

HANDOUT III.B

SUSTAINABLE GROUNDWATER
MANAGEMENT (SGM)
GRANT PROGRAM



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

Grantee Name: Borrego Water District
Grant Agreement No.: 46-14652
Progress Report No.: PR #7
Reporting Period: 7/1/2024 TO 9/30/2024
Prepared: 11/15/2024

Project: Implementation Project for the Borrego Springs Subbasin

1. Component 6: Biological Restoration of Fallowed Lands

CATEGORY (A) COMPONENT ADMINISTRATION. The work performed for this task includes monthly project management of the tasks included in Component 6 and preparation of quarterly grant progress reports for submittal to the Borrego Water District (BWD).

The work performed for this task during the reporting period included:

- Completed the sixth quarterly grant progress report and reimbursement request for the April 1, 2024 through June 30, 2024 period.
- Performed project management to review scope, schedule, and budget progress.
- Updated budget status table.

Milestones or Deliverables Completed/Submitted:

- Quarterly grant progress report #6
- Reimbursement request #6

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.

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CATEGORY (D) MONITORING, ASSESSMENT. The work performed for this task includes the monitoring and reporting portion of the Component 6 tasks.

Task 1 – Review and Analysis of Existing Data

The work performed for this task during the reporting period included:

- None. This task is complete.

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 2 – Existing Fallowed Farmland and Reference Natural Habitat Field Study

The work performed for this task during the reporting period included:

- Held internal meetings and performed task coordination
- Presented Task 2 results at the Ecological Society of America (ESA) Conference
- Finalized report for Task 2: *Existing Retired Farmland and Natural Habitat Field Study* based on feedback from the EWG following the July 16 meeting

Milestones or Deliverables Completed/Submitted:

- Task 2 Report - *Existing Retired Farmland and Natural Habitat Field Study*

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 (beyond overall project schedule delay described for Category (A)).

Task 3 – Brush Pile Wildfire Sand Fence Case Study

The work performed for this task during the reporting period included:

- Coordinated with contractor (Fredericks Construction) to construct sand fences.
- Began construction of sand fences.

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- Performed seed cleaning and seed germination testing for installation in the sand fence study areas.
- Developed methods and measurement protocols for the treatment areas in the sand fence study areas.

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.

- Fewer contractors than anticipated submitted bids to construct the sand fences, in part due to the grant requirements and remoteness of the work site. This has resulted in a delay in the schedule and costs that are higher than included in the budget. However, due to completing Category (d) Task 2 *Existing Fallowed Farmland and Reference Natural Habitat Field Study* under budget, it is anticipated that the remaining Task 2 budget will be utilized to cover the additional contractor costs and complete Task 3.

Task 4 – Farmland Fallowing Rehabilitation Strategies

The work performed for this task during the reporting period included:

- Developed draft fallowing strategies and conducted literature review.
- Held internal meetings and performed task coordination.
- Began drafting the Task 4 Report, including state-transition models explaining expected outcomes of the fallowing approaches.

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 (beyond overall project schedule delay described for Category (A)).

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Task 5 – Farmland Fallowing Prioritization

The work performed for this task during the reporting period included:

- No work performed in 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 (beyond overall project schedule delay described for Category (A)).

CATEGORY (E) STAKEHOLDER OUTREACH. The work performed for this task includes stakeholder outreach activities to support the implementation and communication of the Component 6 tasks.

Task 6 – Conduct Environmental Working Group (EWG) Meetings

The work performed for this task during the reporting period included:

- Prepared for and attended the EWG meeting on July 16, 2024. Prepared meeting minutes, agenda package, and meeting presentation.
- Recorded the July 16, 2024 EWG meeting and posted all meeting materials to the Borrego Springs Watermaster website.
- Updated the EWG website with meeting information.

Milestones or Deliverables Completed/Submitted:

- Agenda packet and meeting presentation for the July 16, 2024, EWG meeting.

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 (beyond overall project schedule delay described for Category (A)).

