



Grantee Name: Borrego Water District
Grant Agreement No.: 46-14652
Progress Report No.: 2
Reporting Period: 4/1/2023 TO 6/30/2023
Prepared: 8/28/2023

Project: Implementation Project for the Borrego Springs Sub Basin

1. Project or Component Description

Component 1: Grant Administration

Component 1 will provide the general grant oversight and management and ensure invoicing, reporting, and deliverables are turned in on time and in final format.

Component 2: Advanced Meter Infrastructure

Component 2 will replace over 2,000 manual read water meters in the Borrego Water District service area with Advanced Meter Infrastructure.

Component 3: Wastewater Treatment Plant Monitoring Wells

Component 3 will install monitoring wells to detect potential water quality issues on parcels adjacent to the Rams Hill Waste Water Treatment Plant operated by the Borrego Water District.

Component 4: Education Project

Component 4 will create and implement a Career Technical Education Pathway in Energy, Environment and Utilities for Borrego Springs Middle and High Schools to educate students about water sustainability challenges in the basin.

Component 5: Resiliency Strategy

Component 5 will identify, prioritize and implement initiatives supporting the Borrego Valley GMP projects and management actions to minimize undesirable results.

Component 6: Biological Restoration of Fallowed Lands

Component 6 will develop guidance on techniques to mitigate the potential adverse impacts associated with the fallowing of lands and test cases of biological restoration techniques on fallowed lands.

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

Component 7 will provide and maintain dataset of groundwater pumping, levels and quality to be reported to CASGEM, CEDEN and GAMA. It will include creation of monitoring stations and wells as well as abandonment or conversion to monitoring of inactive wells.



Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

Component 8 will reassess groundwater dependent ecosystems and evaluate impacts of changing groundwater elevations.

2. Project Progress

Component 1: Grant Administration

- Updates on All Tasks (activities accomplished during the reporting period):
 - Compile and submit Progress Report No 1, Reimbursement Request No 1 and submission of Deliverables.
 - Assist all parties with CEQA documentation.
 - Correspond and coordinate with parties to submit grant amendment request.
 - Be available to answer questions and provide assistance.
- Milestones or Deliverables Completed/Submitted
 - EIF
 - Deliverable Due Date Schedule
 - Quarterly Progress Report & Invoices for period thru 06/30/23
- Impediments to Completion of Task
 - None
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Delays in execution of BWD/DWR Grant Agreement resulted in a late start for some subgrantees. It is unknown if schedules will be affected.

Component 2: Advanced Meter Infrastructure

- Updates on All Tasks (activities accomplished during the reporting period):
 - Task 1: Continued staff work on creation of request for qualifications and bid documents. Staff has been conducting thorough research on available technologies and how to optimize a system in Borrego Springs.
 - Task 2: CEQA determination finalization
- Milestones or Deliverables Completed/Submitted
 - None.
- Impediments to Completion of Task
 - BWD's District Engineer voluntarily terminated employment on March 15, 2023. This is not expected to impede the project schedule, but may result in Engineering Consultant expenses.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.



- None.

Component 3: Wastewater Treatment Plant Monitoring Wells

- Updates on All Tasks (activities accomplished during the reporting period):
 - Task 1: None. Task completed.
 - Task 2: None.
 - Task 3: During the construction phase, BWD was closely involved and onsite to work with the contractor and answer their questions. Review of change orders, schedules and contractor pay requests were completed in coordination with Dudek and Labor Compliance Consultants. Construction photos can be found in Appendix C of this report.
 - Task 4: Monitoring wells were drilled with modifications to the original scope of work as reviewed by the Colorado River Basin Regional Water Quality Control Board and submitted to the Grant Manager. A technical letter outlining the modifications and their causes has been incorporated as a deliverable.
 - Task 6: Dudek has prepared a comprehensive Well Completion Report that is included as a deliverable.
 - Milestones or Deliverables Completed/Submitted
 - Construction Photographs
 - Technical Letter for Well Design Variance
 - Drillers Well installation Report(s)
 - Impediments to Completion of Task
 - During drilling, lithologic limitations were encountered that made it infeasible to drill the (3) well clusters as originally planned. Dudek prepared a Technical Letter describing the variance that has been added as a deliverable to this project.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Single bid received was \$65,100 in excess of engineers estimate. BWD is preparing a budget amendment request.

Component 4: Education Project

- Updates on All Tasks (activities accomplished during the reporting period):
 - Task 1: Create an Energy, Environment, and Utilities CTE (Career Technical Education) Pathway Curriculum of 330 hours for Borrego Springs Middle and High Schools.
 - Milestones or Deliverables Completed/Submitted
 - Development has begun on the 9-12th grade curriculum.
 - Four courses, each one semester long, are in development, with the first two (year one) near completion.
 - Impediments to Completion of Task



- No impediments in Q2 2023 after The Energy Coalition (TEC) took over curriculum development.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - TEC has developed the curriculum and is on a steady pace to complete year one (2 semesters/first half of the curriculum) by the beginning of the 2023-2024 school year to allow the CTE educator to implement the course successfully.
- Task 2: BSUSD will hire a CTE instructor certified in Energy, Environment, and Utilities.
 - Milestones or Deliverables Completed/Submitted
 - The position was posted on Edjoin, the local Borrego Sun Newspaper, and advertised to personal referrals and contacts.
 - School district administrators searched for a local instructor with work experience in Energy, Environment, and Utilities related fields and an interest in obtaining a CTE Credential.
 - A qualified CTE Instructor was screened, interviewed, and offered the position.
 - Contract negotiations began.
 - Impediments to Completion of Task
 - Identifying a local Instructor with work experience in Energy, Environment, and Utilities related fields and an interest in obtaining a CTE Credential has been challenging.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - A viable candidate was identified and should onboard in time for the 2023-2024 school year.
- Task 3: The CTE Teacher (CTET) will implement the curriculum developed by ABDNHA while creating partnerships with a wide variety of local entities able to enhance the curriculum.
 - Milestones or Deliverables Completed/Submitted
 - No deliverables were completed within the reporting period.
 - Impediments to Completion of Task
 - No CTE instructor has been identified.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No activities to report.
- Task 4: Four experiential outdoor classroom laboratories for the Environment, Energy, and Utilities CTE students will be built at the ArtPark/ Community Garden at the Borrego



Art Institute (non-profit) for studies in aquaponics water smart growing, xeriscape gardening, best water conservation practices in irrigation and soil studies for watershed and absorption.

- Milestones or Deliverables Completed/Submitted
 - No deliverables were completed within the reporting period.
- Impediments to Completion of Task
 - 110+ desert temperatures.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No activities to report.
- Task 5: Interpretive signs in English and Spanish will be created and placed in the ABDNHA Desert Garden with content to educate CTE students, gardeners, and the general public about the essential roles that desert plants play in the overall ecosystem of the desert environment, best water conservations practices, low water-use plants for landscaping and wildlife habitat and the operation of effective irrigation practices.
 - Milestones or Deliverables Completed/Submitted
 - ABDNHA has completed the initial “scoping” of the project, determining the messaging and theme of each of three (or possibly four) signs, along with the fabrication details (approximate size, location, and mounting). ABDNHA has also identified the manufacturer of the sign materials and installing hardware and preliminary cost estimates.
 - Sign 1 “Borrego Beginnings” - The story of how Borrego Springs was started, with promises of an endless water supply for agriculture, and illustrated with old newspaper ads and photos from various sources.
 - Sign 2. “The Borrego Aquifer” - The story of Borrego Springs’ sole source of water, the Borrego Aquifer, how it functions geologically, its natural limitations to supply water as determined by scientific research, and how decades of over-pumping have put Borrego Springs at risk of losing its water supply.
 - Sign 3 “A New Beginning” - A description of two things, (1) the new legal water plan which will, after several years, bring Borrego’s water consumption into a sustainable situation, so pumping will not exceed the natural recharge rate of water coming into the aquifer, as well as (2) a description of water saving measures that homeowners can take to conserve water.
 - Depending on how this material comes together, we may split this into two signs, one on the water agreement and one on things homeowners can do.



- Impediments to Completion of Task
 - No impediments.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No activities to report.
- Task 6: ABF (Anza Borrego Foundation) will work jointly with the ABDSP (Anza Borrego Desert State Park) to create interpretation materials in English and Spanish that explain the “why” of our watershed situation and attempt to give a broader understanding of our water resource.
 - Milestones or Deliverables Completed/Submitted
 - No deliverables were completed within the reporting period.
 - Impediments to Completion of Task
 - No impediments.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No activities to report.

Component 5: Resiliency Strategy

- Updates on All Tasks (activities accomplished during the reporting period):
 - **Task 1: Planning**
 - Borrego Valley Stewardship Council (BVSC), and CivicWell, began the procurement of a limited-term contract employee to serve as a basin coordinator on April 12, 2023. The position description and request for services was published on the BVSC website and advertise through email to BVSC signatories and other subscribers. BVSC, with support from CivicWell, reviewed applications and conducted interviews. As a result, BVSC selected Eduardo Rivera to serve as basin coordinator.
 - BVSC, and CivicWell, in coordination with Howard Blackson prepared a timeline for outreach and engagement activities. Howard Blackson began drafting community visioning process, and requested a review from the BVSC board. BVSC responded to the request, and Howard Blackson prepared the community visioning process and schedule. The outreach and engagement process will kick-off with an educational webinar series that will help community members increase understanding on the basin and the protected land of Anza-Borrego Desert State park, aquifer and water dependent systems, forecasted changes with reduction of 75% groundwater use, community planning, among other local groundwater and basin-related topics.



- CivicWell, Howard Blackson and BVSC began drafting a stakeholder list, including a list of local and regional partners to participate in basin and basin-wide coordination efforts.
- Task 2: Basin Characterization
 - After the completion of the community visioning process, Howard Blackson and CivicWell started work on the basin characterization white paper
- Task 4: Sponsor Group Coordination
 - Howard Blackson, and BVSC participated on the May 2023 Sponsor Group meeting and provided a presentation on Component 5 and the community vision process. BVSC, CivicWell and Howard Blackson will continue to engage with the Sponsor Group through the monthly meetings.
- Milestones or Deliverables Completed/Submitted
 - Category A Grant Administration: Established scope of work with Howard Blackson.
 - Category B: Environmental / Engineering / Design
 - Task 1 Planning: limited-term contract employee position description and scope of services, community visioning process schedule, community engagement plan
- Impediments to Completion of Task
 - CivicWell did not experience impediments that prevent them from making progress on the grant tasks.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Category A: Borrego Valley Stewardship Council (BVSC) identified Howard Blackson, with AVR Studio as the consultant to support Component 5 based on his unique familiarity with San Diego County and knowledge of the Borrego Springs and related planning, development, and environmental context.
 - Howard Blackson, is an Urban Designer, author, and lecturer, with an extensive background in community and transit planning and design, urban infill, mixed-use, housing, and education across Southern California and San Diego region. Howard's previous working relationship with BVSC, his experience with SGMA and Groundwater Master Plan for the community, along with his comprehensive knowledge of San Diego County's land use planning, zoning, and policies, and his close understanding of environmental, groundwater-related, and economic challenges in Borrego Springs makes him a suitable consultant to support this effort. Howard will lead a community visioning and planning process, and develop and produce a Borrego Springs strategic plan for a community- and water-resilient future. Howard will work in close coordination with CivicWell and collaboration with BVSC to support outreach and engagement



activities and will lead the Existing Conditions analysis and the Basin Characterization white paper.

- No Change Orders have been requested at this time.

Component 6: Biological Restoration of Fallowed Lands

CATEGORY (A) COMPONENT ADMINISTRATION.

