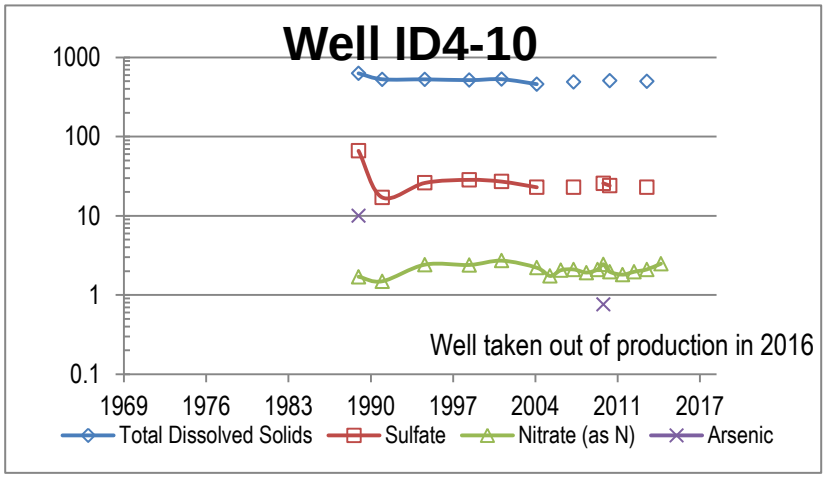
FIGURE 8
DRAFT: Central Management Area Wells

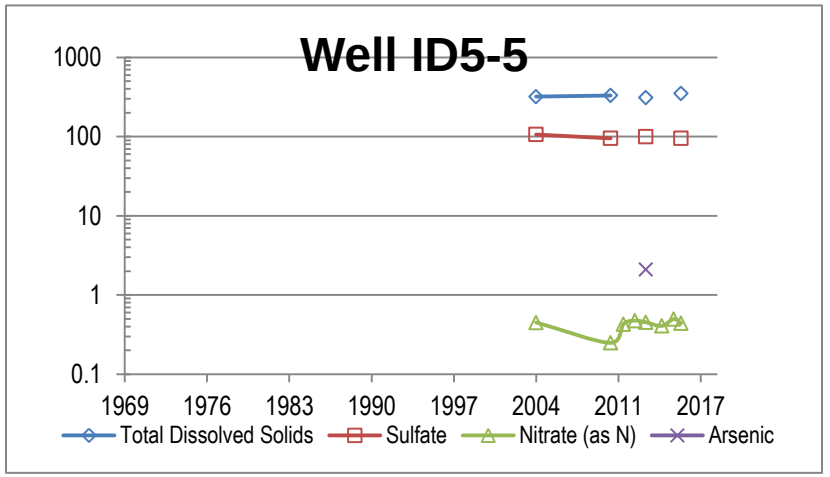
Figure 9 Central Management Area Groundwater Quality

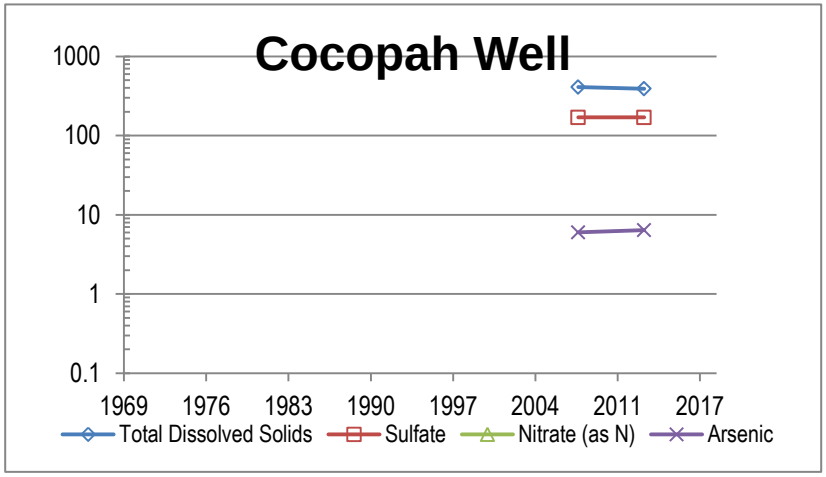


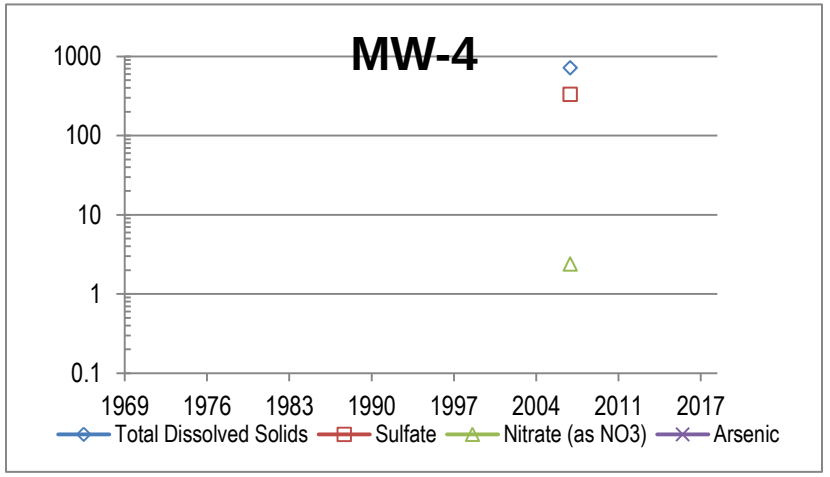
Source: BWD 2016, USGS 2009, 2012, Rezaie-Boroon et al. 2014

Figure 10 Central Management Area Groundwater Quality (Continued)



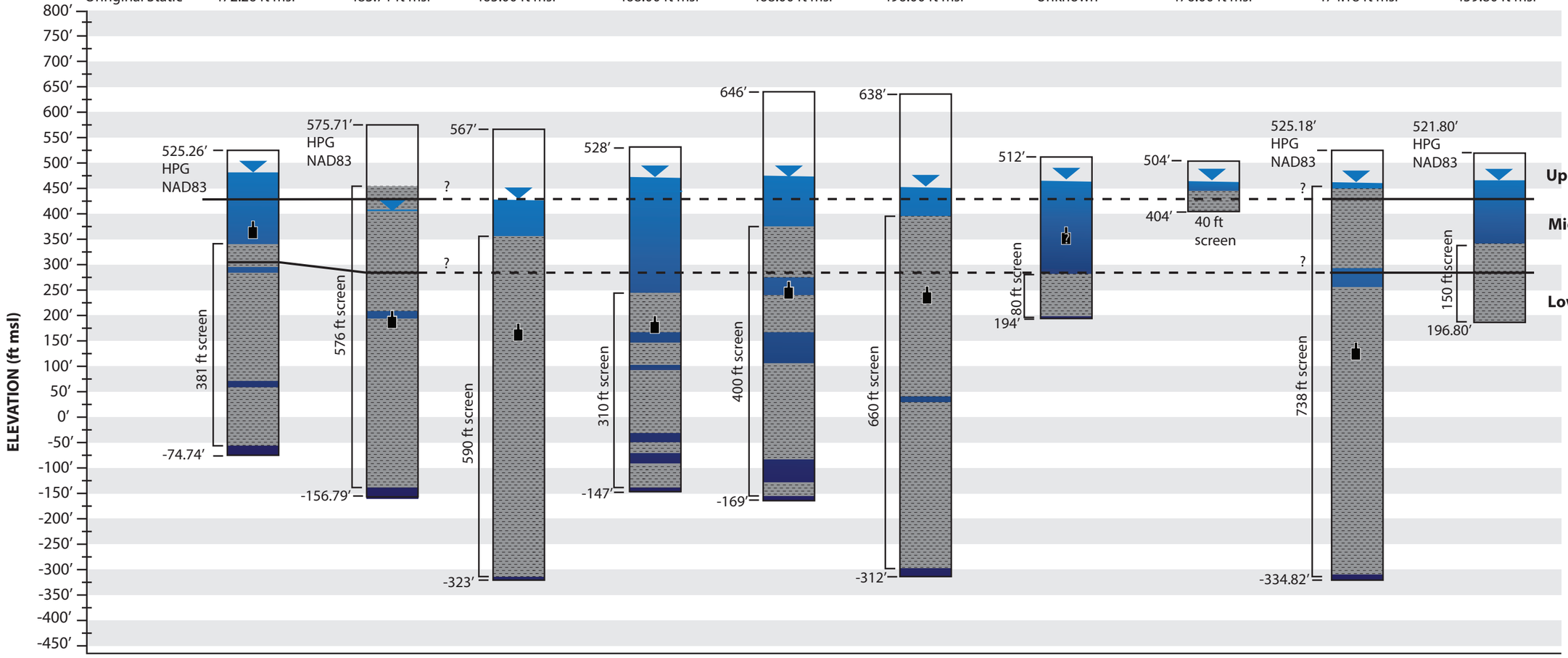






Source: BWD 2016, USGS 2009

Well ID	ID1-1	ID1-2	RH-3	RH-4	RH-5	RH-6	Jack Crosby Well	WWTP Well	ID1-8	MW-3
Current gpm	Q=200 gpm	Q=200 gpm	Q=230 gpm	Q=260 gpm	Q=350 gpm	Q=350 gpm	Q=10 gpm	Monitoring Well	Q=350 gpm (2013)	Monitoring Well
Original gpm*	Q=300 gpm*	Q=295 gpm*	Q=250 gpm*	Q=342 gpm*	Q=360 gpm*	Q=500 gpm*	Q=50 gpm*	N/A	Q=1,100 gpm*	N/A
Year Drilled	(1972)	(1972)	(2014)	(2014)	(2015)	(2015)	(2004)	(2009)	(1972)	(2005)
Oringinal Static	472.26 ft msl	483.71 ft msl	465.00 ft msl	468.00 ft msl	468.00 ft msl	496.00 ft msl	Unknown	476.00 ft msl	474.18 ft msl	459.80 ft msl



Casing Inside Diameter (in):	12.75″ ID	12.75″ ID	12.75″ ID	10.75″ ID	10.75″ ID	10.75″ ID	4.5″ ID	4.5″ ID	12.75″ ID	4″ ID
Well Depth (ft bls):	600′ bls	732′ bls	890′ bls	675 bls	815′ bls	900′ bls	318′ bls	100′ bls	850′ bls	325′ bls
Borehole Depth (ft bls):	609′ bls	740 bls	998′ bls	844′ bls	830′ bls	1,000′ bls	318′ bls	100′ bls	938′ bls	344′ bls
Pump Size (HP):	40 HP	40 HP	40 HP	40 HP	40 HP	40 HP	unknown	N/A	100 HP	N/A
Pump Depth (ft msl):	357 ft msl	188 ft msl	187 ft msl	168 ft msl	246 ft msl	238 ft msl	N/A	N/A	135 ft msl	N/A
Specific Capacity (gpm/ft):	3.25 gpm/ft	1.45 gpm/ft	1.24 gpm/ft	1.69 gpm/ft	7.0 gpm/ft	5.9 gpm/ft	unknown	N/A	8.7 gpm/ft	N/A
Current Production Rate (gpm):	200 gpm	200 gpm	230 gpm	260 gpm	350 gpm	350 gpm	10 gpm	N/A	350 gpm (2013)	N/A
Casing Type:	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	PVC	PVC	Mild Steel	Mild Steel

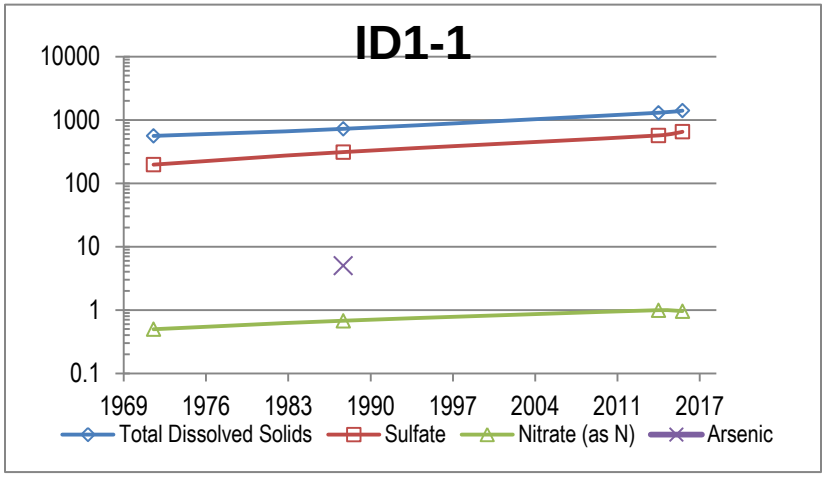
* Indicates original tested production rate when drilled

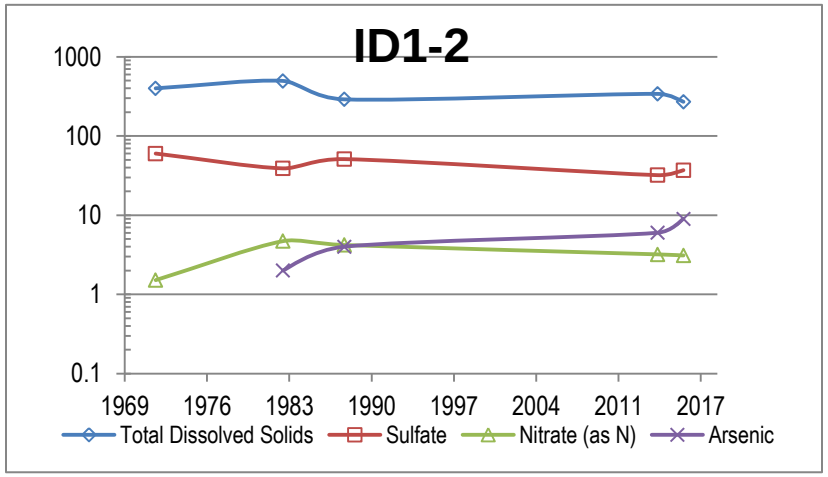
SOURCE: DWD, Pump Check 2008, 2009, 2010, 2013, DWR Well Completion Reports '79/'95/'82/'04, USGS (ID1-1, ID1-2, ID1-8, MW-3 elevation data source), other elevation data from Google Earth

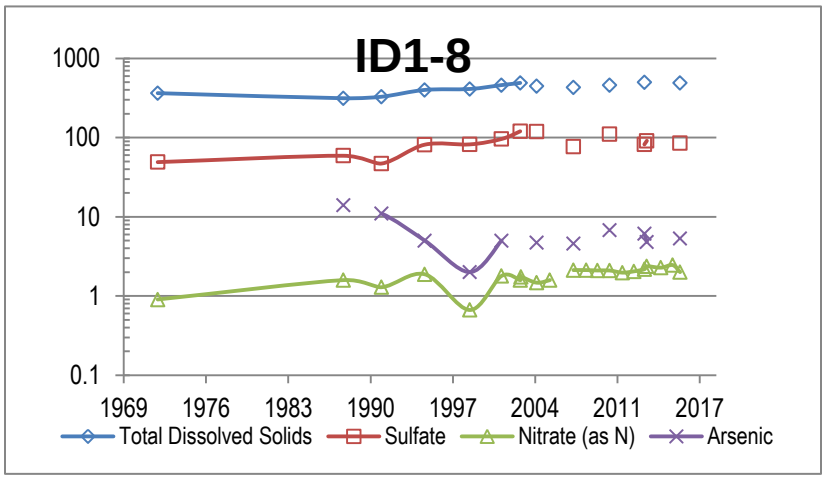
FIGURE 11

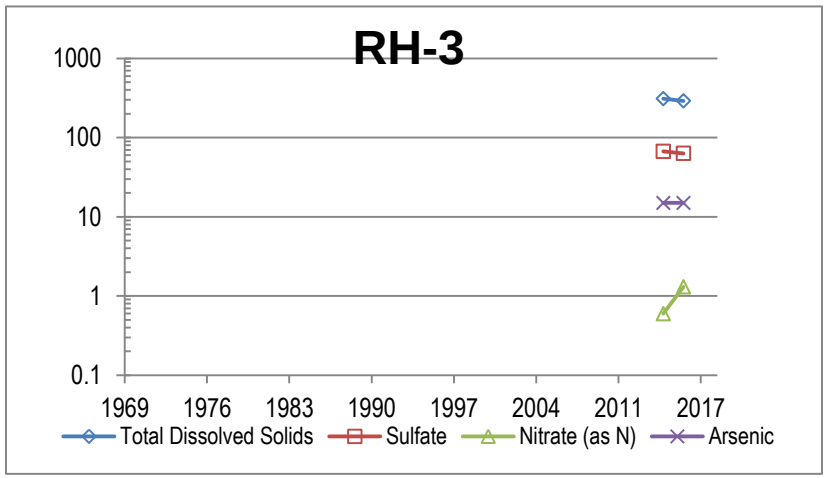
DRAFT: Southern Management Area Wells

Figure 12 South Management Area Groundwater Quality



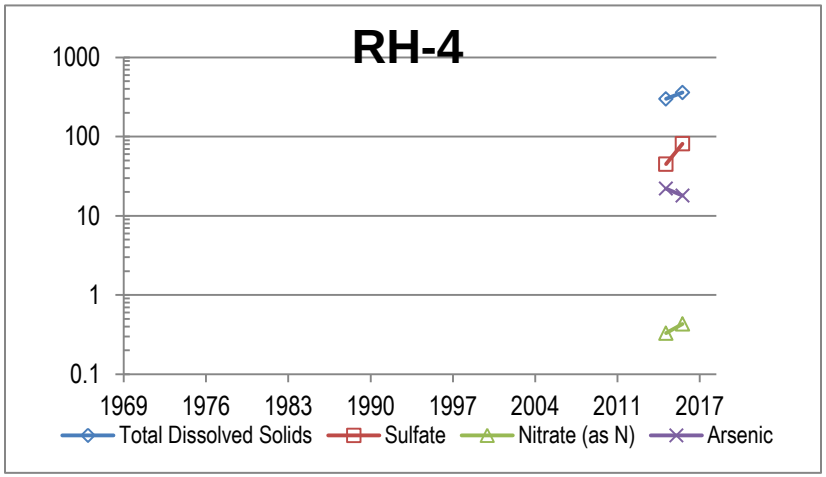


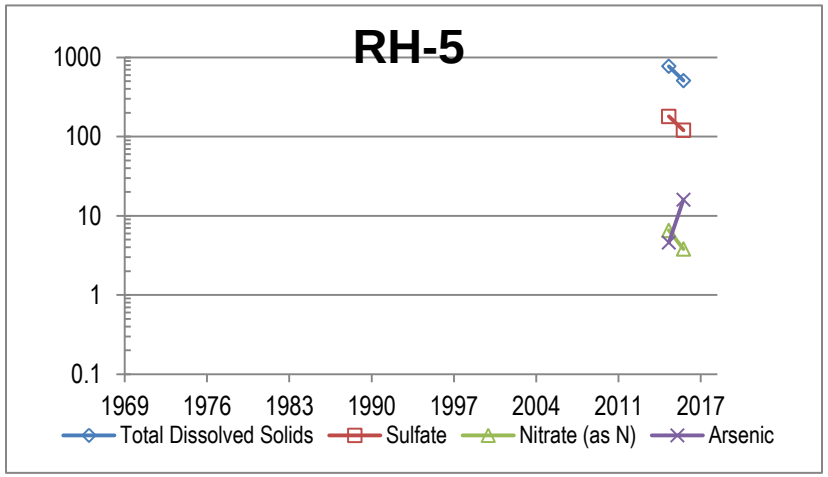


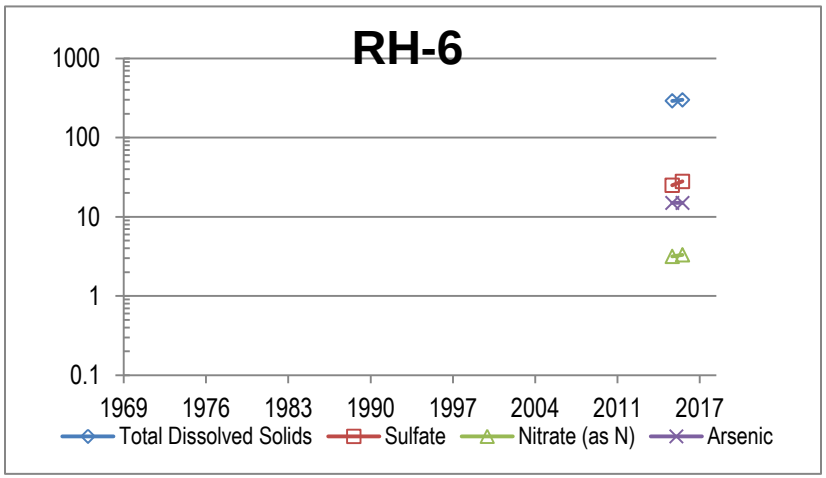


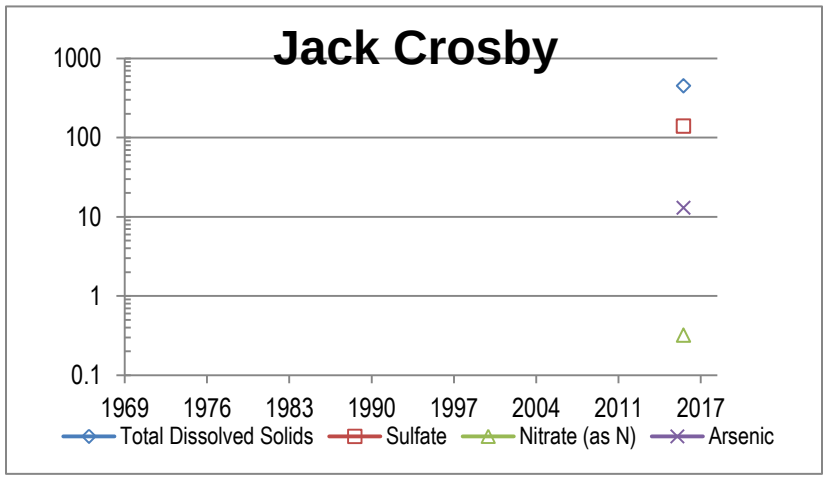
Source: BWD 2016, USGS 2013

Figure 13 South Management Area Groundwater Quality (Continued)



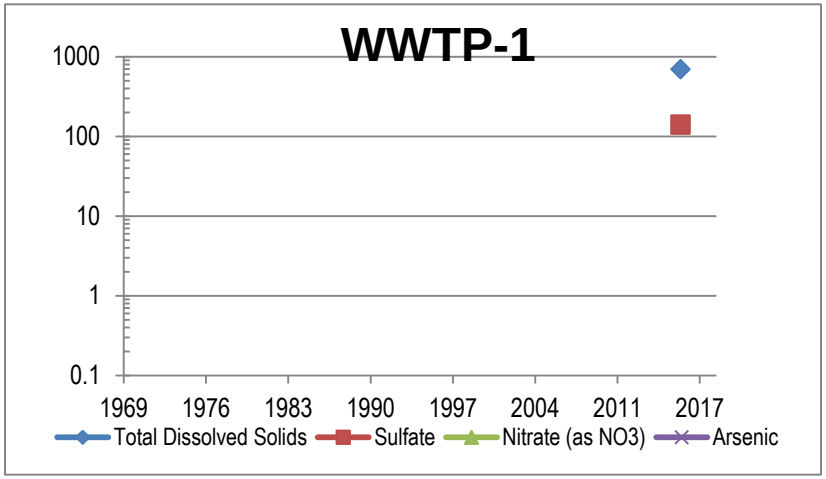






Source: Dudek 2016

Figure 14 South Management Area Groundwater Quality (Continued)



Source: BWD 2016

Attachment B

Working Draft Memorandum Groundwater Quality Risk Assessment Update dated October 17, 2023

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WORKING DRAFT MEMORANDUM

To:	Geoff Poole, Borrego Water District
From:	Trey Driscoll, PG, CHG, Mackenzie Dughi
Subject:	Groundwater Quality Risk Assessment Update
Date:	October 17, 2023
Att:	Figures 1-9
cc:	Jessica Clabaugh, Alan Ashe, BWD Board of Directors

Executive Summary

The Borrego Springs Groundwater Subbasin (Subbasin) of the Borrego Valley Groundwater Basin (BVGB) has been determined to be in "overdraft"[1, 2]. Recent studies estimate that water users within the Borrego Springs Groundwater Subbasin of the BVGB currently withdraw approximately 13,064 acre-feet per year[3] (AFY) and that the "sustainable yield" of the Borrego Springs Groundwater Subbasin is 5,700 AFY[4]. Thus, the current estimated "overdraft" rate is approximately 7,364 AFY. The Sustainable Groundwater Management Act (SGMA) mandates that the Subbasin achieve a long-term withdrawal rate less than or equal to the sustainable yield by the end of the prescribed 20-year water reduction period, in this case, by the year 2040[5].

This Technical Memorandum (TM) has been prepared to assess the potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water maximum contaminant levels (MCLs) in Borrego Water District (BWD) production wells. This risk is attributed to the long-standing critical overdraft and implementation of the Physical Solution, which includes the rampdown of pumping to achieve a balanced water budget by 2040. Thus, this TM assesses current and historical groundwater quality data and their inter-relationship with groundwater levels and groundwater production. Based on our current understanding of groundwater quality conditions, the main constituents of concern (COCs) are arsenic, nitrate, sulfate, fluoride, and total dissolved solids (TDS). In addition, the BWD is in the process of conducting Per- and polyfluoroalkyl substances (PFAS) sampling, as required by the State Water Resources Control Board (SWRCB), to evaluate whether these emerging constituents

1 The overdraft of the BVGB was definitively established by the U.S. Geological Survey (USGS) work conducted in 1982 for San Diego County.
2 The Department of Water Resources approved BWD's request for a scientific internal modification of the BVGB into the Borrego Springs Subbasin (7-024.01) and Ocotillo Wells Subbasin (7-024.02) in October 2016.
3 Water Year 2022 Annual Report for the Borrego Springs Subbasin Prepared for the Borrego Springs Watermaster. Prepared by West Yost. March 10, 2023.
4 Draft Final Groundwater Management Plan for the Borrego Springs Subbasin. January 2020.
5 The 20-year water reduction period is promulgated in CWC Section 10727.2(b).

of concern are detected within the aquifer. Of primary concern is the potential for water quality degradation and the relative risk that the groundwater supply will exceed drinking water MCLs.

The U.S. Geological Survey (USGS), in cooperation with the BWD, published Scientific Investigation Report 2015–5150 that evaluated available groundwater quality data in Borrego Springs and Ocotillo Wells Groundwater Subbasins of the BVGB (Faunt et al. 2015). The USGS found that concentrations of TDS and nitrate exceed their respective water quality standard thresholds in portions of the upper aquifer of the Subbasin (for reference regarding depth, the Borrego Springs Groundwater Subbasin is comprised of three aquifers: upper, middle, and lower). The highest concentrations of both constituents were generally found in the northern portion of the Subbasin, with TDS concentration increasing as groundwater levels decline. Sulfate, another COC, was also found to increase in concentration as groundwater levels decline. In addition to nitrate, TDS, and sulfate, other potential COCs in the BVGB include arsenic and gross alpha radiation, though the latter appears to be confined to the Ocotillo Wells Groundwater Subbasin.

The Groundwater Management Plan (GMP) for the Borrego Springs Groundwater Subbasin[6] reports that the most extensive water quality monitoring data within the Subbasin comes from reporting by public water supply systems to the SWRCB Division of Drinking Water to ensure adequate drinking water quality. As of spring of 2023, there are 29 wells in the current groundwater-quality monitoring network[7]. BWD routinely monitors approximately nine active production wells to test groundwater for general minerals, aggregate properties, solids, metals, and nutrients at least every 3 years. In addition to historical water quality data available within the Subbasin, Table 1 shows the wells included in the monitoring network for groundwater quality. Constituents to be monitored have been selected based on the results of prior monitoring activities in the Subbasin conducted primarily by DWR, USGS, and BWD. These monitoring activities along with USGS publications (USGS 2014, 2015) have summarized groundwater quality conditions in sufficient detail to identify arsenic, nitrate, sulfate, fluoride, and TDS as the Subbasin's main COCs. Radionuclides were not explored in this Groundwater Quality Risk Assessment Update because available radionuclide data indicates that gross alpha and gross beta results are below MCLs and not a current COC for the Subbasin.

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6 The Groundwater Management Plan for the Borrego Springs Subbasin is provided as Exhibit 1 to the Stipulated Judgment.

7 Groundwater Monitoring Plan for the Borrego Springs Subbasin Prepared for the Borrego Springs Watermaster. April 11, 2023.

Table 1. Wells in the Current Groundwater-Quality Monitoring Network

Well Name	Well Owner	Well Use	Well Status	Well Depth (ft-bgs)	Screened Interval (ft-bgs)	Principal Aquifer(s) Screened	Monitoring Entity
North Management Area							
ID4-18	BWD	MUN	Active	570	240 - 560	Upper/Middle	BWD
ID4-9	BWD	MUN	Active	916	460 - 800	Middle/Lower	BWD
MW-1	BWD	OBS	-	900	800 - 890	Middle/Lower	Watermaster
Horse Camp	CA Dept of Parks and Rec	DeMIN	Active	350	150 - 350	Upper	Watermaster
Auxiliary 2	CA Dept of Parks and Rec	MUN	Active	490	no data	Lower	Watermaster
Central Management Area							
BSR Well 6	Borrego Nazareth L	IRR	Active	no data	no data	no data	Watermaster
County Yard (SD DOT)	County of San Diego	DeMIN	Active	280	no data	Upper/Middle	Watermaster
ID1-10	BWD	MUN	Active	392	162 - 372	Middle/Lower	BWD
ID1-12	BWD	MUN	Active	580	248 - 568	Middle/Lower	BWD
ID1-16	BWD	MUN	Active	705	160 - 540	Upper/Middle/Lower	BWD
ID4-11	BWD	MUN	Active	770	450 - 750	Middle/Lower	BWD
ID5-5	BWD	OBS	-	700	400 - 700	Middle/Lower	BWD
MW-4	BWD	OBS	-	390	85 - 390	Upper/Middle	Watermaster
Terry Well	Private	DeMIN	Active	920	450 - 620	Lower	Watermaster
ID4-20 (Wilcox)	BWD	MUN	Active	502	252 - 502	Upper/Middle/Lower	BWD
South Management Area							
Air Ranch Well 4	Borrego Air Ranch	MUN	Active	380	120 - 300	Middle/Lower	Watermaster

Table 1. Wells in the Current Groundwater-Quality Monitoring Network

Well Name	Well Owner	Well Use	Well Status	Well Depth (ft-bgs)	Screened Interval (ft-bgs)	Principal Aquifer(s) Screened	Monitoring Entity
Army Well	Unknown	OBS	-	690	no data	Lower	Watermaster
ID1-8	BWD	MUN	Active	850	72 - 830	Upper/Middle/Lower	BWD
La Casa	CWC Casa del Zorro	IRR	Active	500	no data	no data	Watermaster
MW-3	BWD	OBS	-	325	175 - 325	Middle/Lower	Watermaster
MW-5A (East-Lower)	BWD	OBS	-	345	45 - 155	Middle	Watermaster
MW-5B (West-Upper)	BWD	OBS	-	160	200 - 340	Upper	Watermaster
RH-1 (ID1-1)	T2 Borrego	IRR	Active	600	180 - 580	Middle/Lower	Watermaster
RH-2 (ID1-2)	T2 Borrego	IRR	Active	740	120 - 720	Upper/Middle/Lower	Watermaster
RH-3	T2 Borrego	IRR	Active	890	295 - 885	Middle/Lower	Watermaster
RH-4	T2 Borrego	IRR	Active	675	280 - 420	Middle/Lower	Watermaster
RH-5	T2 Borrego	IRR	Active	815	270 - 480	Lower	Watermaster
RH-6	T2 Borrego	IRR	Active	948	238 - 938	Middle/Lower	Watermaster
WWTP-1	BWD	OBS	-	100	60 - 100	Upper/Middle	Watermaster

Notes: BWD = Borrego Water District, DeMIN = de minimis, IRR = irrigation, MUN = municipal, OBS = observation

Since the compilation of available groundwater quality data for the GMP, the BWD has collected additional data for its 15 active production and monitoring wells, and the Borrego Springs Watermaster has gathered data for an additional 14 wells included in the monitoring network. These recent data indicate that arsenic concentrations exceed the California drinking water MCL of 10 micrograms per liter (µg/L) in portions of the lower aquifer in the South Management Area (SMA). Additionally, a review of historical arsenic data for wells located in the SMA indicates an increasing arsenic trend in wells RH-2 (ID1-2) and RH-5. A linear regression analysis was conducted for all wells located in the SMA. A positive correlation was found between arsenic concentrations and declining groundwater levels at RH-5, but this correlation was not observed for the remaining wells in the SMA. Information regarding the timing of sampling was not

available, causing variability among the analytical results. Arsenic concentrations cannot be predicted solely based on a linear regression approach using annual groundwater production and declining groundwater levels. Due to limited groundwater quality data for the Subbasin, further data collection (including the timing of sampling) and evaluation are required to predict exceedances of arsenic drinking water standards in ID1-8 and arsenic or other COC drinking water standards for other wells in the Subbasin.

In August 2023, BWD began to monitor several non-potable irrigation wells located in the NMA associated with the acquisition of Baseline Pumping Allocation (BPA) and property from William Bauer. Preliminary results of sampling four wells on the Bauer Farms properties indicate elevated levels of nitrate and TDS detected in the wells. One of the four Bauer wells has a nitrate concentration above the drinking water standard. One of the four Bauer wells was sampled for PFAS substances with no detections above the laboratory reporting limits.

Introduction

The Subbasin is in the northeastern part of San Diego County (Figure 1). The boundary of the Subbasin is generally defined by the contact of unconsolidated deposits with plutonic and metamorphic basement deposits. The trace of the Coyote Creek fault, which trends northwest-southeast to the north and east of the Subbasin, and the San Felipe Wash to the south, which is approximately co-located with a basement high known as the Yaqui Ridge/San Felipe anticline and San Felipe fault, are recognized barriers to flow that form additional boundaries of the subbasin (Figure 1).

Groundwater pumped from the Subbasin is the sole source of supply to meet agricultural, municipal, and recreational water demands for the community of Borrego Springs. Since the 1950s when intensive groundwater pumping began[8], extraction has exceeded recharge. Approximately 555,646 acre-feet of groundwater has been permanently removed from groundwater storage, and groundwater levels have dropped by more than 100 feet in portions of the Subbasin (Faunt et al. 2015, West Yost 2022). Today, groundwater extraction continues to exceed recharge. Water users within the Subbasin currently withdraw approximately 13,064 AFY of groundwater, and the "sustainable yield" is 5,700 AFY. Thus, the current estimated overdraft is 7,364 AFY. Approximately a 56% pumping reduction would be required to balance extraction with long-term average recharge.

The SGMA was passed in September 2014 as a means of regulating groundwater use throughout the State of California. On April 8, 2021, the honorable Judge Peter Wilson of the California Superior Court for the County of Orange granted the motion for entry of the Stipulated

[8] Agricultural expansion of the Subbasin proceeded rapidly after World War II. On October 19, 1945, DiGiorgio switched on the first electric well pump—the same day that San Diego Gas & Electric established electricity in the Borrego Valley (Brigandi 1959).

Judgment[9]. As stated in Section II.F of the Judgment, the Court found that the Physical Solution for the Basin, which is comprised of the Judgment and GMP, is consistent with California Water Code (CWC) Section 10737.8 and is a prudent, legal, and durable means to achieve sustainable groundwater management within the Subbasin as intended by SGMA.