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2. 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 throughout the month on grant requirements and logistics, reimbursement status, and quarterly reports. Corresponded with staff including meetings to review and discuss questions on grant requirements, discuss grant budget amendment, and respond to DWR questions.
- Performed monthly project management to review scope, schedule, and budget progress.
- Updated budget status table.
- Completed the sixth quarterly grant progress report and reimbursement request for the April 1, 2024 through June 30, 2024 period.
- Updated the payment status and total amount requested from the first six grant reimbursement requests.
- Reviewed SGM grant closure and Completion Report requirements.
- Prepared redline version of SGM grant and narrative on proposed changes to project budget for submission to DWR.

Milestones or Deliverables Completed/Submitted:

- Quarterly grant progress report #6
- Reimbursement request #6

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.

- Based on spending projections for the remainder of the grant period, the remaining Category (a) budget is projected to be surplus to what is needed to complete project management tasks defined in the grant agreement. A request to amend the grant agreement to use the surplus funding from Category (a) to cover efforts in Category (d), specifically the increased cost of semi-annual monitoring events due to success in adding new monitoring locations as a result of public outreach efforts. The amendment request was submitted to DWR on July 15, 2024 and is pending approval.

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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 – conversion of abandoned wells.

Task 1 - Environmental Documentation/Permitting

The work performed for this task during the reporting period included:

- This task is complete.

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 2 – Design Plans and Specifications

The work performed for this task during the reporting period included:

- Held meetings and communicated with contractor, Well Tec, to discuss schedule, budget, and deliverables for preparing specifications for well conversions and provided them with materials to support development of the scope and cost estimates for well conversions.
- Prepared figures of the expansion of the groundwater monitoring program, highlighting the abandoned wells anticipated to be incorporated into the network pending outcomes of conversion analysis.
- Prepared memo summarizing the scope for converting identified abandoned wells into monitoring stations.
- Performed outreach to well owners regarding potential wells that could be converted to monitoring wells and to request permission to perform conversions. Public outreach included the preparation and distribution of outreach packets and calling and emailing well owners.

Milestones or Deliverables Completed/Submitted:

- Draft well conversion workplans and cost estimate.

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.

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- The well conversion 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 currently planned to be completed by March 31, 2025. However, there is a potential that all the planned conversions cannot be completed before the end of the grant period. At this time there is no indication that all work can't be completed, but is worth noting that the availability of contractors is unpredictable. The schedule delay did not result in any change orders for the project.

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 task in the grant agreement – conversion of abandoned wells.

Task 3 - Construction Management

The work performed for this task during the reporting period included:

- No work performed during this 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 4 - Construct New Monitoring Facilities (Surface Water Station)

This task has been omitted pursuant to the grant amendment approved by DWR on February 26, 2024.

Task 5 – Identify and Address Improperly Abandoned Wells

The work performed for this task during the reporting period included:

- Reviewed and discussed SGM grant Labor Compliance Report requirements for field work.
- Coordinated with Well Tec on schedule for first round of field work.
- Communicated with well owners to develop and execute entry agreements and permits to perform well conversions.

Milestones or Deliverables Completed/Submitted:

- Entry Agreements with five (5) well owners to convert wells to monitoring wells and perform future monitoring activities.

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Impediments to Completion of Task:

- The Watermaster has been executing Entry Agreements with well owners to ensure access to their wells to convert the inactive/abandoned well to monitoring wells and perform monitoring of groundwater-level and groundwater-quality. These Entry Agreements were previously approved by the former grant manager. In October 2024, DWR's Legal team asked to re-review the Entry Agreements. The Watermaster has paused all work on the conversion of inactive/abandoned wells task while the DWR Legal team reviews the Entry Agreements, which has resulted in a delay to the schedule. Due to this delay in work while DWR performs its review, Watermaster is concerned that there will not be enough time to complete this task prior to the expiration of the grant (see more below).

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.

- As noted for Category (b), the well conversion 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 currently planned to be completed by March 31, 2025. However, there is a potential that all the planned conversions cannot be completed before the end of the grant period. At this time there is no indication all currently planned work can't be completed, but is worth noting that the availability of contractors is unpredictable. Additionally, the cost to complete the conversions is lower than anticipated due a number of wells only requiring "simple" conversions. Thus, a request to amend the grant agreement to use a portion of the Category (c) budget to cover efforts in Category (d), specifically the higher cost of semi-annual monitoring events due to success in adding new monitoring locations as a result of public outreach efforts. The amendment request was submitted to DWR on July 15, 2024 and is pending approval.

