

Borrego Water District Board of Directors
Regular Meeting
October 11, 2022 @ 9:00 a.m.
806 Palm Canyon Drive
Borrego Springs, CA 92004

COVID-19 UPDATE: The Borrego Water District Board of Directors meeting as scheduled in an electronic format. BWD will be providing public access to the Meeting thru electronic means only to minimize the spread of the COVID-19 virus, based upon direction from the California Department of Public Health, the California Governor's Office and the County Public Health Office. Anyone who wants to listen to or participate in the meeting is encouraged to observe the GO TO MEETING from your computer, tablet or smartphone at:

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I. OPENING PROCEDURES -

- A. Call to Order
- B. Pledge of Allegiance
- C. Directors' Roll Call: President Dice, Vice President Baker, Directors Duncan, Johnson and Rosenboom
- D. Approval of Agenda
- E. Comments from the Public & Requests for Future Agenda Items (may be limited to 3 min)
- F. Comments from Directors
- G. Correspondence Received from the Public- None

II. ITEMS FOR BOARD CONSIDERATION

- A. Air Quality Monitoring Funding Request – G Poole/D Garmon
- B. California State Proposition 68 Grant Draft Agreements – S Anderson
- C. Wastewater Treatment Plant Study – G Poole
- D. State of California Technical Services Support Agreement: Monitoring Well – T Driscoll
- E. Borrego Springs Subbasin Watermaster Board – VERBAL D Duncan/K Dice/T Driscoll
 1. Update on Board Activities
 2. Update on Technical Advisory Committee Activities
 3. Discussion of Letter to the County of SD and State of CA re: de min well process/results

III. BOARD COMMITTEE REPORTS, IF NEEDED

STANDING:

- A. Operations and Infrastructure: Duncan/Rosenboom
- B. Budget and Audit: Dice/Rosenboom
- C. ACWA/JPIA Insurance: Dice/Johnson

AGENDA: October 11, 2022

All Documents for public review on file with the District's secretary located at 806 Palm Canyon Drive, Borrego Springs CA 92004. Any public record provided to a majority of the Board of Directors less than 72 hours prior to the meeting, regarding any item on the open session portion of this agenda, is available for public inspection during normal business hours at the Office of the Board Secretary, located at 806 Palm Canyon Drive, Borrego Springs CA 92004.

The Borrego Springs Water District complies with the Americans with Disabilities Act. Persons with special needs should call Geoff Poole – Board Secretary at (760) 767 – 5806 at least 48 hours in advance of the start of this meeting, in order to enable the District to make reasonable arrangements to ensure accessibility.

If you challenge any action of the Board of Directors in court, you may be limited to raising only those issues you or someone else raised at the public hearing, or in written correspondence delivered to the Board of Directors (c/o the Board Secretary) at, or prior to, the public hearing.

AD HOC:

- A. Prop 68: Baker/Johnson
- B. Public Outreach: Dice/Johnson
- C. Grants: Dice/Johnson
- D. Cyber Security/Risk Management: Baker/Rosenboom
- E. Developer's Policy: Baker/Duncan
- F. Finance: Baker/Rosenboom
- G. WWTP Monitoring Wells: Baker/Rosenboom

IV STAFF REPORTS - VERBAL

- A. Finance – Jessica Clabaugh
 - i. FY 22-23 Legal Expense Review
- B. General Manager – Geoff Poole
 - i. BPA Acquisition: Pumper Contact Update -VERBAL
 - ii. Board Member Election Filing Results - VERBAL

1. CLOSED SESSION:

- A. Conference with Legal Counsel - Potential Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: (Two (2) potential cases)
- B. Conference with Legal Counsel – Existing Litigation (Borrego Water District v. All Persons (Groundwater), Orange County Superior Court Case No. 37-2020-00005776)
- C. Conference with Real Property Negotiators (Gov. Code §Section 54956.8) Property (BWD Wastewater Treatment Plant Monitoring Well Easements) APN: 200-120- 42-00 Agency Negotiator: Geoff Poole, BWD General Manager Negotiating Parties: BWD and T2 Borrego as potential seller Price and Terms of Payment

VII. CLOSING PROCEDURE: The next Board Meeting is scheduled for 9:00 AM October 25, 2022, to be available online. See Board Agenda at BorregoWD.org for details, Agenda information available at least 72 hours before the meeting.

AGENDA: October 11, 2022

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BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
OCTOBER 11, 2022
AGENDA ITEM II.A

October 5, 2022

TO: Board of Directors
FROM: Geoffrey Poole, General Manager
SUBJECT: Air Quality Monitoring Funding Request

RECOMMENDED ACTION:
Discuss Program with David Garmon and take action

ITEM EXPLANATION:
David Garmon will be in attendance at the meeting to respond to questions from the Board on the Basins Air Quality Monitoring Program. BWD and other local organizations have been collecting data for a number of years and has a backlog of data in need on evaluation.

Issues to discuss with David Garmon at the Board Meeting include:

*Whether a 1/4 time analyst will have enough time to do current work plus catch up with the two-year air quality monitoring backlog.

*Provide a comparison of 1/2 time versus 1/4 time air quality analyst.

*Description of what we are getting for the money.

He will also be able to respond to any new questions from the Board and/or public.

NEXT STEPS
TBD

FISCAL IMPACT
\$76,000 over 3 years: \$9,000 in year one and \$33,000 and \$34,000 per year in two and three.

ATTACHMENTS
1. None

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
OCTOBER 11, 2022
AGENDA ITEM II.B

October 5, 2022

TO: Board of Directors
FROM: Geoffrey Poole, General Manager
SUBJECT: California State Proposition 68 Grant Draft Agreements – S Anderson

RECOMMENDED ACTION:

Review Draft DWR/BWD and Sub Grantee Agreements. Approve all Agreements at a future meeting

ITEM EXPLANATION:

DWR has informed BWD that all projects included in the Proposition 68 Grant have been approved and the Final review and development of the BWD-DWR Agreement is underway. Following one more review by DWR Legal, the Final Draft of the documents will be forwarded to BWD.

BWD-DWR Agreement; At this time, BWD Legal will present the latest draft of the BWD-DWR and Sub Grantee Agreements for comment and Q/A from the Board and public. Once the Final Draft of the BWD-DWR Agreement is received from DWR, BWD Board will review any changes and request approval from the Board, likely at the late October or early November meeting.

Sub Grantee Agreement: BWD Legal Counsel has been working with Watermaster Legal on the attached Draft Sub Grantee Agreement. The same contracts have been customized and forwarded to UCI, BS School District and soon the Borrego Valley Stewardship Council for review/comment.

Legal Counsel will be prepared to present the attached Draft documents and respond to any questions on either the Draft DWR or Sub Grantee Agreements.

NEXT STEPS

1. Review Draft Contracts at this time and Approve in subsequent meeting

FISCAL IMPACT

TBD

ATTACHMENTS

1. Memo RE: BWD-DWR Grant Agreement
2. Draft Subgrantee Agreement
3. Subgrantee Agreement Power Point Presentation

MEMO ITEM PRESENTATION:

October 11, 2022

TO: Board of Directors

FROM: Steve Anderson, BBK and Geoffrey Poole, General Manager

SUBJECT: DWR Grant Agreement and Subgrantee Agreement

RECOMMENDED ACTION:

1. Review the California Department of Water Resources Grant Agreement for the Sustainable Groundwater Management Act Implementation Grant.
2. Review the Watermaster Subgrantee Agreement for the Implementation of the Sustainable Groundwater Management Grant Program.

ITEM EXPLANATION

The District is considering entering into a grant agreement with the California Department of Water Resources (“DWR”) to assist in financing projects associated with the Sustainable Groundwater Management Grant Program (“Program”) on a reimbursable basis. In turn, the District is considering entering into a subgrantee agreement with Local Projector Sponsors, including the Watermaster, to assist in reimbursement of their projects in the Borrego Springs Sub Basin associated with this Program.

In 2018, California voters approved Proposition 68, the Groundwater Treatment and Remediate Grant Program, which administered \$75 million from Chapter 11.1 for grants for treatment and remediation activities that prevent or reduce the contamination of groundwater that serves as a source of drinking water. DWR is administering the Sustainable Groundwater Management (SGM) Grant Program Sustainable Groundwater Management Act (SGMA) Implementation using funds authorized by Proposition 68 and the California Budget Act of 2021 for projects that encourage sustainable management of groundwater resources that support SGMA and/or invest in groundwater recharge projects with surface water, stormwater, recycled water, and other conjunctive use projects.

Grant Agreement

The District wishes to consider entering into a \$6,115,833 million dollar grant agreement with DWR for Proposition 68 funding awarded to the District to fund the Program (“Grant Agreement”). The grant will assist in financing projects associated with the SGM Grant Program on a reimbursable basis for a period of three years (“Project”). The Project involves activities associated with implementation and continued planning, development, and preparation of groundwater sustainability for the Borrego Valley Subbasin (“Basin”). The Program Projects will incorporate appropriate Best Management Practices as developed by DWR, and will result in a more complete understanding of the groundwater subbasin to support long-term sustainable groundwater management. The work plan and associated grant amount for the Project involve

eights components: 1) grant administration (\$250,000); 2) advanced meter infrastructure (\$1,300,000); 3) wastewater treatment plant monitoring wells (\$206,500); 4) education project (\$384,000); 5) resiliency strategy (\$200,000); 6) biological restoration of fallowed lands (\$755,340); 7) Monitoring, Reporting and Groundwater Management Plan Update (\$1,983,250); and 8) Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring (\$1,036,743).

Subgrantee Agreement

To accomplish the above, the District wishes to enter into subgrantee agreements with Local Project Sponsors to assist in financing projects associated with the Grant Agreement on a reimbursable basis. The subgrantee agreement allows the Local Project Sponsor to fulfill one or more components of the Grant Agreement through the allocation of the grant given by DWR to the District, subject to the Local Project Sponsors complying with the terms of the BWD-DWR grant agreement and meeting a variety of other obligations, including preparing required reports, timely submitting invoices, and indemnifying the District. The District will not be obligated to perform under the subgrantee agreement if DWR does not provide funding through the Grant Agreement; or, if DWR chooses to amend the Grant Agreement, the District has the power to amend or terminate the subgrantee agreement to reflect the reduced funding by DWR. The Local Project Sponsor must complete any and all requirements for their projects as directed in the Grant Agreement. If the Local Project Sponsor fails to comply with any terms of the subgrantee agreement or the Grant Agreement, the District, after proper notice and opportunity to cure within 10 days, may cease distribution of funding and terminate the subgrantee agreement. Further, the Local Project Sponsors is responsible for the maintenance and operation of facilities and structures constructed or improved as part of their project; thus, neither the District nor DWR are liable for any cost of maintenance, management, or operation during any point of their project's life. Accordingly, the District will incur no or very limited responsibility for the Local Project Sponsor and their projects.

NEXT STEPS

Staff requests the Board of Directors to consider approving the Grant and Subgrantee Agreements at the October 25, 2022 Board meeting.

**GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA
(DEPARTMENT OF WATER RESOURCES) AND
BORREGO WATER DISTRICT
AGREEMENT NUMBER 4600014652**

SUSTAINABLE GROUNDWATER MANAGEMENT ACT (SGMA) IMPLEMENTATION GRANT

THIS GRANT AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" or "DWR" and the Borrego Water District, a public agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee," which parties do hereby agree as follows:

1. PURPOSE. The State shall provide funding from the Budget Act of 2021 (Stats. 2021, ch. 240, § 80) to the Grantee to assist in financing the Implementation Project for the Borrego Springs Sub Basin (Project). By executing this Agreement, the Grantee certifies that the purpose of the Project is to implement SGMA as outlined in the Grantee's Alternative to a GSP (Alternative). The provision of State funds pursuant to this Agreement shall not be construed or interpreted to mean that the Alternative, or any components of the Alternative, implemented in accordance with the Work Plan as set forth in Exhibit A will be: adopted by the applicable Groundwater Sustainability Agency (GSA); obtain the necessary desirable results of Sustainable Management Criteria.
2. TERM OF GRANT AGREEMENT. The term of this Grant Agreement begins the date of execution and ends three (3) years following the final payment unless otherwise terminated or amended as provided in this Agreement. However, all work shall be completed by APRIL 30, 2025, and no funds may be requested after JUNE 30, 2025.
3. GRANT AMOUNT. The maximum amount payable by the State under this Agreement shall not exceed \$6,115,833.
4. GRANTEE COST SHARE. Not applicable.
5. BASIC CONDITIONS. The State shall have no obligation to disburse money for the Project under this Grant Agreement until the Grantee has satisfied the following conditions:
 - A. The Grantee must demonstrate compliance with all eligibility criteria set forth on Pages 7 through 13 of the *SGM Grant Program 2021 Guidelines* (2021 Guidelines).
 - B. For the term of this Grant Agreement, the Grantee submits Quarterly Progress Reports, associated quarterly invoices, and all invoice backup documentation no later than sixty (60) days following the end of the calendar quarter (e.g., submitted by May 30th, August 29th, November 29th, and February 28th) and all other deliverables as required by Paragraph 12, "Submission of Reports" and Exhibit A, "Work Plan".
 - C. Prior to the commencement of construction or implementation activities, if applicable, the Grantee shall submit the following to the State:
 - i. Final plans and specifications certified by a California Registered Civil Engineer (or equivalent registered professional as appropriate) to certify compliance for each approved project as listed in Exhibit A, "Work Plan" of this Grant Agreement.
 - ii. Work that is subject to the California Environmental Quality Act (CEQA) process and/or environmental permitting shall not proceed under this Grant Agreement until the following actions are performed:
 - a. The Grantee submits to the State all applicable environmental permits as indicated on the Environmental Information Form (EIF) to the State,
 - b. Documents that satisfy the CEQA process are received by the State,
 - c. The State has completed its CEQA compliance review as a Responsible Agency, and
 - d. The Grantee receives written concurrence from the State of Lead Agency's CEQA document(s) and State notice of verification of environmental permit submittal.

The State's concurrence of Lead Agency's CEQA documents is fully discretionary and shall constitute a condition precedent to any work (i.e., construction or implementation activities) for which it is required. Once CEQA documentation has been completed, the State will consider the environmental documents and decide whether to continue to fund the project or to require changes, alterations or other mitigation. The Grantee must also demonstrate that it has complied with all applicable requirements of the National Environmental Policy Act (NEPA) by submitting copies of any environmental documents, including environmental impact statements, Finding of No Significant Impact, mitigation monitoring programs, and environmental permits as may be required prior to beginning construction/implementation.

iii. A monitoring plan as required by Paragraph 14, "Project Monitoring Plan Requirements."

6. DISBURSEMENT OF FUNDS. The State will disburse to the Grantee the amount approved, subject to the availability of funds through normal State processes. Notwithstanding any other provision of this Grant Agreement, no disbursement shall be required at any time or in any manner which is in violation of, or in conflict with, federal or state laws, rules, or regulations, or which may require any rebates to the federal government, or any loss of tax-free status on state bonds, pursuant to any federal statute or regulation. Any and all money disbursed to the Grantee under this Grant Agreement shall be deposited in a non-interest bearing account and shall be used solely to pay Eligible Project Costs.
7. ELIGIBLE PROJECT COST. The Grantee shall apply State funds received only to Eligible Project Costs in accordance with applicable provisions of the law and Exhibit B, "Budget". Eligible Project Costs include the reasonable costs of studies, engineering, design, land and easement acquisition and associated legal fees, preparation of environmental documentation, environmental mitigations, monitoring, and project construction. Reimbursable administrative expenses are the necessary costs incidental but directly related to the Project included in this Agreement. Work performed on the Project after JANUARY 1, 2022, shall be eligible for reimbursement.

Costs that are not eligible for reimbursement include, but are not limited to the following items:

- A. Costs for preparing and filing a grant application and/or Spending Plan.
- B. Costs associated with the formation of a GSA(s) or other board formation that is responsible for implementing SGMA.
- C. Operation and maintenance costs, including post construction performance and monitoring costs.
- D. Purchase of equipment not an integral part of a project.
- E. Establishing a reserve fund.
- F. Purchase of water supplies.
- G. Replacement of existing funding sources for ongoing programs.
- H. Travel and per diem costs, except for mileage.
- I. Support of existing agency requirements and mandates.
- J. Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies, or acquisition of land by eminent domain.
- K. Meals, food items, or refreshments.
- L. Costs incurred as part of any necessary response and cleanup activities required under the Comprehensive Environmental Response, Compensation, and Liability Act; Resource Conservation and Recovery Act; Hazardous Substances Account Act; or other applicable law.
- M. Overhead and indirect costs: "Indirect Costs" means those costs that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the funded project (i.e., costs that are not directly related to the funded project). Examples of Indirect Costs include, but

are not limited to: central service costs; general administration of the Grantee; non-project-specific accounting and personnel services performed within the Grantee's organization; depreciation or use allowances on buildings and equipment; the costs of operating and maintaining non-project-specific facilities; tuition and conference fees; forums, trainings, and seminars; and, generic overhead or markup. This prohibition applies to the Grantee and any subcontract or sub-agreement for work on the Project that will be reimbursed pursuant to this Agreement.

8. **METHOD OF PAYMENT.** After the disbursement requirements in Paragraph 5, "Basic Conditions" are met, the State will disburse the whole or portions of State funding to the Grantee, following receipt from the Grantee via US mail or Express mail delivery of a "wet signature" invoice or an electronic invoice certified and transmitted via DocuSign for costs incurred and timely Quarterly Progress Reports as required by Paragraph 12, "Submission of Reports." Payment will be made no more frequently than quarterly, in arrears, upon receipt of an invoice bearing the Grant Agreement number. Invoices must accompany a Quarterly Progress Report and shall be submitted within no later than sixty (60) days following the end of the calendar quarter (e.g., submitted by May 30th, August 29th, November 29th, and February 28th). The State will notify the Grantee, in a timely manner, whenever, upon review of an Invoice, the State determines that any portion or portions of the costs claimed are not eligible costs or is not supported by documentation or receipts acceptable to the State. The Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to the State to cure such deficiency(ies). If the Grantee fails to submit adequate documentation curing the deficiency(ies), the State will adjust the pending invoice by the amount of ineligible or unapproved costs.

Invoices submitted by the Grantee shall include the following information:

- A. Costs incurred for work performed in implementing the Project during the period identified in the particular invoice. If backup documentation provided is outside of the period identified in the particular invoice, the Grantee must provide justification within the associated Quarterly Progress Report and note the discrepancy on the Invoice Submittal Summary Sheet.
- B. Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for a project during the period identified in the particular invoice for the implementation of a project.
- C. Invoices shall be submitted on forms provided by the State and shall meet the following format requirements:
 - i. Invoices must contain the date of the invoice, either the time period covered by the invoice or the invoice date received within the time period covered, and the total amount due.
 - ii. Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B, "Budget". The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
 - iii. One set of sufficient evidence (i.e., receipts, copies of checks, time sheets) must be provided for all costs included in the invoice.
 - iv. Each invoice shall clearly delineate those costs claimed for reimbursement from the State's funding amount, as depicted in Paragraph 3, "Grant Amount".

Original signature and date (in ink) of the Grantee's Project Representative. Submit the original "wet signature" copy of the invoice form to the following address: Christopher Martinez at P.O. Box 942836, Sacramento, CA 94236-0001 or an electronic signature certified and transmitted via DocuSign from authorized representative to Christopher Martinez; christopher.martinez@water.ca.gov.

All invoices submitted shall be accurate and signed under penalty of law. Any and all costs submitted pursuant to this Agreement shall only be for the tasks set forth herein. The Grantee shall not submit any invoice containing costs that are ineligible or have been reimbursed from other funding sources unless required and specifically noted as such (i.e., match costs/cost share). Any eligible costs for which the Grantee is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing

for time, services, or any other eligible cost is illegal and constitutes fraud. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements of grant funds and/or termination of this Agreement requiring the repayment of all funds. Additionally, the State may request an audit pursuant to Paragraph D.5 and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability. (Civ. Code, §§ 1572-1573; Pen. Code, §§ 470, 487-489.)

9. WITHHOLDING OF DISBURSEMENTS BY THE STATE. If the State determines that a project is not being implemented in accordance with the provisions of this Grant Agreement, or that the Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if the Grantee does not remedy any such failure to the State's satisfaction, the State may withhold from the Grantee all or any portion of the State funding and take any other action that it deems necessary to protect its interests. Where a portion of the State funding has been disbursed to the Grantee and the State notifies the Grantee of its decision not to release funds that have been withheld pursuant to Paragraph 10, "Default Provisions," the portion that has been disbursed shall thereafter be repaid immediately at the time the State notifies the Grantee, as directed by the State. The State may consider the Grantee's refusal to repay the requested disbursed amount a contract breach subject to the default provisions in Paragraph 10. If the State notifies the Grantee of its decision to withhold the entire funding amount from the Grantee pursuant to this Paragraph, this Grant Agreement shall terminate upon receipt of such notice by the Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.

10. DEFAULT PROVISIONS. The Grantee will be in default under this Grant Agreement if any of the following occur:

- A. Substantial breaches of this Grant Agreement, or any supplement or amendment to it, or any other agreement between the Grantee and the State evidencing or securing the Grantee's obligations;
- B. Making any false warranty, representation, or statement with respect to this Grant Agreement or the application filed to obtain this Grant Agreement;
- C. Failure to operate or maintain the Project in accordance with this Grant Agreement.
- D. Failure to make any remittance required by this Grant Agreement, including any remittance recommended as the result of an audit conducted pursuant to Paragraph D.5.
- E. Failure to submit quarterly progress reports pursuant to Paragraph 5.
- F. Failure to routinely invoice the State pursuant to Paragraph 8.
- G. Failure to meet any of the requirements set forth in Paragraph 11, "Continuing Eligibility."

Should an event of default occur, the State shall provide a notice of default to the Grantee and shall give the Grantee at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Grantee. If the Grantee fails to cure the default within the time prescribed by the State, the State may do any of the following:

- A. Declare the funding be immediately repaid.
- B. Terminate any obligation to make future payments to the Grantee.
- C. Terminate the Grant Agreement.
- D. Take any other action that it deems necessary to protect its interests.

In the event the State finds it necessary to enforce this provision of this Grant Agreement in the manner provided by law, the Grantee agrees to pay all costs incurred by the State including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

11. CONTINUING ELIGIBILITY. The Grantee must meet the following ongoing requirement(s) and all eligibility criteria outlined in the 2021 Guidelines to remain eligible to receive State funds:

- A. The Grantee must continue to demonstrate eligibility and the groundwater basin must continue to be an eligible basin as outlined in the 2021 Guidelines and 2021 PSP.
 - B. Grantee must adhere to the protocols developed pursuant to The Open and Transparent Water Data Act (Wat. Code, § 12406) for data sharing, transparency, documentation, and quality control.
 - C. If the Grantee diverting surface water, the Grantee must maintain compliance with diversion reporting requirements as outlined in Water Code section 5100 et seq.
 - D. If applicable, maintain compliance with the Urban Water Management Planning Act (Wat. Code, § 10610 et seq.).
 - E. If applicable, maintain compliance with Sustainable Water Use and Demand Reduction requirements outlined in Water Code Section 10608, et seq.
 - F. On March 4, 2022, the Governor issued Executive Order N-6-22 (the EO) regarding Economic Sanctions against Russia and Russian entities and individuals. The EO may be found at: <https://www.gov.ca.gov/wp-content/uploads/2022/03/3.4.22-Russia-Ukraine-Executive-Order.pdf>. “Economic Sanctions” refers to sanctions imposed by the U.S. government in response to Russia’s actions in Ukraine, as well as any sanctions imposed under State law. The EO directs DWR to terminate funding agreements with, and to refrain from entering any new agreements with, individuals or entities that are determined to be a target of Economic Sanctions. Accordingly, should the State determine that the Grantee is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for termination of this Agreement. The State shall provide the Grantee advance written notice of such termination, allowing the Grantee at least 30 calendar days to provide a written response. Termination shall be at the sole discretion of the State.
12. SUBMISSION OF REPORTS. The submittal and approval of all reports is a requirement for the successful completion of this Grant Agreement. Reports shall meet generally accepted professional standards for technical reporting and shall be proofread for content, numerical accuracy, spelling, and grammar prior to submittal to the State. All reports shall be submitted to the State’s Grant Manager, and shall be submitted via DWR’s “Grant Review and Tracking System” (GRanTS), or an equivalent online submittal tool. If requested, the Grantee shall promptly provide any additional information deemed necessary by the State for the approval of reports. Reports shall be presented in the formats described in the applicable portion of Exhibit F, “Report Formats and Requirements.” The timely submittal of reports is a requirement for initial and continued disbursement of State funds. Submittal and subsequent approval by the State, of a Project Completion Report is a requirement for the release of any funds retained for such project.
- A. Quarterly Progress Reports: The Grantee shall submit Quarterly Progress Reports to meet the State’s requirement for disbursement of funds. Quarterly Progress Reports shall be uploaded via GRanTS, or an equivalent online submittal tool, and the State’s Grant Manager notified of upload. Quarterly Progress Reports shall, in part, provide a brief description of the work performed, the Grantees activities, milestones achieved, any accomplishments and any problems encountered in the performance of the work under this Grant Agreement during the reporting period. The first Quarterly Progress Report and associated quarterly invoice should be submitted to the State no later than NOVEMBER 30, 2022, with future reports then due on successive three-month increments based on the invoicing schedule and this date. The DWR Grant Manager will provide a Quarterly Progress Report template that shall be used for the duration of the Agreement.
 - B. Groundwater Sustainability Plan: Not applicable to this Agreement.
 - C. Component Completion Report(s): The Grantee shall prepare and submit to the State a separate Component Completion Report for each component included in Exhibit A, “Work Plan”. The Grantee shall submit a Component Completion Report within ninety (90) calendar days of component completion or before the work completion date in Paragraph 2, whichever is earliest. Each Component Completion Report shall include, in part, a description of actual work done, any changes or amendments to each component, and a final schedule showing actual progress versus planned

progress, copies of any final documents or reports generated or utilized during a project. The Component Completion Report shall also include, if applicable, certification of final component by a California Registered Civil Engineer (or equivalent registered professional as appropriate), consistent with Standard Condition D.18, "Final Inspections and Certification of Registered Civil Engineer". A DWR "Certification of Project Completion" form will be provided by the State.

- D. Grant Completion Report: Upon completion of the Project included in Exhibit A, "Work Plan" the Grantee shall submit to the State a Grant Completion Report. The Grant Completion Report shall be submitted within ninety (90) calendar days of submitting the Completion Report for the final project to be completed under this Grant Agreement, as outlined in Exhibit F, "Report Formats and Requirements". Retention for the last project to be completed as part of this Grant Agreement will not be disbursed until the Grant Completion Report is submitted to be approved by the State. The Grantee must submit the draft Grant Completion Report to the DWR Grant Manager for comment and review 90 days before the work completion date listed in Paragraph 2. DWR's Grant Manager will review the Draft Grant Completion Report and provide comments and edits within 30-days of receipt, when possible. Prepare a Final Completion Report addressing the DWR Grant Manager's comments prior to the work completion date listed in Paragraph 2. The Grantee must obtain the DWR Grant Manager's approval of the report within 30 days after the work completion date.
- E. Post Performance Reports (PPRs): The Grantee shall submit PPRs to the State within ninety (90) calendar days after the first operational year of a project has elapsed. This record keeping and reporting process shall be repeated annually for a total of three (3) years after the completed project begins operation.
- F. Deliverable Due Date Schedule: The Grantee shall submit a Deliverable Due Date Schedule within 30 days of the execution date of the Grant Agreement. No invoices will be reviewed or processed until the Deliverable Due Date Schedule has been received by the DWR Grant Manager. Any edits to the schedule must be approved by the DWR Grant Manager and the revised schedule saved in the appropriate project files.
- G. Environmental Information Form (EIF): Prepare and submit the EIF within 30 days of the execution date of the Grant Agreement. No invoices will be reviewed or processed until the EIF has been received by the DWR Grant Manager.
13. OPERATION AND MAINTENANCE OF PROJECT. For the useful life of construction and implementation projects and in consideration of the funding made by the State, the Grantee agrees to ensure or cause to be performed the commencement and continued operation of the project, and shall ensure or cause the project to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The State shall not be liable for any cost of such maintenance, management, or operation. The Grantee or their successors may, with the written approval of the State, transfer this responsibility to use, manage, and maintain the property. For purposes of this Grant Agreement, "useful life" means period during which an asset, property, or activity is expected to be usable for the purpose it was acquired or implemented; "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses, and "maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal of the Grantee to ensure operation and maintenance of the projects in accordance with this provision may, at the option of the State, be considered a breach of this Grant Agreement and may be treated as default under Paragraph 10, "Default Provisions."
14. PROJECT MONITORING PLAN REQUIREMENTS. As required in Exhibit A, "Work Plan", a Monitoring Plan shall be submitted to the State prior to disbursement of State funds for construction or monitoring activities. The Monitoring Plan should incorporate Post Performance Monitoring Report requirements as defined and listed in Exhibit J, "Monitoring and Maintenance Plan Components". The SGM Grant Program

has developed post construction monitoring methodologies that shall be used for the Post Performance Reporting.

15. STATEWIDE MONITORING REQUIREMENTS. The Grantee shall ensure that all groundwater projects and projects that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Wat. Code, § 10780 et seq.) and, where applicable, that projects that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the Surface Water Ambient Monitoring Program carried out by the State Water Resources Control Board. See Exhibit G, "Requirements for Data Submittal" for web links and information regarding other State monitoring and data reporting requirements.
16. NOTIFICATION OF STATE. The Grantee shall promptly notify the State, in writing, of the following items:
 - A. Events or proposed changes that could affect the scope, budget, or work performed under this Grant Agreement. The Grantee agrees that no substantial change in the scope of a project will be undertaken until written notice of the proposed change has been provided to the State and the State has given written approval for such change. Substantial changes generally include changes to the scope of work, schedule or term, and budget.
 - B. Any public or media event publicizing the accomplishments and/or results of this Grant Agreement and provide the opportunity for attendance and participation by the State's representatives. The Grantee shall make such notification at least fourteen (14) calendar days prior to the event.
 - C. Discovery of any potential archaeological or historical resource. Should a potential archaeological or historical resource be discovered during construction, the Grantee agrees that all work in the area of the find will cease until a qualified archaeologist has evaluated the situation and made recommendations regarding preservation of the resource, and the State has determined what actions should be taken to protect and preserve the resource. The Grantee agrees to implement appropriate actions as directed by the State.
 - D. The initiation of any litigation or the threat of litigation against the Grantee regarding the Project or that may affect the Project in any way.
 - E. For implementation/construction Projects, final inspection of the completed work on a project by a Registered Civil Engineer, in accordance with Standard Condition D.18, "Final Inspections and Certification of Registered Civil Engineer." The Grantee shall notify the State's Grant Manager of the inspection date at least fourteen (14) calendar days prior to the inspection in order to provide the State the opportunity to participate in the inspection.
17. NOTICES. Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this Grant Agreement shall be in writing. Notices may be transmitted by any of the following means:
 - A. By delivery in person.
 - B. By certified U.S. mail, return receipt requested, postage prepaid.
 - C. By "overnight" delivery service; provided that next-business-day delivery is requested by the sender.
 - D. By electronic means.
 - E. Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery or receipt). Notices sent by certified mail will be deemed effective given ten (10) calendar days after the date deposited with the U. S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent electronically will be effective on the date of transmission, which is documented in writing. Notices shall be sent to the below addresses. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below.

18. PERFORMANCE EVALUATION. Upon completion of this Grant Agreement, the Grantee's performance will be evaluated by the State and a copy of the evaluation will be placed in the State file and a copy sent to the Grantee.

19. PROJECT REPRESENTATIVES. The Project Representatives during the term of this Grant Agreement are as follows:

Department of Water Resources
Arthur Hinojosa
Manager, Division of Regional Assistance
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 902-6713
Email: Arthur.Hinojosa@water.ca.gov

Borrego Springs Water District
Geoff Poole
General Manager
806 Palm Canyon Drive
Borrego Springs, CA 92004
Phone: (760) 767-5806
Email: geoff@borregowd.com

Direct all inquiries to the Grant Manager:

Department of Water Resources
Christopher Martinez
Engineering Geologist
Division of Regional Assistance
P.O. Box 942836
Sacramento, CA 94236-001
Phone: (916) 902-7015
Email: christopher.martinez@water.ca.gov

Borrego Springs Water District
Geoff Poole
General Manager
806 Palm Canyon Drive
Borrego Springs, CA 92004
Phone: (760) 767-5806
Email: geoff@borregowd.com

Either party may change its Grant Manager, Project Representative, or Project Manager upon written notice to the other party.

20. STANDARD PROVISIONS AND INTEGRATION. This Grant Agreement is complete and is the final Agreement between the parties. The following Exhibits are attached and made a part of this Grant Agreement by this reference:

Exhibit A– Work Plan

Exhibit B– Budget

Exhibit C– Schedule

Exhibit D– Standard Conditions

Exhibit E– Authorizing Resolution Accepting Funds

Exhibit F– Report Formats and Requirements

Exhibit G– Requirements for Data Submittal

Exhibit H– State Audit Document Requirements and Funding Match Guidelines for Grantees

Exhibit I– Project Location

Exhibit J– Monitoring and Maintenance Plan Components

Exhibit K– Local Project Sponsors

Exhibit L– Appraisal Specifications

Exhibit M– Information Needed for Escrow Process and Closure

Exhibit N– Project Monitoring Plan Guidance

Exhibit O– Invoice Guidance for Administrative and Overhead Charges

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Borrego Water District

Arthur Hinojosa
Manager, Division of Regional Assistance

Geoff Poole
General Manager

Date _____

Date _____

Approved as to Legal Form and Sufficiency

_____ for
Robin Brewer
Assistant General Counsel,
Office of the General Counsel

Date _____

DRAFT

Exhibit A

WORK PLAN

Project Title: : Implementation Project for the Borrego Springs Sub Basin (Project)

Project Description: The Work Plan includes activities associated with implementation and continued planning, development, and preparation of groundwater sustainability for the Borrego Valley Subbasin (Basin). The resulting work from this grant will incorporate appropriate Best Management Practices as developed by DWR, and will result in a more complete understanding of the groundwater subbasin to support long-term sustainable groundwater management. The Project contains construction and planning projects including updating the Groundwater Management Plan (GMP). The Work Plan includes eight Components:

- Component 1: Grant Administration
- Component 2: Advanced Meter Infrastructure
- Component 3: Wastewater Treatment Plant Monitoring Wells
- Component 4: Education Project
- Component 5: Resiliency Strategy
- Component 6: Biological Restoration of Fallowed Lands
- Component 7: Monitoring, Reporting and Groundwater Management Plan Update
- Component 8: Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring

COMPONENT 1: GRANT ADMINISTRATION

Category (a): Grant Agreement Administration

Prepare reports detailing work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement. Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports and should be submitted to the DWR Grant Manager for review to receive reimbursement of Eligible Project Costs. Collect and organize backup documentation by component, budget category, and task and prepare a summary Excel document detailing contents of the backup documentation organized by component, budget category, and task.

Prepare and submit the Environmental Information Form (EIF) within 30 days of the execution date of the Grant Agreement. No invoices will be reviewed or processed until the EIF has been received by the DWR Grant Manager. Submit a deliverable due date schedule within 30 days of the execution date of the Grant Agreement to be reviewed and approved by the DWR Grant Manager. Any edits to the schedule must be approved by the DWR Grant Manager and the revised schedule saved in the appropriate project files.

Prepare the Draft Grant Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the work completion date listed in Paragraph 2. DWR's Grant Manager will review the Draft Grant Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Completion Report addressing the DWR Grant Manager's comments prior to the work completion date. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the work completion report. However, all charges accrued after the work completion date in Paragraph 2 will not be reimbursed. The retention invoice must be received, processed, and through DWR's accounting office by the no funds may be requested after date outlined in Paragraph 2. All deliverables listed within the Work Plan shall be submitted with the Final Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- EIF
- Deliverable due date schedule
- Quarterly Progress Reports, Quarterly Invoices, and all required backup documentation
- Draft and Final Grant Completion Reports

COMPONENT 2: ADVANCED METER INFRASTRUCTURE

Component 2 consists of the replacement of all the Grantee's manual water meters with an advanced system. Component 2 will replace over 2,000 manual water meters to address demand-side reductions to basin pumping. Development in the Grantee's service area is primarily geographically dispersed on relatively large lots in sandy soil. This scenario does create situations where water leaks in the customers plumbing or irrigation system can run for extended periods of time unrecognized. The new infrastructure will increase water use efficiency and improve leak detection and create an immediate response in the Basin's commercial and residential sectors. Based on historic trends, Component 2 will save approximately 20 acre-feet annually.

Category (a): Component Administration

Prepare reports detailing Component 2 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by Component 2 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 2 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 2 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Planning

Prepare and advertise bid documents for Component 2. Prepare the advertisement and contract documents for construction contract bidding. Conduct a pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed. Oversee procurement and construction management.

Deliverables:

- Bid documents
- Proof of advertisement
- Executed contract
- Notice to Proceed

Task 2: Design Plans and Specifications

Submit all required permits and CEQA document(s) to the DWR Grant Manager for review and concurrence prior to beginning construction activities. Submit all design plans and specifications of the AMI hardware and software to the DWR Grant Manager for review and concurrence prior to advertising Component 2 for bids.

Construction may not begin and no costs for Category (c), Task 3 may be incurred until the State has reviewed the CEQA document(s), completed its CEQA responsible agency obligations and given its environmental clearance in accordance with Paragraphs 5 and D.8 of this Agreement. Any costs incurred for Category (c), Task 3 prior to DWR completing its responsible agency obligations shall not be reimbursed and any such amounts shall be deducted from the total Grant Amount in Paragraph 3.

Deliverables:

- All required permits
- CEQA Documentation, if applicable
- Design plans and specifications

Category (c): Implementation / Construction**Task 3: Pilot Study**

Install new AMI equipped water meters and shut-off valves for a minimum of 100 customers. Evaluate whether automatic shutoff valves should be offered for customers. Install, test, and evaluate electronic automated systems or other similar technology to communicate with the AMI meters and automated valves. Make a recommendation to proceed with the evaluated technology or potentially reevaluate technology options. Monitor and assess the pilot study to determine if adjustments are necessary to the full scale implementation program.

Deliverables:

- Pilot Study Report
- Meter Inspection Report
- Pilot study monitoring and assessment report
- Full scale project monitoring and assessment report

Task 4: AMI Implementation for Remaining Connections

Install new AMI equipped water meters for the remaining 1,959 customers that were not included in the pilot study. Replace a minimum of 300 meters owned and operated by the Grantee. Install automated valves, if necessary.

Deliverables:

- Full Scale Project Implementation Report
- Meter Installation Inspection Report

Category (d): Monitoring / Assessment

Not applicable to this Component.

Category (e): Engagement / Outreach**Task 5: AMI Outreach and Education**

Conduct bilingual outreach to ratepayers to explain the benefits of Component 2 and educate them how to use online tools to shut-off water service when leaks are detected. Advertise the project to the ratepayers through the Grantee's website and through information material provided in monthly billing statements.

Deliverables:

- AMI Customer Informational Flyer
- Vendor Provided User Video

COMPONENT 3: WASTEWATER TREATMENT PLANT MONITORING

Historically, elevated levels of nitrates have been realized in the one existing Monitoring Well located adjacent to the Rams Hill Waste Water Treatment Plant (WWTP) Percolation Ponds. Three clusters of two monitoring wells, six total, will be installed around the WWTP Percolation Ponds to study the fate and transport of nitrate and Total Dissolved Solids contamination originating from the discharge of effluent. The wells will be addressing potential water quality issues by evaluating the point source discharges to the aquifer.

Each of the 3 proposed monitoring well clusters will consist of a deeper (~100 foot) and shallower (~40 foot) monitoring well pair spaced approximately 15 feet apart. The wells will be located on parcels adjacent to the existing WWTP.

Category (a): Component Administration

Prepare reports detailing Component 3 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by Component 3 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 3 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 3 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Environmental Documentation/Permitting

Prepare the appropriate CEQA documentation for Component 3 and file the document(s) with the County Clerk's Office and State Clearinghouse as required. Prepare and submit an Initial Study for Component 3, if necessary. Complete the required CEQA documentation. Submit the CEQA document(s) to the DWR Grant Manager for review and concurrence prior to beginning construction activities. Prepare application(s) for and obtain required permit(s) to construct Component 3. Obtain all required permits for Component 3 and submit copies to the DWR Grant Manager.

Construction may not begin and no costs for Category (c), Task 4 may be incurred until the State has reviewed the CEQA document(s), completed its CEQA responsible agency obligations and given its environmental clearance in accordance with Paragraphs 5 and D.8 of this Agreement. Any costs incurred for Category (c),

Task 4 prior to DWR completing its responsible agency obligations shall not be reimbursed and any such amounts shall be deducted from the total Grant Amount in Paragraph 3.

Deliverables:

- CEQA documentation
- Copies of required permits

Task 2: Design Plans and Specifications

Complete the preliminary design plans and specifications for Component 3 along with the topographic survey, if needed. Develop the 50% design plans for Component 3 and submit them for review and concurrence prior to completing the final design plans and specifications. Prepare the 100% design plans and specifications in accordance with requirements for public bidding for construction, after review of the 50% design plans. Submit the 100% design plans and specifications for review and concurrence prior to advertising Component 3 for bids.

Deliverables:

- 50% design plans and specifications
- 100% design plans and specifications

Category (c): Implementation / Construction

Task 3: Construction Management

Develop all necessary documents to secure a contractor(s) and submit to the DWR Grant Manager prior to advertising. Award the contract, submit the Notice of Award, and submit the Notice to Proceed to the DWR Grant Manager. Photo-document pre-construction conditions and weekly construction activities. Prepare any change orders, address contractor's onsite questions, review/update construction schedule, review contractor submittals and pay requests, and notify contractor if work is not acceptable. Finalize record drawings and submit the as-built drawings to DWR's Grant Manager. Construct Component 3 per the final design plans and specifications and outlined in the awarded contract(s). Conduct an inspection of the completed Component 3 by a licensed professional and submit a Certification of Completion letter from the licensed professional to ensure Component 3 was constructed per the 100% design plans and specifications and that Component 3 will provide the benefits claimed.

Deliverables:

- Notice of Award
- Notice to Proceed
- Bid document(s)
- Photo-documentation of pre-, during, and post-construction activities included within the appropriate quarterly Progress Reports
- Notice of Completion
- As-built drawings
- Site inspection letter or report

Task 4: Monitoring Well Installation

Conduct drilling, construction, and development of six (6) monitoring wells within the Rams Hill WWTF to a maximum depth of 100 feet using the sonic drilling method in accordance with the Final Contract Documents and Specifications.

Deliverables:

- Drillers Well installation report(s)

Category (d): Monitoring / Assessment**Task 5: Water Quality Sampling**

Collect groundwater samples from each well using a submersible pump to be analyzed for specific constituents. Compose monitoring plan detailing what is being collected and analyzed.