- The work performed for this task during the reporting period included:
 - Corresponded with BWD staff on grant logistics, including meetings to review and discuss the grant reporting formats, and discuss CEQA requirements.
 - Completed the first quarterly grant progress report and reimbursement request for the January 1, 2022 through March 31, 2023 period. Submitted report materials to BWD Board.
 - Reviewed draft CEQA compliance documents prepared by Tom Dodson and Associates for the project (Notice of Exemption).
 - Compiled and annotated West Yost invoices for the first quarterly status report and reimbursement request.
 - Performed project management to review scope, schedule, and budget progress as of the end of March 2023.
 - Updated budget status table.
- Milestones or Deliverables Completed/Submitted
 - Quarterly grant progress report #1
 - Reimbursement request #1
 - Notice of Exemption
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - Project commenced later than anticipated due to the delay in BWD and DWR executing the grant master agreement; and subsequently the subgrantee agreement between BWD and Watermaster. Though the project commenced later than anticipated, the schedule for all tasks was updated and the project is planned to be completed by March 31, 2025. The schedule delay did not result in any change orders for the project.

CATEGORY (B) and (C) are not applicable to this component.

CATEGORY (D) MONITORING, ASSESSMENT. The tasks in this Category includes the following:

Task 1 – Review and Analysis of Existing Data

- The work performed for this task during the reporting period included:
 - Finalized Literature Review task memorandum. This task is complete.



- Milestones or Deliverables Completed/Submitted
 - Literature Review on Rehabilitation of Fallowed Farmlands in Borrego Valley, California
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

Task 2 – Existing Fallowed Farmland and Reference Natural Habitat Field Study

- The work performed for this task during the reporting period included:
 - Prepared draft methodology for Existing Abandoned Farmland and Reference Natural Habitat Field Study.
 - Collected Spring 2023 field data and performed data management.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

Task 3 - Brush Pile Wildlife Sand Fence Case Study.

- The work performed for this task during the reporting period included:
 - Prepared Draft Methodology for Fallowed Farmland Brush Fence Study.
 - Coordinated with County, landowners, and Watermaster Staff to develop Study.
 - Prepared and submitted sand fence design specifications to San Diego County for review.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

Task 4 - Farmland Following Rehabilitation Strategies

- The work performed for this task during the reporting period included:
 - None for the reporting period.



- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

Task 5 - Farmland Fallowing Prioritization

- The work performed for this task during the reporting period included:
 - None for the reporting period.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

CATEGORY (E) STAKEHOLDER OUTREACH. The tasks included in this Category includes the following:

Task 6 - Conduct Environmental Working Group (EWG) Meetings

- The work performed for this task during the reporting period included:
 - None
- Milestones or Deliverables Completed/Submitted
 - None
- Impediments to Completion of Task
 - None
- Activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved
 - None

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

CATEGORY (A) COMPONENT ADMINISTRATION. The work performed for this task includes monthly project management of the tasks included in Component 7 and preparation of quarterly grant progress reports for submittal to the Borrego Water District (BWD).

- The work performed during the invoice period includes:



- Corresponded with BWD staff on grant logistics, including meetings to review and discuss the grant reporting formats, and discuss CEQA requirements.
 - Prepared subconsultant agreement with Tom Dodson and Associates.
 - Performed monthly project management to review scope, schedule, and budget progress as of the end of May 2023.
 - Updated budget status table.
 - Compiled and annotated invoices for the first quarterly status report and reimbursement request for the period of January 2022 through March 2023.
 - Completed the first quarterly grant progress report and reimbursement request for the January 1, 2022 through March 31, 2023 period. Submitted report materials to BWD Board.
- Milestones or Deliverables Completed/Submitted
 - Quarterly grant progress report #1
 - Reimbursement request #1
 - Impediments to Completion of Task
 - None.
 - Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

CATEGORY (B) PLANNING, DESIGN, ENVIRONMENTAL. The work to be performed for this task includes the planning, design, and environmental review portion of the Component 7 tasks. Component 7 includes one design task – design of a surface water monitoring station at Coyote Creek. Environmental review will be performed on Component 7 as a whole.

Task 1: Environmental Documentation/Permitting

- The work performed for this task during the reporting period included:
 - Reviewed draft CEQA compliance documents prepared by Tom Dodson and Associates for the project (Notice of Exemption).
- Milestones or Deliverables Completed/Submitted
 - Notice of Exemption.
- Impediments to Completion of Task
 - None



- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

Task 2: Design Plans and Specifications

- The work performed for this task during the reporting period included:
 - No work performed in this reporting period.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - Due to funding constraints, work on the design of the surface water monitoring station could not commence until the grant agreement was fully in place. This task was not commenced as scheduled due to the significant delay in executing the grant master agreement between BWD and DWR; and subsequently the subgrantee agreement between BWD and Watermaster. Through discussions with the Watermaster's Technical Advisory Committee, the surface water monitoring station implementation was deemed infeasible to complete at the present time because there is insufficient time in the remaining grant period to address access agreements with the Anza Borrego Desert State Park, and limited time to perform the monitoring within the grant period. The feasibility of installing a surface water monitoring station will be evaluated in the future.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Given that the surface water monitoring stations design and construction was deemed infeasible (noted above), BWD will submit a formal request to DWR to transfer the unused budget to Category (d) Task 12: Redetermination Of The Sustainable Yield Of The Borrego Springs Subbasin to support additional work that was recommended by the Watermaster's Technical Advisory Committee after completing the first phase of work in Task 12.

CATEGORY (C) CONSTRUCTION, IMPLEMENTATION. The work performed for this task includes the construction and implementation portion of the Component 7 tasks. Component 7 includes one construction and implementation task – implementation of the surface water monitoring station at Coyote Creek.

Task 3: Construction Management



- The work performed during the invoice period includes:
 - No work performed in this reporting period.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts for this reporting period.

Task 4: Construction of New Monitoring Facilities (Surface Water Station)

- The work performed during the invoice period includes:
 - No work performed in this reporting period.
- Milestones or Deliverables Completed/Submitted
 - Nothing to report for this period.
- Impediments to Completion of Task
 - Due to funding constraints, work on the design of the surface water monitoring station could not commence until the grant agreement was fully in place. This task was not commenced as scheduled due to the significant delay in executing the grant master agreement between BWD and DWR; and subsequently the subgrantee agreement between BWD and Watermaster. Through discussions with the Watermaster's Technical Advisory Committee, the surface water monitoring station implementation was deemed infeasible to complete at the present time because there is insufficient time in the remaining grant period to address access agreements with the Anza Borrego Desert State Park, and limited time to perform the monitoring within the grant period. The feasibility of installing a surface water monitoring station will be evaluated in the future.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Given that the surface water monitoring stations design and construction was deemed infeasible (noted above), BWD will submit a formal request to DWR to transfer the unused budget to Category (d) Task 12: Redetermination Of The Sustainable Yield Of The Borrego Springs Subbasin to support additional work that was recommended by the



Watermaster's Technical Advisory Committee after completing the first phase of work in Task 12.

Task 5: Identify and Address Improperly Abandoned Wells

- The work performed during the invoice period includes:
 - No work performed in this reporting period.
- Milestones or Deliverables Completed/Submitted
 - None for the reporting period.
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

CATEGORY (D) MONITORING, ASSESSMENT. The work performed for this task includes the monitoring and reporting portion of the Component 7 tasks. The work performed in this reporting period included:

Task 6: Groundwater Pumping Monitoring - Annual Meter Verification.

- The work performed for this task during the reporting period included:
 - **Monthly Collection and Processing of Meter Read Data –**
 - Collected, compiled, and managed all Basin pumping data to ensure compliance with pumping Rampdown, including:
 - Cataloged and processed monthly meter reads for March 2023 through May 2023.
 - Calculated pumping by well for March 2023 through May 2023.
 - Performed QA/QC of March 2023 through May 2023 pumping data.
 - Communicated with Parties on questions regarding meter read values.
 - Completed summarizing pumping for the first six months of the water year (WY) and developed a summary report of mid-year pumping.
 - **Annual Meter Verification –**
 - Updated meter verification tracker with new data from pumpers.
 - **Annual Water Rights Accounting Report –**
 - No work performed during this period.



- *Milestones or Deliverables Completed/Submitted:*
 - Completed monthly calculation of pumping data for all metered wells for March 2023 through June 2023.
 - Developed a summary report of mid-year pumping for the first six months of WY 2023.
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

Task 7 and 8: Groundwater Level and Quality Monitoring Program

- The work performed for this task during the reporting period included:
 - **Semi Annual Monitoring Events -**
 - Completed updates to field forms to conform to the standards included in the Watermaster's updated Groundwater Monitoring Plan for the Borrego Springs Subbasin.
 - Updated the pre-route checklist, photos, maps, and contact sheet and compiled all information into a field binder that is used by field technicians to execute the semi-annual monitoring program.
 - Prepared for the spring 2023 semi-annual monitoring event, which included: coordinating with Blaine Tech Services to schedule semi-annual monitoring events, coordinating with analytical laboratory to order sample bottles and labels, scheduling appointments with well owners, booking accommodations, inventorying field supplies, preparing field forms, and developing schedule of monitoring activities that will occur over the four-day monitoring event.
 - Performed the Spring 2023 semi-annual field monitoring event from April 2 to April 6, 2023, which included visiting and monitoring wells across the Basin to collect groundwater level and quality data. This also included visiting Coyote Creek to visually observe and document streamflow conditions at five locations. Following each event, all field forms were scanned, and all data logger files were saved to the project directory.
 - Received, cataloged, processed into standard formats, and loaded to HydroDaVE (Watermaster's data management system) datasets collected in the field by Watermaster Staff in April 2023. All data were checked for quality assurance and control. The datasets included:
 - Manual water level measurements



- Transducer water level data
- Field water quality parameters
- Laboratory water quality parameters for samples collected in the field by Watermaster Staff.
- **Prepare Groundwater Monitoring Plan Update -**
 - Completed final updates to the Groundwater Monitoring Plan (GWMP) report based on Board comments the April 6, 2023 Board meeting. Compiled the final PDF and posted it to the Watermaster website.
 - Attended the Borrego Springs Land Use and Water Committee Meeting on May 17, 2023 to give a presentation on Watermaster outreach efforts to expand the groundwater monitoring network and explain how interested persons can participate.
 - Met with Borrego Water District staff on June 13, 2023 to discuss coordination of monitoring at BWD wells for the Groundwater Monitoring Plan, including forms and protocols identified in the GWMP.
 - Visited Borrego Springs to canvass potential new monitoring well sites identified through the Monitoring Plan outreach process. Summarized field visits, including cataloging photos and searching for matching DWR well lots. The visits included:
 - New wells acquired by the BWD through a purchase of property from another BPA holder on June 14, 2023.
 - Multiple wells through the Basin identified by John Peterson on June 15, 2023.
- Milestones or Deliverables Completed/Submitted
 - Semi-Annual Report of Groundwater Level and Quality Results: Spring 2023
 - Groundwater Monitoring Plan
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

Task 9: Surface Water Flow Monitoring

- The work performed for this task during the reporting period included:
 - No work performed during this period.
- Milestones or Deliverables Completed/Submitted
 - Nothing to report.



- Impediments to Completion of Task
 - Due to funding constraints, work on the design and construction and monitoring of a new surface water monitoring station on Coyote Creek could not commence until the grant agreement was fully in place. This task was not commenced as scheduled due to the significant delay in executing the grant master agreement between BWD and DWR; and subsequently the subgrantee agreement between BWD and Watermaster. Through discussions with the Watermaster's Technical Advisory Committee, the surface water monitoring station implementation was deemed infeasible to complete at the present time because there is insufficient time in the remaining grant period to address access agreements with the Anza Borrego Desert State Park, and limited time to perform the monitoring within the grant period. The feasibility of installing a surface water monitoring station will be evaluated in the future. These changes have been incorporated into Amendment Request No. 1.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Given that the surface water monitoring stations design and construction (for a new station) was deemed infeasible (noted above), BWD will submit a formal request to DWR to transfer the unused budget for monitoring the new station to Category (d) Task 12: Redetermination Of The Sustainable Yield Of The Borrego Springs Subbasin to support additional work that was recommended by the Watermaster's Technical Advisory Committee after completing the first phase of work in Task 12.