The Watermaster is concerned that there will not be time to complete the abandoned wells project before the grant expiration date if we do not receive feedback from DWR within the next few weeks. We are limited on the time remaining to complete the project and need to fully complete the work prior to March 31, 2025 to ensure it is fully reimbursed. Watermaster does not have the funding to implement this program absent grant funds. We would appreciate an understanding of the exact issue that DWR is reviewing and hope it can be resolved before the holidays so we have time to complete agreements, perform field work, and prepare reports. And, if this is not resolvable, can Watermaster use the funds for other work that would benefit the Basin?

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

Task 6 - Groundwater Pumping Monitoring

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 June 2024 through August 2024.
 - Calculated pumping by well for June 2024 through August 2024.
 - Performed QA/QC of June 2024 through August 2024 pumping data.
- Reviewed production data of a well to determine status and estimated start date of operations.
- Identified and discussed ways to troubleshoot wells with telemetry systems not reporting meter read data to the data portal.

Annual Meter Verification

- No work performed in this 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.

Tasks 7 and 8 - Groundwater Level and Quality Monitoring Program

The work performed for this task during the reporting period included:

Semi Annual Monitoring Events -

- Revised and finalized Spring 2024 Semi-Annual Monitoring Report based on the Board's comments.
- Began preparing for the Fall 2024 monitoring event:
 - Obtained quotes from vendors for groundwater-quality sample analysis and replacement/back-up transducers.
 - Began internal team coordination of action items to prepare for the monitoring event.

Milestones or Deliverables Completed/Submitted:

- Final Semi-Annual Report of Groundwater Level and Quality Results: Spring 2024.

Impediments to Completion of Task:

- None.

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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.

- Due to success in adding new monitoring locations as a result of public outreach efforts, expenses related to the semi-annual monitoring events are greater than initially budgeted-for in the grant agreement. To cover the increased costs of groundwater-level and groundwater-quality, a grant amendment was submitted, which requested funding from Category (a) and Category (c) be re-allocated to Category (d). This amendment was submitted by BWD to DWR on July 15, 2024. This change is pending approval.

Task 9 - Maintain and Enhance the Data Management System (DMS)

The work performed for this task during the reporting period included:

- Uploaded no-measurement record for a Representative Monitoring Well in the monitoring program to SGMA's Monitoring Network Module (MNM).
- Digitized and loaded well construction information for two wells to DMS.
- Reviewed SGM grant requirements for monitoring data submittals, prepared summary of requirements, and performed outreach to DWR to confirm requirements.
- Downloaded and processed historic groundwater quality results (since 2020) from BWD wells from the Babcock Laboratory data portal and began uploading data to DMS.
- Uploaded groundwater production data to the DMS.
- Reviewed available data on Geotracker for Borrego Landfill, determined what data needs to be downloaded to update the DMS, and began downloading and processing groundwater-level and groundwater-quality data from the landfill wells.

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 10 - Annual Reporting to the Court and DWR

The work performed for this task during the reporting period included:

Annual Water Rights Accounting

- No work performed during this reporting period.

Annual Report to the Court and DWR

- No work performed during this reporting period.

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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 11 - Redetermination of the Sustainable Yield of the Borrego Springs Subbasin

The Borrego Springs Watermaster approved a scope-of-work to Redetermine the Sustainable Yield by 2025. The scope-of-work includes five tasks, which are referenced below. The work performed for this task during the reporting period included:

- Continued work on Task 4 – *Model Recalibration*, including:
 - Completed calibration of the Borrego Valley Hydrologic Model (BVHM), including:
 - Performed literature review and reviewed pump test results, and used information to prepare a summary of acceptable aquifer parameter ranges to use in model recalibration.
 - Updated ranges of parameter values assigned Pilot Points and generated kriged surfaces of aquifer properties to calibrate.
 - Configured PEST settings and performed model calibration with PEST.
 - Reviewed results of model recalibration simulations, including reviewing statistics, objective function, and observation target residuals.
 - Developed script to generate hydrographs comparing model-simulated vs. measured groundwater elevations to include recalibration statistics.
 - Developed modeling tools to estimate model results from the portion of the model overlying the Basin only.
 - Used Zonebudget and wrote scripts to calculate water budget for the Basin portion of the BVHM domain.
 - Prepared figures and tables to present results of BVHM calibration.
 - Estimated the Preliminary Sustainable Yield.
 - Performed a sensitivity analysis of the Preliminary Sustainable Yield.
 - Distributed results of the model calibration and sensitivity analysis to the TAC via email.
 - Prepared a draft technical memorandum (TM) on the methods and results of Task 4- *Model Recalibration*.
- Continued work on Task 5 – *Determine the Sustainable Yield*, including:
 - Prepared Party-specific Pumping Plans of projected pumping and Carryover water, including:
 - Excel spreadsheet and Party-specific tables of future pumping estimates.

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- Developed scripts to produce figures displaying historical monthly metered pumping by Party and average monthly metered groundwater pumping by Party.
- Scheduled and began conducting meetings with Pumpers to discuss future groundwater pumping plans, which will be used to: (i) run future BVHM scenarios with a Rampdown of pumping to the Preliminary Sustainable Yield and (ii) evaluate the potential for Undesirable Results under the Preliminary Sustainable Yield.
- Began preparing Basin-wide summary of pumping projections.
- Began extending model input files through the projection period.
- Prepared precipitation and evapotranspiration matrices using DWR climate change factors for 2030 and 2070 for projection scenarios and Monte Carlo Simulations.
- Reviewed model input files and prepared summary of how Rampdown scenarios were executed by Dudek (for establishing Initial Sustainable Yield in the 2020 GMP).

Milestones or Deliverables Completed/Submitted:

- Draft TM on Task 4 – *Model Recalibration*.

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 – Prepare the 2025 Groundwater Management Plan (GMP) Update

The work performed for this task during the reporting period included:

- Began developing approaches for updating Sustainable Management Criteria in consideration of beneficial uses and users.
- Compared current basin conditions to Sustainable Management Criteria in the GMP.
- Finalized analysis of land subsidence in the Basin.
- Worked on sections of the five-year assessment reported related to annual and cumulative change in storage over the first five-year implementation period of the GMP, including beginning to compute the most recent change in storage for spring 2023 to spring 2024, which involved:
 - Reviewed available water level data to confirm prior year's methodology and representative network can be used for the storage calculation, and made updates to network, where necessary.
 - Selected representative groundwater level elevations for spring 2024 for each well in the monitoring network.

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- Prepared rasters and contours of groundwater elevation in spring 2023 and spring 2024.
- Performed QA/QC of preliminary storage change results.

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.

- When the grant application was initially prepared, Watermaster assumed that its 5-year assessment and GMP update would be due in January 2025, as the initial alternative plan (which is comprised of the Judgment and GMP) was submitted in January 2020. Since the time of the grant application, DWR has informed Watermaster that (1) the 5-year assessment is not due until June 2026 and (2) that it will not accept or review an assessment for an alternative plan that has not been approved by the DWR. To date, the DWR has not provided input to the Watermaster on its findings related to the alternative plan submission for the Borrego Springs Subbasin. Therefore, Watermaster will not be able to complete the 5-year assessment and GMP update under the remaining timeframe of the grant, which ends March 31, 2025. In acknowledgement of this, BWD submitted a grant amendment to DWR on July 15, 2024 which proposed to use the grant funding to prepare a framework document for the 5-year assessment and a recommended scope of work to complete the assessment (assuming input from DWR received before the grant deadline). The framework document can be used as a template for future 5-year assessment updates and will include development of standard figures and table templates that can be used to assess sustainability based on basin conditions and Sustainable Management Criteria. The deliverable would be a draft and final framework document and the standard graphics to demonstrate progress towards sustainability. This change is pending approval.

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.