Deliverables:

- One-round water quality sample results
- Monitoring Plan
- Copies of Water Quality Reports

Task 6: Well Completion Report

Prepare and submit a comprehensive well completion report that documents all drilling operations, including a description of the lithology encountered at each borehole, the type and quantity of well construction materials used, and well development forms.

Deliverables:

- Well Completion Report

Task 7: Fate and Transport Investigation and Effluent Limit Feasibility Study

Perform a study to discover the fate and transport of contaminants at the WWTF, including data collection and analysis to determine current plant performance and nitrogen removal. Prepare nitrogen control strategy technical report to determine if wastewater discharged to evaporation/percolation ponds is causing nitrogen impairment to groundwater.

Deliverables:

- Nitrogen Control Strategy Work Plan

Category (e): Engagement / Outreach**Task 8: Outreach and Education**

Perform education and outreach to ratepayers through Town Hall meetings and presentations. Highlight the project through an informational flyer that will be posted to the Grantee's website.

Deliverables:

- WWTF Informational Flyer
- Meeting agenda and presentation materials

COMPONENT 4: EDUCATION PROJECT

Component 4 will create and implement a Career Technical Education (CTE) Pathway in Energy, Environment, and Utilities for Borrego Springs Middle and High Schools. The goal is to educate young people around the water issues and challenges pertinent to our basin from historical times to the present Stipulated Agreement. Borrego Springs Unified School District will hire a CTE instructor certified in Energy, Environment, and Utilities who will be ready to teach in 2023. In addition, this CTE Pathway will introduce students to vital skills and post high school job opportunities. Currently, there is little understanding among students and their families about water sustainability challenges in their Basin and the required ramp down of water usage over the next 18 years.

Component 4 will address this lack of awareness by exposing students to a curriculum that will teach all aspects of water as a natural resource to be understood, regulated, and conserved in order to achieve

sustainability. The curriculum of 330 hours will be integrated into science classes in middle school and in high school the curriculum will become part of the Energy, Environment, and Utilities Pathway. The goal of Component 4 is to lead to internships, partnerships, career investigations, certifications, and/or post high school vocational programs.

Component 4 also includes outreach to parents and independent gardeners in the community by students serving as the presenters to their parents and to our local gardeners, the majority of whom have children in the school district.

Category (a): Component Administration

Prepare reports detailing Component 4 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 4 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 4 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 4 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Educational Material Design

Create an Energy, Environment and Utilities CTE Pathway curriculum of 330 hours for grades 6-12 that meets the Science, Technology, Engineering, and Mathematics (STEM) statewide standards. Submit the curriculum to the DWR Grant Manager for review and approval through DWR's Public Affairs Office (PAO) to add to DWR's Underrepresented Community Technical Assistance Program's website.

Deliverables:

- Curriculum

Task 2: Lesson Design & Translation

Recruit and hire an Energy, Environment, and Utilities CTE Teacher(s). Plan, design, and publish lessons for students to present to parents and gardeners. Provide translated school lessons into Spanish to provide to parents and gardeners. Purchase the required instructional materials to get the program started. Create video and printed material for Watershed Interpretation in Spanish and English.

Deliverables:

- Two sets of lessons: 1 for parents and 1 for gardeners
- Two sets of Spanish lessons: 1 for parents and 1 for gardeners

- List of needed materials
- Video and printed materials

Task 3: Water Wise Design

Design and produce a minimum of 50 Water Wise certificates and a minimum of 50 vehicle magnets designed by the high school Graphic Design Class to be given to local gardeners after participating in an environmentally responsive landscaping class. Submit the certificate and magnet mock up to the DWR Grant Manager for review prior to printing. Provide a sign in sheet for the class(es) along with photo documentation of the class(es) in the associated quarterly Progress Report(s).

Deliverables:

- Copy of certificates and magnets
- Photo-documentation in associated quarterly Progress Report(s)

Category (c): Implementation / Construction

Task 4: Outdoor Learning Labs & Desert Garden Signs

Purchase materials for a minimum of four (4) outdoor learning labs at the ArtPark Community Garden for CTE students and the general public for hands-on learning in aquaponics, xeriscape gardening, best water conservation practices in irrigation, and soil studies for watershed and absorption. Create and install a minimum of one (1) educational sign at each outdoor laboratory highlighting best water practices in desert gardening. Submit the mock up of the signage to the DWR Grant Manager for review prior to ordering the sign(s). Submit photo documentation of the laboratories and signage in the associated quarterly Progress Report(s).

Deliverables:

- Materials for Learning Labs
- Mock up of educational signage
- Photo-documentation in associated quarterly Progress Report(s)

Category (d): Monitoring / Assessment

Task 5: Education Project Assessment

Create, administer, and score pre and post assessments of all students and adults in the Education Project to assess their growth in understanding SGMA and its impact on sustainability of water in the Basin.

Deliverables:

- Scoring Results for Year 1 and 2.

Category (e): Engagement / Outreach

Task 6: Outreach

Coordinate partnerships with community wide entities, businesses, and public works to enrich the learning experience of studies regarding SGMA and create opportunities for internships, field trips, job shadowing, and work experience.

Deliverables:

- Documentation of participation

COMPONENT 5: RESILIENCY STRATEGY

Component 5 will provide education and engagement to the community to ensure that the community's needs are being included within the Borrego Springs Community Plan update, implementation of the groundwater stipulation agreement, and implementation of the groundwater management plan. Doing this will create new and strengthened connections across sectors and improved understanding of state and local government structures, policies, economic development, and socioeconomic and environmental factors. Component 5 will identify one or more community and climate ambassador(s) to engage with local decision makers and develop a cohesive resilience strategy with broad community support. As a result, Component 5 will provide an informed network of watershed/basin leaders to advocate for improvements and communication with interested parties through ongoing community engagement.

Component 5 will improve community understanding of socio-ecological systems, increase the community's ability to engage in watershed/basin-wide planning and decision-making, and ensure disadvantaged community member concerns are addressed by attending meetings, submitting public comments, and recommending **XX** to be included in the plans. Component 5 will create college and career pathways for students that were involved in the CTE Pathway from **Component 4 (?)** who interested in pursuing natural resources, interpretive, or engineering professions.

Watershed and groundwater improvement projects identified by the Borrego Valley Stewardship Council (Council), and listed within GMP projects and management actions section, will expand paid technical and green jobs for residents and will bring in contract jobs that contribute to local food and lodging businesses, supporting local community members.

Category (a): Component Administration

Prepare reports detailing Component 5 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 5 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 5 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 5 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Planning

Recruit, hire, and onboard new part-time employee to serve as watershed coordinator for the Council. Design a voluntary community visioning process, consisting of an engagement arc and plan, that maximizes diverse community participation and elevates the voices of marginalized groups. Establish a network of at least 20 local and regional partners across the watershed/basin to participate in watershed and basin-wide coordination efforts.

Deliverables:

- Contract for Administrative Support Staff for 3 years, with position description and scope of work
- Community visioning process schedule, engagement arc, and engagement plan.
- Interested party contact information, roles, and levels of engagement
- List or database of potential funding options, submitted applications.

Task 2: Watershed/Basin Characterization

Conduct desktop research and literature review of the region's natural resources / environmental (watershed) characteristics, community priorities, planning, and governance. Support community visioning process and the development of community priorities for the watershed. Identify and prioritize community watershed vision, which will include potential watershed restoration or management projects. Develop monitoring and evaluation protocols for the community watershed vision and priorities. Obtain feedback on summary white paper from a minimum of 5 water network partners and/or cooperators.

Deliverables:

- Summary white paper of watershed characterization
- Summary notes from community meeting(s); and/or analysis of community survey results.
- Prioritized list of potential projects
- Document of watershed monitoring and evaluation protocols

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Not applicable to this Component

Category (e): Engagement / Outreach

Not applicable to this Component

Task 3: Watermaster Board Coordination

Establish criteria for evaluating the impacts to the watershed from implementation of the GMP. Conduct GMP analysis for alignment with community watershed vision and potential impacts to the watershed. Develop recommendations for implementing community watershed vision, priorities, and watershed protections.

Deliverables:

- Document of criteria for analyzing GMP for watershed impacts
- Memorandum outlining potential impacts to the watershed from GMP implementation.
- Memorandum of recommendations to the Watermaster Board to prevent negative impacts to the watershed from GMP implementation.
- Presentation of recommendations to Watermaster Board during at least 1 public meeting; Feedback on presentation from attendees.

Task 4: Sponsor Group Coordination

Participate in a minimum of 3 Sponsor Group-driven Community Plan Update Process meetings. Coordinate with Sponsor Group community engagement efforts to ensure adequate community input on watershed priorities and impacts. Develop recommendations for environmental and natural resources components to be included in the Community Plan, including. Share recommendations (or supplemental plan) with Sponsor Group and Community Plan update process.

Deliverables:

- List of Sponsor Group public meeting dates attended
- Materials from community meetings and/or outreach efforts
- Memorandum of recommendations for Community Plan
- Presentation to Sponsor Group and Community Plan Update participants; Summary of feedback on presentation

Task 5: Community Plan Update

Compile a database of at least 10 outreach channels across the watershed. Establish a minimum of 5 relevant watershed education, engagement, and outreach providers. Create a stakeholder and community engagement plan for basin/watershed coordination and education. Coordinate and help promote local groundwater and watershed-related education efforts between providers and venues across the region.

Deliverables:

- Database of outreach channels
- Established system for regular communication, coordination, cross-promotion, and support between watershed education and outreach providers.
- Stakeholder and community engagement plan
- Regularly maintained calendar of coordinated education efforts.

Task 6: Groundwater Training & Leadership Development Program

Develop curriculum for groundwater training and leadership development program. Conduct extensive direct engagement to target populations for recruiting program participants. Implement the Water Academy Program in order to develop a constituency of informed local leaders. Evaluate effectiveness of program implementation, identify areas of improvement, and adapt program structure and content for future iterations.

Deliverables:

- Curriculum outlines and materials
- Roster of participants
- Session agendas
- Evaluation survey results

COMPONENT 6: BIOLOGICAL RESTORATION OF FALLOWED LANDS

The Borrego Springs GMP defines a Sustainability Goal of operating the Basin within its sustainable yield by 2040. Achieving this goal requires implementation of an aggressive pumping ramp down of approximately 75 percent over the next twenty years. The GMP recognizes that fallowing of agricultural lands will be key to achieving the Sustainability Goal, but also recognizes the potential adverse environmental effects of fallowing, including airborne emissions through wind-blown dust, the introduction or spreading of invasive plant species, and changes to the landscape that could adversely affect visual quality.

Component 6 will develop guidance on techniques to mitigate the potential adverse impacts associated with the fallowing of lands that is expected to occur within the Basin. Component 6 will analyze existing data and information, conduct field reconnaissance, and test cases of biological restoration techniques at existing fallowed lands within the Basin.

A final technical report will describe and document the results, conclusions, and recommendations; the biological restoration strategies that are expected to be most effective within the Basin; and a prioritization of land parcels for biological restoration.

Category (a): Component Administration

Prepare reports detailing Component 6 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 6 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 6 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 6 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Not applicable to this Component

Category (c): Implementation / Construction

Not applicable to this Component

Category (d): Monitoring / Assessment

Task 1: Review and Analysis of Existing Data

Perform a kick-off meeting with the key team members. Review literature and data mine existing reports for a written summary of relevant information to be included in the final technical report. Conduct interviews with local and subject-matter experts. Create project geodatabase for relevant land use and environmental thematic layers, including but not limited to topography, flow accumulation, soil characteristics, and wind patterns. Collect water consumption data from the Grantee; update parcel level GIS data, as necessary; calculate water consumption by parcel; and digitize new data layers, as necessary. Review historical maps and available records. Synthesize information to describe site specific historical ecology and include comparison of historical current vegetation cover densities. Provide guidance on feasible restoration targets. Develop a technical memo summarizing the existing data and a final prioritization map of the Basin identifying good locations within the Basin for land fallowing.

Deliverables:

- Technical Memo Summarizing Existing Data
- Initial Fallowed Farmland Rehabilitation Opportunities and Prioritization Map

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

Perform field observations of existing fallowed farmland. Interview past and current Grantee staff about experience with fallowed lands, field visits, and data collection of existing conditions. Use GIS layers to stratify landscape in the Basin, including the agricultural land into similar geomorphic features for sampling. Determine a sampling design to collect more detailed information on plant cover and "greenness" utilizing drones and multispectral imagery over hundreds of acres. Sample cover data to analyze and interpret reference conditions to identify a range of reasonable habitat restoration targets for fallowed farmland. Summarize activities in a technical report.

Deliverables:

- Technical Report of Field Study Results

Task 3: Brush Pile Wildlife Sand Fence Case Study

Identify manipulative sites for sand fences. Identify one or more site(s), based on feasibility, for construction of sand fences. Identify the most economical method of construction for sand fences and build variations on the design, as appropriate. Take baseline observation data of sand fences for comparison to future datasets and to characterize the habitat and dust control value of the sand fences. Establish an initial study with promising plant species to help understand plant response to sand fences. Summarize results of the study in a technical report.

Deliverables:

- Construction sample of sand fences
- Design Plans
- Construction Permits, if applicable
- Technical Report

Task 4: Farmland Fallowing Rehabilitation Strategies

Develop conceptual models of key processes involved in dust, native recruitment, and habitat restoration of fallowed farmland based on literature review, geodatabase indices and analysis, field study results and expert interviews. Develop rehabilitation strategies for fallowed farmland based on conceptual models, the range of potential for rehabilitation based on site level measurements across the study area, and project goals. Recommend best practice language for fallowing of farmland to be incorporated into the GMP. Identify gaps in knowledge for future monitoring and study to improve best practice adaptively as land begins to be fallowed for water conservation.

Deliverables:

- Draft Rehabilitation Strategies and Best Practice for Fallowing
- Final Rehabilitation Strategies and Best Practice for Fallowing

Task 5: Farmland Fallowing Prioritization

Develop a model for prioritizing farmland for fallowing based on the reduction of water consumption, and likelihood of success of the rehabilitation strategies.

Deliverables:

- Prioritization of Farmland Fallowing Report
- Prioritization of Farmland Fallowing Map

Category (e): Interested Parties Outreach/Education**Task 6: Conduct Environmental Working Group (EWG) Meetings**

Perform a minimum of two (2) EWG meetings per year for the EWG to: receive updates on project progress; receive input from the public and interested stakeholders; provide guidance and input to the Watermaster Technical Consultant and subcontractors; review draft and final project deliverables and make recommendations to the Watermaster Board.

Deliverables:

- Meeting agendas/packets
- PowerPoint presentations
- Summary meeting notes

- Memorandums with recommendations to the Watermaster Board.

COMPONENT 7: MONITORING, REPORTING, AND GROUNDWATER MANAGEMENT PLAN UPDATE

Component 7 will provide a comprehensive, updated datasets for groundwater pumping, groundwater levels, groundwater quality, and surface-water flow through Water Year 2024; provide maintenance of these datasets in a data management system that will be used to report these data to the CASGEM, CEDEN, and GAMA platforms on a **XX** basis; construct two new surface-water monitoring station on Coyote Creek; construct two new multi-completion monitoring wells; properly abandon a minimum of two (2) inactive production wells; convert a minimum of one (1) inactive production wells to monitoring wells; develop and submit annual reports to the DWR pursuant to SGMA for 2023, 2024, and 2025; progress towards the redetermination of the Sustainable Yield of the Basin which is due by 2025; and conduct interested party engagement and outreach meetings.

Category (a): Component Administration

Prepare reports detailing Component 7 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly Progress Reports. Collect and organize backup documentation by the Component 7 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 7 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 7 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Environmental Documentation/Permitting

Prepare the appropriate CEQA documentation for Component 7 and file the document(s) with the County Clerk's Office and State Clearinghouse, as required. Prepare and submit an Initial Study for Component 7. Submit the CEQA document(s) to the DWR Grant Manager for review and concurrence prior to beginning construction activities. Prepare application(s) for and obtain required permit(s) to construct Component 7. Obtain all required permits for the Component and submit copies to the DWR Grant Manager.

Construction may not begin and no costs for Category (c), Task 4 may be incurred until the State has reviewed the CEQA document(s), completed its CEQA responsible agency obligations and given its environmental clearance in accordance with Paragraphs 5 and D.8 of this Agreement. Any costs incurred for Category (c),

Task 4 prior to DWR completing its responsible agency obligations shall not be reimbursed and any such amounts shall be deducted from the total Grant Amount in Paragraph 3.

Deliverables:

- Easements and other necessary document(s), if necessary
- Initial Study
- CEQA documentation
- Copies of all required permits

Task 2: Design Plans and Specifications

Complete the preliminary design plans and specifications for Component 7 along with the topographic survey, if needed. Develop the 50% design plans for the Component and submit them for review and concurrence prior to completing the final design plans and specifications. Prepare the 100% design plans and specifications in accordance with requirements for public bidding for construction, after review of the 50% design plans. Submit the 100% design plans and specifications for review and concurrence prior to advertising the Component for bids.

Deliverables:

- 50% design plans and specifications
- 100% design plans and specifications

Category (c): Implementation / Construction

Task 3: Construction Management

Develop all necessary documents to secure a contractor(s) and submit to the DWR Grant Manager prior to advertising. Award the contract, submit the Notice of Award, and submit the Notice to Proceed to the DWR Grant Manager. Photo-document pre-construction conditions and weekly construction activities. Prepare any change orders, address contractor's onsite questions, review/update construction schedule, review contractor submittals and pay requests, and notify contractor if work is not acceptable. Finalize record drawings and submit the as-built drawings to DWR's Grant Manager. Construct the Component per the final design plans and specifications and outlined in the awarded contract(s). Conduct an inspection of the completed Component by a licensed professional and submit a Certification of Completion letter from the licensed professional to ensure the Component was constructed per the 100% design plans and specifications and that the Component will provide the benefits claimed.

Deliverables:

- Proof of bid advertisement
- Notice of Award
- Notice to Proceed
- Bid document(s)
- Photo-documentation of pre-, during, and post-construction activities included within the appropriate quarterly Progress Reports
- Notice of Completion
- As-built drawings
- Site inspection letter or report

Task 4: Construction of New Monitoring Facilities

Construct and equip a surface-water discharge monitoring station in Coyote Creek. Install a camera staff gauge, perform surveys, establish rating curves, and perform repairs/maintenance of the facility in the event of disturbances during or after high-discharge events.

Deliverables:

- Technical Specifications
- Notice of Completion

Task 5: Identify and Address Improperly Abandoned Wells

Develop outreach tools to identify improperly abandoned wells and perform outreach to determine access. Identify three (3) improperly abandoned wells, and if accessible through an easement or other access agreement, the wells will be properly abandoned or convert to a monitoring well. Convert two (2) inactive production wells to monitoring wells.

Deliverables:

- Documentation of proper abandonment
- Documentation of conversion to monitoring wells
- Easements and other necessary document(s), if necessary

Category (d): Monitoring/Assessment

Task 6: Groundwater Pumping Monitoring

Collect, compile, and manage all basin pumping data to ensure successful compliance with the pumping ramp down. Perform monthly meter reading and pumping calculations, annual meter accuracy testing, and collecting annual meter data from all new de-minimus pumping wells in accordance with Watermaster policy.

Deliverables:

- Annual monitoring summary reports
- Annual water rights accounting report

Task 7: Groundwater Level Monitoring

Implement a comprehensive groundwater-level monitoring program to track changes in Basin conditions (e.g., groundwater levels, storage, and flow directions) and the effectiveness of the Physical Solution. Perform semi-annual monitoring events to collect manual water level measurements and download pressure transducers with continuously-recording data-loggers; QA/QC and upload of data to Watermaster's Data Management System (DMS). Expand the monitoring program by: performing outreach efforts to the DWR, the Parties, and others to obtain cooperation from well owners in expanding the groundwater-level monitoring network; visiting wells in the field to assess suitability for monitoring, executing access agreements; and purchase and installation of up to fifteen new pressure transducers with continuously-recording data loggers.

Deliverables:

- Annual monitoring summary reports
- Data delivered to California Environmental Data Exchange Network (CEDEN), Groundwater Ambient Monitoring and Assessment Program (GAMA), and other platforms requested by DWR

Task 8: Groundwater Quality Monitoring

Implement a comprehensive groundwater-quality monitoring program to track changes in Basin conditions and evaluate the need for water quality optimization programs to achieve sustainability. Perform semi-annual monitoring events to collect water quality grab samples at wells. Analyze groundwater samples for constituents identified in the GMP, including arsenic, fluoride, nitrate, sulfate, TDS, and all other major anions and cations. Process data, following each field event, perform QA/QC, and load data to the Watermaster DMS. Prepare a Water-Quality Monitoring Plan (WQMP) to enhance the monitoring network and program.

Deliverables:

- Groundwater Quality Data delivered to CEDEN, GAMA, and other platforms requested by DWR
- Annual monitoring summary reports

- Draft and Final WQMP

Task 9: Surface Water Flow Monitoring

Implement a surface water monitoring program to collect data that can be used in the Borrego Valley Hydrologic Model (BVHM) to assess Basin recharge and the Sustainable Yield. Perform the surface-water discharge monitoring on Coyote Creek, as described in the GMP, and expand the surface-water discharge station, as described in Task 4.

Deliverables:

- Surface Water Flow Data delivered to CEDEN

Task 10: Maintain and enhance the Data Management System

Maintain and improve the Watermaster's Data Management System for efficient reporting in compliance with the Judgment and Grant requirements. Develop specific reporting tools to efficiently report data to CASGEM, CEDEN, GAMA, or other required platforms.

Deliverables:

- Technical Memo
- Data delivered to CASGEM, CEDEN, GAMA, and other platforms requested by DWR

Task 11: Annual Reporting to DWR and the Court

Prepare the combined annual report of Basin conditions and the Physical Solution implementation progress. Review a draft report, each year, at a public hearing to receive comments and the final report will be completed and submitted to the Court and DWR no later than April 1st following the end of the calendar year.

Deliverables:

- Draft and Final Annual Reports for Water Year 2021, 2022, 2023, and 2024

Task 12: Redetermination of the Sustainable Yield by 2025

Perform a comprehensive update the Basin's hydrologic model to support the redetermination of Sustainable Yield by 2025.

Deliverables:

- Draft and Final technical memorandum: Redetermination of the Sustainable Yield (WY 2022).
- Draft and Final technical memorandum: Redetermination of the Sustainable Yield (WY 2023).
- Draft and Final technical memorandum: Redetermination of the Sustainable Yield (WY 2024).

Task 13: Prepare the 2025 GMP Update

Prepare the 2025 GMP to include updates to current groundwater conditions, implementation progress on the pumping ramp down and other PMA's, evaluation and update of plan elements such as undesirable results, minimum thresholds, management areas, etc.; water budget review; sustainable yield update, description of the monitoring network and data gaps; new information; enforcement actions, stakeholder outreach and coordination efforts; and GMP amendments. Present the GMP update in a series of workshops for stakeholder input as part of the Watermaster's regular meeting process.

Deliverables:

- Draft and Final 2025 GMP

Category (e): Interested Parties Outreach/Education**Task 14: Stakeholder Outreach**

Facilitate public outreach and communications of Watermaster planned actions and provide a venue to receive public input prior to making Watermaster decisions. Conduct Board Meetings, TAC Meetings, Stakeholder Workshops and Open Houses, and maintain website.

Deliverables:

- Meeting Agendas and packets
- Meeting presentations
- Meeting summaries
- Stakeholder outreach materials.

COMPONENT 8: GROUNDWATER DEPENDENT ECOSYSTEM (GDE) IDENTIFICATION, ASSESSMENT, AND MONITORING

Component 8 will provide essential data to the Borrego Watermaster, water management planners and affected citizens of the Region during implementation of the Groundwater Management Plan for the Borrego Springs Sub Basin. Component 8 will focus on determining if those ecosystems that were once indisputably groundwater dependent, but at the present time may no longer be accessing groundwater due to declines in the water table over the past several decades. Component 8 will also analyze if the groundwater that supports the GDEs will be impacted by changes in the groundwater elevations. Impacts upon GDEs is a sustainability indicator identified in the Basins Groundwater Management Plan.

When considering the different data types that could be useful in determining connectivity of GDEs to the Subbasin aquifer, it has been found that remote sensing data beyond that already acquired and published did not contribute to a definitive dataset. It was concluded that in-situ data taken together was far more definitive, such as isotopic analysis, population and health surveys in very limited representative areas of the potential GDEs, along with direct measurement of groundwater and evapotranspiration conditions (temperature, humidity, precipitation, wind, and insolation). It is contemplated that the data generated by the Project will be of critical importance to the Borrego Watermaster and all its constituents: the Grantee, the Borrego Community at large, the agricultural community, the recreational community, and the County of San Diego. Therefore, integral to this Project is regular reporting of status and findings to the Grantee, the Borrego Watermaster, the WM's Environmental Working Group, the Department of Water Resources and interested stakeholders/ community members.

The reduction of the Mesquite Bosque near the Borrego sink is occurred in response to the lowering of the water table in the area. Component 8 will use the established method of comparing the isotopic signature of the groundwater the predominant isotopes found in the local plant. Several data sets will be captured to enable a calculation to determine if the plant assemblage and supported fauna at the proposed GDE could survive only with access to surface water. These data sets are: 1) a complete inventory of the plants and fauna in the potential GDE, 2) a water needs assessment of that plant assemblage found at the potential GDE, and 3) determining the availability of surface water at the potential GDE. If data from existing monitoring wells is found to be insufficient, a dual-nested monitoring well will be constructed near or within the Borrego Sink.

Category (a): Component Administration

Prepare reports detailing Component 8 work completed during reporting period as outlined in Exhibit F, "Report Formats and Requirements" of this Agreement, for inclusion in Component 1 Quarterly Progress Reports. Quarterly Progress Reports will include sufficient information for the DWR Grant Manager to understand and review backup documentation submitted with invoices. Quarterly invoices will accompany the Quarterly

Progress Reports. Collect and organize backup documentation by the Component 8 budget category and task and prepare a summary Excel document detailing contents of the backup documentation organized by task.

Prepare the Draft Component Completion Report and submit to the DWR Grant Manager for comment and review 90 days before the end date for Component 8 as outlined in Exhibit C. DWR's Grant Manager will review the Draft Component Completion Report and provide comments and edits within 30 days of receipt, when possible. Prepare a Final Component Completion Report addressing the DWR Grant Manager's comments within 30 days before the Component 8 end date outlined in Exhibit C. The report shall be prepared and presented in accordance with the provisions of Exhibit F, "Report Formats and Requirements" and approved by the DWR Grant Manager within 30 days after the end date. All deliverables listed within the Work Plan shall be submitted with the Final Component Completion Report unless a new deliverable due date was approved by the DWR Grant Manager.

Deliverables:

- Component reporting to be included in Quarterly Progress Reports and Invoices
- Draft and Final Component Completion Reports

Category (b): Environmental / Engineering / Design

Task 1: Prepare the GDE Monitoring Program Workplan

Prepare a GDE Evaluation and Monitoring Program Workplan with the GDE Scientific Implementation Subcommittee, the EWG, and the Watermaster Board. Review the technical work that supported the opinions/assertions regarding Subbasin GDE's in the GMP and noting the data gaps in the GMP.

Deliverables:

- Draft and Final versions of the GDE Evaluation and Monitoring Program Workplan

Task 2: Environmental Documentation/Permitting

Prepare the appropriate CEQA documentation for the Component and file the document(s) with the County Clerk's Office and State Clearinghouse as required. Prepare and submit an Initial Study for the Component. Complete the required CEQA documentation. Submit the CEQA document(s) to the DWR Grant Manager for review and concurrence prior to beginning construction activities. Prepare application(s) for and obtain required permit(s) to construct the Component. Obtain all required permits for the Component and submit copies to the DWR Grant Manager.

Construction may not begin and no costs for Category (c), Task 5 may be incurred until the State has reviewed the CEQA document(s), completed its CEQA responsible agency obligations and given its environmental clearance in accordance with Paragraphs 5 and D.8 of this Agreement. Any costs incurred for Category (c), Task 5 prior to DWR completing its responsible agency obligations shall not be reimbursed and any such amounts shall be deducted from the total Grant Amount in Paragraph 3.

Deliverables:

- Easements and other necessary document(s), if necessary
- Initial Study
- CEQA documentation, if necessary
- Copies of all required permits, if necessary

Task 3: Design Plans and Specifications

Complete the preliminary design plans and specifications for the Component along with the topographic survey, if needed. Develop the 50% design plans for the Component and submit them for review and concurrence prior to completing the final design plans and specifications. Prepare the 100% design plans and specifications in accordance with requirements for public bidding for construction, after review of the 50%

design plans. Submit the 100% design plans and specifications for review and concurrence prior to advertising the Component for bids.

Deliverables:

- 50% design plans and specifications
- 100% design plans and specifications

Category (c): Implementation / Construction

Task 4: Construction Management

Develop all necessary documents to secure a contractor(s) and submit to the DWR Grant Manager prior to advertising. Award the contract, submit the Notice of Award, and submit the Notice to Proceed to the DWR Grant Manager. Photo-document pre-construction conditions and weekly construction activities. Prepare any change orders, address contractor's onsite questions, review/update construction schedule, review contractor submittals and pay requests, and notify contractor if work is not acceptable. Finalize record drawings and submit the as-built drawings to DWR's Grant Manager. Construct the Component per the final design plans and specifications and outlined in the awarded contract(s). Conduct an inspection of the completed Component by a licensed professional and submit a Certification of Completion letter from the licensed professional to ensure the Component was constructed per the 100% design plans and specifications and that the Component will provide the benefits claimed.

Deliverables:

- Proof of bid advertisement
- Notice of Award
- Notice to Proceed
- Bid document(s)
- Photo-documentation of pre-, during, and post-construction activities included within the appropriate quarterly Progress Reports
- Notice of Completion
- As-built drawings
- Site inspection letter or report

Task 5: Drill Monitoring Well

Analyze and identify data gaps identified in the GMP and the GDE Evaluation and Monitoring Program Workplan to fill. Construct and equip one (1) dual-nested monitoring well near or within the Borrego sink, if necessary.

Deliverables:

- Draft and Final technical specifications for a monitoring well
- Contractor bid documents
- Monitoring Well completion report.

Category (d): Monitoring / Assessment

Task 6: Update the mapping and characterization of the historical GDE's

Update Maps of the extent and health of the potential GDE's in the Subbasin and in Clark Dry Lake using ground-based assessment/mapping techniques.

Deliverables:

- Technical Memorandum/Public Report to document results and conclusions

Task 7: Fill Data Gaps

Measure plant use from different water sources by analyzing the stable isotope abundance in water held within plant tissues. Create an inventory of the plant species in and around the Mesquite Bosque by performing database searches of the San Diego Herbarium and iNaturalists (iNat). Perform iNat training for volunteer botanists to help identify plants in the Mesquite Bosque. Create a water needs assessment of the plant assemblage identified and cataloged. Analyze existing climate monitoring data, including soil moisture, to create an understanding of the surface water available to the extant plant assemblage at the mesquite bosque.

Deliverables:

- Draft and Final Technical Memo to document investigations and technical work

Task 8: Prepare GDE Monitoring Program Report and Recommendations

Provide recommendations to the Watermaster Board for revisions to the GMP to protect the environmental beneficial uses of groundwater pursuant to the requirements of SGMA, if the monitoring program indicates that GDE(s) are dependent on the regional aquifer within the Subbasin.

Deliverables:

- Draft and Final GDE Monitoring Program Report and Recommendations

Category (e): Interested Parties Outreach / Education**Task 9: Stakeholder Meetings and Outreach**

Facilitate public outreach and communications of the EWG and Scientific Implementation Subcommittee planned actions and provide a venue to receive public input prior to making decisions and recommendations to the Watermaster Board. Recruit and/or employ local interns and volunteers to assist in implementation of the monitoring program.

Deliverables:

- Meeting agendas/packets
- PowerPoint presentations
- Summary meeting notes and memorandums with recommendations to the Watermaster Board

BUDGET**Grant Title: Implementation Project for the Borrego Springs Subbasin****Grantee: Borrego Water District**

Components	Grant Amount
Component 1: Grant Administration	\$250,000
Component 2: Advanced Meter Infrastructure	\$1,300,000
Component 3: Wastewater Treatment Plant Monitoring Wells	\$206,500
Component 4: Education Project	\$384,000
Component 5: Resiliency Strategy	\$200,000
Component 6: Biological Restoration of Fallowed Lands	\$755,340
Component 7: Monitoring, Reporting, and GMP Update	\$1,983,250
Component 8: GDE Identification, Assessment, & Monitoring	\$1,036,743
Total:	\$6,115,833

Component 1: Grant Administration

Component serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Grant Agreement Administration	\$250,000
Total:	\$250,000

Component 2: Advanced Meter Infrastructure

Component 2 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$50,000

(b) Environmental / Engineering / Design	\$75,000
(c) Implementation / Construction	\$1,145,000
(d) Monitoring / Assessment	\$0
(e) Engagement / Outreach	\$30,000
Total:	\$1,300,000

Component 3: Wastewater Treatment Plant Monitoring Wells

Component 3 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$10,000
(b) Environmental / Engineering / Design	\$19,000
(c) Implementation / Construction	\$141,000
(d) Monitoring / Assessment	\$33,500
(e) Engagement / Outreach	\$3,000
Total:	\$206,500

Component 4: Education Project

Component 4 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$38,400
(b) Environmental / Engineering / Design	\$286,600
(c) Implementation / Construction	\$50,000
(d) Monitoring / Assessment	\$1,000
(e) Engagement / Outreach	\$8,000

Total:	\$384,000
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Component 5: Resiliency Strategy

Component 5 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$20,000
(b) Environmental / Engineering / Design	\$30,000
(c) Implementation / Construction	\$55,000
(d) Monitoring / Assessment	\$0
(e) Engagement / Outreach	\$95,000
Total:	\$200,000

Component 6: Biological Restoration of Fallowed Lands

Component 6 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$50,000
(b) Environmental / Engineering / Design	\$0
(c) Implementation / Construction	\$0
(d) Monitoring / Assessment	\$655,340
(e) Engagement / Outreach	\$50,000
Total:	\$755,340

Component 7: Monitoring Reporting, and GMP Update

Component 7 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$137,000
(b) Environmental / Engineering / Design	\$50,000
(c) Implementation / Construction	\$379,000
(d) Monitoring / Assessment	\$1,167,250
(e) Engagement / Outreach	\$250,000
Total:	\$1,983,250

Component 8: GDE Identification, Assessment, & Monitoring

Component 8 serves a need of a DAC, SDAC, Tribe and/or Underrepresented Community?

(check all that apply): DAC, SDAC, Tribe, and/or Underrepresented Community

Budget Categories	Grant Amount
(a) Component Administration	\$25,286
(b) Environmental / Engineering / Design	\$116,007
(c) Implementation / Construction	\$55,354
(d) Monitoring / Assessment	\$684,618
(e) Engagement / Outreach	\$155,477
Total:	\$1,036,741

**Exhibit C
SCHEDULE**

Grant Title: Implementation Project for the Borrego Springs Subbasin

Categories	Start Date ¹	End Date ¹
Component 1: Grant Agreement Administration		
(a) Grant Agreement Administration	1/1/2022	3/31/2025
Component 2: Advanced Meter Infrastructure		
(a) Grant Agreement Administration	1/1/2022	12/31/2024
(b) Environmental / Engineering / Design	7/30/2022	3/29/2023
(c) Implementation / Construction	3/30/2023	3/30/2025
(d) Monitoring / Assessment	N/A	N/A
(e) Education / Outreach	N/A	N/A
Component 3: Wastewater Treatment Plant Monitoring Well		
(a) Grant Agreement Administration	1/1/2022	6/1/2023
(b) Environmental / Engineering / Design	1/1/2022	10/30/2022
(c) Implementation / Construction	11/1/2022	11/1/2024
(d) Monitoring / Assessment	12/1/2024	12/01/2025
(e) Education / Outreach	N/A	N/A
Component 4: Education Project		
(a) Grant Agreement Administration	7/1/2022	3/31/2025
(b) Environmental / Engineering / Design	7/30/2022	12/31/2022
(c) Implementation / Construction	1/1/2023	6/30/2024
(d) Monitoring / Assessment	7/1/2025	12/1/2025
(e) Education / Outreach	7/30/2022	6/30/2024
Component 5: Resiliency Strategy		
(a) Grant Agreement Administration	4/1/2022	6/30/2024
(b) Environmental / Engineering / Design	7/30/2022	7/30/2023
(c) Implementation / Construction	8/1/2023	6/30/2025
(d) Monitoring / Assessment	7/30/2025	12/1/2025
(e) Education / Outreach	7/30/2022	6/30/2025

Categories	Start Date ¹	End Date ¹
Component 1: Grant Agreement Administration		
Component 6: Biological Restoration of Fallowed Lands		
(a) Grant Agreement Administration	7/1/2022	3/31/2025
(b) Environmental / Engineering / Design	N/A	N/A
(c) Implementation / Construction	N/A	N/A
(d) Monitoring / Assessment	7/1/2022	3/31/2025
(e) Education / Outreach	7/1/2022	3/31/2025
Component 7: Monitoring, Reporting, and GMP Update		
(a) Grant Agreement Administration	1/1/2022	3/31/2025
(b) Environmental / Engineering / Design	8/1/2022	3/31/2025
(c) Implementation / Construction	4/1/2023	3/31/2025
(d) Monitoring / Assessment	6/30/2025	3/31/2025
(e) Education / Outreach	6/1/2022	3/31/2025
Component 8: GDE Identification, Assessment, & Monitoring		
(a) Grant Agreement Administration	1/1/2022	03/31/2025
(b) Environmental / Engineering / Design	8/1/2022	12/1/2022
(c) Implementation / Construction	12/1/2022	2/1/2024
(d) Monitoring / Assessment	2/1/2024	3/31/2025
(e) Education / Outreach	8/1/2022	3/31/2025

NOTES:

¹Exhibit C Schedule only dictates the work start date and the work end date for the Budget Category listed. The Grantee must adhere to the Deliverable Due Date Schedule that has been approved by the DWR Grant Manager. The dates listed in Exhibit C Schedule are date ranges that correlates to the Deliverable Due Date Schedule. Eligible costs for each line item will only be approved if the work completed falls within the date ranges listed in Exhibit C.

Exhibit D**STANDARD CONDITIONS****D.1. ACCOUNTING AND DEPOSIT OF FUNDING DISBURSEMENT:**

- A. **Separate Accounting of Funding Disbursements:** the Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. The Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. The Grantee shall keep complete and accurate records of all receipts and disbursements on expenditures of such funds. The Grantee shall require its contractors or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by the State at any and all reasonable times.
- B. **Disposition of Money Disbursed:** All money disbursed pursuant to this Grant Agreement shall be deposited in a non-interest bearing account, administered, and accounted for pursuant to the provisions of applicable law.
- C. **Remittance of Unexpended Funds:** The Grantee shall remit to the State any unexpended funds that were disbursed to the Grantee under this Grant Agreement and were not used to pay Eligible Project Costs within a period of sixty (60) calendar days from the final disbursement from the State to the Grantee of funds or, within thirty (30) calendar days of the expiration of the Grant Agreement, whichever comes first.

D.2. ACKNOWLEDGEMENT OF CREDIT AND SIGNAGE: The Grantee shall include appropriate acknowledgement of credit to the State for its support when promoting the Project or using any data and/or information developed under this Grant Agreement. Signage shall be posted in a prominent location at Project site(s) (if applicable) or at the Grantee's headquarters and shall include the Department of Water Resources color logo and the following disclosure statement: "Funding for this project has been provided in full or in part from the Budget Act of 2021 and through an agreement with the State Department of Water Resources." The Grantee shall also include in each of its contracts for work under this Agreement a provision that incorporates the requirements stated within this paragraph.

D.3. AMENDMENT: This Grant Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Grantee for amendments must be in writing stating the amendment request and the reason for the request. Requests solely for a time extension must be submitted at least 90 days prior to the work completion date set forth in Paragraph 2, "Term of Grant Agreement." Any other request for an amendment must be submitted at least 180 days prior to the work completion date set forth in Paragraph 2, "Term of Grant Agreement." The State shall have no obligation to agree to an amendment.

D.4. AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, the Grantee assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.5. AUDITS: The State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of the Project, with the costs of such audit borne by the State. After completion of the Project, the State may require the Grantee to conduct a final audit to the State's specifications, at the Grantee's expense, such audit to be conducted by and a report prepared by an independent Certified Public Accountant. Failure or refusal by the Grantee to comply with this provision

shall be considered a breach of this Grant Agreement, and the State may elect to pursue any remedies provided in Paragraph 10, "Default Provisions" or take any other action it deems necessary to protect its interests. The Grantee agrees it shall return any audit disallowances to the State.

Pursuant to Government Code section 8546.7, the Grantee shall be subject to the examination and audit by the State for a period of three (3) years after final payment under this Grant Agreement with respect of all matters connected with this Grant Agreement, including but not limited to, the cost of administering this Grant Agreement. All records of the Grantee or its contractor or subcontractors shall be preserved for this purpose for at least three (3) years after receipt of the final disbursement under this Agreement. If an audit reveals any impropriety, the Bureau of State Audits or the State Controller's Office may conduct a full audit of any or all of the Grantee's activities. (Pub. Resources Code, § 80012, subd. (b).)

- D.6. BUDGET CONTINGENCY: If the Budget Act of the current year covered under this Grant Agreement does not appropriate sufficient funds for this program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of the State to make any payments under this Grant Agreement. In this event, the State shall have no liability to pay any funds whatsoever to the Grantee or to furnish any other considerations under this Grant Agreement and the Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide the Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year after the current year covered by this Grant Agreement is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Grant Agreement with no liability occurring to the State, or offer a Grant Agreement amendment to the Grantee to reflect the reduced amount.
- D.7. CALIFORNIA CONSERVATION CORPS: The Grantee may use the services of the California Conservation Corps or other community conservation corps as defined in Public Resources Code section 14507.5.
- D.8. CEQA: Activities funded under this Grant Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA). (Pub. Resources Code, § 21000 et seq.) Any work that is subject to CEQA and funded under this Agreement shall not proceed until documents that satisfy the CEQA process are received by the DWR Grant Manager and the State has completed its CEQA compliance. Work funded under this Agreement that is subject to a CEQA document shall not proceed until and unless approved by the Department of Water Resources. Such approval is fully discretionary and shall constitute a condition precedent to any work for which it is required. If CEQA compliance by the Grantee is not complete at the time the State signs this Agreement, once the State has considered the environmental documents, it may decide to require changes, alterations, or other mitigation to the Project; or to not fund the Project. Should the State decide to not fund the Project, this Agreement shall be terminated in accordance with Paragraph 10, "Default Provisions."
- D.9. CHILD SUPPORT COMPLIANCE ACT: The Grantee acknowledges in accordance with Public Contract Code section 7110, that:
- A. The Grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Family Code section 5200 et seq.; and
 - B. The Grantee, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.
- D.10. CLAIMS DISPUTE: Any claim that the Grantee may have regarding performance of this Agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the DWR Project Representative, within thirty (30) days of the Grantee's knowledge of the claim. The

State and the Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to this Agreement to implement the terms of any such resolution.