Task 10: Maintain and Enhance the Data Management System

- The work performed for this task during the reporting period included:
 - Received, cataloged, processed into standard formats, and loaded to HydroDaVE (Watermaster's data management system) laboratory water quality parameters collected in the field by BWD staff during the Spring 2023 monitoring event. All data were checked for quality assurance and control.
 - Processed groundwater level data (manual and transducer data) for Spring 2023 collected by the BWD. Began checking data for QA/QC and identified issues to discuss with BWD before completing processing of the data.
 - Completed populating SGMA Monitoring Network Module (MNM) database with well identification information and the latest monitoring results (Spring 2023) for wells in the groundwater level monitoring network.
 - Developed an automation tool to produce groundwater quality time history charts that can be posted to Watermaster website after each monitoring event for public review.
 - Added the new MW-6D monitoring well construction details to HydroDaVE.
- Milestones or Deliverables Completed/Submitted



- Spring 2023 groundwater level data submitted to SGMA MNM.
 - Spring 2023 groundwater level and quality data uploaded to HydroDaVE.
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

Task 11: Annual Report To The Court and DWR

- The work performed for this task during the reporting period included:
 - No work performed during this reporting period.
- Milestones or Deliverables Completed/Submitted
 - None
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

Task 12: Redetermination Of The Sustainable Yield Of The Borrego Springs Subbasin

- The work performed for this task during the reporting period included:
 - Ran the Borrego Valley Hydrologic Model (BVHM) to perform comparison of model-estimated pumping to metered pumping for WY 2022.
 - Developed summary of findings comparing BVHM estimated pumping to measured pumping. Sent summary to TAC for review and comment. Reviewed comments received from TAC.
 - Continued working on task to update the water-use factors used in the Farm Process in the BVHM.
 - Prepared presentation with recommendation to TAC on how to update the water-use factors in the BVHM.
 - Reviewed and summarized comments from the TAC on the water-use factors recommendation.
- Milestones or Deliverables Completed/Submitted
 - None



- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - Upon completion of the first phase of work in WY 2022, it was determined that the scope of work and budget to complete the redetermination of the Sustainable Yield would need to be modified to address specific issues (documented in task reports). The Technical Advisory Committee recommended a revised scope of work and budget. To cover the costs of the increased budget, Watermaster proposes to use funds initially planned for use for the design, construction, and monitoring of a new surface water station in Coyote Creek which has been deemed infeasible (see discussions under Category (b), Category (c), and Category (d) Task 9. If DWR approves this transfer of funds, no change orders will be necessary. BWD submitted a formal request to DWR to transfer the unused budget for the surface water monitoring work that can no longer be performed in Categories (b) and (c) to this Category (d) Task 12.

Task 13: Prepare the 2025 GMP Update

- The work performed for this task during the reporting period included:
 - No work performed during this reporting period.
- Milestones or Deliverables Completed/Submitted
 - None
- Impediments to Completion of Task
 - None.
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - No impacts to report for this period.

CATEGORY (E) STAKEHOLDER OUTREACH. The work performed for this task includes stakeholder outreach activities to support the implementation and communication of the Component 7 tasks. The work performed in this reporting period included:

Task 14: Interested Party Outreach

- The work performed for this task during the reporting period included:
 - **Board Meetings**
 - None for the reporting period.



- **Technical Advisory Committee Meetings***

*Note: all TAC meetings were held remotely during the reporting period.

- Prepared for and held public TAC working meeting on June 5, 2023.
- Prepared technical information and presentation materials for the June 5, 2023 TAC working meeting.
- Prepared minutes for June 5, 2023, TAC meeting. All TAC meeting documents and recordings are available on the Watermaster's website.

- **Stakeholder Open House**

- Developed list of handouts for Stakeholder Open House.
- Performed outreach to interested Stakeholders to discuss ways to inform the community about the Open House.
- Prepared handouts and presentation summarizing (1) outcomes of outreach to identify existing wells to add to the monitoring program and (2) the spring 2023 semi-annual monitoring event.
- Conducted the second in-person Stakeholder Open House at the Borrego Springs Library on June 14, 2023 from 1 to 4 pm. The meeting was hosted and led by Andy Malone, Lauren Salberg, and Samantha Adams.

- **Maintain Website and Grant Communications**

- Worked on building out informational portions of Watermaster website in response to interested stakeholder feedback.

- Milestones or Deliverables Completed/Submitted

- TAC Meetings: 6/5/2023 meeting agenda, packet, presentation, and meeting minutes.
- June 14, 2023 Stakeholder Open House: meeting notice, meeting handouts, and meeting summary.

- Impediments to Completion of Task

- None.

- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.

- No impacts to report for this period.

Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

- Updates on All Tasks (activities accomplished during the reporting period):

- Task 6: Arranged staffing, equipment purchases for the first period of field data collection and began arranging subcontracting agreements for the San Diego Natural History Museum and the Tubb Canyon Desert Conservancy
- Task 7: Extensive first and second data collection on plant water status and collection of plant and soil water samples for isotopic analysis were carried out. Identification of locations to install wildlife monitoring cameras within the



sentinel sites established for biodiversity and plant water use monitoring.

Continued assessment of available remote sensing information and preliminary estimates of evapotranspiration by plants

- Task 9: Continued to present our analysis of the existing research to date on Groundwater Dependent Ecosystems (technical memorandum) to different community groups in Borrego Springs to guide decision-making (presentation to Borrego Water District, May 9th, 2023; Borrego Springs Watermaster June 14th, 2023)
-
- Milestones or Deliverables Completed/Submitted
 - Communicated the analysis of the state of knowledge on groundwater dependent ecosystems in the Borrego Subbasin to groups within the community
 - Collected, processed, and shipped plant water and soil water isotope samples to analytic laboratory at the University of Wyoming
- Impediments to Completion of Task
 - No major impediments that influenced our task time-lines specific to activities this quarter
- Describe activities that negatively or positively impacted the schedule and/or budget. If Change Orders (COs) have been approved, describe the reason for those and how the situation was resolved.
 - None

3. Activities for next reporting period:

Component 1: Grant Administration

- Work to be completed during the next invoice period includes:
 - Complete CEQA Determinations.
 - Submission of deliverables and preparation of Progress Reports and Reimbursement Requests.
 - Prepare for amendment request.

Component 2: Advanced Meter Infrastructure

- Work to be completed during the next invoice period includes:
 - Finalize RFQ and Bid Docs and Open Bidding.

Component 3: Wastewater Treatment Plant Monitoring Wells

- Work to be completed during the next invoice period includes:
 - Begin monitoring and work towards project completion.

Component 4: Education Project

- Work to be completed during the next invoice period includes:



- Task 1
 - TEC will complete year one and two curriculum for 9-12th grade.
 - Martha Deichler will complete the 6-9th grade (middle school) curriculum.
- Task 2
 - BSUSD will hire a CTE instructor and complete contractual requirements.
 - CTE Instructor will --
 - Set up their classroom and be ready to teach in August 2023.
 - Create an MOU with the BWD creating a partnership for job shadowing, internships, apprenticeships, guest speakers, and field trips.
 - Create a list of needed classroom materials and equipment.
 - Work with the School Community Liaison to forge connections with businesses, farmers, and entities relevant to the student's understanding of how a sustainable aquifer is imperative for everyone in our community.
 - Partner with the High School Counselor to introduce the Energy, Environment, and Utilities Pathway to high school students and encourage interest and participation. It will be mandatory in grades 6-9.
 - Collaborate with local community colleges offering AA degrees and certifications in Energy, Environment, and Utilities studies, specifically water certificates: Imperial Valley College and College of the Desert.
- Task 3
 - Begin discussions with the high school Graphic Design teacher to design and produce 50 Water Wise certificates and 50 vehicle magnets (minimum).
- Task 4
 - CTE Instructor and the ArtPark Director will meet and plan the creation of the four laboratories as hands-on classrooms for students.
- Task 5
 - Drafting initial sign content and rough layout will begin in September.
- Task 6
 - TEC will integrate ABF-developed materials into the school's Energy, Environment, and Utilities Pathway.

Component 5: Resiliency Strategy

- Work to be completed during the next invoice period includes:
 - CivicWell, in close coordination with BVSC, and Howard Blackson, expects to finalize the contract for limited-term contract employee, compile a database of local outreach channels across the basin, and launch a series of webinars focused on local groundwater and basin-related education.

Component 6: Biological Restoration of Fallowed Lands

- Work to be completed during the next invoice period includes:
 - **CATEGORY (A) COMPONENT ADMINISTRATION**
 - Manage staff and report on project progress.



- Prepare quarterly invoices and quarterly progress report for submittal to BWD and DWR for the reimbursement period of April 1, 2023 through June 30, 2023.
 - Perform monthly project management tasks including budget, schedule, and scope of work progress evaluations.
 - **CATEGORY (B) and (C)** are not applicable to this component.
 - **CATEGORY (D) MONITORING, ASSESSMENT**
 - **Task 1 – Review and Analysis of Existing Data**
 - This task is complete.
 - **Task 2 - Existing Fallowed Farmland and Reference Natural Habitat Field Study**
 - Develop research questions and methods to support the design of the study.
 - **Task 3 - Brush Pile Wildlife Sand Fence Case Study**
 - Develop research questions and methods to support the design of the study.
 - Construction of brush fence case study.
 - **Task 4 - Farmland Fallowing Rehabilitation Strategies**
 - No activity planned until 2024.
 - **Task 5 - Farmland Fallowing Prioritization**
 - No activity planned until 2024.
 - **CATEGORY (E) STAKEHOLDER OUTREACH MONITORING, ASSESSMENT**
 - **Task 6 - Conduct Environmental Working Group (EWG) Meetings**
 - Prepare for and present study design at a EWG Meeting to be held in September 2023 (Date TBD with EWG).

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

- Work to be completed during the next invoice period includes:
 - **CATEGORY (A) COMPONENT ADMINISTRATION**
 - Prepare quarterly invoices and quarterly progress report for submittal to BWD and DWR for the reimbursement period of April 1, 2023 through June 30, 2023.
 - Perform monthly project management tasks including budget, schedule, and scope of work progress evaluations.
 - **CATEGORY (B) PLANNING, DESIGN, ENVIRONMENTAL**
 - **Task 1 – Environmental Documentation/Permitting**
 - No work planned.
 - **Task 2 – Design Plans and Specifications**
 - No work planned.
 - **CATEGORY (C) CONSTRUCTION, IMPLEMENTATION**
 - **Task 3 - Construction Management**
 - No work planned.
 - **Task 4 - Construction of New Monitoring Facilities (Surface Water Station)**
 - No work planned.



- **Task 5 – Identify and Address Improperly Abandoned Wells**
 - No work planned.
- **CATEGORY (D) MONITORING, ASSESSMENT**
 - **Task 6 - Groundwater Pumping Monitoring**
 - **Monthly Collection and Processing of Meter Read Data**
 - Collect and process monthly meter reads for June, July, and August 2023.
 - Complete monthly calculation of pumping data for all metered wells for June, July, and August 2023.
 - **Annual Meter Verification**
 - No work planned.
 - **Annual Water Rights Accounting**
 - No work planned.
 - **Tasks 7 and 8 - Groundwater Level and Quality Monitoring**
 - **Semi-Annual Monitoring Events**
 - Begin scheduling logistics for the Fall 2023 monitoring event.
 - **Prepare Groundwater Monitoring Plan Update**
 - This task is complete.
 - **Task 9 - Surface Water Flow Monitoring**
 - No work planned.
 - **Task 10 - Maintain and Enhance the Data Management System**
 - Add new wells to HydroDaVE from site visits and community outreach efforts.
 - Collect and process any available cooperator data.
 - **Task 11 - Annual Reporting to the Court and DWR**
 - No work planned.
 - **Task 12 - Redetermination of the Sustainable Yield of the Borrego Springs Subbasin**
 - Continue work to update water use factors utilized in the BVHM Farm Process and present results to the TAC (Task 2 of approved scope-of-work).
 - Begin correcting errors identified in the 2021 BVHM (Task 3 of approved scope-of-work).
 - **Task 13: Prepare the 2025 GMP Update**
 - No work planned.
- **CATEGORY (E) STAKEHOLDER OUTREACH**
 - **Task 14 - Interested Party Outreach**
 - **Board Meetings**
 - No work planned.
 - **Technical Advisory Committee Meetings**



- Conduct a working meeting of the TAC in August 2023 to review and refine the results of updating the water use factors used in the BVHM’s Farm Process.
- **Stakeholder Open House**
 - No work planned.
- **Maintain Website and Grant Communications**
 - Update Watermaster website with latest documents.

Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

- Work to be completed during the next invoice period includes:
 - Work in the next invoicing period will mainly be concentrated on data collection from trees, soils, and groundwater throughout the basin in the ‘pre-summer’ period of ecosystem activity. In addition, wildlife monitoring and remote sensing of ecosystem dynamics will be initiated.

4. Project Cost Update:

Component 1: Grant Administration

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$6,102.90
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$ 33,734.40

Component 2: Advanced Meter Infrastructure

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$6,637.80
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$ 23,963.20

Component 3: Wastewater Treatment Plant Monitoring Wells

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$233,498.00
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$269,097.91

Component 4: Education Project

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$12,629.93
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$12,629.93

Component 5: Resiliency Strategy

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$4,238.25
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$4,238.25

Component 6: Biological Restoration of Fallowed Lands

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$40,278.94
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$208,551.48

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$106,802.75
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ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$563,410.58
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Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$52,462.80
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$98,149.03

5. Other Major Issues:

Component 1: Grant Administration

No major issues have occurred to date.

Component 2: Advanced Meter Infrastructure

No major issues have occurred to date.

Component 3: Wastewater Treatment Plant Monitoring Wells

No major issues have occurred to date.

Component 4: Education Project

No major issues have occurred to date.

Component 5: Resiliency Strategy

No major issues have occurred to date.

Component 6: Biological Restoration of Fallowed Lands

No major issues have occurred to date.

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

As discussed previously, the surface water monitoring station implementation was deemed infeasible to complete at the present time because there is insufficient time in the remaining grant period to address access agreements with the Anza Borrego Desert State Park, and limited time to perform the monitoring within the grant period.

An amendment will be submitted to modify the scope of work to remove and adjust tasks and associated budgets as described previously.

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Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

No major issues have occurred to date.

SUSTAINABLE GROUNDWATER
MANAGEMENT (SGM)

GRANT PROGRAM



Grantee: Borrego Water District
Project Name: Implementation Project for the Borrego Springs Sub
Basin
Grant #: 46-14652



Appendix A

Status of Required Deliverables

TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
1	Grant Administration			
1a	EIF	3/15/2023	100%	3/14/2023
	Deliverable Due Date Schedule	3/15/2023	100%	3/14/2023
2	Advanced Meter Infrastructure			
2b	Bid Documents	12/31/2023	80%	Click or tap to enter a date.
2b	Proof of Advertisement	12/31/2023	0%	Click or tap to enter a date.
2b	Executed Contract	12/31/2023	0%	Click or tap to enter a date.
2b	Notice to Proceed	12/31/2023	0%	Click or tap to enter a date.
2b	Permits (if required)	12/31/2023	0%	Click or tap to enter a date.
2b	CEQA Documentation	05/30/2023	95%	
2b	Plans & Specs	12/31/2023	0%	
2c	Pilot Study Report	03/30/2025	0%	
2c	Meter Inspection Report	03/30/2025	0%	
2c	Pilot Study Monitoring & Assessment Report	03/30/2025	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
2c	Full Scale Project Monitoring & Assessment Report	03/30/2025	0%	
2c	Full Scale Project Implementation Report	03/30/2025	0%	
2c	Meter Installation Inspection Report	03/30/2025	0%	
2c	AMI Customer Informational Flyer	03/30/2025	0%	
2c	Vendor Provided User Video	03/30/2025	0%	
3	Wastewater Treatment Plant Monitoring Wells			
3b	CEQA Documentation	3/31/2023	100%	3/2/2023
3b	Copies of Required Permits	10/30/2023	100%	5/25/2023
3b	Well Schematic & Workplan	3/31/2023	100%	5/24/2023
3c	Notice of Award	11/1/2024	100%	5/25/2023
3c	Notice to Proceed	11/1/2024	100%	4/7/2023
3c	Bid Documents	11/01/2024	100%	04/07/2023
3c	Notice of Completion	11/01/2024	0%	
3c	As-Built Drawings	11/01/2024	0%	
3c	Site Inspection Letter or Report	11/01/2024	0%	
3c	Well Drillers Report	11/01/2024	0%	
3d	1 st Round Water Quality Sample Results	06/30/2025	0%	
3d	Monitoring Plan	06/30/2025	0%	
3d	Copies of Water Quality Reports	06/30/2025	0%	
3d	Well Completion Report	06/30/2025	0%	
3d	Nitrogen Control Strategy Work Plan	06/30/2025	0%	
3e	WWTF Informational Flyer	06/30/2025	0%	
3e	Meeting Agenda and Presentation Materials	06/30/2025	0%	
4	Education Project			



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
4admin	CEQA Documentation	04/30/2025	100%	03/23/2023
4b	Copy of Curriculum	04/30/2025	0%	
4b	Two Sets of Lesions (parents/gardeners)	04/30/2025	0%	
4b	Two Sets of Spanish Lessons (parents/gardeners)	04/30/2025	0%	
4b	List of needed materials	04/30/2025	0%	
4b	Video and Printed Materials	04/30/2025	0%	
4b	Copy of certificates and magnets	04/30/2025	0%	
4c	Materials for Learning Labs	04/30/2025	0%	
4c	Mockup of Educational Signage	04/30/2025	0%	
4d	Scoring Results for Year 1 & 2	04/30/2025	0%	
4e	Documentation of Participation	4/30/2025	0%	Click or tap to enter a date.
5	Resiliency Strategy			
5admin	CEQA Documentation	04/30/2025	100%	03/23/2023
5b	Contract for employee	05/30/2024	0%	
5b	Community Visioning Schedule & Engagement Arc	05/30/2024	0%	
5b	Engagement Plan	05/30/2024	0%	
5b	Local & Regional Partner Contact Info/Roles/Engagement Levels	05/30/2024	0%	
5b	White Paper of Basin Characterization	05/30/2024	0%	
5b	Factsheet/FAQ of White Paper On Website	05/30/2024	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
5b	SWOT analysis of natural resources	05/30/2024	0%	
5b	Documentation of Basin Monitoring & Evaluation Roles, Etc.	05/30/2024	0%	
5e	Document of Basin Impact Analyzation Criteria	04/30/2025	0%	
5e	Memorandum of Potential GMP Implementation Impacts	04/30/2025	0%	
5e	Memorandum of Recommendations to WM for GMP Implementation	04/30/2025	0%	
5e	Presentation to WM Board w/feedback	04/30/2025	0%	
5e	Presentation of characterization white paper/outreach efforts	04/30/2025	0%	
5e	Presentation of draft and final Community Visioning White Paper	04/30/2025	0%	
5e	Document Feedback and Revisions to White Paper	04/30/2025	0%	
5e	Copy of Survey	04/30/2025	0%	
5e	Copy of Town Hall Presentation Materials	04/30/2025	0%	
5e	Draft/Final White Paper	4/30/2025	0%	Click or tap to enter a date.
5e	Basin FAQ Brochure	4/30/2025	0%	Click or tap to enter a date.
5e	Curriculum Outline	4/30/2025	0%	Click or tap to enter a date.



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
5e	List of indicators of success	4/30/2025	0%	Click or tap to enter a date.
5e	Report on Survey and Recommendations for moving forward	4/30/2025	0%	Click or tap to enter a date.
6	Biological Restoration of Fallowed Lands			
6d	Technical Memo Summarizing Existing Data	03/31/2023	0%	
6d	Initial Fallowed Farmland Rehabilitation Opportunities and Prioritization Map	03/31/2023	0%	
6d	Technical Report of Field Study Results	03/31/2025	0%	
6d	Construction sample of sand fences	12/31/2023	0%	
6d	Design Plans	12/31/2023	0%	
6d	Construction Permits (if applicable)	12/31/2023	0%	
6d	Technical Report	03/31/2025	0%	
6d	Draft Rehab Strategies & Following Best Practices	01/31/2025	0%	
6d	Final Rehab Strategies & Following Best Practices	03/31/2025	0%	
6d	Prioritization of Farmland Following Report	03/31/2025	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
6d	Prioritization of Farmland Following Map	03/31/2025	0%	Click or tap to enter a date.
6e	Meeting Agendas/Packets	03/31/2025	0%	Click or tap to enter a date.
6e	PowerPoint Presentations	03/31/2025	0%	Click or tap to enter a date.
6e	Summary meeting notes	03/31/2025	0%	Click or tap to enter a date.
6e	Memorandums with recommendations to the WM Board	03/31/2025	0%	Click or tap to enter a date.
7	Monitoring, Reporting and Groundwater Management Plan Update			
7b	CEQA Documentation	03/21/2024	0%	
7c	Bid Documents for Well Conversion or Abandonment	02/28/2024	0%	
7c	Technical Specifications for Well Conversion or Abandonment	02/28/2024	0%	
7c	Documentation of Proper Abandonment	01/31/2025	0%	
7c	Documentation of conversion to monitoring wells	01/31/2025	0%	
7d	Annual Metering Monitoring Summary Reports WY 2023 (Tsk 6)	10/31/2023	0%	
7d	Annual Metering Monitoring Summary Reports WY 2024 (Tsk 6)	10/31/2024	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
7d	Annual Water Rights Accounting Report WY 2022 (Tsk 6)	05/31/2023	100%	05/24/2023
7d	Annual Water Rights Accounting Report WY 2023 (Tsk 6)	12/31/2023	0%	
7d	Annual Water Rights Accounting Report WY 2024 (Tsk 6)	12/31/2024	0%	
7d	Semi-Annual Monitoring Summary Reports fall/spring WY 2023 (Tsk 7/8)	09/30/2023	0%	
7d	Semi-Annual Monitoring Summary Reports fall/spring WY 2024 (Tsk 7/8)	09/30/2024	0%	
7d	Semi-Annual Monitoring Summary Reports fall WY 2025 (Tsk 7/8)	02/28/2025	0%	
7d	Groundwater Level Data delivered to CEDEN, GAMA and other platforms requested by DWR (Tsk 7/8/10)	03/31/2025	0%	
7d	Draft and Final WQMP (Tsk 8)	06/30/2025	0%	
7d	Draft and Final Annual Reports for WY 21	05/31/2023	100%	05/24/2023
7d	Draft and Final Annual Reports for WY 22	05/31/2023	100%	05/24/2023
7d	Draft and Final Annual Reports for WY 23	04/30/2024	0%	
7d	Draft and Final Annual Reports for WY 24	03/31/2025	0%	
7d	Draft and Final Tech Memo: Redetermination of Sustainable Yield WY22	05/31/2023	100%	05/24/2023
7d	Draft and Final Tech Memo: Redetermination of Sustainable Yield WY23	12/31/2024	0%	
7d	Draft and Final Tech Memo: Redetermination of Sustainable Yield WY24	03/31/2025	0%	
7d	Draft and Final 2025 GMP	03/31/2025	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
7e	TAC Meeting Agendas/Packets	03/31/2025	20%	05/24/2023
7e	TAC Meeting Presentations	3/31/2025	20%	5/24/2023
7e	TAC Meeting Summaries	3/31/2025	20%	5/24/2023
7e	TAC Recommendation Reports	3/31/2025	20%	5/24/2023
7e	Interested Party outreach materials	3/31/2025	20%	5/24/2023
8	Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring			
8b	Draft and Final GDE Evaluation and Monitoring Workplan	12/01/2024	0%	
8b	Easements and other necessary document(s)	12/01/2024	0%	
8b	Initial Study	12/01/2024	0%	
8b	CEQA Documentation	12/01/2024	0%	
8b	Copies of Required Permits	12/01/2024	50%	05/24/2023
8b	50% Design Plans & Specs	12/01/2024	0%	
8b	100% Design Plans & Specs	12/01/2024	0%	
8c	Proof of Advertisement	03/01/2025	0%	
8c	Notice of Award	03/01/2025	0%	
8c	Notice to Proceed	03/01/2025	0%	
8c	Bid Documents	03/01/2025	0%	
8c	Notice of Completion	03/01/2025	0%	
8c	As-Built Drawings	03/01/2025	0%	
8c	Site Inspection Letter or Report	03/01/2025	0%	
8c	Draft & Final Technical Specifications for Monitoring Well	03/01/2025	0%	