Task 13 - Interested Party Outreach

The work performed for this task during the reporting period included:

Technical Advisory Committee Meetings*

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

- Prepared technical information and presentation materials for the July 1st, August 14th, and September 10th 2024 TAC meetings. All TAC meeting documents and recordings are available on the Watermaster's website.

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- Conducted a Regular TAC working meeting on July 1, 2024 and September 10, 2024.
- Conducted an Ad-Hoc TAC working meeting on August 14, 2024.
- Began preparation for November and December 2024 Regular TAC working meetings.

Stakeholder Open House

- No work performed in this reporting period.

Maintain Website and Grant Communications

- No work performed in this reporting period.

Milestones or Deliverables Completed/Submitted:

- TAC Meetings:
 - July 1, 2024 Regular TAC meeting agenda, presentation, and meeting minutes.
 - August 14, 2024 Ad-Hoc TAC meeting agenda and presentation.
 - September 10, 2024 Regular TAC meeting agenda, presentation, and meeting minutes.

Impediments to Completion of Task:

- No impacts to report for this period.

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.



3. Activities for Next Reporting Period:

Component 6: Biological Restoration of Fallowed Lands

Work to be completed during the next invoice period (October through December 2024) 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 October 1, 2024 through December 31, 2024.
- 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

- This task is complete.

Task 3 - Brush Pile Wildlife Sand Fence Case Study

- Complete construction of sand fence samples and install monitoring equipment.
- Collect preliminary data from sand fence samples.

Task 4 - Farmland Fallowing Rehabilitation Strategies

- Prepare draft Report on Task 4 – Farmland Fallowing Rehabilitation Strategies.
- Synthesize results from Task 1 (literature review), Task 2 (habitat study), and preliminary results from Task 3 (sand fences) to begin preparation of recommendations to update the fallowing standards.

Task 5 - Farmland Fallowing Prioritization

- Analyze new geodata for surface geomorphology to include in updated fallowing prioritization map.
- Draft fallowing prioritization map.

CATEGORY (E) STAKEHOLDER OUTREACH MONITORING, ASSESSMENT

Task 6 - Conduct Environmental Working Group (EWG) Meetings

- Prepare for an EWG Meeting on November 20, 2024 to discuss final report on the Existing Fallowed Farmland and Reference Natural Habitat Field Study (Task 2) and visit the constructed sand fences (Task 3).

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Component 7: Monitoring, Reporting and Groundwater Management Plan Update

Work to be completed during the next invoice period (October through December 2024) includes:

CATEGORY (A) COMPONENT ADMINISTRATION

- Prepare quarterly invoices and quarterly progress report for submittal to BWD and DWR for the reimbursement period of October 1, 2024 through December 31, 2024.
- 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

- Finalize conversion plans for wells being converted to monitoring stations. Conversion activities may include: repairing well casings, constructing concrete bases, and adding stick-ups to ground surface.

CATEGORY (C) CONSTRUCTION, IMPLEMENTATION

Task 3 - Construction Management

- No work planned.

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

- No work planned. This task has been omitted pursuant to the grant amendment approved by DWR on February 26, 2024.

Task 5 – Identify and Address Improperly Abandoned Wells

- Perform site visit to document well conditions prior to conversion activities.
- Finish execution of entry permits and data confidentiality agreements for owners of inactive/abandoned wells participating in the groundwater monitoring program.
- Perform first round of field work to convert inactive/abandoned wells into monitoring wells.
- Prepare Labor Compliance reports.

CATEGORY (D) MONITORING, ASSESSMENT

Task 6 - Groundwater Pumping Monitoring

Monthly Collection and Processing of Meter Read Data

- Collect and process monthly meter reads for September, October, and November 2024.
- Complete monthly calculation of pumping data for all metered wells for September, October, and November 2024.

HANDOUT III.B

SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM



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

- Calculate total water year 2024 pumping from metered data for Annual Water Rights Accounting (October 2023 through September 2024).

Annual Meter Verification

- Begin process to perform annual meter accuracy testing for WY 2025, including: i) correspondence with parties, ii) review accuracy tests received, and iii) record test results and documentation.