In addition to developing a water quantity path to sustainability, it is essential to evaluate groundwater quality to ensure the availability of suitable water quality for domestic, municipal and irrigation supply. This TM has been prepared to perform an updated assessment of the potential risk associated with temporal and spatial changes in groundwater quality that may result in exceedances of California drinking water MCLs in BWD production wells due to the long-standing critical overdraft of the Subbasin. To date, the BWD has been able to supply customers with groundwater without the need for any additional treatment other than disinfection by chlorination as required by the SWRCB's Division of Drinking Water (DDW). The potable groundwater served by the BWD currently meets all drinking water standards, and no water quality violations have been identified in active BWD wells.

Degradation of water quality is of concern for the Subbasin from both anthropogenic and naturally occurring COCs. Potential anthropogenic sources include agricultural return flows, septic tank treatment and disposal systems, and percolation of treated wastewater from the Rams Hill Wastewater Treatment Facility. For domestic and municipal wells, this TM evaluates water quality results in relation to potable drinking water standards specified in Title 17 and Title 22 of the California Code of Regulations (CCR). For irrigation wells, water quality should be suitable for agricultural use, which depending on the crop type, soil conditions on other factors may be sensitive to a particular water quality constituent (e.g., elevated salts in the root zone may affect plant health). While this TM focuses on potable water quality of for BWD active production wells, additional data is evaluated for irrigation wells and monitoring wells to identify areas of poor water quality in the Subbasin.

Stratigraphy and Hydrogeologic Conceptual Model

The groundwater system is generally subdivided by the USGS into three aquifers denoted as the upper, middle, and lower.[10] The upper aquifer is comprised of coarse sediments sourced from the Coyote Creek watershed. The thickness of the upper aquifer thins from a maximum thickness of about 643 feet, where Coyote Creek enters the basin, to about 50 feet near the Borrego Sink (Faunt et al. 2015) and becomes mostly unsaturated south of the Desert Lodge anticline near

[9] Borrego Water District v. All Persons and Legal Entities Who Claim a Right to Extract Groundwater from the Borrego Valley Groundwater Subbasin No. 7.024-01 Whether Based on Appropriation, Overlying Right, or Other Basis of Right, and/or Who Claim a Right To Use of Storage Space in the Subbasin; et al., (Orange County Super Ct. Apr. 8, 2021).

[10] The upper, middle, and lower aquifers represent a generalized description of the Borrego Springs Subbasin stratigraphy based on work performed by Moyle (1982) and described in detail in Faunt et al. (2015). The aquifers are not separated by distinct confining layers. Aquifer testing and review of long-term groundwater level data, lithologic logs and geophysical logs indicate that confining downward conditions are present in much of the Subbasin. In addition, many wells are screened over multiple aquifers providing a direct pathway for vertical migration of water among the three aquifers in many locations of the Subbasin.

Rams Hill. The upper aquifer yields as much as 2,000 gallons per minute and has been extensively dewatered. The middle aquifer contains finer sediments thought to originate from lower energy sediment sources prior to the initiation of slip along the Coyote Creek fault (Faunt et al. 2015). The middle aquifer like the upper aquifer thins from the northeast to southwest and varies in thickness from about 1,000 feet to 50 feet. "The middle aquifer yields moderate quantities of water to wells, but is considered a non-viable source of water south of San Felipe Creek because of its diminished thickness" (Mitten 1988). The lower aquifer is comprised of partly consolidated continental sediments up to 3,831 feet thick and is thickest in the eastern part of the basin near the Borrego Airport. The lower aquifer yields smaller quantities of water to wells than the upper and middle aquifers. Understanding the spatial distribution of the upper, middle, and lower aquifers, as well as faulting and folding in the basin, is important to evaluate groundwater quality.

Production wells in the Subbasin are generally screened in the upper, middle, or lower aquifers or cross-screened in multiple aquifers. Due to the variable thickness of the individual aquifers (i.e., thickness of aquifers generally thin to the south), BWD production wells are predominantly cross-screened in the upper, middle, and lower aquifers in the northern part of the subbasin; cross-screened in the middle and lower aquifers in the central part of the subbasin; and cross-screened in the middle and lower aquifers in the southern part of the subbasin (see Figures 2, 3, and 4).

Three management areas were adopted in the GMP to better support groundwater management within the subbasin: the north management area (NMA), central management area (CMA), and south management area (SMA)[11]. The boundaries of these areas are based on the distribution of the three aquifers, geologic controls on groundwater movement, and differences in overlying land uses and associated groundwater pumping depressions (GMP 2020). The two primary geologic features that define the boundaries between the management areas are the West Salton detachment fault (between the NMA and the CMA) and the Desert Lodge anticline (between the CMA and the SMA). These features appear to have influenced deposition of sediments in the Subbasin, faulting and folding of sediments, and hydrologic communication between the northern, central, and southern parts of the Subbasin. Due to the variable thickness of the individual aquifers, extraction wells are predominantly cross-screened in the upper, middle, and lower aquifers in the NMA, and cross-screened in the middle and lower aquifers in the CMA and SMA.

The NMA is dominated by agricultural land use but also includes domestic uses, with groundwater production occurring from primarily the upper and middle aquifers. Subsequently, the NMA has the greatest overall groundwater level declines when compared to the CMA and SMA. The primary land uses in the CMA are municipal and recreational (golf courses) but also include substantial undeveloped areas. The CMA is the primary production area for municipal

[11] "Management area" refers to an area within a basin for which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors (CCR Title 23, Division 2, Chapter 1.5. subchapter 2, Article 2, Section 351).

supply with groundwater production from the upper, middle, and lower aquifers. Like the NMA, water quality is generally good, and historical groundwater level declines are high. The SMA is compartmentalized effectively from the CMA by the Desert Lodge anticline. Land use in the SMA is undeveloped open space, except for the Rams Hill Country Club and Air Ranch. The SMA includes limited municipal and domestic pumping and is currently dominated by pumping for recreational use that only occurs in the middle and lower aquifers. Unlike the NMA and CMA, arsenic exceeds the MCL in groundwater and several wells that tap the lower semi-confined groundwater aquifer[12] and is the primary COC in the SMA.

General Regulatory Drinking Water Requirements

As a public water system, the BWD is regulated by the SWRCB's DDW. California regulations related to drinking water can be found in the CCR Title 17 and Title 22. California drinking water MCLs that shall not be exceeded in the water supplied to the public are listed in CCR Title 22 Chapter 15. The BWD samples groundwater quality from water wells at intervals required by the DDW. While bacteriological sampling of the water system occurs frequently, sampling for general minerals, aggregate properties, solids, metals, and nutrients occurs every 3 years[13]. The BWD groundwater quality data reviewed for the analysis includes data through the 2022 DDW's regulatory sampling event and the spring 2023 Watermaster semi-annual monitoring event. The period of record of available water quality is unique to each well depending on the date of construction or when the well was first monitored. Sampling of the BWD water wells for general minerals, aggregate properties, solids, metals, and nutrients is not required again until 2025. In addition, the Borrego Springs Watermaster in coordination with BWD samples BWD wells semi-annually for COCs as part of the Borrego Springs Groundwater Monitoring Network[14].

DDW Ongoing MCL Review

Health and Safety Code Section 116365(g) requires the SWRCB review its MCLs at least once every five years. In the review, the SWRCB's MCLs are to be consistent with criteria of Health and Safety Code Section 116365(a) and (b). Those criteria state that the MCLs cannot be less stringent than federal MCLs and must be as close as is technically and economically feasible to the Public Health Goals (PHGs)[15] established by Office of Environmental Health Hazard Assessment (OEHHA). Consistent with those criteria, the SWRCB is to amend any standard if any of the following occur: (1) Changes in technology or treatment techniques that permit a materially greater protection of public health or attainment of the PHG, or (2) New scientific evidence

[12] Review of lithologic logs, geophysical logs, long-term water level hydrographs and aquifer testing for multiple wells completed in the SMA indicate semi-confined and confining downwards conditions.

[13] The BWD water quality data set also includes non-regulatory samples that are periodically collected by BWD and researchers to evaluate water quality trends.

[14] Groundwater Monitoring Plan Borrego Springs Subbasin Prepared for Borrego Springs Watermaster. Prepared by West Yost. March 2023.

[15] Public health goals (PHGs) are concentrations of drinking water contaminants that pose no significant health risk if consumed for a lifetime, based on current risk assessment principles, practices, and methods. OEHHA establishes PHGs pursuant to Health & Safety Code Section 116365(c) for contaminants with MCLs, and for those for which MCLs will be adopted.

indicates that the substance may present a materially different risk to public health than was previously determined. The SWRCB is required to identify each MCL it intends to review for that year by March 1st of that same year.

Arsenic

The California arsenic MCL is 0.010 milligrams per liter (mg/L) (equivalent to 10 micrograms per liter [µg/L]) and became effective on November 28, 2008, while the federal MCL for arsenic of 10 µg/L has been in effect since January 2006. Previous California and federal MCLs for arsenic were 50 µg/L. The California PHG for arsenic is 4 parts per trillion based on lung and bladder cancer in studies of hundreds of thousands of people in communities in Taiwan, Chile, and Argentina associated with arsenic-contaminated drinking water. Exposure to the PHG level in drinking water results in a risk of less than one additional case of these forms of cancer in a population of one million people drinking two liters daily of the water for 70 years. While the PHG is based primarily on data from cancer studies, no other adverse health effects are expected to arise from arsenic at the level of the PHG (OEHHA 2004).

The SWRCB's DDW is currently investigating the technological and economic feasibility of lowering the MCL below the current MCL and closer to the PHG as part of ongoing Regulatory Proposal SWRCB-DDW-23-002 Arsenic MCL. The DDW held a pre-rulemaking workshop to lower the detection limits for purposes of reporting (DLR)[16] for several metals, including arsenic on November 3, 2022. To adequately evaluate health risk and technological feasibility in consideration of a revised MCL, a DLR should, where feasible, be set at concentrations at or below the corresponding public health goals. The current DLR for arsenic is 0.002 mg/L compared to the PHG of 0.000004 mg/L. SWRCB staff have developed a draft proposal for revisions to the metal DLRs in two phases. Phase II would lower the DLR for arsenic with a three-year compliance schedule to provide time for the laboratories to procure equipment and develop sufficient analytical capacity. The proposed DLR for arsenic is 0.0005 mg/L (SWRCB 2022). The SWRCB has not provided a long-term schedule for Regulatory Proposal SWRCB-DDW-23-002 Arsenic MCL; however, based on the need to lower the DLR to collect additional data to better evaluate health risk and technological feasibility, it is speculated that it will take more than 5 years to develop a revised MCL for arsenic.

Nitrate

The MCL for nitrate is 10 mg/L as nitrate-nitrogen (NO_3-N). This concentration is approximately equivalent to the World Health Organization (WHO) guideline of 50 mg/L as NO_3 or 11.3 mg/L NO_3-N (multiply NO_3 mg/L by 0.2258). The PHG for nitrate from the State of California Office of Environmental Health Hazard Assessment (OEHHA) is also 10 mg/L NO_3-N. The nitrate MCL was

[16] A detection limits for purposes of reporting (DLR) is the designated minimum levels at or above which an analytical finding of a contaminant in drinking water must be reported.

set to protect against infant methemoglobinemia (blue baby syndrome)[17]; however, other health effects including cancer and adverse reproductive outcomes were not considered.

A review of available studies to date by Ward (2018), documented the strongest evidence for a relationship between drinking water nitrate ingestion and adverse health outcomes (besides methemoglobinemia) is for colorectal cancer, thyroid disease, and neural tube defects. Four of the five published studies of colorectal cancer found evidence of an increased risk of colorectal cancer or colon cancer associated with water nitrate levels that were mostly below the respective regulatory limits.

The Ward (2018) study concluded that the number of well-designed studies of individual health outcomes is still too few to draw firm conclusions about risk from drinking water nitrate ingestion. Significant research and health risk assessment are needed to further evaluate other health effects including cancer and adverse reproductive outcomes from drinking water with elevated nitrate levels. It is unlikely that the MCL will be revised downward in the next decade, but it is possible if new scientific evidence indicates that the nitrate may present a materially different risk (i.e. cancer and reproductive harm) to public health than was previously determined solely for blue baby syndrome.

The last MCL review for nitrate occurred in 2018 and concluded that the MCL is at or below the PHG, and that a revision of the MCL will not offer any additional health benefit since the PHG represents a contaminant level that poses no significant health risks. The next MCL review is scheduled for 2023 and there is no current information to suggest that the PHG for nitrate will be revised in 2023.

Groundwater Quality

General Minerals

"General minerals" refer to the eight dominant anions and cations found in most groundwater. Anions are negatively charged ions, while cations are positively charged ions. The four main cations are calcium (Ca+2), sodium (Na+), magnesium (Mg+2), and potassium (K+), and the four main anions are sulfate (SO4-2), chloride (Cl-), carbonate (CO3-2), and bicarbonate (HCO3-).

These ions play a significant role in the chemistry of groundwater and can be used to analyze variations in water chemistry spatially and temporally across the Subbasin. General minerals are formed through the dissolution of rocks and minerals, making them valuable indicators of

[17] Ingested nitrate is reduced to nitrite by bacteria in the mouth and in the infant stomach, which is less acidic than adults. Nitrite binds to hemoglobin to form methemoglobin, which interferes with the oxygen carrying capacity of the blood. Methemoglobinemia is a life-threatening condition that occurs when methemoglobin levels exceed about 10%. Risk factors for infant methemoglobinemia include formula made with water containing high nitrate levels and foods and medications that have high nitrate levels. Methemoglobinemia related to high nitrate levels in drinking water used to make infant formula was first reported in 1945. The U.S. EPA limit of 10 mg/L NO_3-N was set as about one-half the level at which there were no observed cases.

minerals like sulfates and carbonates present in the subsurface or in water recharged into the aquifer system.

As part of the GMP, a water quality review and assessment was conducted for the BWD water supply wells (Environmental Navigation Services 2019). The analysis uses graphical methods like Stiff Diagrams and Trilinear or Piper Diagrams are used to visualize the composition of multiple anions and cations (Piper 1944, Stiff 1951). These diagrams help in understanding the distribution and relationships between various ions in groundwater samples and the distribution and genesis of principal groundwater types in the Subbasin. Exhibit 1 identifies the water quality types that can be identified from the anions and cations and can be used to better understand the hydrochemical facies present in the aquifer.

Exhibit 1. Piper diagram components – bottom left is a ternary plot of the cations, bottom right is a ternary plot of the anions, and top is a diamond plot of a project from the other two plots.

Overall, the assessment revealed systematic variations in natural water chemistry across the Subbasin. Water samples from BWD water supply wells indicated dominant cations as sodium and calcium, while bicarbonate, sulfate, and chloride were the dominant anions. In the NMA wells, calcium sulfate-type water was found, whereas SMA wells exhibited sodium bicarbonate-type water. The study also highlighted temporal variability, with around 70 percent of wells experiencing changes in water chemistry attributed to long-term overdraft.

The observed differences in water quality within the Subbasin are influenced by various factors, including the source of recharge waters (e.g. Coyote Creek versus San Felipe Creek), proximity to irrigated lands impacting nitrate levels, aquifer lithology with potential arsenic-bearing clays, aquifer depth affecting TDS, and location within the Subbasin relative to the Borrego Sink with enhanced evaporation of surface water.

Constituents of Concern

There are both anthropogenic and natural sources of the COCs in the Subbasin. Anthropogenic sources that may contribute to the degradation of the current water quality in the basin include agricultural use of pesticides and fertilizers, salt accumulation resulting from agricultural irrigation practices, and household septic system return flows. Natural sources of COCs in the BVGB include the rocks and minerals that comprise the aquifer matrix material. These naturally occurring COCs include evaporite minerals, which can dissolve and increase TDS concentration in the aquifer; silicate minerals, which can contribute arsenic to the groundwater; and sulfate minerals, which as their name suggests can contribute sulfate to the groundwater. All are found in differing amounts in the upper, middle, and lower aquifers. In the GMP's water quality review and assessment, multiple aquifers were represented in data due to the construction of wells, making it challenging to differentiate the water quality based on the three-layer aquifer system. However, it is assumed that differences in the mineralogical composition of the aquifers can result in groundwater quality differences between the aquifers.

Arsenic

Naturally occurring arsenic concentrations in groundwater are highly variable, though naturally occurring concentrations that exceed the California drinking water primary MCL of 0.010 mg/L (equivalent to 10 µg/L) are common in semi-arid and arid groundwater basins in the western United States (Welch et al. 2000, Anning et al. 2012). In these basins, groundwater recharge is limited due to low precipitation and the residence time of the groundwater in the basin is high. The long residence time of the groundwater in the basin allows for more interaction between the groundwater and the minerals that comprise the aquifer matrix material. With time, arsenic desorbs from sediments and enters the groundwater. This process is more efficient in groundwater with higher pH. The groundwater in the Subbasin has a pH of 7.5 to 9.0, a range that is conducive to this transfer of arsenic from the sediment to the water. In addition, a study conducted in the San Joaquin Valley of California identified a correlation between overpumping and increasing arsenic concentrations (Smith et al. 2018).

Fluoride

Fluoride is a naturally occurring element in groundwater resulting from the dissolution of fluoride-bearing minerals from the aquifer sediments and surrounding bedrock. Brown staining or mottling of teeth and resistance to tooth decay as a result of drinking water with high concentrations of fluoride has been known since the 1930s. While drinking fluoridated water at low concentrations (i.e., 0.7 ppm) is beneficial to prevent tooth decay, excessive exposure to

fluoride can result in dental and skeletal fluorosis. The California drinking water primary MCL for fluoride is 2 milligrams per liter (mg/L).

Nitrate

Sources of nitrate in groundwater are typically associated with specific land use but it can also occur naturally. Fertilizers and septic tanks are common anthropogenic sources of nitrate detected in groundwater. Potential natural sources of nitrate in groundwater may result from leaching of soil nitrate, which occurs by atmospheric deposition, and dissolution of evaporative minerals, igneous rocks, and deep geothermal fluids. In desert groundwater basins, the largest source of naturally occurring nitrates in groundwater is due to incomplete utilization of nitrate by sparse vegetation. This nitrate accumulates in the unsaturated zone and may become mobile when surficial recharge percolates through the unsaturated zone (Walvoord et al. 2003). In arid environments, nitrate stored in the unsaturated zone may become mobilized by artificial recharge from irrigation return flow, septic effluent, and infiltration basins. The Subbasin lacks appreciable evaporitic deposits, and anthropogenic sources or mobilization as a result of artificial recharge is likely the main contributor of nitrates to the Subbasin. The California drinking water primary MCL for nitrate is 10 mg/L as nitrogen (N), which is equivalent to 45 mg/L as nitrate (NO_3).

Sulfate

Natural sulfate sources include atmospheric deposition, sulfate mineral dissolution, and sulfide mineral oxidation of sulfur. Gypsum is an important source near localized deposits such as in the Ocotillo Wells Subbasin near Fish Creek Mountains in Imperial County. Fertilizers can also be a source of sulfate in groundwater but typically do not result in exceedance of drinking water standards. The California drinking water secondary MCL for sulfate is recommended at 250 mg/L, with upper and short-term limits of 500 mg/L and 600 mg/L, respectively.

Total Dissolved Solids

TDS is a measure of all dissolved solids in water including organic and suspended particles. Sources of TDS in groundwater include an interaction of groundwater with the minerals that comprise the aquifer matrix material. Over time, TDS will increase as more minerals in contact with groundwater dissolve. In desert basins, evaporative enrichment near dry lake beds (playas) is known to naturally increase TDS in groundwater such as that observed at the Borrego Sink. This process also occurs in plants, both in agriculture and natural systems. Anthropogenic sources include synthetic fertilizers, manure, wastewater treatment facilities, and septic effluent. The California drinking water secondary MCL for TDS is recommended at 500 mg/L with upper and short-term limits of 1,000 mg/L and 1,500 mg/L, respectively.

Historical Groundwater Quality

This analysis evaluates historical groundwater quality for BWD wells and all additional wells in the Borrego Springs Monitoring Network. Data for groundwater quality constituents are provided in Table 2 and displayed graphically in Figures 5-8 and Exhibits 6 through 30.

The groundwater quality data are presented in the figures relative to the MCL for each of the COCs. Concentrations that lie between half of the MCL and the MCL are noted. While the concentrations are below the MCL for most of these points, increasing concentrations of many of the COCs are being observed with ongoing groundwater level decline so the upper range concentration data are highlighted in this risk assessment.

Groundwater Quality Concentration Trend Statistical Analysis

Historical groundwater quality data that extends through early 2023 was evaluated to determine groundwater concentration trends for COCs (arsenic, fluoride, nitrate, sulfate, and TDS). The period of record of available water quality is unique to each well depending on the date of construction or when the well was first monitored.

The Mann-Kendall test, an industry standard for non-parametric trend detection, was applied to assess trends in groundwater quality (Helsel, 2012; Helsel et al., 2020). The Mann-Kendall test does not require regularly spaced sample intervals, is unaffected by missing time periods, avoids substitution for data that contain non-detects, and does not assume a pre-determined data distribution. The Mann-Kendall test assesses whether or not a dataset exhibits a monotonic trend (increasing or decreasing) within a selected significance level. A significance level of 0.05 (i.e., a confidence level of 95%) was selected for this analysis. The results of the Mann-Kendall test are listed in Table 2.

Table 2. Mann-Kendall Trend Analysis

Well ID	Arsenic (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	TDS (mg/L)
North Management Area Wells					
Auxiliary 2	*Insufficient data*	no trend	no trend	**increasing**	**increasing**
Fortiner #1 (Allegre 1)	**No data**	no trend	no trend	no trend	no trend
Horse Camp	*Insufficient data*	no trend	decreasing	no trend	decreasing
ID4-18	*Insufficient data*	no trend	**increasing**	no trend	no trend
ID4-9	no trend	no trend	no trend	no trend	no trend
MW-1	no trend	no trend	*Insufficient data*	no trend	no trend
MW-6D	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*
MW-6S	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*
Orchard Well (T2)	**No data**	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*
Central Management Area Wells					
BSR Well 6	no trend	no trend	no trend	no trend	no trend
County Yard (SD DOT)	no trend	**increasing**	no trend	no trend	decreasing
High School	**No data**	*Insufficient data*	*Insufficient data*	*Insufficient data*	*Insufficient data*
ID1-10	no trend	decreasing	no trend	no trend	no trend
ID1-12	no trend	decreasing	no trend	decreasing	no trend

Table 2. Mann-Kendall Trend Analysis

Well ID	Arsenic (mg/L)	Fluoride (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	TDS (mg/L)
ID1-16	no trend	decreasing	no trend	no trend	no trend
ID4-11	no trend	no trend	no trend	decreasing	decreasing
ID4-20 (Wilcox)	no trend	no trend	no trend	no trend	no trend
ID5-5	no trend	no trend	no trend	no trend	no trend
MW-4	no trend	no trend	no trend	no trend	decreasing
Terry Well	*Insufficient data*	*Insufficient data*	**No data**	*Insufficient data*	*Insufficient data*
South Management Area Wells					
Air Ranch Well 4	no trend	no trend	no trend	no trend	no trend
Army Well	no trend	no trend	no trend	no trend	no trend
ID1-8	no trend	no trend	no trend	no trend	no trend
JC Well	no trend	decreasing	**increasing**	**increasing**	**increasing**
La Casa	no trend	no trend	no trend	no trend	no trend
MW-3	no trend	no trend	no trend	decreasing	decreasing
MW-5A (East-Lower)	no trend	no trend	no trend	decreasing	decreasing
MW-5B (West-Upper)	no trend	no trend	no trend	no trend	no trend
RH-1 (ID1-1)	no trend	no trend	no trend	no trend	no trend
RH-2 (ID1-2)	**increasing**	no trend	no trend	decreasing	no trend
RH-3	no trend	no trend	no trend	no trend	no trend
RH-4	no trend	decreasing	**increasing**	**increasing**	**increasing**
RH-5	**increasing**	no trend	no trend	decreasing	no trend
RH-6	no trend	no trend	no trend	**increasing**	**increasing**
WWTP-1	**increasing**	no trend	decreasing	no trend	decreasing

Increasing groundwater concentration trends were exhibited for:

- Arsenic in wells RH-2 (ID1-2), RH-5, and WWTP-1;
- Fluoride in the County Yard (SD DOT);
- Nitrate in wells ID4-18, JC Well, and RH-4;
- Sulfate and TDS in wells JC Well, RH-4, RH-6, and Auxiliary 2.

Decreasing groundwater concentration trends were exhibited for:

- Fluoride in wells ID1-10, ID1-12, ID1-16, JC Well, and RH-4;
- Nitrate in wells Horse Camp and WWTP-1;
- Sulfate in wells ID1-12, RH-2 (ID1-2), ID4-11, MW-3, MW-5A (East-Lower), and RH-5; and

- TDS in wells County Yard (SD DOT), Horse Camp, ID4-11, MW-3, MW-4, MW-5A (East-Lower), and WWTP-1.

A minimum of four data points are required to calculate the trend. “Insufficient data” indicates wells where no trend was established because less than four data points were present. “No data” indicates that either the COC was not sampled or was less than the laboratory reporting limit.

Arsenic

Arsenic concentrations have been detected above laboratory reporting limits at several wells in the Borrego Springs Subbasin since the 1980s[18]. Arsenic has been detected up to 22 µg/L in the Rams Hill Golf Course well RH-4. The California drinking water MCL for arsenic is 10 µg/L. Lowering of this MCL could have a substantial impact on BWD operations. California’s revised arsenic MCL of 0.010 mg/L (equivalent to 10 µg/L) became effective on November 28, 2008 (previous California and federal MCLs were 50 µg/L). As of August 2023, the DDW is currently investigating the technological and economic feasibility of lowering the current MCL closer to the PHG (0.004 µg/L)[19] as previously described.

The most recent arsenic wellhead concentrations for the Borrego Springs Subbasin are shown in Figure 5. In 2023, 30 of the 34 wells in the monitoring network were sampled for arsenic while the remaining four wells were sampled in 2020 (High School Well), 2021 (Army Well), and 2022 (JC Well and RH-5). Arsenic concentrations for wells located in the NMA were less than half the MCL (< 5 µg/L) for wells screened in the upper, middle, and lower aquifers. NMA well information including elevation, well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 7.

Arsenic concentrations from the most recent samples for wells located in the CMA were less than half the MCL (< 5 µg/L) for wells screened in the upper, middle, and lower aquifers except for ID4-20 (Wilcox) which had a concentration of 0.0056 mg/L (below the MCL 10 µg/L). CMA well information including elevation, well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 3.

For wells located in the SMA, the most recent arsenic concentrations ranged from less than half the MCL (< 5 µg/L) to greater than the MCL (>10 µg/L). Rams Hill Golf Course irrigation wells 3, 4, 5, and 6 exceeded the California drinking water MCL. The screen intervals of wells in the SMA predominantly intercept the lower aquifer though most wells are also partially screened in the middle aquifer. No recent wellhead sample is available for the upper aquifer overlying the SMA as this portion of the aquifer is currently unsaturated. SMA well information including elevation,

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[18] Prior to the 1980s, laboratory detection limits for arsenic were often established at 10 µg/L or 50 µg/L and results were reported as below the laboratory detection limit.

[19] Information and updates regarding this pre-rulemaking action can be found on the State Water Resources Control Board website, SWRCB-DDW-23-002 Arsenic MCL (SWRCB-DDW-23-002 Arsenic MCL | California State Water Resources Control Board.

well depth, groundwater level, pump information, screen interval, casing diameter, and production rate is provided in Figure 4.

Historical arsenic data for wells located in the NMA were reviewed to determine trends (Figures 10 through 12). NMA wells have arsenic concentrations less than the California drinking water MCL. These wells displayed no trend, had insufficient data to establish a trend, or were not sampled for arsenic (Fortiner #1 and Orchard Well).

Historical arsenic data for wells located in the CMA were also reviewed to determine trends (Figures 17 through 23). These wells have arsenic concentrations less than the California drinking water MCL, except for one non-compliance sample collected from ID1-10 in 2014 by M.H. Rezaie-Boroon et al. (2014). Subsequent compliance sampling completed by BWD in 2023 indicates that ID1-10 arsenic concentration is below the MCL at a 4.2 µg/L concentration. Except for the High School Well which was not sampled for arsenic, the CMA wells display no trend as many of the arsenic results are below laboratory reporting limits.

Historical arsenic data for wells located in the SMA were reviewed to determine trends (Figures 24 through 28). ID1-8 is the only potable BWD production well located in the SMA. While the majority of arsenic concentrations at ID1-8 have been below the California drinking water MCL, this well had three non-compliance samples – 14 µg/L in 1988, 11 µg/L in 1991, and 11 µg/L in 2022. Subsequent compliance sampling completed by BWD in 2023 indicates that the arsenic concentration at ID1-8 is below the MCL at a concentration of 6.4 µg/L. Exhibit 20a shows the ID1-8 arsenic concentration fluctuates over time. Additionally, the Rams Hill Golf Course wells RH-3, 4, 5, and 6 in Exhibits 26a through 29a historically show arsenic concentrations exceeding the California drinking water MCL. Wells located in the SMA do not indicate arsenic concentration trends except for RH-2 (ID1-2), RH-5, and WWTP-1 which indicate an increasing trend.

Overall, arsenic concentrations above the MCL have been detected in the SMA, specifically the Rams Hill Golf Course wells, and show an increasing trend. While the majority of wells are screened across multiple aquifers, the Rams Hill Golf Course wells exceeding the MCL provide evidence that arsenic concentrations increase with depth. Arsenic tends to be bound in clay layers and as production increases in the SMA, water in the clay layers is expelled, causing arsenic bound in the clay layers to leach into the aquifer.

Fluoride

Historical fluoride data for wells located in the NMA were reviewed to determine trends. Fluoride concentrations for wells in the NMA were below one-half the California drinking water MCL (2 mg/L) except for Orchard Well (T2) and MW-6D. Fluoride concentrations for both Orchard Well (T2) and MW-6D were below the California drinking water MCL, 1.2 mg/L and 1.8 mg/L, respectively. No trend for fluoride is indicated for any of the NMA wells.

Historical fluoride data for wells located in the CMA were also reviewed to determine trends. Fluoride concentrations are typically below one-half the California drinking water MCL except for BSR Well 6 and ID5-5. Fluoride concentrations in well ID5-5 are below the California drinking

water MCL. One sample tested above the California drinking water standard in the BSR Well 6 at a concentration of 8 mg/L in 2018 but is considered an outlier. The rest of the historical data for this well is below one-half the MCL and no trend is indicated for fluoride. A decreasing trend for fluoride is indicated for wells ID1-10, ID1-12, and ID1-16 while the remaining wells indicate no trend except for County Yard (SD DOT). This well indicates an increasing trend for fluoride, but historical concentrations are still below one-half the California drinking water standard and range from 0.32 to 0.41 mg/L.

Historical fluoride data for wells located in the SMA were reviewed to determine trends. Fluoride concentrations for wells in the SMA are typically below one-half the California drinking water MCL except for MW-5B (West-Upper), RH-3, RH-5, and RH-6 which are below the MCL. No trend for fluoride is indicated for all wells in the SMA except for JC Well and RH-4 which show a decreasing trend.

Nitrate

The California drinking water primary MCL for nitrate as N is 10 mg/L. The MCL has also been historically expressed as 45 mg/L nitrate as nitrate [as NO_3], and a careful review of historical data is required to verify reporting units[20]. The most recent nitrate as N wellhead concentrations for the Borrego Springs Subbasin are shown in Figure 6. Three out of the 38 wells sampled in 2023 had nitrate concentrations that exceeded the MCL – Fortiner #1 (Allegre 1), MW-6S and 904 DiGiorgio Road.

Historical nitrate data for wells located in the NMA were reviewed for trends. These wells are located on the fringe of current and historical agricultural production in both the upper and middle aquifers. A decreasing nitrate as N concentration trend is observed at Horse Camp while an increasing trend is observed at ID4-18. The remaining wells indicate no trend or there is insufficient data to determine a trend as many of the nitrate as N results are below the laboratory reporting limits. In addition, the vertical distribution of nitrate is the NMA is now documented at the multi-depth cluster well, MW-6 recently completed as part of a California Department of Water Resources (DWR) Technical Support Services (TSS) program. The monitoring well cluster was completed at two intervals: 390 to 490 feet below ground surface (bgs) and 640 to 740 feet bgs. The nitrate concentration in the shallow completion exceeds the MCL at 11 mg/L whereas the deeper completion was only 0.27 mg/L. It is interpolated that the shallow completion is screened across the upper aquifer and upper portion of the middle aquifer, and the deeper completion is screened in the deepest 100 feet of the middle aquifer.

Historical nitrate data for wells located in the CMA were also reviewed for trends. These wells are located in or near the primary area of municipal groundwater production in the Subbasin. Golf courses and septic return flow with limited areas of agriculture are the probable

[20] The Division of Drinking Water recently made revisions to California drinking water standards for nitrate in California Code of Regulations Sections 64431 (MCL), 64432 (DLR), and 64482 (Health Information). The revisions specify that nitrate laboratory results must be expressed as nitrate as nitrogen. As a result, the MCL for nitrate is now expressed as “10 mg/L (as nitrogen)” instead of “45 mg/L (as nitrate)”.

anthropogenic sources of nitrate to wells in the CMA. Except for the High School well which had insufficient data, all wells in the CMA indicate no trend in concentration for nitrate as N.

Historical nitrate data was also reviewed for trends for wells located in the SMA. JC Well and RH-4 display an increasing nitrate as N concentration trend. WWTP-1 displays a decreasing nitrate as N concentration trend. No trend is observed for the remaining wells located in the SMA. The Rams Hill golf course is a potential anthropogenic source of nitrates in the SMA in addition to the percolation ponds at the wastewater treatment plant. Concentrations for SMA wells are below one-half the California drinking water MCL (Figure 6).

Nitrate predominantly originates from fertilizers present in irrigation return flow and from septic systems (GMP 2020). Nitrate concentrations were generally found highest in wells that are screened in the upper aquifer and in the NMA where agricultural activities occur. A comprehensive assessment of historical effects and the continuing vulnerability of the aquifer to nitrate concentrations necessitate an examination of past, present, and future land usage within a spatial framework. (GMP 2020).

Sulfate

The secondary California drinking water standard for sulfate is 500 mg/L[21]. The most recent sulfate wellhead concentrations for the Subbasin are shown in Figure 7. Similar to arsenic, 30 of the 34 wells in the monitoring network were sampled for sulfate in 2023, while the remaining four wells were sampled in 2020 (High School Well), 2021 (Army Well), and 2022 (JC Well and RH-5). The most recent concentrations for sulfate generally show that concentrations are below one-half the secondary MCL. Exceedances were observed in the SMA and the NMA for wells RH-1 (ID1-1), JC Well, MW-5B, and Fortiner #1 and ranged from 530 mg/L (Fortiner #1, NMA) to 750 mg/L (RH-1 (ID1-1), SMA).

Historical sulfate data for wells located in the NMA were reviewed for trends. Auxiliary 2 displays an increasing trend for sulfate concentrations. MW-6S/D and Orchard Well had insufficient data and the remaining wells displayed no trend for sulfate.

Historical sulfate data for wells located in the CMA were also reviewed for trends. These wells display stable sulfate concentrations for the period of record monitored in each well (Figure 7). However, a decreasing trend for sulfate was indicated in wells ID1-12 and ID4-20. All wells indicate concentrations below the California drinking water secondary recommended MCL of 250 mg/L, except MW-4 at a concentration of 260 mg/L.

Historical sulfate data for wells located in the SMA were also reviewed to determine trends. An increasing trend in sulfate concentrations was observed at wells JC Well, RH-4, and RH-6. A decreasing trend in sulfate concentrations was indicated at wells MW-3, MW-5A, RH-2 (ID1-2), and RH-5. RH-1 (ID1-1) and MW-5B have historically exhibited concentrations above the secondary MCL. No trend was indicated for the remaining wells located in the SMA.