- D.11. COMPETITIVE BIDDING AND PROCUREMENTS: The Grantee's contracts with other entities for the acquisition of goods and services and construction of public works with funds provided by the State under this Grant Agreement must be in writing and shall comply with all applicable laws and regulations regarding the securing of competitive bids and undertaking competitive negotiations. If the Grantee does not have a written policy to award contracts through a competitive bidding or sole source process, the Department of General Services' *State Contracting Manual* rules must be followed and are available at: <https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/State-Contracting>.
- D.12. COMPUTER SOFTWARE: The Grantee certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.
- D.13. CONFLICT OF INTEREST: All participants are subject to State and Federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code section 1090 and Public Contract Code sections 10410 and 10411, for State conflict of interest requirements.
- A. Current State Employees: No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
 - B. Former State Employees: For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.
 - C. Employees of the Grantee shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act. (Gov. Code, § 87100 et seq.)
 - D. Employees and Consultants to the Grantee: Individuals working on behalf of a Grantee may be required by the Department to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.
- D.14. DELIVERY OF INFORMATION, REPORTS, AND DATA: The Grantee agrees to expeditiously provide throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by the State.
- D.15. DISPOSITION OF EQUIPMENT: The Grantee shall provide to the State, not less than 30 calendar days prior to submission of the final invoice, an itemized inventory of equipment purchased with funds provided by the State. The inventory shall include all items with a current estimated fair market value of more than \$5,000.00 per item. Within 60 calendar days of receipt of such inventory the State shall provide the Grantee with a list of the items on the inventory that the State will take title to. All other items shall become the property of the Grantee. The State shall arrange for delivery from the Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by the State.

- D.16. **DRUG-FREE WORKPLACE CERTIFICATION:** Certification of Compliance: By signing this Grant Agreement, the Grantee, its contractors or subcontractors hereby certify, under penalty of perjury under the laws of the State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Gov. Code, § 8350 et seq.) and have or will provide a drug-free workplace by taking the following actions:
- A. Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code section 8355.
 - B. Establish a Drug-Free Awareness Program, as required by Government Code section 8355 to inform employees, contractors, or subcontractors about all of the following:
 - i. The dangers of drug abuse in the workplace,
 - ii. The Grantee's policy of maintaining a drug-free workplace,
 - iii. Any available counseling, rehabilitation, and employee assistance programs, and
 - iv. Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.
 - C. Provide, as required by Government Code section 8355, that every employee, contractor, and/or subcontractor who works under this Grant Agreement:
 - i. Will receive a copy of the Grantee's drug-free policy statement, and
 - ii. Will agree to abide by terms of the Grantee's condition of employment, contract or subcontract.
- D.17. **EASEMENTS:** Where the Grantee acquires property in fee title or funds improvements to real property already owned in fee by the Grantee using State funds provided through this Grant Agreement, an appropriate easement or other title restriction shall be provided and approved by the State. The easement or other title restriction must be in first position ahead of any recorded mortgage or lien on the property unless this requirement is waived by the State.
- Where the Grantee acquires an easement under this Agreement, the Grantee agrees to monitor and enforce the terms of the easement, unless the easement is subsequently transferred to another land management or conservation organization or entity with State permission, at which time monitoring and enforcement responsibilities will transfer to the new easement owner.
- Failure to provide an easement acceptable to the State may result in termination of this Agreement.
- D.18. **FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED CIVIL ENGINEER:** Upon completion of the Project, the Grantee shall provide for a final inspection and certification by a California Registered Civil Engineer that the Project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement.
- D.19. **GRANTEE'S RESPONSIBILITIES:** The Grantee and its representatives shall:
- A. Faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A, "Work Plan" and in accordance with Project Exhibit B, "Budget" and Exhibit C, "Schedule".
 - B. Must maintain eligibility requirements as outlined in the 2021 Guidelines and 2021 PSP and pursuant to Paragraph 11.
 - C. Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by the Grantee in the application, documents, amendments, and communications filed in support of its request for funding.
 - D. Comply with all applicable California, federal, and local laws and regulations.

- E. Implement the Project in accordance with applicable provisions of the law.
 - F. Fulfill its obligations under the Grant Agreement and be responsible for the performance of the Project.
 - G. Obtain any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of the Project. The Grantee shall provide copies of permits and approvals to the State.
 - H. Be solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by the State is solely for the purpose of proper administration of funds by the State and shall not be deemed to relieve or restrict responsibilities of the Grantee under this Agreement.
 - I. Be solely responsible for all work and for persons or entities engaged in work performed pursuant to this Agreement, including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Grantee shall be responsible for any and all disputes arising out of its contracts for work on the Project, including but not limited to payment disputes with contractors and subcontractors. The State will not mediate disputes between the Grantee and any other entity concerning responsibility for performance of work.
- D.20. GOVERNING LAW: This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.
- D.21. INCOME RESTRICTIONS: The Grantee agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Grantee under this Agreement shall be paid by the Grantee to the State, to the extent that they are properly allocable to costs for which the Grantee has been reimbursed by the State under this Agreement. The Grantee shall also include in each of its contracts for work under this Agreement a provision that incorporates the requirements stated within this paragraph.
- D.22. INDEMNIFICATION: The Grantee shall indemnify and hold and save the State, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Project and this Agreement, and any breach of this Agreement. The Grantee shall require its contractors or subcontractors to name the State, its officers, agents and employees as additional insureds on their liability insurance for activities undertaken pursuant to this Agreement.
- D.23. INDEPENDENT CAPACITY: The Grantee, and the agents and employees of the Grantees, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.
- D.24. INSPECTION OF BOOKS, RECORDS, AND REPORTS: During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by the Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and the State may withhold disbursements to the Grantee or take any other action it deems necessary to protect its interests.
- D.25. INSPECTIONS OF PROJECT BY STATE: The State shall have the right to inspect the work being performed at any and all reasonable times during the term of the Grant Agreement. This right shall extend to any subcontracts, and the Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with the State.
- D.26. LABOR CODE COMPLIANCE: The Grantee agrees to be bound by all the provisions of the Labor Code regarding prevailing wages and shall monitor all contracts subject to reimbursement from this Agreement to assure that the prevailing wage provisions of the Labor Code are being met. Current

Department of Industrial Relations (DIR) requirements may be found at: <http://www.dir.ca.gov/lcp.asp>. For more information, please refer to DIR's *Public Works Manual* at: <http://www.dir.ca.gov/dlse/PWManualCombined.pdf>. The Grantee affirms that it is aware of the provisions of section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance, and the Grantee affirms that it will comply with such provisions before commencing the performance of the work under this Agreement and will make its contractors and subcontractors aware of this provision.

- D.27. **MODIFICATION OF OVERALL WORK PLAN:** At the request of the Funding Recipient, the State may at its sole discretion approve non-material changes to the portions of Exhibits A, B, and C which concern the budget and schedule without formally amending this Funding Agreement (Level I – Informal). Non-material changes with respect to work plan are changes that help clarify the original language, addition of task without deleting others, and minor edits that will not result in change to the original scope. Non-material changes with respect to the budget are changes that only result in reallocation of the budget and will not result in an increase in the amount of the State Funding Agreement. Non-material changes with respect to the Project schedule are changes that will not extend the term of this Funding Agreement. Requests for non-material changes to the budget and schedule must be submitted by the Funding Recipient to the State in writing and are not effective unless and until specifically approved by the State's Program Manager in writing.
- D.28. **NONDISCRIMINATION:** During the performance of this Grant Agreement, the Grantee and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual orientation, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital status, and denial of medial and family care leave or pregnancy disability leave. The Grantee and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. The Grantee and its contractors or subcontractors shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code, § 12990.) and the applicable regulations promulgated there under (Cal. Code Regs., tit. 2, § 11000 et seq.). The applicable regulations of the Fair Employment and Housing are incorporated into this Agreement by reference. The Grantee and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- The Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Grant Agreement.
- D.29. **OPINIONS AND DETERMINATIONS:** Where the terms of this Grant Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.
- D.30. **PERFORMANCE BOND:** Where contractors are used, the Grantee shall not authorize construction to begin until each contractor has furnished a performance bond in favor of the Grantee in the following amounts: faithful performance (100%) of contract value, and labor and materials (100%) of contract value. This requirement shall not apply to any contract for less than \$25,000.00. Any bond issued pursuant to this paragraph must be issued by a California-admitted surety. (Pub. Contract Code, § 7103; Code Civ. Proc., § 995.311.)
- D.31. **PRIORITY HIRING CONSIDERATIONS:** If this Grant Agreement includes services in excess of \$200,000, the Grantee shall give priority consideration in filling vacancies in positions funded by the Grant Agreement to qualified recipients of aid under Welfare and Institutions Code section 11200 in accordance with Public Contract Code section 10353.

- D.32. PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION: The Grantee shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Project, or with the Grantee's service of water, without prior permission of the State. The Grantee shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of the Grantee meet its obligations under this Grant Agreement, without prior written permission of the State. The State may require that the proceeds from the disposition of any real or personal property be remitted to the State.
- D.33. PROJECT ACCESS: The Grantee shall ensure that the State, the Governor of the State, or any authorized representative of the foregoing, will have safe and suitable access to the Project site at all reasonable times during Project construction and thereafter for the term of this Agreement.
- D.34. REMAINING BALANCE: In the event the Grantee does not submit invoices requesting all of the funds encumbered under this Grant Agreement, any remaining funds revert to the State. The State will notify the Grantee stating that the Project file is closed and any remaining balance will be disencumbered and unavailable for further use under this Grant Agreement.
- D.35. REMEDIES NOT EXCLUSIVE: The use by either party of any remedy specified herein for the enforcement of this Grant Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.
- D.36. RETENTION: The State shall withhold ten percent (10%) of the funds requested by the Grantee for reimbursement of Eligible Project Costs until the Project is completed and Final Report is approved. Any retained amounts due to the Grantee will be promptly disbursed to the Grantee, without interest, upon completion of the Project.
- D.37. RIGHTS IN DATA: The Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Grant Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act. (Gov. Code, § 6250 et seq.) The Grantee may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to the State for financial support. The Grantee shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.
- D.38. SEVERABILITY: Should any portion of this Grant Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Grant Agreement shall continue as modified.
- D.39. SUSPENSION OF PAYMENTS: This Grant Agreement may be subject to suspension of payments or termination, or both if the State determines that:
- A. The Grantee, its contractors, or subcontractors have made a false certification, or
 - B. The Grantee, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted in this Grant Agreement.
- D.40. SUCCESSORS AND ASSIGNS: This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant Agreement or any part thereof, rights hereunder, or interest herein by the Grantee shall be valid unless and until it is approved by the State and made subject to such reasonable terms and conditions as the State may impose.
- D.41. TERMINATION BY THE GRANTEE: Subject to State approval which may be reasonably withheld, the Grantee may terminate this Agreement and be relieved of contractual obligations. In doing so, the Grantee must provide a reason(s) for termination. The Grantee must submit all progress reports summarizing accomplishments up until termination date.

- D.42. TERMINATION FOR CAUSE: Subject to the right to cure under Paragraph 10, "Default Provisions," the State may terminate this Grant Agreement and be relieved of any payments should the Grantee fail to perform the requirements of this Grant Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 10, "Default Provisions."
- D.43. TERMINATION WITHOUT CAUSE: The State may terminate this Agreement without cause on 30 days' advance written notice. The Grantee shall be reimbursed for all reasonable expenses incurred up to the date of termination.
- D.44. THIRD PARTY BENEFICIARIES: The parties to this Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or any duty, covenant, obligation or understanding established herein.
- D.45. TIMELINESS: Time is of the essence in this Grant Agreement.
- D.46. UNION ORGANIZING: The Grantee, by signing this Grant Agreement, hereby acknowledges the applicability of Government Code sections 16645 through 16649 to this Grant Agreement. Furthermore, the Grantee, by signing this Grant Agreement, hereby certifies that:
- A. No State funds disbursed by this Grant Agreement will be used to assist, promote, or deter union organizing.
 - B. The Grantee shall account for State funds disbursed for a specific expenditure by this Grant Agreement to show those funds were allocated to that expenditure.
 - C. The Grantee shall, where State funds are not designated as described in (b) above, allocate, on a pro rata basis, all disbursements that support the program.
 - D. If the Grantee makes expenditures to assist, promote, or deter union organizing, the Grantee will maintain records sufficient to show that no State funds were used for those expenditures and that the Grantee shall provide those records to the Attorney General upon request.
- D.47. VENUE: The State and the Grantee hereby agree that any action arising out of this Agreement shall be filed and maintained in the Superior Court in and for the County of Sacramento, California, or in the United States District Court in and for the Eastern District of California. The Grantee hereby waives any existing sovereign immunity for the purposes of this Agreement.
- D.48. WAIVER OF RIGHTS: None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

Exhibit E
AUTHORIZING RESOLUTION ACCEPTING FUNDS

RESOLUTION 2022-01-02
AUTHORIZING THE FILING OF GRANT APPLICATION TO THE CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Resolved by the Borrego Water District Board of Directors, that an application be made to the California Department of Water Resources to obtain a grant under the 2021 Sustainable Groundwater Management (SGM) Grant Program SGMA Implementation Round Grant pursuant to the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 (Proposition 68) (Pub. Resource Code, § 80000 et seq.) and the California Budget Act of 2021 (Stats. 2021, ch. 240, § 80) and to enter into an agreement to receive a grant for the Implementation Project for the Borrego Springs Sub Basin. The General Manager, or designee, is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement and any future amendments (if required), submit invoices, and submit any reporting requirements with the California Department of Water Resources.

ADOPTED, SIGNED AND APPROVED this 18th day of January, 2022.



Kathy Dice
President Of The Board of Directors
Of Borrego Water District

ATTEST:



Dave Duncan
Secretary of the Board Of Directors
Of Borrego Water District

PASSED AND ADOPTED by said Board on this 18th day of January, 2022 by the following vote:

AYES: Dice, Baker, Rosenboom, Johnson, and Duncan
NOES:
ABSENT:
ABSTAIN:

STATE OF CALIFORNIA)
)
COUNTY OF SAN DIEGO)

I, Dave Duncan, Secretary of the Board of Directors of the Borrego Water District, do hereby certify that the foregoing is a true and correct copy of a resolution passed and adopted by the Board of Directors of the Borrego Water District at a meeting of said Board held on the 18th day of January 2022.



Dave Duncan
Secretary Of The Board Of Directors
Of The Borrego Water District



Exhibit F

REPORT FORMATS AND REQUIREMENTS

The following reporting formats should be utilized. Please obtain State approval prior to submitting a report in an alternative format.

1. QUARTERLY PROGRESS REPORTS

A Quarterly Progress Report template will be provided by the DWR Grant Manager. Grantees must use the template provided for all Quarterly Progress Reports to obtain reimbursement reported. The Quarterly Progress Report must accompany an Invoice and be numbered the same for ease of reference for auditing purposes. In addition, the reporting period for the Quarterly Progress Report must also align with the corresponding quarterly Invoice.

2. COMPONENT COMPLETION REPORT

Component Completion Reports shall generally use the following format. This report should summarize all work completed as part of this grant.. This is standalone document and should not reference other documents or websites. Web links are edited or removed over time. These grants can be audited several years after they are closed. Therefore, links are not appropriate to include in the close out reports.

EXECUTIVE SUMMARY – Should include a brief summary of project information and include the following items:

- Brief description of work proposed to be done in the original application
- Description of actual work completed and any deviations from the work plan identified in the Grant Agreement

REPORTS AND/OR PRODUCTS – The following items should be provided

- Final Evaluation report
- Electronic copies of any data collected, not previously submitted
- As-built drawings
- Final geodetic survey information
- Self-Certification that the Project meets the stated goal of the Grant Agreement (e.g. 100-year level of flood protection, HMP standard, PI-84-99, etc.)
- Project photos
- Discussion of problems that occurred during the work and how those problems were resolved
- A final project schedule showing actual progress versus planned progress

COSTS AND DISPOSITION OF FUNDS – A list of showing:

- The date each invoice was submitted to the State
- The amount of the invoice
- The date the check was received
- The amount of the check (If a check has not been received for the final invoice, then state this in this section.)
- A summary of the payments made by the Grantee for meeting its cost sharing obligations under this Grant Agreement.
- A summary of final funds disbursement including:
 - Labor cost of personnel of agency/ major consultant /sub-consultants. Indicate personnel, hours, rates, type of profession and reason for consultant, i.e., design, CEQA work, etc.
 - Evaluation cost information, shown by material, equipment, labor costs, and any change orders

- Any other incurred cost detail
- A statement verifying separate accounting of funding disbursements
- Summary of project cost including the following items:
 - Accounting of the cost of project expenditure;
 - Include all internal and external costs not previously disclosed; and
 - A discussion of factors that positively or negatively affected the project cost and any deviation from the original project cost estimate.

ADDITIONAL INFORMATION – Any relevant additional Information should be included.

3. GRANT COMPLETION REPORT

The Grant Completion Report shall generally use the following format. This report should summarize all work completed as part of this grant.. This is standalone document and should not reference other documents or websites. Web links are edited or removed over time. These grants can be audited several years after they are closed. Therefore, links are not appropriate to include in the close out reports.

- Executive Summary: consisting of a maximum of ten (10) pages summarizing information for the grant as well as the individual projects.
- Brief discussion whether the level, type, or magnitude of benefits of each project are comparable to the original project proposal; any remaining work to be completed and mechanism for their implementation; and a summary of final funds disbursement for each project.

Additional Information: Summary of the submittal schedule for the Post Performance Reports applicable for the projects in this Grant Agreement.

4. POST-PERFORMANCE REPORT

The Post Performance Report (PPR) should be concise and focus on how each project is performing compared to its expected performance. The PPR should be following the Methodology Report for the specific project type(s) provided by the DWR Grant Manager. The PPR should identify whether the project is being operated and maintained. DWR requirements is for all funded projects should be maintained and operated for a minimum of 15 years. If the project is not being maintained and operated, justification must be provided. A PPR template may be provided by the assigned DWR Grant Manager upon request. The PPR should follow the general format of the template and provide requested information as applicable. The following information, at a minimum, shall be provided:

Reports and/or products

- Header including the following:
 - Grantee Name
 - Implementing Agency (if different from Grantee)
 - Grant Agreement Number
 - Project Name
 - Funding grant source
 - Report number
- Post Performance Report schedule
- Time period of the annual report (e.g., January 2018 through December 2018)
- Project Description Summary
- Discussion of the project benefits
- An assessment of any differences between the expected versus actual project benefits as stated in the original application. Where applicable, the reporting should include quantitative metrics (e.g., new acre-feet of water produced that year, etc.).
- Summary of any additional costs and/or benefits deriving from the project since its completion, if applicable.

- Any additional information relevant to or generated by the continued operation of the project.

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Exhibit G

REQUIREMENTS FOR DATA SUBMITTAL

Surface and Groundwater Quality Data:

Groundwater quality and ambient surface water quality monitoring data that include chemical, physical, or biological data shall be submitted to the State as described below, with a narrative description of data submittal activities included in project reports, as described in Exhibit G, "Requirements for Data Submittal."

Surface water quality monitoring data shall be prepared for submission to the California Environmental Data Exchange Network (CEDEN). The CEDEN data templates are available on the CEDEN website. Inclusion of additional data elements described on the data templates is desirable. Data ready for submission should be uploaded to your CEDEN Regional Data Center via the CEDEN website. CEDEN website: <http://www.ceden.org>.

If a project's Work Plan contains a groundwater ambient monitoring element, groundwater quality monitoring data shall be submitted to the State for inclusion in the State Water Resources Control Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program. Information on the GAMA Program can be obtained at: https://www.waterboards.ca.gov/water_issues/programs/gama/. If further information is required, the Grantee can contact the State Water Resources Control Board (SWRCB) GAMA Program. A listing of SWRCB staff involved in the GAMA program can be found at: https://www.waterboards.ca.gov/water_issues/programs/gama/contact.shtml.

Groundwater Level Data

For each project that collects groundwater level data, the Grantee will need to submit this data to DWR's Water Data Library (WDL), with a narrative description of data submittal activities included in project reports, as described in Exhibit F, "Report Formats and Requirements." Information regarding the WDL and in what format to submit data in can be found at: <http://www.water.ca.gov/waterdatalibrary/>.

Exhibit H

STATE AUDIT DOCUMENT REQUIREMENTS

The following provides a list of documents typically required by State Auditors and general guidelines for Grantees. List of documents pertains to both State funding and the Grantee's Local Cost Share and details the documents/records that State Auditors would need to review in the event of this Grant Agreement is audited. Grantees should ensure that such records are maintained for each funded project.

State Audit Document Requirements

Internal Controls

1. Organization chart (e.g., Agency's overall organization chart and organization chart for the State funded Program/Project).
2. Written internal procedures and flowcharts for the following:
 - a) Receipts and deposits
 - b) Disbursements
 - c) State reimbursement requests
 - d) Expenditure tracking of State funds
 - e) Guidelines, policy, and procedures on State funded Program/Project
3. Audit reports of the Agency internal control structure and/or financial statements within the last two years.
4. Prior audit reports on the State funded Program/Project.

State Funding:

1. Original Grant Agreement, any amendment(s) and budget modification documents.
2. A listing of all bond-funded grants, loans, or subventions received from the State.
3. A listing of all other funding sources for each Program/Project.

Contracts:

1. All subcontractor and consultant contracts and related or partners' documents, if applicable.
2. Contracts between the Agency and member agencies as related to the State funded Program/Project.

Invoices:

1. Invoices from vendors and subcontractors for expenditures submitted to the State for payments under the Grant Agreement.
2. Documentation linking subcontractor invoices to State reimbursement, requests and related Grant Agreement budget line items.
3. Reimbursement requests submitted to the State for the Grant Agreement.

Cash Documents:

1. Receipts (copies of warrants) showing payments received from the State.
2. Deposit slips (or bank statements) showing deposit of the payments received from the State.
3. Cancelled checks or disbursement documents showing payments made to vendors, subcontractors, consultants, and/or agents under the grants or loans.
4. Bank statements showing the deposit of the receipts.

Accounting Records:

1. Ledgers showing entries for funding receipts and cash disbursements.
2. Ledgers showing receipts and cash disbursement entries of other funding sources.
3. Bridging documents that tie the general ledger to requests for Grant Agreement reimbursement.

Administration Costs:

1. Supporting documents showing the calculation of administration costs.

Personnel:

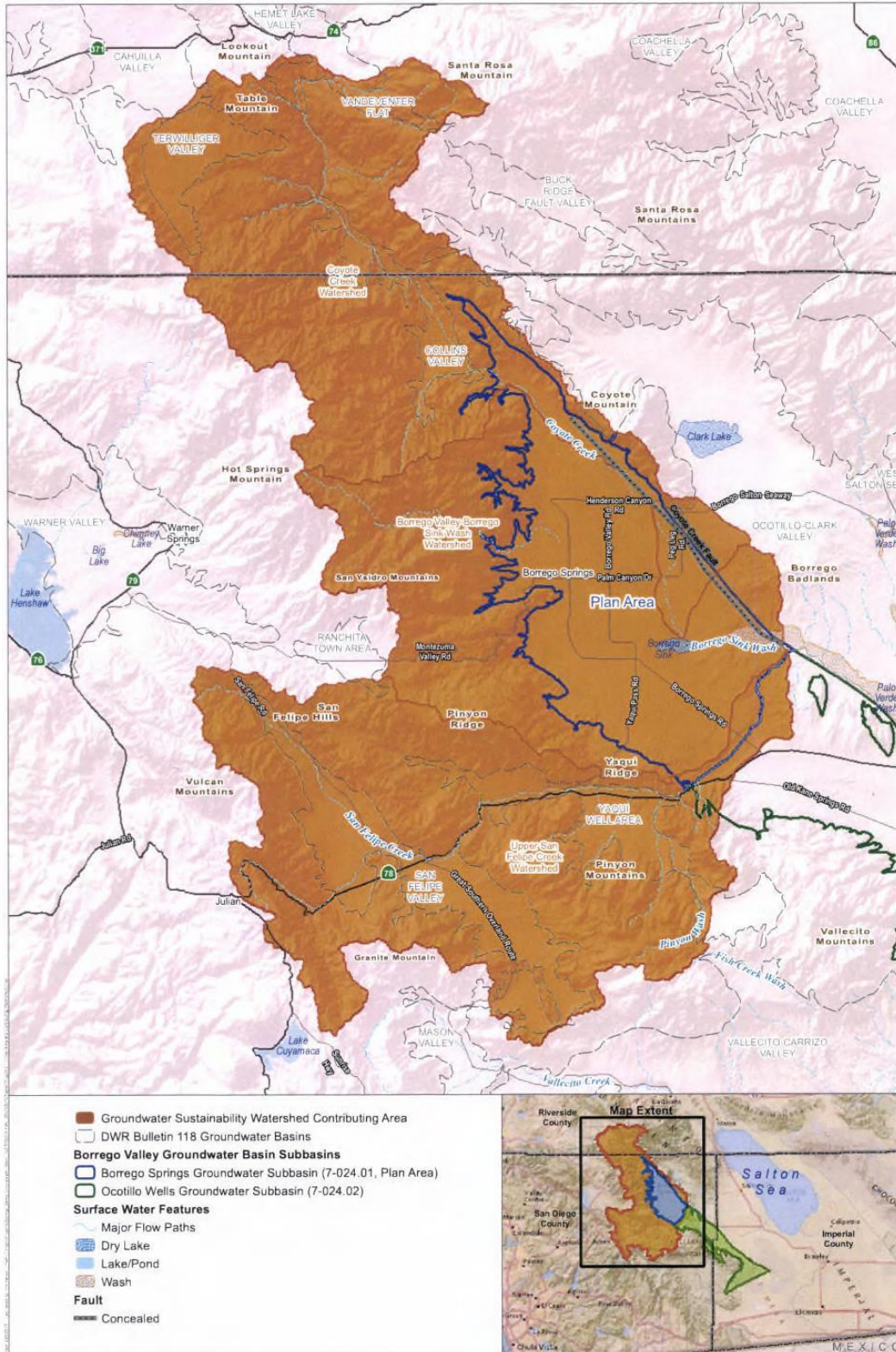
1. List of all contractors and Agency staff that worked on the State funded Program/Project.
2. Payroll records including timesheets for contractor staff and the Agency personnel who provided services charged to the program

Project Files:

1. All supporting documentation maintained in the project files.
2. All Grant Agreement related correspondence.

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Exhibit I PROJECT LOCATION



DATUM: NAD 1983 DATA SOURCE: DWR 2015, SanGIS 2014, USGS NHD 2017



Figure 2.1-1
Plan Area and Contributing Watersheds
Groundwater Sustainability Plan for the Borrego Springs Groundwater Subbasin

Exhibit J

MONITORING AND MAINTENANCE PLAN COMPONENTS

Introduction

- Goals and objectives of project
- Site location and history
- Improvements implemented

Monitoring and Maintenance Plan

Detailed monitoring methods and protocols specific to the projects listed in Exhibit A will be provided by the Grant Manager at a later date.

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Exhibit K
LOCAL PROJECT SPONSORS
NOT APPLICABLE

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Exhibit L**APPRAISAL SPECIFICATIONS**

For property acquisitions funded this Grant Agreement, the Grantee must submit an appraisal for review and approval by the Department of General Services or DWR's Real Estate Branch prior to reimbursement or depositing State funds into an escrow account. All appraisal reports, regardless of report format, must include all applicable Appraisal Specifications below. Appraisals for a total compensation of \$150,000 or more shall be reported as a Self-Contained Appraisal Report. Appraisals for a total compensation of less than \$150,000 may be reported as a Summary Appraisal Report, which includes all information necessary to arrive at the appraiser's conclusion. Appraisal Specifications 14, 16, 21, 23-25, and 28 shall be narrative analysis regardless of the reporting format.

1. Title page with sufficient identification of appraisal assignment.
2. Letter of transmittal summarizing important assumptions and conclusions, value estimate, date of value and date of report.
3. Table of contents.
4. Assumptions and Limiting Conditions, Extraordinary Assumptions, and Hypothetical Conditions as needed.
5. Description of the scope of work, including the extent of data collection and limitations, if any, in obtaining relevant data.
6. Definition of Fair Market Value, as defined by Code of Civil Procedure, section 1263.320.
7. Photographs of subject property and comparable data, including significant physical features and the interior of structural improvements, if applicable.
8. Copies of Tax Assessor's plat map with the subject marked along with all contiguous assessor's parcels that depict the ownership.
9. A legal description of the subject property, if available.
10. For large, remote or inaccessible parcels, provide aerial photographs or topographical maps depicting the subject boundaries.
11. Three-year subject property history, including sales, listings, leases, options, zoning, applications for permits, or other documents or facts that might indicate or affect use or value.
12. Discussion of any current Agreement of Sale, option, or listing of subject property. This issue required increased diligence since state agencies often utilize non-profit organizations to quickly acquire sensitive-habitat parcels using Option Agreements. However, due to confidentiality clauses, the terms of the Option are often not disclosed to the State. If the appraiser discovers evidence of an Option or the possible existence of an Option, and the terms cannot be disclosed due to a confidentiality clause, then the appraiser is to cease work and contact the client.
13. Regional, area, and neighborhood analyses. This information may be presented in a summary format.
14. Market conditions and trends including identification of the relevant market area, a discussion of supply and demand within the relevant market area, and a discussion of the relevant market factors impacting demand for site acquisition and leasing within the relevant market area. This information may be presented in a summary format.
15. Discussion of subject land/site characteristics (size, topography, current use, elevations, zoning and land use issues, development entitlements, General Plan designation, utilities, offsite improvements, access, land features such as levees and creeks, offsite improvements, easements and encumbrances, covenants, conditions and restrictions, flood and earthquake information, toxic hazards, water rights, mineral rights, toxic hazards, taxes and assessments, etc.).

16. Description of subject improvements including all structures, square footage, physical age, type of construction, quality of construction, condition of improvements and/or identification of any permanent plantings. Discussion of construction cost methodology, costs included and excluded, accrued depreciation from all causes, remaining economic life, items of deferred maintenance and cost to cure, and incurable items. Construction cost data must include cost data source, date of estimate or date of publication of cost manual, section and page reference of cost manual, copies of cost estimate if provided from another source, replacement or reproduction cost method used, and supporting calculations including worksheets or spreadsheets.
17. Subject property leasing and operating cost history, including all items of income and expense.
18. Analysis and conclusion of the larger parcel for partial taking appraisals. For partial taking appraisals, Appraisal Specifications generally apply to the larger parcel rather than an ownership where the larger parcel is not the entire ownership.
19. Include a copy of a recent preliminary title report (within the past year) as an appraisal exhibit. Discuss the title exceptions and analyze the effect of title exceptions on fair market value.
20. For appraisals of partial takings or easements, a detailed description of the taking or easement area including surface features and topography, easements, encumbrances or improvements including levees within the subject partial take or easement, and whether the take area is characteristic of the larger parcel. Any characteristics of the taking area, including existing pre-project levees that render the take area different from the larger parcel must be addressed in the valuation.
21. Opinion of highest and best use for the subject property, based on an in depth analysis supporting the concluded use which includes the detail required by the complexity of the analysis. Such support typically requires a discussion of the four criteria of tests utilized to determine the highest and best use of a property. If alternative feasible uses exist, explain and support market, development, cash flow, and risk factors leading to an ultimate highest and best use decision.
22. All approaches to market value applicable to the property type and in the subject market. Explain and support the exclusion of any usual approaches to value.
23. Map(s) showing all comparable properties in relation to the subject property.
24. Photographs and plat maps of comparable properties.
25. In depth discussion of comparable properties, similarities and differences compared to the subject, adjustments to the comparable data, and discussion of the reliability and credibility of the data as it relates to the indicated subject property value. Improved comparable sales which are used to compare to vacant land subject properties must include an allocation between land and improvements, using methodology similar to methodology used in item 16 above to estimate improvement value when possible, with an explanation of the methodology used.
26. Comparable data sheets.
 - a) For sales, include information on grantor/Grantee, sale/recordation dates, listed or asking price as of the date of sale, highest and best use, financing, conditions of sale, buyer motivation, sufficient location information (street address, post mile, and/or distance from local landmarks such as bridges, road intersections, structures, etc.), land/site characteristics, improvements, source of any allocation of sale price between land and improvements, and confirming source.
 - b) For listings, also include marketing time from list date to effective date of the appraisal, original list price, changes in list price, broker feedback, if available.
 - c) For leases, include significant information such as lessor/lessee, lease date and term, type of lease, rent and escalation, expenses, size of space leased, tenant improvement allowance, concessions, use restrictions, options, and confirming source. When comparing improved sales to a vacant land subject, the contributory value of the improvements must be segregated from the land value.

27. For appraisals of easements, a before and after analysis of the burden of the easement on the fee, with attention to how the easement affects highest and best use in the after condition. An Easement Valuation Matrix or generalized easement valuation references may be used ONLY as a reference for a secondary basis of value.
28. For partial taking and easement appraisals, valuation of the remainder in the after condition and analysis and identification of any change in highest and best use or other characteristics in the after condition, to establish severance damages to the remainder in the after condition, and a discussion of special and general benefits, and cost to cure damages or construction contract work.
29. There are occasions where properties involve water rights, minerals, or salable timber that require separate valuations. If an appraisal assignment includes water rights, minerals, or merchantable timber that requires separate valuation, the valuation of the water rights, minerals, or merchantable timber must be completed by a credentialed subject matter specialist.
30. For partial taking and easement appraisals, presentation of the valuation in California partial taking acquisition required format.
31. Implied dedication statement.
32. Reconciliation and final value estimate. Include analysis and comparison of the comparable sales to the subject, and explain and support conclusions reached.
33. Discussion of any departures taken in the development of the appraisal.
34. Signed Certification consistent with the language found in Uniform Standards of Professional Appraisal Practice.
35. If applicable, in addition to the above, appraisals of telecommunication sites must also provide:
 - a) A discussion of market conditions and trends including identification of the relevant market, a discussion of supply and demand within the relevant market area and a discussion of the relevant market factors impacting demand for site acquisition and leasing within the relevant market area.
 - b) Analysis of other (ground and vault) leases comparable to subject property. Factors to be discussed in the analysis include the latitude, longitude, type of tower, tower height, number of rack spaces, number of racks occupied, placement of racks, power source and adequacy, back-up power, vault and site improvements description and location on site, other utilities; access, and road maintenance costs.

Exhibit M

INFORMATION NEEDED FOR ESCROW PROCESSING AND CLOSURE

The Grantee must provide the following documents to the State Project Representative during the escrow process. Property acquisition escrow documents must be submitted within the term of this Grant Agreement and after a qualified appraisal has been approved.

- Name and Address of Title Company Handling the Escrow
- Escrow Number
- Name of Escrow Officer
- Escrow Officer's Phone Number
- Dollar Amount Needed to Close Escrow
- Legal Description of Property Being Acquired
- Assessor's Parcel Number(s) of Property Being Acquired
- Copy of Title Insurance Report
- Entity Taking Title as Named Insured on Title Insurance Policy
- Copy of Escrow Instructions in Draft Form Prior to Recording for Review Purposes
- Copy of Final Escrow Instructions
- Verification that all Encumbrances (Liens, Back Taxes, and Similar Obligations) have been Cleared Prior to Recording the Deed to Transfer Title
- Copy of Deed for Review Purposes Prior to Recording
- Copy of Deed as Recorded in County Recorder's Office
- Copy of Escrow Closure Notice

EXHIBIT N

Introduction

For each project contained in Exhibit A, please include a brief description of the project (maximum ~150 words) including project location, implementation elements, need for the project (what problem will the project address) and responds to the requirements listed below.

Project Monitoring Plan Requirements

Detailed monitoring methods and protocols specific to the projects listed in Exhibit A will be provided by the Grant Manager at a later date.

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EXHIBIT O

INVOICE GUIDANCE FOR ADMINISTRATIVE AND OVERHEAD CHARGES

The funds provided pursuant to this Agreement may only be used for costs that are directly related to the funded Project. The following provides a list of typical requirements for invoicing, specifically providing guidance on the appropriate methods for invoicing administrative and direct overhead charges.

Administration Charges

Indirect and General Overhead (i.e., indirect overhead) charges are not an allowable expense for reimbursement. However, administrative expenses that are apportioned directly to the project are eligible for reimbursement. Cost such as rent, office supplies, fringe benefits, etc. can be "Direct Costs" and are eligible expenses as long as:

- There is a consistent, articulated method for how the costs are allocated that is submitted and approved by the Grant Manager. The allocation method must be fully documented for auditors.
- A "fully-burdened labor rate" can be used to capture allowable administrative costs.
- The administrative/overhead costs can never include:
 - Non-project specific personnel and accounting services performed within the Grantee or an LPS' organization
 - Generic markup
 - Tuition
 - Conference fees
 - Building and equipment depreciation or use allowances
- Using a general overhead percentage is never allowed

Labor Rates

The Grantee must provide DWR with supporting documentation for personnel hours (see personnel billing rates letter in example invoice packet). The personnel rate letter should be submitted to the DWR Grant Manager prior to submittal of the first invoice. The supporting documentation must include, at a minimum, employee classifications that will be reimbursed by grant funds and the corresponding hourly rate range. These rates should be "burdened"; the burdened rate must be consistent with the Grantee's/Local Project Sponsors standardized allocation methodology. The supporting documentation should also provide an explanation of what costs make up the burdened rate and how those costs were determined. This information will be used to compare against personnel hours summary table invoice back up documentation. Periodic updates may be needed during the life of the grant which would be handled through a revised billing rate letter

AGREEMENT
for the
SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM
BETWEEN
BORREGO WATER DISTRICT,
BORREGO VALLEY STEWARDSHIP COUNCIL
AND
CIVICWELL
PROJECT NOS. [INSERT PROJECT ##]

This Agreement between the Borrego Water District, a California Water District (“District”), the Borrego Valley Stewardship Council, a local leadership council, and Civicwell, a nonprofit organization (collectively, “Local Project Sponsor”) sets forth the understanding of the District and the Local Project Sponsor (collectively, “Parties”) for distribution of a grant award from the State of California Department of Water Resources (“DWR” or “State”).

RECITALS

1. In 2018, California voters approved Proposition 68, the Groundwater Treatment and Remediate Grant Program, which administered \$75 million from Chapter 11.1 for grants for treatment and remediation activities that prevent or reduce the contamination of groundwater that serves as a source of drinking water.
2. In 2020, Proposition 68 was amended to add section 80146 to the Public Resources Code, authorizing the Legislature to appropriate General Obligation Bond funds for competitive grants for projects that address drought and groundwater investments to achieve regional sustainability; for investments in groundwater recharge with surface water, stormwater, recycled water, and other conjunctive use projects; and projects to prevent or clean up contamination of groundwater that serves as source of drinking water.
3. The California Budget Act of 2021 (Stats. 2021, ch. 240, § 80) appropriates funds to the Department of Water Resources for grant awards, directed to projects that benefit critically overdrafted, medium priority, and high priority groundwater basins.
4. DWR is administering the Sustainable Groundwater Management (SGM) Grant Program Sustainable Groundwater Management Act (SGMA) Implementation using funds authorized by Proposition 68 and the California Budget Act of 2021 for projects that encourage sustainable management of groundwater resources that support SGMA and/or invest in groundwater recharge projects with surface water, stormwater, recycled water, and other conjunctive use projects.
5. On [INSERT DATE], the District entered into a \$6,115,833 million dollar grant agreement with DWR for Proposition 68 funding awarded to the District (“Grant Agreement”), incorporated by reference and attached as **Exhibit A**. The Grant Agreement is effective as of [INSERT DATE]. The grant will assist in financing projects associated with the SGM Grant Program on a reimbursable basis.

6. The District now wishes to enter into this agreement to assist in reimbursing the Local Project Sponsor for its project, up to the amount set forth in the Grant Agreement for the specified project, with funds provided on a reimbursement basis to the District by DWR for SGM Grant Program implementation.

7. The work performed under this agreement by Local Project Sponsor is a valuable service to the District. The grant funds provided by DWR and the District to Local Project Sponsor are valuable consideration for the services provided.

TERMS AND CONDITIONS

The Recitals are incorporated herein, and the Parties do agree as follows:

1. Definitions:

The following words and terms, unless otherwise defined, shall mean:

- (a) Local Project Sponsor: Borrego Valley Stewardship Council and Civicwell
- (b) Grant Agreement: Grant Agreement [INSERT GRANT NUMBER] between the District and the DWR, dated [INSERT DATE], for the disbursement of \$6,115,833 million dollars in grant funds.
- (c) Project: Component [INSERT NUMBER]: [INSERT COMPONENT DESCRIPTION]. The Work Plan for the Project is provided in attached **Exhibit B**.

2. Term of Agreement: The term of this Agreement shall begin on the date of execution of this agreement. The term of this Agreement shall end no later than the termination date of the Grant Agreement, when all Parties' obligations under this Agreement have been fully satisfied, or when the when the Agreement is terminated pursuant to the terms provided in this Agreement.

3. Budget Contingency:

(a) The District and the Local Project Sponsor shall have no obligation to perform under this Agreement if DWR does not provide funding through the Grant Agreement. Local Project Sponsor acknowledges that if funding for any fiscal year is reduced or eliminated by the DWR, the DWR at its option may either (1) cancel the Grant Agreement with no liability occurring to DWR or the District, or (2) amend the Grant Agreement to reflect the reduced amount of funding. If DWR amends the Grant Agreement, the District will offer to amend or terminate this Agreement to reflect the reduced funding by DWR. The Local Project Sponsor agrees to timely complete its Project and will be eligible for reimbursement only to the extent so allowed by DWR.

(b) If grant funding is eliminated by DWR, the District shall have no obligation to continue to sponsor the Project and this Agreement shall be of no force and effect. In this event, Local Project Sponsor shall not be obligated to perform under the Agreement.

(c) The District shall not have an obligation to perform under this Agreement until the District and DWR have each executed the Grant Agreement. The Local Sponsor shall not receive advanced payments from the District for the Project, regardless of whether DWR has allotted the grant to the District.

4. Schedule: The Local Sponsor shall complete its work for the Project within the schedule set forth in the Grant Agreement, as also reflected in **Exhibit C**. If the Local Sponsor does not complete the work according to the schedule, DWR shall have the authority to reduce the grant according to the Local Sponsor's delay.

5. Grant Amount: The maximum amount payable by the District for these Project shall not exceed the following amounts:

(i) [INSERT PROJECT NAME] [INSERT GRANT AMOUNT].

(ii) [INSERT PROJECT NAME] [INSERT GRANT AMOUNT].

The District is not liable for reimbursement of any funds expended by the Local Project Sponsor beyond the grant amount stated above, nor for any costs expended by Local Project Sponsor outside the timeframes and other requirements of the Grant Agreement.