Tasks 7 and 8 - Groundwater Level and Quality Monitoring

Semi-Annual Monitoring Events

- Prepare for and perform the semi-annual groundwater level and groundwater quality monitoring event in fall 2024 (scheduled for October 27 – 31, 2024).
- Begin processing and reviewing the results of the fall semi-annual groundwater monitoring event, as available.

Prepare Groundwater Monitoring Plan Update

- This task is complete.

Task 9 - Maintain and Enhance the Data Management System

- Collect and process any available cooperators data.
- Upload fall 2024 water levels to the DWR MNM.
- Upload fall 2024 groundwater quality data to GAMA.

Task 10 - Annual Reporting to the Court and DWR

Annual Water Rights Accounting

- Prepare draft and final water rights accounting for WY 2024, summarizing pumping for all Parties with metered pumping data.
- Populate and send WY 2024 pumping reports to each Party to the Judgment, including notification of water eligible for Carryover.

Annual Report to the Court and DWR

- Calculate change in groundwater storage from spring 2023 to spring 2024.
- Begin preparation of draft WY 2024 Annual Report.

Task 11 - Redetermination of the Sustainable Yield of the Borrego Springs Subbasin

- Finalize technical memorandum on the methods and results of performing Task 4 – *Model Calibration* of the scope of work to redetermine the 2025 Sustainable Yield.

HANDOUT III.B

SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM



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

- Prepare a Final Technical Report on the process to redetermine the 2025 Sustainable Yield. This report will be a compilation of all prior memos and TMs published on Tasks 1 through 4 of the scope of work to redetermine the 2025 Sustainable Yield.
- Develop a methodology to assess Carryover rules. Implement methodology and perform analysis of Carryover rules.
- Prepare draft and final report on the analysis of Carryover rules.
- Develop draft and final scope of work for WY 2026 – 2029 to redetermine the 2030 Sustainable Yield. The scope will include a variety of tasks for the TAC to review, deliberate on, and recommend to the Watermaster Board.
- Prepare Technical Consultant Recommendation Reports to the Watermaster Board on the following topics:
 - The redetermination of the 2025 Sustainable Yield.
 - The scope of work for WY 2026 – 2029 to redetermine the 2030 Sustainable Yield.
- Continue work on Task 5 of the scope of work to redetermine the 2025 Sustainable Yield – *Determine the Sustainable Yield*, including:
 - Develop projection scenarios of future groundwater pumping and Carryover to use in the BHVM.
 - Extend the calibrated BHVM through the projection period and update input files.

Task 12: Prepare the 2025 GMP Update

- Continue preparation of figures, texts, and tables of the 5-year GMP Assessment Report.

CATEGORY (E) STAKEHOLDER OUTREACH

Task 13 - Interested Party Outreach

Technical Advisory Committee Meetings

- Prepare draft and final TAC Recommendation Reports on the following topics. The reports will be sent to the TAC for review and finalized based on TAC feedback:
 - TAC Recommendation Report on the redetermination of the 2025 Sustainable Yield.
 - TAC Recommendation Report on the scope of work for WY 2026 – 2029 to redetermine the 2030 Sustainable Yield.
- Conduct an Ad-Hoc working meeting of the TAC in October 2024 to discuss and obtain feedback on i) draft TM on Task 4 – *Model Calibration* to redetermine the 2025 Sustainable Yield, ii) the TAC recommendation on the 2025 Sustainable Yield, and iii) initial scope of work for WY 2026 – 2029 to redetermine the 2030 Sustainable Yield.
- Conduct working meetings of the TAC in November and December 2024 to discuss and obtain feedback on i) the TAC recommendation on the 2025 Sustainable Yield, ii) the TAC recommendation on the scope of work for WY 2026 – 2029 to redetermine the 2030 Sustainable Yield, and iii) analysis of Carryover rules.

HANDOUT III.B

SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM



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

- ***Stakeholder Open House***

- Develop a flyer advertising the November 2024 Open House and circulate amongst the public in Borrego Springs.
- Hold a Stakeholder Open House in Borrego Springs in November 2024.