[21] The recommended, upper, and short-term California drinking water secondary MCLs for sulfate are 250 mg/L, 500 mg/L, and 600 mg/L, respectively.

Piper diagram analyses were performed as part of a water quality review and assessment for the Borrego Springs GMP. The analysis indicated that sulfate is the general mineral most commonly observed to be increasing in groundwater (according to the Piper diagrams) and that groundwater quality systematically varies with distance along the valley, with water in the SMA being noticeably different (GMP 2020, Appendix D2). Water quality gradually changes from north to south, consistent with pre-development groundwater water flow patterns. The NMA wells tend to be sulfate dominant while the SMA wells tend to have either no dominant anion or become bicarbonate dominant. Updated Piper diagrams are discussed further in the Summary of Water Quality by District Well section.

TDS

The secondary California drinking water standard for TDS is 500 mg/L[22]. The most recent TDS wellhead concentrations for the Borrego Springs Subbasin are shown in Figure 8. Like arsenic and sulfate, 30 of the 34 wells in the monitoring network were sampled for TDS in 2023, while the remaining four wells were sampled in 2020 (High School Well), 2021 (Army Well), and 2022(JC Well and RH-5). The most recent concentrations for TDS generally show that concentrations are below one-half the secondary MCL for wells located in the CMA. Exceedances were observed in the SMA and the NMA for wells RH-1 (ID1-1), JC Well, MW-5A/B, Fortiner #1, and MW-6S and ranged from 1,000 mg/L (MW-5A, SMA) to 1,600 mg/L (RH-1 (ID1-1), SMA).

Historical TDS data for wells located in the NMA were reviewed for trends. Auxiliary 2 displays an increasing trend while Horse Camp Well indicates a decreasing trend for TDS concentrations. MW-6S/D and Orchard Well had insufficient data and the remaining wells displayed no trend for TDS.

Historical TDS data for wells located in the CMA were also reviewed for trends. These wells display stable TDS concentrations for the period of record monitored in each well (Figure 8). However, a decreasing trend for TDS was indicated in wells ID1-12 and ID4-20. All wells indicate concentrations below the California drinking water secondary recommended MCL of 250 mg/L, except MW-4 at a concentration of 260 mg/L.

Historical sulfate data for wells located in the SMA were also reviewed to determine trends. An increasing trend in sulfate concentrations was observed at wells JC Well, RH-4, and RH-6. A decreasing trend in sulfate concentrations was indicated at wells County Yard (SD DOT), ID4-11, and MW-4. The High School well had insufficient data to establish a trend in TDS concentrations. No trend was indicated for the remaining wells located in the SMA.

Per- and Polyfluorinated Alkyl Substances

Per- and Polyfluorinated Alkyl Substances (PFAS) are a class of synthetic fluorinated chemicals used in many industrial and consumer products, including non-stick cookware, food packaging, waterproof clothing, fabric stain protectors, lubricants, paints, and firefighting foams such as

[22] The recommended, upper, and short-term California drinking water secondary MCLs for sulfate are 500 mg/L, 1,000 mg/L, and 1,500 mg/L, respectively.

aqueous film forming foam (AFFF). These group of chemicals have garnered significant attention due to their widespread presence in the environment and potential adverse health effects. Moreover, the persistence of PFAS in the environment has raised concerns, as they do not easily break down and can accumulate in soil, water, and biota over time. Their presence in drinking water sources and the detection of PFAS in human blood samples have led to growing health concerns. Consequently, the management and regulation of PFAS have become a critical environmental and public health priority, with ongoing efforts to understand their behavior, mitigate contamination, and establish stringent safety guidelines. On March 14, 2023, EPA announced the proposed National Primary Drinking Water Regulation (NPDWR) for six PFAS including perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS)[23]. EPA anticipates finalizing the regulation by the end of 2023 and the proposed PFAS NPDWR does not require any actions until it is finalized.

As of March 2023, PFAS MCLs in California have not yet been established[24]. The development of standards for PFOA, PFOS, and other PFAS is a priority for the DDW, and it has established notification and response levels for PFOA, PFOS, PFBS, and PFHxS (Table 3). Below is a timeline of key developments related to these PFAS notification and response levels.

- In July 2018, DDW established an interim notification level of 14 ppt for PFOA and 13 ppt for PFOS and a single response level of 70 ppt for the combined concentrations of PFOA and PFOS.
- In August 2019, DDW revised the notification levels to 6.5 ppt for PFOS and 5.1 ppt for PFOA. The single health advisory level (for the combined values of PFOS and PFOA) remained at 70 ppt.
- On February 6, 2020, DDW issued updated drinking water response levels of 10 ppt for PFOA and 40 ppt for PFOS based on a running four-quarter average.
- On March 5, 2021, DDW issued a drinking water notification level and response level of 0.5 parts per billion (ppb) and 5 ppb, respectively for perfluorobutane sulfonic acid (PFBS).
- On October 31, 2022, DDW issued a drinking water notification level and response level of 3 parts per trillion (ppt) and 20 ppt, respectively for perfluorohexane sulfonic acid (PFHxS).

[23] EPA is proposing a NPDWR to establish legally enforceable MCLs for six PFAS substances in drinking water. A summary of the proposed MCLs can be found on the EPAs website: https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

[24] Any updates to the upcoming rulemaking process for PFOA and PFOS in California will be posted at the PFOS and PFOA MCL rulemaking record website: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/swrcb-ddw-24-001.html

Table 3. PFAS Notification and Response Levels

Chemical	Notification Level (ppt)	Response Level (ppt)
PFOA	5.1	10
PFOS	6.5	40
PFBS	500	5000
PFHxS	3	20

Notes: ppt = parts per trillion

Evaluation

South Management Area Wells

As previously described, the SMA wells are hydraulically isolated from the CMA by the Desert Lodge anticline and screen intervals of wells in the SMA predominantly intercept the lower aquifer though most wells are also partially screened in the middle aquifer. Because arsenic concentrations have been documented to exceed the MCL in irrigation wells in the SMA, the BWD's only production well, ID1-8, which is screened in saturated portions of the upper, middle, and lower aquifers is susceptible to groundwater quality degradation because of groundwater withdraw. As such, linear regression analysis was performed to evaluate if there is an identifiable correlation between increasing arsenic concentrations and groundwater production.

Well RH-2 (ID1-2)

As indicated by the Mann-Kendall trend analysis, arsenic concentrations in Well RH-2 (ID1-2) have a statistically increasing trend. Annual groundwater production at RH-2 (ID1-2) and the combined annual production of the SMA wells were compared with available arsenic concentration data as shown in Exhibit 2.

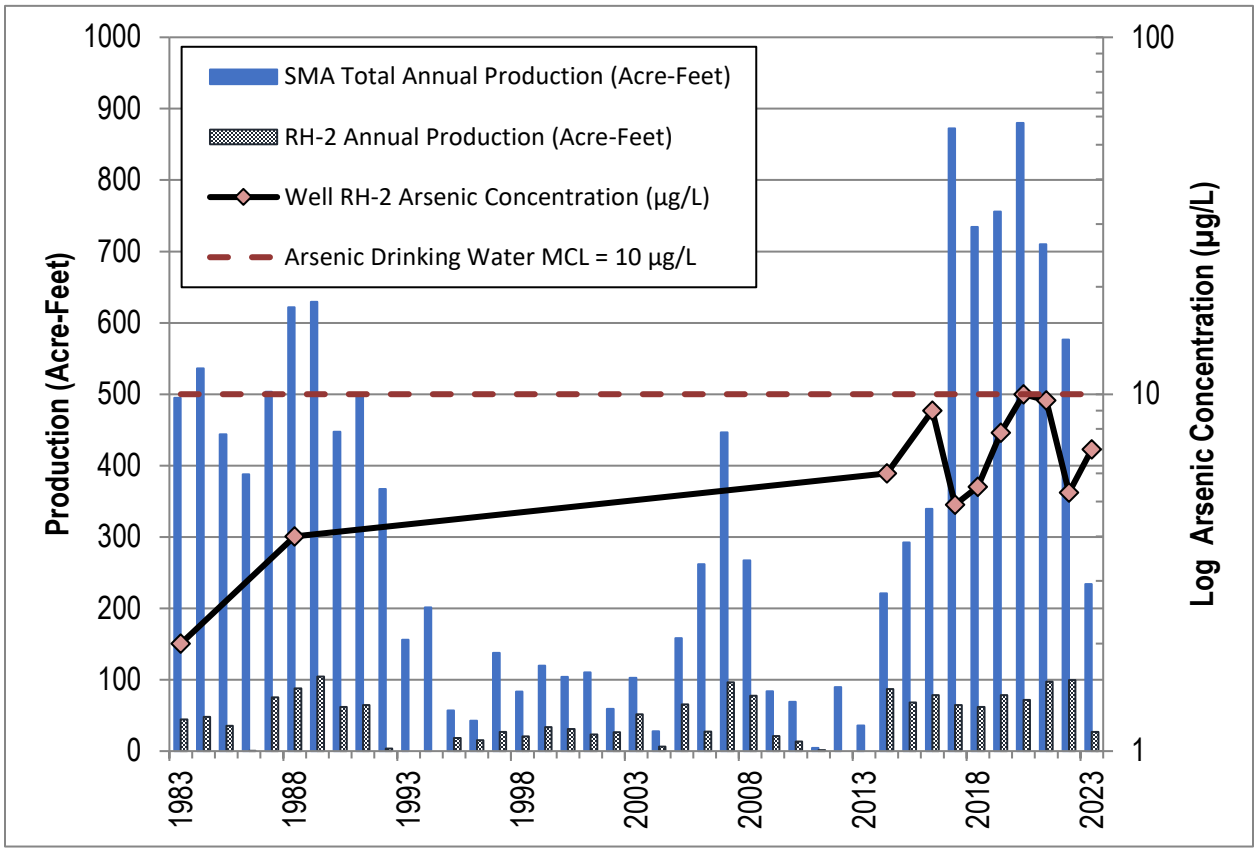


Exhibit 2. Well RH-2 (ID1-2) in SMA – Groundwater Production and Arsenic Data.

A linear regression analysis of the dependent variable, arsenic concentration, was plotted against the independent variable, annual groundwater production for RH-2. The goodness of fit for well RH-2 linear regression was poor (R-squared value = 0.07). Similarly, the arsenic concentration was plotted against the combined annual groundwater production for SMA wells. The goodness of fit was also poor (R-squared value = 0.02).

A linear regression analysis of the dependent variable, arsenic concentration, was also plotted against the independent variable, groundwater level data for RH-2. The goodness of fit for RH-2 linear regression (R-squared value = 0.52) was better than fitting the production data, but only 52% of the increasing arsenic concentrations can be explained by changes in groundwater levels (Exhibit 3).

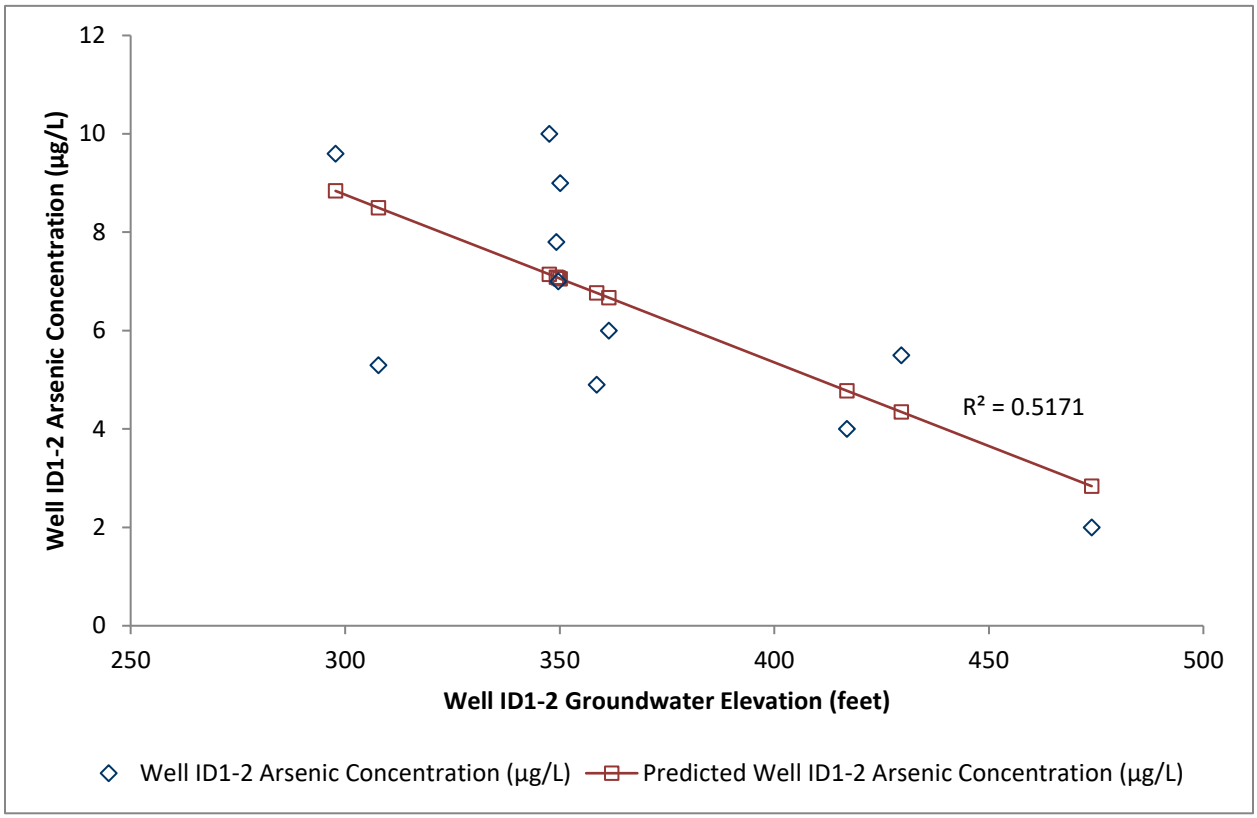


Exhibit 3. Well RH-2 (ID1-2) in SMA – One-way Linear Regression.

Well ID1-8

As indicated by the Mann-Kendall trend analysis, arsenic concentrations in well ID1-8 have no statistically determined trend. Visual review of the data shown in Exhibit 4 suggests that arsenic concentrations initially dropped, stabilized, and rose again in recent years. Currently, the arsenic concentration is below the California drinking water MCL. However, since arsenic concentrations can vary with depth, further review of the data was conducted with respect to independent production rates, combined production rates for SMA wells, and groundwater levels.

Annual groundwater production at Well ID1-8 and the combined annual production for SMA wells was compared with available arsenic concentration data as shown in Exhibit 4.

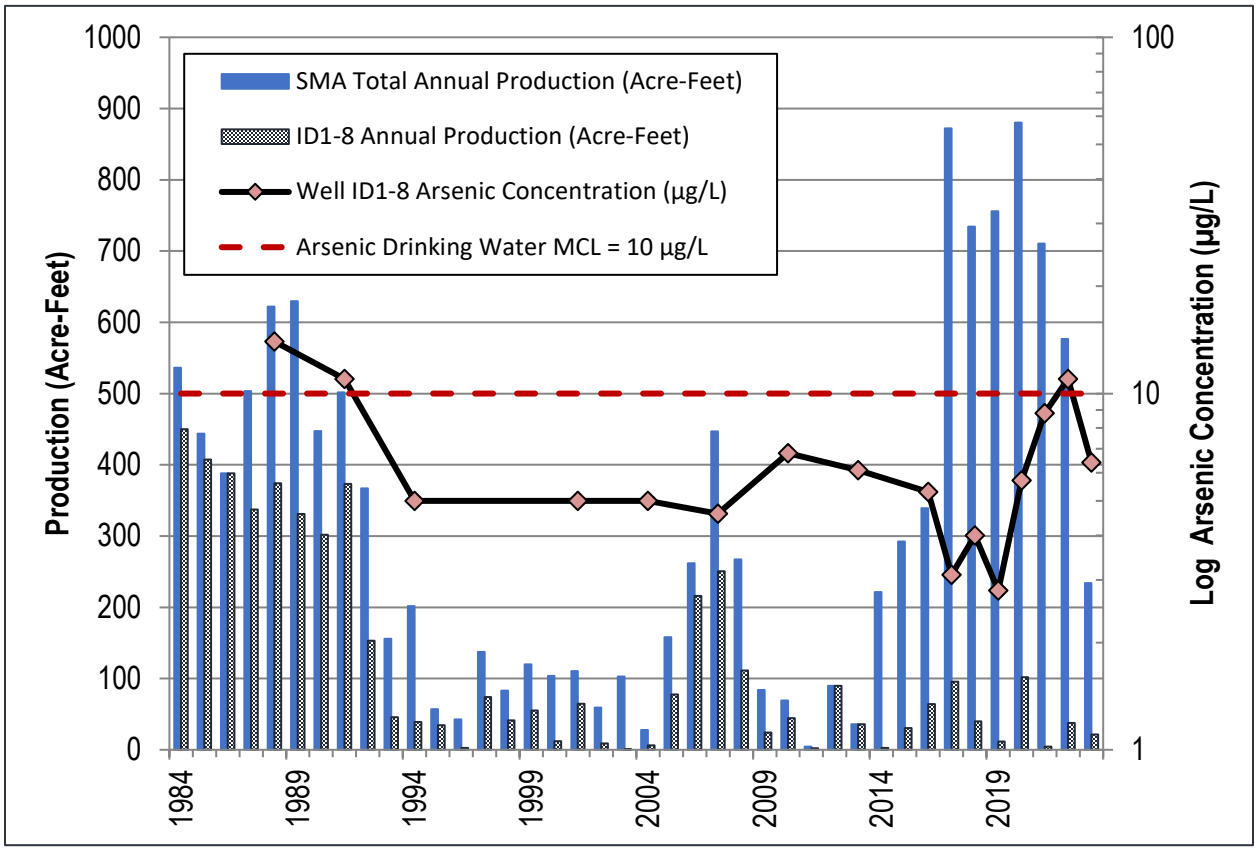


Exhibit 4. Well ID1-8 in SMA – Groundwater Production and Arsenic Data.

A linear regression analysis of the dependent variable, arsenic concentration was plotted against the independent variable, annual groundwater production for ID1-8. The goodness of fit for ID1-8 linear regression was poor (R-squared value = 0.35). Similarly, the arsenic concentration was plotted against the combined annual groundwater production for SMA wells and did not yield a better fit (R-squared value = 0.003).

As there appears to be about a 2-year lag in increased arsenic concentration in relation to pumping, an alternative linear regression was performed, incorporating a 2-year lag correction into the data. A linear regression analysis of the dependent variable, arsenic concentration was plotted against the independent variable, annual groundwater production with a 2-year lag applied for ID1-8. The goodness of fit for ID1-8 linear regression with a 2-year lag (R-squared value = 0.51) was better than annual production alone, but only about 50% of the increasing arsenic concentrations can be explained by annual production using the 2-year lag (Exhibit 5).

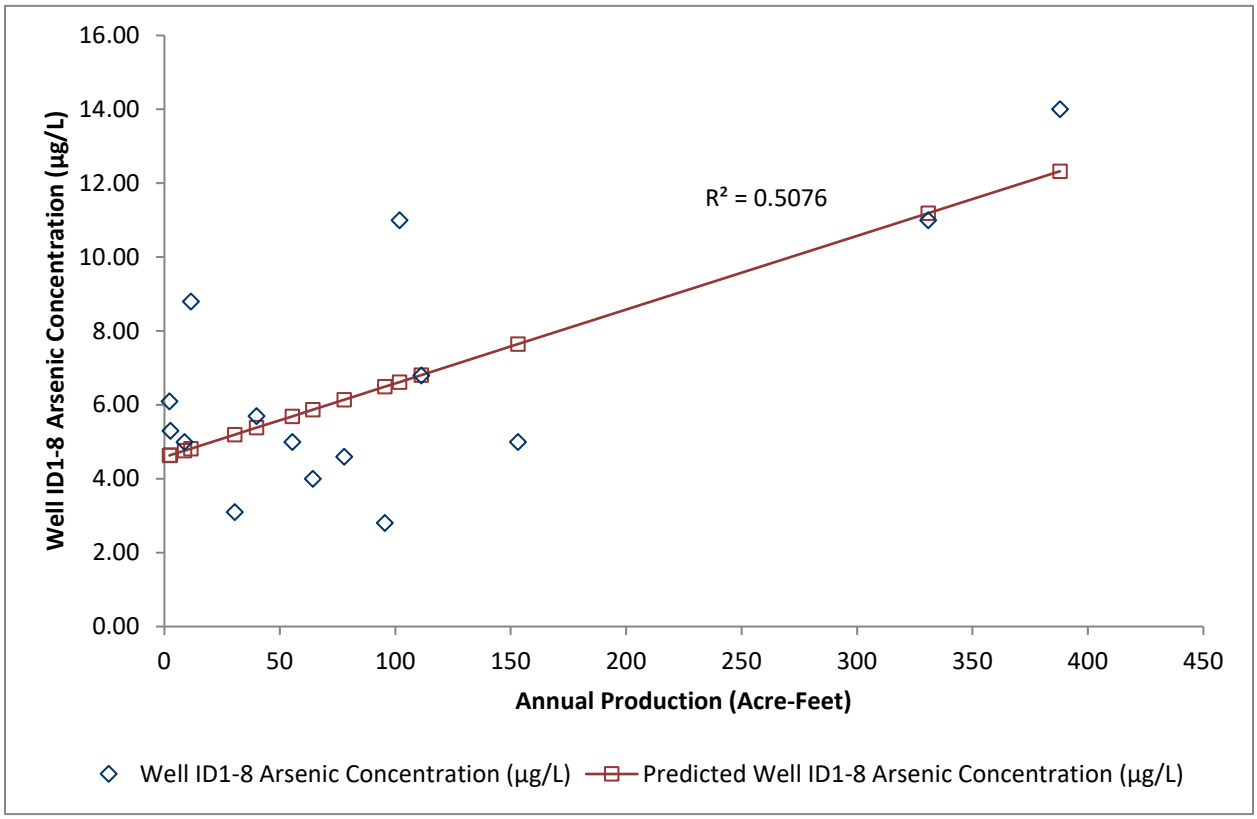


Exhibit 5. Well ID1-8 in SMA – One-way Linear Regression with a 2-year lag.

Rams Hill Wells: RH-3, RH-4, RH-5, and RH-6

Linear regression analyses were carried out for the remaining production wells located in the SMA – RH-3, RH-4, RH-5, and RH-6. As described above for RH-2 and ID1-8, the combined SMA annual production, a 2-year lag on combined annual production, and groundwater levels, and a 2-year lag on the well's singular annual production were favored as the independent variables. Table 4 summarizes the results where bold R-squared values indicate the independent variable with the best fit.

While the R-squared value for RH-5 had the best fit with the groundwater level data as the independent variable, the mixed result for the remaining SMA wells indicates that multiple factors appear to be influencing the arsenic concentration by well and these relationships are likely non-linear. Information regarding the timing of sampling and whether the well has been actively pumping for minutes or days at each location has not been considered in this analysis and could be a root cause of the variability in analytical results. Arsenic concentrations cannot be explained solely by declining groundwater levels and increased production for SMA wells (excluding RH-5).

Table 4. Linear Regression Results for Rams Hill Wells.

Well Location	Combined SMA Annual Production	2-year Lag of Combined SMA Annual Production	Water Levels	2-year Lag of Annual Production
	R-Squared Values			
ID1-8	0.003	0.100	0.182	**0.510**
RH-1 (ID1-1)	0.007	0.039	0.001	**0.574**
RH-2 (ID1-2)	0.016	0.123	**0.517**	0.234
RH-3	0.010	0.441	0.008	**0.687**
RH-4	0.024	0.079	0.104	**0.208**
RH-5	0.397	0.780	**0.889**	0.716
RH-6	0.004	**0.472**	0.403	0.294

Summary of Water Quality for District Wells and Monitoring Wells

North Management Area Wells

The NMA wells are generally located to the west and upgradient of the irrigated agricultural areas.

ID4-18

The Mann-Kendall analysis (Table 2) indicates an increasing trend for nitrate concentrations at ID4-18. The water quality times series plot (Exhibit 6a) shows that nitrate has steadily increased since 1991 but has remained less than half the California drinking water MCL (10 mg/L). TDS is between the recommended and secondary upper MCL (most recent sample at 630 mg/L). Similarly, sulfate is between the recommended and secondary upper MCL at 280 mg/L. Neither constituent indicates a trend in concentration. Arsenic has mostly been non-detect at this well – the last detection was reported in 2021 at 2.5 µg/L.

The Piper diagram depicted in Exhibit 6b shows that ID4-18 water quality has remained relatively stable over time. The cation ternary plot shows that ID4-18 has shifted slightly from non-dominant to more sodium and potassium-dominant water. The anion ternary plot shows sulfate-dominant water. And the combination depicts that ID4-18 is sodium chloride-type water.

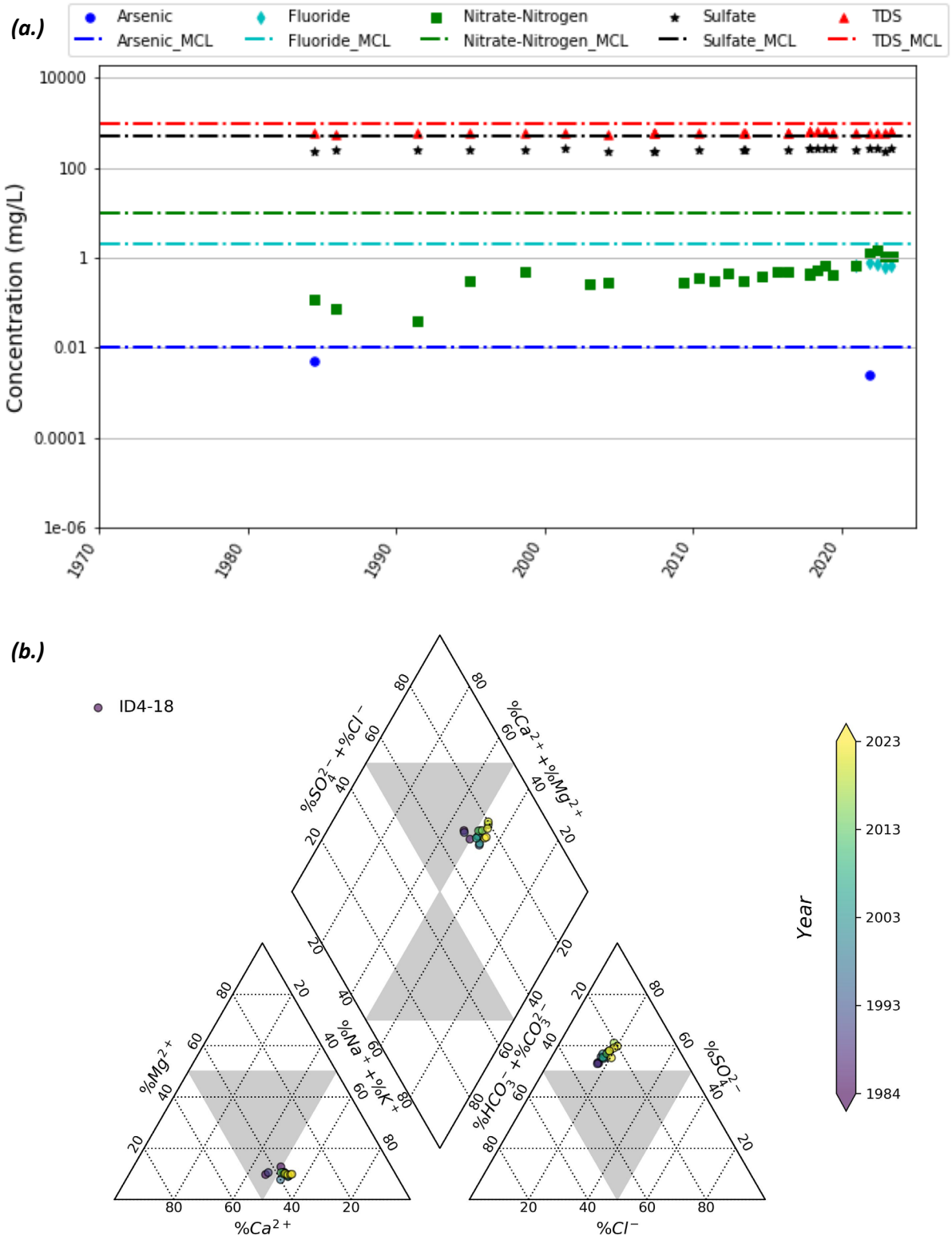


Exhibit 6. (a.) Time series and (b.) Piper diagram of water quality parameters at ID4-18.

ID4-9

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs at ID4-9. As a newly installed well, the water quality data set spans 2019 through 2023. The water quality times series plot (Exhibit 7a) shows that there was one sample for arsenic in 2023 that nearly reached the California drinking water MCL (10 µg/L) but has since dropped to 3.2 µg/L[25]. The remaining constituents remain below the associated MCL.

The piper diagram in Exhibit 7b shows relatively stable water quality at ID4-9 over time. ID4-9 is classified as a sodium chloride type water with sodium and potassium dominant cations with no dominant anions.

[25] The variability in arsenic concentration for ID4-9 and other wells sampled may be due to differences in the duration in pumping prior to sample collection. It is recommended that the duration and volume of pumping prior to sample collection be documented for BWD wells.

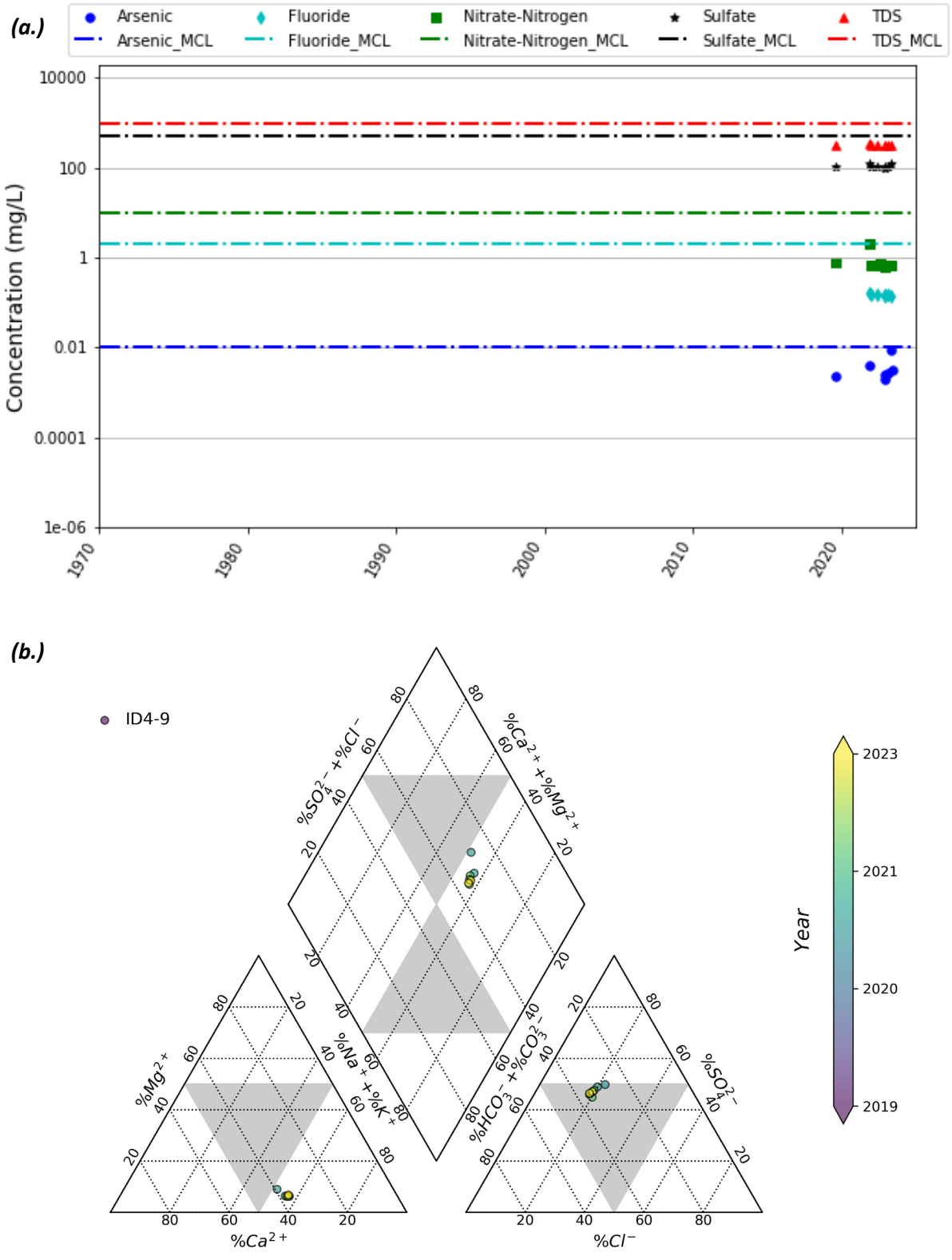


Exhibit 7. (a.) Time series and (b.) Piper diagram of water quality parameters at ID4-9.

MW-1

The Mann-Kendall analysis (Table 2) does not indicate a trend for the COCs of interest at MW-1 and had insufficient data for nitrate. The water quality data set for MW-1 spans 2020 through 2023. The water quality times series plot (Exhibit 8a) shows that arsenic samples have been below the California drinking water MCL (10 µg/L) with the most recent sample being non-detect. The remaining constituents remain below the associated MCL.

The piper diagram in Exhibit 8b shows relatively stable water quality at MW-1 over time. The piper diagram indicates that MW-1 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

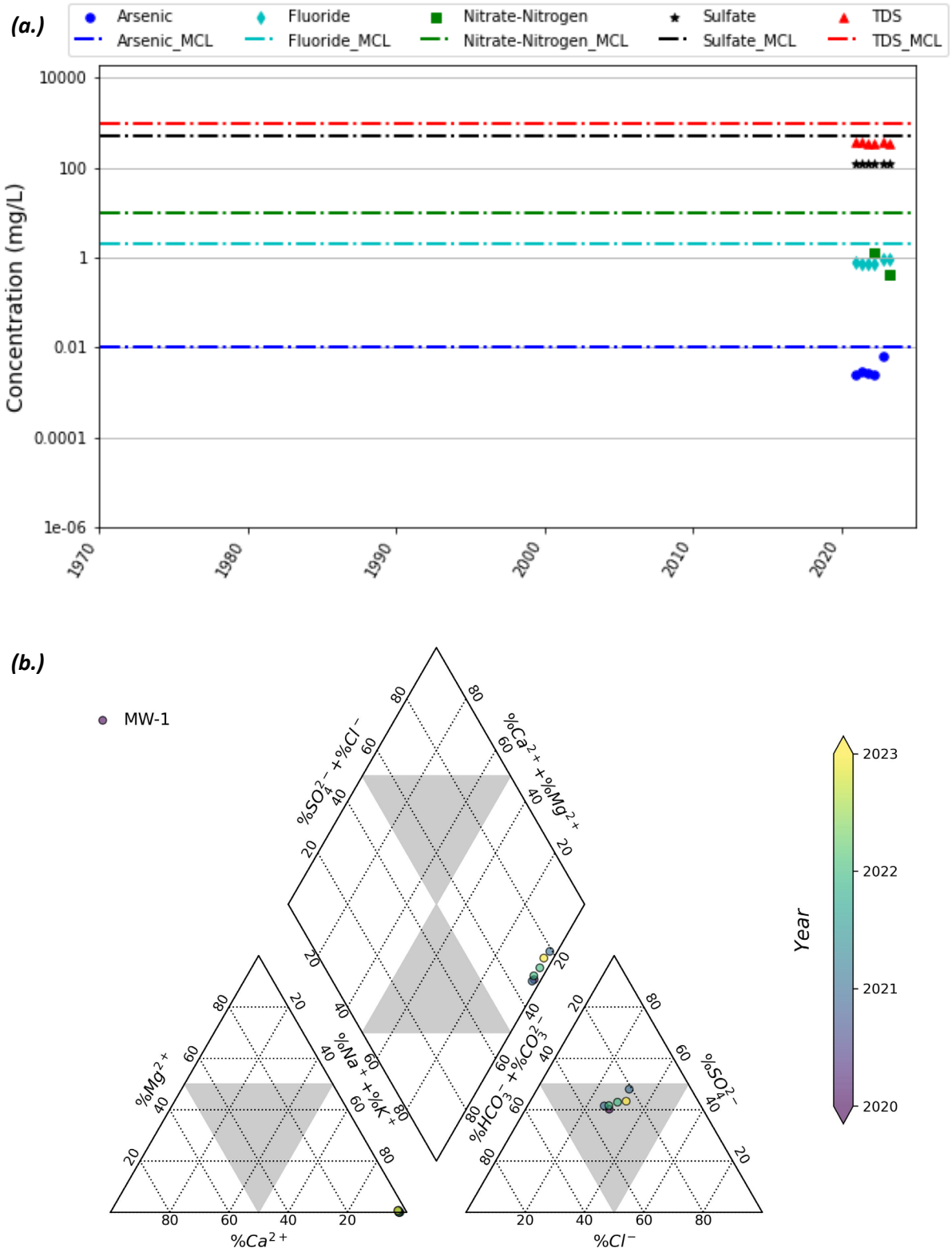


Exhibit 8. (a.) Time series and (b.) Piper diagram of water quality parameters at MW-1.