TABLE 1: Deliverable Table for Implementation Project for the Borrego Springs Sub Basin				
Budget Comp.# or Category	Budget Category Work Items for Review	Estimated Due Date	% Of Work Complete	Date Submitted
8c	Contractor Bid Documents	03/01/2025	0%	
8c	Monitoring Well Completion Report	03/01/2025	0%	
8d	Technical Memo/Public Report to document results & conclusions	03/31/2025	0%	
8d	Draft & Final Tech Memo to document investigations and technical work	03/31/2025	0%	
8d	Draft & Final GDE Monitoring Program Report and Recommendations	03/31/2025	0%	
8e	Meeting Agendas/Packets	03/31/2025	0%	
8e	PowerPoint Presentations	3/31/2025	0%	Click or tap to enter a date.
8e	Summary Meeting Notes & Memos with Recommendations to UCI Board	3/31/2025	0%	

Appendix B – Outreach, Coordination, Engagement

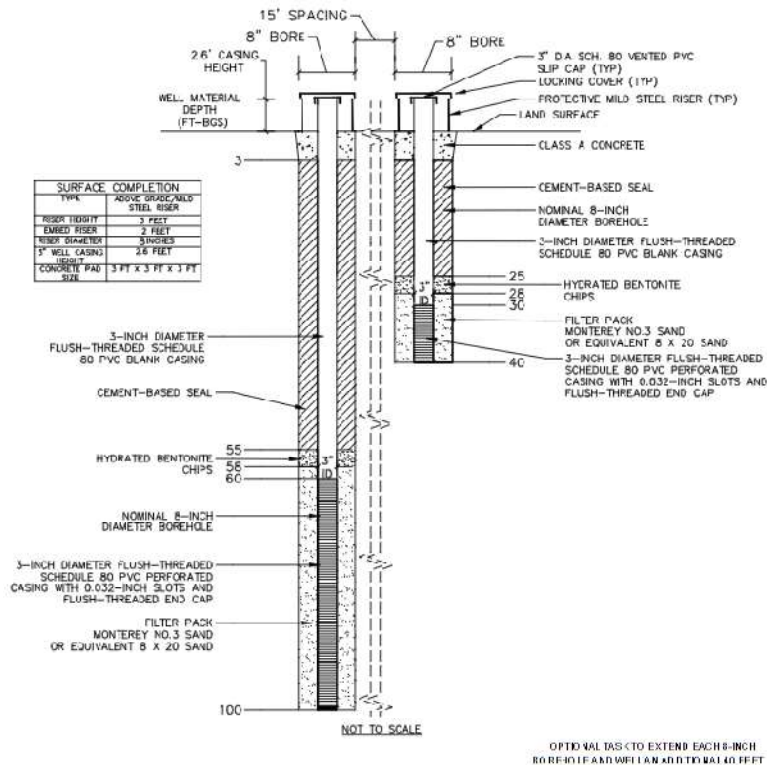
Add photo documentation, agendas, handouts, etc. for any activities by component.

COMPONENT 3 – WWTP Monitoring Wells

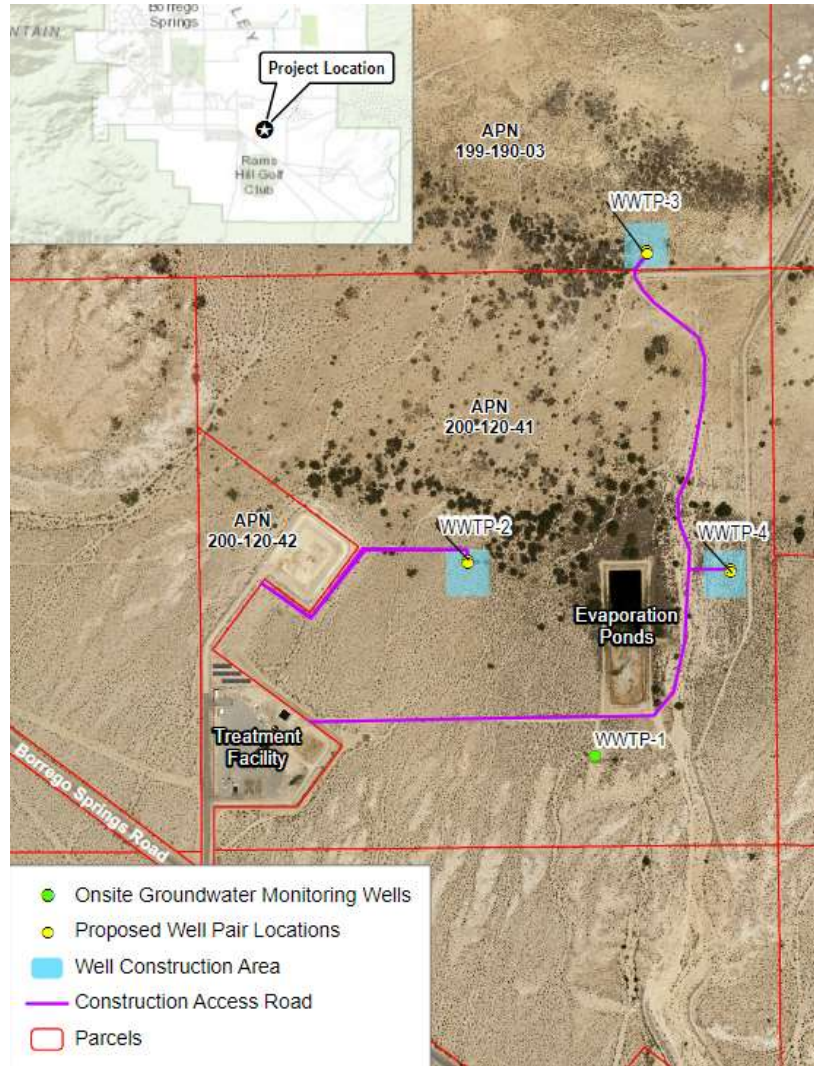
BORREGO WATER DISTRICT

Request for bids the installation of six (6) groundwater monitoring wells adjacent to the Rams Hill Wastewater Treatment Facility Evaporation Ponds Borrego Springs, California. The proposed total depth is to a maximum of approximately 100 feet and the wells shall be drilled using the sonic drilling method. To secure bid documents, please contact Dudek, 605 Third Street, Encinitas, California 92024, telephone (760) 415-4105. A pre-bid meeting will be held on Monday, February 20, 2023 at 1:00 PM at the Rams Hill Wastewater Treatment Facility, located at 4891 Borrego Springs Rd, Borrego Springs, California 92004. Sealed bids must be submitted to the Borrego Water District office no later than 2:00 PM on Monday, March 6th, 2023

Request for bids advertisement



Final design of well clusters



Map of WWTP and location of proposed monitoring well clusters



COMPONENT 4 – Education Project



BSUSD Superintendent meets with County Board of Education to discuss Prop 68 Education Project



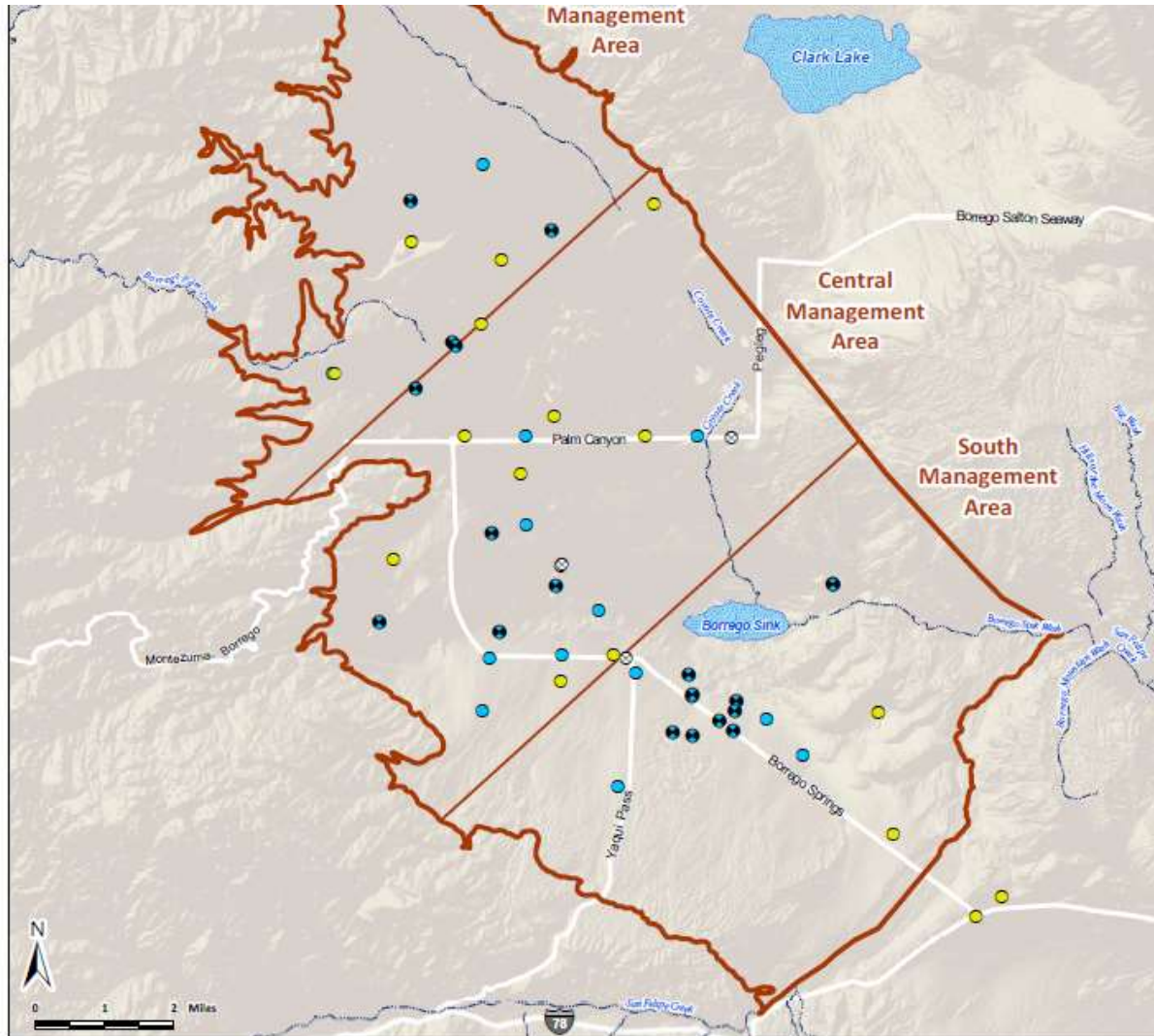
Borrego Springs High School where the CTE curriculum will be taught



Visit to the Desert Garden at the Anza Borrego Desert Natural History Association for demonstration garden planning.