6. Project Costs: The reasonable total cost of each of the tasks for the Project to be reimbursed to Local Project Sponsor through this Agreement are described in the Grant Agreement and also summarized in **Exhibit D**, Budget Table. The Project Costs may be amended by the Local Project Sponsor provided that the District gives reasonable approval and DWR gives final approval to such proposed amendments.

7. Eligible Costs:

(a) Eligible costs are only those described in the Grant Agreement. In general terms, these costs include the reasonable and necessary costs of engineering, design, legal, land and easement acquisition, preparation of environmental documentation, environmental mitigation, and project implementation. Only work performed after [INSERT DATE], shall be eligible for reimbursement. Costs incurred after [April 30, 2025], and before [INSERT DATE], are not eligible for reimbursement. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the Project.

(b) Costs that are not reimbursable are described in the Grant Agreement and include, but are not limited to, the following:

- Costs incurred before [INSERT DATE].
- Costs for preparing and filing a grant application and/or Spending Plan.

- Costs associated with the formation of a GSA(s) or other board formation that is responsible for implementing SGMA.
- Operation and maintenance costs, including post construction performance and monitoring costs.
- Purchase of equipment not an integral part of a project.
- Establishing a reserve fund.
- Purchase of water supplies.
- Replacement of existing funding sources for ongoing programs.
- Travel and per diem costs, except for mileage.
- Support of existing agency requirements and mandates.
- Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies, or acquisition of land by eminent domain.
- Meals, food items, or refreshments.
- Costs incurred as part of any necessary response and cleanup activities required under the Comprehensive Environmental Response, Compensation, and Liability Act; Resource Conservation and Recovery Act; Hazardous Substances Account Act; or other applicable law.
- Overhead and indirect costs: “Indirect Costs” means those costs that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the funded project (i.e., costs that are not directly related to the funded project). Examples of Indirect Costs include, but are not limited to: central service costs; general administration of the Grantee; non-project-specific accounting and personnel services performed within the Grantee’s organization; depreciation or use allowances on buildings and equipment; the costs of operating and maintaining non-project-specific facilities; tuition and conference fees; forums, trainings, and seminars; and, generic overhead or markup. This prohibition applies to the Grantee and any subcontract or sub-agreement for work on the Project that will be reimbursed pursuant to this Agreement.

8. Local Project Sponsor Responsibilities:

(a) The Local Project Sponsor must comply with this agreement in its entirety as well as all applicable terms of the Grant Agreement, including the obligation to maintain its Project for the period set forward in the Grant Agreement. If the Local Project Sponsor does not meet this obligation, DWR, at its sole discretion, may either reduce funding or withhold funding

pursuant to Section 9 of the Grant Agreement. After following the provisions of Paragraph 18, the District may seek all available remedies.

(b) The Local Project Sponsor warrants that the Project meets all the requirements set forth in the 2021 SGM Grant Program SGMA Implementation Guidelines (pp. 7 through 13) (“2021 Guidelines”) and 2021 SGM Grant Program SGMA Implementation Proposal Solicitation Package.

(c) The Local Project Sponsor must submit any and all invoices, reports and other documents (collectively, “Project documentation”) associated with the Project as required by the Grant Agreement. In particular, such Project documentation shall be provided to the District no later than forty-five (45) days following the end of the calendar quarter (e.g. submitted by May 30th, August 29th, November 29th, and February 28th) and all other deliverables as required by Paragraph 12, “Submission of Reports” and Exhibit A, “Work Plan” of the Grant Agreement detailed in Exhibit A. The District shall not be obligated to disburse any reimbursement funds it receives from DWR until all Project documents cited in this paragraph are given to the District, DWR gives final approval to them, and DWR actually provides the reimbursement amounts to the District. If the Local Project Sponsor does not deliver these Project documents on time, the payments to the Local Project Sponsor may be delayed or not honored pursuant to Section 9 of the Grant Agreement. If the Local Project Sponsor does not timely submit this Project documentation, the District may elect to pursue the remedies found in Paragraph 18.

(d) Local Project Sponsor shall comply with all public bidding and other requirements of the Grant Agreement (e.g., Exhibit D, para. D.11.). Local Project Sponsor shall be responsible for resolving all disputes arising out of its contracts for work including, but not limited to, bid disputes and payment disputes with its contractors and consultants or other entities. Neither DWR, the State of California, nor the District will mediate disputes between Local Project Sponsor and any other entity regarding performance of work.

(e) Local Project Sponsor shall be responsible for oversight and compliance of the Project. Local Project Sponsor or its representatives shall perform regular inspections of work in progress. Local Project Sponsor must submit a timely bi-weekly reports of its oversight, compliance, and inspections to the District. If the Local Project Sponsor does not submit these reports or fails to do so in a timely manner, the District may elect to pursue the remedies found in Paragraph 18.

(f) Subject to section 8(a), above, Local Project Sponsor is solely responsible for implementation of the Project. Any review or approval of plans, specifications, bid documents, or other documents by the District is solely for the purpose of proper administration of grant funds and shall not relieve or limit responsibilities of Local Project Sponsor with regard to its contractual obligations.

(g) The Local Project Sponsor shall maintain and operate the facility and structures constructed or improved as part of the project throughout the useful life of the project, consistent with the purposes for which this grant was made. The Local Project Sponsor assumes all operations and maintenance costs of the facilities and structures. Neither the District nor

DWR shall be liable for any cost of such maintenance, management, or operation during any point of the Project's life. Operation costs include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses. Maintenance costs include ordinary repairs and replacements of a recurring nature necessary to prolong the life of capital assets and basic structures, and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures.

9. Independent Capacity: In the performance of this Agreement, Local Project Sponsor, its officers, agents, contractors, volunteers, and employees shall act in an independent capacity and not as officers, employees, or agents of the District.

10. Compliance with Terms: Local Project Sponsor shall comply with all terms, and conditions of the Grant Agreement attached as **Exhibit A**. If the Local Project Sponsor does not timely comply with these terms, the Local Project Sponsor may be in danger of not receiving reimbursement from the DWR grant, at DWR's sole discretion. If the Local Project Sponsor does not comply with these terms, the District may also elect to pursue the remedies found in Paragraph 18. In case of inconsistency between the terms of this Agreement and the Grant Agreement, the Grant Agreement terms shall control.

11. Acknowledgement of Sponsorship: Local Project Sponsor shall include appropriate acknowledgement to the District, DWR, and all cost-sharing partners for their support when promoting the SGM Grant Program or associated grant funded Project, or using any data and/or information developed under this Agreement. During implementation of the Project, Local Project Sponsor shall, if applicable, install a sign at a prominent location which shall include a statement that the Project has received funds from the District. Local Project Sponsor shall notify the District as each sign has been erected by providing it with a site map with the sign location noted and a photograph of each sign. Local Project Sponsor also shall include appropriate acknowledgement in its public outreach information, including, if applicable, its Project website.

12. Requirements for Disbursement:

(a) By [INSERT DATE], Local Project Sponsor shall meet all conditions precedent to the disbursement of funds as listed below and in the Grant Agreement. Local Project Sponsor may be in danger of not receiving all grant funds given from DWR at DWR's sole discretion if they fail to comply by this date. For disbursements of funds for each Project, Local Project Sponsor shall continue to meet the conditions for disbursement, paragraph 14, Disbursement by DWR and Payment by the District. If Local Project Sponsor fails to do so, the District may elect to pursue the remedies found in Paragraph 18. Local Project Sponsor acknowledges that the State hold the primary responsibility for determining whether Project, and their individual components, meet Grant requirements and are eligible for reimbursement.

i. Local Project Sponsor shall ensure the availability of sufficient funds/cash flow/liquidity to complete its Project identified in this Agreement (Exhibit B).

ii. Local Project Sponsor shall comply with all applicable requirements of the California Environmental Quality Act ("CEQA"), including preparing draft

CEQA compliance documents for review and approval by the District and DWR, to the extent the Local Project Sponsor is not a public agency. Any Local Project Sponsor that is a public agency shall complete its own CEQA compliance as lead agency. With the assistance of the Local Project Sponsor, including the submission of draft CEQA compliance documents to the District, the District shall also conduct CEQA compliance, whether as lead agency or responsible agency, depending upon the circumstances. Costs associated with the District's CEQA compliance shall be reimbursed to the District either by way of the grant, if available, or the Local Project Sponsor. Before construction or implementation begins on a project, Local Project Sponsor shall submit to the District copies of environmental documents, including environmental impact reports, environmental impact statements, negative declarations, mitigation agreements, and environmental permits that are required. Any work that is subject to CEQA and funded under this Agreement shall not proceed until documents that satisfy the CEQA process are received and approved (if legally required as a responsible agency or otherwise) by the District and the State. Alternatively, the Local Project Sponsor shall notify the District if they believe their activities qualify for a CEQA exemption. If CEQA compliance by the Local Project Sponsor has been completed at the time this Agreement is executed, once the District has considered the environmental documents, it may decide to require changes, alterations, or other mitigation to the project; or to not fund the project. Should DWR decide to not provide reimbursement for the Project due to failure to comply with CEQA or otherwise, this Agreement will be terminated. Any work subject to CEQA that proceeds prior to the State's and District's review and approval process being completed, will not be reimbursed and the amount will be reduced from the award amount. The Local Project Sponsor must also demonstrate that it has complied with all applicable requirements of the National Environmental Policy Act (NEPA) by submitting copies of any environmental documents, including environmental impact statements, Finding of No Significant Impact, mitigation monitoring programs, and environmental permits as may be required prior to beginning construction/implementation. The Local Project Sponsor's CEQA and NEPA compliance is also subject to DWR's review and approval process pursuant to Section 5(C) of the Grant Agreement. The Local Project Sponsor may not commence the Project until the District gives reasonable approval and DWR gives final approval of these documents.

iii. For the term of the Agreement, Local Project Sponsor shall submit timely periodic progress reports as required by Grant Agreement, Paragraph 21, Submission of Reports. If the Local Project Sponsor does not turn in these reports or fails to do so in a timely manner, the Local Project Sponsor may be in danger of not receiving reimbursement funds, at DWR's sole discretion. If the Local Project Sponsor does not comply with these terms, the District may also elect to pursue the remedies found in Paragraph 18.

(b) Before disbursement of funds by DWR or the District, Local Project Sponsor shall submit to the District, a written statement that all necessary permits, easements, rights-of-way, and approvals as may be required by other State, federal, and/or local agencies as specified in paragraph 26, Permits, Licenses, Approvals, and Compliance with Laws, have been obtained.

13. Quarterly Invoices: Consistent with Section 12 of the Grant Agreement, Local Project Sponsor shall timely submit invoices with their Quarterly Reports to the District, which shall in turn send the invoices to DWR. If the Local Project Sponsor fails to timely submit its invoices, the District and DWR, at their sole discretion, may reduce funding, withhold funding,

or terminate this Agreement in its entirety. Invoices shall be presented in the formats described in the applicable portion of Exhibit F, "Report Formats and Requirements" of the Grant Agreement and include the following information:

- A. Costs incurred for work performed in implementing the Project during the period identified in the particular invoice. If backup documentation provided is outside of the period identified in the particular invoice, the Grantee must provide justification within the associated Quarterly Progress Report and note the discrepancy on the Invoice Submittal Summary Sheet.
- B. Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for a Project during the period identified in the particular invoice for the implementation of a Project.
- C. Invoices shall be submitted on forms provided by the State and shall meet the following format requirements:
 - i. Invoices must contain the date of the invoice, either the time period covered by the invoice or the invoice date received within the time period covered, and the total amount due.
 - ii. Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B, "Budget". The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
 - iii. One set of sufficient evidence (i.e., receipts, copies of checks, time sheets) must be provided for all costs included in the invoice.
 - iv. Each invoice shall clearly delineate those costs claimed for reimbursement from the State's funding amount, as depicted in Paragraph 3, "Grant Amount".
 - v. Original signature and date (in ink) of the Local Project Sponsor's representative.

Local Project Sponsor must submit the original and three (3) copies of the invoice to the following address:

Geoff Poole
Borrego Water District
806 Palm Canyon Drive
Borrego Springs, CA 92004

With a copy also sent by email to: Geoff@borregowd.org

Failure to use the mailing address exactly as provided in this paragraph may result in return of the invoice to Local Project Sponsor.

14. Disbursement by State and Payment by the District: Following the receipt of grant funds reimbursement checks from DWR, the District will disburse to the Local Project Sponsor the approved amounts for each of its Project subject to the availability of funds through normal DWR processes as described in the Grant Agreement Section 6. The District shall forward the appropriate amount of reimbursed funds to the Local Project Sponsor. All money disbursed by DWR under the Grant Agreement and all interest earned by the District shall be used solely to pay eligible costs. Within thirty (30) days of receipt of funds from DWR, the District shall disburse the funds to the Local Project Sponsor. Neither the District nor the DWR will provide advanced payments to the Local Project Sponsor, except as specifically agreed to in writing by formal action of the District Board of Directors or DWR.

15. Method of Payment: Consistent with Section 8 of the Grant Agreement, DWR will disburse the whole or portions of funding to District for the benefit of the Local Project Sponsor, following receipt from the District and, as applicable, Local Project Sponsor via US mail or Express mail delivery of a “wet signature” invoice or an electronic invoice certified and transmitted via DocuSign for costs incurred and timely Quarterly Progress Reports as required. Payment will be made no more frequently than quarterly, in arrears, upon receipt of an invoice. Invoices must accompany a Quarterly Progress Report and shall be submitted within no later than sixty (60) days following the end of the calendar quarter (e.g. submitted by May 30th, August 29th, November 29th, and February 28th). DWR will notify the District and the Local Project Sponsor, in a timely manner, whenever, upon review of an Invoice, DWR determines that any portion or portions of the costs claimed are not eligible costs or is not supported by documentation or receipts acceptable to DWR. The Local Project Sponsor may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to District and DWR to cure such deficiency(ies). If the Local Project Sponsor fails to submit adequate documentation curing the deficiency(ies), District and/or DWR will adjust the pending invoice by the amount of ineligible or unapproved costs.

Invoices submitted by the Local Project Sponsor shall include the following information:

1. Costs incurred for work performed in implementing the Project during the period identified in the particular invoice. If backup documentation provided is outside of the period identified in the particular invoice, the Local Project Sponsor must provide justification within the associated Quarterly Progress Report and note the discrepancy on the Invoice Submittal Summary Sheet.
2. Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for a project during the period identified in the particular invoice for the implementation of a project.
3. Invoices shall be submitted on forms provided by the State and shall meet the following format requirements:
 - i. Invoices must contain the date of the invoice, either the time period covered by the invoice or the invoice date received within the time period covered, and the total amount due.

ii. Invoices must be itemized based on the categories (i.e., tasks) specified in Grant Agreement, Exhibit D, "Project Costs". The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).

ii. One set of sufficient evidence (i.e., receipts, copies of checks, time sheets) must be provided for all costs included in the invoice.

iv. Each invoice shall clearly delineate those costs claimed for reimbursement from the DWR's funding amount, as depicted in Paragraph 5, "Grant Amount".

Original signature and date (in ink) of the Local Project Sponsor's Project Representative. Submit the original "wet signature" copy of the invoice form to the following address: Christopher Martinez at P.O. Box 942836, Sacramento, CA 94236-0001 or an electronic signature certified and transmitted via DocuSign from authorized representative to Geoff Poole at geoff@borregowd.com. The District shall be cc'd on all invoices submitted by Local Project Sponsor to the State.

All invoices submitted shall be accurate and signed under penalty of law. Any and all costs submitted pursuant to this Agreement shall only be for the tasks set forth herein and in the Grant Agreement. The Local Project Sponsor shall not submit any invoice containing costs that are ineligible or have been reimbursed from other funding sources unless required and specifically noted as such (i.e., match costs/cost share). Any eligible costs for which the Local Project Sponsor is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing for time, services, or any other eligible cost is illegal and constitutes fraud. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements of grant funds and/or termination of this Agreement requiring the repayment of all funds. Additionally, DWR may request an audit and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability. (Civ. Code, §§ 1572-1573; Pen. Code, §§ 470, 487-489.)

16. Accounting and Deposit of Grant Disbursement:

(a) Separate Accounting of Grant Disbursement and Interest Records: Local Project Sponsor shall:

i. Account for the money and in-kind services disbursed pursuant to this Agreement separately from all other funds.

ii. Maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices.

iii. Keep complete and accurate records of all receipts, disbursements, and interest earned on expenditures of funds.

iv. Require its contractors, consultants, and subcontractors, or others employed in the work to maintain books, records, and other documents pertinent to their work in

accordance with generally accepted accounting principles and practices. Records are subject to inspection by the District or DWR at all reasonable times.

(b) **Fiscal Management Systems and Accounting Standards:** Local Project Sponsor's fiscal control and accounting procedures will be sufficient to permit tracing of grant funds to a level of expenditure adequate to establish that such funds have not been used in violation of state law, this Agreement or the Grant Agreement.

(c) **Remittance of Unexpended Funds:** Within forty-five (45) calendar days of the final disbursement from the District, Local Project Sponsor shall remit to the District any unexpended funds that were disbursed to Local Project Sponsor and were not needed to pay Eligible Project Costs.

17. Continuing Eligibility: The Local Project Sponsor must meet the following ongoing requirement(s) and all eligibility criteria outlined in the 2021 Guidelines to remain eligible to receive funds:

- a) The Local Project Sponsor must continue to demonstrate eligibility and the groundwater basin must continue to be an eligible basin as outlined in the 2021 Guidelines and 2021 PSP.
- b) Local Project Sponsor must adhere to the protocols developed pursuant to The Open and Transparent Water Data Act (Wat. Code, § 12406) for data sharing, transparency, documentation, and quality control.
- c) If the Local Project Sponsor diverting surface water, the Local Project Sponsor must maintain compliance with diversion reporting requirements as outlined in Water Code section 5100 et seq.
- d) If applicable, maintain compliance with the Urban Water Management Planning Act (Wat. Code, § 10610 et seq.).

If applicable, maintain compliance with Sustainable Water Use and Demand Reduction requirements outlined in Water Code Section 10608, et seq.

18. Default Provisions:

(a) Local Project Sponsor will be in default under this Agreement if any of the following occur:

- i. Substantial breaches of this Agreement, or any supplement or amendment to it, or any other agreement between the Local Project Sponsor and the District evidencing or securing the Local Project Sponsor's obligations;
- ii. Making any false warranty, representation, or statement with respect to this Agreement or the application filed to obtain this Agreement;
- iii. Failure to operate or maintain the Project in accordance with this Agreement.

- iv. Failure to make any remittance required by this Agreement, including any remittance recommended as the result of an audit.
- v. Failure to submit quarterly progress reports.
- vi. Failure to routinely invoice the District.
- vii. Failure to meet any of the requirements set forth in “Continuing Eligibility.”

Should an event of default occur, the District shall provide a notice of default to the Local Project Sponsor and shall give the Local Project Sponsor at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Local Project Sponsor. If the Local Project Sponsor fails to cure the default within the time prescribed by the District, the District may do any of the following:

- i. Declare the funding be immediately repaid.
- ii. Terminate any obligation to make future payments to the Local Project Sponsor.
- iii. Terminate the Local Project Sponsor.
- iv. Take any other action that it deems necessary to protect its interests.

In the event the District finds it necessary to enforce this provision of this Agreement in the manner provided by law, the Local Project Sponsor agrees to pay all costs incurred by the District including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

19. Disputes:

(a) If the District disputes an invoice submitted by Local Project Sponsor, the District may withhold payment in good faith until the dispute is resolved or a corrected invoice is submitted.

(b) Any claim by Local Project Sponsor regarding the performance of this Agreement shall be submitted to the District Project Manager within thirty (30) calendar days of Local Project Sponsor's knowledge of the claim. The Local Project Sponsor and the District shall then attempt to promptly negotiate a resolution of such claim.

20. Submission of Reports: All reports shall be submitted to the District's Project Manager [OR INSERT APPLICABLE PERSONNEL]. The submittal and approval of all reports is a requirement for the successful completion of this Agreement. Reports shall be submitted in both electronic and hard copy forms, shall meet generally accepted professional standards for technical reporting, and shall be proofread for content and accuracy before submission. Local Project Sponsor shall promptly provide any additional information requested by the District for approval of reports. Reports shall be presented in the formats described in Exhibit F of the Grant Agreement. The submittal and approval of reports is a requirement for initial and continued disbursement of State funds. Submittal of a Project Completion Report for each project listed in Exhibit A is a requirement for the release of any retention.

(a) Quarterly Reports: The Local Project Sponsor shall submit Quarterly Progress Reports to meet the District's requirement for disbursement of funds. Quarterly Progress Reports shall, in part, provide a brief description of the work performed, the Local Project Sponsor activities, milestones achieved, any accomplishments and any problems encountered in the performance of the work under this Agreement during the reporting period. The first Quarterly Progress Report should be submitted to the District no later than [INSERT DATE] with future reports then due on successive three-month increments based on the invoicing schedule and this date.

(b) Component Completion Report(s): The Local Project Sponsor shall prepare and submit to the District a separate Component Completion Report for each component included in Exhibit B, "Work Plan". The Local Project Sponsor shall submit a Component Completion Report within ninety (90) calendar days of component completion. Each Component Completion Report shall include, in part, a description of actual work done, any changes or amendments to each component, and a final schedule showing actual progress versus planned progress, copies of any final documents or reports generated or utilized during a project. The Component Completion Report shall also include, if applicable, certification of final component by a California Registered Civil Engineer (or equivalent registered professional as appropriate).

(c) Grant Completion Report: Upon completion of the Project included in Exhibit B, "Work Plan" the Local Project Sponsor shall submit to the District a Grant Completion Report. The Grant Completion Report shall be submitted within ninety (90) calendar days of submitting the Completion Report for the final project to be completed under this Agreement, as outlined in Exhibit F, "Report Formats and Requirements" of the Grant Agreement. Retention for the last project to be completed as part of this Agreement will not be disbursed until the Grant Completion Report is submitted to be approved by the District.

(d) Post Performance Reports: Local Project Sponsor shall submit a Post-Performance Report to the District within 60 calendar days after the first year following the completion of the Project has elapsed. In subsequent years, all Post Performance Reports shall be submitted, no later than May 1 of each year. This record-keeping and reporting process shall be repeated for each project annually for a total of 3 years after the Project is completed.

21. Audits: The District reserves the right to conduct an audit at any time between the execution of this Agreement and the completion of the Grant Agreement Program, with the costs of such audit to be borne by the Local Project Sponsor. After completion of the Program, the District may either conduct a final audit at the Local Project Sponsor's expense, require that Local Project Sponsor complete a final audit, or require a copy of the Local Project Sponsor's general annual audits as they pertain to the Project. The audit will be conducted with a report prepared by an independent Certified Public Accountant.

22. Inspection of Books, Records and Reports: During regular business hours, the District and its authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Agreement. Local Project Sponsor shall maintain and make available at all times for such inspection, accurate records of all its costs, disbursements, and receipts with respect to its activities under this Agreement. Failure or refusal by Local Project Sponsor to comply with this provision shall be considered a breach of

this Agreement, and the District may withhold disbursements to Local Project Sponsor, terminate this Agreement, or take any action or enforce any remedy to protect its interests.

23. Rights in Data: Local Project Sponsor agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes, and other written or graphic work produced in the performance of this Agreement shall be in the public domain. Local Project Sponsor may disclose, disseminate and use in whole or in part, any final form data and information received, collected, and developed under this Agreement, subject to appropriate acknowledgement of credit to State for financial support. Local Project Sponsor shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so.

24. Monitoring Requirements:

(a) **Project Monitoring Requirements:** As required in Exhibit B, “Work Plan”, a Monitoring Plan shall be submitted to the District prior to disbursement of funds for construction or monitoring activities. The Monitoring Plan should incorporate Post Performance Monitoring Report requirements as defined and listed in Exhibit E, “Monitoring and Maintenance Plan Components”. The SGM Grant Program has developed post construction monitoring methodologies that shall be used for the Post Performance Reporting.

(b) **Statewide Monitoring Requirements:** The Local Project Sponsor shall ensure that all groundwater Project and Project that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Wat. Code, § 10780 et seq.) and, where applicable, that Project that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the Surface Water Ambient Monitoring Program carried out by the State Water Resources Control Board.

25. Permits, Licenses, Approvals, and Compliance with Laws: Local Project Sponsor shall ensure all permits, licenses, and approvals required for performing their obligations under this Agreement are obtained, and shall comply with all applicable federal, state, and local laws, rules, and regulations, guidelines, including the Americans with Disabilities Act (ADA) of 1990 (42 U.S.C., 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA and requirements for each project described in Exhibit A.

26. Drug-Free Workplace Requirements: Local Project Sponsor, its contractors and subcontractors will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code 8350 et seq.) and will provide a drug-free workplace.

27. Prevailing Wages : Local Project Sponsor shall comply with provisions of the California Labor Code (Section 1720 et seq.) regarding payment of prevailing wages for public works Project.

28. Notification of the District: For each project, Local Project Sponsor shall promptly notify the District in writing of the following occurrences:

a. Events or proposed changes that could affect the scope, budget, or work performed under this Agreement. Local Project Sponsor agrees that no substantial change in the scope of a project will be undertaken until written notice of the proposed change has been provided to the District and District has given written approval of such change.

b. Any public or media event publicizing the accomplishments or results of this Agreement that provide the opportunity for the District representatives to attend and participate. Local Project Sponsor shall notify the District at least sixteen (16) calendar days before the event.

c. Discovery of any potential archaeological or historical resource. Should a potential archaeological or historical resource be discovered during construction, the Local Project Sponsor agrees that all work in the area of the find will cease until a qualified archaeologist has evaluated the situation and made recommendations regarding preservation of the resource, and the District has determined what actions should be taken to protect and preserve the resource. The Local Project Sponsor agrees to implement appropriate actions as directed by the State.

e. The initiation of any litigation or the threat of litigation against the Grantee regarding the Project or that may affect the Project in any way.

f. For implementation/construction Project, final inspection of the completed work on a project by a Registered Civil Engineer. The Local Project Sponsor shall notify the District's Grant Manager of the inspection date at least fourteen (14) calendar days prior to the inspection in order to provide the District the opportunity to participate in the inspection.

g. Completion of work on the Project.

29. Disposition of Equipment: Not less than forty-five (45) days before submission of its final invoice, Local Project Sponsor shall provide to the District a final inventory of equipment purchased with grant funds provided by State. Local Project Sponsor shall consult with the District on the scope of the inventory not less than seventy-five (75) days before the submission of the final project invoice. The inventory shall include all items with a current estimated fair market value of more than \$500 per item. Within sixty (60) days of receipt of the inventory, Local Project Sponsor will provide District with a list of the items on the inventory to which Local Project Sponsor will take title. All other items shall become the property of Local Project Sponsor. District or State will arrange for delivery from Local Project Sponsor of items to which it takes title.

30. Operation and Maintenance of Project:

(a) For the useful life of the Project and in consideration of the Grant made by DWR, Local Project Sponsor shall ensure the commencement and continued operation of the Project, and shall ensure the Project are operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary for the efficient operation of the same are provided: and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. All operations and maintenance costs of the facilities and structures shall be the responsibility of

Local Project Sponsor for its project(s) for the entirety of the project's life. DWR or District shall not be liable for any cost of maintenance, management, or operation of the project for the project's entire life.

(b) For purposes of this Agreement, "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses. "Maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures, and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal of Local Project Sponsor to ensure operation and maintenance of the Project in accordance with this provision may, at the option of the District, be considered a breach of this Agreement and may be treated as default under paragraph 18.

31. Retention of Records: Local Project Sponsor shall retain all records that are relevant to this Agreement for a period of 3 years after submission of the Post-Performance Report.

32. Project Managers: Any party may change its Project Manager upon written notice to the other parties.

(a) The District's Project Manager shall be Geoff Poole, General Manager. The District's Project Manager shall be its representative for the administration of this Agreement and shall have full authority to act on behalf of the District, including authority to execute all payment requests.

(b) Local Project Sponsor's Project Manager, CivicWell, shall be its representative for the administration of this Agreement and shall have full authority to act on behalf of Local Project Sponsor, including authority to execute all payment requests.

34. Notices: All notice, demand, request, consent, or approval that any party desires or is requested to give to one or more of the other parties shall be in writing. Notices may be sent by mail, courier, electronic mail or any other means of delivery. Notices delivered by mail shall be deemed delivered 2 days after deposit in the mail, by next-day courier shall be deemed delivered 1 day after deposit with the courier, and by electronic means shall be deemed delivered upon electronic delivery if within regular business hours of the recipient party. Any party may, by written notice to the others, designate a different address that shall be substituted for the one below.

Borrego Water District
Attn: Geoff Poole
806 Palm Canyon Drive
Borrego Springs, CA 92004

Borrego Valley Stewardship Council
P.O. Box 2078
Borrego Springs, CA 92004
Attention: [INSERT NAME]

CivicWell
980 9th St. #1700
Sacramento, CA 95814
Attention: [INSERT NAME]

[copy to]

[INSERT NAME]
[INSERT ADDRESS]

35. Amendment: All amendments or modification of this Agreement shall be in writing and signed by the Parties. No oral understanding or agreement not incorporated in the Agreement is binding on the parties.

36. Severability of Unenforceable Provision: If any provision of this Agreement is held invalid or unenforceable by a court of competent jurisdiction, all other provisions of this Agreement shall be construed to remain fully valid, enforceable, and binding on the parties.

37. Indemnity — Hold Harmless:

(a) To the fullest extent permitted by law, the Local Project Sponsor shall (1) immediately defend, and (2) indemnify the District, and DWR and their directors, officers, and employees (collectively “Indemnified Parties”) from and against all liabilities regardless of nature or type arising out of or resulting from Local Project Sponsor’s performance of services under this contract, or any negligent or wrongful act or omission of the Local Project Sponsor or Local Project Sponsor’s officers, employees, agents, or subcontractors. Liabilities subject to the duties to defend and indemnify include, without limitation all claims, losses, damages, penalties, fines, and judgments; associated investigation and administrative expenses; defense costs, including but not limited to reasonable attorneys’ fees; court costs; and costs of alternative dispute resolution. The Local Project Sponsor’s obligation to indemnify applies unless it is adjudicated that its liability was caused by the negligence or willful misconduct of an Indemnified Party. If it is finally adjudicated that liability is caused by the comparative negligence or willful misconduct of an indemnified party, the Local Project Sponsor’s indemnification obligation shall be reduced in proportion to the established comparative liability of the Indemnified Party.

(b) The duty to defend is a separate and distinct obligation from the Local Project Sponsor’s duty to indemnify. The Local Project Sponsor shall be obligated to defend, in all legal, equitable, administrative, or special proceedings arising out of or resulting from Local Project Sponsor’s performance of services under this contract, or any negligent or wrongful act or omission of the Local Project Sponsor or Local Project Sponsor’s officers, employees, agents, or subcontractors, with counsel approved by the District and DWR, the Indemnified Parties, immediately upon tender to the Local Project Sponsor of the claim in any form or at any stage of an action or proceeding, whether or not liability is established, unless caused by the negligence or willful misconduct of an Indemnified Party or any third-party not under the control or supervision of the Local Project Sponsor. Local Project Sponsor shall have no duty to defend the

Indemnified Parties if the claim is related to an allegation or determination of comparative negligence or willful misconduct by an Indemnified Party. The obligation to defend extends through final judgment, including exhaustion of any appeals.

(c) The review, acceptance or approval of the Local Project Sponsor's work or work product by any Indemnified Party shall not affect, relieve or reduce the Local Project Sponsor's indemnification or defense obligations. This Section survives completion of the services or the termination of this contract. The provisions of this Section are not limited by and do not affect the provisions of this contract relating to insurance.

38. Insurance:

(a) The Local Project Sponsor shall procure and maintain during the period of performance of this Agreement, insurance from insurance companies admitted to do business in the State of California, as set forth in this Section. These policies shall be primary insurance as to the District so that any other coverage held by the District shall not contribute to any loss under the Local Project Sponsor's insurance. Coverage may be provided by a combination of primary and excess insurance policies, provided all insurers meet the requirements of this Section.

(b) All insurance shall cover occurrences during the coverage period.

(c) The coverage amount of each policy of insurance shall be as required by the Water Authority.

(1) The following insurance and limits are required for the contract:

Commercial General Liability: Coverage at least as broad as ISO form GC
00 01 10 01

Limit per occurrence: \$1,000,000

(d) The insurance policies shall be endorsed as follows:

(1) For the general commercial liability as well as excess or umbrella insurance covering risks within the scope of that type insurance, the District, its directors, officers, employees and agents are included as additional insureds with regard to liability and defense of suits or claims arising from the operations, products and activities performed by or on behalf of the Named Insured. The Local Project Sponsor's insurance applies separately to each insured, including insureds added pursuant to this paragraph, against whom claim is made or suit is brought except with respect to the policy limits of liability. The inclusion of any person or entity as an insured shall not affect any right which the person or entity would have as a claimant if not so included. Any failure of the named insured to comply with reporting provisions of the policy or breaches or violations of warranties shall not affect coverage provided to the insureds added pursuant to this paragraph. The additional insured endorsement shall provide coverage at least as broad as ISO form CG 20 10 10 93.

(2) The Local Project Sponsor's insurance shall be primary. Any other insurance or self-insurance available to the District or persons stated in paragraph (1) shall be in excess of and shall not contribute to the Contractor's insurance.

(3) The insurance shall not be canceled or materially reduced in coverage except after 30 days prior written notice receipted delivery has been given to the District, except 10 days' notice shall be allowed for non-payment of premium.

(e) Unless otherwise specified, the insurance shall be provided by an acceptable insurance provider, as determined by the District, which satisfies the following minimum requirements: An insurance carrier admitted to do business in California and maintaining an agent for process within the state. Such insurance carrier shall maintain a current A.M. Best rating classification of "A- (A minus)" or better and a financial size of \$10 million to \$24 million (Class V) or better, or a Lloyds of London program provided by syndicates of Lloyds of London and other London insurance carriers, providing all participants are qualified to do business in California and the policy provides for an agent for process in the state and the program assures a financial capability at least equal to the required classification and size for admitted insurers.

(f) Certificates of insurance and endorsements shall be provided by the Local Project Sponsor and approved by the District before execution of the Contract. Endorsements may be provided on forms provided by the District, or substantially equivalent forms provided by the insurer.

(g) Additional Insured: All Consultants/Contractors performing the scope of work on behalf of the Local Project Sponsor shall name the District and State (including their directors, officers, employees, and agents) as an additional insured on their Commercial General Liability policy and the policy shall be endorsed with use of an ISO form CG 20 10 10 93 or equivalent.

39. Contingent Fee: The Local Project Sponsor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the subgrantee to solicit or secure this Agreement, and that the Local Project Sponsor has not paid or agreed to pay any company, or person, other than a bona fide employee or [INSERT CONSULTANT IF APPLICABLE], working solely for the Local Project Sponsor, any fee, commission, percentage, brokerage fee, gifts, or other consideration, contingent upon or resulting from the award or making of this Agreement. For breach of violation of this warranty, the District shall have the right to annul this Agreement without liability or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage, gift or continent fee.

40. Incorporation of Standard Conditions and Grantee Commitments: The following exhibits are attached and made a part of this Agreement by this reference:

Exhibit A — Grant Agreement

Exhibit B — Work Plan

Exhibit C — Schedule

Exhibit D — Grant Budget

Exhibit E — Statewide Monitoring

41. Laws and Venue: This Agreement shall be interpreted in accordance with the laws of the state of California. If any action is brought to interpret or enforce any term of this Agreement the action shall be brought in a state or federal court in San Diego County.

42. Assignment: A Party shall not assign, sublet, or transfer this Agreement or any rights or interest in this Agreement without the written consent of the District, which may be withheld for any reason.

43. Integration: This Agreement represents the entire understanding of the Parties as to those matters contained herein. No prior oral or written understanding should be of any force or effect with respect to those matters covered hereunder. This Agreement may not be modified or altered except in writing signed by the Parties.

44. Forced Delay: Performance by any Party to this Agreement shall not be deemed to be in default where delays or defaults are due to war; insurrection; strikes; lock outs; riots; floods; earthquakes; fires; casualties; acts of God; acts of the public enemy; epidemics; quarantine restrictions; freight embargoes; lack of transportation; government restrictions or priorities; litigation; unusually severe weather; inability to secure any necessary labor, materials or tools; delays of any contractor or supplier; acts of the other parties; or any other causes beyond the reasonable control of the party claiming an extension of time to perform. Any extension of time for any such cause shall be for the period of the forced delay and shall commence to run from the time of the commencement of the cause.

[SIGNATURE PAGE TO FOLLOW]

**SIGNATURE PAGE TO
AGREEMENT
for the
SUSTAINABLE GROUNDWATER MANAGEMENT GRANT PROGRAM
BETWEEN
BORREGO WATER DISTRICT
BORREGO VALLEY STEWARDSHIP COUNCIL
AND
CIVICWELL
PROJECT NOS. [INSERT PROJECT ##]**

Signatures: The individuals executing this Agreement represent and warrant that they have the legal capacity and authority to do so on behalf of their respective legal entities.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date below:

BORREGO WATER DISTRICT

Approved as to form:

By: _____

By: _____

Steven M. Anderson
Best Best & Krieger LLP

BORREGO VALLEY STEWARDSHIP
COUNCIL

Approved as to form:

By: _____

By: _____

CIVICWELL

Approved as to form:

By: _____

By: _____

Exhibit A

Grant Agreement

Exhibit B

Work Plan

Exhibit C

Schedule

Exhibit D

Project Costs

Exhibit E

Monitoring Requirements

BORREGO WATER DISTRICT SUSTAINABLE GROUNDWATER MANAGEMENT ACT IMPLEMENTATION GRANT AGREEMENTS

Steve Anderson, Partner



Best Best & Krieger



Company/BestBestKrieger



@BBKlaw



BEST BEST & KRIEGER 
ATTORNEYS AT LAW

BACKGROUND

- **2018** - California voters approved Proposition 68, which administered \$75 million for grants for treatment and remediation activities that prevent or reduce the contamination of groundwater that serves as a source of drinking water
- **2020** - Proposition 68 was amended, authorizing the Legislature to appropriate funds for competitive grants for projects that address drought and groundwater investments
- **2021** - California Budget Act of 2021 appropriated funds to the Department of Water Resources for grant awards, directed to projects that benefit critically overdrafted, medium priority, and high priority groundwater basins
- **2022** - DWR is administering the Sustainable Groundwater Management (SGM) Grant Program Sustainable Groundwater Management Act (SGMA) Implementation using funds authorized by Proposition 68 and the California Budget Act of 2021



DWR SGMA Implementation Grant Agreement

- **Purpose:** provide funding to assist in financing the Implementation Project for the Borrego Springs Sub Basin (“Project”)
 - BWD certifies the purpose of the Project is to implement SGMA as outlined in BWD’s Alternative to a GSP
- **Term:** 3 years from date of execution
- **Grant Amount:** \$6,115,833



Basic Conditions

- Demonstrate compliance with all eligibility criteria set forth in the SGM Grant Program 2021 Guidelines
- Submit Quarterly Progress Reports, associated quarterly invoices, and all invoice backup documentation
- Submit final plans and specifications certified by a California Registered Civil Engineer prior to activity
- Perform any CEQA work and submit to the State



Project Components & Grant Amounts

- grant administration - \$250,000
- advanced meter infrastructure - \$1,300,000
- wastewater treatment plant monitoring wells -\$206,500
- education project - \$384,000
- resiliency strategy - \$200,000
- biological restoration of fallowed lands - \$755,340
- Monitoring, Reporting and Groundwater Management Plan Update - \$1,983,250
- Groundwater Dependent Ecosystem Identification, Assessment, & Monitoring - \$1,036,743



Project Costs

- **Eligible Costs** – can seek reimbursement for: reasonable costs of studies, engineering, design, land and easement acquisition and associated legal fees, preparation of environmental documentation, environmental mitigations, monitoring, and project construction
- **Non-Eligible Costs** – no reimbursement for: purchase of water supplies, travel and per diem costs, establishing a reserve fund, meals, food items, costs incurred from response and cleanup activities, indirect costs etc.



Disbursement of Funds

- DWR shall disburse to BWD the amount approved following receipt from BWD of an invoice for costs incurred and timely Quarterly Progress Reports
 - Agreement details info needed from the invoices and Quarterly Progress Reports
- Disbursement subject to availability of funds through normal State processes
- If DWR determines that a project is not being implemented in accordance with provisions of agreement, DWR can withhold any and all funds



Submission of Reports

- Submittal and approval of all reports is a requirement. Reports include:
 - **Quarterly Progress Reports** – provide description of work performed, activities, milestones achieved, and any accomplishments or problems
 - **Component Completion Report** – description of actual work done, any changes to project, and final schedule showing progress, copies of documents or reports
 - **Grant Completion Report** – overview of all projects
 - **Post Performance Reports** – details project performance
 - **Deliverable Due Date Schedule**
 - **Environmental Information Form**



BWD / Local Project Sponsor Subgrantee Agreement

- **Purpose:** Local Project Sponsor (“LPS”) essentially stepping into BWD’s shoes for the Grant Agreement. Subgrantee agreement mirrors Grant Agreement provisions.
- **Term:** 3 years after date of execution
- **Grant Amount:** determined by Local Project Sponsor’s project component



Local Project Sponsor's Responsibilities

- Must comply with agreement as well as terms of the Grant Agreement
- Shall meet as requirements of the 2021 SGM Grant Program SGMA Implementation Guidelines
- Must submit any and all invoices, reports and other documents for project pursuant to Grant Agreement
- Must comply with all public bidding and other requirements of Grant Agreement
- Responsible for oversight and compliance of the project
- Solely responsible for implementation of the project
- Must maintain and operate facility and structures of the project throughout the useful life of the project
- Must assume all operations and maintenance costs of facilities/structures



Requirements for Disbursement of Grant

- Meet all conditions in the Grant Agreement
- Ensure availability of sufficient funds/cash flow/liquidity to complete project
- Comply with CEQA
- Submit timely reports as required by Grant Agreement (i.e. invoice & quarterly reports), including bi-weekly progress reports to BWD
- Before disbursement, shall submit to BWD a written statement about permits, licenses, approvals, and compliance with laws were obtained
- BWD will disburse grant subject to availability of funds from DWR



BWD Protections

- BWD has not obligation to perform under agreement if DWR does not provide funding through the Grant Agreement
- If DWR reduces or eliminates funding, BWD can: (1) cancel the subgrantee agreement with no liability to them, or (2) amend the subgrantee agreement
- BWD has not obligation to perform under subgrantee until Grant Agreement is executed
- BWD is not liable for reimbursement of any funds expended by LPS beyond grant amount, outside timeframes, or other grant requirements
- BWD not obligated to disburse any reimbursements funder until it receives all Project documents required by agreement



BWD Protections

- BWD not responsible for any LPS disputes with other entities
- BWD not responsible for implementation of LPS's project
- BWD not liable for any cost of maintenance, management, or operation during any point of project's life
- If LPS is in default of the agreement, BWD, after notice and time to cure (10 days), can: 1) declare funding to be immediately repaid; 2) terminate obligation for future payment; 3) terminate agreement; or 4) take any action BWD deems necessary





Best Best & Krieger



Company/BestBestKrieger



@BBKlaw



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ATTORNEYS AT LAW

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
OCTOBER 11, 2022
AGENDA ITEM II.C

September 20, 2022

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Wastewater Treatment Plant Study – G Poole

RECOMMENDED ACTION:

Approve Study

ITEM EXPLANATION:

In August 2022, representatives from Dudek Engineering presented the Board with a study that identified “bottlenecks” in the existing Waste Water Treatment Plant and calculated the cost of future capacity expansions. Staff has provided one month for public comment and received none to date, so its recommended the Study be approved as presented in August (attached).