Bauer Non-Potable Irrigation Wells

The BWD recently executed Agreements for the acquisition of baseline pumping allocation (BPA) from agricultural lands in the NMA. BWD staff sampled four wells located at 282 DiGiorgio Road, 705 DiGiorgio Road, 808 DiGiorgio Road and 904 DiGiorgio Road. The water quality results for the Bauer non-potable irrigation wells provides additional information for the NMA that fills previously identified data gaps. Results are provided by well for each of the Bauer wells:

282 DiGiorgio Road

The BWD has executed Agreements for the acquisition of BPA and property owned by Bauer D & J Family Trust. The 137-acre parcel is located at 282 DiGiorgio Road on assessor's parcel number (APN) 140-010-11-00. Currently there is approximately 128.03 acres of citrus on the site.

The 282 DiGiorgio Road well was sampled in August 2023 for arsenic, nitrate, PFAS substances, total dissolved solids, and pathogens (total coliform and E. coli). Results for the sample collected in August 2023 are summarized in Table 5.

Table 5. 282 DiGiorgio Road Water Quality

Analyte	Result	Units	RDL	EPA Method
Arsenic	ND	ug/L	2.0	EPA 200.8
Nitrate	2.8	mg/L	0.20	EPA 300.0
TDS	960	mg/L	10	SM 2540C
Total Coliform	Absent	--	1.1	SM 9223B
E. coli	Absent	--	1.1	SM 9223B
PFAS substances (25 PFAS chemicals)	ND	ng/L	varies	EPA 533

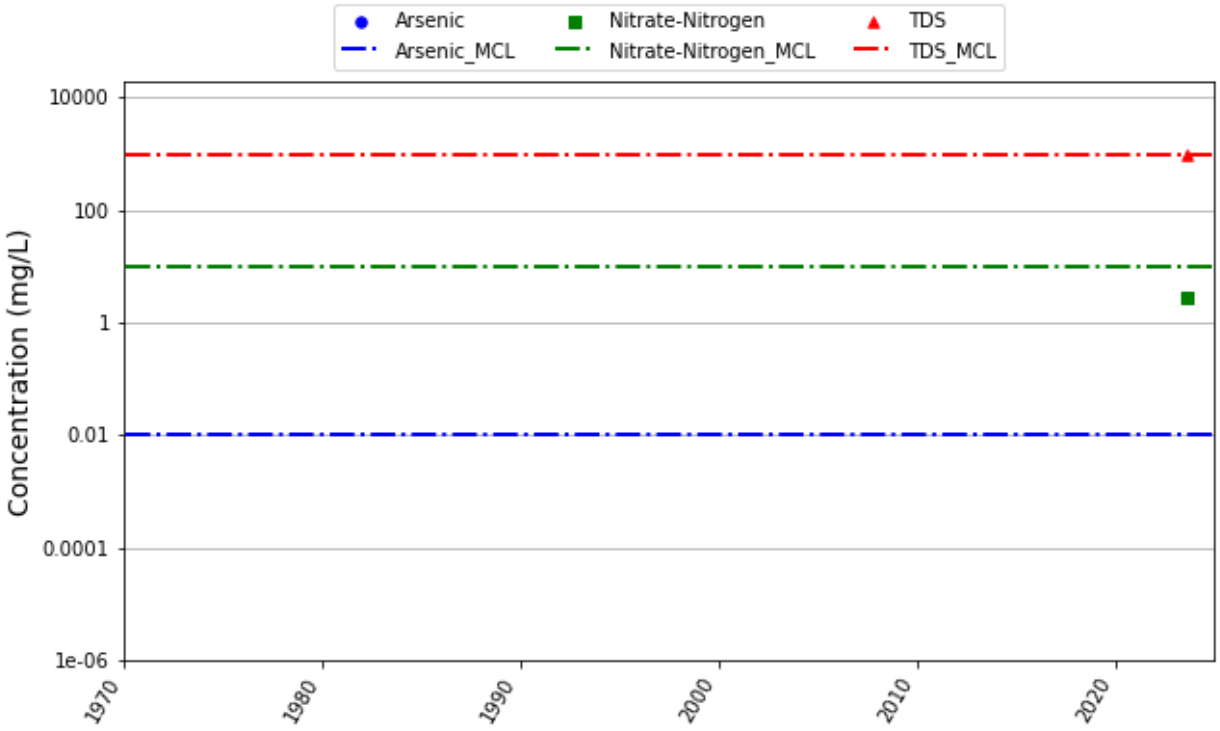


Exhibit 9. Time series of water quality parameters at 282 DiGiorgio Road.

705 DiGiorgio Road

The BWD has executed Agreements for the acquisition of BPA and property owned by Bauer D & J Family Trust. The site is located at 705 DiGiorgio Road on APN 140-070-17-00 (40 acres) and APN 140-070-18-00 (38.56 acres). Currently there is approximately 35.82 acres of citrus on APN 140-070-17-00 and 35.85 acres on APN 140-070-17-00.

The 705 DiGiorgio Road well was sampled in August 2023 for arsenic, nitrate, total dissolved solids, and pathogens (total coliform and E. coli). Results for the sample collected in August 2023 are summarized in Table 6.

Table 6. 705 DiGiorgio Road Water Quality

Analyte	Result	Units	RDL	EPA Method
Arsenic	3.7	ug/L	2.0	EPA 200.8
Nitrate	7.9	mg/L	0.20	EPA 300.0
TDS	970	mg/L	10	SM 2540C
Total Coliform	Absent	--	1.1	SM 9223B
E. coli	Absent	--	1.1	SM 9223B

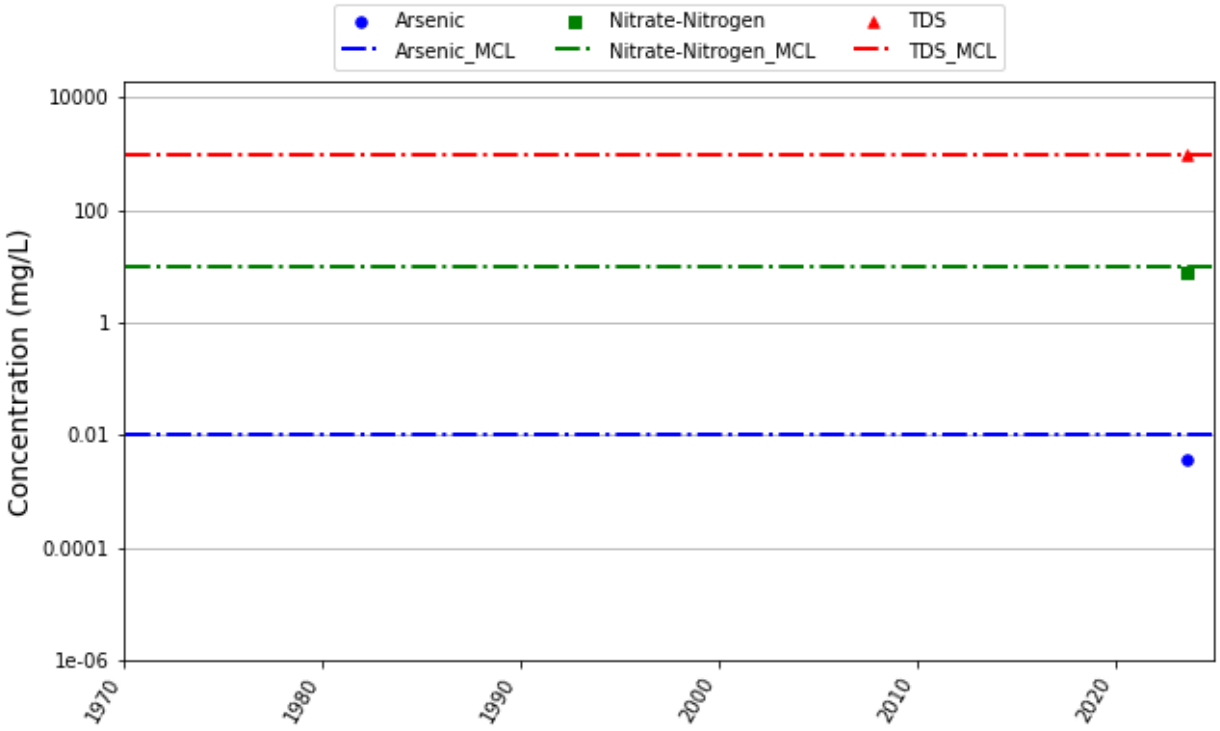


Exhibit 10. Time series of water quality parameters at 705 DiGiorgio Road.

808 DiGiorgio Road

The BWD has executed Agreements for the acquisition of BPA and property owned by Bauer D & J Family Trust. The site is located at 808 DiGiorgio Road on APN 140-070-27-00 (20 acres). Currently there is approximately 17.18 acres of citrus on the site.

The 808 DiGiorgio Road well was sampled in August 2023 for arsenic, nitrate, total dissolved solids, and pathogens (total coliform and E. coli). Results for the sample collected in August 2023 are summarized in Table 7.

Table 7. 808 DiGiorgio Road Water Quality

Analyte	Result	Units	RDL	EPA Method
Arsenic	ND	ug/L	2.0	EPA 200.8
Nitrate	1.9	mg/L	0.20	EPA 300.0
TDS	780	mg/L	10	SM 2540C
Total Coliform	Present	--	1.1	SM 9223B
E. coli	Absent	--	1.1	SM 9223B

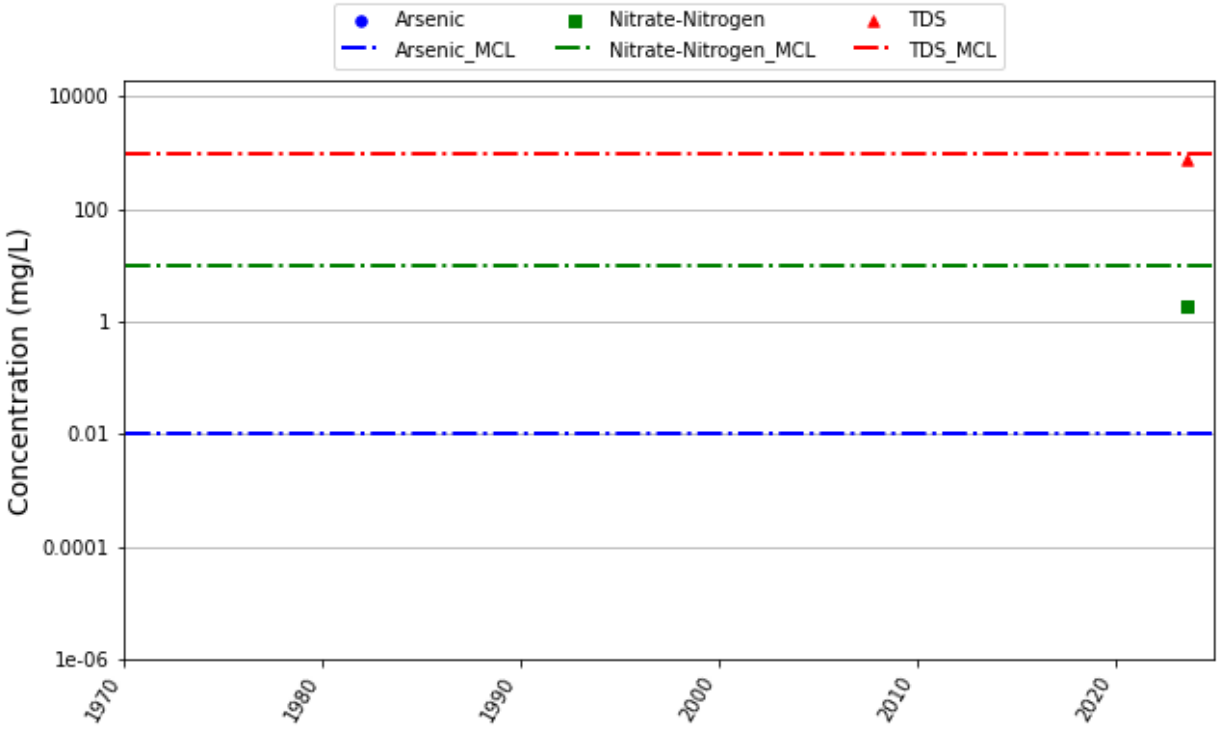


Exhibit 11. Time series of water quality parameters at 808 DiGiorgio Road.

904 DiGiorgio Road

The BWD has executed Agreements for the acquisition of BPA and property owned by Bauer D & J Family Trust. The site is located at 904 DiGiorgio Road on APN 140-110-14-00 (74.5 acres). Currently there is approximately 73.36 acres of citrus on the site.

The 904 DiGiorgio Road well was sampled in August 2023 for arsenic, nitrate, total dissolved solids, and pathogens (total coliform and E. coli). Results for the sample collected in August 2023 are summarized in Table 8.

Table 8. 904 DiGiorgio Road Water Quality

Analyte	Result	Units	RDL	EPA Method
Arsenic	2.4	ug/L	2.0	EPA 200.8
Nitrate	15	mg/L	0.20	EPA 300.0
TDS	910	mg/L	10	SM 2540C
Total Coliform	Absent	--	1.1	SM 9223B
E. coli	Absent	--	1.1	SM 9223B

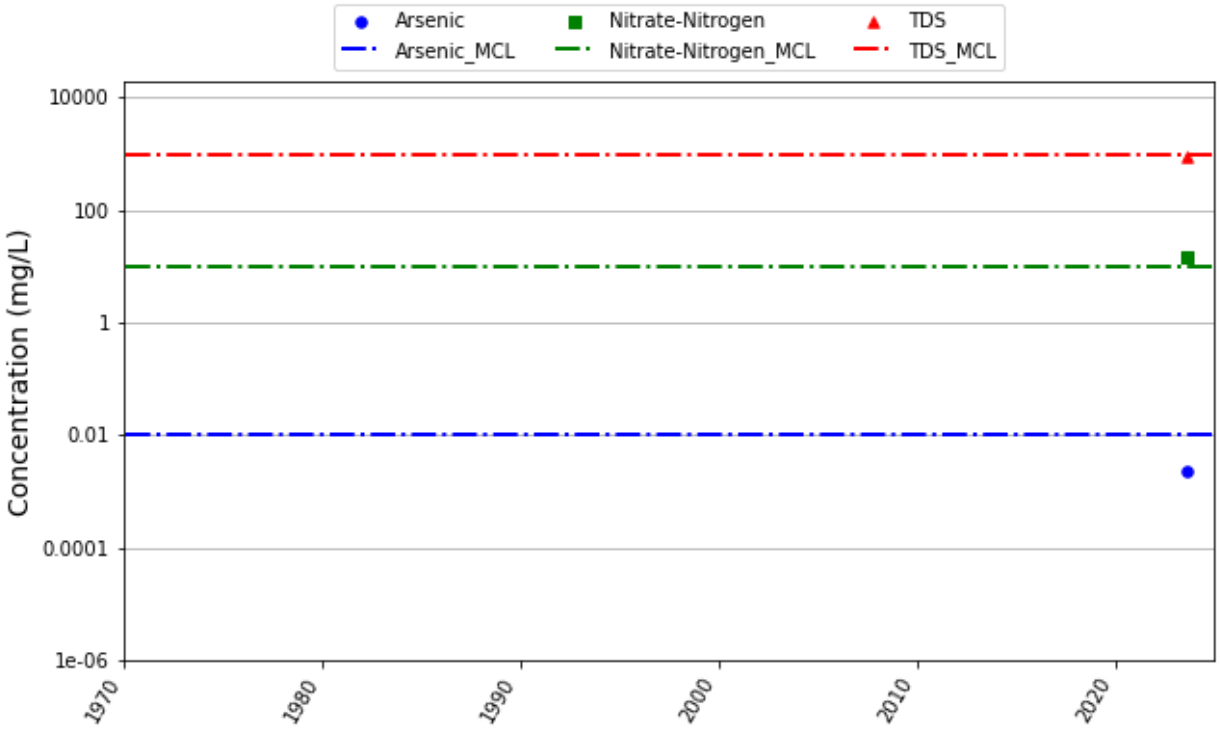


Exhibit 12. Time series of water quality parameters at 904 DiGiorgio Road.

Central Management Area Wells

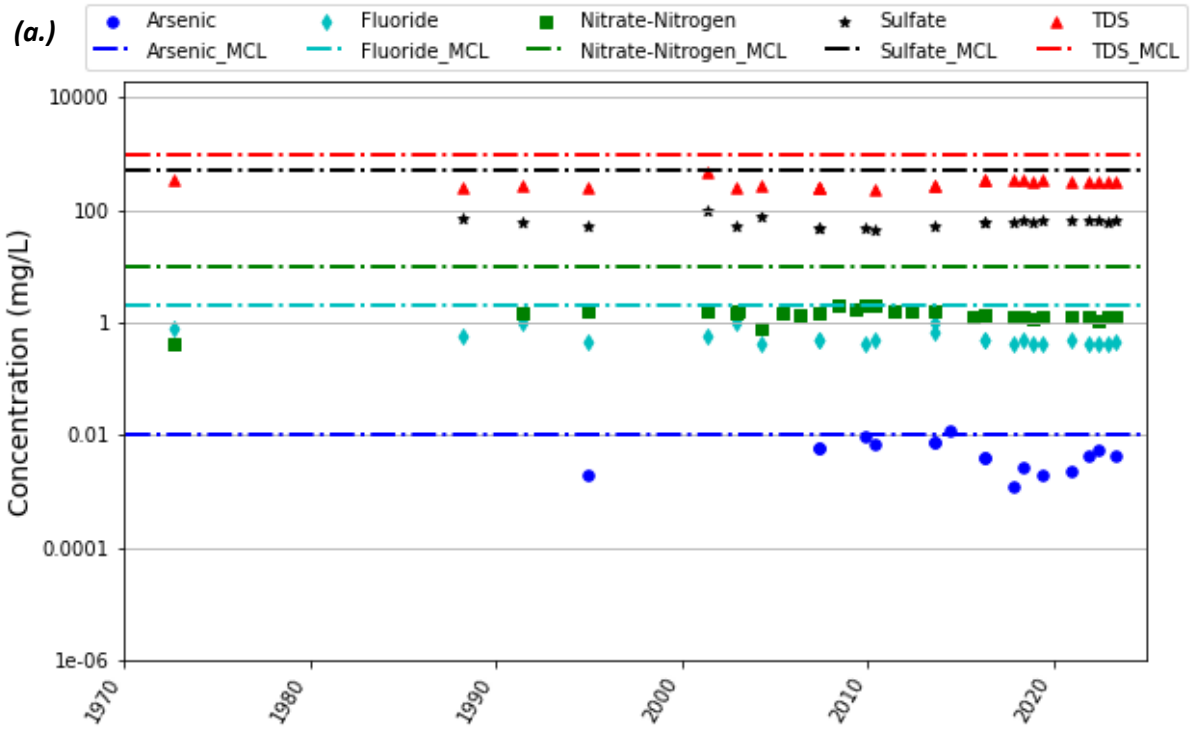
The CMA wells are generally located near the community of Borrego Springs and are considered a transitional water quality type between the north and south management areas. Primary production in the CMA is utilized for municipal supply.

ID1-10

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for fluoride and no trend for the remaining COCs at ID1-10. The water quality times series plot (Exhibit 13a) shows that arsenic has fluctuated over time with exceedance of the MCL (10 µg/L) in 2014 at 12.2 µg/L for a non-regulatory sample. Arsenic concentrations have mostly stabilized with the most recent sample recorded in 2023 as 4.2 µg/L. The remaining constituents remain below the associated MCL.

The piper diagram in Exhibit 13b shows water quality at ID1-10 has gradually changed over time but appears to be stabilizing. The piper diagram indicates that ID1-10 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

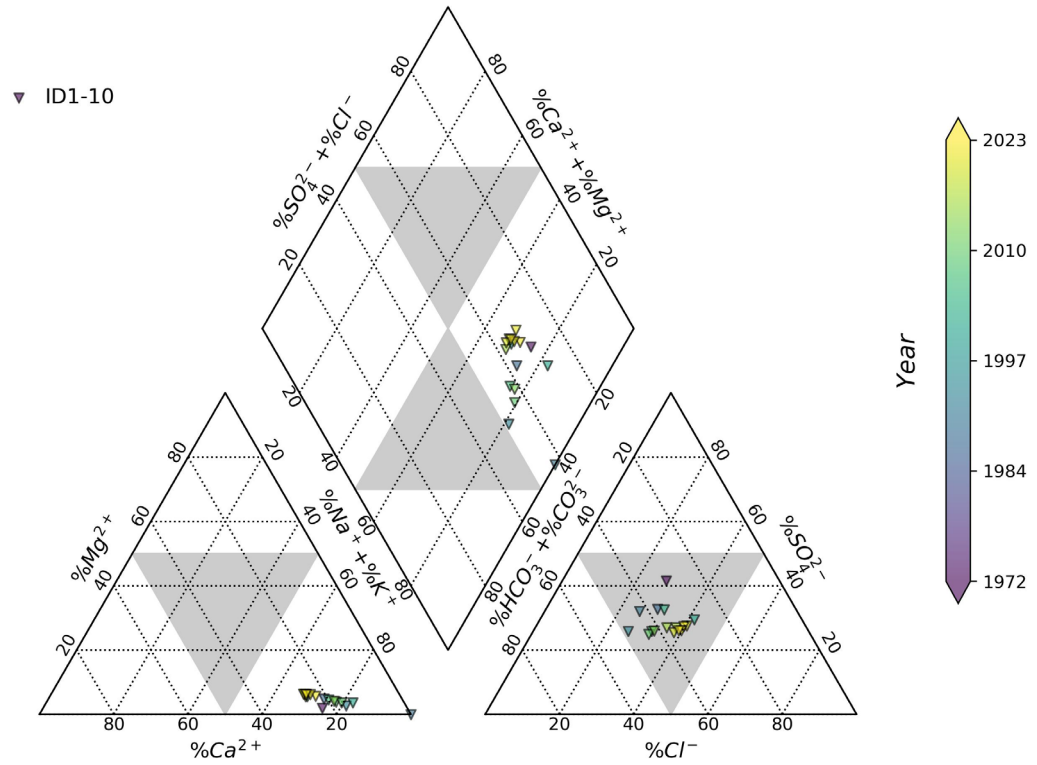


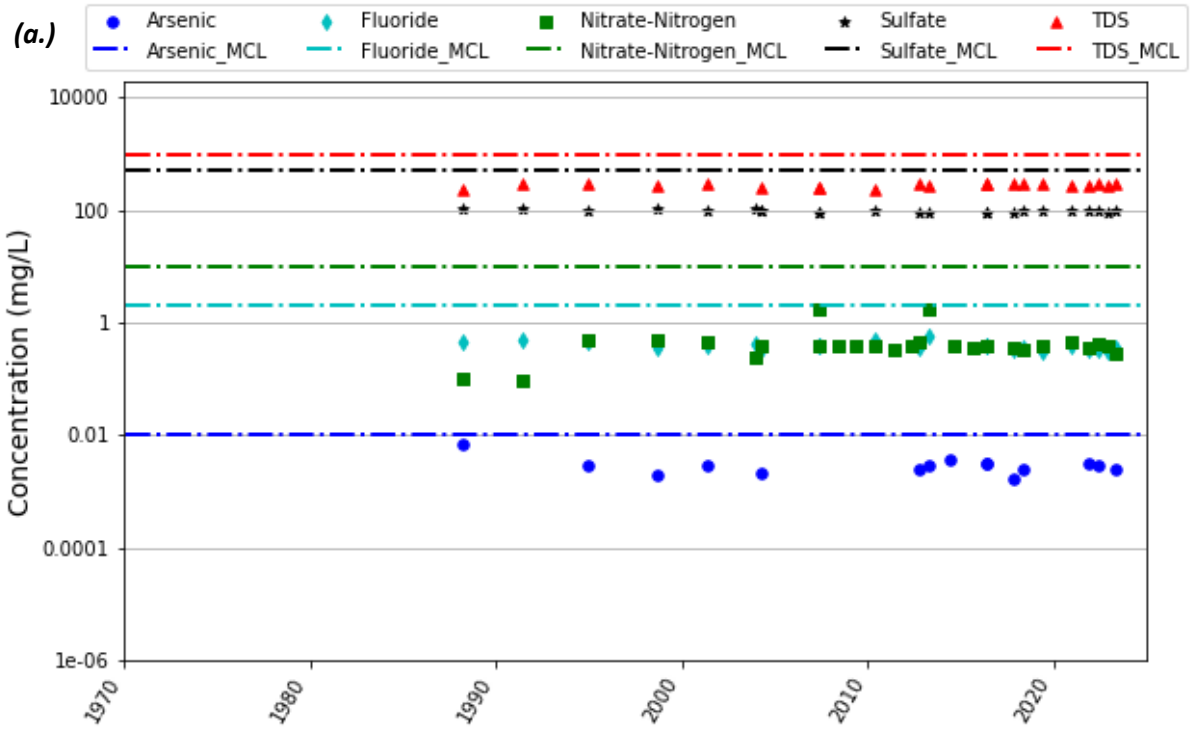
Exhibit 13. (a.) Time series and (b.) Piper diagram of water quality parameters at ID1-10.

ID1-12 (BWD Production Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for fluoride and sulfate. No trend was indicated for the remaining COCs at ID1-12. The water quality times series plot (Exhibit 14a) shows that all COCs have remained relatively stable and have not exceeded the California drinking water standards.

The piper diagram in Exhibit 14b shows water quality at ID1-12 has remained relatively stable over time. The piper diagram indicates that ID1-12 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

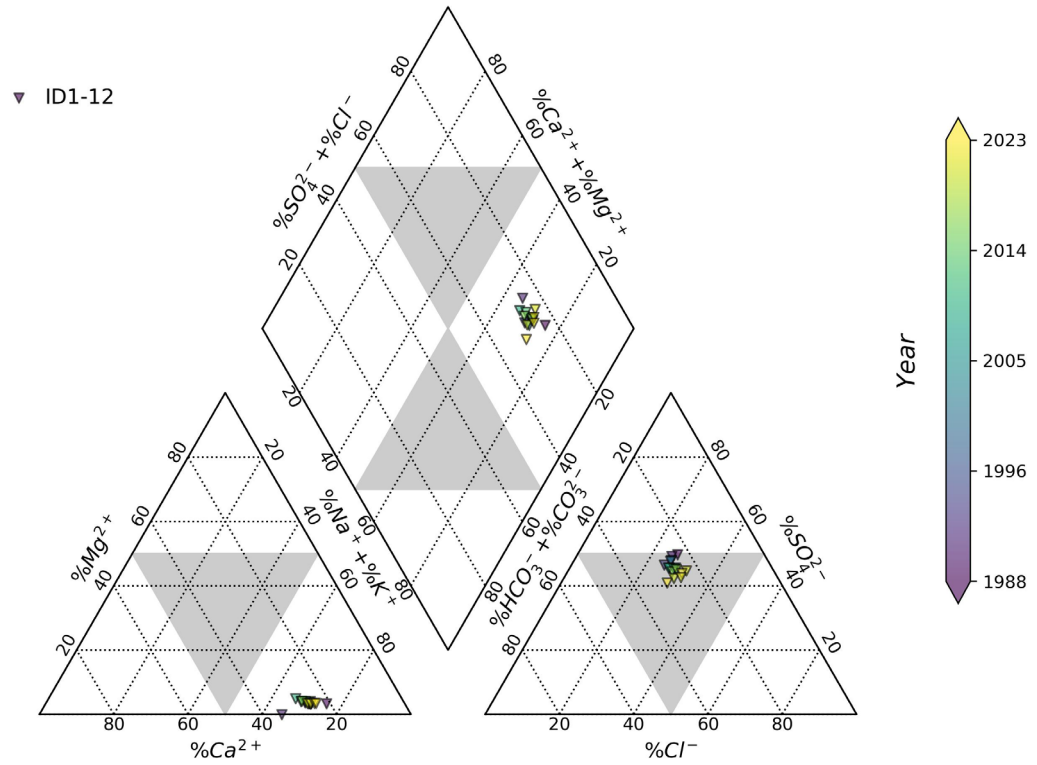


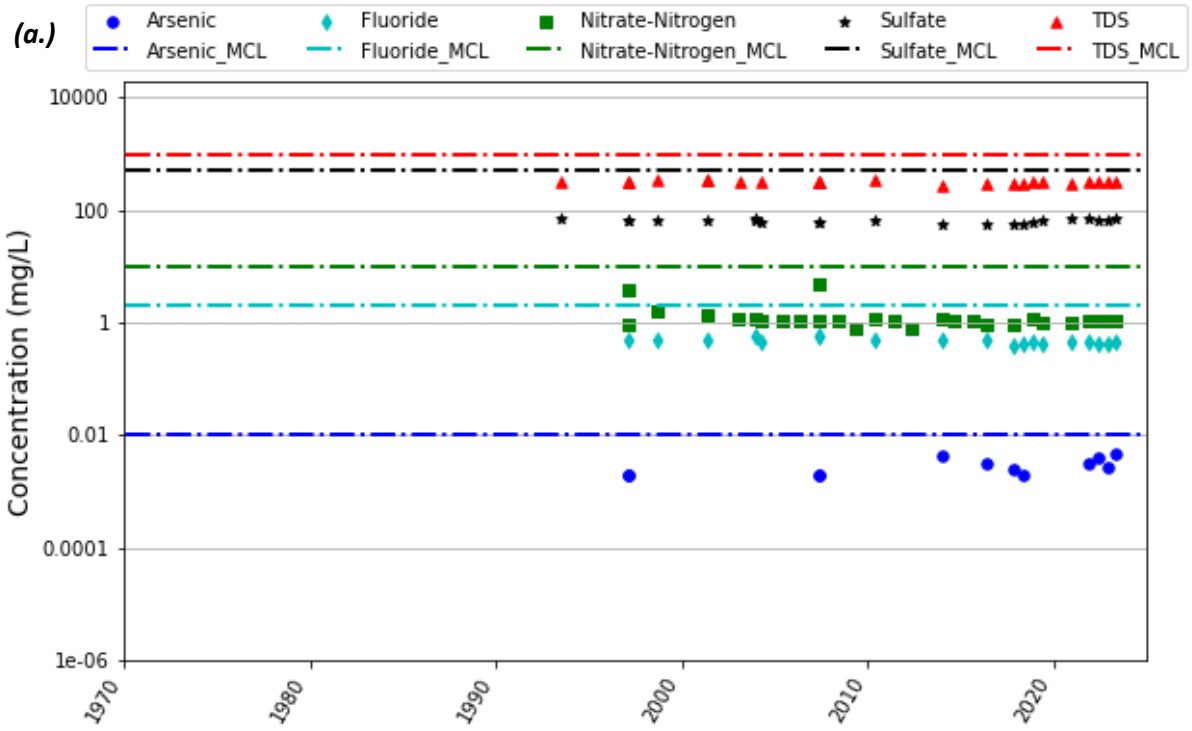
Exhibit 14. (a.) Time series and (b.) Piper diagram of water quality parameters at ID1-12.

ID1-16 (BWD Production Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for fluoride and no trend for the remaining COCs at ID1-16. The water quality times series plot (Exhibit 15a) shows that all COCs have remained relatively stable and have not exceeded the California drinking water standards.