Map of Groundwater Monitoring Well Network from WY22 Annual Report



Groundwater Monitoring Network

Wells Monitored for Groundwater-Level
(symbol style)

- Manual Water-level Data
- ⊗ Transducer Water-level Data
- No Water-level Data

Status of Water Quality Sampling of Wells
(symbol color)

- Sampled for Water Quality
- Not Sampled for Water Quality

Other Wells

- ⊗ Well No Longer Able to be Monitored

Prepared by:



Borrego Valley Groundwater Basin Subbasins

- ▭ Borrego Springs Groundwater Subbasin (7-024.01)

Surface Water Features

- Stream Channel
- Dry Lake

Other Features

- ▭ Borrego Springs Subbasin with Management Area Divisions



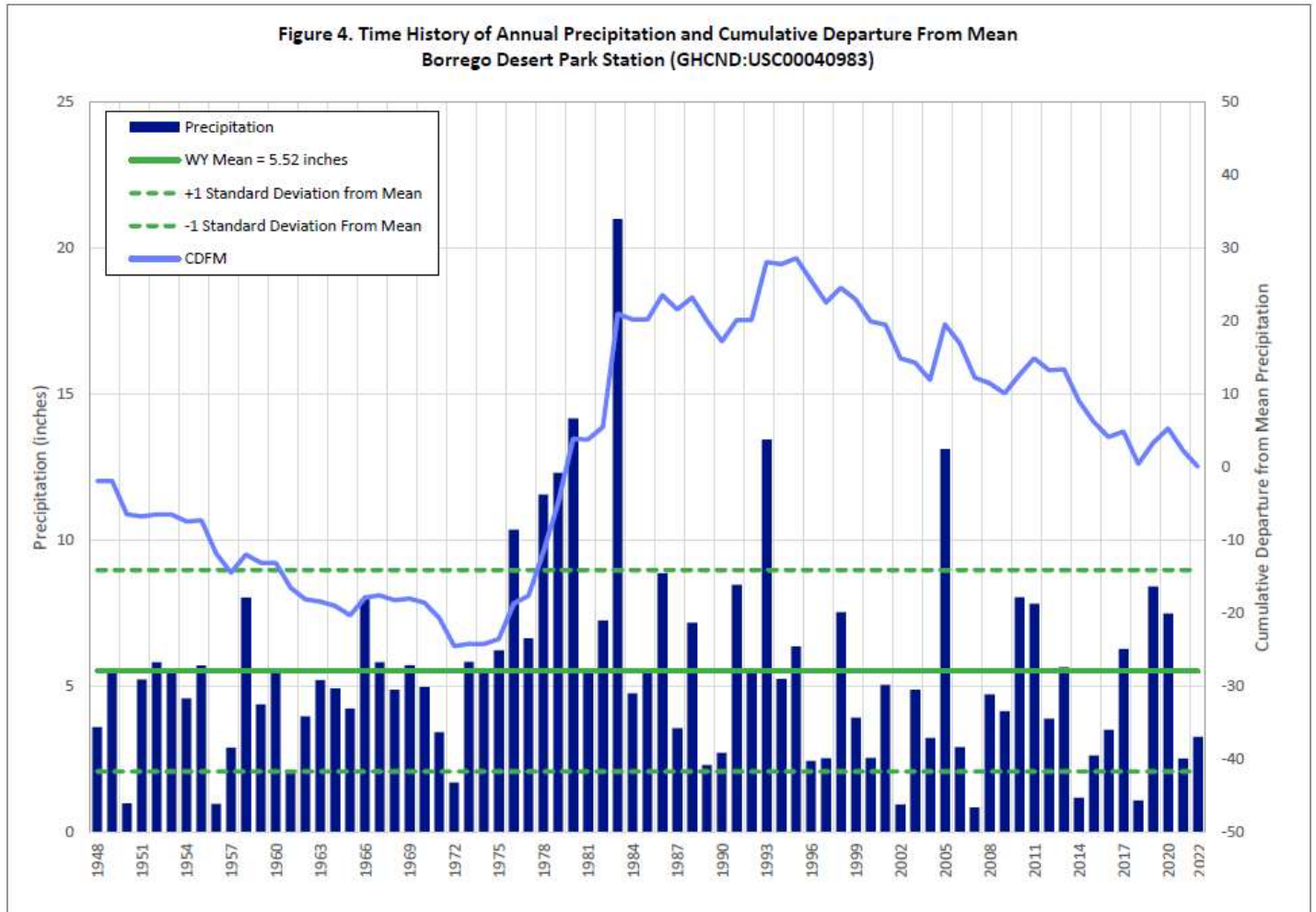
Figure 2

Groundwater Level and Quality Monitoring Network

Borrego Springs Watermaster
Borrego Springs Subbasin
2022 Annual Report

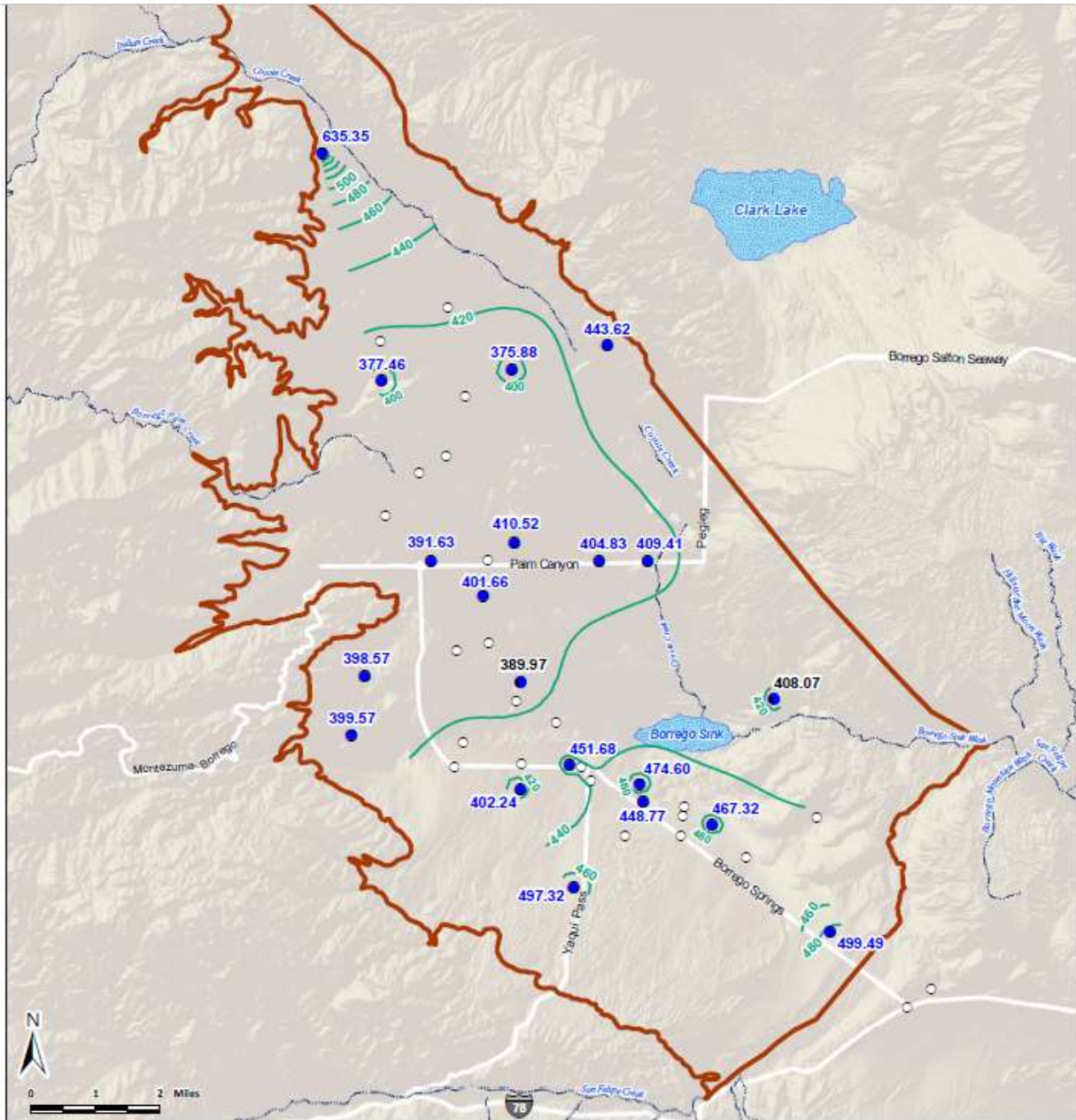


Precipitation History from WY22 Annual Report





Groundwater Elevations from WY22 Annual Report



Groundwater Monitoring Wells Used to Develop Groundwater Elevation Contours for Spring 2022

- 350 ● True static groundwater elevation (ft-amsl)
- 350 ● Estimated static groundwater elevation (ft-amsl)
- Other Groundwater Monitoring Wells
- 400 — Groundwater Elevation Contours Spring 2022 (ft-amsl)

Borrego Valley Groundwater Basin Subbasins

- ▭ Borrego Springs Groundwater Subbasin (7-024.01)