NEXT STEPS

1. Prepare recommendations on timing of construction of correction for bottleneck and funding source.

FISCAL IMPACT

1. See attached

ATTACHMENTS

1. Waste Water Treatment Plant Study

TECHNICAL MEMORANDUM - DRAFT

To: Geoff Poole, General Manager
From: Greg Guillen PhD, PE (Dudek)
Subject: Rams Hill WWTF Capacity Analysis and Cost Estimates for Facility Replacement and Expansion Alternatives
Date: August 23, 2022
cc: Kayvan Ilkhanipour PG, CHG, Dudek; Agata Bugala EIT, Dudek
Attachments: **Attachment A** - Wastewater Discharge Permit, **Attachment B** – Historical Flow Assumptions, **Attachment C** - Design Criteria, **Attachment D** - Cost Tables

Executive Summary

Borrego Water District (District) contracted Dudek to prepare a capacity analysis and an engineer's estimate of probable cost (cost opinion) for multiple expansion alternatives for the Rams Hill Wastewater Treatment Facility (WWTF or Facility). Additionally, as part of capacity evaluation, Dudek and the District have compiled historical flow data from sewersheds contributing flow to the WWTF since its commissioning in 1983.



Rams Hill WWTF

Summary of Findings

The WWTF was originally designed for an average day design capacity of 250,000 gpd but did not include dedicated nitrogen removal capabilities. The oxidation ditch and equalization basin were found to have capacities below 250,000 gpd. Therefore, these units need to be upgraded to bring their individual capacities to 250,000 gpd to serve a total of 2,594 Equivalent Dwelling Unit (EDU). The following summarize the findings of this technical memorandum:

- The 811 EDUs currently contributing flow to the WWTF result in an average day flow generation factor of 96.4 gpd/EDU.
- The WWTF was found to have a current treatment capacity of 915 EDU (88,200 gpd average day flow). Existing WWTF capacity bottlenecks include nitrogen removal and flow equalization.
- Modifying the oxidation ditch to provide dedicated nitrogen removal is estimated to increase the WWTF capacity to 1,261 EDU (121,500 gpd average day flow) and cost \$624,000.
- Modifying the oxidation ditch for nitrogen removal and expanding the equalization basin volume will bring the WWTF capacity to 2,594 EDU (250,000 gpd). This project is estimated to cost \$1,125,000.
- Expanding the WWTF to 500,000 gpd, serving a total capacity of 5,187 EDU is estimated to cost \$5,499,000.

- Expanding the WWTF to 750,000 gpd, serving a total capacity of 7,781 EDU is estimated to cost \$10,763,000.
- Expanding the WWTF to 500,000 gpd, serving a total capacity of 5,187 EDU, and producing recycled water is estimated to cost \$14,585,000.
- Expanding the WWTF to 750,000 gpd, serving a total capacity of 7,781 EDU, and producing recycled water is estimated to cost \$19,625,000.
- Annual O&M costs were not included in the life cycle analyses.

Summary of Recommendations

- Based on the available data and the performed analyses, it appears that the District can maintain reliable WWTF performance while providing wastewater services to the current 811 connected EDU.
- Assuming no changes in the flow and BOD load per EDU, there is existing capacity to add an additional 104 EDU without plant expansion. A nitrogen removal design criterion was assumed for this exercise because the District does not currently have a nitrogen effluent discharge limit. The assumed design criterion results in nitrogen (TKN) removal capacity in the oxidation ditch being the first plant bottleneck. It is recommended that the plant's nitrogen removal capacity and future discharge limit be further evaluated.
- Percolation ponds are a permitting bottleneck. While the percolation ponds may be able to discharge treated effluent at a much higher rate, the District's current discharge permit limits the maximum monthly average discharge rate to 250,000 gpd. Expanding the percolation ponds while under the existing permit would not allow the District to increase discharge capacity. For planning purposes and more accurate estimates, it is recommended to perform a percolation/study test to assess infiltration rates of the existing ponds to determine a theoretical maximum discharge capacity.
- The 3-inch Parshall flume flow meter combined with a level indicator at the maximum water depth of 18 inches is capable of measuring a maximum flow rate of 835 gpm (1.2 million gallons per day (MGD)). Currently, the flow meter is set up to measure flow rates between 0 gpm and 143 gpm based on its mounting height and calibration. It is recommended to recalibrate the flow meter to measure higher flow rates projected under future expansion without adding/expanding the actual flume.

1 Project Background

The Ram Hills WWTF is owned and operated by BWD and its discharge is regulated by the Colorado River Basin Regional Water Quality Control Board (Colorado River Basin Water Board). The District has operated the WWTF since 1983. This plant, originally designed to treat effluent to tertiary levels with a capacity of 250,000 gpd, has never had sufficient flow to justify the increased expense of operating the tertiary portion of the original plant design.

In 2014, Dudek updated the Preliminary Evaluation of Water Supply Options for the Rams Hill Golf Course Study which contemplated the use of disinfected, tertiary recycled water to offset groundwater pumping to meet irrigation demand (Dudek 2014). This previous study indicated that at a minimum, filters and disinfection facilities would be required to meet Title 22 regulations, and a pump station and flow equalization/storage basin may be required for distribution of recycled water to the golf course. In the previous study, economic viability was assumed when the Rams Hill WWTF could produce at least 100 acre-feet per year (90,000 gpd) of recycled water, which would meet approximately 15% of the irrigation water demand of the golf course. The cost opinion to replace the existing WWTF includes four alternatives detailed in the sections below.

This project's overarching goals are to perform the following:

- Determine historical and current flows as well as mass load of biological oxygen demand (BOD) and nitrogen generated by the Borrego Springs collection system.
- Evaluate individual process unit capacity based on existing WWTF design criteria.
- Determine the overall WWTF available capacity based on the individual process with the lowest available capacity.
- Provide an engineer's estimate of probable cost for the following alternatives:
 - **Alternative 0:** Expand oxidation ditch by adding anoxic zone to provide capacity for removing nitrogen.
 - **Alternative 1:** Identify and upgrade any unit processes which do not meet current design capacity requirements (250,000 gpd) for WWTF.
 - **Alternative 2:** Maintain existing WWTF equipment and provide similar, new equipment to increase capacity by 250,000 gpd for a total treatment capacity of 500,000 gpd.
 - **Alternative 3:** Maintain existing WWTF equipment and provide similar, new equipment to increase capacity by 500,000 gpd for a total treatment capacity of 750,000 gpd.
 - **Alternative 4:** Replace existing WWTF equipment with similar, new equipment in order to meet Title 22 regulations for disinfected, tertiary recycled water at a total capacity of 500,000 gpd.
 - **Alternative 5:** Replace existing WWTF equipment with similar, new equipment in order to meet Title 22 regulations for disinfected, tertiary recycled water at a total capacity of 750,000 gpd.

1.1 Wastewater Treatment Plant Facility Overview

The WWTF is a 250,000 gpd facility consisting of preliminary, secondary, final effluent, and solids removal treatment. The WWTF operates a single-duty oxidation ditch, extended aeration activated sludge (EAAS) biological treatment process, as shown in **Figure 1**. Influent wastewater flows through a Parshall flume flow meter, mechanical

bar screen for screenings removal, grinder¹, and a vortex grit chamber for grit removal prior to entering the oxidation ditch. The oxidation ditch is designed to achieve biochemical oxygen demand (BOD₅) reduction and also some nitrogen removal via nitrification/denitrification. Mixed liquor from the oxidation ditch flows to the secondary clarifiers. Clarified effluent is discharged to percolation ponds without being disinfected. Sludge wasted from the secondary clarifiers flows to sludge holding tanks and is then stabilized using sludge drying beds. The sludge is removed every 2-3 years for off-site disposal. The WWTF process flow diagram and site layout are shown in **Figures 1** and **2**, respectively. Background description, function, and major assets in each area of the WWTF are summarized in **Table 1**.

Table 1: Treatment Plant Process Summary

Unit Process	Description	Major Assets
Headworks	Functions to remove rags, grit, and other large materials from the influent wastewater before entering downstream processes.	<ul style="list-style-type: none"> Parshall Flume Meter Bar Screen Comminutor (Grinder) Aerated Grit Chamber
Biological Treatment (Secondary Treatment)	Functions to reduce BOD and TSS from the wastewater utilizing a single-duty oxidation ditch. The process is intended to operate with a low solids retention time (SRT). Important parameters which control biomass growth rates and microbial communities are the Return Activated Sludge (RAS) and Waste Activated Sludge (WAS).	<ul style="list-style-type: none"> Oxidation Ditch Secondary Clarifiers
Final Effluent	Functions to provide consistent flow by retaining high flow fluctuations and final effluent disposal to evaporation/percolation ponds.	<ul style="list-style-type: none"> Equalization Basin Evaporation/Percolation Ponds Emergency Basin
Solids Treatment	Functions to reduce quantity and stabilize biosolids through evaporation.	<ul style="list-style-type: none"> Sludge Holding Tank Sludge Drying Beds

1.2 WWTF Status and Avoided Replacement Cost

A complete renovation of the WWTF is underway with replacement of equipment and repair/replacement of exposed concrete and metal surfaces. Cost estimates to replace the WWTF as-is are shown in **Table 2**. Major assumptions made in the development of this cost estimate include:

- General Requirements are estimated to be 5% of total construction cost.
- Sitework includes earthwork and it is estimated to be 10% of total construction cost.
- All concrete structures are replaced in kind.
- Installation of mechanical equipment for a new oxidation ditch.
- Installation of new bar screen.
- Installation of mechanical equipment for a new grit chamber and grit classifier.

¹ A machine that cuts up solids in raw sewage in preparation for treatment and safe pumping.

- Installation of mechanical equipment for a new secondary clarifier.
- New miscellaneous pumps are estimated to be 10% of total equipment cost.
- Installation of civil piping are estimated to be 8% of total construction cost.
- Installation of new electrical capital costs are estimated to be 10% of total construction cost.
- Installation of instrumentation cost are estimated to be 3% of total construction cost.

Table 2: WWTF Replacement Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 150,000
General Requirements (5% of overall construction cost)	\$ 150,000	\$ 150,000
Division 2 - Sitework/Earthwork		\$ 340,000
Existing Structures (10% of overall construction cost)	\$ 340,000	\$ 340,000
Division 3 - Concrete		\$ 773,000
Grit Chamber Concrete Structure	\$ 1,000	\$ 28,000
Ox Ditch Concrete Structure	\$ 1,000	\$ 307,000
EQ Basin Concrete Structure	\$ 1,000	\$ 211,000
Secondary Clarifier Concrete Structure (1+1)	\$ 1,000	\$ 180,000
Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 47,000
Division 11 - Equipment		\$ 1,349,000
Bar Screen	\$ 104,000	\$ 104,000
Grinder	\$ 10,000	\$ 10,000
Grit Chamber + Grit Classifier	\$ 299,000	\$ 299,000
Oxidation Ditch Mechanism	\$ 208,000	\$ 208,000
Secondary Clarifier Mechanism	\$ 304,000	\$ 608,000
Miscellaneous Pumps (10% of equipment)	\$ 120,000	\$ 120,000
Division 15 - Mechanical		\$ 280,000
Civil Piping (8%)	\$ 280,000	\$ 280,000
Division 16 - Electrical		\$ 320,000
Electrical (10% of overall construction cost)	\$ 320,000	\$ 320,000
Division 17 - Instrumentation		\$ 100,000
Sensors and Alarms (3% of overall construction cost)	\$ 100,000	\$ 100,000
	Construction Subtotal	\$ 3,312,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 165,600
	Construction Contingency (20%)	\$ 663,000
	Total Construction Cost	\$ 4,140,600
	Engineering Design (15% of Construction)	\$ 621,090
	Construction Management (10% of Construction)	\$ 414,060

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
	Total	\$ 5,176,000

A 30-year life-cycle cost model was prepared to estimate the useful life of the existing infrastructure. It is assumed that the existing 250,000 gpd infrastructure will need to be replaced by 2051. The life-cycle cost model parameters are shown in **Table 3**. Capital costs (e.g., construction costs) are estimated based on vendor equipment quotations and third-party vendor service and installation fees.

Table 3: Life-cycle Cost Model Inputs

Parameter	Units	Value
Starting Year	-	2022
Ending Year	-	2051
Discount Rate	%/yr	2%
Inflation Rate	%/yr	3%

Table 4 lists the present worth capital costs associated with replacing the existing 250,000 gpd infrastructure in year 2051.

Table 4: Projected Construction Cost Estimate

Cost	30-year Total Capital Cost
General (mobilization, demobilization)	\$ 199,052
Civil	\$ 451,184
Structural	\$ 1,025,780
Equipment	\$ 1,790,138
Mechanical	\$ 371,563
Electrical	\$ 557,345
Subtotal	\$ 4,395,061
Construction Contingency (20%)	\$ 880,000
Total Construction Cost	\$ 5,275,061
Engineering Design (15% of Construction)	\$ 791,259
Construction Management (10% of Construction)	\$ 527,506
Total	\$ 6,594,000

1.3 Discharge Requirements

The discharge of the final effluent from the WWTF is regulated by Colorado River Basin Water Board Order No. R7-2019-0015, which describes the Waste Discharge Requirements (WDRs) and other terms and conditions of operation for the WWTF. Discharge requirements are summarized in **Table 5**. Refer to **Attachment A** for a detailed description of the permit.

Table 5: Rams Hill WWTF Waste Discharge Requirements

Constituent	Units	Monthly Average	Weekly Average
20 °C BOD ₅	mg/l	30	45
Total Suspended Solids (TSS)	mg/l	30	45
Settleable Solids	ml/l	0.3	0.5

Notes:

1. 30-day average daily dry weather discharge from WWTF into the evaporation/percolation ponds shall not exceed 0.250 MGD.
2. TDS concentration of the effluent shall not exceed 700 mg/l.
3. Effluent from the WWTF into the evaporation/percolation ponds shall not have a pH below 6.0 or above 9.0.

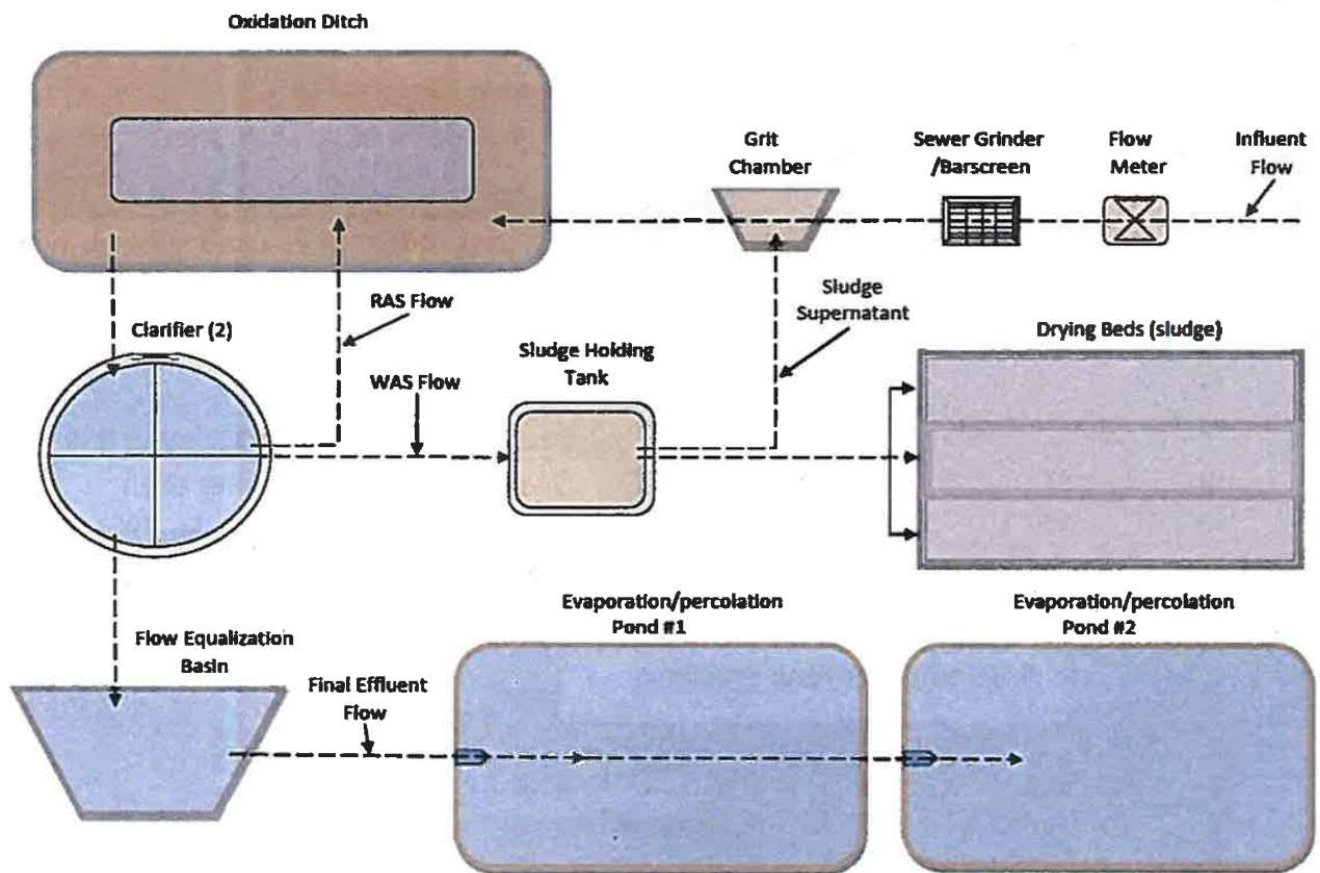


Figure 1: Rams Hill WWTF Process Flow Diagram



Figure 2: Rams Hill WWTF

2 Historical Flow Contributions at the WWTF

The WWTF originally accepted a small volume of flow from the Rams Hill sewershed. The Town Center sewershed was connected to the WWTF in 1987. The Borrego Springs Resort-Club Circle sewershed was not connected to the WWTF until 2011. Total daily and annual WWTF flows are reported to the State of California. Unfortunately, due to inoperable meters/equipment, computer failure leading to lost data and other factors, actual flows are not available for the three service areas of Rams Hill, Borrego Springs Resort-Club Circle, and Town Center. Based on available data and extrapolation, the historical flow contributions were estimated as shown in **Table 6**. Assumed annual flows are shown in **Attachment B**.

Table 6: Estimated Historical Sewershed Flow Contributions

Sewershed	Flow Contribution (Mgal)	Percent Contribution
Rams Hill	202	36%
Town Center	310	55%
Borrego Springs Resort-Club Circle	48	9%
Total Flow	560	100%

3 Current Flow and Load Generation

A high-level WWTF treatment process evaluation was performed with a focus on recent (2020) WWTF treatment capacity. Individual unit process capacities were evaluated under current loading conditions and current EDU connections. Results from the evaluation are intended to assist the District in determining potential expansion requirements for the WWTF.

Flow, BOD, and TKN concentration and loading values were developed from WWTF influent data from January 2020 to December 2020. The Rams Hill WWTF flow and loads incorporate such peaking factors to maintain required treatment process integrity, as presented in **Table 7**.

Table 7: Rams Hill WWTF Current Influent Flows, Loads, and Connections

Parameter	Units	Value
Connected EDU	no.	811
Average Day Flow (ADF) ¹	gpd (gpm)	63,350 (44)
Maximum Month Dry Weather Flow (MMDF) ²	gpd (gpm)	128,800 (89)
Peak Hour Flow (PHF) ³	gpd (gpm)	253,400 (176)
Average Day BOD ₅ Concentration	mg/l	84
Average Day BOD ₅ Load	lb/d	47
Maximum Month BOD ₅ Load ²	lb/d	188
Average Day TKN Concentration	mg/l	52
Average Day TKN Load	lb/d	28
Maximum Month TKN Load	lb/d	55
WAS Sludge Production @ ADF ⁴	lb/d	33

Notes:

¹ADF and MMDF values derived from monthly flow data (Jan 2020 – December 2020)

²March 2017 average flow and BOD load during “superbloom” period

³PHF assumes a peaking factor of 4 relative to ADF

⁴Assumed 0.5% solids

Individual unit processes at the WWTF are required to treat flow and loads over different time scales. Processes at the head of the plant must treat instantaneous flows or the facility risks flooding. This instantaneous flow capacity is approximated by Peak Hour Flow (PHF). The biological treatment process (oxidation ditch) is required to handle BOD and TKN loads over month-long periods (Maximum Month Load, MML) while like the equalization basins are designed to handle average day flows (ADF). Process flow and load treatment requirements are listed in **Table 9**.

3.1 Flow and Load Generation Factors

Generation factors were calculated to determine flows and loads produced by each EDU connected to the WWTF collection system. The ADF generation factor was increased by one standard deviation to compensate for the limited flow data. The measured ADF for 2020 was 63,350 gpd with a standard deviation of 14,820 gpd. The ADF used to determine the generation factor was 63,350 gpd + 14,820 gpd = 78,170 gpd. Normalizing by the 811 EDU results in an ADF flow generation factor of 96.4 gpd/EDU. Flow and strength factors are used to determine potential available capacity within the WWTF. A summary of wastewater flow and load generation factors is provided in **Table 8**.

Table 8: Flow and Load Generation Factors

Parameter	Units	Value
Average Day Flow (ADF)	gpd/EDU	96.4 ¹
Maximum Month Dry Weather Flow (MMDF)	gpd/EDU	159
Peak Hour Flow (PHF)	gpd/EDU	385.5
Maximum Month BOD ₅ Load (MML)	lb/d/EDU	0.23
Maximum Month TKN Load (MML)	lb/d/EDU	0.07
Sludge Production @ ADF	wet-lb/d/EDU	0.04 ²

Notes:

¹Flow generation factors for residential wastewater collection systems derived using average flow data and 1 standard deviation to account for data uncertainty.

²Assumed 0.5% solids

The flow generation factor of 96.4 gpd/EDU is still lower than the typical 150 to 200 gpd/EDU, which is explained by the transient nature of the Borrego Springs community.

4 WWTF Unit Process Capacities

This section summarizes individual unit process design and available capacities.

4.1 Determination of Available Process Capacities

Unit process performance is evaluated by analyzing process flow rates and water quality data between January 2020 and December 2020 unless otherwise noted. Design criteria were taken from WWTF design drawings from 1981 and the 2016 Wastewater Treatment Plant Upgrade Report. Refer to **Attachment C** for the WWTF design criteria.

The WWTF is composed of several unit processes. Each unit process has its own capacity. The overall WWTF capacity is equal to that of the unit process with the lowest individual capacity. The available capacity of a unit process is defined here as the difference between the full design capacity and the in-use capacity. In this analysis it was assumed the equipment is performing adequately compared to its design criteria without any deficiencies and, therefore, available capacity only considers current load versus design load and does not consider actual process performance.

Table 9 lists individual unit processes at the WWTF and their associated design flow or load capacities. The listed design flow and load scenarios must be accommodated by the corresponding unit process. For example, the biological treatment system must have enough capacity to treat the maximum month BOD and TKN load that enters the WWTF. Likewise, the headworks must have enough capacity to process peak hourly flow.

Table 9: Unit Process Design Flow and Load Summary

Unit Process	Design Flow/Load
Headworks	Peak Hour Flow (PHF)
Biological Treatment (Oxidation Ditch)	Max Month Load (MML)
Secondary Clarifiers	Average Day Flow (ADF)
Equalization/Stabilization Basin	Average Day Flow (ADF)
Percolation Ponds	Max Month Dry Weather Flow (MMDF)
Solids Treatment	Max Month Load (MML)
	Average Day Flow (ADF)

4.2 Headworks

WWTF influent flow enters the headworks through a 15-inch diameter polyvinyl chloride (PVC) gravity sewer main. The headworks consists of a Parshall flume flow meter, grinder with a bypass bar screening unit. Screened wastewater enters an aerated grit chamber for grit removal. Grit accumulated in the chamber is scooped out and disposed of in a dumpster along with screenings. Individual headworks unit processes must handle peak hour flow (PHF) as there is no upstream flow equalization. WWTF preliminary treatment design and available capacity parameters are given in **Table 10**.

A Parshall flume flow meter measures the depth of flow through an engineered throat of known width. The measured depth of flow is used to calculate flow rate. The flume has a 6-inch throat with a 3-inch insert. The 6-inch Parshall flume flow meter can measure a maximum flow of 1,750 gpm (2.5 MGD) at a depth of 18 inches. The 3-inch insert reduces

the maximum measurable flow to 834 gpm (1.2 MGD) at a water depth of 18 inches but increases the measurement accuracy over the lower range. However, the ultrasonic level sensor is currently calibrated to measure flow between 0 and 143 gpm (205,000 gpd). The full design capacity for the Parshall flume is listed as 834 gpm, which assumes the 3-inch insert remains in place and the ultrasonic level sensor is recalibrated to measure up to the maximum flow rate.

Table 10: Headworks Available Capacity

Unit Process	Full Design Capacity	In-Use Capacity	Available Capacity
Parshall flume flow meter	834 gpm @ PHF	217 gpm @ PHF	+617 gpm (+2,304 EDU)
Bar screen + Grinder	1,201 gpm @ PHF		+984 gpm (+3,676 EDU)
Grit chamber	2,778 gpm @ PHF		+2,561 gpm (+9,564 EDU)

Key Notes/Findings

- The headworks can accommodate an additional 2,304 EDU.
- Parshall flume flow meter is currently configured to measure up to 205,000 gpd. However, the measurable flow rate can be increased up to 1.2 MGD by recalibrating the ultrasonic level sensor.
- The influent bar screen and grit chamber are projected to have the capacity to screen influent flow from an additional 3,676 EDU and 9,564 EDU, respectively.

4.3 Secondary Treatment

Secondary treatment consists of a single-duty oxidation ditch and two secondary clarifiers which typically operate with one unit in a duty/standby configuration, allowing for the inspection, maintenance, and rehabilitation of each basin independently. Secondary treated effluent is discharged to the evaporation/percolation ponds.

The mass of BOD and TKN that can be removed via the oxidation ditch is limited by the basin volume and oxidation ditch loading rate capacity. The oxidation ditch is designed to remove BOD and TKN loads under maximum monthly loading rate conditions. The capacities of the oxidation ditch, with respect to BOD and TKN removal, as well as secondary clarifiers are presented in **Table 11**.

Table 11: Secondary Treatment Available Capacity

Unit Process	Design Capacity	In-Use Capacity	Available Capacity
Oxidation Ditch (BOD Load)	573 lb/d BOD @ MML	188 lb/d BOD @ MML	+385 lb/d BOD (+1,663 EDU)
Oxidation Ditch (TKN Load) ¹	63lb/d TKN @ MML	55 lb/d TKN @ MML	+7 lb/d TKN (+104 EDU)¹
Secondary Clarifiers (SOR) ²	249,995 gpd @ ADF	78,169 gpd	171,827 gpd (+1,783 EDU)
Secondary Clarifiers (SLR) ^{3,4}	983,213 gpd @ ADF	128,802 gpd	854,411 gpd (+5,380 EDU)

Notes:

¹No TKN design criterion available. Assumed a design influent TKN of 30 mg/l @ 250,000 gpd which is typical for WWTFs of this vintage.

²Solids Overflow Rate (SOR)

³Solids Loading Rate (SLR)

⁴Assumed a design MLSS of 1,500 mg/l

There were no influent nitrogen (TKN) loading or removal design criteria associated with the original oxidation ditch design. An influent design TKN concentration of 30 mg/l at 250,000 gpd was assumed for the purposes of this analysis. Under this assumption, the oxidation ditch is projected to have capacity to treat nitrogen generated from an additional 104 EDUs. Actual oxidation ditch removal capacity should be evaluated to accurately determine available oxidation ditch capacity.

Key Notes/Findings

- The secondary treatment process capacity is limited by nitrogen removal in the oxidation ditch and is projected to accommodate an additional 104 EDU. However, this conclusion is based on an assumed design criterion and no explicit permitted nitrogen discharge limit.
- The oxidation ditch is projected to have capacity to treat BOD generated from an additional 1,663 EDU.
- The secondary clarifiers are projected to have capacity to handle flow from an additional 1,783 EDU.
- Assuming that the designed MLSS is 1,500 mg/l, then the secondary clarifiers are projected to have capacity to separate solids from an additional 5,380 EDU.

4.4 Flow Equalization Basin

Secondary clarified effluent is conveyed by gravity to a flow equalization (EQ) basin. One equalization basin is currently operated. The EQ basin is aerated to keep treated effluent mixed and to avoid odor production. The equalization basin is designed to provide 24 hours of storage. The capacity analysis of the equalization basin is presented in **Table 12**.

Table 12: Stabilization Basin Available Capacity

Unit Process	Design Capacity	In-Use Capacity	Available Capacity
Equalization Basin	121,500 gpd @ ADF	78,169 gpd @ ADF	+43,331 gpd (+450 EDU)

Key Notes/Findings

- The EQ basin is projected to have capacity to treat an additional 450 EDU.

4.5 Final Effluent Disposal

Final effluent is disposed to percolation ponds where treated wastewater infiltrates into the local groundwater basin. The capacity analysis of the percolation ponds is presented in **Table 13**.

Table 13: Final Effluent Available Capacity

Unit Process	Design Capacity	In-Use Capacity	Available Capacity
Percolation Pond	250,000 gpd @ MMDF	128,802 gpd @ MMDF	+121,198 gpd (+763 EDU)

Key Notes/Findings

- The effluent percolation ponds are projected to have capacity for an additional 763 EDU.
- The design capacity is a permitted limit. The percolation ponds may in fact be able to discharge a larger volume of treated effluent.

4.6 Sludge Treatment

There are two sludge drying beds which are used to stabilize the sludge. In addition, there is a single sludge holding tank with an operational detention time of 72 hours to help maintain constant sludge application rates. The sludge is removed every 4-5 years from the sludge drying beds and disposed of off-site at a disposal waste management facility approved by the Regional Board. Sludge treatment available capacity is presented in **Table 14**.

Table 14: Sludge Treatment Available Capacity

Unit Process	Design Capacity	In-Use Capacity	Available Capacity
Sludge Holding Tank	10,000 gpd WAS @ MML	3,156 gpd @ MML	+6,844 gpd (+1,759 EDU)
Sludge Drying Bed	385 lb/d WAS @ ADF	33 lb/d WAS @ ADF	+352 lb/d WAS (+8,776 EDU)

Key Notes/Findings

- Sludge holding tank is projected to have capacity for an additional 1,759 EDU.
- Sludge drying beds are projected to have capacity for an additional 8,776 EDU.

4.6 Unit Process Capacity Summary

Individual unit process in-use and available capacities are summarized in **Table 15**.

Table 15: Summary of Unit Process Available Capacities

Unit Process	Design Criteria	In-Use Capacity	Available Capacity
Parshall Flume	834 gpm @ PHF	217 gpm @ PHF	+617 gpm (+2,304 EDU)
Bar Screen + Grinder	1,201 gpm @ PHF		+984 gpm (+3,676 EDU)
Grit Chamber	2,778 gpm @ PHF		+2,561 gpm (+9,564 EDU)
Oxidation Ditch (BOD)	573 lb/d @ MML	188 lb/d @ MML	+385 lb/d BOD (+1,663 EDU)
Oxidation Ditch (TKN)	63 lb/d @ MML	55 lb/d @ MML	+7 lb/d TKN (+104 EDU)¹
Secondary Clarifiers (SOR)	249,995 gpd @ ADF	78,169 gpd	171,827 gpd (+1,783 EDU)
Secondary Clarifiers (SLR)	983,213 gpd @ MMDF	128,802 gpd	854,411 gpd (+5,380 EDU)
Equalization Basin	121,500 gpd @ ADF	78,169 gpd @ ADF	+43,331 gpd (+450 EDU)
Percolation Pond	250,000 gpd @ MMDF	128,802 gpd @ MMDF	+121,198 gpd (+763 EDU)
Sludge Holding Tank	10,000 gpd WAS @ MML	3,156 gpd @ MML	+6,844 gpd (+1,759 EDU)
Sludge Drying Bed	385 lb/d WAS @ ADF	33 lb/d WAS @ ADF	+352 lb/d WAS (+8,776 EDU)

5 Plant Upgrades Cost Estimates

The following opinion of probable cost serves to establish the order of magnitude cost for the identified preferred project alternative. The cost opinion is based on the quantities and unit price estimates of treatment process upgrades developed from planning level concepts, vendor quotes, and existing site conditions. In addition, a project complexity factor is incorporated into the unit price to adjust for projected difficulties based on the construction site and work conditions. Refer to **Attachment D** for detailed cost tables.

5.1 Cost Opinion Methodology and Assumptions

For the purposes of this analysis, the cost opinion is a **Class 5** AACE Construction Cost Opinion, based on the feasibility level analysis completed. The cost opinion makes use of quantity takeoffs, vendor/supplier/manufacturer quotations, and recent data in the development of projected costs. Other general assumptions in construction cost analysis include:

- Cost Index – Engineering News Record Cost Index for Los Angeles, CA
- Escalation to Midpoint of 5% of construction subtotal per year
- Construction Contingency of 20% of construction subtotal
- Engineering Design is 35% of total construction cost for alternative 0
- Engineering Design is 30% of total construction cost for alternative 0
- Engineering Design is 15% of total construction cost for alternatives 3-5
- Construction Management is 25% of total construction cost for alternative 0
- Construction Management is 20% of total construction cost for alternative 1
- Construction Management is 10% of total construction cost

5.2 Alternative 0 – Addition of Nitrogen Removal Capacity

Alternative 0 includes the addition of dedicated nitrogen removal capacity at the WWTF. There are many different processes that can provide nitrogen removal at the WWTF, including denitrification filters, simultaneous nitrification-denitrification, and the addition of an anoxic zone for denitrification. For this analysis, we have chosen the addition of an anoxic zone to the existing oxidation ditch to provide nitrogen removal. This concept includes the addition of tankage to the end of the oxidation ditch. This additional tankage will be approximately 40% of the existing oxidation ditch volume and will be mixed but unaerated. The anoxic zone is intended to remove (denitrify) the nitrate that is formed in the aerated zone of the oxidation ditch thereby increasing nitrogen removal at the WWTF. Oxidation ditches with anoxic zones typically produce effluent with total nitrogen concentrations below 10 mg/l. This analysis assumes the addition of an anoxic zone will remove the existing nitrogen removal capacity bottleneck and provide the District with nitrogen removal capacity up to a total of 2,594 EDU (250,000 gpd). Because denitrification requires a carbon source (e.g. BOD), it is assumed that the additional nitrogen removal will also increase BOD removal up to a capacity of 2,594 EDU. Nitrogen removal capacity and removal technologies will be further evaluated in a future project.

The major cost estimate assumptions for the identified process deficiencies are listed below and estimated construction costs are shown in **Table 16**.

The major assumptions include:

- Existing unit processes and equipment that do not need an upgrade remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General requirements are estimated to be 5% of total construction cost.
- Sitework accounts only for excavation.
- Sitework and concrete work includes the addition of (1) anoxic zone.
- The anoxic zone for the oxidation ditch is estimated to be expanded by 40% of the total oxidation ditch volume to accommodate BOD and TKN loading rates.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of electrical equipment is estimated to be 10% of total construction cost.
- Installation of instrumentation is estimated to be 3% of total construction cost.

5.2.1 Alternative 0 Capital Cost Estimate

The capital cost estimate for Alternative 0 is summarized in **Table 16**.

Table 16: Alternative 0 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 15,000
General Requirements	\$ 15,000	\$ 15,000
Division 2 - Sitework/Earthwork		\$ 12,000
Expansion Structures	\$ 15	\$ 12,000
Division 3 - Concrete		\$ 133,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 133,000
Division 11 - Equipment		\$ 88,000
Ox. Ditch Anoxic Zone Mixer (5 HP)	\$ 70,000	\$ 70,000
Division 15 - Mechanical		\$ 25,000
Civil Piping	\$ 25,000	\$ 25,000
Division 16 - Electrical		\$ 30,000
Electrical (10% of overall construction cost)	\$ 30,000	\$ 30,000
Division 17 - Instrumentation		\$ 8,000
Sensors and Alarms (3% of overall construction cost)	\$ 8,000	\$ 8,000
	Construction Subtotal	\$ 311,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 15,550
	Construction Contingency (20%)	\$ 63,000
	Total Construction Cost	\$ 389,550
	Engineering Design (35% of Construction)	\$ 136,343
	Construction Management (25% of Construction)	\$ 97,388
	Total	\$ 624,000

5.3 Alternative 1 – EDU-Based Cost Analysis

Alternative 1 evaluates the capacity of the existing WWTF infrastructure. **Table 17** lists the WWTF total hydraulic capacity, BOD load capacity, and TKN load capacity. The WWTF has a total hydraulic capacity of 250,000 gpd that can accommodate flow from 2,594 EDU. **Figure 3** shows a capacity “timeline” expressed in number of connected EDU. The capacity of each process is listed and the point at which each process needs to be expanded coincides when the number of connected EDU exceeds the process capacity in terms of EDU. Alternative 1 identifies those processes that do not provide up to 2,594 EDU capacity and provides a cost estimate for the expansion of those processes to meet that EDU capacity.

Table 17: Summary of Unit Process Total Capacities

Capacity	Scenarios	EDUs
Total Hydraulic Capacity	250,000 gpd @ ADF	2,594 EDU
BOD Load Capacity	573 lb BOD/d @ MML	2,474 EDU
TKN Load Capacity	62.6 lb TKN/d @ MML	915 EDU

The WWTF is deficient in its BOD and TKN treatment capacities. To address this deficiency, additional BOD and TKN treatment are assumed to be provided by adding an anoxic zone to the existing oxidation ditch.² The anoxic zone is a mixed, unaerated zone in which nitrate is removed. Removal of nitrate requires approximately 4 lbs of BOD per lb of nitrate-nitrogen removed. For the purposes of this high-level estimate, it is assumed an anoxic zone on the order of 40% of the oxidation ditch volume will provide BOD and TKN treatment capacity to serve 2,594 EDU.

² Each alternative includes the construction of an anoxic zone on the existing oxidation ditch as well as anoxic zones on new oxidation ditches. This measure is included to increase both BOD and TKN treatment capacities to match hydraulic capacity.

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Unit Process	Design Capacity (EDU)	Available Unit Process EDUs (EDU)
Parshall Flume	3,115	2,304
Bar Screen + Grinder	4,487	3,676
Grit Chamber	10,375	9,564
Oxidation Ditch (BOD Load)	2,474	1,663
Oxidation Ditch (TKN Load)	915	104
Secondary Clarifiers (SOR)	2,594	1,783
Secondary Clarifiers (SLR)	6,191	5,380
Equalization Basin	1,261	450
Percolation Pond	1,574	763
Sludge Holding Tank	2,570	1,759
Sludge Drying Bed	9,587	8,776

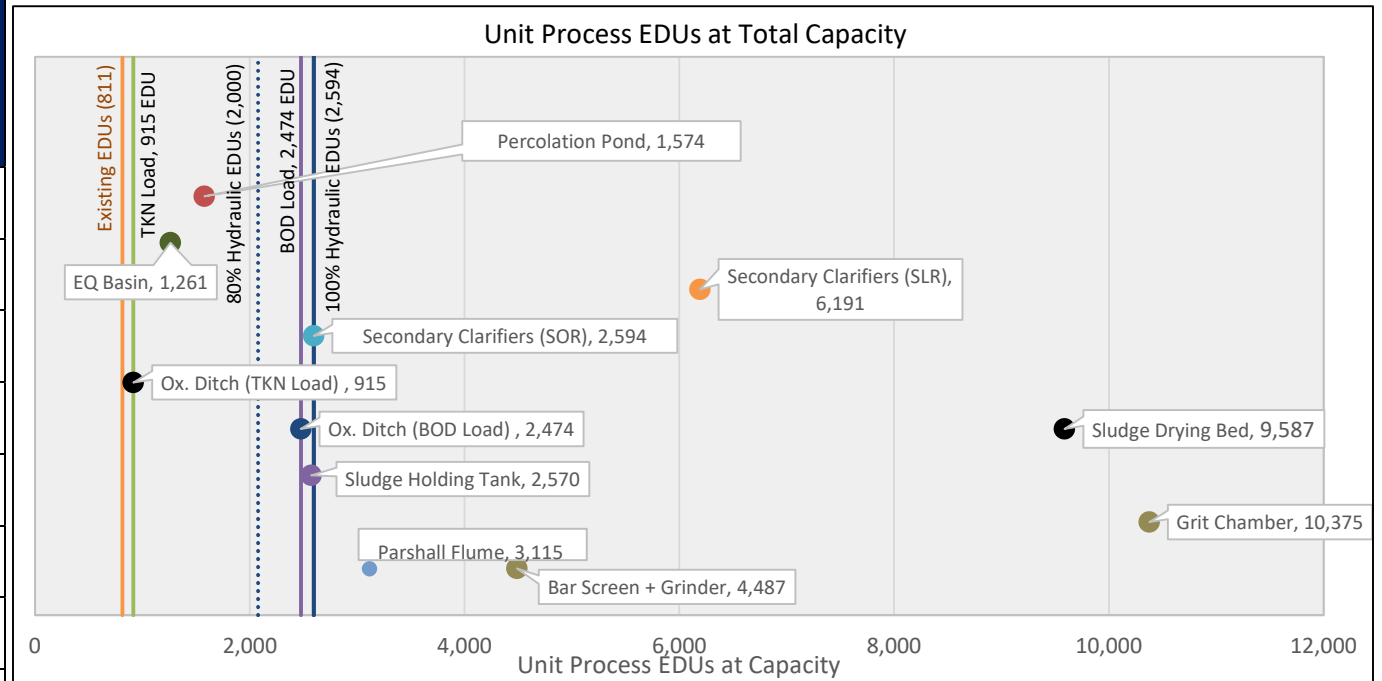


Figure 3. Unit Process EDUs at Total Capacity

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As shown in **Figure 3**, the following unit processes require expansion to meet the 2,594 EDU capacity:

- Oxidation ditch (Total BOD = 2,474 EDU; Total TKN capacity = 915 EDU)
- Equalization basin (Total capacity = 1,261 EDU)
- Percolation pond (Total (permitted) capacity = 1,574 EDU)
- Sludge holding tank (Total capacity = 2,570 EDU)

An anoxic zone will be added to the oxidation ditch to bring its total BOD and TKN removal capacities to 2,594 EDU. The equalization basin currently has 1,261 EDU capacity, so an additional identical basin will be added to bring the total equalization capacity near 2,594 EDU. The sludge holding tank is not proposed to be expanded as its current capacity is only 24 EDU shy of 2,594 EDU. The percolation pond capacity is limited by the WWTF permit rather than by performance. A permit amendment would be required to expand the percolation pond capacity. Construction of additional percolation ponds would not be required for Alternative 1.