The piper diagram in Exhibit 15b shows water quality at ID1-16 has remained relatively stable over time. The piper diagram indicates that ID1-16 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

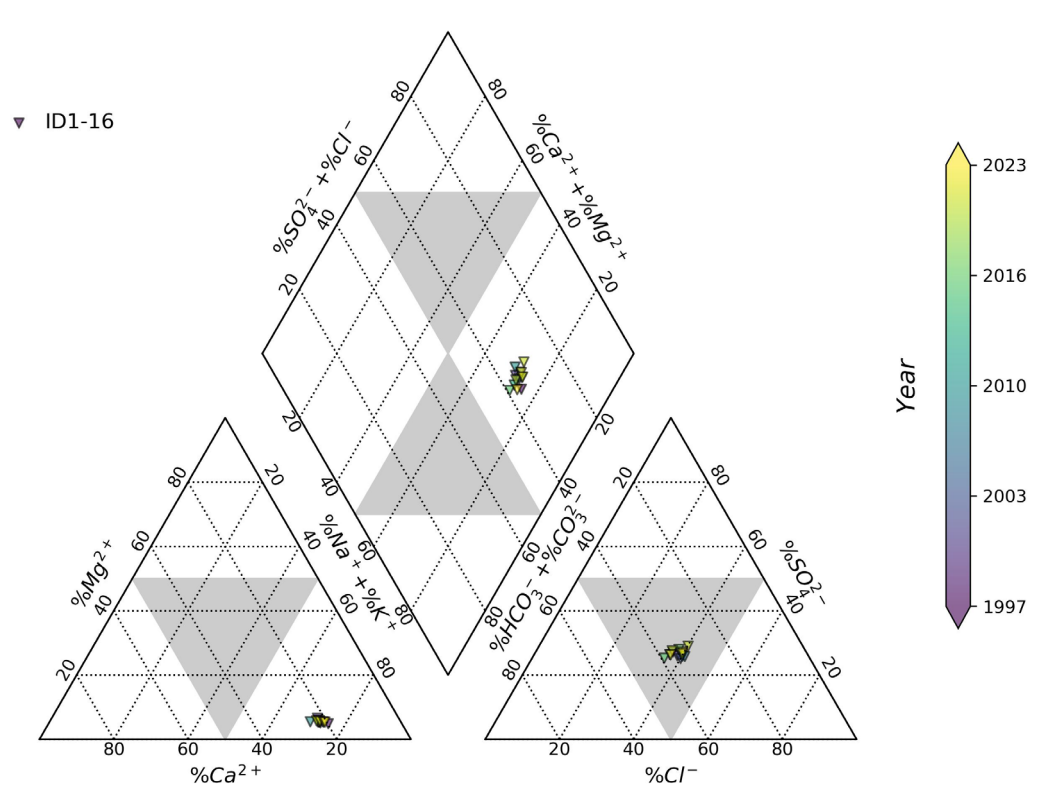


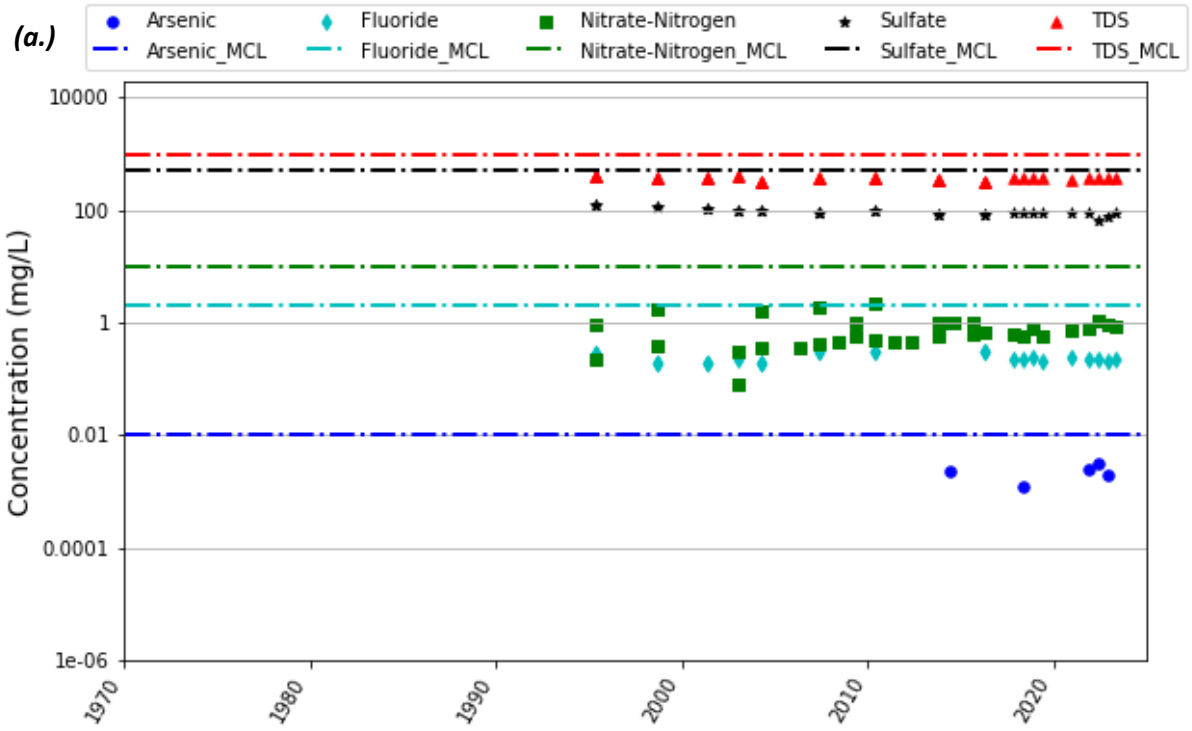
Exhibit 15. (a.) Time series and (b.) Piper diagram of water quality parameters at ID1-16.

ID4-11 (BWD Production Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate and TDS. No trend was indicated for the remaining COCs at ID4-11. The water quality times series plot (Exhibit 16a) shows that all COCs have remained relatively stable (with the exception of nitrate fluctuating) and have not exceeded the California drinking water standards.

The piper diagram in Exhibit 16b shows water quality at ID4-11 has remained relatively stable over time. The piper diagram indicates that ID4-11 is mixed type water with no dominant cations or anions.

(a.)



(b.)

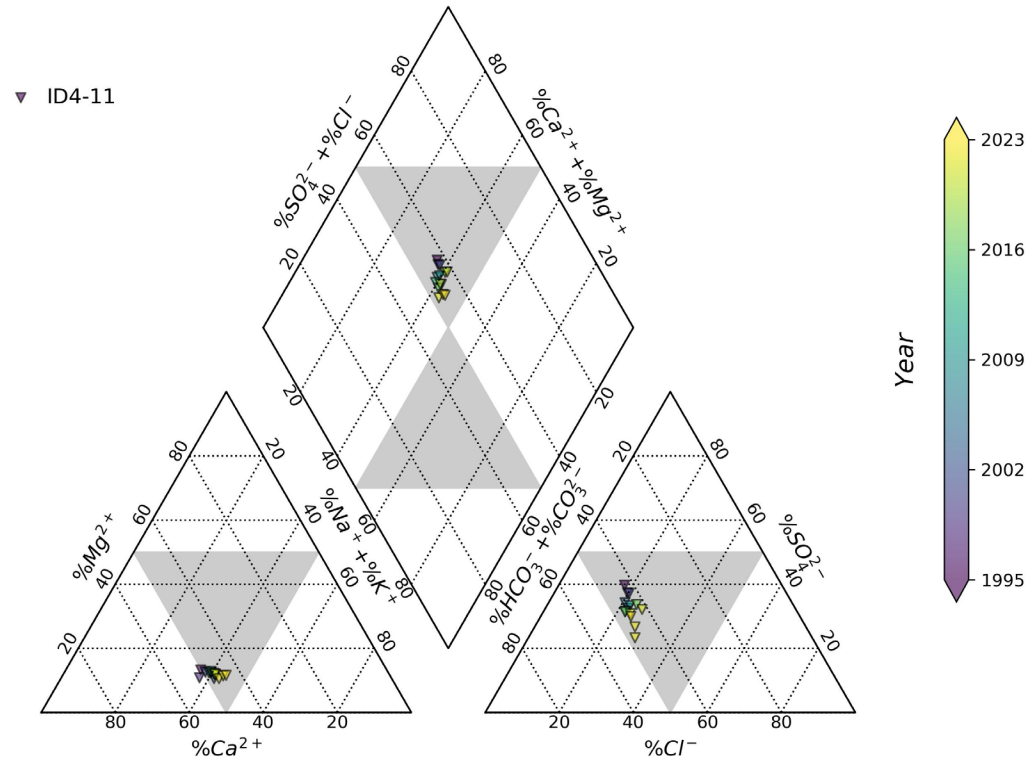


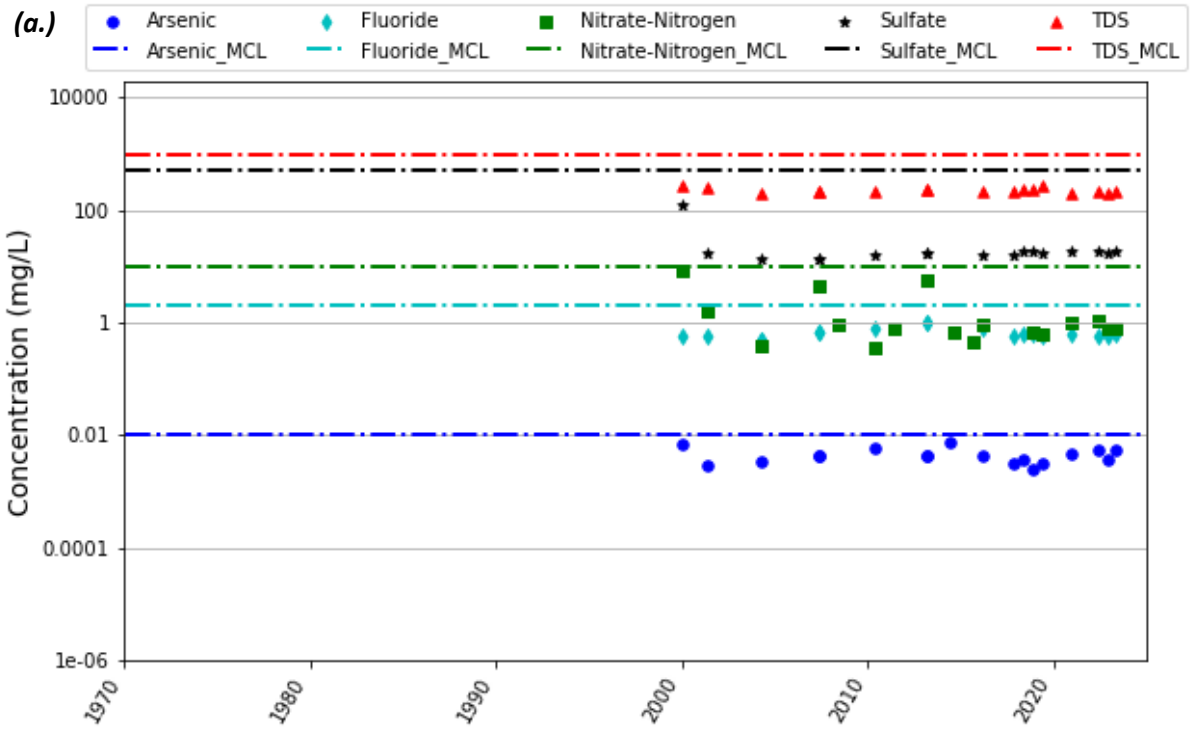
Exhibit 16. (a.) Time series and (b.) Piper diagram of water quality parameters at ID4-11.

ID4-20 (Wilcox) (BWD Production Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at ID4-20. The water quality times series plot (Exhibit 17a) shows that all COCs have remained relatively stable (apart from nitrate fluctuating) and have not exceeded the California drinking water standards. The earliest sample in 2000 appears to be an outlier with elevated sulfate (127 mg/L) and chloride (69.3 mg/L) concentrations but has since stabilized.

The piper diagram in Exhibit 17b shows water quality at ID4-20 has remained relatively stable over time. The piper diagram indicates that ID4-20 is mixed type water with sodium and potassium dominant cations and bicarbonate dominant anions.

(a.)



(b.)

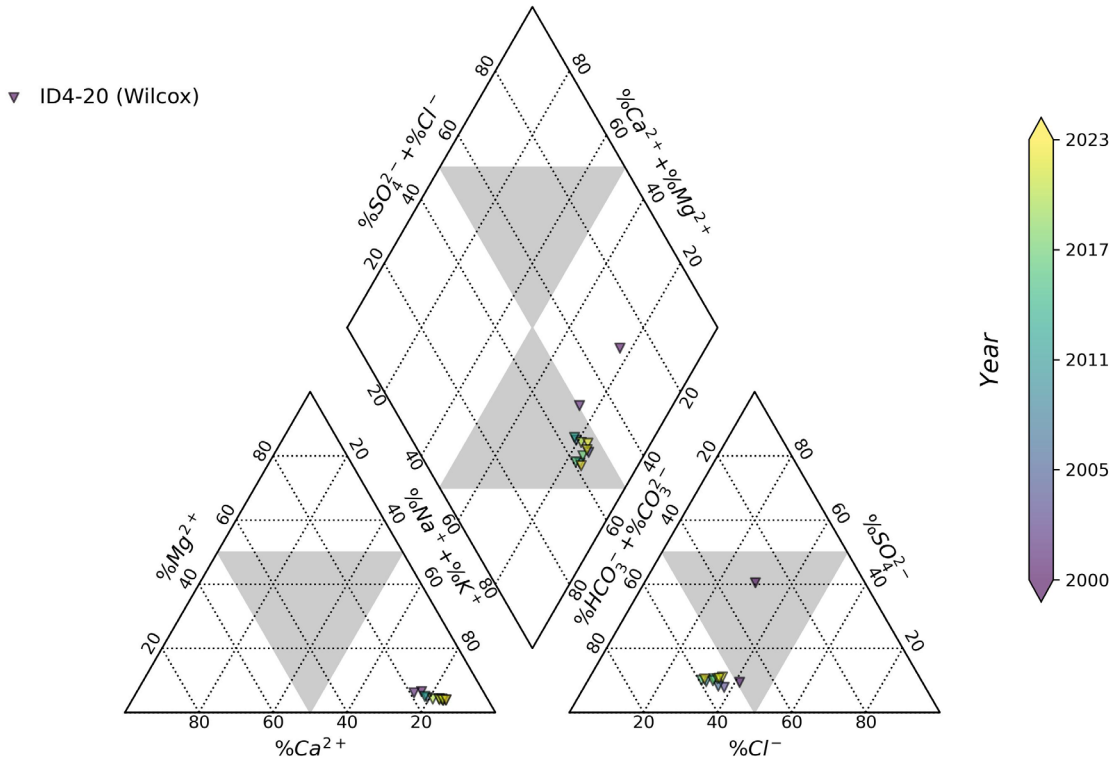


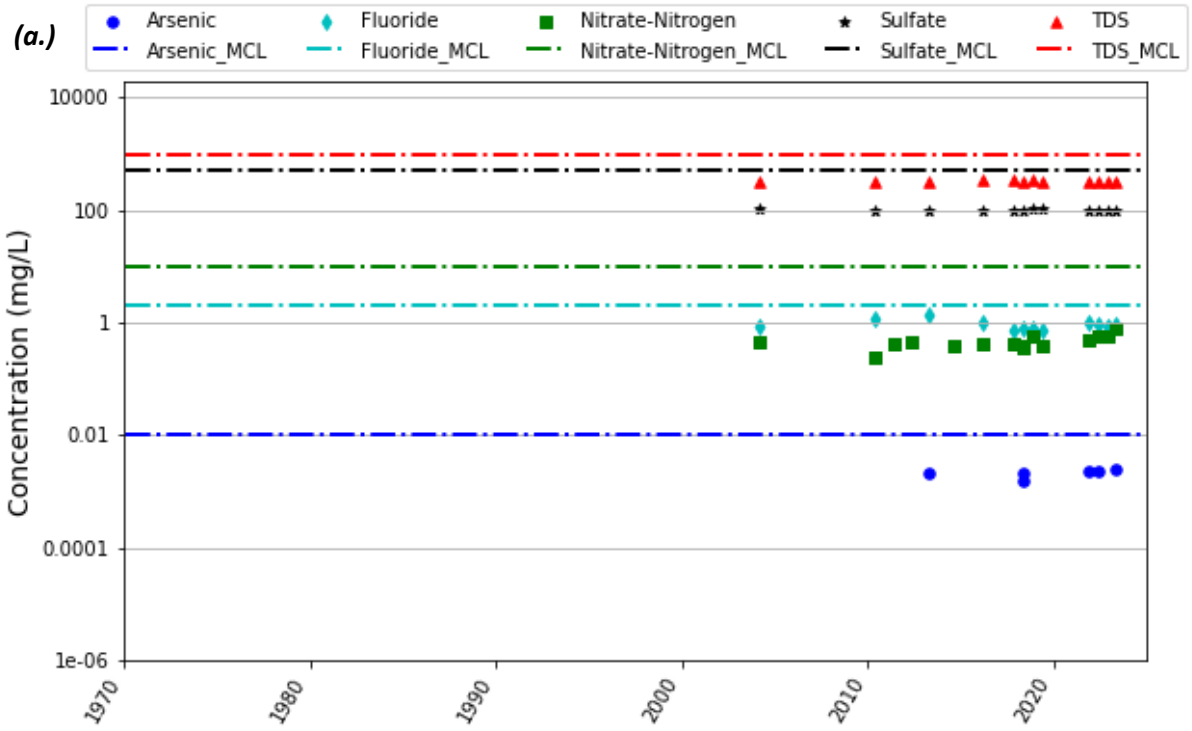
Exhibit 17. (a.) Time series and (b.) Piper diagram of water quality parameters at ID4-20 (Wilcox).

ID5-5 (BWD Production Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at ID5-5. The water quality times series plot (Exhibit 18a) shows that all COCs have remained relatively stable and have not exceeded the California drinking water standards.

The piper diagram in Exhibit 18b shows water quality at ID5-5 has remained stable over time. The piper diagram indicates that ID5-5 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

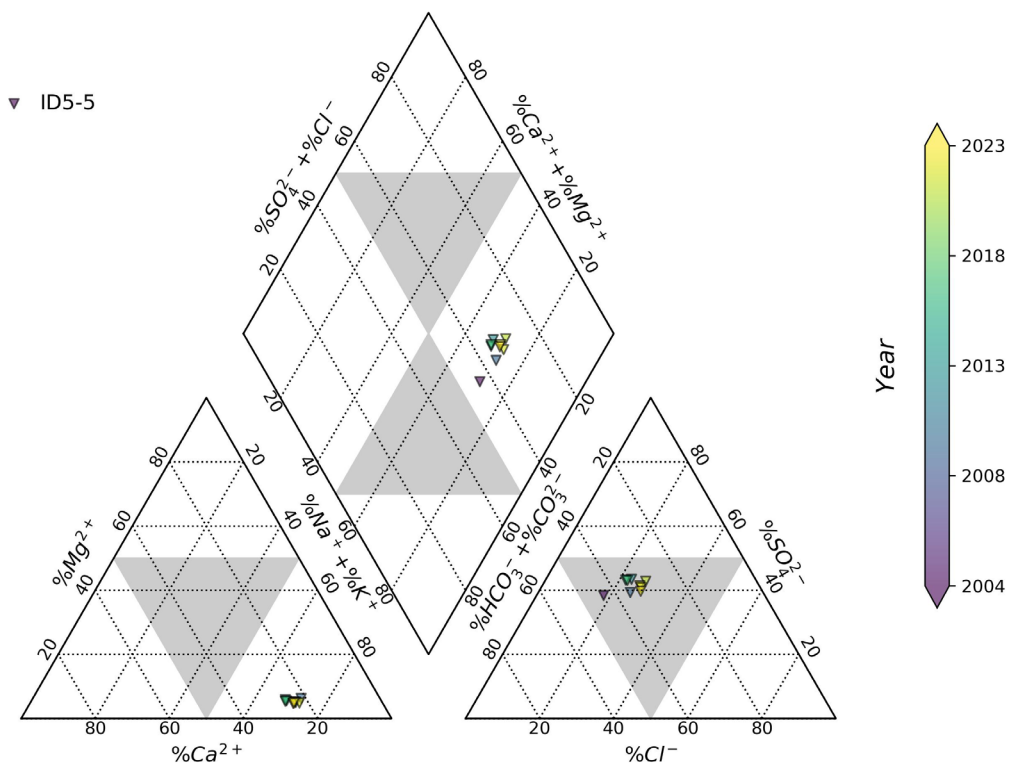


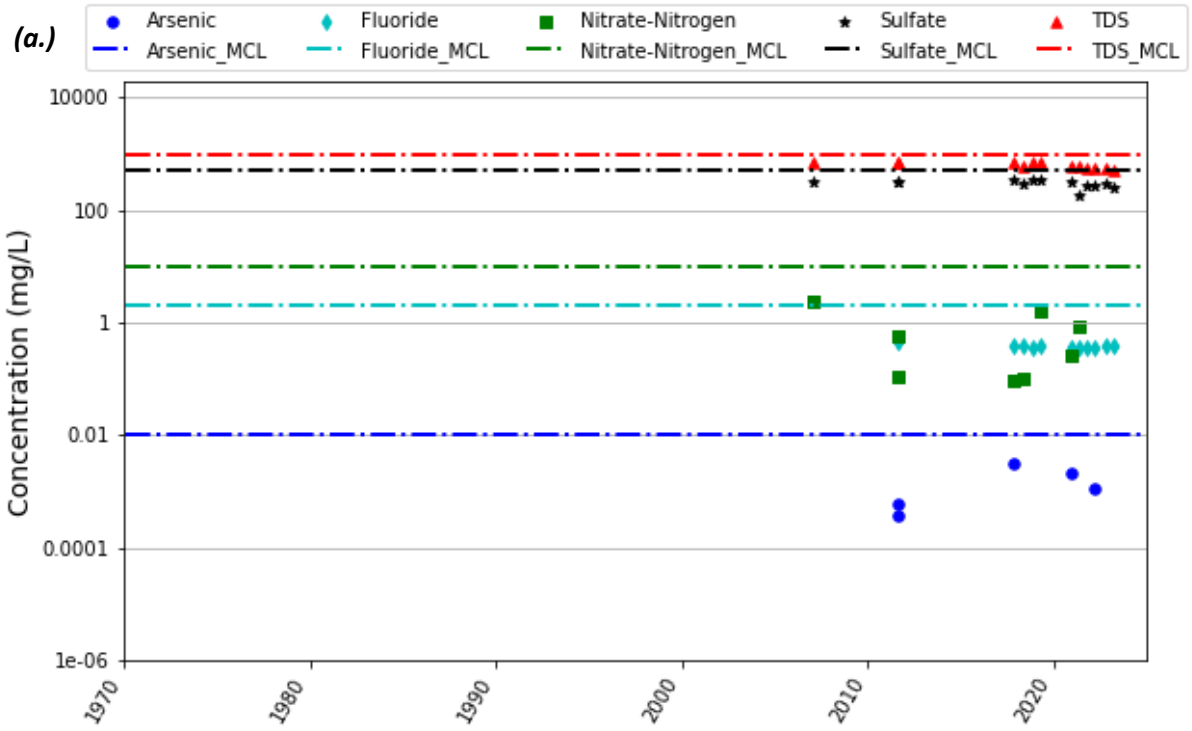
Exhibit 18. (a.) Time series and (b.) Piper diagram of water quality parameters at ID5-5.

MW-4 (Monitoring Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate and no trend indicated for the remaining COCs at MW-4. The water quality times series plot (Exhibit 19a) shows that while nitrate has fluctuated over time, the remaining COCs have remained relatively stable. None of the COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 19b shows water quality at MW-4 has gradually fluctuated over time. Overall, the piper diagram indicates that MW-4 is sodium chloride type water with sodium and potassium dominant cations and sulfate dominant anions.

(a.)



(b.)

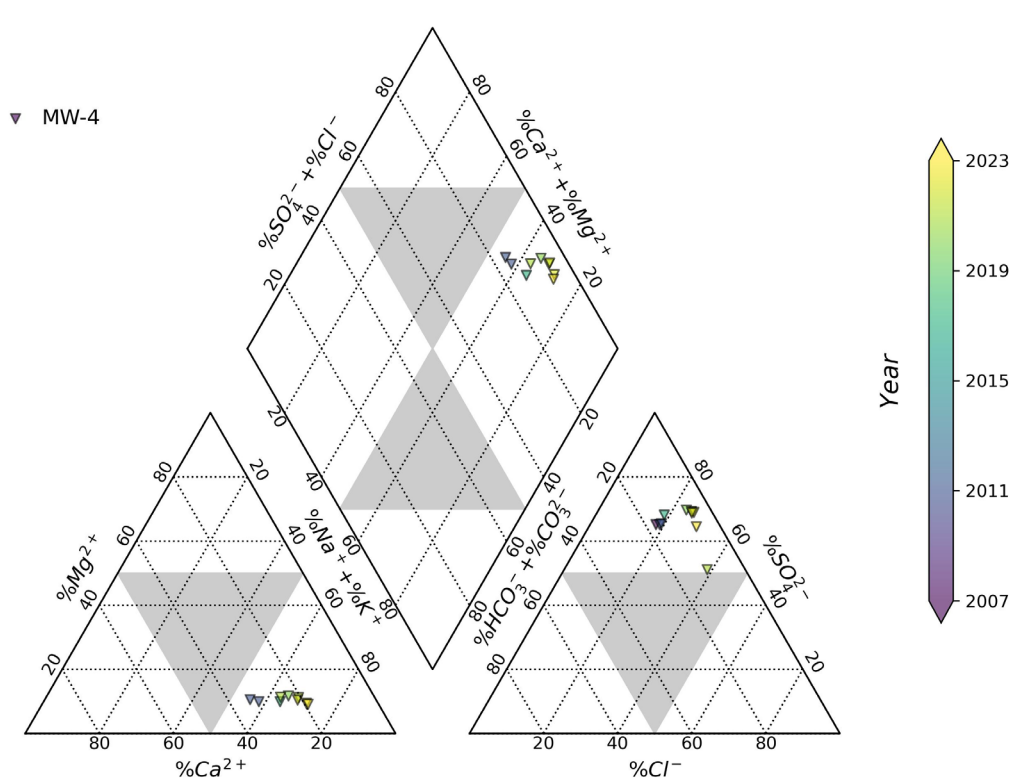


Exhibit 19. (a.) Time series and (b.) Piper diagram of water quality parameters at MW-4.

South Management Area Wells

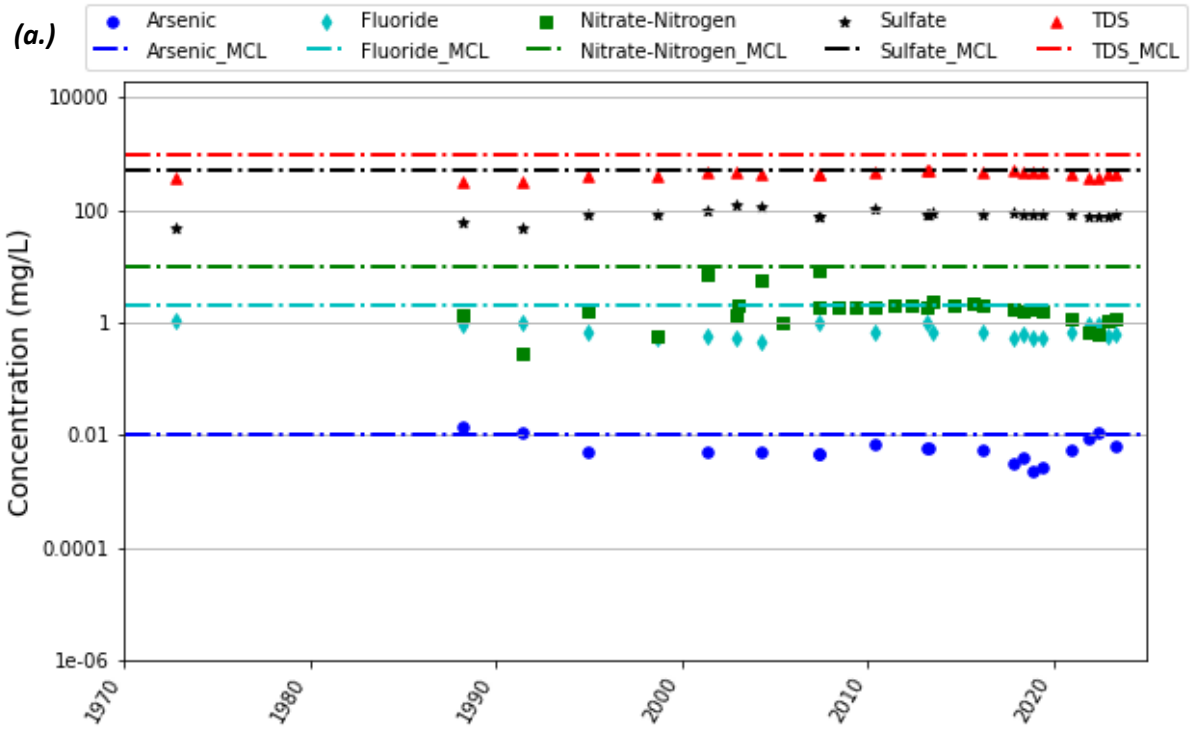
The SMA wells are generally located northeast of the Rams Hill Golf Course. Production in the SMA includes some municipal and domestic pumping but is currently dominated by pumping for recreational use.

ID1-8 (BWD Production Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at ID1-8. The water quality times series plot (Exhibit 20a) shows that ID1-8 has exceeded the arsenic California drinking MCL (10 µg/L) in 1988, 1991, and most recently in 2022 at 11 µg/L for non-regulatory samples. The most recent sample taken in 2023 is below the MCL at 6.4 µg/L. The remaining COCs are relatively stable and have not exceeded the California drinking water standards.

The piper diagram in Exhibit 20b shows water quality at ID1-8 has significantly changed over time. Overall, the piper diagram indicates that ID1-8 has moved from mixed type water to sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

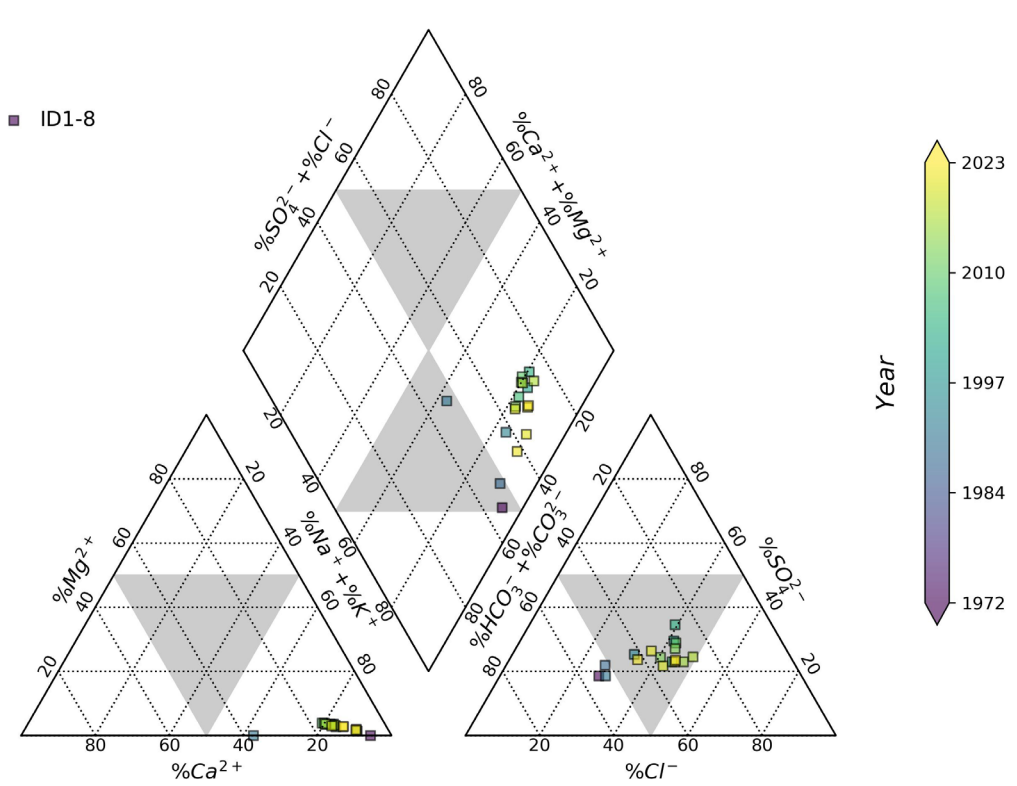


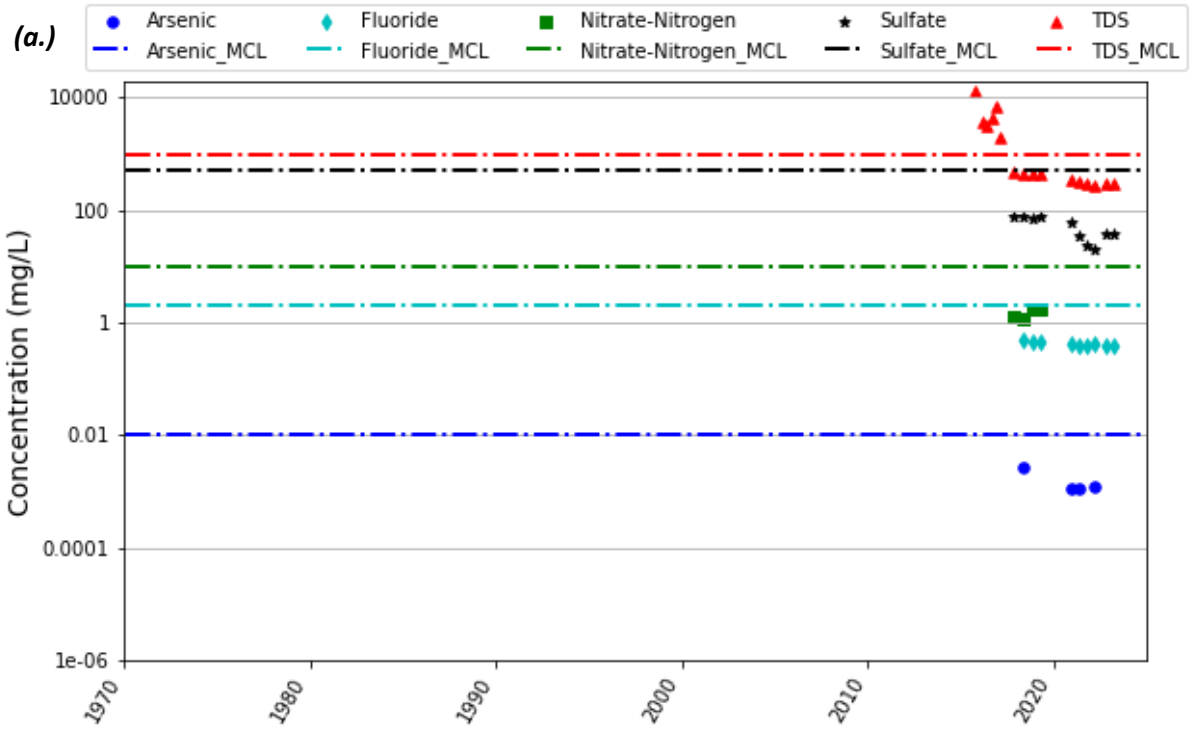
Exhibit 20. (a.) Time series and (b.) Piper diagram of water quality parameters at ID1-8.

MW-3 (Monitoring Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate and TDS. No trend was indicated for the remaining COCs at MW-3. The water quality times series plot (Exhibit 21a) shows that TDS exceeded the California drinking water secondary upper MCL (1,000 mg/L) from 2015 through 2017. TDS has stabilized and the most recent sample is below the secondary MCL at 500 mg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 21b shows water quality at MW-3 has fluctuated over time. Overall, the piper diagram indicates that MW-3 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

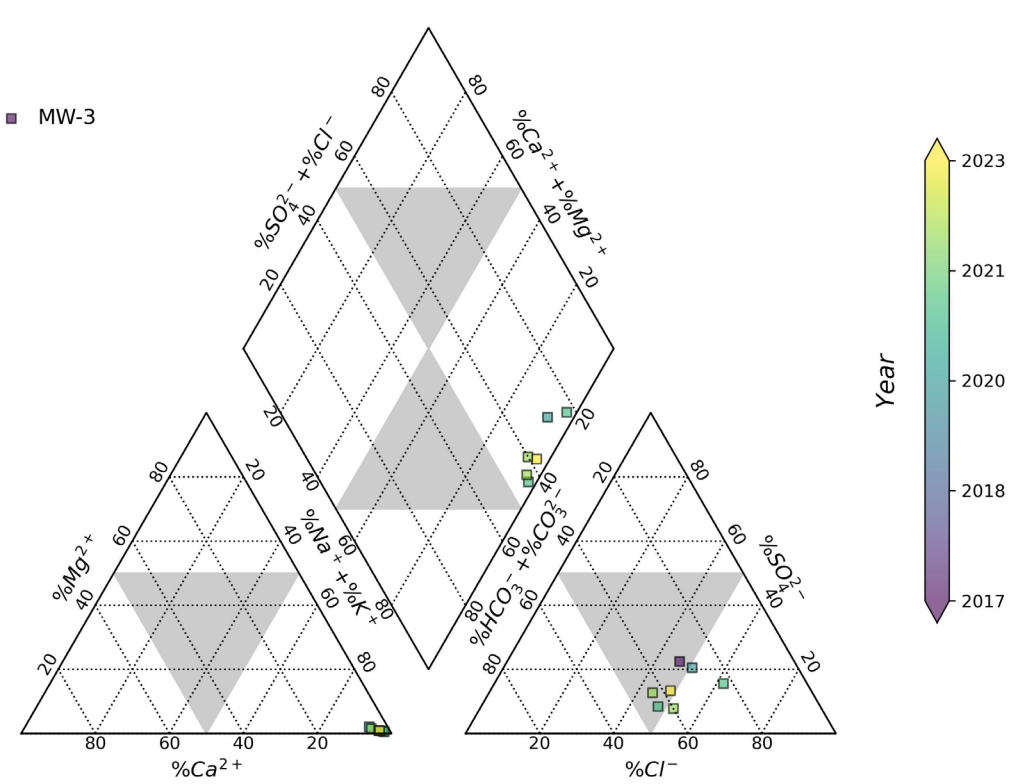


Exhibit 21. (a.) Time series and (b.) Piper diagram of water quality parameters at MW-3.