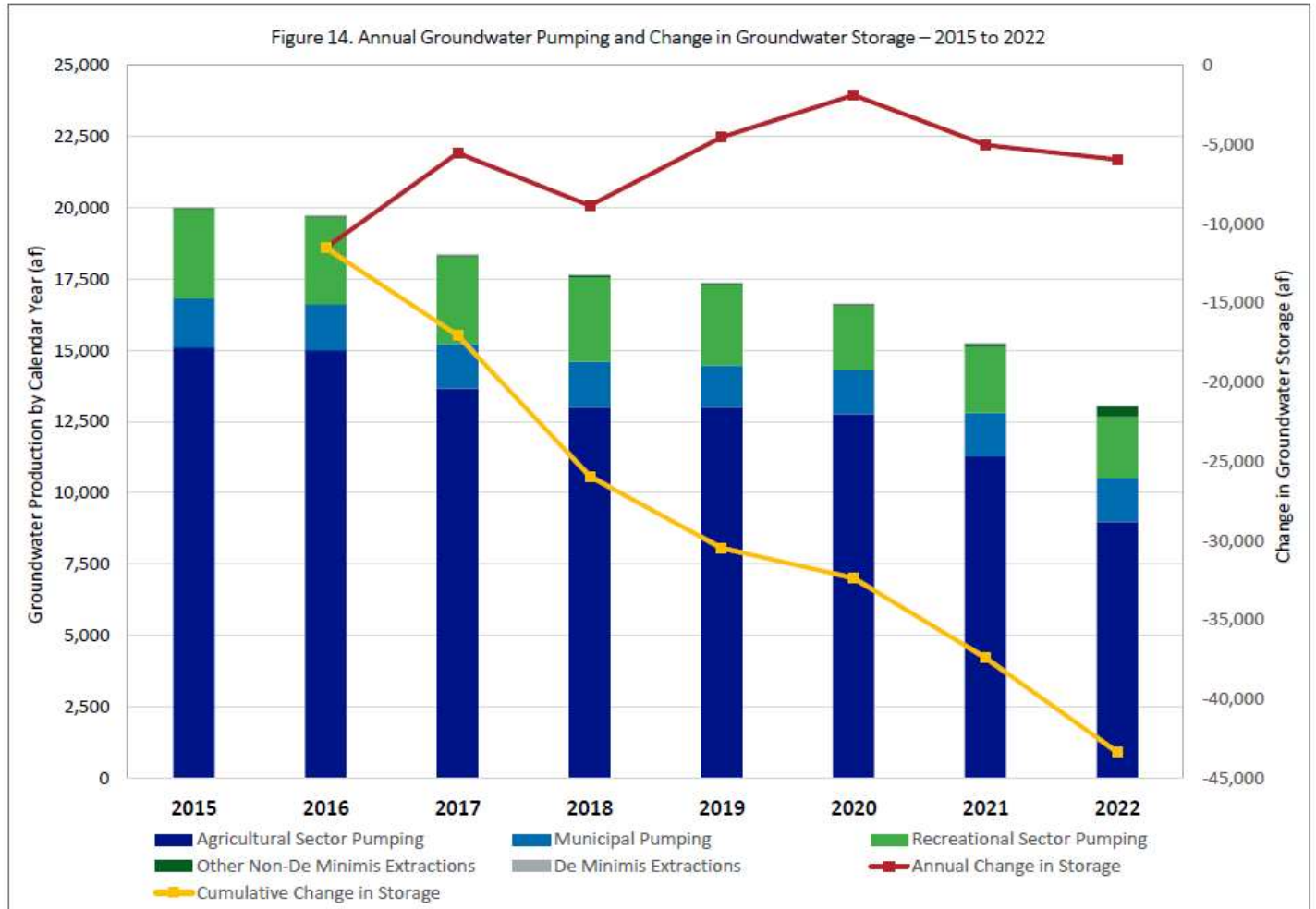
Surface Water Features

- Stream Channel
- ▭ Dry Lake





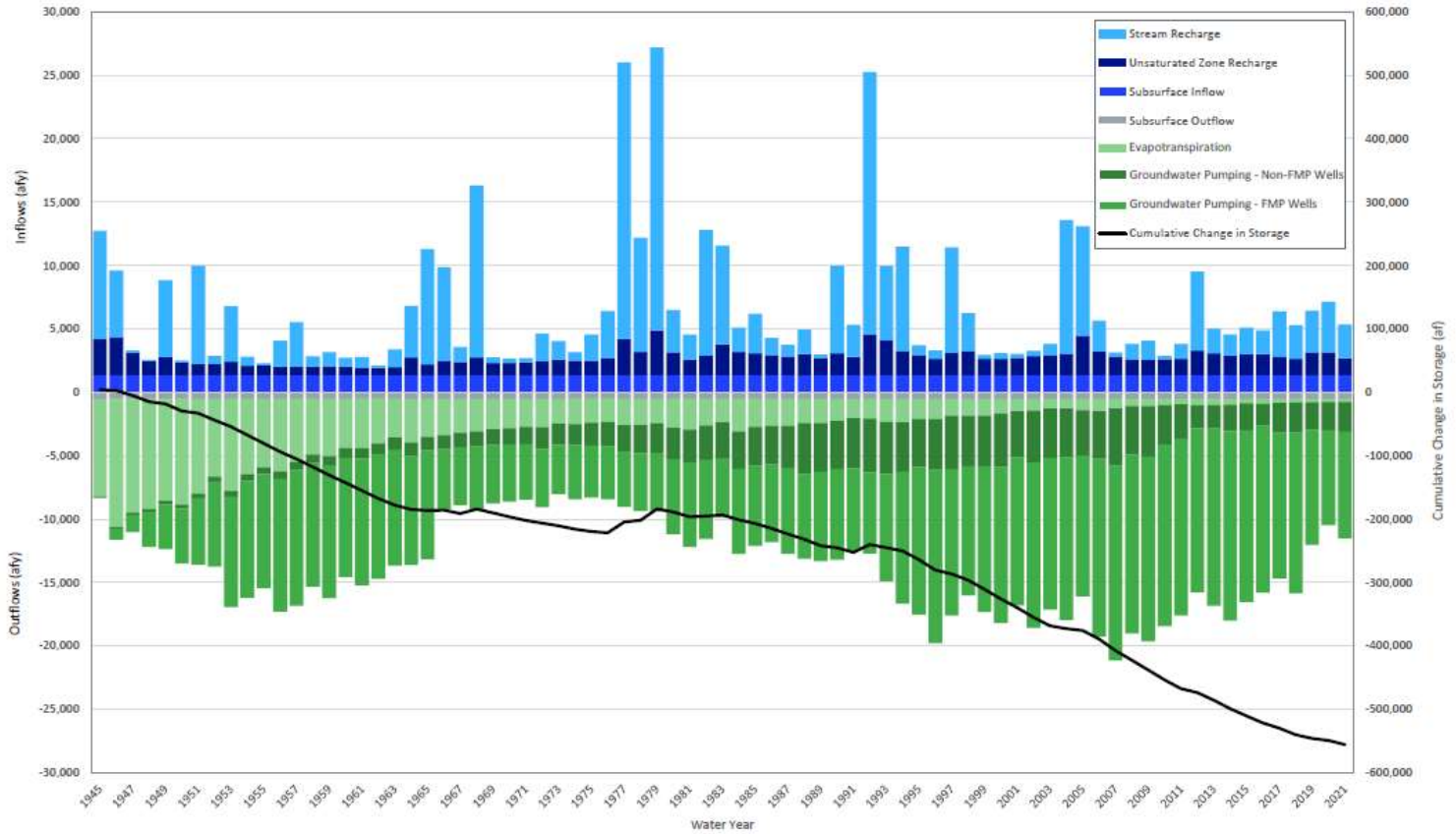
Groundwater Pumping and Change in Storage Report from WY22 Annual Report

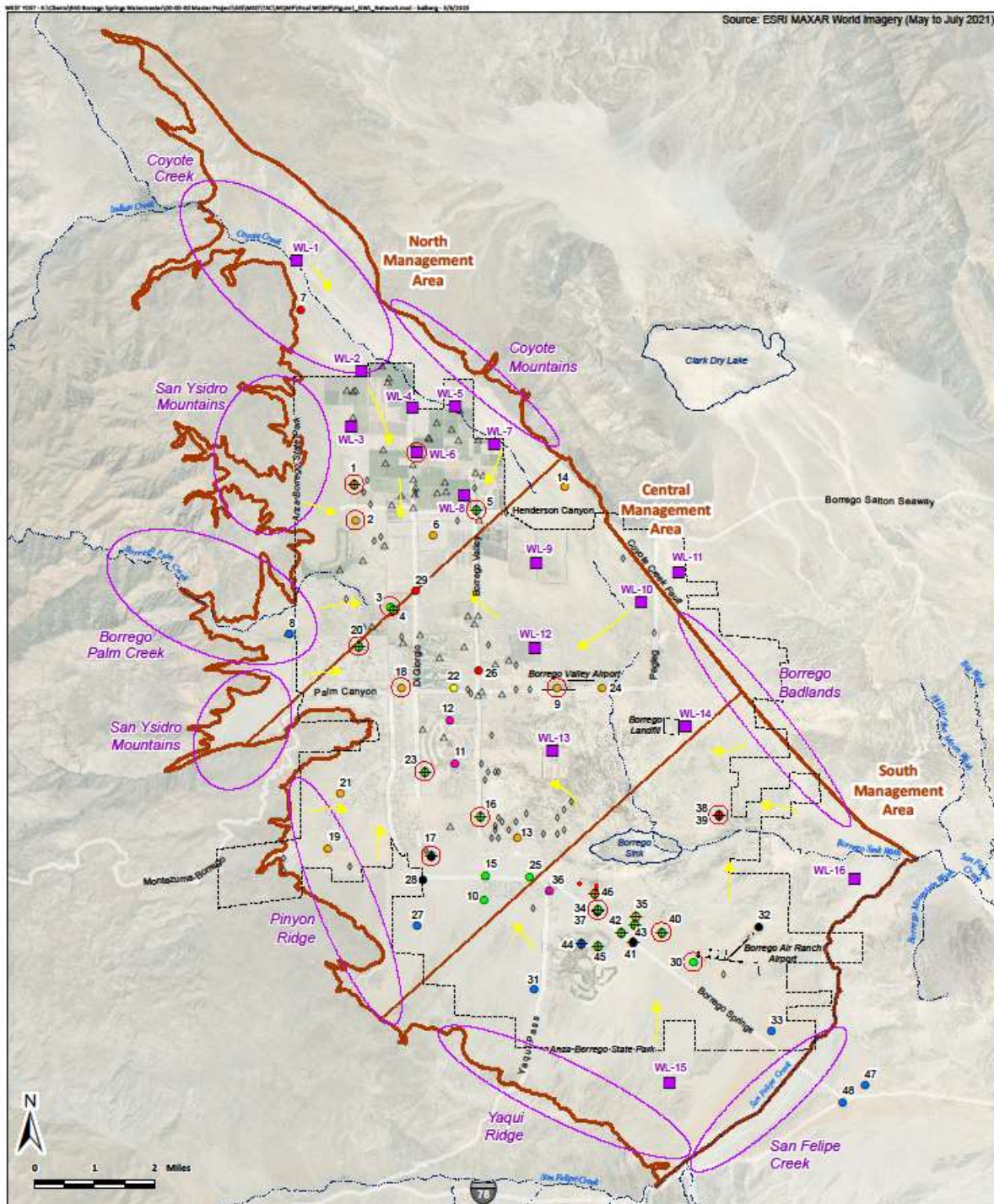




Water Budget from Tech Memo: Redetermination of Sustainable Yield WY22

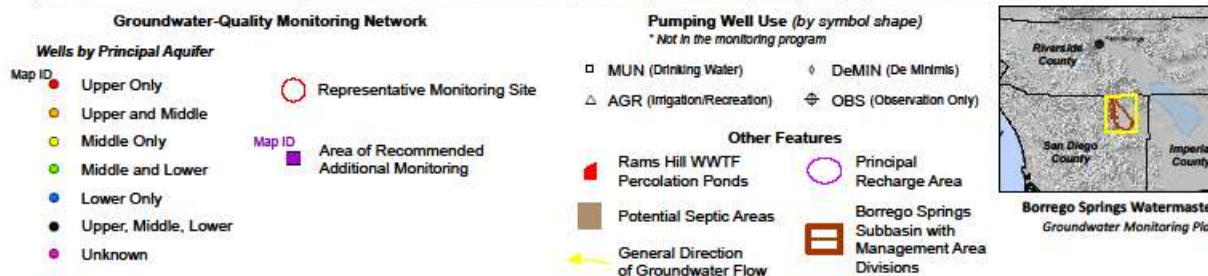
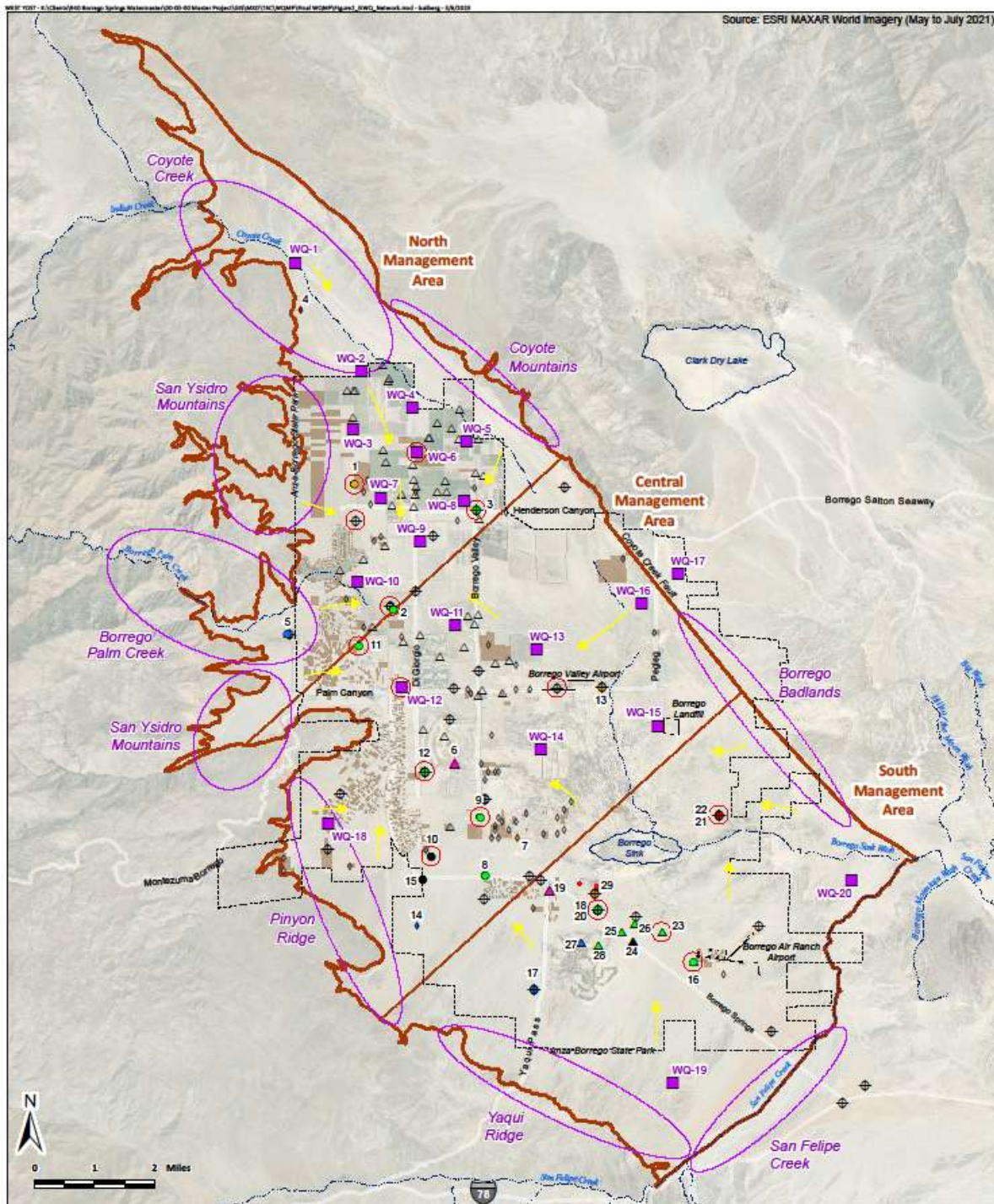
Figure 4. Water Budget for the 2021 BVHM