The major cost estimate assumptions for the identified process deficiencies are listed below and estimated construction costs are shown in **Table 18**.

The major assumptions include:

- Existing unit processes and equipment that do not need an upgrade remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General requirements are estimated to be 5% of total construction cost.
- Sitework accounts only for excavation.
- Sitework and concrete work includes the addition of (1) anoxic zone and one (1) EQ basin.
- The anoxic zone for the oxidation ditch is estimated to be expanded by 40% of the total oxidation ditch volume to accommodate BOD and TKN loading rates.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of electrical equipment is estimated to be 10% of total construction cost.
- Installation of instrumentation is estimated to be 3% of total construction cost.

5.3.1 Alternative 1 Capital Cost Estimate

The capital cost estimate for Alternative 1 is summarized in **Table 18**.

Table 18: Alternative 1 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 30,000
General Requirements	\$ 30,000	\$ 30,000
Division 2 - Sitework		\$ 22,000
Expansion Structures	\$ 15	\$ 22,000
Division 3 - Concrete		\$ 344,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 133,000
EQ Basin Concrete Structure	\$ 1,000	\$ 211,000
Division 11 - Equipment		\$ 84,000
Ox. Ditch Anoxic Zone Mixer (5 HP)	\$ 70,000	\$ 70,000
Miscellaneous Equipment (20% of equipment)	\$ 14,000	\$ 14,000
Division 15 - Mechanical		\$ 45,000
Civil Piping	\$ 45,000	\$ 45,000
Division 16 - Electrical		\$ 60,000
Electrical (10% of overall construction cost)	\$ 60,000	\$ 60,000
Division 17 - Instrumentation		\$ 15,000
Sensors and Alarms (3% of overall construction cost)	\$ 15,000	\$ 15,000
	Construction Subtotal	\$ 600,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 30,000
	Construction Contingency (20%)	\$ 120,000
	Total Construction Cost	\$ 750,000
	Engineering Design (30% of Construction)	\$ 225,000
	Construction Management (20% of Construction)	\$ 150,000
	Total	\$ 1,125,000

5.4 Alternative 2 - WWTF 250,000 GPD Expansion without Replacing Existing Equipment

Alternative 2 includes upsizing the WWTF by adding an additional 250,000 gallons per day of treatment capacity. The WWTF will have capacity to produce 500,000 gpd of secondary treated effluent. Other major assumptions include:

- All existing unit processes and equipment remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General requirements are estimated to be 5% of total construction cost.
- Sitework, concrete and mechanical equipment estimates are developed for one (1) bar screen, one (1) grinder, two (2) anoxic zones, one (1) oxidation ditch, one (1) secondary clarifier, three (3) EQ basins, two (2) percolation ponds, and one (1) sludge holding tanks if applicable.
- Sitework accounts only for excavation.
- New miscellaneous pumps are estimated to be 10% of total equipment cost.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of new electrical equipment is estimated to be 10% of total construction cost.
- Installation of new instrumentation is estimated to be 3% of total construction cost.

5.4.1 Alternative 2 Capital Cost Estimate

The capital cost estimate for Alternative 2 is summarized in **Table 19**.

Table 19: Alternative 2 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 180,000
General Requirements	\$ 180,000	\$ 180,000
Division 2 - Sitework		\$ 359,000
Expansion Structures	\$ 15	\$ 359,000
Division 3 - Concrete		\$ 1,365,000
Ox Ditch Concrete Structure	\$ 1,000	\$ 331,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 265,000
EQ Basin Concrete Structure	\$ 1,000	\$ 632,000
Secondary Clarifier Concrete Structure	\$ 1,000	\$ 90,000
Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 47,000
Division 11 - Equipment		\$ 880,000
Bar Screen	\$ 112,000	\$ 112,000
Grinder	\$ 14,000	\$ 14,000
Oxidation Ditch Mechanism	\$ 224,000	\$ 224,000
Anoxic Zone Mixer (5 HP)	\$ 90,000	\$ 180,000
Secondary Clarifier Mechanism	\$ 266,000	\$ 266,000
Miscellaneous Equipment (10% of equipment)	\$ 79,600	\$ 80,000
Division 15 - Mechanical		\$ 275,000
Civil Piping	\$ 275,000	\$ 275,000
Division 16 - Electrical		\$ 350,000
Electrical (10% of overall construction cost)	\$ 350,000	\$ 350,000
Division 17 - Instrumentation		\$ 110,000
Sensors and Alarms (3% of overall construction cost)	\$ 110,000	\$ 110,000
	Construction Subtotal	\$ 3,519,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 175,950
	Construction Contingency (20%)	\$ 704,000
	Total Construction Cost	\$ 4,398,950
	Engineering Design (15% of Construction)	\$ 659,843
	Construction Management (10% of Construction)	\$ 439,895
	Total	\$ 5,499,000

5.5 Alternative 3 - WWTF 500,000 GPD Expansion without Replacing Existing Equipment

Alternative 3 includes upsizing the WWTF by adding an additional 500,000 gallons per day of treatment capacity. The WWTF will have capacity to produce 750,000 gpd of secondary treated effluent. Major assumptions include:

- Existing unit processes and equipment remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General Requirements are estimated to be 5% of total construction cost.
- Sitework accounts only for excavation.
- Sitework, concrete and mechanical equipment (if applicable) are developed for one (1) bar screen, one (1) grinder, three (3) anoxic zones, two (2) oxidation ditches, two (2) secondary clarifiers, five (5) EQ basins, four (4) percolation ponds, and two (2) sludge holding tanks.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of new electrical equipment is estimated to be 10% of total construction cost.
- Installation of new instrumentation is estimated to be 3% of total construction cost.

5.5.1 Alternative 3 Capital Cost Estimate

Capital cost estimates for Alternative 2 are summarized in **Table 20**.

Table 20: Alternative 3 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 335,000
General Requirements	\$ 335,000	\$ 335,000
Division 2 - Sitework		\$ 729,000
Expansion Structures	\$ 15	\$ 729,000
Division 3 - Concrete		\$ 2,486,000
Ox Ditch Concrete Structure	\$ 1,000	\$ 614,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 500,000
EQ Basin Concrete Structure	\$ 1,000	\$ 1,053,000
Secondary Clarifier Concrete Structure	\$ 1,000	\$ 180,000
Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 139,000
Division 11 - Equipment		\$ 1,888,000
Bar Screen	\$ 112,000	\$ 112,000
Grinder	\$ 14,000	\$ 14,000
Oxidation Ditch Mechanism	\$ 288,000	\$ 576,000
Anoxic Zone Mixer (5 HP)	\$ 110,000	\$ 330,000
Secondary Clarifier Mechanism	\$ 342,000	\$ 684,000

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Miscellaneous Equipment (10% of equipment)	\$ 171,600	\$ 172,000
Division 15 - Mechanical		\$ 550,000
Civil Piping	\$ 550,000	\$ 550,000
Division 16 - Electrical		\$ 700,000
Electrical (10% of overall construction cost)	\$ 700,000	\$ 700,000
Division 17 - Instrumentation		\$ 200,000
Sensors and Alarms (3% of overall construction cost)	\$ 200,000	\$ 200,000
	Construction Subtotal	\$ 6,888,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 344,400
	Construction Contingency (20%)	\$ 1,378,000
	Total Construction Cost	\$ 8,610,400
	Engineering Design (15% of Construction)	\$ 1,291,560
	Construction Management (10% of Construction)	\$ 861,040
	Total	\$ 10,763,000

5.6 Alternative 4 - WWTF Expansion and Recycled Water Production

The fourth alternative is to upgrade the WWTF to tertiary level treatment to meet Title 22 regulations for disinfected, tertiary recycled water production with a total capacity of 500,000 gpd. Historically, the tertiary and disinfection facilities of the WWTF have never been operated or maintained and the system has not been capable of producing recycled water. The existing sand filters do not meet current Title 22 requirements, there are no flocculation facilities, and the chlorine contact basin is not anticipated to have sufficient modal contact time. The upgraded tertiary facilities would be sized and constructed to handle maximum monthly flow rates.

The anticipated improvements required for expanding the existing capacity by 250,000 gpd and producing recycled water at the WWTF include:

- Existing unit processes and equipment remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General requirements are estimated to be 5% of total construction cost.
- Sitework, concrete and mechanical equipment estimates are developed for one (1) bar screen, one (1) grinder, two (2) anoxic zones, one (1) oxidation ditch, one (1) secondary clarifier, three (3) EQ basins, two (2) percolation ponds, and one (1) sludge holding tanks if applicable.
- Sitework accounts only for excavation.
- New miscellaneous pumps are estimated to be 10% of total equipment cost.
- Installation of coagulant dosing system and mixer.
- Construction of flocculation chamber.

- Installation of new above grade filter system skids (e.g. disk filters) and piping.
- Construction of an additional pass in chlorine contact chamber and piping modifications.
- Installation of new sodium hypochlorite storage tanks and dosing equipment.
- Installation of new recycled water pumps.
- Installation of new electrical and instrumentation system for tertiary and disinfection facilities.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of new electrical equipment is estimated to be 10% of total construction cost.
- Installation of instrumentation is estimated to be 3% of total construction cost.

5.6.1 Alternative 4 Capital Cost Estimate

The capital cost estimate for Alternative 4 is summarized in Table 21.

Table 21: Alternative 4 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 400,000
General Requirements	\$ 400,000	\$ 400,000
Division 2 - Sitework		\$ 359,000
Expansion Structures	\$ 15	\$ 359,000
Division 3 - Concrete		\$ 1,465,000
Ox Ditch Concrete Structure	\$ 1,000	\$ 331,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 265,000
EQ Basin Concrete Structure	\$ 1,000	\$ 632,000
Secondary Clarifier Concrete Structure	\$ 1,000	\$ 90,000
Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 47,000
Extend CCT	\$ 100,000	\$ 100,000
Division 11 - Equipment		\$ 5,510,000
Bar Screen	\$ 112,000	\$ 112,000
Grinder	\$ 14,000	\$ 14,000
Oxidation Ditch Mechanism	\$ 224,000	\$ 224,000
Anoxic Zone Mixer (5 HP)	\$ 90,000	\$ 180,000
Secondary Clarifier Mechanism	\$ 266,000	\$ 266,000
RW pumps	\$ 270,000	\$ 540,000
Disk filter (x2), floc/coag, and piping	\$ 1,440,000	\$ 2,880,000
NaOCl tank, pumps, & piping	\$ 135,000	\$ 270,000
NaOCl mix vault and static mixer	\$ 105,000	\$ 105,000
Miscellaneous Equipment (20% of equipment)	\$ 918,200	\$ 919,000
Division 15 - Mechanical		\$ 600,000
Civil Piping	\$ 600,000	\$ 600,000
Division 16 - Electrical		\$ 750,000
Electrical (10% of overall construction cost)	\$ 750,000	\$ 750,000
Division 17 - Instrumentation		\$ 250,000
Sensors and Alarms (3% of overall construction cost)	\$ 250,000	\$ 250,000
	Construction Subtotal	\$ 9,334,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 466,700
	Construction Contingency (20%)	\$ 1,867,000
	Total Construction Cost	\$ 11,667,700

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Engineering Design (15% of Construction)	\$	1,750,155
Construction Management (10% of Construction)	\$	1,166,770
Total	\$	14,585,000

5.7 Alternative 5 - WWTF Expansion and Recycled Water Production

The fifth alternative is to upgrade the WWTF to tertiary level treatment to meet Title 22 regulations for disinfected, tertiary recycled water production with a total capacity of 750,000 gpd. Major assumptions include:

- Existing unit processes and equipment remain in place. It is assumed that they perform adequately and there is no need to replace them.
- General Requirements are estimated to be 5% of total construction cost.
- Sitework accounts only for excavation.
- Sitework, concrete and mechanical equipment (if applicable) are developed for one (1) bar screen, one (1) grinder, three (3) anoxic zones, two (2) oxidation ditches, two (2) secondary clarifiers, five (5) EQ basins, four (4) percolation ponds, and two (2) sludge holding tanks.
- New miscellaneous pumps are estimated based on 10% of total equipment cost.
- Installation of coagulant dosing system and mixer to accommodate proposed flow.
- Construction of flocculation chambers.
- Installation of new above grade filter system skids (e.g. disk filters) and piping.
- Construction of an additional pass in chlorine contact chamber and piping modifications.
- Installation of new sodium hypochlorite storage tanks and dosing equipment.
- Installation of new recycled water pumps.
- Installation of new electrical and instrumentation system for tertiary and disinfection facilities.
- Installation of civil piping is estimated to be 8% of total construction cost.
- Installation of new electrical equipment is estimated to be 10% of total construction cost.
- Installation of instrumentation is estimated to be 3% of total construction cost.

5.7.1 Alternative 5 Capital Cost Estimate

The capital cost estimate for Alternative 5 is summarized in **Table 22**.

Table 22: Alternative 5 - Capital Cost Estimate

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Division 1 - General Requirements		\$ 575,000
General Requirements	\$ 575,000	\$ 575,000
Division 2 - Sitework		\$ 729,000
Expansion Structures	\$ 15	\$ 729,000
Division 3 - Concrete		\$ 2,636,000
Ox Ditch Concrete Structure	\$ 1,000	\$ 614,000
Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 500,000
EQ Basin Concrete Structure	\$ 1,000	\$ 1,053,000
Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 139,000
Extend CCT	\$ 150,000	\$ 150,000
Division 11 - Equipment		\$ 6,020,000
Bar Screen	\$ 144,000	\$ 144,000
Grinder	\$ 18,000	\$ 18,000
Oxidation Ditch Mechanism	\$ 288,000	\$ 576,000
Anoxic Zone Mixer (5 HP)	\$ 110,000	\$ 330,000
Secondary Clarifier Mechanism	\$ 342,000	\$ 684,000
RW pumps	\$ 150,000	\$ 450,000
NaOCl tank, pumps, & piping	\$ 75,000	\$ 225,000
Disk filter (x2), floc/coag, and piping	\$ 800,000	\$ 2,400,000
NaOCl mix vault and static mixer	\$ 75,000	\$ 225,000
Miscellaneous Equipment (20% of equipment)	\$ 1,042,800	\$ 1,043,000
Division 15 - Mechanical		\$ 1,000,000
Civil Piping	\$ 1,000,000	\$ 1,000,000
Division 16 - Electrical		\$ 1,250,000
Electrical (10% of overall construction cost)	\$ 1,250,000	\$ 1,250,000
Division 17 - Instrumentation		\$ 350,000
Sensors and Alarms (3% of overall construction cost)	\$ 350,000	\$ 350,000
	Construction Subtotal	\$ 12,560,000
	Escalation to Midpoint (5%/yr x 1 years)	\$ 628,000
	Construction Contingency (20%)	\$ 2,512,000
	Total Construction Cost	\$ 15,700,000
	Engineering Design (15% of Construction)	\$ 2,355,000

CAPITAL COST ITEM DESCRIPTION	ENGINEERING ESTIMATE	
	TOTAL	
	\$/UNIT	NET COST
Construction Management (10% of Construction)	\$	1,570,000
Total	\$	19,625,000

5.8 Cost Summary

Table 23 provides a comparison of the engineer’s opinion of probable construction costs for each alternative scenario. The construction costs do not include soft costs.

Table 23. Comparison of construction cost items between proposed alternatives

Cost Item	Alt. 0	Alt. 1	Alt.2	Alt. 3	Alt 4	Alt. 5
Total Capital Cost	\$311,000	\$600,000	\$3,519,000	\$6,888,000	\$9,334,000	\$12,560,000
AACE Class 5 Estimate, Low (-50% to -20%)	\$155,500 to \$248,800	\$300,000 to \$480,000	\$1,759,500 to \$2,815,200	\$3,444,000 to \$5,510,400	\$4,667,000 to \$7,467,200	\$6,280,000 to \$10,048,000
AACE Class 5 Estimate, High (+30% to +100%)	\$404,300 to \$622,000	\$780,000 to \$1,200,000	\$4,574,700 to \$7,038,000	\$8,954,400 to \$13,776,000	\$12,134,200 to \$18,668,000	\$16,328,000 to \$25,120,000

6 Conclusions

The following conclusions are based on the above evaluation of process treatment capacities. Key takeaways include:

- It appears that the District can maintain reliable WWTF performance while providing wastewater services to the current 811 connected EDU.
- Assuming no changes in the flow and BOD load per EDU, there is existing capacity to add an additional 104 EDU without plant expansion. A nitrogen removal design criterion was assumed for this exercise because the District does not currently have a nitrogen discharge limit. The assumed design criterion results in nitrogen (TKN) removal capacity in the oxidation ditch being the plant bottleneck. It is recommended that the plant’s nitrogen removal capacity and future discharge limit be further evaluated.
- Percolation ponds are a permitting bottleneck. Based on the current permit, the WWTF is required to have redundancy in percolation ponds. For planning purposes and more accurate estimates, it is recommended to perform a percolation/study test to assess infiltration rates of the existing ponds to determine actual percolation capacity.
- The 3-inch Parshall flume flow meter combined with a level indicator at the maximum water depth of 18 inches is capable of measuring a maximum flow rate of 835 gpm (1.2 MGD). Currently, the flow meter is

set up to measure flow rates between 0 gpm and 143 gpm based on its mounting height and calibration. It is recommended to recalibrate the flow meter to measure higher flow rates projected under future expansion without adding/expanding the actual flume.

ATTACHMENT A

Wastewater Discharge Permit



Colorado River Basin Regional Water Quality Control Board

January 25, 2019

Geoff Poole
General Manager
Borrego Water District
P.O. Box 1870
Borrego Springs, CA 92004


Dear Mr. Poole,

SUBJECT: TENTATIVE WASTE DISCHARGE REQUIREMENTS (WDRs) R7-2019-0015 FOR BORREGO WATER DISTRICT, RAM'S HILL WASTEWATER TREATMENT FACILITY, BORREGO SPRINGS, SAN DIEGO COUNTY

Enclosed are copies of the Tentative WDRs for the subject facility and the Notice of Public Hearing. As explained in the Notice, the Colorado River Basin Regional Water Quality Control Board will consider adoption of the tentative WDRs at its next regularly scheduled public meeting, which will take place at 10:00 a.m., Thursday, March 7th, 2019, at the City of Blythe, Council Chambers, 235 N Broadway, CA 92225. The Notice provides a 30-day public comment period during which interested persons may submit comments on the tentative WDRs. The Colorado River Basin Water Board will consider any comments received when determining whether to adopt the tentative WDRs.

If you have any questions, please do not hesitate to call me at (760) 776-8960.

Sincerely,



Doug Wylie, P.E.
Senior Water Resources Control Engineer
Colorado River Basin
Regional Water Quality Control Board

AG/mc

Enclosures: 1) Tentative Waste Discharge Requirements Order R7-2019-0015
2) Notice of Public Hearing 7-19-11

File: 7A370125001, CW-210088, Borrego Water District, Ram's Hill Wastewater Treatment Facility, R7-2019-0015

NANCY WRIGHT, CHAIR | PAULA RASMUSSEN, EXECUTIVE OFFICER

73-720 Fred Waring Drive, Suite 100, Palm Desert, CA 92260 | www.waterboards.ca.gov/coloradoriver



cc: Joseph Cornejo (jclabs72@gmail.com)
Roy Martinez, Plant Operator (roy@borregowd.org)

Via Email (Public Notice only):

San Diego Co. Land Use & Environment Group
South Coast Air Quality Management District
CA Department of Fish and Wildlife
CA SWRCB – DDW
CA SWRCB – DWR
CA SWRCB – DWQ
CA SWRCB – OCC

Communications Officer
Regional Contact
Regional Manager
District Engineer
Supervisor
Supervisor
Staff Council

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
Phone: (760) 346-7491

Public Notice 7-19-11
January 25, 2019

**NOTICE OF PUBLIC HEARING
FOR
TENTATIVE WASTE DISCHARGE REQUIREMENTS
ORDER R7-2019-0015**

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) has prepared tentative Order R7-2019-0015 for Borrego Water District's Rams Hill Wastewater Treatment Facility in the unincorporated community of Borrego Springs, California, San Diego County. The Colorado River Basin Water Board intends to consider adopting the tentative Order during a public hearing that will commence at the time and place indicated:

Date: March 7, 2019
Time: 10:00 a.m.
Location: City of Blythe
Council Chambers
235 N. Broadway
Blythe, CA 92225

The Colorado River Basin Water Board will accept written comments regarding this tentative Order during the thirty-day public comment period, which begins **January 25, 2019** and ends **February 25, 2019**. Persons wishing to submit written comments on the tentative Order are requested to do so as soon as possible, but no later than **February 25, 2019**.

The Colorado River Basin Water Board has implemented an electronic records management system to reduce paper consumption and improve overall accessibility to records and documents. To submit comments electronically, please convert the signed original documents to Portable Document Format (PDF) and submit via email to Doug Wylie at doug.wylie@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk or USB and mailed to:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

Mailed written comments may be sent to the address above. Written comments may also be faxed to the Colorado River Basin Water Board office at (760) 341-6820.

Interested persons are invited to attend and express their views orally on this matter at the public hearing. The Colorado River Basin Water Board requests that those persons wishing to speak at the hearing provide a copy of their oral comments in writing before or during the hearing to ensure accuracy of the record.

Copies of the tentative Order are available on the Colorado River Basin Water Board's website at:

http://www.waterboards.ca.gov/coloradriver/board_decisions/

Interested persons requiring a hard copy of the tentative Order should contact Mary Castañeda at (760) 776-8945.

Please bring the foregoing to the attention of any persons known to you who would be interested in this matter.

Any person who is disabled and requires special accommodations to participate in this public hearing, please contact Hilda Vasquez at (760) 776-8950 no later than ten (10) days before the scheduled public hearing.

If you have questions concerning this matter, please contact Doug Wylie at (760) 776-8960.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

ORDER R7-2019-0015

WASTE DISCHARGE REQUIREMENTS
FOR
BORREGO WATER DISTRICT, OWNER/OPERATOR
RAMS HILL WASTEWATER TREATMENT FACILITY
Borrego Springs – San Diego County

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board) finds that:

1. Borrego Water District (District or Discharger) owns and operates a wastewater collection, treatment, and disposal system known as the Rams Hill Wastewater Treatment Facility (WWTF or Facility), which provides sewerage service to portions of the unincorporated community of Borrego Springs. The Facility has a design treatment capacity of 0.250 million gallons-per-day (mgd) and currently discharges approximately 0.073 mgd.
2. The Facility is located about four miles southeast of Borrego Springs at Assessor's Parcel Nos. 200-120-42 and 200-120-41, in the East ½ of Section 23, Township 11 South, Range 6 East, San Bernardino Baseline and Meridian. The Facility's location is shown in **Attachment A - Vicinity Map**, which is incorporated herein and made part of this Order by reference. The Facility is assigned California Integrated Water Quality System (CIWQS) No. CW-210088, Waste Discharger Identification (WDID) No. 7A370125001, and GeoTracker Global Identification No. WDR100027526.
3. The Facility is currently regulated under Waste Discharge Requirements (WDRs) prescribed under Order R7-2007-0053, adopted on September 19, 2007.
4. On September 10, 2017, the Discharger submitted a Report of Waste Discharge (ROWD) to the Colorado River Basin Water Board for the Facility.
5. This Order updates the WDRs to reflect changes in the Facility's operation and to implement the most current laws and regulations applicable to the discharge. For example, this Order reflects that the collection system now includes portions of Borrego Springs Park Community Services District's former Wastewater Reclamation Facility (regulated by Order 96-009, rescinded June 23, 2011). Additionally, the Order eliminates the prior seasonal monitoring and reporting schedule and implements a constant schedule throughout the year.
6. Accordingly, this Order supersedes WDRs Order R7-2007-0053 upon the effective date of this Order, except for enforcement purposes.

Wastewater Treatment Facility and Discharge

7. The WWTF services approximately 20 percent of the community of Borrego Springs—specifically, the Rams Hill residential community and the Town Center area, which includes hotels, a motel, and small business along Palm Canyon Drive. The remaining 80 percent of Borrego Springs is serviced by individual septic tank-subsurface disposal systems.
8. The WWTF now includes the wastewater collection system from Borrego Springs Park

Community Services District's (PCSD) former Wastewater Reclamation Facility. PCSD's facility, which was previously regulated by Order 96-009, closed in April 2011. The Colorado River Basin Water Board rescinded Order 96-009 on June 23, 2011. The wastewater collection system that once delivered domestic wastewater to the PCSD facility has been extended to the WWTF's collection system. PCSD previously treated approximately 0.013 mgd of domestic wastewater, all of which is now treated at the WWTF.

9. The WWTF includes a parshall flume, flow meter, bar screen, communitor, grit chamber, an oxidation ditch, two secondary clarifiers, a flow equalization basin, two evaporation/percolation ponds, a sludge holding tank, two sludge drying beds, and one emergency basin.
10. Wastewater influent enters the WWTF and flows through the flow meter, bar screen and a communitor that grinds solids prior to treatment, then flows to the grit chamber, where sand and grit are removed from the waste stream. Wastewater then flows to the oxidation ditch, which provides primary and secondary biological treatment. From the oxidation ditch, wastewater then goes to the secondary clarifiers, where heavier solids settle to the bottom and are collected by a skimming arm and floatable solids are skimmed from the surface. Sludge is collected at the secondary clarifiers. Wastewater then flows to the equalization basin for further oxidation and storage. The treated effluent is discharged into one of three evaporation/percolation ponds for disposal. Sludge from the Facility is discharged to on-site drying beds for stabilization. The sludge is removed every five to ten years for off-site disposal at a waste management facility approved by the Colorado River Basin Water Board.
11. The wastewater flow treatment process is shown in **Attachment B – Schematic Flow Diagram**, incorporated herein and made part of this Order by reference. The current location of the groundwater monitoring well for the percolation ponds is shown in **Attachment C – Site Map with Location of Groundwater Monitoring Well**, which is also incorporated herein by reference and made part of this Order.
12. The Discharger's Self-Monitoring Reports (SMRs) from January 2013 through November 2018 characterize the WWTF influent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
Flow	mgd	0.074	0.136	0.041
20° C BOD ₅ ¹	mg/L ²	90.2	660	0.0
TSS ³	mg/L	85.6	308	0.0

13. The Discharger's SMRs from January 2013 through November 2018 characterize the WWTF effluent as follows:

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
20° C BOD ₅	mg/L	4.35	49.5	0.0

¹ 5-day biochemical oxygen demand at 20 degrees Celsius

² milligrams per Liter

³ Total Suspended Solids

<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	<u>Minimum</u>
TSS	mg/L	7	58	0.0
Settleable Solids	ml/L ⁴	0.02	0.3	0.0
pH	s.u. ⁵	7.4	8.2	6.58
TDS ⁶	mg/L	593	735	480
Dissolved Oxygen	mg/L	7.75	10.25	5
Total Nitrogen	mg/L	29.5	48	0.0

14. Monitoring and Reporting Program (MRP) R7-2007-0053 included a seasonal monitoring and reporting schedule since historically, domestic wastewater influent flows were significantly greater during the winter months by comparison to the summer months. In 2007, the Facility received about 0.060 mgd during the high season and dropped to about 0.020 mgd in the summer. Current flows into the Facility average approximately 0.089 mgd in the winter months and 0.061 mgd during the summer. Thus, the influent flows to the Facility have increased overall and the seasonable variability is no longer as great as in the past. This Order eliminates the seasonal monitoring and reporting schedule and implements a constant schedule throughout the year.

Hydrogeologic Conditions

15. Average annual precipitation for the area is 6.8 inches, and average annual evaporation is 50 inches. Temperatures in the Borrego Springs area can reach 120° F in summer.
16. The WWTF is about 520 feet above mean sea level. Surface water runs off as sheet flow, draining to the east.
17. Soils at the WWTF from the ground surface to approximately 35 feet below ground surface (bgs) consist of fine to coarse sands, and silty clays.
18. The Discharger owns and operates a network of eleven groundwater wells that provide domestic water for the community. Groundwater quality in Borrego Springs varies from good to excellent. Depth to first encountered groundwater is approximately 60 feet bgs.
19. The Discharger reports that domestic water for the sewered portion of the community is supplied by four wells. The wells are reportedly upgradient of the WWTF and show the following constituent concentrations in milligrams per Liter for 2016:

Constituent	ID1-Well 12	ID1-Well 16	ID4-Well 3	ID4-Well 11
Total Dissolved Solids	300	300	Out of Service	320
Chloride	42	58	Out of Service	44
Nitrate-Nitrogen	0.38	0.95	Out of Service	0.66
Sulfate	90	56	Out of Service	85
Fluoride	0.4	0.5	Out of Service	0.3

⁴ milliliters per Liter

⁵ Standard pH Units

⁶ Total Dissolved Solids

Basin Plan, Beneficial Uses, and Regulatory Considerations

20. The Water Quality Control Plan for the Colorado River Basin (Basin Plan), which was adopted on November 17, 1993 and amended on March 7, 2017, designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Pursuant to Water Code section 13263, subdivision (a), waste discharge requirements must implement the Basin Plan and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Water Code section 13241.
21. The discharge is located within the Anza-Borrego Hydrological Unit. The beneficial uses of groundwater in the Anza-Borrego Hydrological Unit are:
 - a. Municipal supply (MUN),
 - b. Industrial supply (IND), and
 - c. Agricultural supply (AGR).
22. This Order establishes WDRs pursuant to division 7, chapter 4, article 4 of the Water Code for discharges that are not subject to regulation under Clean Water Act section 402 (33 U.S.C. § 1342).
23. These WDRs implement numeric and narrative water quality objectives for groundwater and surface waters established by the Basin Plan. The numeric objectives for groundwater designated for municipal and domestic supply are the maximum contaminant levels (MCLs) specified in California Code of Regulations, title 22, section 64421 et seq. and bacteriological limits set in section 64426.1 of title 22 of the California Code of Regulations. Groundwater for use as domestic or municipal water supply (MUN) must not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.
24. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This Order promotes that policy by requiring discharges to meet the MCLs designed to protect human health and ensure that water is safe for domestic use.
25. The discharge as authorized by this Order, and treatment and storage facilities associated with discharges of treated municipal wastewater, except for discharges of residual sludge and solid waste, are exempt from the requirements of the Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste, as set forth in California Code of Regulations, title 27, division 2, subdivision 1, commencing with section 20005. This exemption is based on title 27, section 20090, subdivision (a), which states in relevant part that discharges of domestic sewage or treated effluent, and treatment or storage facilities associated with municipal wastewater treatment plants, are exempt provided that such discharges are regulated by WDRs consistent with applicable water quality objectives, and that residual sludges or solid waste from wastewater treatment facilities are discharged only in accordance with the applicable title 27 provisions. This Order regulates the discharge of domestic wastewater and associated treatment and storage facilities in a manner consistent with applicable surface water and groundwater quality objectives, and residual sludges or solid waste from the Facility will be managed pursuant to title 27.

26. Section 13267 of the Water Code authorizes the Colorado River Basin Water Board to require technical and monitoring reports. The monitoring and reporting requirements in Monitoring and Reporting Program (MRP) R7-2019-0015 are necessary to determine compliance with this Order. The State Water Board's electronic database, GeoTracker Information Systems, facilitates the submittal and review of Facility documents. The burden, including costs, of this MRP bears a reasonable relationship to the need for that information and the benefits to be obtained from that information.
27. Pursuant to Water Code section 13263, subdivision (g), the discharge of waste is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

State Antidegradation Policy

28. State Water Board Resolution 68-16, entitled *Statement of Policy with Respect to Maintaining High Quality Waters in California* (Resolution 68-16), generally prohibits the Colorado River Basin Water Board from authorizing discharges that will result in the degradation of high quality waters, unless it is demonstrated that any change in water quality will (a) be consistent with maximum benefit to the people of the state, (b) not unreasonably affect beneficial uses, and (c) not result in water quality less than that prescribed in state and regional policies (e.g., the violation of one or more water quality objectives). The discharger must also employ best practicable treatment or control (BPTC) to minimize the degradation of high quality waters.
29. Some degradation of groundwater from the discharge to the evaporation/percolation ponds is consistent with Resolution 68-16, provided that the degradation:
- Is confined to a reasonable area;
 - Is minimized by means of full implementation, regular maintenance, and optimal operation of BPTC measures by the Discharger;
 - Is limited to waste constituents typically encountered in domestic wastewater;
 - Does not unreasonably affect any beneficial uses of groundwater prescribed in the Basin Plan, and will not result in the violation of any water quality objective; and
 - Is consistent with the maximum benefit to the people of the state.
30. Constituents in the WWTP effluent that have the potential to degrade groundwater include: nitrogen, coliforms (pathogen-indicator organisms), and TDS. The WWTF provides substantial removal of soluble organic matter, solids, and some nitrogen treatment. Each of these constituents is discussed below:
- Nitrogen.** The Primary Maximum Contaminant Level (MCL) found in California Code of Regulations, title 22, section 64431 for nitrate plus nitrite as nitrogen is 10 mg/L. To account for the fate of transport for the various components of total nitrogen, as a conservative value, it is assumed that all nitrogen present converts to nitrate/nitrite. The Discharger's SMRs from January 2013 through November 2018 show a range of 0 to 48 mg/L with an average 29.5 mg/L for total nitrogen in the effluent. The effluent total nitrogen data indicates that the discharge of treated wastewater may be impacting groundwater at a rate or in concentrations causing groundwater to exceed the Primary MCL, which is the applicable water quality objective. However, given the relatively low volume of the discharge, the degradation of groundwater is believed to be limited to the area near the evaporation percolation ponds. This Order requires that the Discharger

conduct a nitrogen removal analysis and provide its findings in a technical report that provides a workplan and time schedule for the installation and implementation of nitrogen removal alternatives. The study may be used in the future establishment of an appropriate nitrogen effluent limitation.

- b. **Coliforms.** Secondary treatment reduces fecal coliform densities by 90 to 99%; the remaining organisms in effluent are still 10^5 to 10^6 most probable number (MPN)/100 ml. (U.S. Environmental Protection Agency, *Design Manual: Municipal Wastewater Disinfection*, EPA/625/1-86/021, October 1986.) Given the depth to groundwater, which is approximately 60 feet, it is not likely that pathogen-indicator bacteria will reach groundwater in excess of that prescribed in California Code of Regulations, title 22, 64426.1. However, given the location of the discharge, and the distance to the nearest domestic water supply well, the degradation of groundwater it is believed to be limited to the area near the evaporation percolation ponds and will not impact any domestic supply basin. To verify no degradation due to pathogen-indicator organisms is occurring, this Order adds quarterly total coliform and *E. coli* monitoring in the groundwater monitoring wells.
 - c. **TDS.** The typical incremental addition of dissolved salts from domestic water usage is 150 to 380 mg/L. Domestic water supply to the community has an average of about 315 mg/L. From January 2013 through November 2018, treated wastewater discharged by the Discharger had an average TDS concentration of approximately 593 mg/L. The average TDS increase over the domestic water supply for this Facility for the same time period was about 270 mg/L. An interim regulatory limit of 700 mg/L has been set by the Colorado River Basin Water Board, which reasonably protects present and anticipated beneficial uses of groundwater in the area; it is not likely that groundwater will exhibit significant degradation by TDS. This Order requires that the Discharger conduct a TDS study to assess the water quality conditions for the future establishment of an effluent limitation for TDS that takes into account site-specific conditions.
31. The discharge of wastewater from the WWTF, as permitted herein, reflects BPTC. The WWTF incorporates:
- a. Controls to monitor the concentrations of waste constituents;
 - b. Structural controls to dispose of waste constituents in a designated area;
 - c. Sludge handling facilities;
 - d. An operation and maintenance manual;
 - e. Staffing to ensure proper operation and maintenance; and
 - f. A standby emergency power generator of sufficient size to operate the treatment plant and ancillary equipment during periods of loss of commercial power.
32. Degradation of groundwater by some of the typical waste constituents associated with discharges from a facility treating domestic wastewater, after effective source control, treatment, and control measures are implemented, is consistent with the maximum benefit to the people of the state. The technology, energy, water recycling, and waste management advantages of municipal utility service far exceed any benefits derived from reliance on numerous, concentrated individual wastewater systems, and the impact on water quality will be substantially less. The economic prosperity of surrounding communities and associated

industries is of maximum benefit to the people of the state, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.

Stormwater

33. Federal regulations for stormwater discharges were promulgated by the U.S. Environmental Protection Agency on November 16, 1990 (40 C.F.R. parts 122, 123, and 124) to implement the Clean Water Act's stormwater program set forth in Clean Water Act section 402, subdivision (p) (33 U.S.C. § 1342(p)). In relevant part, the regulations require specific categories of facilities that discharge stormwater associated with industrial activity to "waters of the United States" to obtain National Pollutant Discharge Elimination System (NPDES) permits and to require control of such pollutant discharges using Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to prevent and reduce pollutants and any more stringent controls necessary to meet water quality standards.
34. The State Water Board adopted Order 2014-0057-DWQ (NPDES No. CAS000001), *General Permit for Storm Water Discharges Associated with Industrial Activities* (Industrial General Permit) on July 1, 2015. Facilities (1) used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage—including land dedicated to the disposal of sewage sludge that are within the confines of such a facility—with a design flow of one million gallons per day or more, or (2) that are required to have an approved pretreatment program under 40 Code of Federal Regulations part 403, are required to enroll under the Industrial General Permit, unless there is no discharge of industrial stormwater to waters of the United States.
35. The Facility has a design treatment capacity of 0.250 mgd and is not required to have an approved pretreatment program under 40 Code of Federal Regulations part 403. Therefore, the Facility is not required to enroll under the Industrial General Permit.

CEQA and Public Participation

36. Pursuant to California Code of Regulations, title 14, chapter 3, section 15301, the issuance of these WDRs, which govern the operation of an existing facility involving negligible or no expansion of use beyond that previously existing, is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq.
37. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update WDRs for this discharge, and has provided them with an opportunity for a public meeting and to submit comments.
38. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, that Order R7-2007-0053 is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code, and regulations adopted thereunder, the Discharger shall comply with the following:

A. Discharge Prohibitions

1. Discharge of waste classified as "hazardous," as defined in California Code of Regulations, title 27, section 20164, or "designated," as defined in Water Code section 13173 and California Code of Regulations, title 27, section 20164, is prohibited.
2. Discharge of treated wastewater at a location other than the designated disposal areas is prohibited.
3. The discharge of any wastewater from the Facility to any surface waters or surface drainage courses is prohibited.
4. The Discharger shall not accept waste in excess of the design treatment capacity of the Facility's disposal system.
5. Surfacing or ponding of wastewater outside of the designated disposal locations is prohibited.
6. Bypass or overflow of untreated or partially-treated waste is prohibited, except as permitted in Standard Condition G.13.
7. The discharge of treated wastewater to land not owned or authorized for such use by the Discharger is prohibited.
8. The storage, treatment, or disposal of wastes from the Facility shall not cause contamination, pollution, or nuisance as defined in Water Code section 13050, subdivisions (k), (l), and (m).

B. Effluent Limitations

1. Effluent discharged into the evaporation/percolation ponds for disposal shall not exceed the following effluent limits:

<u>Constituent</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>
20° C BOD ₅ ⁷	mg/L ⁸	30	45
Total Suspended Solids (TSS)	mg/L	30	45
Settleable Solids	ml/L ⁹	0.3	0.5

2. The 30-day average daily dry weather discharge from the WWTF into the evaporation/percolation ponds shall not exceed 0.250 mgd.
3. As an interim effluent limit, the TDS concentration of the effluent shall not exceed 700 mg/L.
4. Effluent from the WWTF into the evaporation/percolation ponds shall not have a pH below 6.0 or above 9.0.

⁷ 5-day biochemical oxygen demand at 20 °C

⁸ milligrams per Liter

⁹ milliliters per Liter

C. Groundwater Limitations

Discharge from the Facility shall not: cause groundwater to exceed water quality objectives; acquire taste, odor, toxicity, or color that create nuisance conditions; impair beneficial uses; or contain constituents in excess of California Maximum Contaminant Levels (MCLs), as set forth in title 22 of the California Code of Regulations (section 64426.1 for bacteriological constituents; section 64431 for inorganic chemicals (including nitrate); and section 64444 for organic chemicals; and section 64678 for lead and copper action levels).

D. Discharge Specifications

1. The evaporation/percolation ponds shall be maintained so they will continuously operate in aerobic conditions. The dissolved oxygen content in the upper zone (one foot) of the evaporation/percolation ponds shall not be less than 1.0 mg/L.
2. A minimum depth of freeboard of two (2) feet shall be maintained at all times in each evaporation/percolation pond.
3. All treatment, storage, and disposal areas shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
4. Evaporation/percolation ponds shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, ancillary inflow, and infiltration. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.
5. The evaporation/percolation ponds shall be managed to prevent breeding of mosquitoes, in particular:
 - a. An erosion control program should ensure that small coves and irregularities are not created around the perimeter of the water surface;
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides;
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
6. Public contact with non-disinfected wastewater shall be precluded through such means as fences, signs, and other acceptable alternatives.
7. Objectionable odors originating at the Facility shall not be perceivable beyond the limits of the wastewater treatment and disposal area.
8. The evaporation/percolation ponds shall be maintained and operated so as to maximize infiltration and minimize the increase of salinity in the groundwater.
9. There shall be no surface flow of wastewater away from the designated disposal areas.
10. The Discharger shall not accept wastewater in excess of the treatment capacity of the Facility.

E. Sludge and Solids Limitations

1. Disposal of oil and grease, biosolids, screenings, and other solids collected from liquid wastes shall be pursuant to title 27 of the California Code of Regulations.

2. Sludge use and disposal shall comply with federal and state laws and regulations, including permitting requirements, and technical standards in 40 Code of Federal Regulations part 503.
3. Any proposed change in use or disposal of biosolids requires the approval of the Colorado River Basin Water Board's Executive Officer, and U.S. Environmental Protection Agency Regional Administrator, who must be notified at least **90 days** in advance of the change.
4. The Discharger shall maintain a permanent log of all solids hauled away from the treatment facility for use/disposal elsewhere and shall provide a summary of the volume, type (screenings, grit, raw sludge, digested sludge), use (agricultural, composting, etc.), and the destination in accordance with the MRP of this Order. Sludge that is stockpiled at the treatment facility shall be sampled and analyzed for those constituents listed in the sludge monitoring section of the MRP of this Order and as required by 40 Code of Federal Regulations part 503. The results of the analyses shall be submitted to the Colorado River Basin Water Board as part of the MRP.