MW-5A (Monitoring Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate and TDS. No trend was indicated for the remaining COCs at MW-5A. The water quality times series plot (Exhibit 22a) shows that TDS exceeds the California drinking water secondary upper MCL (1,000 mg/L) in 2006, 2017, and 2018. The remaining data for TDS has at or slightly below the secondary upper MCL with the most recent sample in 2023 at 1,000 mg/L. Similarly, sulfate exceeds the California drinking water secondary upper MCL (500 mg/L) in these same years. Sulfate concentrations have since stabilized and remain below the secondary upper MCL with the most recent sample in 2023 at 160 mg/L. The water quality times series plot also shows that fluoride exceeds the California drinking water MCL (2mg/L) in 2018 (2.1 mg/L) and 2019 (2.2 mg/L). The most recent sample taken in 2023 is below the MCL at 0.8 mg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 22b shows water quality at MW-5A has fluctuated over time. The outliers reflect the high TDS and sulfate concentrations noted above. Overall, the piper diagram indicates that MW-5A is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

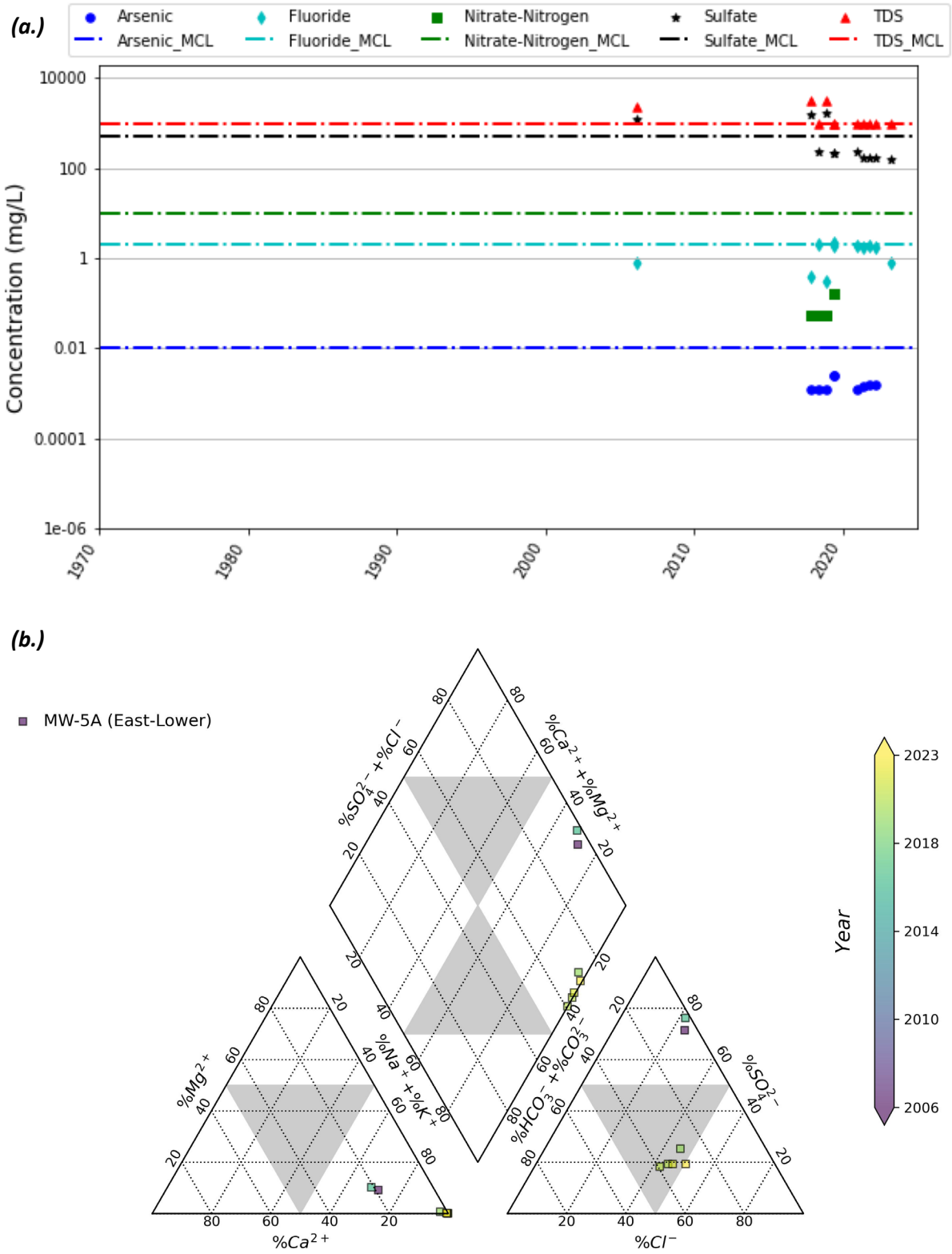


Exhibit 22. (a.) Time series and (b.) Piper diagram of water quality parameters at MW-5A.

MW-5B (Monitoring Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at MW-5B. The water quality times series plot (Exhibit 23a) shows that TDS exceeds the California drinking water secondary upper MCL (1,000 mg/L) for the entire record. The most recent TDS concentration at MW-5B in 2023 was 1,300 mg/L. Similarly, sulfate concentrations also exceed the California drinking water secondary upper MCL (500 mg/L) for the entire record. The most recent sulfate concentration in 2023 was 630 mg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 23b shows water quality at MW-5A has remained stable over time. Overall, the piper diagram indicates that MW-5A is sodium chloride type water with sodium and potassium dominant cations and sulfate dominant anions.

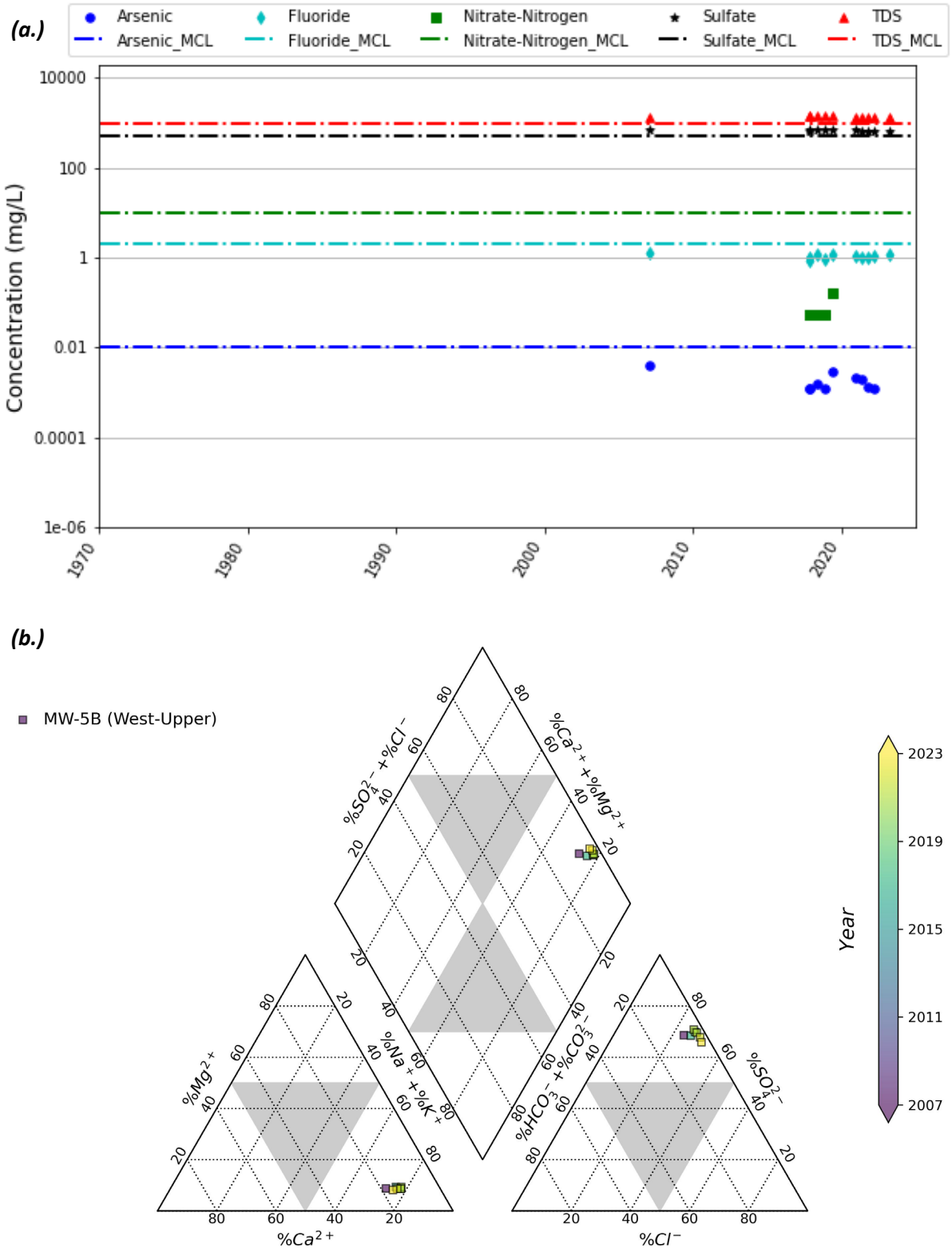


Exhibit 23. (a.) Time series and (b.) Piper diagram of water quality parameters at MW-5B.

RH-1 (ID1-1) (Irrigation Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at RH-1 (ID1-1). The water quality times series plot (Exhibit 24a) shows that TDS exceeds the California drinking water secondary upper MCL (1,000 mg/L) for the majority of the record. The most recent TDS concentration in at RH-1 (ID1-1) in 2023 was 1,600 mg/L. Similarly, sulfate concentrations also exceed the California drinking water secondary upper MCL (500 mg/L) for the majority of the record. The most recent sulfate concentration in 2023 was 750 mg/L. The water quality times series plot also shows that RH-1 (ID1-1) has exceeded the arsenic California drinking MCL (10 µg/L) in 2021 at 16 µg/L. The most recent sample taken in 2023 was non-detect. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 24b shows water quality at RH-1 (ID1-1) has fluctuated over time. Overall, the piper diagram indicates that RH-1 (ID1-1) is borderline between mixed type and sodium chloride type water. RH1 (ID1-1) has sodium and potassium dominant cations (on borderline with no dominant type) and mostly sulfate dominant anions.

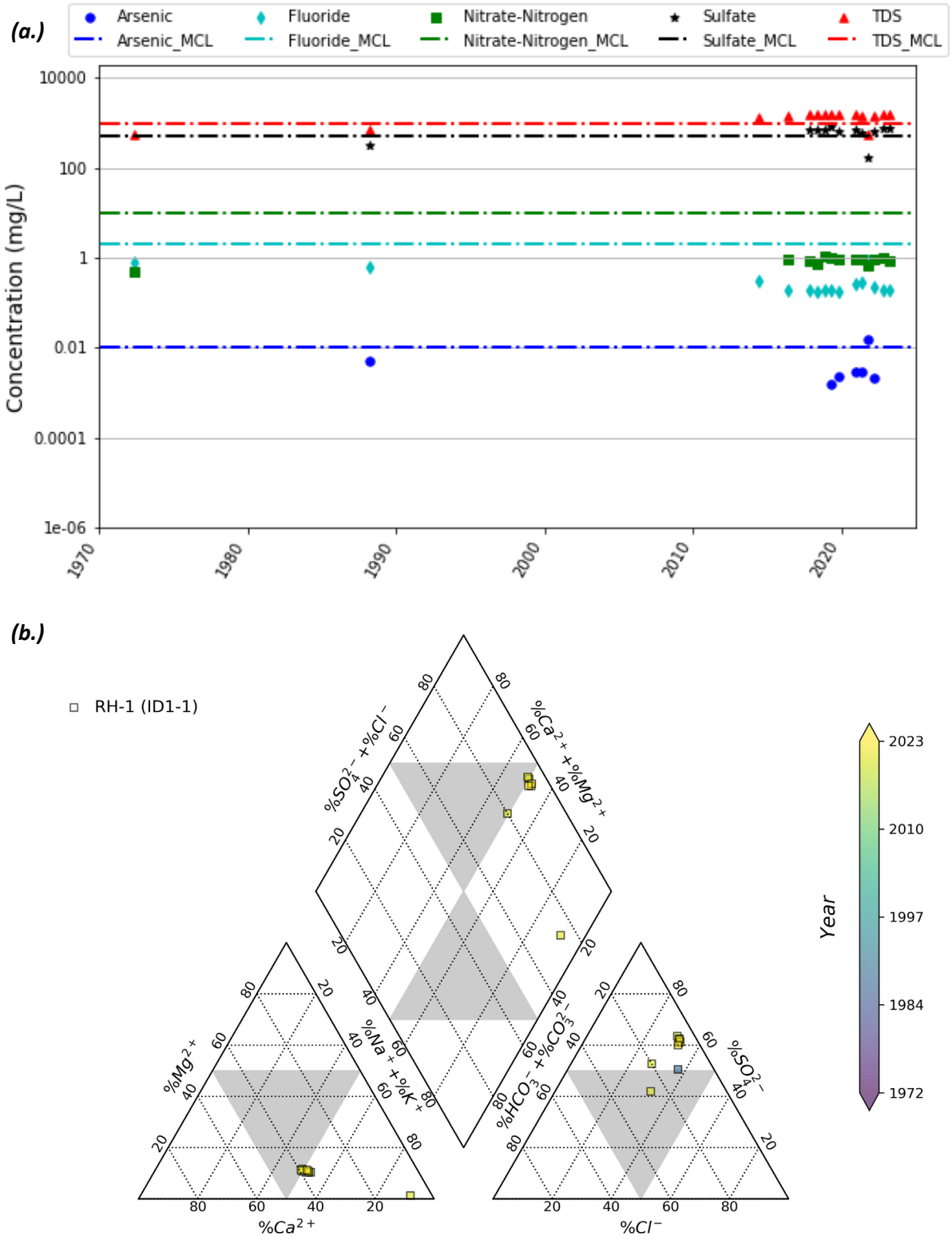


Exhibit 24. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-1 (ID1-1).

RH-2 (ID1-2) (Irrigation Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate, an increasing trend for arsenic, and no trend indicated for the remaining COCs at RH-2 (ID1-2). The water quality times series plot (Exhibit 25a) shows that arsenic does not exceed the California drinking water MCL (10 µg/L) for the entire record, but trending towards the limit. The most recent sample taken in 2023 was 7 µg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 25b shows water quality at RH-2 (ID1-2) has changed over time. Overall, the piper diagram indicates that RH-2 (ID1-2) is sodium bicarbonate type water and has sodium and potassium dominant cations and moved from no dominant anions to bicarbonate dominant anions.

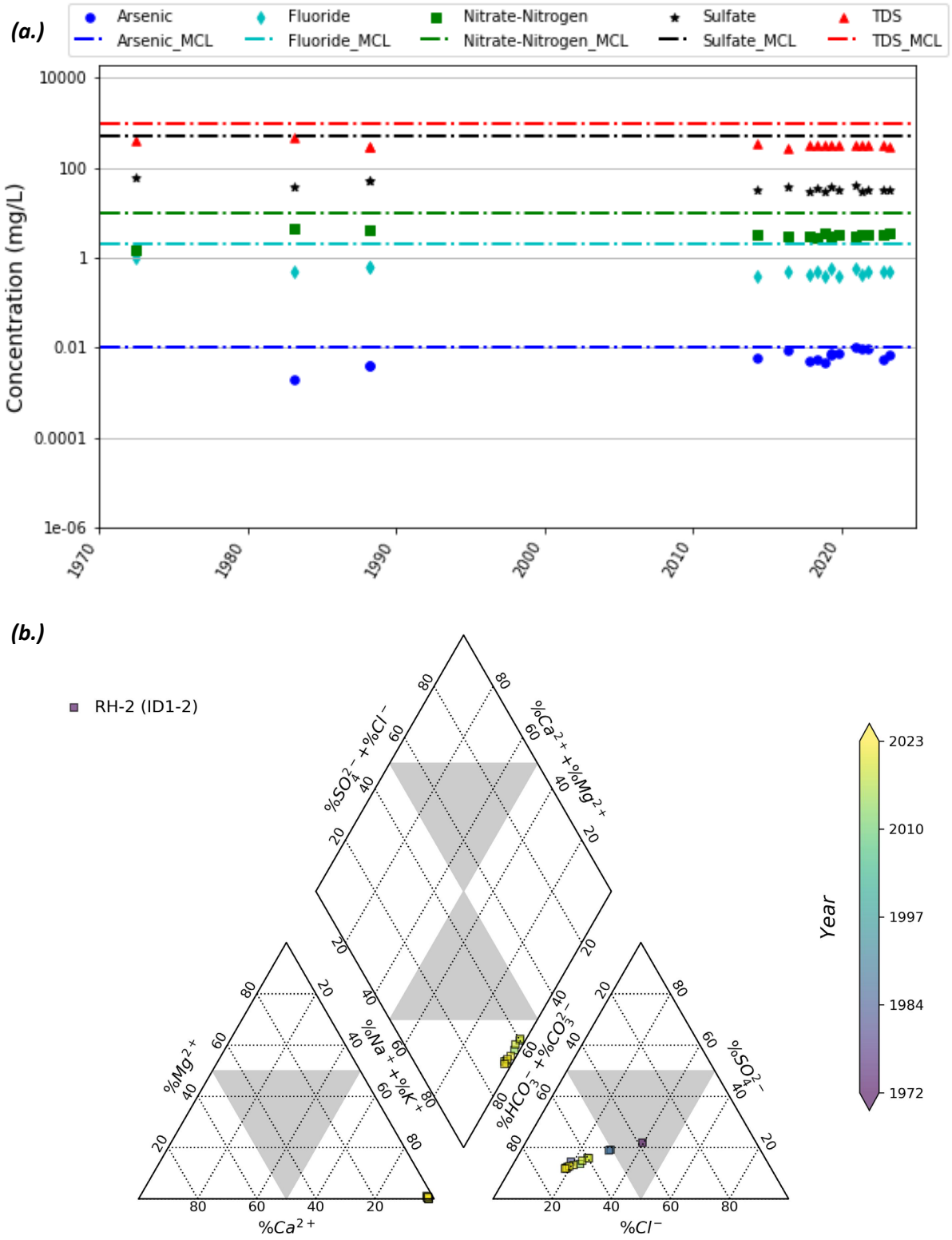


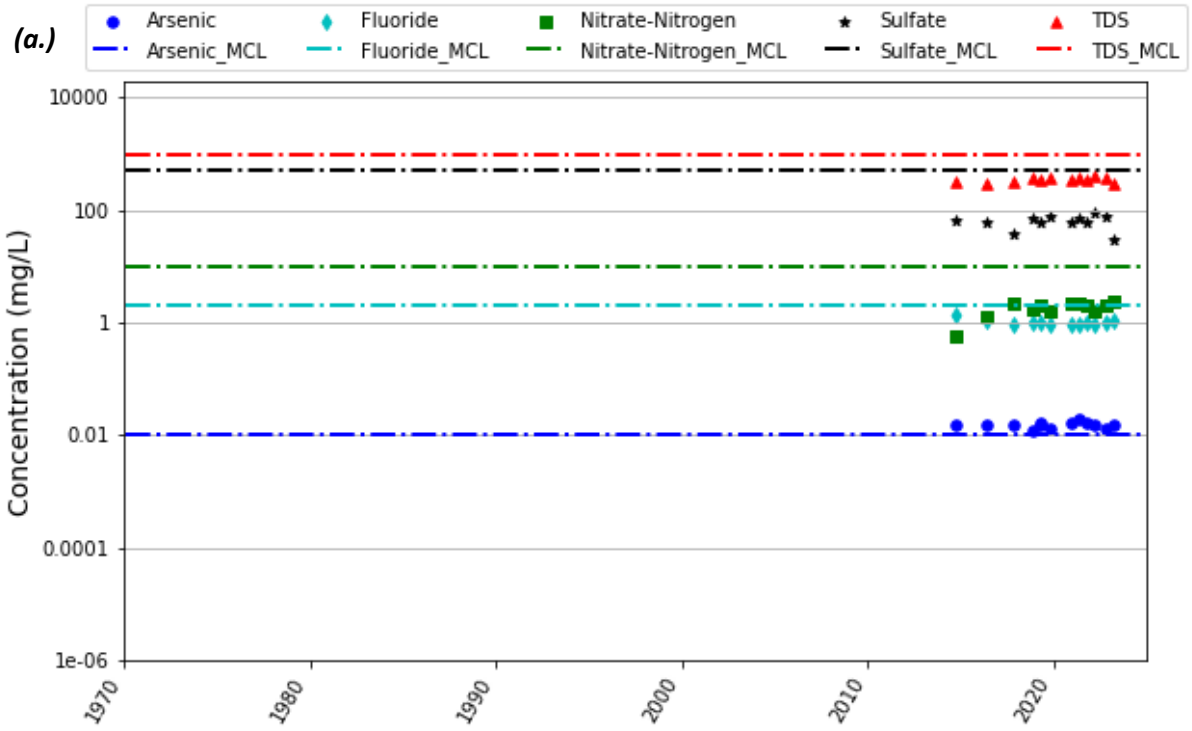
Exhibit 25. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-2 (ID1-2).

RH-3 (Irrigation Well)

The Mann-Kendall analysis (Table 2) does not indicate a trend for any of the COCs of interest at RH-3. The water quality times series plot (Exhibit 26a) shows that arsenic exceeds the California drinking water MCL (10 µg/L) for the entire record. The most recent arsenic concentration in at RH-3 in 2023 was 16 µg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 26b shows water quality at RH-3 has significantly fluctuated over time. Overall, the piper diagram indicates that RH-3 has fluctuated between sodium chloride type water and sodium bicarbonate type water. Similarly, RH-3 has fluctuated between having no dominant anions and bicarbonate dominant anions. Sodium and potassium have remained the dominant cations over time.

(a.)



(b.)

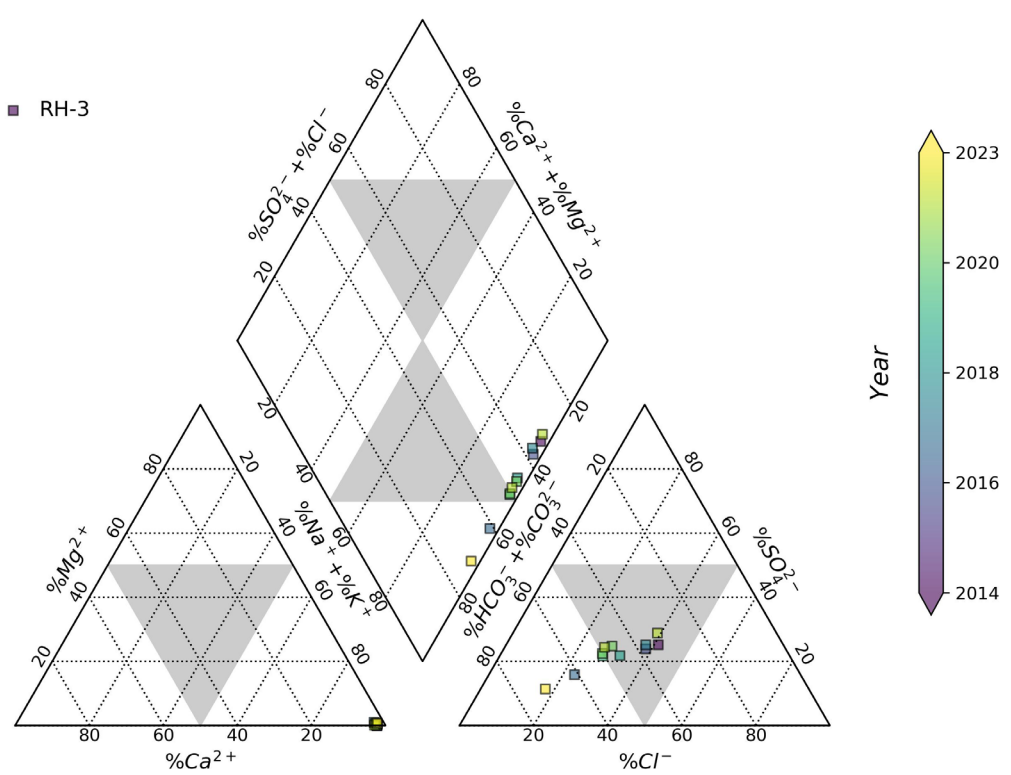


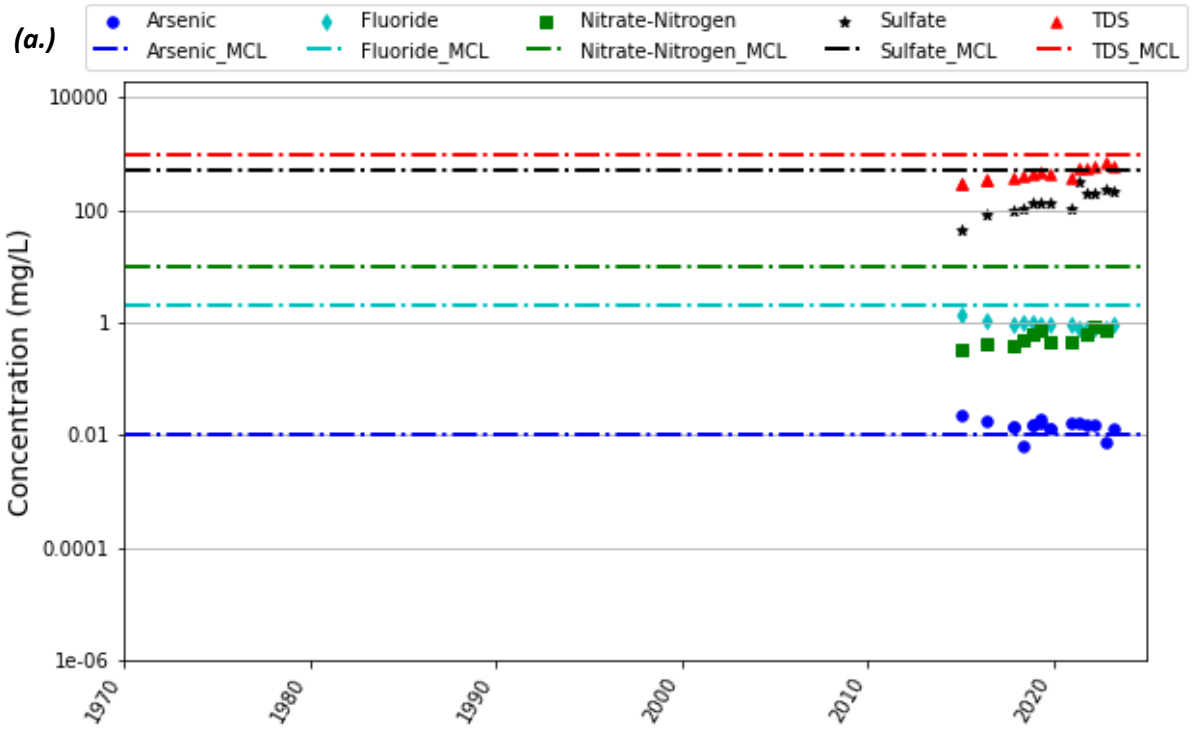
Exhibit 26. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-3.

RH-4 (Irrigation Well)

The Mann-Kendall analysis (Table 2) indicates an increasing trend for nitrate, sulfate, and TDS, a decreasing trend for fluoride, and no trend for arsenic at RH-4. The water quality times series plot (Exhibit 27a) shows that arsenic exceeds the California drinking water MCL (10 µg/L) for the majority of record. The most recent arsenic concentration in at RH-4 in 2023 was 13 µg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 27b shows water quality at RH-4 has fluctuated over time. Overall, the piper diagram indicates that RH-4 has sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

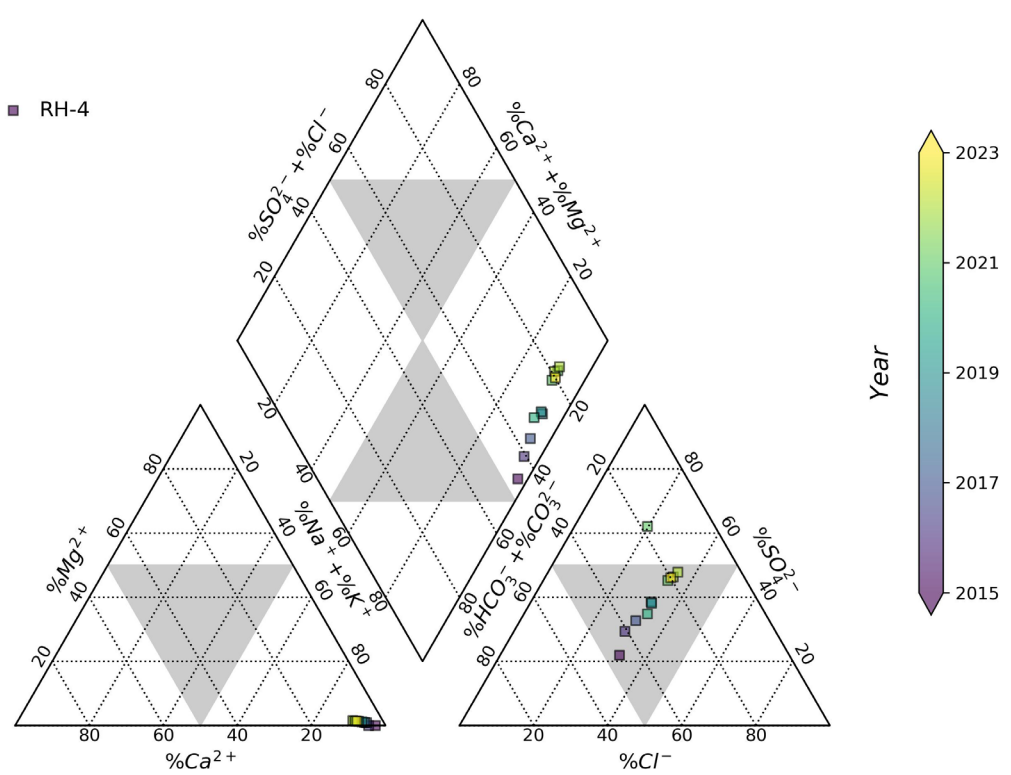


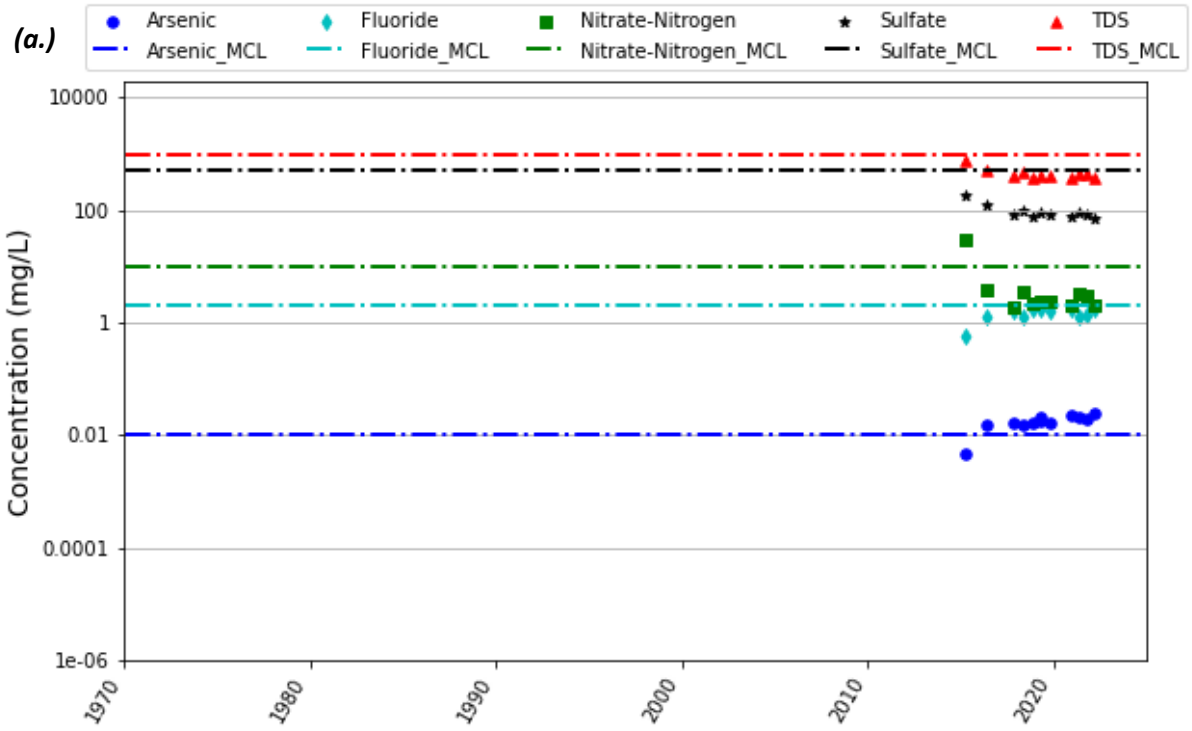
Exhibit 27. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-4.