- ***Maintain Website and Grant Communications***

- Update Watermaster website with latest documents.

HANDOUT III.B

SUSTAINABLE GROUNDWATER MANAGEMENT (SGM) GRANT PROGRAM



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

4. Project Cost Update:

Component 6: Biological Restoration of Fallowed Lands

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$147,972.19
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$556,538.02

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

ESTIMATED TOTAL PROJECT COST INCURRED THIS REPORTING PERIOD:	\$147,992.60
ESTIMATED TOTAL PROJECT COST INCURRED TO DATE:	\$1,273,236.85



5. Other Major Issues:

Component 6: Biological Restoration of Fallowed Lands

Fewer contractors than anticipated submitted bids to construct the sand fence study under Category (d) Task 3 – Brush Pile Wildfire Sand Fence Case Study, in part due to the grant requirements and remoteness of the work site. The difficulty in identifying and hiring a contractor has resulted in a delay in the schedule and an increased cost due to the contractor selected. However, due to completing Task 2 ahead of budget, it is anticipated that any remaining budget will be repurposed to complete Task 3. The sand fences are anticipated to be completed a few months later than initially planned, therefore reducing the period in which monitoring can occur. However, discussion is underway to have research students from the University of California Irvine (UCI) continue monitoring the sand fence sites after the end of the grant period. UCI has proposed to create research questions to be studied by a small group (3 to 4 student) of second year Masters students in their capstone project for their degree at UCI in the Masters in Conservation and Restoration Science. The cost to perform the monitoring and work will be covered by UCI.

Component 7: Monitoring, Reporting and Groundwater Management Plan Update

In the initial grant agreement, 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 was submitted by BWD to modify the scope of work to remove and adjust tasks and associated budgets (as described previously) on July 27, 2023. This change was approved by DWR on February 26, 2024. The Progress Report has been updated to reflect the approved changes to the grant agreement.

On July 15, 2024, BWD submitted another amendment to DWR requesting to i) transfer portions of the budgets of Category (a) and Category (c) to Category (d) and, ii) reduce the scope *Category (d), Task 12. Prepare the 2025 GMP Update*. The reasons for these modifications are described in their respective Categories of this report. This change is pending approval.

HANDOUT III.B

Component 6. Quarter 3 - Watermaster Monitoring Reporting and GMP Update				
Cat. (a) Component Administration				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Component Administration	2059435	7/31/2024	\$ 276.25
West Yost	Component Administration	2059874	8/31/2024	\$ 221.00
West Yost	Component Administration	2060201	9/30/2024	\$ 165.75
Land IQ	Component Administration	6244	8/31/2024	\$ 877.60
Land IQ	Component Administration	6189	7/31/2024	\$ 625.01
Land IQ	Component Administration	6290	9/30/2024	\$ 365.00
Component Administration Subtotal				\$ 2,530.61
Cat. (b): Environmental/Engineering/Design				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
Environmental/Engineering/Design Subtotal				\$ -
Cat. (c): Implementation/Construction				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
Implementation/Construction Subtotal				\$ -
Cat. (d): Monitoring/Assessment				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Task 3: Sand Fence Case Study	2059435	7/31/2024	\$ 55.25
Land IQ	Task 2: Habitat Field Study	6244	8/31/2024	\$ 1,161.33
Land IQ	Task 3: Sand Fence Case Study	6244	8/31/2024	\$ 48,341.97
Land IQ	Task 4: Following Rehab Strategies	6244	8/31/2024	\$ 5,112.64
Land IQ	Task 2: Habitat Field Study	6189	7/31/2024	\$ 6,970.65
Land IQ	Task 3: Sand Fence Case Study	6189	7/31/2024	\$ 26,507.58
Land IQ	Task 4: Following Rehab Strategies	6189	7/31/2024	\$ 2,096.42
Land IQ	Task 3: Sand Fence Case Study	6290	9/30/2024	\$ 38,314.80
Land IQ	Task 4: Following Rehab Strategies	6290	9/30/2024	\$ 12,040.44
Monitoring/Assessment Subtotal				\$ 140,601.08
Cat. (e): Engagement/Outreach				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
Land IQ	Task 6: EWG Meetings	6189	7/31/2024	\$ 1,600.00
Land IQ	Task 6: EWG Meetings	6290	9/30/2024	\$ 160.00
West Yost	Task 6: EWG Meetings	2059435	7/30/2024	\$ 2,922.50
West Yost	Task 6: EWG Meetings	2060201	9/30/2024	\$ 158.00
Engagement/Outreach Subtotal				\$ 4,840.50
COMPONENT GRAND TOTAL				\$ 147,972.19