F. Special Provisions

1. Groundwater Monitoring Network Technical Report and Work Plan

- a. Within **six (6) months** of the adoption of this Order, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report on the adequacy of the existing groundwater monitoring network. The technical report shall:
 - i. Describe the current condition of the groundwater monitoring network;
 - ii. Evaluate whether this network adequately monitors the effects of the discharge from the disposal ponds on groundwater; and
 - iii. Analyze the groundwater data collected from the existing groundwater monitoring wells. The analysis shall include:
 1. Maps (e.g., equipotential maps) showing the direction of flow and identification of upgradient and downgradient monitoring wells.
 2. An appropriate statistical analysis for constituents of concern (COCs) for the upgradient and downgradient wells, based on the groundwater data collected to date. COCs in this case are TDS and its major ions: sulfate, chloride, nitrogen (total nitrogen, nitrite, and nitrate), and fluoride.
- b. If the technical report indicates that repair or addition of monitoring wells is necessary, the Discharger shall submit a work plan to the Colorado River Basin Water Board's Executive Officer for review and approval **within four (4) months** of technical report approval. The work plan shall include:
 - i. A description proposed changes to the groundwater monitoring network (e.g., monitoring locations, monitoring frequency, sampling protocol, or quality assurance/quality control); and
 - ii. A time schedule for the implementation of these changes, which shall not be longer than **18 months**.
- c. **Within 30 days** of approval of the work plan by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule.

2. Nitrogen Control Strategy Technical Report: Fate and Transport Investigation, and Effluent Limit Feasibility Study

- a. Within **six (6) months** of determining sufficient adequacy of the groundwater network, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report that includes a work plan and time schedule to: (1) determine if wastewater discharged to the evaporation/percolation ponds is causing nitrogen impairment to groundwater; (2) determine the feasibility of achieving a 10 mg/L total nitrogen effluent limit; and (3) ensure that any proposed effluent limit for nitrogen does not cause exceedance of the nitrogen receiving water limitation.
- b. The fate and transport investigation section of the work plan shall include, but not be limited to, the following:
 - i. An evaluation of nitrogen removal technology provided by the Discharger.
 - ii. Characterization for total nitrogen and nitrates of the wastewater discharged to the evaporation/percolation ponds and in the receiving groundwater.
 - iii. Evaluation of the impact of the wastewater discharged on the groundwater in the vicinity of the percolation ponds with respect to nitrogen concentrations.
- c. The feasibility study section of the work plan shall include, but need not be limited to, discussion of the practicability of achieving a 10 mg/L total nitrogen effluent limit, including projected costs and sewer rate increases. The Discharger shall evaluate alternative methods of treatment that are available and may be implemented to achieve a 10 mg/L total nitrogen effluent limit. The alternative analysis should include the costs of the alternatives, expressed in dollars per ton, of nitrogen removed from the discharge.
- d. **Within 30 days** of approval by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule. The time schedule for implementation shall not be longer than **24 months**. The Discharger shall submit progress reports in the quarterly SMR to the Colorado River Basin Water Board.
- e. **Within 2 months** of completion of the nitrogen control strategy: fate and transport investigation, and effluent limitation feasibility study, the Discharger shall submit a final technical report that includes the Discharger's findings, recommendations and conclusions. The final technical report may provide recommendations on an appropriate nitrogen effluent limitation. The report shall include a tentative work plan and time schedule for facility plant improvements required to accomplish nitrogen removal and comply with groundwater water quality objectives and receiving water limitations.

3. TDS Source Control Program Technical Report

- a. Within **nine (9) months** of adoption of this Order, the Discharger shall submit to the Colorado River Basin Water Board's Executive Officer for review and approval a technical report that includes a work plan and time schedule to develop and implement a TDS Source Control Program. The objective of the Source Control Program is to evaluate source control and methods to reduce TDS concentrations in

- the discharge to the evaporation/percolation ponds. A public outreach program component may be included as part of the work plan. The technical report must identify the major sources of salinity into the WWTP collection system, including but not limited to, contributions from domestic sources, commercial and industrial sources, and water softener regeneration brines.
- b. Evaluation by the Discharger shall include, but is not limited to, information on the following factors relating to the discharge:
 - i. Description of the municipal entity and facilities, including local ordinances, and rules and regulations that address the topic of controlling salinity in wastewater.
 - ii. Identification and description of entities responsible for controlling each source, if available.
 - iii. Overall TDS mass balance for the influent into the WWTP.
 - iv. Description of wastewater treatment strategies available and employed at the Facility to remove identified pollutants.
 - v. Characterization of the concentrations of TDS in the wastewater discharged to the evaporation/percolation ponds and in the receiving groundwater.
 - c. **Within 30 days** of approval by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule. The time schedule for implementation shall not be longer than **three (3) years**.
 - d. The Discharger shall monitor and analyze the effectiveness of the source control program by means of trend monitoring and report the analytical results with the quarterly SMRs to the Colorado River Basin Water Board.
 - e. **Within 2 months** of completion of implementation, the Discharger shall submit a final technical report that summarizes the Discharger's findings, recommendations, and conclusions addressing the effectiveness of the source control program. The final report shall evaluate the incremental increase of TDS above the source water (community water supply) and the impact the discharge has on the beneficial uses of the receiving groundwater. The final technical report may also provide recommendations on the final TDS effluent limitation.
5. **Requests for Extension.** If the Discharger is unable to comply with any of the above Special Provisions in compliance with the applicable schedule, the Discharger may request an extension with written approval of the Colorado River Basin Water Board Executive Officer. The extension request must be in writing and submitted as soon as a delay is recognized and prior to the compliance date. The extension request should include justification for the delay.

G. Standard Provisions

1. **Noncompliance.** The Discharger shall comply with all of the terms, requirements, and conditions of this Order and Monitoring and Reporting Program R7-2019-0015. Noncompliance is a violation of the Porter-Cologne Water Quality Control Act (Water Code, § 13000 et seq.) and grounds for: (1) an enforcement action; (2) termination, revocation and reissuance, or modification of these waste discharge requirements; or (3) denial of an Order renewal application.
2. **Enforcement.** The Colorado River Basin Water Board reserves the right to take any

enforcement action authorized by law. Accordingly, failure to timely comply with any provisions of this Order may subject the Discharger to enforcement action. Such actions include, but are not limited to, the assessment of administrative civil liability pursuant to Water Code sections 13323, 13268, and 13350, a Time Schedule Order (TSO) issued pursuant to Water Code section 13308, or referral to the California Attorney General for recovery of judicial civil liability.

3. **Proper Operation and Maintenance.** The Discharger shall at all times properly operate and maintain all systems and components of collection, treatment, and control, installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes, but is not limited to, effective performance, adequate process controls, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities/systems when necessary to achieve compliance with this Order. All systems in service or reserved shall be inspected and maintained on a regular basis. Records of inspections and maintenance shall be retained, and made available to the Colorado River Basin Water Board on request.
4. **Reporting of Noncompliance.** The Discharger shall report any noncompliance that may endanger human health or the environment. Information shall be provided orally to the Colorado River Basin Water Board office and the Office of Emergency Services within twenty-four (24) hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. All other forms of noncompliance shall be reported with the Discharger's next scheduled SMRs, or earlier if requested by the Executive Officer or if required by an applicable standard for sludge use and disposal.
5. **Duty to Mitigate.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.
6. **Material Changes.** Prior to any modifications which would result in any material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Colorado River Basin Water Board, and if required by the Colorado River Basin Water Board, obtain revised requirements before any modifications are implemented.
7. **Design Capacity Report.** The Discharger shall provide a report to the Colorado River Basin Water Board when it determines that the plant's average dry-weather flow rate for any month exceeds 80 percent of the design capacity. The report should indicate what steps, if any, the Discharger intends to take to provide for the expected wastewater treatment capacity necessary when the plant reaches design capacity.
8. **Operational Personnel.** The Facility shall be supervised and operated by persons possessing certification of appropriate grade pursuant to section 3680, chapter 26, division 3, title 23 of the California Code of Regulations.

9. **Familiarity with Order.** The Discharger shall ensure that all site-operating personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the site.
10. **Inspection and Entry.** The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter the premises regulated by this Order, or the place where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, records kept under the conditions of this Order;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. Sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at this location.
11. **Records Retention.** The Discharger shall retain copies of all reports required by this Order and the associated MRP. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. Records may be maintained electronically.
12. **Change in Ownership.** This Order is not transferable to any person without written approval by the Colorado River Basin Water Board's Executive Officer. Prior to any change in ownership of this operation, the Discharger shall notify the Colorado River Basin Water Board's Executive Officer in writing at least 30 days in advance. The notice must include a written transfer agreement between the existing owner and the new owner. At a minimum, the transfer agreement must contain a specific date for transfer of responsibility for compliance with this Order and an acknowledgment that the new owner or operator is liable for compliance with this Order from the date of transfer. The Colorado River Basin Water Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate other requirements as may be necessary under the Water Code.
13. **Bypass.** Bypass (i.e., the intentional diversion of waste streams from any portion of the treatment facilities, except diversions designed to meet variable effluent limits) is prohibited. The Colorado River Basin Water Board may take enforcement action against the Discharger for bypass unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to be inoperable, or substantial and permanent loss of natural resources reasonably expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production; and
 - b. There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities or retention of untreated waste. This condition is not satisfied if adequate back-up equipment was not installed to prevent bypass occurring during equipment downtime, or preventive maintenance; or

- c. Bypass is (1) required for essential maintenance to ensure efficient operation; (2) neither effluent nor receiving water limitations are exceeded; and (3) the Discharger notifies the Colorado River Basin Water Board ten (10) days in advance.

In the event of an unanticipated bypass, the Discharger shall immediately report the incident to the Colorado River Basin Water Board. During non-business hours, the Discharger shall leave a message on the Colorado River Basin Water Board's office voicemail. A written report shall be provided within five (5) business days after the Discharger is aware of the incident. The written report shall include a description of the bypass, any noncompliance, the cause, period of noncompliance, anticipated time to achieve full compliance, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

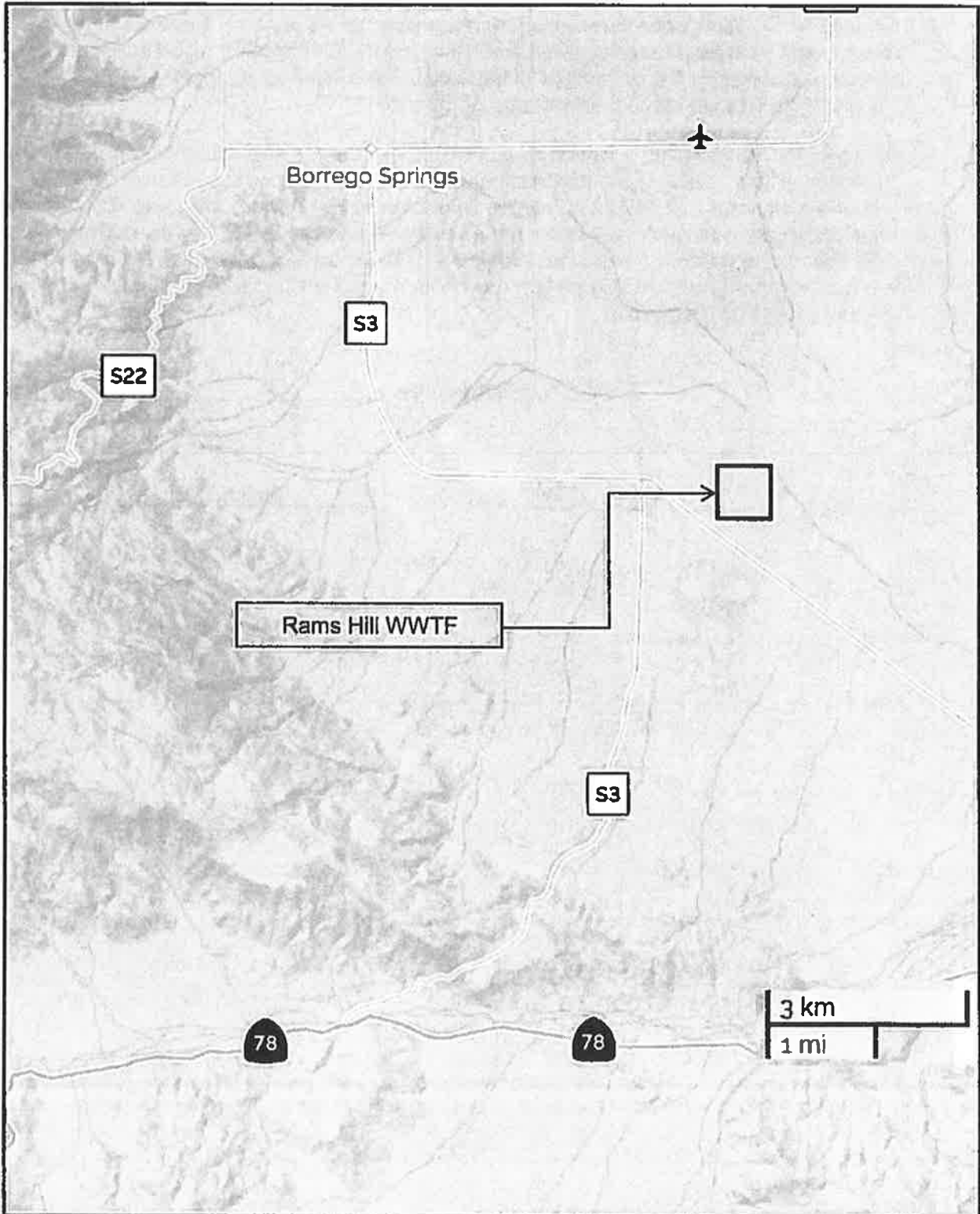
14. **Backup Generators.** Standby, power generating facilities shall be available to operate the Facility during a commercial power failure.
15. **Format of Technical Reports.** The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted in accordance with chapter 30, division 3, title 23 of the California Code of Regulations, as groundwater raw data uploads electronically over the internet into the State Water Board's GeoTracker database, found at: <https://geotracker.waterboards.ca.gov/>. Documents that are normally mailed by the Discharger, such as regulatory documents, narrative technical monitoring program reports, and such reports submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall also be uploaded into GeoTracker in the appropriate Microsoft software application, such as word, excel, or an Adobe Portable Document Format (PDF) file. Large documents are to be split into manageable file sizes appropriately labelled and uploaded into GeoTracker. The Facility is assigned GeoTracker Global Identification No. WDR100027526.
16. **Qualified Professionals.** In accordance with Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of California registered professionals (i.e., civil engineer, engineering geologist, geologist, etc.) competent and proficient in the fields pertinent to the required activities. All technical reports required under this Order that contain work plans, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal. Additionally, all field activities are to be conducted under the direct supervision of one or more of these professionals.
17. **Certification Under Penalty of Perjury.** All technical reports required in conjunction with this Order shall include a statement by the Discharger, or an authorized representative of the Discharger, certifying under penalty of perjury under the laws of the State of California, that the reports were prepared under his or her supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluated the information submitted, and that based on his or her inquiry of the person or persons who manage the system, the information submitted is, to the best of his or her knowledge and belief, true, complete, and accurate.

18. **Violation of Law.** This Order does not authorize violation of any federal, state, or local laws or regulations.
19. **Modification, Revocation, Termination.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for an Order modification, rescission, or reissuance, or the Discharger's notification of planned changes or anticipated noncompliance, does not stay any Order condition. Causes for modification include, but are not limited to, the violation of any term or condition contained in this Order, a material change in the character, location, or volume of discharge, a change in land application plans or sludge use/disposal practices, or the adoption of new regulations by the State Water Board, Colorado River Basin Water Board (including revisions to the Basin Plan), or federal government.
20. **Severability.** The provisions of this Order are severable. If any provision of this Order is found invalid, the remainder of these requirements shall not be affected.

I, Paula Rasmussen, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on March 7, 2019.

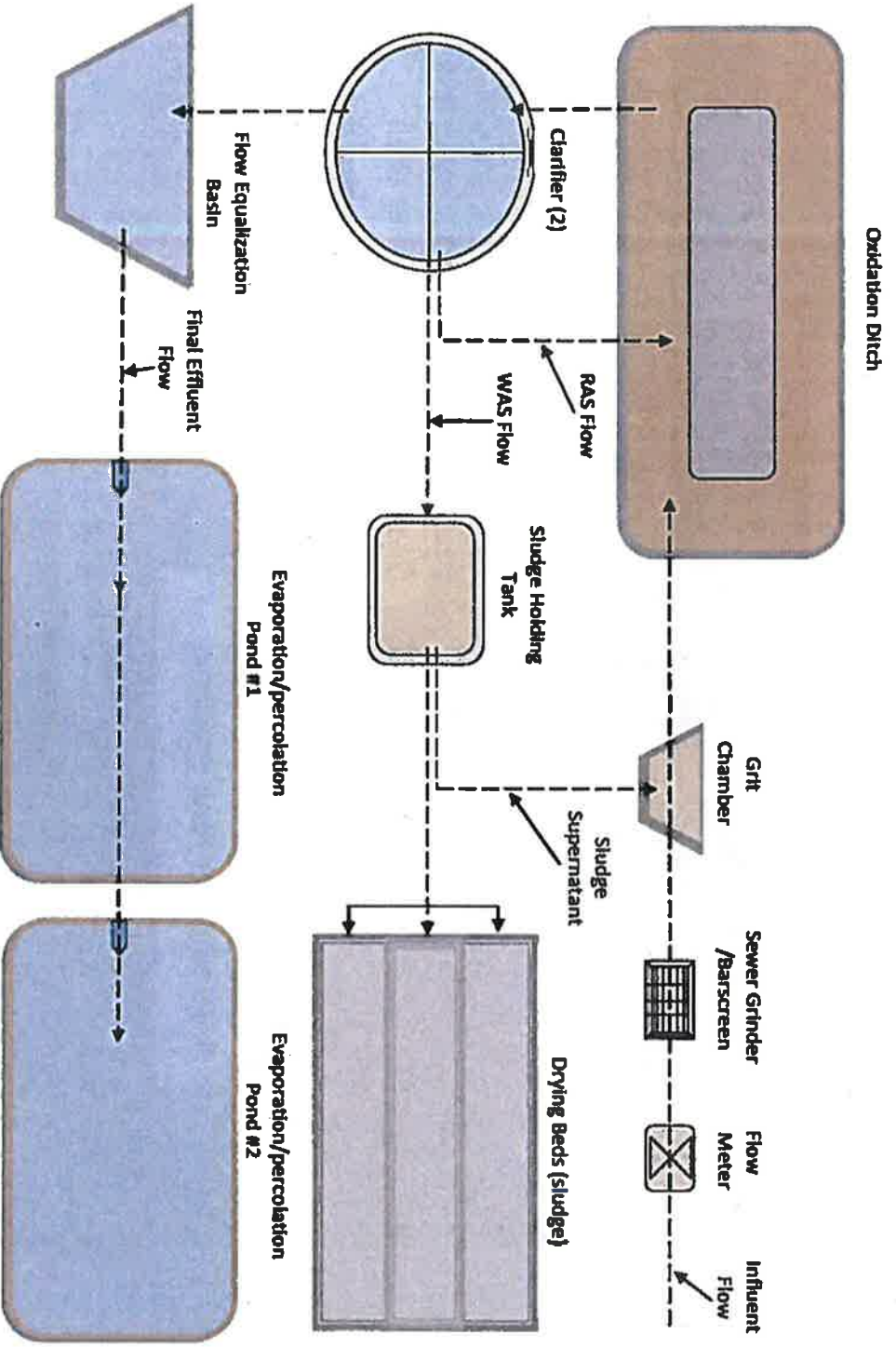
PAULA RASMUSSEN
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION**

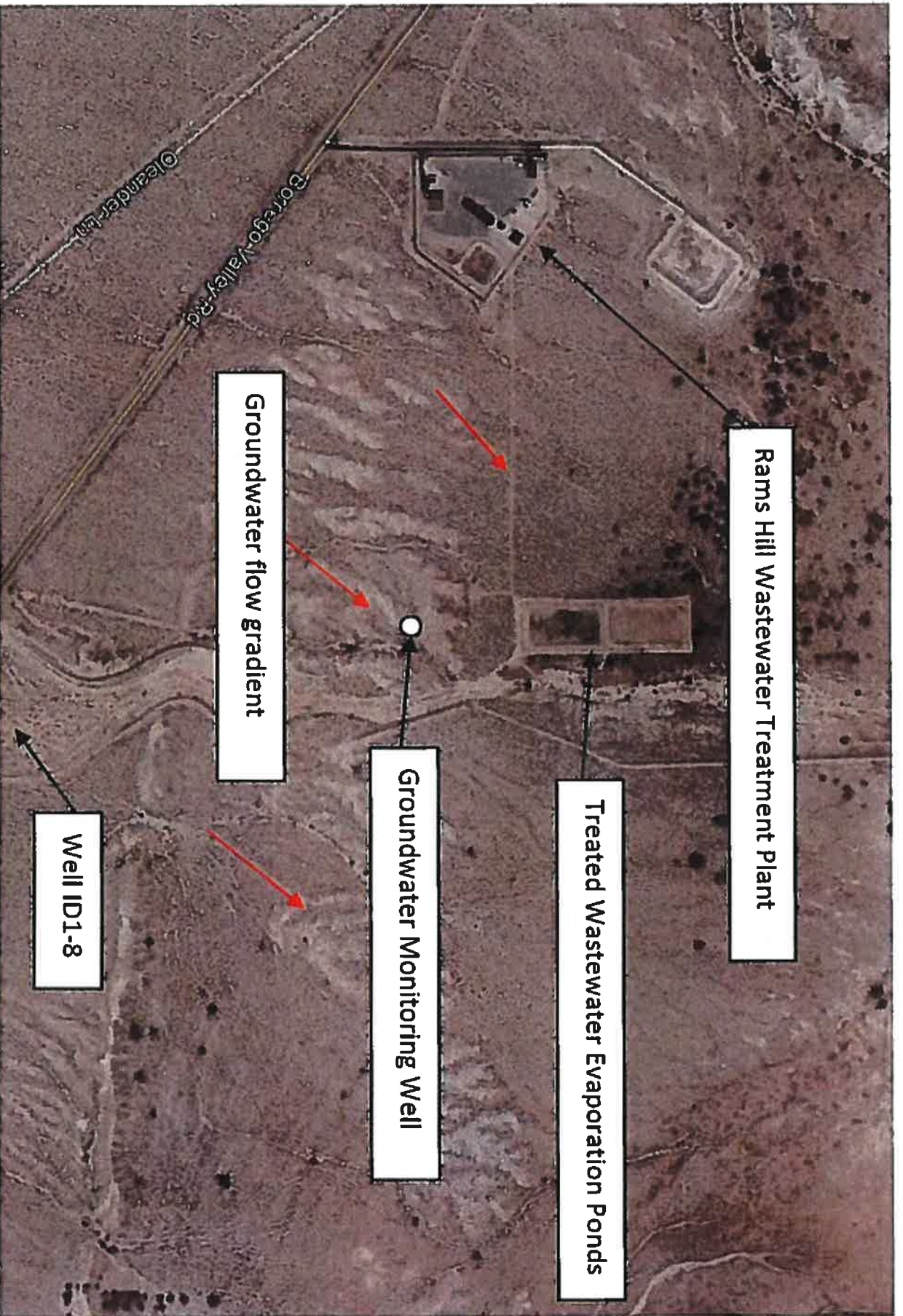


VICINITY MAP

**BORREGO WATER DISTRICT, OWNER/OPERATOR
RAMS HILL WASTEWATER TREATMENT FACILITY
Borrego Springs – San Diego County
E ½ of Section 23, T11S, R6E, SBB&M**



BORREGO WATER DISTRICT, OWNER/OPERATOR, RAMS HILL WASTEWATER TREATMENT FACILITY
 Borrego Springs – San Diego County



Site Map with Location of Groundwater Monitoring Well

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
COLORADO RIVER BASIN REGION

MONITORING AND REPORTING PROGRAM R7-2019-0015
FOR
BORREGO WATER DISTRICT, OWNER/OPERATOR
RAMS HILL WASTEWATER TREATMENT FACILITY
Borrego Springs – San Diego County

Location of Discharge:
E ½ of Section 23, T11S, R6E, SBB&M

A. Monitoring

1. This Monitoring and Reporting Program (MRP) is issued pursuant to Water Code section 13267 and describes requirements for monitoring the relevant wastewater system and groundwater quality. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Colorado River Basin Water Board or its Executive Officer.
2. The Discharger owns and operates the wastewater system that is subject to Order R7-2019-0015. The reports are necessary to ensure that the Discharger complies with the Order. Pursuant to Water Code section 13267, the Discharger shall implement the MRP and shall submit the monitoring reports described herein.
3. The collection, preservation, and holding times of all samples shall be in accordance with U. S. Environmental Protection Agency (USEPA) approved procedures. Unless otherwise approved by the Colorado River Basin Water Board's Executive Officer, all analyses shall be conducted by a laboratory certified by the State Water Board, Division of Drinking Water's Environmental Laboratory Accreditation Program (ELAP). All analyses shall be conducted in accordance with the latest edition of the *Guidelines Establishing Test Procedures for Analysis of Pollutants* (40 C.F.R. part 136), promulgated by the USEPA.
4. Samples shall be collected at the location specified in the WDRs. If no location is specified, sampling shall be conducted at the most representative sampling point available.
5. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Colorado River Basin Water Board staff.
6. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. In the event that continuous monitoring equipment is out of service for a period greater than 24-hours, the Discharger shall obtain representative grab samples each day the equipment is out of service. The Discharger shall correct the cause(s) of failure of the continuous monitoring equipment as soon as practicable. The Discharger shall report the period(s) during which the equipment was out of service and if the problem has not been corrected, shall identify the steps which the Discharger is taking or proposes to take to bring the equipment back into service and the schedule for these actions.

7. Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that:
 - a. The user is trained in proper use and maintenance of the instruments;
 - b. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
 - c. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
 - d. Field calibration reports are submitted as described in the "Reporting" section of this MRP.
8. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurement(s);
 - b. The individual(s) who performed the sampling or measurement(s);
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or method used; and
 - f. The results of such analyses.
9. Given the monitoring frequency prescribed by MRP R7-2019-0015, if only one sample is available for a given reporting period, compliance with monthly average or weekly average effluent limitations or discharge specifications will be determined from that sample.
10. If the Facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Colorado River Basin Water Board indicating that there has been no activity during the required reporting period.

Influent Monitoring

11. Influent to the WWTF shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Flow; Total Plant Influent	MGD ¹	Flow Measurement	Daily ²	Monthly

¹ Million Gallons per Day

² Reported for each day with average monthly flow

20°C BOD ₅ ³	mg/L ⁴	24-Hr. Composite	Monthly	Monthly
Total Suspended Solids	mg/L	24-Hr. Composite	Monthly	Monthly

Effluent Monitoring

12. Effluent from the WWTF into the Evaporation/Percolation Ponds shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
20°C BOD ₅	mg/L	Grab	2x/Month	Monthly
Total Suspended Solids	mg/L	Grab	2x/Month	Monthly
Settleable Solids	mg/L	Grab	2x/Month	Monthly
Total Nitrogen	mg/L	Grab	2x/Month	Monthly
Total Dissolved Solids	mg/L	Grab	2x/Month	Monthly
VOCs ⁵	µg/L ⁶	Grab	Annually	Annually

Evaporation/Percolation Pond Monitoring

13. The Discharger shall monitor each of the evaporation/percolation ponds as specified:

<u>Constituent⁷</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
pH	pH units	Grab	Monthly	Monthly
Dissolved Oxygen	mg/L	Grab	Monthly	Monthly
Freeboard	0.1 feet	Measurement	Monthly	Monthly
Berm Condition	---	Observation	Monthly	Monthly
Odors	mg/L	Observation	Monthly	Monthly

³ 5-day Biochemical Oxygen Demand at 20 degrees Celsius.

⁴ milligrams per Liter

⁵ Analysis of Volatile Organic Compounds is to be accomplished using the USEPA test methods 601, 602 or 624.

⁶ micrograms per liter

⁷ Samples shall be collected from opposite the inlet at a depth of one foot and from each pond in use. If there is no water in the evaporation/percolation ponds, the monitoring report shall state "No standing water in ponds" in place of reporting pH and dissolved oxygen concentration.

Groundwater Monitoring

14. Groundwater monitoring wells shall be monitored according to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Depth to Groundwater	ft (bgs) ⁸	measurement	Quarterly	Quarterly
TDS	mg/L	Grab	Quarterly	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrate as N	mg/L	Grab	Quarterly	Quarterly
Nitrite as N	mg/L	Grab	Quarterly	Quarterly
Standard Minerals ⁹	mg/L	Grab	Annually	Annually
Total Coliforms	MPN/100 mL	Grab	Quarterly	Quarterly
E. coli	MPN/100 mL	Grab	Quarterly	Quarterly
VOCs	µg/L	Grab	Annually	Annually

Domestic Water Supply Monitoring

15. The domestic water supply shall be monitored at the water supply production wells, include notations of which wells are non-operating for a reporting period and in accordance to the following schedule:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
pH	pH Units	Grab	Monthly	Monthly
Nitrate	mg/L	Grab	Quarterly	Quarterly

Sludge Monitoring

16. The Discharger shall report annually on the quantity, location and method of disposal of all sludge and similar solid materials being produced at the WWTP. If no sludge is disposed of during the year being reported, the Discharger shall state "No Sludge Removed" in the annual monitoring report. Sludge that is generated at the WWTP shall be sampled and analyzed for the following:

⁸ feet below ground surface

⁹ At a minimum, Standard Minerals shall include: total dissolved solids, calcium, chloride, fluoride, iron, magnesium, manganese, nitrate, potassium, sodium, sulfate, barium, total alkalinity (including alkalinity series), and hardness.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Monitoring Frequency</u>	<u>Reporting Frequency</u>
Arsenic	mg/kg ¹⁰	Composite	Annually	Annually
Cadmium	mg/kg	Composite	Annually	Annually
Chromium	mg/kg	Composite	Annually	Annually
Copper	mg/kg	Composite	Annually	Annually
Lead	mg/kg	Composite	Annually	Annually
Mercury	mg/kg	Composite	Annually	Annually
Molybdenum	mg/kg	Composite	Annually	Annually
Nickel	mg/kg	Composite	Annually	Annually
Selenium	mg/kg	Composite	Annually	Annually
Zinc	mg/kg	Composite	Annually	Annually
Fecal Coliform	MPN/gram ¹¹	Composite	Prior to Disposal	Annually

Operation and Maintenance

1. The Discharger shall monitor and report the following:

Activity

The Discharger shall inspect and document any operation/maintenance problems by inspecting each unit process. Operation and Maintenance reports shall be submitted to the Colorado River Basin Water Board annually, containing documentation showing the calibration of flow meters and equipment as performed in a timely manner, modifications and updates to the Operation and Maintenance Manual, and modifications and updates to the Discharger's wastewater ordinance or rules and regulations. The Discharger shall also provide an operator certification status update including number of staff and grade certification.

Reporting

Annually

B. Reporting

1. Daily, weekly, and monthly monitoring shall be included in the monthly monitoring report. Monthly monitoring reports shall be submitted to the Colorado River Basin Water Board by the **15th day of the following month**. Quarterly monitoring reports shall be submitted by **January 15th, April 15th, July 15th and October 15th**. Annual monitoring reports shall be submitted by **January 31st** of the following year.

¹⁰ milligrams per kilogram

¹¹ Most Probable Number per gram

2. The Discharger shall attach a cover letter to the self-monitoring reports (SMRs). The information contained in the cover letter shall clearly identify violations of the WDRs, discuss corrective actions taken or planned, and the proposed time schedule of corrective actions. Identified violations should include a description of the requirement that was violated and a description of the violation.
3. In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to clearly illustrate whether the Facility is operating in compliance with the WDRs. Where appropriate, the Discharger shall include supporting calculations (e.g., for monthly averages).
4. The results of any analysis taken more frequently than required at the locations specified in this MRP shall be reported to the Colorado River Basin Water Board.
5. SMRs shall be certified under penalty of perjury to be true and correct, and shall contain the required information at the frequency designated in this MRP.
6. Each report submitted to the Colorado River Basin Water Board shall contain the following completed declaration:

"I certify under the penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the _____ day of _____ at _____

(Signature)

(Title)"

7. The SMRs and any other information requested by the Colorado River Basin Water Board shall be signed by a principal executive officer or ranking elected official. A duly authorized representative of the Discharger may sign the documents if:
 - a. The authorization is made in writing by the person described above;
 - b. The authorization specified an individual or person having responsibility for the overall operation of the regulated disposal system; and
 - c. The written authorization is submitted to the Colorado River Basin Water Board's Executive Officer.
8. The Discharger shall report immediately any failure in the waste disposal system as specified in Standard Provisions G.4. Results of any sampling or other analysis performed as a result of a failure of the Facility shall be provided within fourteen days after receipt.

9. As specified in Standard Provisions G.16, technical reports shall be prepared by or under the direction of appropriately qualified professional(s). Each technical report submitted shall contain a statement of qualifications of the responsible licensed professional(s) as well as the professional's signature and/or stamp of the seal.
10. As specified in Standard Provisions G.15, the Discharger shall comply with Electronic Submittal of Information (ESI) requirements by submitting all correspondence and reports required under MRP R7-2019-0009 and future revisions thereto, including groundwater monitoring data and discharge location data (latitude and longitude), correspondence, and PDF monitoring reports to the State Water Board's Geotracker database. Documents that are 2.0 MB or larger should be broken down into smaller electronic files, labelled properly, and uploaded into Geotracker

Ordered by: _____
PAULA RASMUSSEN
Executive Officer

March 7, 2019
Date

ATTACHMENT B

Historical Flow Assumptions

Historical Flow Contribution - Assumptions

Due to insufficient data, the following assumption were made:

No.	Assumptions
1	Historical flow contributions come from the three tributary sewersheds of the WWTF: Ram Hills, Town Center Sewer, and Borrego Springs Resort (BSR)/Club Circle.
2	Ram Hills was connected to the WWTF in 1983.
3	Town Center was connected to the WWTF in the mid of 1987.
4	BSR was connected to the WWTF in 2011.
5	Annual total flow rates are estimated based on monthly averages.
6	District provided Dudek with total monthly flow rates from 1983 to 2021.
7	District provided Dudek with Ram Hills average monthly flow rates from 1983 to 1986 and from 2008 to 2011.
8	There is no historical flowrate data for Ram Hills between 1987 and 2007. It was therefore assumed that Ram Hills flow rates increased by 8% per year.
9	In 2008, Ram Hills monthly flow rates from January to August were not available and total annual flows were computed from the remaining 4 months of data.
10	There is no information about the initial flows from the Town Center flows between 1987 and 2011, therefore they were estimated as the difference between total flow and Ram Hills flow.
11	BSR/Club Circle was connected to the WWTF in 2011. It is assumed that flow was not discharged to the WWTF until 2012.
12	Since 2012 flow contributions from all three (3) sewersheds were determined based on the current ratios provided by the District. These flows are the following: <ul style="list-style-type: none"> • Town Center contributes 63.7% of total flow. • Ram Hills contributes 17.7% of total flow. • BSR/Club Circle contributes 18.6% of total flow.
13	In 2017, total monthly flow rates from July to December were not available and total annual flows were computed from the remaining 6 months of data.
14	In 2019, total monthly flow rates from November to December were not available and total annual flows were computed from the remaining 10 months of data.
15	In 2021, total monthly flow rates from September to December were not available and total annual flows were computed from the remaining 8 months of data.
16	Total flow for 2022 is not included in the analysis due to insufficient data.

Year	Rams Hill			Town Center Sewer			BSR/Club Circle			WWTF Total	
	gpd	Mgal/yr	%	gpd	Mgal/yr	%	gpd	Mgal/y r	%	gpd	Mgal/yr
1983	250	0.1	100%	0	0.0	0%	0	0.0	0%	250	0.1
1984	2,050	0.7	100%	0	0.0	0%	0	0.0	0%	2,050	0.7
1985	3,375	1.2	100%	0	0.0	0%	0	0.0	0%	3,375	1.2
1986	4,667	1.7	100%	0	0.0	0%	0	0.0	0%	4,667	1.7
1987	5,040	1.8	28%	13,098	4.8	72%	0	0.0	0%	18,138	6.6
1988	5,443	2.0	26%	15,832	5.8	74%	0	0.0	0%	21,275	7.8
1989	5,879	2.1	19%	24,917	9.1	81%	0	0.0	0%	30,796	11.2
1990	6,349	2.3	19%	26,750	9.8	81%	0	0.0	0%	33,099	12.1
1991	6,857	2.5	27%	18,500	6.8	73%	0	0.0	0%	25,357	9.3
1992	7,405	2.7	17%	37,207	13.6	83%	0	0.0	0%	44,612	16.3
1993	7,998	2.9	22%	27,632	10.1	78%	0	0.0	0%	35,630	13.0
1994	8,638	3.2	26%	25,034	9.1	74%	0	0.0	0%	33,672	12.3
1995	9,329	3.4	24%	29,408	10.7	76%	0	0.0	0%	38,737	14.1
1996	10,075	3.7	34%	19,137	7.0	66%	0	0.0	0%	29,212	10.7
1997	10,881	4.0	37%	18,371	6.7	63%	0	0.0	0%	29,252	10.7
1998	11,751	4.3	53%	10,374	3.8	47%	0	0.0	0%	22,126	8.1
1999	12,692	4.6	45%	15,232	5.6	55%	0	0.0	0%	27,923	10.2
2000	13,707	5.0	46%	16,015	5.8	54%	0	0.0	0%	29,722	10.8
2001	14,803	5.4	57%	10,968	4.0	43%	0	0.0	0%	25,772	9.4
2002	15,988	5.8	56%	12,427	4.5	44%	0	0.0	0%	28,415	10.4
2003	17,267	6.3	60%	11,449	4.2	40%	0	0.0	0%	28,716	10.5
2004	18,648	6.8	69%	8,195	3.0	31%	0	0.0	0%	26,843	9.8
2005	20,140	7.4	61%	12,928	4.7	39%	0	0.0	0%	33,068	12.1
2006	21,751	7.9	73%	8,005	2.9	27%	0	0.0	0%	29,756	10.9
2007	23,491	8.6	86%	3,969	1.4	14%	0	0.0	0%	27,460	10.0
2008	26,691	9.7	77%	7,775	2.8	23%	0	0.0	0%	34,466	12.6
2009	26,204	9.6	62%	16,177	5.9	38%	0	0.0	0%	42,381	15.5
2010	42,590	15.5	88%	5,880	2.1	12%	0	0.0	0%	48,470	17.7
2011	65,632	24.0	99%	715	0.3	1%	0	0.0	0%	66,347	24.2
2012	10,941	4.0	18%	39,374	14.4	64%	11,497.03	4.2	19%	61,812	22.6
2013	12,709	4.6	18%	45,737	16.7	64%	13,354.99	4.9	19%	71,801	26.2
2014	12,449	4.5	18%	44,801	16.4	64%	13,081.48	4.8	19%	70,331	25.7
2015	11,740	4.3	18%	42,251	15.4	64%	12,336.96	4.5	19%	66,328	24.2
2016	12,687	4.6	18%	45,658	16.7	64%	13,331.92	4.9	19%	71,677	26.2
2017	17,475	6.4	18%	62,890	23.0	64%	18,363.54	6.7	19%	98,729	36.0
2018	13,979	5.1	18%	50,307	18.4	64%	14,689.38	5.4	19%	78,975	28.8
2019	11,842	4.3	18%	42,618	15.6	64%	12,444.29	4.5	19%	66,905	24.4
2020	11,213	4.1	18%	40,353	14.7	64%	11,782.91	4.3	19%	63,349	23.1
2021	11,008	4.0	18%	39,615	14.5	64%	11,567.34	4.2	19%	62,190	22.7
TOTAL	551,632	201.3	36%	849,600	310.1	55.4%	132,450	48.3	8.6%	1,533,682	559.8

ATTACHMENT C

Design Criteria

DESIGN CRITERIA

FLOW	
AVERAGE	= 0.25 MGD
PEAK	= 0.75 MGD
PLANT HYDRAULIC CAPACITY	= 2.00 MGD
ULTIMATE PLANT CAPACITY	= 0.50 MGD
WASTEWATER CONCENTRATION	
5-DAY BOD	= 275 mg/l
SUSPENDED SOLIDS	= 275 mg/l
INFLUENT SCREENING	
TYPE	= COMMINUTOR W/ BYPASS BAR SCREEN
CAPACITY	= 1.73 MGD
FLOW METER	
TYPE	= PARSHALL FLUME
SIZE	= 6" PERMANENT W/ 3" NESTED INSERT
GRIT CHAMBER	
TYPE	= AERATED
AIR REQUIREMENT	= 50 CFM
PEAK CAPACITY	= 4.0 MGD
GRIT WASHER	
NUMBER	= 1
GRIT PUMPS	
TYPE	= AIR LIFT
NUMBER	= 2
OXIDATION DITCH	
VOLUME	= 250,000 GAL. (MIN.)
AERATION	= BRUSH AERATORS (2)
BRUSH LENGTH	= 11'-0"
IMMERSION RANGE	= 3 INCHES - 12 INCHES
HORSEPOWER	= 20 HP EACH
DETENTION TIME (@ 0.25 MGD)	= 24 HOURS
SECONDARY CLARIFIERS	
NUMBER	= 2 (1 STANDBY)
DIAMETER	= 28'-0"
SIDE WATER DEPTH	= 12'-0"
OVERFLOW RATE (@ 0.25 MGD)	= 406 GPD/SF
WEIR LOADING (@ 0.25 MGD)	= 2842 GPD/LF
DETENTION TIME (@ 0.25 MGD)	= 5.3 HOURS
RETURN SLUDGE PUMPS	
PERCENT RETURN	= 25 - 150 PERCENT
TYPE	= ROTARY LOBE
NUMBER	= 2
CAPACITY	
1 CONSTANT SPEED	= 130 GPM
1 MANUALLY ADJUSTABLE	= 40 - 130 GPM
HORSEPOWER	= 15 HP EACH
FLOW EQUALIZATION BASIN	
VOLUME	= 121,500 GAL.
DEPTH RANGE	= 1'-6" - 10'-3"
AERATION	= FLOATING MECHANICAL (1)
HORSEPOWER	= 10 HP
FILTRATION AID FEED SYSTEM	
FEED PUMPS, NUMBER	= 3 (1 STANDBY)
ALUM	
NORMAL DOSAGE	= 0-20 mg/l
GPD (50% SOLUTION)	= 11.25
POLYMER	
NORMAL DOSAGE	= 0-1 mg/l
GPD (33% SOLUTION)	= 1.25
FILTER FEED PUMPS	
NUMBER	= 2 (1 STANDBY)
TYPE	= VERTICAL TURBINE
CAPACITY	= 200 GPM
PUMPING HEAD	= 77 FEET
HORSEPOWER	= 5 HP
DUAL MEDIA FILTERS	
NUMBER	= 2 (1 STANDBY)
TYPE	= VERTICAL PRESSURE
DIAMETER	= 7'-6"
MEDIA	= 24 INCH ANTHRACITE/12 INCH SAND
NOMINAL FILTER RATE	= 5 GPM/SF
BACKWASH SOURCE	= RECLAIMED WATER SYSTEM
BACKWASH RATE	= 20 GPM/SF (MAX.)
BACKWASH DURATION	= 10 MIN. (MAX.)