Groundwater-Level Monitoring Network		Other Active Pumping Wells * Not in the monitoring program	
Well by Principal Aquifer	Monitoring Frequency	△ Non De Minimis Well	
Map ID ● Upper Only ● Upper and Middle ● Middle Only ● Middle and Lower ● Lower Only ● Upper, Middle, Lower ● Unknown	⊕ 15-minutes ○ Semi-Annual ○ Representative Monitoring Site Map ID ■ Area of Recommended Additional Monitoring	◇ De Minimis Well	
		Other Features	
		■ Rams Hill WWTF Percolation Ponds	
		→ General Direction of Groundwater Flow	
		○ Principal Recharge Area	
		■ Borrego Springs Subbasin with Management Area Divisions	

Figure 1
Groundwater-Level Monitoring Network and
Areas of Recommended Additional Monitoring





Notice of Watermaster Open House

From: BorregoSprings WM
Sent: Tuesday, November 29, 2022 11:33 AM
To: Samantha Adams
Subject: Notice: Watermaster Open House on December 8, 2022 - Borrego Springs Library

******* NOTICE OF WATERMASTER OPEN
HOUSE*******

Good afternoon Borrego Springs Stakeholders,

The Watermaster will be holding its first Open House event in-person in Borrego Springs on Thursday, December 8, 2022. The Open House will be held at the Borrego Springs Library from 2:00 to 4:00 pm. During this time Watermaster Staff, including the Executive Director (Samantha Adams) and the Lead Technical Consultant (Andy Malone) will be available to answer questions and provide information about the activities of the Borrego Springs Watermaster. The Open House is not a meeting, but an open opportunity for conversation and outreach. If you have any questions you'd like to share with us in advance, please let us know by emailing borregospringsWM@westyost.com. The Open House will be followed by the Watermaster Regular Board meeting at 4:30 pm.

Thank you for your interest in the Watermaster!

Borrego Springs Watermaster
borregospringswatermaster.com

WEST YOST
23692 Birtcher Drive
Lake Forest, CA 92630
borregospringsWM@westyost.com
www.westyost.com | [LinkedIn](#) | [Facebook](#)



TAC Meeting Agenda 02/21/2023

**Borrego Springs Watermaster
Technical Advisory Committee Meeting
February 21, 2023 @ 10:00 a.m – 12:00 p.m.
Meeting Available by Remote Access Only***

Please join the meeting from your computer, tablet or smartphone.

<https://meet.goto.com/156431389>

You can also dial in using your phone.

United States (Toll Free): 1 866 899 4679

Access Code: 156-431-389

Get the app now and be ready when your first meeting starts: <https://meet.goto.com/install>

AGENDA

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

- I. **Roll Call**
- II. **Public Comments**
This is an opportunity for members of the public to address the TAC. Comments will be limited to three minutes per commenter.
- III. **Review of new Watermaster guidelines regarding TAC procedures..... Page 2**
- IV. **Review of draft Groundwater Monitoring Plan** (draft Plan has been delivered via separate email)
- V. **Redetermination of Sustainable Yield in 2025 Page 11**
- VI. **Status Update: DWR Monitoring Well Funded through the DWR's Technical Support Services Grant (time permitting)**
- VII. **Public Comments (time permitting)**
This is an opportunity for members of the public to address the TAC on items discussed during the meeting. Comments will be limited to three minutes per commenter, time permitting.
- VIII. **Future Meetings**
- IX. **Adjournment**



Samantha Adams and Andy Malone presenting during the June 2023 Open House



Site Visit June 2023



Well site evaluation, June 2023



April 2023 Sampling Event visit to new MW-6D site



Ram's Hill and West Yost staff during April 2023 Sampling Event



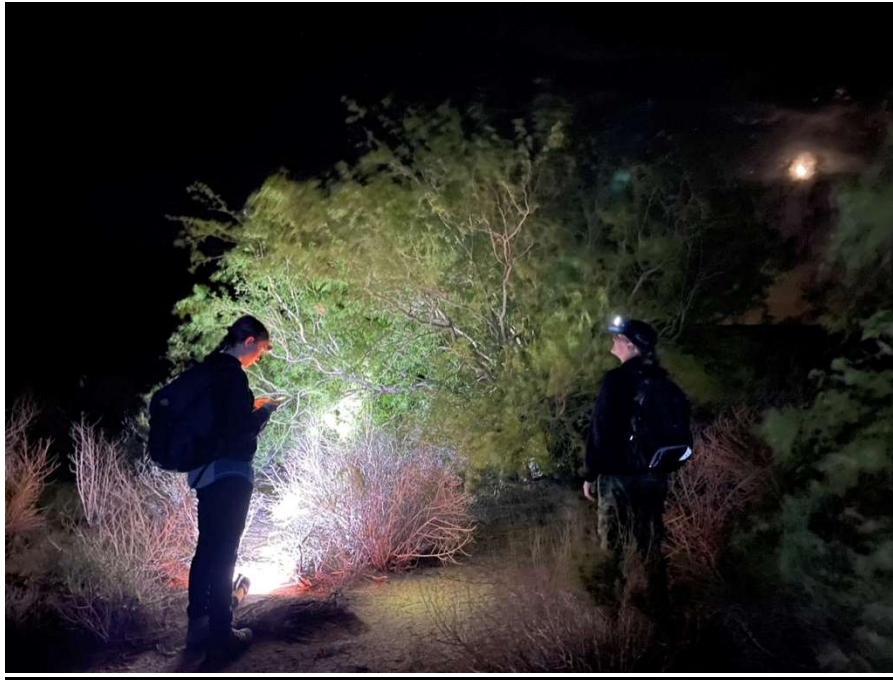
COMPONENT 8 – Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring



Dr. Laurel Brigham evaluates a wind-eroded mesquite root system while establishing field sites to be used for identifying groundwater dependent ecosystems in the Borrego Basin.



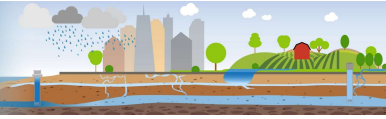
Dr. Nikki Fiore evaluates a down-cutting drainage in the historic bosque of the Borrego basin.



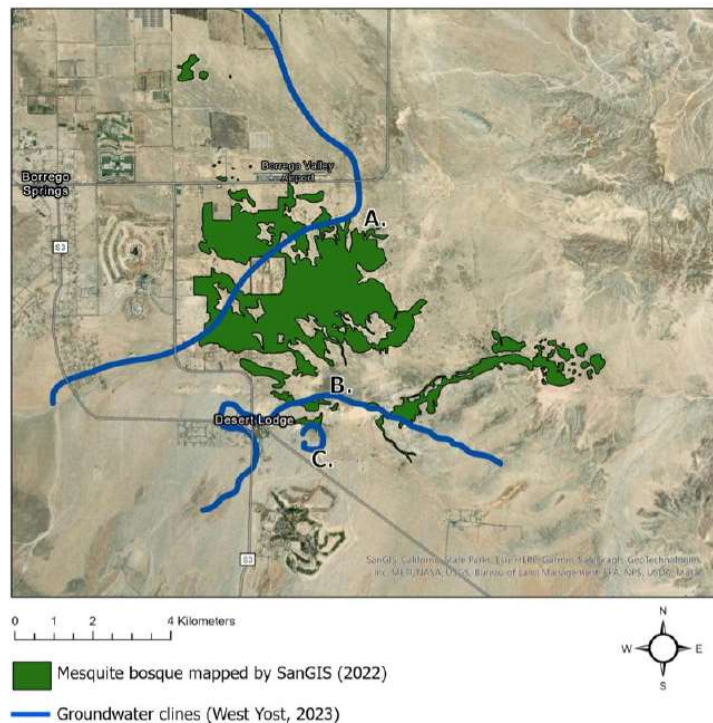
Drs. Laurel Brigham and Nikki Fiore sample mesquite at night to document pre-dawn water potential and temporal patterns of plant water use

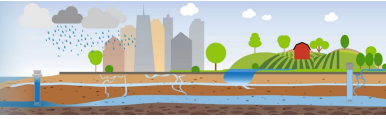


(Left) A soil moisture profile pit at Clark Dry Lake, used to place sensors and establish long-term patterns of soil moisture use by plants. (Right) Soil moisture sensor installation in a profile pit at the Borrego Sink research location.



Dr. Travis Huxman, Dr. Laurel Brighman and Dr. Nikki Fiore (left to right speaking) discuss preliminary work on groundwater dependent ecosystem identification and monitoring in a town hall at the Steele/Burnand Anza-Borrego Desert Research Center on March 27, 2023





Appendix C – Construction Photos

COMPONENT 3 – WWTP Monitoring Wells



Pre-Construction Photo of WWTP Monitoring Wells site



Survey marker indicates drilling location for well WWTF-4



Pre-Construction preparations for WWTP Monitoring Wells site



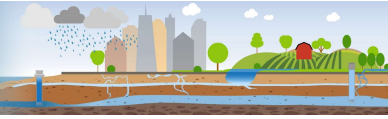
Drill Rig belonging to Gregg's Drilling, Inc



Dudek team monitoring the drilling



Drill site setup



Gregg's Drilling crew monitoring equipment



Completed WWTF-2 monitoring well



Invoice Projections

Invoice Projections

Summary of All Components

IO#: UGF22SGMABWD					
Calendar Year (CY)	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total Grant Funds per CY
	Jan. 1 - Mar. 31	Apr. 1 - Jun. 30	Jul. 1 - Sep. 30	Oct. 1 - Dec. 31	
2022	\$ -	\$ -	\$ -	\$ -	\$ -
2023	\$ 751,123 -	\$ 462,651 -	\$ 588,000 -	\$ 728,000 -	\$ -
2024	\$ 779,000 -	\$ 985,000 -	\$ 980,000 -	\$ 450,000 -	\$ -
2025	\$ 360,000 -	\$ 20,500 -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
				TOTAL:	\$ -
				TOTAL GRANT AWARD:	\$ -