RH-5 (Irrigation Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate, an increasing trend for arsenic, and no trend indicated for the remaining COCs at RH-5. The water quality times series plot (Exhibit 28a) shows that arsenic exceeds the California drinking water MCL (10 µg/L) for the majority of the record. The most recent arsenic concentration at RH-5 in 2022 was 25 µg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 28b shows water quality at RH-5 has fluctuated over time. Overall, the piper diagram indicates that RH-5 has sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

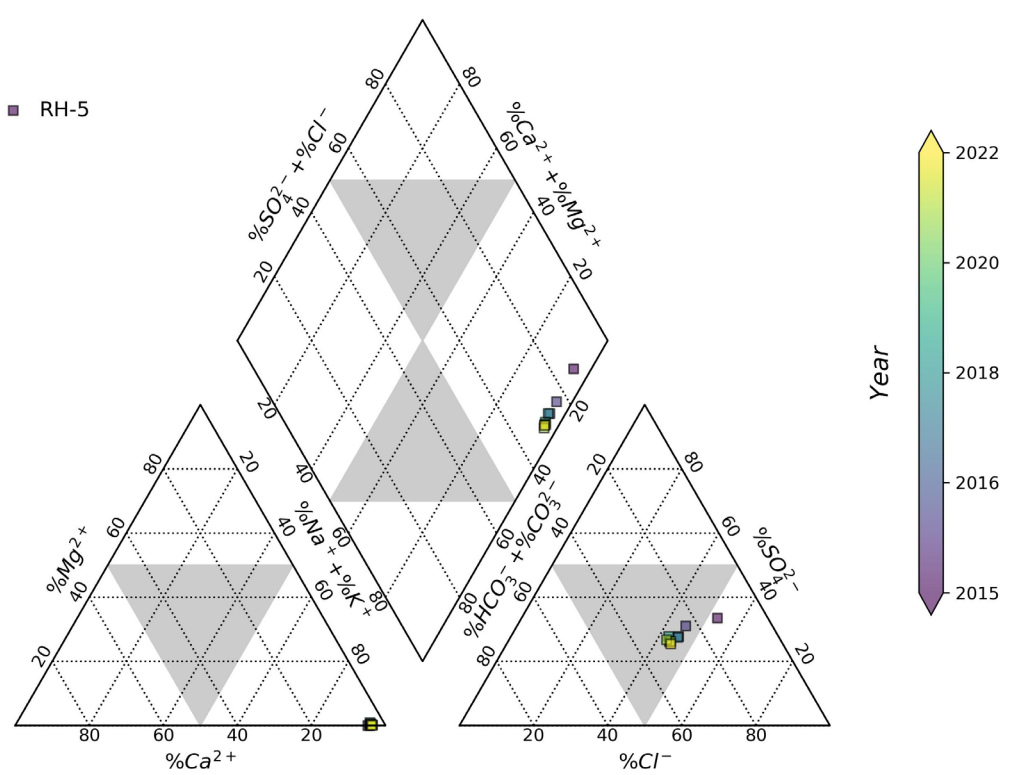


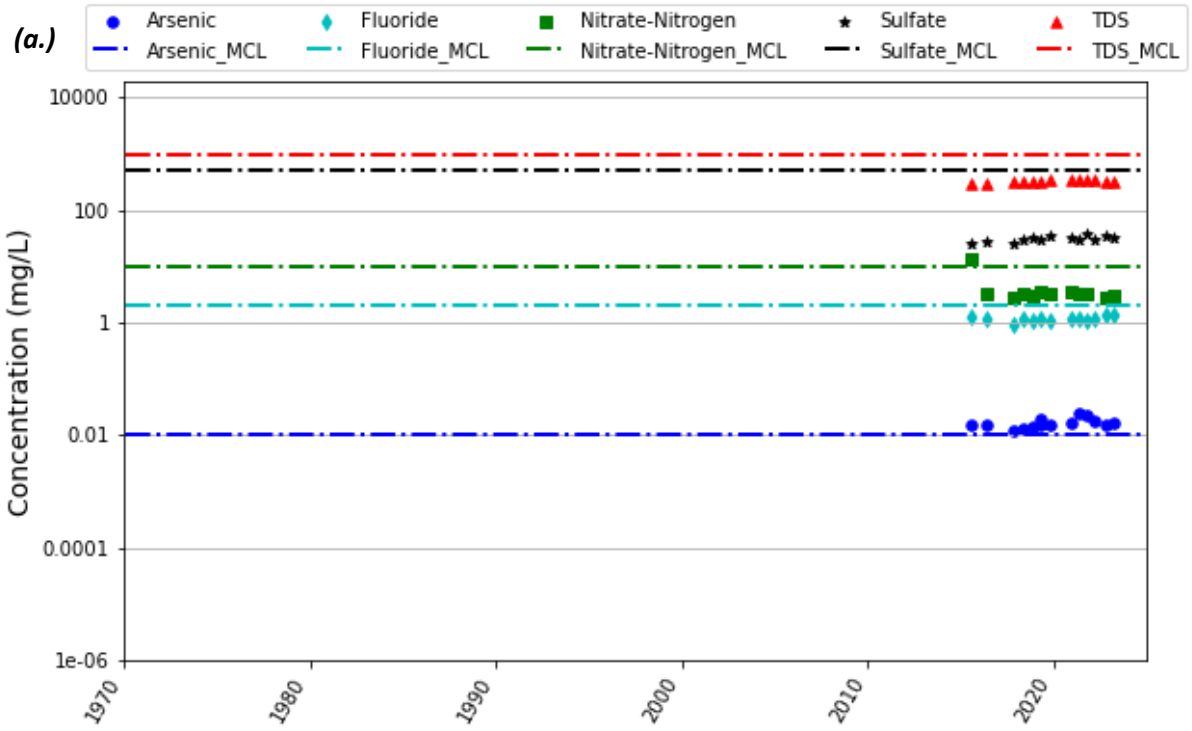
Exhibit 28. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-5.

RH-6 (Irrigation Well)

The Mann-Kendall analysis (Table 2) indicates an increasing trend for sulfate and TDS, and no trend is indicated for the remaining COCs at RH-6. The water quality times series plot (Exhibit 29a) shows that arsenic exceeds the California drinking water MCL (10 µg/L) for the entire record. The most recent arsenic concentration at RH-6 in 2023 was 17 µg/L. The water quality times series plot also shows that RH-6 exceeded the nitrate California drinking MCL (10 mg/L) in 2015 at 14 mg/L. Since then, the nitrate concentration has remained below the MCL and the most recent sample taken in 2023 was 3.1 mg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 29b shows water quality at RH-6 has fluctuated over time. Overall, the piper diagram indicates that RH-6 has sodium bicarbonate type water with sodium and potassium dominant cations and bicarbonate dominant anions.

(a.)



(b.)

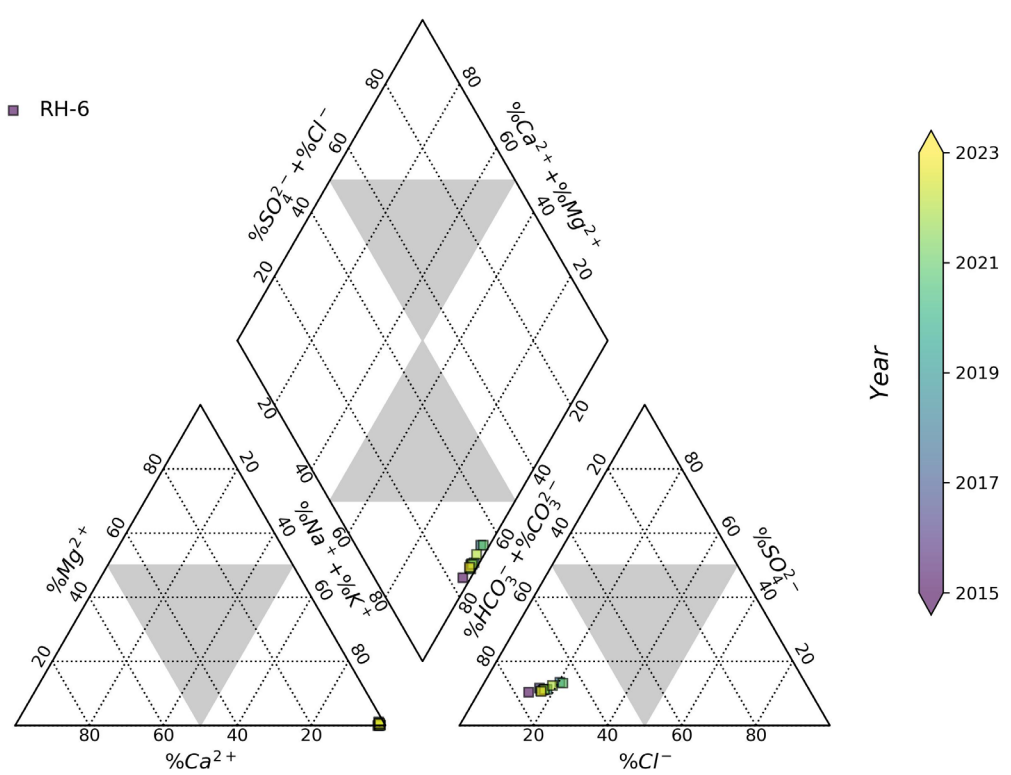


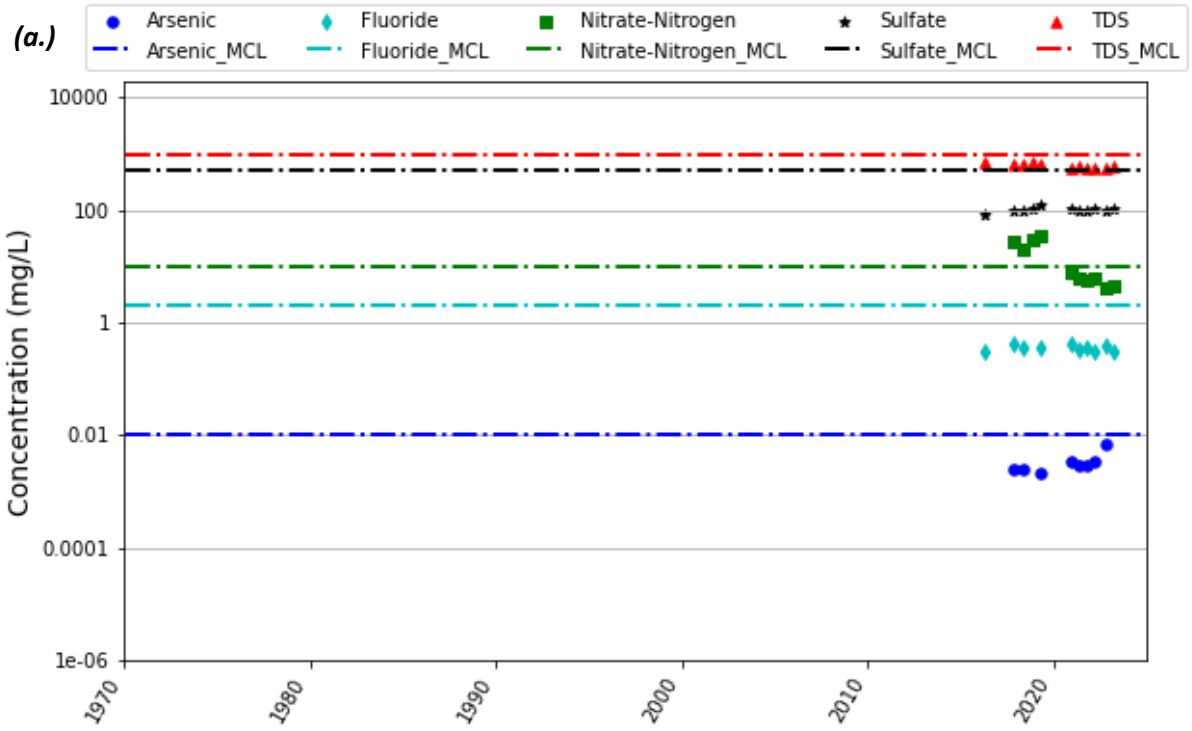
Exhibit 29. (a.) Time series and (b.) Piper diagram of water quality parameters at RH-6.

WWTP-1 (Monitoring Well)

The Mann-Kendall analysis (Table 2) indicates a decreasing trend for sulfate and TDS, and an increasing trend for arsenic. No trend was indicated for the remaining COCs at WWTP-1. The water quality times series plot (Exhibit 30a) shows that nitrate exceeded the California drinking water MCL (10 mg/L) from 2017 through 2019 but has since stabilized and below the MCL. The most recent nitrate concentration at WWTP-1 in 2023 was 4.6 mg/L. The remaining COCs have not exceeded the California drinking water standards.

The piper diagram in Exhibit 30b shows water quality at WWTP-1 has gradually changed over time. Overall, the piper diagram indicates that WWTP-1 is sodium chloride type water with sodium and potassium dominant cations and no dominant anions.

(a.)



(b.)

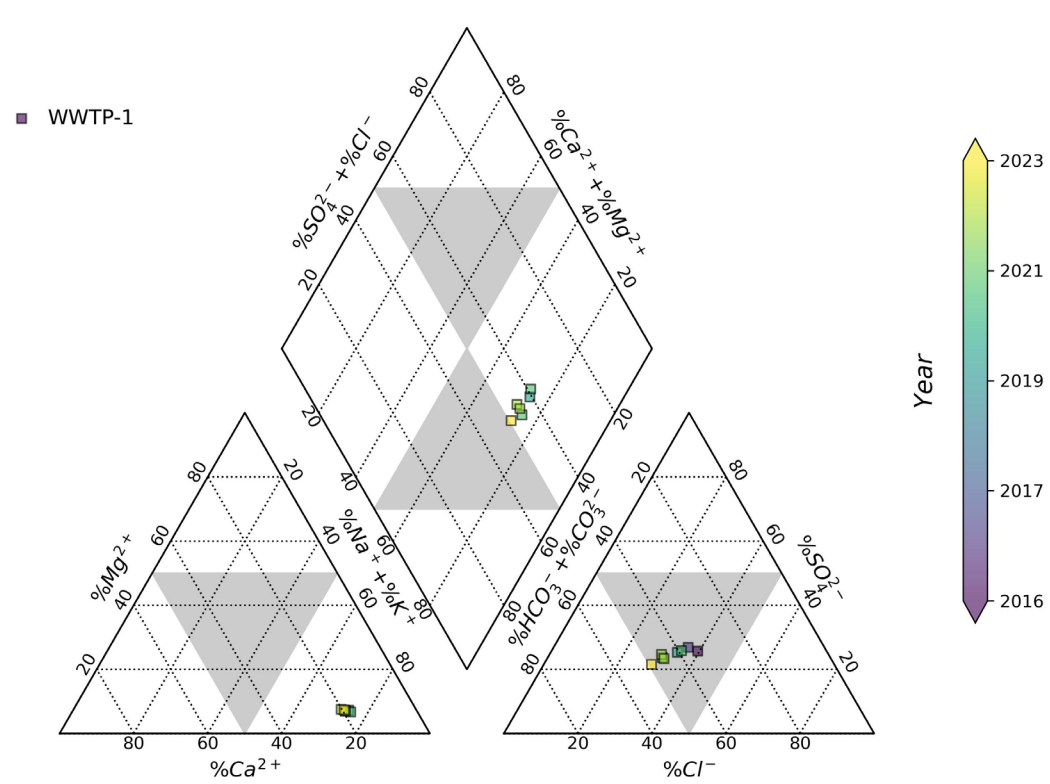


Exhibit 30. (a.) Time series and (b.) Piper diagram of water quality parameters at WWTP-1.

Summary of Preliminary PFAS Sampling

With the increasing concern for PFAS regulation standards for drinking water, BWD is in the process of conducting extensive PFAS sampling in the basin. Preliminary PFAS sampling has taken place in the locations displayed in Figure 9. PFAS has not been detected in the 282 DiGiorgio Road Well, ID4-9, ID4-11, ID4-18, or the landfill wells.

Non-treatment and Treatment Alternatives

While none of the BWD's wells currently exceed California drinking water MCLs, treatment alternatives for COCs are discussed herein to explore options in the event that groundwater quality were to become impaired. Non-treatment and treatment options to meet drinking water standards typically include blending, wellhead treatment, or supplementing the impaired source of supply. In brief, the options include the following.

Switch Sources. As indicated in this TM, the BWD is supplied from several wells located in the NMA, CMA, and SMA of the Borrego Springs Subbasin. If a BWD well were to exceed a drinking water standard, the likely most cost-effective option would be to switch supply to an existing water well(s). Additional evaluation is required to determine if these other sources can meet peak hour demand, maximum day demand and fire flow requirements.

Procurement of a New Source. If additional quantity of groundwater meeting California drinking water MCLs was required by the BWD, then acquiring existing wells or drilling new water wells in the basin may be a cost-effective option. The BWD has already initiated preliminary review of potential new sources of supply in the Subbasin and should further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Blending. If a system has supply sources with low and high concentrations of COCs, blending is a practical option if the source of supply with a low concentration of the COCs is reliable and the sources can be brought together for mixing at a common header (i.e., blending location which may occur within a pipeline). To allow for a safety margin, target concentration of the blended stream is typically set 20% below the respective MCL. It should be noted that the DDW no longer considers blending a viable long-term option to meet drinking water standards for municipal supply.

Sidestream Treatment. If COCs were to exceed a respective MCL by a small margin, then sidestream treatment could be a viable option for some COCs such as arsenic. Sidestream treatment involves splitting flow, treating one stream, and blending it with the untreated stream prior to distribution.

Wellhead Treatment. If the typically more cost-effective options above were exhausted, then wellhead treatment would be evaluated in the event that COCs were to exceed drinking water standards. The U.S. Environmental Protection Agency (EPA) identifies several best available technologies for arsenic removal, which are discussed in further detail in a previous Dudek study,

Water Replacement and Treatment Cost Analysis for the Borrego Valley Groundwater Basin (Dudek 2015).

Conclusions and Recommendations

Based on the findings of this Groundwater Quality Risk Assessment Update, INTERA concludes and recommends the following:

- All active BWD production wells continue to meet drinking water standards without the need for treatment other than chlorination as required by the SWRCB's DDW.

- Increased groundwater production and declining groundwater levels over the last decade in the SMA combined with an observed increase in arsenic concentrations is several irrigation and monitoring wells and shifts in the water quality type as shown on the Piper diagrams is of concern and presents a water quality risk to BWD production well ID1-8. As such, BWD should make plans to switch supply to other existing BWD water wells if water quality begins to exceed drinking water standards for arsenic.

- DDW is currently investigating the technological and economic feasibility of lowering the current arsenic MCL of 0.010 mg/L (equivalent to 10 µg/L) closer to the PHG (0.004 µg/L). Lowering of this MCL could have a substantial impact on BWD operations; however, based upon available information described herein, it is speculated that the arsenic MCL will not be revised for at least 5 years. BWD should closely follow review of the arsenic MCL. Regulatory updates to the arsenic MCL is likely the greatest potential financial impact to the BWD ratepayers.

- As stated in the GMP, "Degradation of groundwater quality in the upper aquifer has occurred as recharge to the aquifer has mobilized natural and anthropogenic sources of nitrate. The groundwater impacted by nitrate has the potential to migrate laterally as a result of pumping. One strategy successfully implemented to produce potable water in several areas of the Subbasin is to only screen the deeper sediments of the middle and lower aquifer to avoid nitrate that is likely concentrated in the upper aquifer. It should be noted that abandoned wells have the potential to provide a migration pathway of nitrate contaminants from the upper aquifer to the middle and lower aquifers. Hence, the Watermaster's proactive cooperation with San Diego County in the enforcement of the County's ordinance governing abandonment of inactive wells will be considered by the Watermaster in order to preserve the existing potable water quality, especially where poor water quality has been identified." As documented by recent data collected from MW-6S, 904 DiGiorgio Road and the Fortiner Well, elevated nitrate concentrations have been detected above the MCL in the upper aquifer and the upper portion of the middle aquifer of the NMA. As such, it is recommended that a formal recommendation be provided to the County of San Diego Department of Environmental Health regarding water well standards documenting the need to require appropriate annular seals for wells that extend through multiple aquifers with variable water quality. In addition,

INTERA recommends an updated well canvas to identify inactive wells in the Subbasin that require proper abandonment in accordance with County and State standards.

- BWD should develop educational materials for pumpers and regulators regarding water quality degradation that is documented to occur within the Subbasin. The location of de minimis domestic wells in the Subbasin should be identified and outreach conducted to those well owners to document groundwater quality and water levels.

- Additional well head data from existing wells in the NMA and CMA are needed to better characterize the spatial variability of groundwater quality. In addition, depth discrete water quality is required to better characterize the groundwater quality by depth. INTERA recommends identifying wells with elevated nitrate in the NMA that would be candidates to perform dynamic flow and chemistry profiling in order to characterize water quality by depth.

- BWD should acquire data semi-annually from the Borrego Springs Watermaster to complete an independent evaluation of water quality results consisting of quality assurance/quality control of the data and flagging of anomalous results not consistent with historical data. On an annual basis statistical trend analysis of available data should be performed to evaluate trends and proactively identify potential water quality risks.

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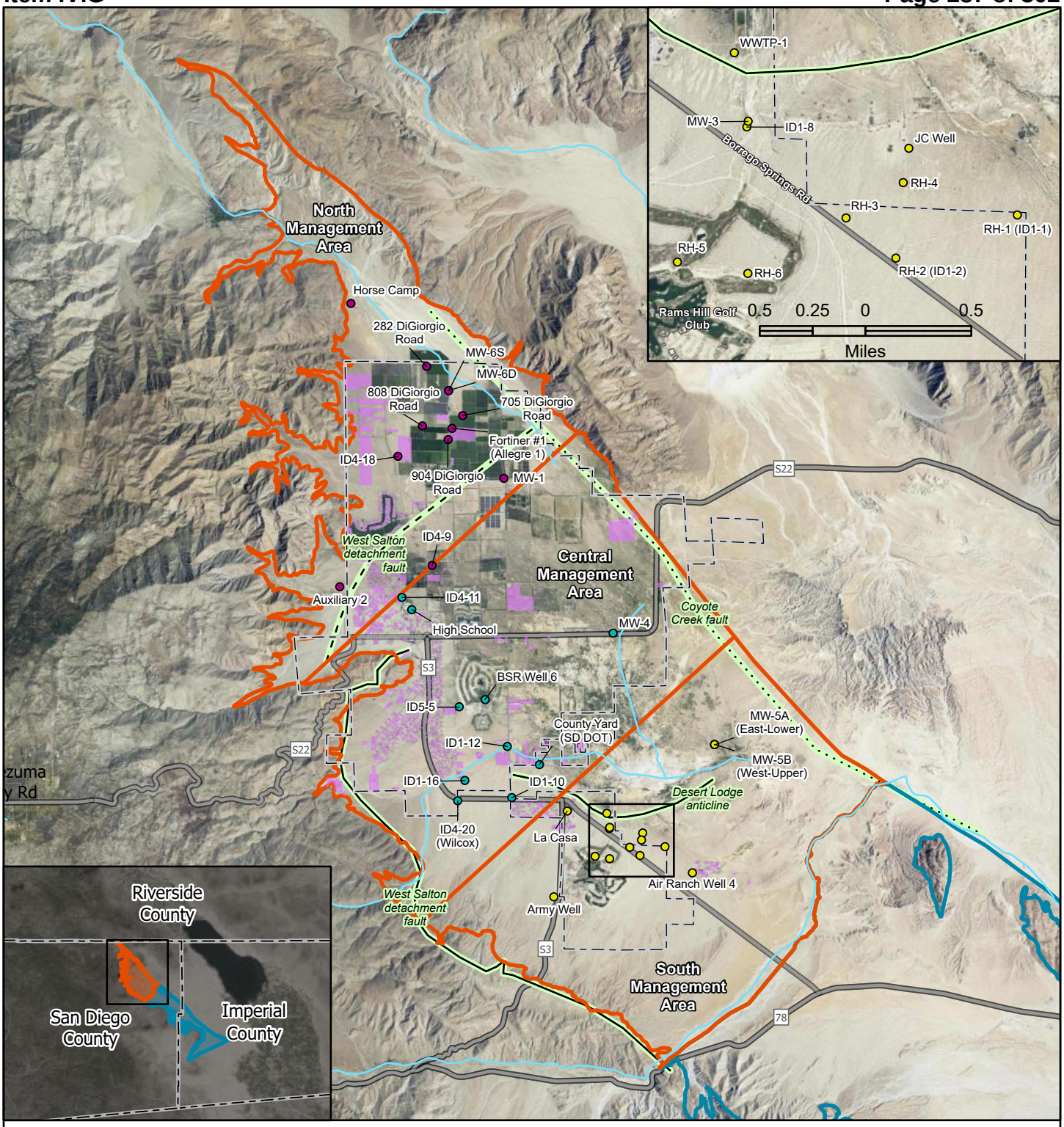


Management Area Wells
- North
- Central
- South

Faults and Folds
- Certain
- Concealed
- Un-Certain

- Borrego Water District
- Borrego Springs Groundwater Subbasin (7-024.01)
- Ocotillo Wells Groundwater Subbasin (7-024.02)
- Residential Sewer Septic Parcels
- Rivers and Streams

N

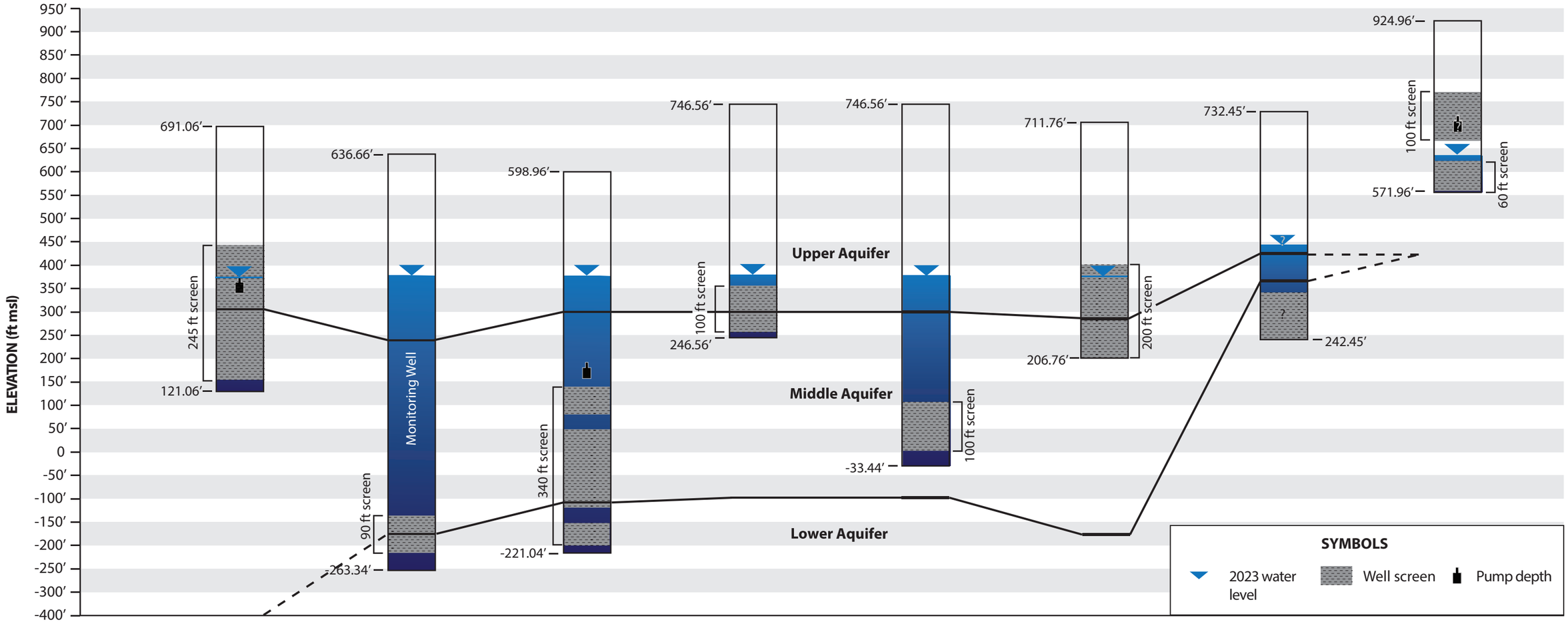
2 1 0 2
Miles

Source(s): BWD 2023, Watermaster 2023

Figure 1
Well Location Map
Borrego Springs Subbasin
Groundwater Quality Risk
Assessment Update

FILE: C:\Users\mdughi\OneDrive - INTERA Inc\Desktop\ArcGIS\BWD\MCL Maps\MCL maps.aprx Layout: Overview Layout Date: 9/29/2023

Well ID	ID4-18	MW-1	ID4-9	MW-6S	MW-6D	Fortiner	Auxiliary 2	Horse Camp
Current gpm	Q=220gpm	Monitoring Well	Q=321gpm	Monitoring Well	Monitoring Well	Q=N/A	Q=Unknown	Q=Unknown
Original gpm*	Q=1,200gpm*	N/A	Q=1,600gpm*	N/A	N/A	Q=770gpm*	Q=Unknown	Q=Unknown
Year Drilled	(1982)	(2004)	(2019)	(2023)	(2023)	(1945)	(1954)	(2005)
Original Static	465.06 ft msl	403.66 ft msl	385.75 ft msl	370.77 ft msl	385.89 ft msl	469.46 ft msl	N/A	454.23 ft msl



Casing Diameter:	14″ ID	16″ ID	16″ ID	4″ ID	4″ ID	16″ ID	N/A	17.5″ ID
Well Depth:	570 ft bls	700 ft bls	820 ft bls	500 ft bls	780 ft bls	505 ft bls	490 ft bls	350 ft bls
Borehole Depth:	699 ft bls	708 ft bls	916 ft bls	520 ft bls	783 ft bls	505 ft bls	505 ft bls	410 ft bls
Pump Size:	160 HP	200 HP	N/A	N/A	N/A	200 HP	N/A	N/A
Pump Depth:	N/A	316 ft msl	N/A	N/A	N/A	219 ft mls	N/A	N/A
Specific Capacity:	N/A	N/A	33.0 gpm/ft	N/A	N/A	31.0 gpm/ft	N/A	N/A
Current Production Rate:	1,166 gpm	1,000 gpm	965 gpm	Monitoring Well	Monitoring Well	723 gpm	N/A	N/A
Casting Type:	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	N/A	Mild Steel
Drop Pipe:	N/A	10″	N/A	N/A	N/A	8″	4″	6″

*Indicates original tested production rate when drilled.

INTERA

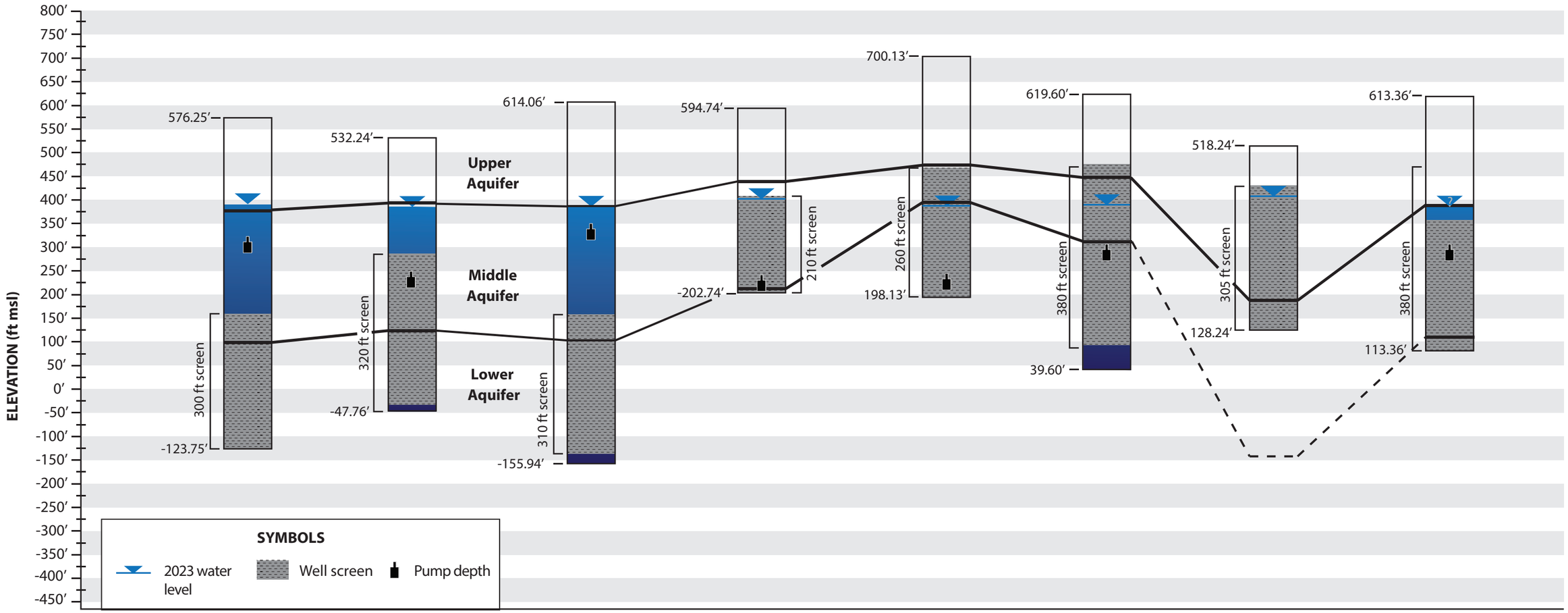
SOURCE: DWD, BWD 2023, DWR Well Completion Reports, Elevation data reported in NAVD88 from BVHM

October 2023

FIGURE 2

DRAFT: North Management Area Wells

Well ID	ID5-5	ID1-12	ID4-11	ID1-10	ID4-20 (Wilcox)	ID1-16	MW-4	High School
Current gpm	1,000 gpm	965	1,100 gpm	500? gpm	175 gpm	750 gpm	Monitoring Well	600
Original gpm*	3,000 gpm*	2,000	2,000 gpm*	1,110 gpm*	900 gpm*	2,500 gpm*	N/A	3,000
Year Drilled	(2000)	1984	(1995)	(1972)	(1981)	(1989)	(2006)	(2019)
Original Static	376.25 ft msl	449.74 ft msl	452.06 ft msl	464.74 ft msl	454.23 ft msl	447.60 ft msl	424.24 ft msl	378.36 ft msl



Casing Diameter:	16″ ID	14.75″ ID	14″ ID	12.75″ ID	12.75″ ID	16″ ID	12″ ID	10.25″ ID
Well Depth:	700 ft bls	580 ft bls	770 ft bls	392 ft bls	502 ft bls	550 ft bls	390 ft bls	500 ft bls
Borehole Depth:	708 ft bls	726 ft bls	800 ft bls	816 ft bls	502 ft bls	705 ft bls	930 ft bls	500 ft bls
Pump Size:	200 HP	200 HP	200 HP	150 HP	80 HP	200 HP	N/A	N/A
Pump Depth:	316 ft msl	242 ft msl	269 ft msl	204 ft msl	225 ft msl	219 ft msl	N/A	N/A
Specific Capacity:	N/A	75.4 gpm/ft	86.95 gpm/ft	20.3 gpm/ft	26.4 gpm/ft	31.0 gpm/ft	N/A	N/A
Current Production Rate:	1,000 gpm	965 gpm	1,100 gpm	500? gpm	350? gpm	723 gpm	N/A	N/A
Casing Type:	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel
Drop Pipe Diameter:	10″	8″		8″	6″	8″	N/A	N/A

*Indicates original tested production rate when drilled.