SPENT BACKWASH SYSTEM	
SURGE TANK VOLUME	= 18,000 GAL.
SPENT BACKWASH RECYCLE PUMP	
NUMBER	= 1
TYPE	= ROTARY LOBE
CAPACITY	= 25 GPM
CHLORINATORS	
NUMBER	= 2 (1 STANDBY)
TYPE	= COMPOUND LOOP CONTROL
MAXIMUM DOSAGE	= 20 mg/l
MAXIMUM FEED RATE	= 53 LBS/DAY
CHLORINE CONTACT TANK	
VOLUME	= 21,300 GAL.
DETENTION TIME	= 2 HOURS
LENGTH: WIDTH RATIO	= 42:1
PROCESS RELIABILITY POND	
VOLUME	= 500,000 GAL.
SEASONAL STORAGE PONDS	
VOLUME	= 3,600,000 GAL.
RECLAIMED WATER PUMPS	
NUMBER	= 2 (1 STANDBY)
TYPE	= VERTICAL TURBINE
CAPACITY	= 230 GPM
LIFT	= 483 FEET
HORSEPOWER	= 40 HP EACH
WASTE SLUDGE HANDLING	
QUANTITY WASTED (@ 0.25 MGD)	= 385 LBS/DAY 9250 GPD @ 0.5% CONC.
WASTE SLUDGE PUMP (PROVIDES STANDBY FOR RETURN SLUDGE PUMPS)	
TYPE	= ROTARY LOBE
CAPACITY	= 40 - 130 GPM (MANUALLY ADJUSTABLE)
HORSEPOWER	= 15 HP
AERATED SLUDGE HOLDING TANK	
VOLUME	= 30,000 GAL.
AIR REQUIREMENTS	= 150 CFM
SLUDGE DRYING BEDS	
NUMBER	= 2
AREA	= 2,600 SF EACH
SCUM/TANK DRAIN PUMP	
TYPE	= SUBMERSIBLE
CAPACITY	= 50 GPM
LIFT	= 33 FEET
HORSEPOWER	= 3 HP

ABBREVIATIONS & SYMBOLS

ACP	ASBESTOS CEMENT PIPE
BFV	BUTTERFLY VALVE
BSP	BLACK STEEL PIPE
CIP	CAST IRON PIPE
CISP	CAST IRON SOIL PIPE
CML & CSP	CEMENT MORTAR LINED & COATED STEEL PIPE
CMLSP	CEMENT MORTAR LINED STEEL PIPE
CO	CLEANOUT
CPLG	COUPLING
DIP	DUCTILE IRON PIPE
EL	ELEVATION
FL	FLANGED END
FD	FLOOR DRAIN
FLEX	FLEXIBLE
GE	GROOVED END
HB	HOSE BIBB
HWL	HIGH WATER LEVEL
INV	INVERT
MAX	MAXIMUM
MIN	MINIMUM
MJ	MECHANICAL JOINT
NTS	NOT TO SCALE
PE	PLAIN END
PVC	POLYVINYL CHLORIDE PIPE
RT	RING-TITE
VCP	VITRIFIED CLAY PIPE
VTR	VENT TO ROOF
WSP	WELDED STEEL PIPE

	BUTTERFLY VALVE
	PLUG VALVE
	CHECK VALVE
	FIRE HYDRANT
	UTILITY HYDRANT
	MANHOLE
	CLEANOUT
	GATE VALVE
	BALL VALVE
	FLOW CONTROL VALVE
	CENTERLINE
	DIAMETER
	ANGLE
	AT
	PLATE

	INDICATES PAGE WHICH DETAIL IS DRAWN
DETAIL	
	INDICATES SECTION NUMBER
	INDICATES PAGE WHICH SECTION IS DRAWN
SECTION	
	INDICATES THAT SECTION OR DETAIL IS ON SAME SHEET

DRAWING INDEX

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2.	INDEX, ABBREVIATIONS, SYMBOLS AND DESIGN CRITERIA
3.	PROCESS AND INSTRUMENTATION DIAGRAM
4.	HYDRAULIC PROFILE
5.	SITE PLAN AND GRADING PLAN
6.	ACCESS ROAD - PLAN AND PROFILE
7.	ACCESS ROAD - PLAN AND PROFILE
8.	SITE PIPING
9.	BURIED PIPE PROFILES
10.	TYPICAL DETAILS
11.	TYPICAL DETAILS
12.	TYPICAL DETAILS
13.	HEADWORKS-GRIT CHAMBER - PLAN AND SECTIONS
14.	HEADWORKS-GRIT CHAMBER - SECTIONS AND DETAILS
15.	HEADWORKS-GRIT CHAMBER - STRUCTURAL DETAILS
16.	OXIDATION DITCH - PLAN, SECTION AND DETAILS
17.	OXIDATION DITCH AND SPLITTER BOX - SECTIONS AND DETAILS
18.	OXIDATION DITCH - STRUCTURAL DETAILS
19.	SECONDARY CLARIFIERS - PLAN AND SECTION
20.	SECONDARY CLARIFIERS - SECTIONS
21.	SECONDARY CLARIFIERS - STRUCTURAL DETAILS
22.	FLOW EQUALIZATION BASIN - PLAN, SECTIONS AND DETAILS
23.	MISCELLANEOUS DETAILS
24.	FILTER PUMPS - PLAN, SECTIONS AND DETAILS
25.	CHLORINE CONTACT TANK AND PRESSURE FILTERS - PLAN AND DETAILS
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27.	CHLORINE CONTACT TANK AND SPENT BACKWASH SURGE TANK - SECTIONS
28.	SPENT BACKWASH SURGE TANK - PLAN AND SECTIONS
29.	SLUDGE PUMPING STATION - PLAN AND SECTIONS
30.	SLUDGE HOLDING TANK - PLAN AND SECTIONS
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33.	SEASONAL STORAGE RESERVOIR - PLAN, SECTION AND DETAIL
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BORREGO WATER DISTRICT

RAM'S HILL RECLAMATION PLANT

INDEX, ABBREVIATIONS, SYMBOLS AND DESIGN CRITERIA

APPROVED BY:		
<i>John G. Boyell</i>		
Date: 7/27/81		
REVISIONS		
Mark	Date	Description

Date	JULY 1981	Drawing	
Designed	CB		
Drawn	DG		
Checked	JK		

LOWRY & ASSOCIATES

17748 SKY PARK BOULEVARD IRVINE, CALIFORNIA 92714

3505 GAMINO DEL RIO SO. SUITE 374 SAN DIEGO, CALIFORNIA 92108

ATTACHMENT D

Cost Tables

Project: Alternative 0: Upgrade Oxidation Ditch with Anoxic Zone. 11958.06
 Client: Borrego Water District
 Date: August 23, 2022

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 15,000
1	Mobilization/Demobilization	\$ 12,000	\$ 12,000
2	Start-Up & Testing	\$ 3,000	\$ 3,000
Division 2 - Site Work			\$ 12,000
1	Anoxic Zone	\$ 15	\$ 12,000
Division 3 - Concrete			\$ 133,000
1	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 133,000
Division 11 - Equipment			\$ 88,000
1	Ox. Ditch Anoxic Zone Mixer (5 HP)	\$ 70,000	\$ 70,000
2	Miscellaneous Equipment (25% of equipment)	\$ 17,500	\$ 18,000
Division 15 - Mechanical			\$ 25,000
1	Civil Piping (8%)	\$ 25,000	\$ 25,000
Division 16 - Electrical			\$ 30,000
1	Electrical (10% of overall construction cost)	\$ 30,000	\$ 30,000
Division 17 - Process Instrumentation, Controls and Monitoring			\$ 8,000
1	Sensors and Alarms (3% of overall construction cost)	\$ 8,000	\$ 8,000
Total			\$ 311,000

Alternative 1: Identify and upgrade any unit processes which do not
 Project: meet current design capacity requirements 11958.06
 Client: Borrego Water District
 Date: August 23, 2022

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 30,000
1	Mobilization/Demobilization	\$ 20,000	\$ 20,000
2	Start-Up & Testing	\$ 10,000	\$ 10,000
Division 2 - Site Work			\$ 22,000
1	Anoxic Zone	\$ 15	\$ 12,000
2	EQ Basin	\$ 15	\$ 10,000
Division 3 - Concrete			\$ 344,000
1	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 133,000
2	EQ Basin Concrete Structure	\$ 1,000	\$ 211,000
Division 11 - Equipment			\$ 84,000
1	Ox. Ditch Anoxic Zone Mixer (5 HP)	\$ 70,000	\$ 70,000
2	Miscellaneous Equipment (20% of equipment)	\$ 14,000	\$ 14,000
Division 15 - Mechanical			\$ 45,000
1	Civil Piping (8%)	\$ 45,000	\$ 45,000
Division 16 - Electrical			\$ 60,000
1	Electrical (10% of overall constuction cost)	\$ 60,000	\$ 60,000
Division 17 - Process Instrumentation, Controls and Monitoring			\$ 15,000
1	Sensors and Alarms (3% of overall constuction cost)	\$ 15,000	\$ 15,000
Total			\$ 600,000

Project:	Alternative 2 - Add additional 0.25 MGD without replacing existing equipment to upgrade the WWTF to 500,000 gpd.	11958.06
Client:	Borrego Water District	
Date:	August 23, 2022	

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 180,000
1	Mobilization/Demobilization	\$ 130,000	\$ 130,000
2	Start-Up & Testing	\$ 50,000	\$ 50,000
Division 2 - Site Work			\$ 359,000
1	Oxidation Ditch	\$ 15	\$ 30,000
2	Anoxic Zone	\$ 15	\$ 24,000
3	Secondary Clarifier	\$ 15	\$ 6,000
4	EQ Basin	\$ 15	\$ 28,000
5	Sludge Holding Tank	\$ 15	\$ 3,000
6	Percolation Ponds	\$ 15	\$ 268,000
Division 3 - Concrete			\$ 1,365,000
1	Ox Ditch Concrete Structure	\$ 1,000	\$ 331,000
2	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 265,000
3	EQ Basin Concrete Structure	\$ 1,000	\$ 632,000
4	Secondary Clarifier Concrete Structure	\$ 1,000	\$ 90,000
5	Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 47,000
Division 11 - Equipment			\$ 880,000
1	Bar Screen	\$ 112,000	\$ 112,000
2	Grinder	\$ 14,000	\$ 14,000
3	Oxidation Ditch Mechanism	\$ 224,000	\$ 224,000
4	Anoxic Zone Mixer (5 HP)	\$ 90,000	\$ 180,000
5	Secondary Clarifier Mechanism	\$ 266,000	\$ 266,000
6	Miscellaneous Equipment (10% of equipment)	\$ 79,600	\$ 80,000
Division 15 - Mechanical			\$ 275,000
1	Civil Piping (8%)	\$ 275,000	\$ 275,000
Division 16 - Electrical			\$ 350,000
1	Electrical (10% of overall constuction cost)	\$ 350,000	\$ 350,000
Division 17 - Process Instrumentation, Controls and Monitoring			\$ 110,000
1	Sensors and Alarms (3% of overall constuction cost)	\$ 110,000	\$ 110,000
Total			\$ 3,519,000

Project:	Alternative 3: Add additional 0.5 MGD without replacing existing equipment to upgrade the WWTF to 750,000 gpd	11958.06
Client:	Borrego Water District	
Date:	August 23, 2022	

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 335,000
1	Mobilization/Demobilization	\$ 300,000	\$ 300,000
2	Start-Up & Testing	\$ 35,000	\$ 35,000
Division 2 - Site Work			\$ 729,000
1	Oxidation Ditch	\$ 15	\$ 60,000
2	Anoxic Zone	\$ 15	\$ 72,000
3	Secondary Clarifier	\$ 15	\$ 11,000
4	EQ Basin	\$ 15	\$ 46,000
5	Sludge Holding Tank	\$ 15	\$ 5,000
6	Percolation Ponds	\$ 15	\$ 535,000
Division 3 - Concrete			\$ 2,486,000
1	Ox Ditch Concrete Structure	\$ 1,000	\$ 614,000
2	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 500,000
3	EQ Basin Concrete Structure	\$ 1,000	\$ 1,053,000
4	Secondary Clarifier Concrete Structure	\$ 1,000	\$ 180,000
5	Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 139,000
Division 11 - Equipment			\$ 1,888,000
1	Bar Screen	\$ 112,000	\$ 112,000
2	Grinder	\$ 14,000	\$ 14,000
3	Oxidation Ditch Mechanism	\$ 288,000	\$ 576,000
4	Anoxic Zone Mixer (5 HP)	\$ 110,000	\$ 330,000
5	Secondary Clarifier Mechanism	\$ 342,000	\$ 684,000
6	Miscellaneous Equipment (10% of equipment)	\$ 171,600	\$ 172,000
Division 15 - Mechanical			\$ 550,000
1	Civil Piping (8%)	\$ 550,000	\$ 550,000
Division 16 - Electrical			\$ 700,000
1	Electrical (10% of overall construction cost)	\$ 700,000	\$ 700,000
Division 17 - Process Instrumentation, Controls and Monitoring			\$ 200,000
1	Sensors and Alarms (3% of overall construction cost)	\$ 200,000	\$ 200,000
Total			\$ 6,888,000

Alternative 4: Upgrade of the WWTF to tertiary level to meet Title 22 regulations for disinfected, tertiary recycled water to total capacity of		
Project: 500,000 gpd.		11958.06
Client: Borrego Water District		
Date: August 23, 2022		

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 400,000
1	Mobilization/Demobilization	\$ 250,000	\$ 250,000
2	Start-Up & Testing	\$ 50,000	\$ 50,000
3	Demo filter/CI system and RW pumps	\$ 100,000	\$ 100,000
Division 2 - Site Work			\$ 359,000
1	Oxidation Ditch	\$ 15	\$ 30,000
2	Anoxic Zone	\$ 15	\$ 24,000
3	Secondary Clarifier	\$ 15	\$ 6,000
4	EQ Basin	\$ 15	\$ 28,000
5	Sludge Holding Tank	\$ 15	\$ 3,000
6	Percolation Ponds	\$ 15	\$ 268,000
Division 3 - Concrete			\$ 1,465,000
1	Ox Ditch Concrete Structure	\$ 1,000	\$ 331,000
2	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 265,000
3	EQ Basin Concrete Structure	\$ 1,000	\$ 632,000
4	Secondary Clarifier Concrete Structure	\$ 1,000	\$ 90,000
5	Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 47,000
6	Extend CCT	\$ 100,000	\$ 100,000
Division 11 - Equipment			\$ 5,510,000
1	Bar Screen	\$ 112,000	\$ 112,000
2	Grinder	\$ 14,000	\$ 14,000
3	Oxidation Ditch Mechanism	\$ 224,000	\$ 224,000
4	Anoxic Zone Mixer (5 HP)	\$ 90,000	\$ 180,000
5	Secondary Clarifier Mechanism	\$ 266,000	\$ 266,000
6	Disk filter (x2), floc/coag, and piping	\$1,440,000	\$ 2,880,000
7	NaOCl tank, pumps, & piping	\$ 135,000	\$ 270,000
8	NaOCl mix vault and static mixer	\$ 105,000	\$ 105,000
9	RW pumps	\$ 270,000	\$ 540,000
10	Miscellaneous Equipment (20% of equipment)	\$ 918,200	\$ 919,000
Division 15 - Mechanical			\$ 600,000
1	Civil Piping (8%)	\$ 600,000	\$ 600,000

Alternative 4: Upgrade of the WWTF to tertiary level to meet Title 22 regulations for disinfected, tertiary recycled water to total capacity of Project: 500,000 gpd. Client: Borrego Water District Date: August 23, 2022	11958.06
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Item	Item Description	Total \$/Unit	Total Net Cost \$
	Division 16 - Electrical		\$ 750,000
1	Electrical (10% of overall construction cost)	\$ 750,000	\$ 750,000
	Division 17 - Process Instrumentation, Controls and Monitoring		\$ 250,000
1	Sensors and Alarms (3% of overall construction cost)	\$ 250,000	\$ 250,000
Total			\$ 9,334,000

Alternative 5: Upgrade of the WWTF to tertiary level to meet Title 22 regulations for disinfected, tertiary recycled water to total capacity of		
Project: 750,000 gpd.		11958.06
Client: Borrego Water District		
Date: August 23, 2022		

Item	Item Description	Total \$/Unit	Total Net Cost \$
Division 1 - General Requirements			\$ 575,000
1	Mobilization/Demobilization	\$ 400,000	\$ 400,000
2	Start-Up & Testing	\$ 75,000	\$ 75,000
3	Demo filter/CI system and RW pumps	\$ 100,000	\$ 100,000
Division 2 - Site Work			\$ 729,000
1	Oxidation Ditch	\$ 15	\$ 60,000
2	Anoxic Zone	\$ 15	\$ 72,000
3	Secondary Clarifier	\$ 15	\$ 11,000
4	EQ Basin	\$ 15	\$ 46,000
5	Sludge Holding Tank	\$ 15	\$ 5,000
6	Percolation Ponds	\$ 15	\$ 535,000
Division 3 - Concrete			\$ 2,636,000
2	Ox Ditch Concrete Structure	\$ 1,000	\$ 614,000
3	Ox Ditch Anoxic Zone Concrete Structure	\$ 1,000	\$ 500,000
4	EQ Basin Concrete Structure	\$ 1,000	\$ 1,053,000
4	Secondary Clarifier Concrete Structure	\$ 1,000	\$ 180,000
5	Sludge Holding Tank Concrete Structure	\$ 1,000	\$ 139,000
6	Extend CCT	\$ 150,000	\$ 150,000
Division 11 - Equipment			\$ 6,020,000
1	Bar Screen	\$ 112,000	\$ 112,000
2	Grinder	\$ 14,000	\$ 14,000
3	Oxidation Ditch Mechanism	\$ 288,000	\$ 576,000
4	Anoxic Zone Mixer (5 HP)	\$ 110,000	\$ 330,000
5	Secondary Clarifier Mechanism	\$ 342,000	\$ 684,000
6	Disk filter (x2), floc/coag, and piping	\$1,760,000	\$ 2,400,000
7	NaOCl tank, pumps, & piping	\$ 165,000	\$ 225,000
8	NaOCl mix vault and static mixer	\$ 165,000	\$ 225,000
9	RW pumps	\$ 330,000	\$ 450,000
10	Miscellaneous Equipment (20% of equipment)	\$1,003,200	\$ 1,004,000
Division 15 - Mechanical			\$ 1,000,000
1	Civil Piping (8%)	\$1,000,000	\$ 1,000,000

Alternative 5: Upgrade of the WWTF to tertiary level to meet Title 22 regulations for disinfected, tertiary recycled water to total capacity of Project: 750,000 gpd. Client: Borrego Water District Date: August 23, 2022	11958.06
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Item	Item Description	Total \$/Unit	Total Net Cost \$
	Division 16 - Electrical		\$ 1,250,000
1	Electrical (10% of overall construction cost)	\$1,250,000	\$ 1,250,000
	Division 17 - Process Instrumentation, Controls and Monitoring		\$ 350,000
1	Sensors and Alarms (3% of overall construction cost)	\$ 350,000	\$ 350,000
Total			\$ 12,560,000

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
OCTOBER 11, 2022
AGENDA ITEM II.D

October 5, 2022

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: DRAFT State of California Technical Services Support Agreement and Its Impacts :
Monitoring Well – T Driscoll

RECOMMENDED ACTION:

Receive Overview Draft Agreement and Discuss including its Impacts on BWD

ITEM EXPLANATION:

BWD and the State of California are working on a Technical Services Support Project for installation of a monitoring well that will be added to the existing network. This Proposed monitoring well will be located on the Burnand Ranch and provide both groundwater elevation and water quality sampling (at different elevations).

This Project was originally proposed to be a BWDs and then the State informed us they preferred the Watermaster be the contracting agency. Approximately 3 weeks ago, the State reverted back to its original preference and the Project is now proposed to be administered by BWD. The attached Agreement has been created by DWR.

BBK is in the process of reviewing the and initial thoughts are below and include the possible need for a Sub Grantee Agreement with the Watermaster. BWD has yet to receive a response.

Some sections seem kind of odd given this is a project where the State is doing the drilling and it is not a reimbursement grant. Some of these terms include:

- 1) From Para. 3: “The Local Agency is solely responsible for design, operation, and maintenance of projects to be constructed by the State as described in Exhibit A to this Agreement, Work Plan, Schedule, and Budget. Review or approval of plans, specifications, bid documents, or other construction documents by the State is solely for proper administration of the TSS by the State and shall not be deemed to relieve or restrict responsibilities of the Local Agency under the Agreement.”

Why would BWD design the well if the State is drilling it? Why would BWD take the project out to bid or produce bid documents if the State or its contractor is doing the drilling?

- 2) From Para. 3: “The State may recommend modification to the designs, plans, or specifications prepared by the Local Agency to improve project outcomes, comply with well standards Bulletin 74-90, and/or construction efficiency.”

Since the State is doing or controlling the drilling and the design, why would the State recommend modifications?

- 3) From Para. 4: “The basin or portion of the basin managed by the Local Agency must not be in a current condition of overlap that would disqualify the decision of the Local Agency to undertake groundwater management pursuant to SGMA (CWC Section 10723.8(c)).” Is “overlap” supposed to be “overdraft”?

Thanks,

Steve

Staff would like to discuss all TSS related issue identified above, and any new ones, with the Board at the Meeting. The Plan would be to return to the BWD Board in late Oct or Nov with a Final Draft of TSS and Sub Grantee Agreements, if the Board concurs with Staff/Legal recommendation.

FISCAL IMPACT:

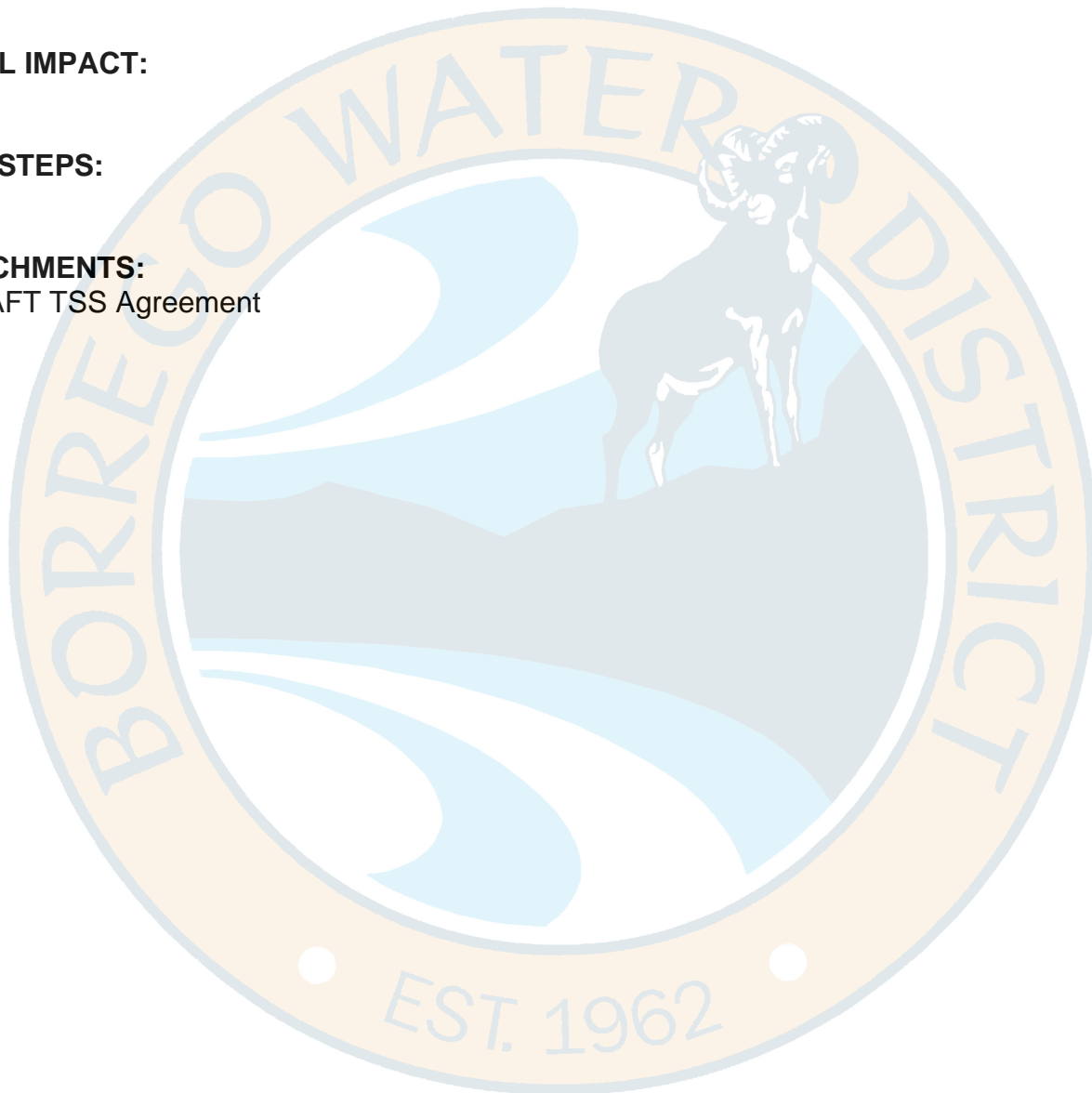
TBD

NEXT STEPS:

TBD

ATTACHMENTS:

1. DRAFT TSS Agreement



AGREEMENT BETWEEN THE STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES (DWR)
AND
BORREGO WATER DISTRICT, A LOCAL AGENCY, UNDER THE
SUSTAINABLE GROUNDWATER MANAGEMENT, TECHNICAL SUPPORT SERVICES (TSS) PROGRAM
AGREEMENT NO. XXXX
CALIFORNIA WATER CODE §10729 ET SEQ.

- 1) PURPOSE. Pursuant to Chapter 7 (commencing with Section 10729) of Division 6, Part 2.74 of the California Water Code (CWC), the State shall provide in-kind and subcontracted technical services for investigating and gathering data on groundwater conditions in groundwater basins of California to assist Groundwater Sustainability Agencies (GSAs) and Local Agencies in developing or implementing Groundwater Sustainability Plans (GSPs) or Alternatives, hereinafter collectively referred to as "Technical Support Services" or "TSS."
- 2) TERM OF AGREEMENT. The term of the Agreement begins on _____, the date the Agreement is executed by the State, and terminates upon completion of the useful life of the project which, at a minimum, is 20 years after the Local Agency's GSP or Alternative implementation, or when all the Parties' obligations under the Agreement are fully satisfied, whichever occurs earlier. Execution date is the date the State signs the Agreement indicated on page 4.
- 3) RELATIONSHIP OF PARTIES. The Local Agency is solely responsible for design, operation, and maintenance of projects to be constructed by the State as described in Exhibit A to this Agreement, Work Plan, Schedule, and Budget. Review or approval of plans, specifications, bid documents, or other construction documents by the State is solely for proper administration of the TSS by the State and shall not be deemed to relieve or restrict responsibilities of the Local Agency under the Agreement. The State may recommend modification to the designs, plans, or specifications prepared by the Local Agency to improve project outcomes, comply with well standards Bulletin 74-90, and/or construction efficiency. Such recommendations will be incorporated into the construction design at the Local Agency's sole discretion, but the Department may terminate this Agreement if it determines that failure to make the recommended changes may pose a threat to water quality.
- 4) CONTINUING ELIGIBILITY. The Local Agency must meet the following ongoing requirements to remain eligible to receive TSS:
 - a) Statutory requirements for Alternatives (CWC Section 10733.6 *et seq.*).
 - b) Statutory requirements for GSP Initial Notification (CWC Section 10727.8 and §353.6 of the GSP Regulations [California Code of Regulations, Title 23, Division 2, Chapter 1.5, Subchapter 2]).
 - c) The basin or subbasin that the Local Agency occupies is current with periodic reporting requirements under DWR's California Statewide Groundwater Elevation Monitoring (CASGEM) and Sustainable Groundwater Management Act (SGMA) Programs, as applicable (CWC Sections 10920 *et seq.* and 10728, respectively).
 - d) The basin or portion of the basin managed by the Local Agency must not be in a current condition of overlap that would disqualify the decision of the Local Agency to undertake groundwater management pursuant to SGMA (CWC Section 10723.8(c)).
- 5) INDEMNIFICATION. The Local Agency and State will exercise reasonable precautions to avoid damage to people and property. Each agrees that it is responsible for its own actions and those of its agents, subcontractors, employees, representatives and any other person acting on their behalf or at their direction, arising out of or as a result of, or in connection with this Agreement and hereby agrees, to the extent permitted by law, to indemnify and hold the other parties and their respective officers and agents harmless, against any or asserted liability arising out of its (and its agents, subcontractors, employees, representatives and any other person acting on their behalf or at their direction) actions, either willful, negligent, or intentional, in implementing the project. Such indemnity will include any losses relating to any claim made, whether or not a court action is filed.
- 6) INDEPENDENT CAPACITY. The Local Agency, and the agents and employees of the Local Agency, in the performance of the Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.

- 7) INSPECTIONS OF PROJECT. The State and Local Agency shall each have the right to inspect all project-related work as described in Exhibit A at all reasonable times and places during the term of the Agreement. The Local Agency and DWR shall include provisions ensuring such access in all their contracts entered into pursuant to its Agreement.
- 8) DEFAULT PROVISIONS. The Local Agency will be in default under this TSS Agreement if any of the following occur:
- a) Breaches of this TSS Agreement, or any supplement or amendment to it, or any other agreement between the Local Agency and the State evidencing or securing the Local Agency's obligations.
 - b) Making any false warranty, representation, or statement with respect to this TSS Agreement or the application filed to obtain this TSS Agreement.
 - c) Failure to operate or maintain project(s) in accordance with this TSS Agreement.
 - d) Failure to meet any of the requirements set forth in Paragraph 4, "Continuing Eligibility."
- 9) RESPONSE TO DEFAULT. Should an event of default occur, the State shall provide a notice of default to the Local Agency and shall give the Local Agency at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Local Agency. If the Local Agency fails to cure the default within the time prescribed by the State, the State may do any of the following:
- a) Terminate any obligation to perform future project work as described in Exhibit A.
 - b) Terminate the TSS Agreement.
 - c) Take any other action that it deems necessary to protect its interests.
- 10) ENTRY PERMIT OR OTHER DOCUMENT. For projects involving construction of improvements on publicly owned real property, including the installation of groundwater monitoring well(s), the Local Agency shall execute or obtain from the owner(s) of the real property a Land Use Agreement (LUA) or a renewable Temporary Entry Permit (TEP) document authorizing DWR's officers, employees, agents, and contractors permission to enter said owner's property with all necessary equipment to perform the work described under this Agreement in Exhibit A, including collection of data for the useful life of the project. Such work will be subject to site specific provisions to be described in the LUA or TEP prior to implementation of field/construction activities. In the event that a project is to be located on privately owned real property, the Local Agency shall be responsible for acquiring any necessary easement granting property rights to conduct the project as described in this agreement and shall execute a LUA or TEP providing DWR access to the site as described in this section. To the extent the Local Agency is unwilling or unable to obtain the property rights and access DWR deems as necessary to perform the work described under this Agreement in Exhibit A, DWR may terminate any obligation to perform future project work in accordance with Section 9.a above.
- 11) WORK AREA SAFETY. Prior to initiating any field work activities including initial site visits and reconnaissance, the State will perform a preliminary review of property to document the physical and environmental conditions and prepare a Job Hazards Analysis (JHA) that considers real and perceived job safety hazards related to site conditions and the work to be performed. The JHA will be reviewed and appropriately updated as site conditions and work activities progress or change. The JHA will outline any required safety precautions to be followed and any personal protective equipment to be worn for DWR staff to safely perform the work. All State and Local Agency officers, employees, agents, and contractors working at or visiting the project work area will be required and agree to read, be briefed on, and sign the JHA as acknowledgement of their awareness of its safety provisions before entering the work area on each day they are present.
- 12) OPERATION AND MAINTENANCE OF PROJECT. For the useful life of projects and in consideration of the services provided by the State, the Local Agency agrees to ensure or cause to be performed the commencement and continued operation of each project, and shall ensure or cause each project to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The State shall not be liable for any cost of such maintenance, management, operation, closure, or removal. The Local Agency or their successors may, with the written approval of the State, transfer this responsibility to use, manage, and maintain the project. For purposes of this Agreement,

"useful life" means the period during which an asset, property, or activity is expected to be usable for the purpose it was acquired or implemented; "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses, and "maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace, reconstruct, close in-place, or remove capital assets or basic structures. Refusal of the Local Agency to ensure operation and maintenance of the project(s) in accordance with this provision may, at the option of the State, be considered a breach of this Agreement and may be treated as default under Paragraph 9, "Default Provisions."

- 13) DESTRUCTION OF WELLS. At any point when a well drilled for purposes of the Project shall be abandoned, the Local Agency shall destroy the abandoned well in accordance with prevailing well completion and destruction standards.
- 14) NOTIFICATION OF STATE. The Local Agency shall promptly notify the State, in writing, of the following items:
- a) Events or proposed changes that could affect the scope, budget, or schedule of DWR's performance under this TSS Agreement. The Local Agency agrees that no substantial change in the scope of a project will be undertaken until written notice of the proposed change has been provided to the State and the State has given written approval for such change. Substantial changes generally include changes to the work plan, schedule or term, and budget.
 - b) Any public or media event publicizing the accomplishments and/or results of this TSS Agreement that provide an opportunity for attendance and participation by the State's representatives. The Local Agency shall make such notification at least 14 calendar days prior to the event, or if the Local Agency does not have 14 calendar days' notice, as soon as practicable.
 - c) Any inspections of completed project work by a California Professional Engineer or Geologist. The Local Agency shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide the State the opportunity to participate in the inspection, or if the Local Agency does not have 14 calendar days' notice, as soon as practicable.
- 15) NOTICES. Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this TSS Agreement shall be in writing. Notices may be transmitted by any of the following means:
- a) By delivery in person.
 - b) By certified U.S. mail, return receipt requested, postage prepaid.
 - c) By "overnight" delivery service; provided that next-business-day delivery is requested by the sender.
 - d) By electronic means.

Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery of receipt). Notices sent by certified mail will be deemed effective given ten (10) calendar days after the date deposited with the U. S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent electronically will be effective on the date of transmission, which is documented in writing. Notices shall be sent to the addresses set forth in Paragraph 16. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below.

- 16) PROJECT REPRESENTATIVES. The Project Representatives during the term of this TSS Agreement are as follows:

Department of Water Resources
Paul Gosselin
Deputy Director
Statewide Groundwater Management
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 653-4781
e-mail: paul.gosselin@water.ca.gov

Borrego Water District
Project representative name
Project representative title
Street address
City, State Zip
Phone: (XXX) XXX-XXXX
e-mail: name@agency.com

Direct all inquiries to:

DWR Program Manager
Steven Springhorn
Supervising Engineering Geologist
Statewide Groundwater Management Office
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 651-9273
e-mail: steven.springhorn@water.ca.gov

Project Manager for Local Agency
Project manager name
Project manager title and office
Address
City, State Zip
Phone: (XXX) XXX-XXXX
e-mail: name@company.com

DWR TSS Region Office Lead
Jack Tung
Senior Engineering Geologist
DWR Southern Region Office
770 Fairmont Avenue, Suite 200
Glendale, CA 91203
Phone: (818) 549-2341
e-mail: jack.tung@water.ca.gov

DWR TSS Project Lead
Jason Preece
Senior Engineering Geologist
Sustainable Groundwater Management Office
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 651-9636
e-mail: jason.preece@water.ca.gov

Either party may change its Project Representative, Program Manager, or Project Manager upon written notice to the other party.

17) STANDARD PROVISIONS. The following Exhibits are attached and made a part of this TSS Agreement by this reference:

- Exhibit A – Work Plan, Schedule, and Budget
- Exhibit B – Standard Conditions

IN WITNESS WHEREOF, the parties hereto have executed this TSS Agreement.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

BORREGO WATER DISTRICT

Paul Gosselin, Deputy Director
Statewide Groundwater Management

Authorized Representative Name
Title

Date_____

Date_____

Approved as to Legal Form and Sufficiency

Erick Soderlund, Staff Counsel
Office of General Counsel

Date_____

Exhibit A
Work Plan, Schedule, and Budget

DRAFT

Exhibit B
Standard Conditions

- B.1) AMENDMENT:** The Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Local Agency for amendments must be in writing stating the amendment request and the reason for the request.
- B.2) APPROVAL:** The Agreement is of no force or effect until signed by all parties to the Agreement.
- B.3) BUDGET CONTINGENCY:** If the Budget Act of the current year covered under the Agreement does not appropriate sufficient funds for the TSS Program, the Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of the State to perform any services under the Agreement. In this event, the State shall have no liability to furnish any considerations under the Agreement and the Local Agency shall not be obligated to perform any provisions of the Agreement. If funding for any fiscal year after the current year covered by the Agreement is reduced or deleted by the Budget Act for purposes of this program, the State shall have the option to either cancel the Agreement with no liability occurring to the State or offer an Agreement amendment to the Local Agency to reflect the reduced amount of services to be provided.
- B.4) CEQA:** Activities performed under the Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 et seq.). Information on CEQA may be found at the following links:
Environmental Information: <https://www.opr.ca.gov/ceqa/>
California State Clearinghouse Handbook: https://www.opr.ca.gov/docs/SCH_Handbook_2012.pdf
- B.5) CLAIMS DISPUTE:** Any claim that the Local Agency may have regarding performance of the Agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the State's Project Representative, within thirty (30) days of the Local Agency's knowledge of the claim. The State and the Local Agency shall then attempt to negotiate a resolution of such claim and process an amendment to the Agreement to implement the terms of any such resolution.
- B.6) DELIVERY OF INFORMATION, REPORTS, AND DATA:** The Local Agency agrees to expeditiously provide throughout the term of the Agreement, such reports, data, information, and certifications as may be reasonably required by the State. If such data is generated and transmitted on a continuous basis (e.g., real-time with telemetry), the State shall also have full access to such capabilities.
- B.7) FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED PROFESSIONAL:** To the extent that the Local Agency provides professional engineering services as an integral component of the Project, the Local Agency shall provide for any final inspection and certification by the appropriate licensed professional (California Professional Civil Engineer or Geologist) that their work has been completed in accordance with licensure law and any submitted final plans and specifications and any modifications thereto and in accordance with the Agreement.
- B.8) LOCAL AGENCY COMMITMENTS:** The Local Agency accepts and agrees to comply with all terms, provisions, conditions and commitments of the Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by the Local Agency in the application, documents, amendments, and communications filed in support of its request for Technical Support Services.
- B.9) Local Agency NAME CHANGE:** Approval of the State's Program Manager is required to change the Local Agency's name as listed on the Agreement. Upon receipt of legal documentation of the name change the State will process an amendment.
- B.10) GOVERNING LAW:** The Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

- B.11) MODIFICATION OF OVERALL WORK PLAN:** At the request of the Local Agency, the State may at its sole discretion approve non-material changes to the portions of Exhibit A which concern the scope, schedule, and budget without formally amending the Agreement. Non-material changes with respect to the budget are changes that only result in reallocation of the budget and will not result in an increase in the project budget amount. Non-material changes with respect to each Project schedule are changes that will not extend the term of the Agreement. Requests for non-material changes to the budget and schedule must be submitted by the Local Agency to the State in writing and are not effective unless and until specifically approved by the State's Project Manager in writing.
- B.12) OPINIONS AND DETERMINATIONS:** Where the terms of the Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.
- B.13) PERFORMANCE AND ASSURANCES:** The Local Agency agrees to faithfully and expeditiously perform or cause to be performed all Project work in their charge as described in Exhibit A, "Work Plan" and to apply State resources received only to its charge in developing one or more GSPs in accordance with applicable provisions of the law.
- B.14) PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION:** The Local Agency shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Project without prior permission of the State.
- B.15) REMEDIES NOT EXCLUSIVE:** The use by either party of any remedy specified herein for the enforcement of the Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.
- B.16) RIGHTS IN DATA:** The Local Agency agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of the Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act., Cal. Gov't Code §6250 *et seq.* The Local Agency may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under the Agreement, subject to appropriate acknowledgement of credit to the State for financial support. The Local Agency shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.
- B.17) SEVERABILITY:** Should any portion of the Agreement be determined to be void or unenforceable, such portion shall be severed from the whole and the Agreement shall continue as modified.
- B.18) STATE REVIEWS:** The parties agree that review or approval of project applications, documents, permits, plans, and specifications or other project information by the State is for administrative purposes only and does not relieve the Local Agency of their responsibility to properly plan, design, construct, operate, maintain, implement, or otherwise carry out their commitments to completing the project.
- B.19) SUCCESSORS AND ASSIGNS:** The Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of the Agreement or any part thereof, rights hereunder, or interest herein by the Local Agency shall be valid unless and until it is approved by the State and made subject to such reasonable terms and conditions as the State may impose.
- B.20) TERMINATION BY THE LOCAL AGENCY:** Subject to the State approval which may be reasonably withheld, the Local Agency may terminate the Agreement and be relieved of contractual obligations. In doing so, the Local Agency must provide a reason(s) for termination and is responsible for reimbursing costs incurred by DWR on the project as described in Exhibit A up to the time of notice of termination.
- B.21) TERMINATION FOR CAUSE:** Subject to the right to cure under Paragraph 9, the State may terminate the Agreement and be relieved of any commitments should the Local Agency fail to perform the requirements of the Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 9 of this Agreement.

- B.22) TERMINATION WITHOUT CAUSE:** The State may terminate the Agreement without cause on a 30-day advanced written notice.
- B.23) THIRD PARTY BENEFICIARIES:** The parties to the Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of the Agreement, or any duty, covenant, obligation or understanding established herein.
- B.24) TIMELINESS:** Time is of the essence in the Agreement.
- B.25) WAIVER OF RIGHTS:** None of the provisions of the Agreement shall be deemed waived, unless expressly waived, in writing. It is the intention of the parties hereto that, from time to time, either party may waive any of its rights under the Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

DRAFT

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
OCTOBER 11, 2022
AGENDA ITEM II.E

October 5, 2022

TO: Board of Directors
FROM: Geoffrey Poole, General Manager
SUBJECT: Borrego Springs Subbasin Watermaster Board – VERBAL D Duncan/K Dice
Update on Board Activities

RECOMMENDED ACTION:

Receive Verbal Report from Representatives and Discuss potential future TAC Agenda items

Vice President Baker has also requested a discussion of BWD's planned letter to the County of SD and State of CA re: de min well process/results. They will be available for this discussion.

ITEM EXPLANATION:

VERBAL REPORT

FISCAL IMPACT:

TBD

NEXT STEPS:

TBD

ATTACHMENTS:

1. None