HANDOUT III.B

Component 7. Quarter 3 - Watermaster Monitoring Reporting and GMP Update				
Cat. (a) Component Administration				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Component Administration	2059434	7/31/2024	\$ 4,348.00
West Yost	Component Administration	2059873	8/31/2024	\$ 2,686.25
West Yost	Component Administration	2060200	9/30/2024	\$ 2,372.00
Component Administration Subtotal				\$ 9,406.25
Cat. (b): Environmental/Engineering/Design				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Task 1/2: Documentation, Design Plans and Specifications	2059434	7/31/2024	\$ 2,031.10
West Yost	Task 1/2: Documentation, Design Plans and Specifications	2059873	8/31/2024	\$ 5,579.00
West Yost	Task 1/2: Documentation, Design Plans and Specifications	2060200	9/30/2024	\$ 1,260.00
Environmental/Engineering/Design Subtotal				\$ 8,870.10
Cat. (c): Implementation/Construction				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Task 5: Identify and Address Improperly Abandoned Wells	2060200	9/30/2024	\$ 2,370.00
Implementation/Construction Subtotal				\$ 2,370.00
Cat. (d): Monitoring/Assessment				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Task 6: Groundwater Pumping Monitoring - Monthly Meter Reading	2059434	7/31/2024	\$ 2,624.00
West Yost	Task 7/8: Groundwater Level and Quality Monitoring Program - Semi Annual Monitoring Events	2059434	7/31/2024	\$ 3,525.00
West Yost	Task 9: Maintain and Enhance Data Management System	2059434	7/31/2024	\$ 1,055.75
West Yost	Task 11: Redetermination of the Sustainable Yield	2059434	7/31/2024	\$ 40,724.25
West Yost	Task 12: Prepare the 2025 GMP Update	2059434	7/31/2024	\$ 4,922.00
West Yost	Task 6: Groundwater Pumping Monitoring - Monthly Meter Reading	2059873	8/31/2024	\$ 525.75
West Yost	Task 9: Maintain and Enhance Data Management System	2059873	8/31/2024	\$ 2,133.25
West Yost	Task 11: Redetermination of the Sustainable Yield	2059873	8/31/2024	\$ 23,758.50
West Yost	Task 12: Prepare the 2025 GMP Update	2059873	8/31/2024	\$ 2,675.00
West Yost	Task 6: Groundwater Pumping Monitoring - Monthly Meter Reading	2060200	9/30/2024	\$ 2,117.75
West Yost	Task 7/8: Groundwater Level and Quality Monitoring Program - Semi Annual Monitoring Events	2060200	9/30/2024	\$ 1,247.25
West Yost	Task 9: Maintain and Enhance Data Management System	2060200	9/30/2024	\$ 1,249.00
West Yost	Task 11: Redetermination of the Sustainable Yield	2060200	9/30/2024	\$ 26,697.25
Monitoring/Assessment Subtotal				\$ 113,254.75
Cat. (e): Engagement/Outreach				
Invoice Description(VENDOR)	Notes/Description	Invoice #	Invoice Date	Invoice Amount
West Yost	Task 13 Outreach - TAC Working Meetings	2059434	7/31/2024	\$ 3,619.75
West Yost	Task 13 Outreach - TAC Working Meetings	2059873	8/31/2024	\$ 4,706.75
West Yost	Task 13 Outreach - TAC Working Meetings	2060200	9/30/2024	\$ 5,765.00
Engagement/Outreach Subtotal				\$ 14,091.50
COMPONENT GRAND TOTAL				\$ 147,992.60