INTERA

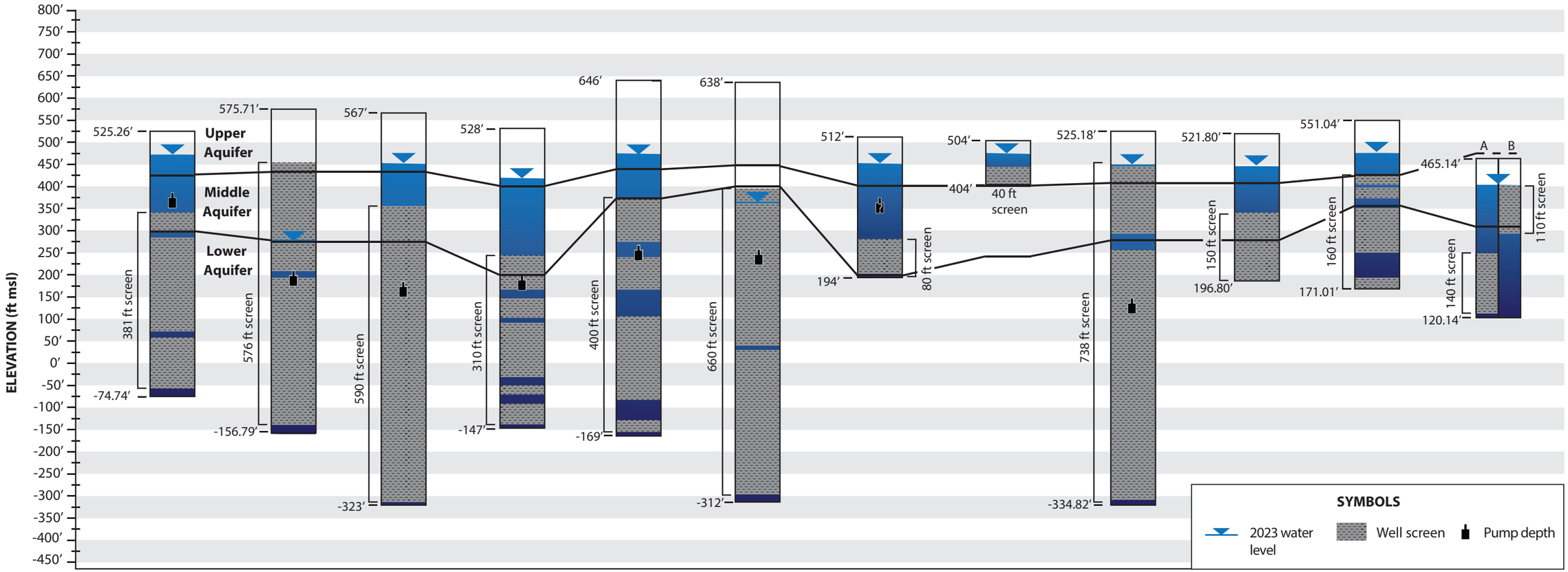
SOURCE: DWD, BWD 2023, DWR Well Completion Reports, Elevation data reported in NAVD88 from BVHM

FIGURE 3

DRAFT: Central Management Area Wells

October 2023

Well ID	RH-1 (ID1-1)	RH-2 (ID1-2)	RH-3	RH-4	RH-5	RH-6	JC Well	WWTP-1	ID1-8	MW-3	Air Ranch Well 4	MW-5A/B
Current gpm	Q=200 gpm	Q=200 gpm	Q=230 gpm	Q=260 gpm	Q=350 gpm	Q=350 gpm	Q=10 gpm	Monitoring Well	Q=300 gpm (2013)	Monitoring Well	Q=Unknown	Monitoring Well
Original gpm*	Q=300 gpm*	Q=295 gpm*	Q=250 gpm*	Q=342 gpm*	Q=360 gpm*	Q=500 gpm*	Q=50 gpm*	N/A	Q=1,100 gpm*	N/A	Q=Unknown	N/A
Year Drilled	(1972)	(1972)	(2014)	(2014)	(2015)	(2015)	(2004)	(2009)	(1972)	(2005)	(1993)	(2006)
Original Static	472.26 ft msl	483.71 ft msl	465.00 ft msl	468.00 ft msl	468.00 ft msl	496.00 ft msl	Unknown	476.00 ft msl	474.18 ft msl	459.80 ft msl	462.04 ft msl	403.14 ft msl



Casing Diameter:	12.75″ ID	12.75″ ID	12.75″ ID	10.75″ID	40.75″ ID	10.75″ ID	4.5″ ID	4.5″ ID	12.75″ ID	4.5″ ID	8″ ID	4″ ID
Well Depth:	600 ft bls	732 ft bls	890 ft bls	675 ft bls	815 ft bls	900 ft bls	318 ft bls	100 ft bls	850 ft bls	325 ft bls	380 ft bls	345 ft bls
Borehole Depth	609 ft bls	740 ft bls	998 ft bls	844 ft bls	830 ft bls	1,000 ft bls	318 ft bls	100 ft bls	938 ft bls	344 ft bls	380 ft bls	480 ft bls
Pump Size:	40 HP	40 HP	40 HP	40 HP	40 HP	40 HP	Unknown	N/A	100 HP	N/A	N/A	N/A
Pump Depth:	357 ft msl	188 ft msl	187 ft msl	168 ft msl	246 ft msl	238 ft msl	N/A	N/A	135 ft msl	N/A	N/A	N/A
Specific Capacity:	3.25 gpm/ft	1.45 gpm/ft	1.24 gpm/ft	1.69 gpm/ft	7.0 gpm/ft	5.9 gpm/ft	Unknown	N/A	8.7 gpm/ft	N/A	N/A	N/A
Current Production Rate:	200 gpm	200 gpm	230 gpm/ft	260 gpm	350 gpm	350 gpm	10 gpm	N/A	350 gpm (2013)	N/A	N/A	N/A
Casing Type:	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	Mild Steel	PVC	PVC	Mild Steel	Mild Steel	PVC	Mild Steel

*Indicates original tested production rate when drilled.

INTERA

SOURCE: DWD, BWD 2023, DWR Well Completion Reports, Elevation data reported in NAVD88 from BVHM

October 2023

FIGURE 4

DRAFT: South Management Area Wells

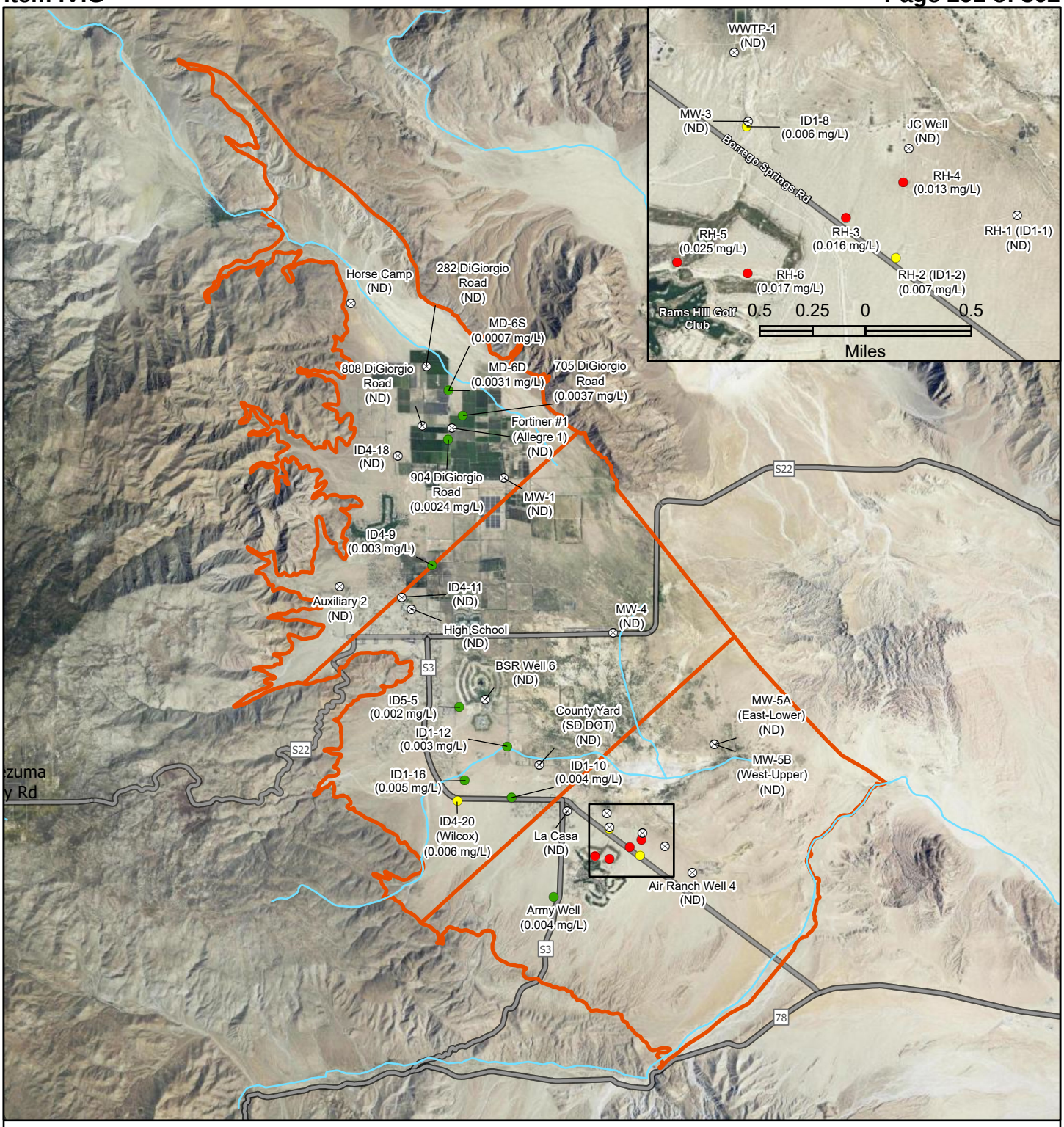


Figure 5
Current Arsenic Wellhead Concentrations
Borrego Springs Subbasin Groundwater Quality Risk Assessment Update

Source(s): BWD 2023, Watermaster 2023
Note(s): Sample results from 2023; if data lacking, most current results used.

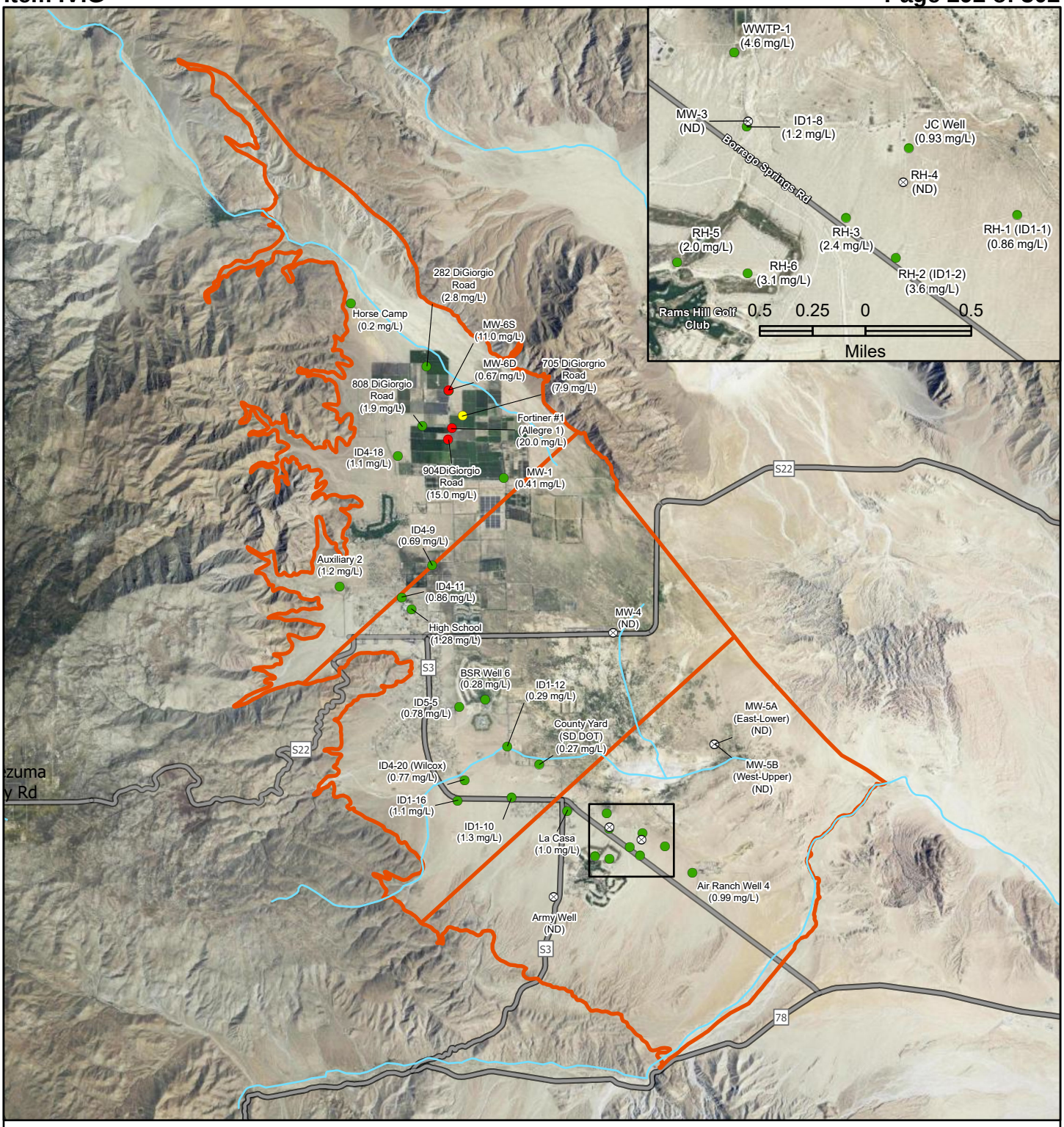
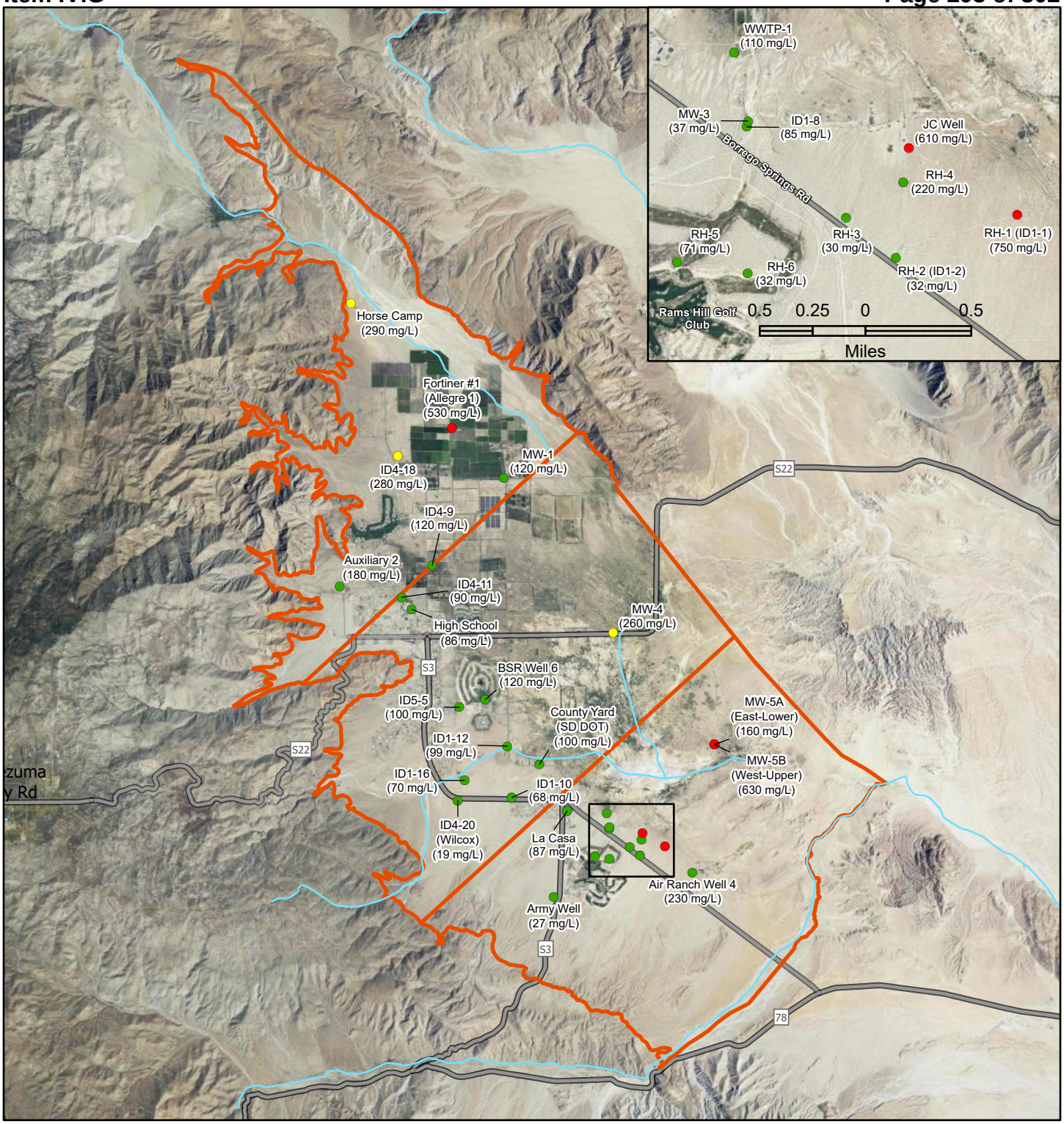


Figure 6
Current Nitrate Wellhead Concentrations
Borrego Springs Subbasin Groundwater Quality Risk Assessment Update

INTERA

Source(s): BWD 2023, Watermaster 2023
Note(s): Sample results from 2023; if data lacking, most current results used.

FILE: C:\Users\mdughi\OneDrive - INTERA Inc\Desktop\ArcGIS\BWD\MCL Maps\MCL maps.aprx Layout: Nitrate Layout Date: 10/5/2023



Sulfate Concentrations
- Below 250 mg/L
- Between 250 and 500 mg/L
- Above 500 mg/L
- Non-detect

Rivers and Streams

Borrego Springs Subbasin

N

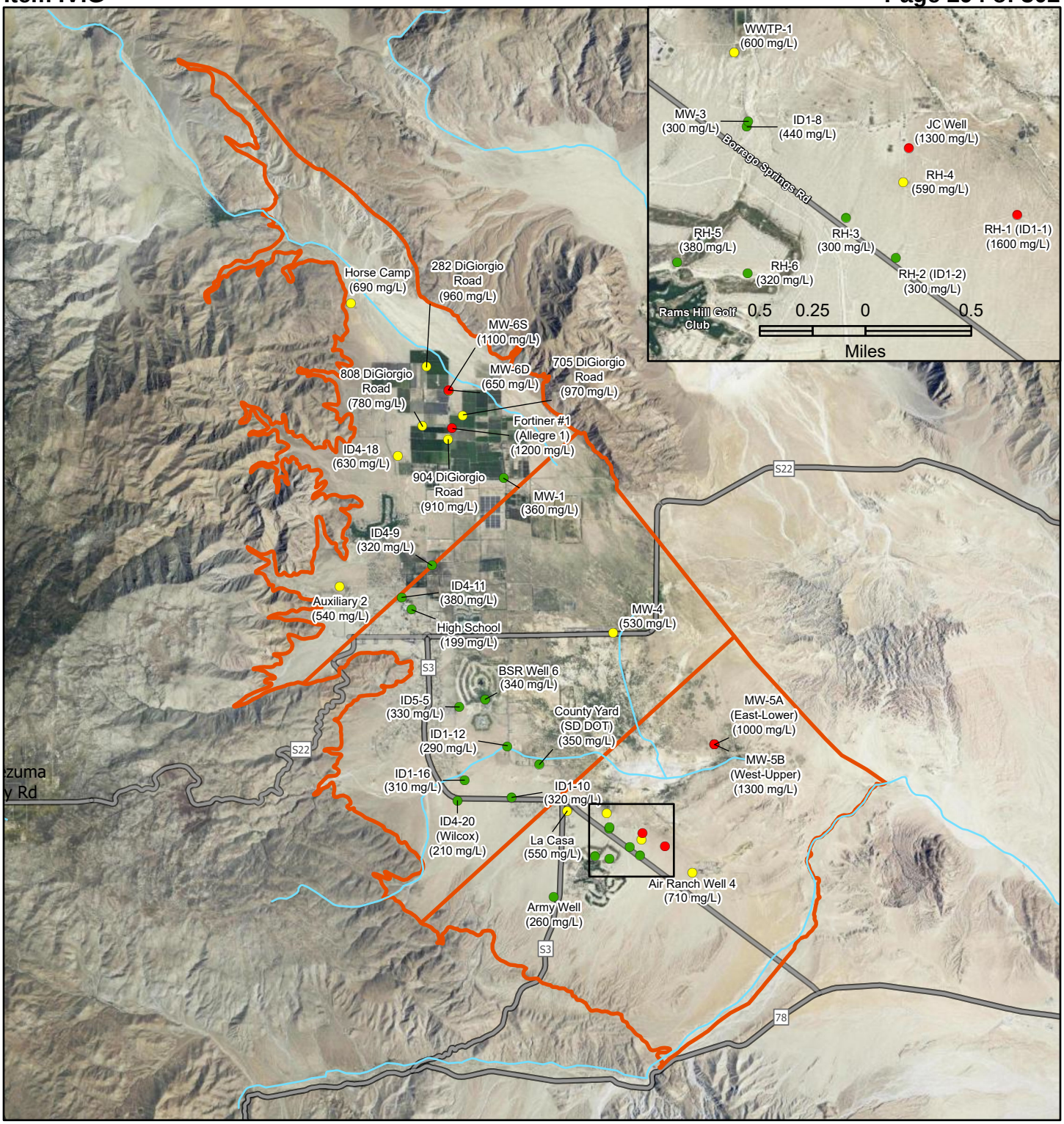
2 1 0 2
Miles

Figure 7
Current Sulfate Wellhead Concentrations
Borrego Springs Subbasin
Groundwater Quality Risk Assessment Update

INTERA

Source(s): BWD 2023, Watermaster 2023
Note(s): Sample results from 2023; if data lacking, most current results used.

FILE: C:\Users\mdughi\OneDrive - INTERA Inc\Desktop\ArcGIS\BWD\MCL Maps\MCL maps.aprx Layout: Sulfate Layout Date: 10/5/2023



TDS Concentrations
- Below 500 mg/L
- Between 500 and 1000 mg/L
- Above 1000 mg/L
- Non-detect

Rivers and Streams

Borrego Springs Subbasin

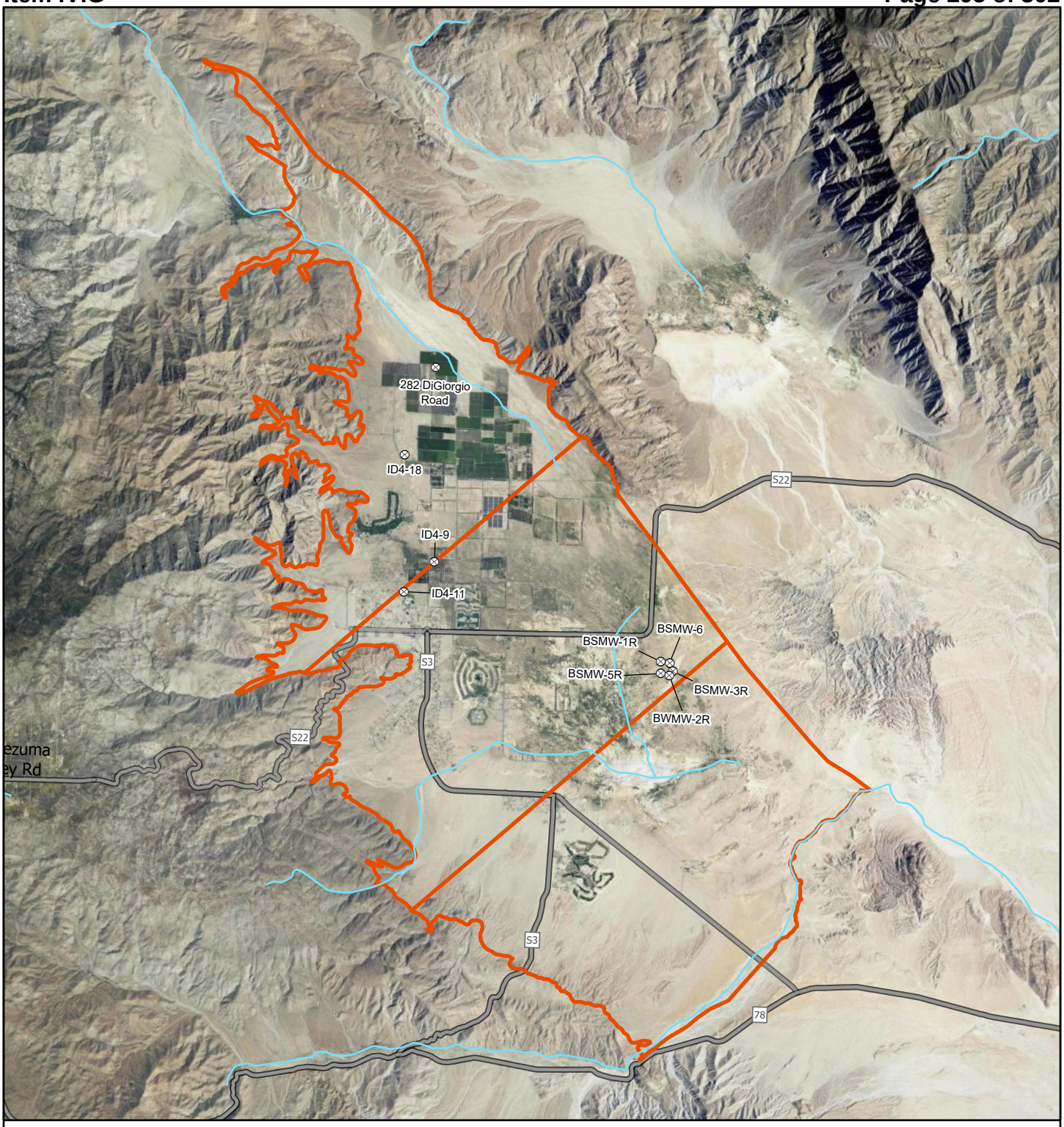
N

2 1 0 2
Miles

Figure 8
Curent TDS Wellhead Concentrations
Borrego Springs Subbasin Groundwater Quality Risk Assessment Update

Source(s): BWD 2023, Watermaster 2023
Note(s): Sample results from 2023; if data lacking, most current results used.

FILE: C:\Users\mdughi\OneDrive - INTERA Inc\Desktop\ArcGIS\BWD\MCL Maps\MCL maps.aprx Layout: TDS Layout Date: 10/5/2023



PFAS Concentrations

⊗ Non-detect

Rivers and Streams

Borrego Springs Groundwater Subbasin (7-024.01)

N

2 1 0 2

Miles

Figure 9
Current PFAS Wellhead Concentrations
Borrego Springs Subbasin Groundwater Quality Risk Assessment Update

INTERA

Source(s): BWD 2023, Watermaster 2023, GeoTracker
Note(s): Sample results from 2023; landfill well data from 2019

FILE: C:\Users\mdughi\OneDrive - INTERA Inc\Desktop\ArcGIS\BWD\MCL Maps\MCL maps.aprx Layout: PFAS Layout Date: 10/5/2023

To: Board of Directors

From: Andy Malone, Technical Consultant

Date: November 14, 2025

Subject: Technical Consultant Report – November 2025

OVERVIEW

The purpose of the monthly Technical Consultant Report is to share information with the Board on the status of technical efforts being performed with guidance and input from the Technical Advisory Committee (TAC) and Environmental Working Group (EWG). Additional details and topics that may arise after publishing this report will be presented during the Board meeting.

At the November 19, 2025 Board meeting, I intend to report out on the following topics:

- Report-out from November 12, 2025 TAC Meeting
  - Updated Sustainable Management Criteria
  - Scenario 1C Pumping Projections
- Status Update: Review of Groundwater Dependent Ecosystem Study Report
- Fall 2025 Semi-Annual Monitoring Event

REPORT-OUT FROM NOVEMBER 12, 2025 TAC MEETING

The TAC met on November 12, 2025 to discuss two main topics:

- **Proposed updates to Sustainable Management Criteria (SMC) in the current Groundwater Management Plan (GMP) for the Sustainability Indicators: (i) chronic lowering of groundwater levels; (ii) reduction in groundwater storage; and (iii) degraded water quality**. The proposed updates to the SMC were based on feedback received to date from the TAC, Board, and the public. During the discussion, we received additional TAC feedback and recommendations that will be described in the TAC meeting minutes (to be published on the TAC webpage by 5pm on Friday, November 14, 2025). At the Board meeting, I will provide a summary of some of the main feedback received from the TAC, and our responses to the feedback.
- **Results from Scenario 1C pumping projections**. These model results were discussed as part of the Board agenda item IV.D. The TAC was presented a similar description of the model results, and their discussion on the model results is summarize in the TAC meeting minutes.

STATUS UPDATE: REVIEW OF THE UCI GDE STUDY REPORT

The Board has directed the Technical Consultant to perform a technical review of the UCI GDE Study Report as to whether it constitutes "best available science," and based on this review, to recommend next steps to utilize this new information to inform adaptive Basin management. Through the remainder of 2025, I will be reviewing the UCI GDE Study Report, collaborating with the report authors if I have questions, reviewing TAC/EWG comments on the UCI GDE Study Report, collaborating with TAC/EWG members as necessary to understand their comments, and soliciting comments from the Nature Conservancy on the UCI GDE Study Report. These are the first steps I'm taking before drafting my Recommendation Report in early 2026.

FALL 2025 SEMI-ANNUAL MONITORING EVENT

As required by the Watermaster's Groundwater Monitoring Program, groundwater-quality and groundwater-levels must be collected semi-annually from wells in the monitoring network. The Fall 2025 Semi-Annual Monitoring event occurred October 26 through October 30, 2025. An in-depth report and analysis of the results will be presented in the Fall 2025 Semi-Annual Monitoring Report at the January 2026 Watermaster Board meeting (if all data are available).

To: Board of Directors
From: Samantha Adams, Executive Director
Date: November 14, 2025
Subject: Executive Director Report – November 2025

Overview

The purpose of the monthly Executive Director (ED) Report is to share information with the Board on the status of key administrative items, including identifying recommended items for future discussion and action. At our November 19, 2025, Board meeting, I intend to report out on the following items. Some information for each item is provided herein, where available. Additional details and topics that arise after publishing this report may be presented during the meeting.

The November 2025 ED Report topics include:

- Closeout of Vendor Payment Terms
- SGM Grant Reimbursement Status
- 5-Year GMP Assessment/Update – Review Schedule
- BPA and Party Updates

Status Updates

Closeout of Vendor Payment Terms

As of October 31, 2025 the Watermaster has fully paid off its balance of payments owed under the Vendor Payment terms with West Yost and Land IQ. The final outstanding balances were paid off upon receiving the Reimbursement #9 (out of 10) from DWR. The Watermaster is now on a regular payment schedule with West Yost where invoices will be paid upon approval by Watermaster's designated reviewers and without accrual of interest.

A total of **$152,616.24 in interest payments** were made by Watermaster to West Yost and Land IQ from June 2023 through October 2025 to enable acceptance of **$2,729,217.31 in grant funds** from DWR. Interest payments to each vendor over this period were as follows:

- West Yost: $119,585.76
- Land IQ: $33,030.48

SGM Grant Status

The final grant report has been approved by DWR and is pending payment to BWD, which is expected before the end of the calendar year. Watermaster's financial model for YW 2026 assumed payment of the final retained funds would be made in March 2026, and so payment and close out of the grant is ahead of schedule.

5-Year GMP Assessment/Update – Review Schedule

Staff is proposing some updates to the schedule to complete the 5-Year Assessment Report and GMP Update to accommodate inclusion of a Board Workshop on the BVHM Judgment Scenario. The revised schedule is attached for discussion (Table 1).

BPA and Party Updates (No Changes)

As reported and discussed in March, there is one Party that remains out of compliance with the Judgment and is not in contact with the Watermaster. Information about outstanding balances and metering requirements to Alternate Director Jim Dax to see how we might be able to get engaged. There is nothing new to report this month on the subject.

- The current outstanding balance owed to Watermaster is $372.24.
- The assumed annual pumping by this party is 1.20 acre-feet per year.

Table 1. Status of Recommended Schedule for GMP Update Activities for June 2025 through June 2026, as Published in WY 2026 Budget Package in June 2025

Month/Year	Planned Technical Topics Related to the GMP Update for Discussion at Board , TAC, and Open House Workshops	Status and Adjustments to Schedule of Topics
June 2025	**Board:** Workshop - Discuss Considerations for Updating the GMP	COMPLETE
July 2025	**Board:** Workshop - Judgment vs GMP **TAC:** *Revised BVHM Pumping Projection - Shift Pumping to NMA *Updating Groundwater Level and Storage SMC	**Board:** COMPLETE **TAC:** MOVED TO AUGUST
Aug 2025	**Board:** Workshop - SMCs	**Board:** COMPLETE **TAC: -** COMPLETE *Revised BVHM Pumping Projection - Shift Pumping to NMA *Updating Groundwater Level and Storage SMC
Sept 2025	**TAC:** Addressing Groundwater Quality SMC, Land Subsidence **Board:** Workshop - Groundwater Quality and SGMA	**Board:** COMPLETE **TAC:** COMPLETE
Oct 2025	**Public Workshop:** Updating SMC **Board:** Workshop - Overview of Public Comments on SMC	**Public Workshop:** COMPLETE **Board:** COMPLETE
Nov 2025	**TAC:** Review of Updated SMC (based on comments) **Board:** Workshop - RCA-2: Domestic Well Mitigation	**TAC:** COMPLETE, Plus Review of Additional BVHM Runs **Board**: CHANGED TO: Workshop - Land Subsidence, RCA #6
Dec 2025	**Board:** Workshop - SMC (final recommendations)	**Board:** CHANGED TO: Workshop - Financing Mitigation of Impacts (Such as Domestic Well Mitigation to address RCA-2)
Jan 2026	**Board:** Workshop - Current Basin Conditions Relative to Updated SMC	**TAC:** ADDED - Sustainability of Judgment Allowed Pumping **Board:** CHANGED TO: Workshop - Sustainability of Judgment Allowed Pumping
Feb 2026	**Board:** Workshop - Conclusions and Recommendations of the 5-Yr Assessment	**TAC:** ADDED - Current Basin Conditions Relative to Updated SMC **Board:** CHANGED TO: RCA #7 - Integration of Judgment/GMP
Mar 2026	**Publish Compiled Draft 5-Year Assessment Report **Public Workshop:** Present Draft 5-Yr Assessment and GMP Update **Board:** Present Draft 5-Yr Assessment and GMP Update	**Board:** CHANGED TO: Workshop - Current Basin Conditions Relative to Updated SMC **Publish Compiled Draft 5-Year Assessment Report/GMP Update Public Workshop: MOVED TO APRIL
Apr 2026	**TAC:** 5-Yr Assessment Report/GMP Update **Board:** Addressing Public/TAC Comments on 5-Yr Assessment Report/GMP Update	**Public Workshop:** Present Draft 5-Yr Assessment and GMP Update **TAC:** Draft 5-Yr Assessment and GMP Update **Board:** Present Draft 5-Yr Assessment and GMP Update
May 2026	**Board:** Revised Draft 5-Yr Assessment Report/GMP Redline	**Board:** CHANGED TO: Addressing Public/TAC Comments on 5-Yr Assessment Report/GMP Update
June 2026	**Board:** Consider Approval of 5-Yr Assessment Report/GMP Update	**Publish Revised Draft 5-Year Assessment Report **Board:** Consider Approval of 5-Yr Assessment Report/GMP Update

Borrego Springs Watermaster
Board of Directors Meeting
November 19, 2025
AGENDA ITEM VI

To: Board of Directors

From: Samantha Adams, Executive Director

Date: November 14, 2025

Subject: Establishing Agenda for December 17, 2025 Regular Board Meeting

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Process

To set the December agenda, the Board will:

1. Review the initial December agenda topics planned by Staff, as listed below
2. Review the January and February tentative topics planned by Staff and previously requested items by Board members, as listed below
3. List out additional items that have arisen during the November Board meeting (such as during public comment)
4. Call on Directors to request additional items for consideration of inclusion on the December or other future agenda
5. Consider motion(s) to approve the agenda (the agenda can be approved in a single motion or multiple motions to cover each item). The Agenda/items are approved by majority vote (3 of 5 directors)

Staff's Initial Agenda for December Regular Meeting

The December 17, 2025 Regular meeting (held virtually) will include all standard items of: public correspondence, consent calendar (meeting minutes, financial reports, staff invoices, etc.), verbal Staff and Chair reports, establishing the agenda for the subsequent meeting, Board member comments, listing of future meeting dates, and adjournment.

In addition to the standard items, the initial agenda planned by Staff for December 2025 includes the following business items for consideration and possible action:

1. Resolution 25-02 to add additional authorized bank signatories
2. Consideration of Approval of West Yost Contract Amendment to incorporate 2026 Rates, and any additional work approved through a Budget Amendment at the November 2025 Board meeting
3. Consideration of Approval of January TAC Meeting Agenda
4. Review change in Groundwater Storage Calculation – Spring 2024 to Spring 2025

5. GMP Assessment and Workshop – Economic Capacity to Implement Mitigation Strategies (such as Domestic Well Mitigation)

Staff's Tentative Topics for January and February

January Agenda Topics

1. Consideration of approval of Joint EWG-TAC Meeting Agenda
2. WY 2026 Q1 Budget Status Review
3. Fall 2025 Semi-Annual Monitoring Report
4. GMP Assessment and Workshop: Sustainability of Judgment Allowed Pumping *(assuming scope and budget approved in Agenda Item IV.F)*

February Agenda Topics

1. Hearing to receive comments on the WY 2025 Annual Report
2. GMP Assessment and Workshop: Updates on addressing RCA #7 – Alignment of Judgment/GMP