**Borrego Water District Board of Directors**
**Special Meeting**
**September 12, 2023 @ 9:00 a.m.**
**806 Palm Canyon Drive**
**Borrego Springs, CA 92004**

The Borrego Water District Board of Directors meeting as scheduled will be conducted in person and in an electronic format please note BWD is providing remote attendance options solely as a matter of convenience to the public. BWD will not stop or suspend its in-person public meeting should a technological interruption occur with respect to the GoTo meeting or call-in line listed on the agenda. We encourage members of the public to attend BWD meetings in-person at the address printed on page 1 of this agenda. Anyone who wants to listen to or participate in the meeting remotely is encouraged to observe the GO TO MEETING 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 & Moran
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 AND POSSIBLE ACTION -

A. Automated Meter Reading System: Vendor Selection Documents – J Clabaugh
B. Initiation of BWD Intern Program with Borrego Springs High School – D Duncan
C. BWD/T2 Deposit Agreement – S Anderson
D. Borrego Springs Subbasin Watermaster Board – VERBAL D Duncan/K Dice/T Driscoll
   1. Update on Board Activities
   2. Update on Technical Advisory Committee Activities

AGENDA: September 12, 2023: The Borrego Springs Water District complies with the Americans with Disabilities Act. Persons with special needs should call Geoff Poole, General Manager – 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.

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.

## III. BOARD COMMITTEE REPORTS, IF NEEDED

STANDING:

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

AD HOC:

A. Prop 68 Implementation: Baker/Johnson
B. Public Outreach: Dice/Johnson
C. Grants: Dice/Johnson
D. Cyber Security/Risk Management: Baker
E. Developer's Agreement: Baker/Duncan
F. Finance: Baker/Moran
H. Borrego Springs Basin Water Quality: Moran/Johnson

## IV. STAFF REPORTS – VERBAL

A. General Manager
   a. PFAS Testing on David Bauer Property Acquisition Documents – NOT PRESENT
   b. Bauer Farmland Fallowing Update and Possible Involvement in Watermaster Prop 68 Grant

## V. 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
0900 & 140-303-1100 Agency Negotiator: Geoff Poole, BWD General Manager Negotiating Parties: BWD and US Gypsum Corp as potential buyer Price and Terms of Payment

## VI. CLOSING PROCEDURE:

The next Board Meeting is scheduled for 9:00 AM September 26, 2023, to be available online and in person at 806 Palm Canyon Drive. See Board Agenda at BorregoWD.org for details, Agenda information available at least 72 hours before the meeting.

AGENDA: September 12, 2023: The Borrego Springs Water District complies with the Americans with Disabilities Act. Persons with special needs should call Geoff Poole, General Manager – 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.

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BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
SEPTEMBER 12, 2023
AGENDA ITEM II.A

September 7, 2023

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Automated Meter Reading System: Vendor Selection Documents – J Clabaugh

**RECOMMENDED ACTION:**
Receive overview of documents and process,

**ITEM EXPLANATION:**
BWD received a Proposition 68 Grant for an AMI system. Staff and Director Baker has been working on a comprehensive document for use in the Vendor selection process, attached. Jessica will provide an overview of the document at the meeting and the Team can answer any questions.

**NEXT STEPS**
1. TBD

**FISCAL IMPACT**
1. N/A

**ATTACHMENTS**
1. AMI Vendor Selection Documents

# ADVANCED METERING INFRASTRUCTURE SYSTEM, METER DATA MANAGEMENT SYSTEM & METER INSTALLATION SERVICES

## REQUEST FOR QUALIFICATIONS

Advertise Date:
September 15, 2023

Pre-Qualifications Package Due Date:
October 16, 2023
3:00 PM Pacific Time

Borrego Water District Contact:
Geoff Poole
General Manager
geoff@borregowd.org

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# 1 ACRONYMS/DEFINITIONS

For the purposes of this request for qualifications (RFQ), the following acronyms and terms are defined as:

*Table 1 - Acronyms/Definitions*

| Acronym/Term | Definition |
|---|---|
| AMI | Advanced Metering Infrastructure |
| AMI Network | Vendor proprietary wireless network that transmits meter data from the meters to the AMDMS |
| API | Application Programming Interface |
| Awarded Proposer | The organization that is awarded and has an approved contract with Borrego Water District for the services identified in this RFQ. |
| BWD | Borrego Water District |
| Customer Portal | Website and/or mobile application that gives BWD's customers access to their meter data, alerts and other capabilities of the system |
| District | Borrego Water District |
| Endpoint | Device that sends data from the meter to a collection point. |
| ESRI | Environmental Systems Research Institute |
| FCC | Federal Communications Commission |
| FTE | Full Time Equivalent |
| GIS | Geographic Information Systems |
| IT/OT | Information Technology/Operational Technology |
| May | Indicates something that is not mandatory, but is permissible |
| AMDMS | Automatic Meter Data Management System |
| Meter Compatibility Matrix | A listing of which meters in the industry (currently being produced or out of production) that are compatible with the Proposers AMI endpoint |
| NDA | Non-Disclosure Agreement |
| NOC | Network Operations Center |
| NSF | National Sanitation Foundation, aka NSF International |
| PCI | Payment Card Industry |
| PQP | Pre-Qualification Package |
| Prime Equipment and Solutions Provider | The prime organization/Proposer submitting an SOQ and potentially Proposal/Cost Proposal in response to this RFQ |
| QA | Quality Assurance |
| RF | Radio Frequency |
| RFQ | Request for Qualifications |
| RFP | Request for Cost Proposals |
| SCADA | Supervisory Control and Data Acquisition |
| SD | Service Disconnect (also known as Remote Disconnect) |

| Acronym/Term | Definition |
|---|---|
| PQP | Pre-Qualifications Package includes the SOQ and references |
| Selection Committee | An independent committee comprised solely of representatives of the City established to review qualifications submitted in response to the RFQ, evaluate the qualifications, and select the Prime and/or Individual Solutions Providers. |
| Shall/Must | Indicates a mandatory requirement; failure to meet a mandatory requirement may result in the rejection of a qualification as non-responsive. |
| Should | Indicates something that is recommended but not mandatory; if a Proposer fails to provide recommended information, the District may, at its sole option, ask the Proposer to provide the information or evaluate the qualification without the information |
| SLA | Service Level Agreement |
| SOQ | Statement of Qualifications |
| SSO | Single Sign-On |
| Individual Solution Provider | Third-party not directly employed by the Prime who will provide services identified in this RFQ |
| VEE | Validation, Estimation, and Editing |
| Proposer | Organization submitting a SOQ in response to this RFQ |

# 2 INTRODUCTION

Borrego Water District, located in Borrego Springs California, , hereby requests a summarized written Statement of Qualifications packages (SOQ) from interested parties who will furnish and install a fully-automated Advanced Metering Infrastructure (AMI) system, associated equipment, meters, new AMI-compatible meter box lids, and an Automatic Meter Data Management System (AMDMS). The scope of the BWD's AMI Project (Project) will include the deployment of all hardware and systems, integrations, testing, training, support services, and maintenance of AMI network infrastructure and system software.

The Borrego Water District (BWD) has received State of California Proposition 68 Grant funding for installation of Automated Metering Infrastructure (AMI) in its service area. BWD understands the level of effort required to formally respond in these situations, so we have developed a process to make the best use of the Proposer's time and BWD staff.

It is BWDs intent not to require possible vendors to invest considerable amount of time in the beginning with detailed, lengthy written Proposals. Instead, BWD is requiring submittal of basic information(summary SOQ) and references in a Pre-Qualifications Package (PQP). BWD will evaluate the info submitted, check the references and invite those that that meet BWD needs and received positive recommendations to the next step that will consist of in person or video interviews. Following the interviews, a top 3 (estimated) will be selected and invited to submit a written Proposal with Pricing (sealed). BWD will evaluate the Proposal, interview again if needed, and select the Preferred Vendor. Once selected, the Cost Proposal of the Preferred Vendor will be opened and contract negotiations commence.

Following is a summary of the process and the requirements of each possible Vendor.

1. Pre-Qualification: Provide information on your company, products and services that you feel is important for BWD to know and at least 3 contacts for past AMI projects for agencies of comparable size to BWD (@ 2,200 customers). BWD would prefer to see references from small, rural Agencies with approximately 5,000 connections or less. Following the reference check, a list of qualified Vendors will be created and each invited to continue in the process.
2. Interviews: Prepare a Presentation that covers the questions and requirements of this RFQ. Invitees should expect to come to the interviews at a minimum prepared with the presentation and the following: software available for demonstrations, metering/box/lid and shut off valve hardware, etc. To allow for adequate time, BWD is planning 1.5 hrs. to cover each presentation and subsequent Q & A. The top 3 Vendors (estimated) will be asked to continue in the process.
3. Submit SOQ and Sealed Cost Proposal: Respond in writing to BWDs attached Request for Proposal and submit sealed Cost Proposal. BWD will rank the final 3, interview again if needed and select a Preferred Vendor.
4. Contract and Pricing: BWD will open the Cost Proposal from the selected Vendor, begin Contract negotiations and execute.

BWD reserves the right to contact all or any of the references provided in response; contact any Proposer to clarify any response; contact any current user of a Proposer's services or products; solicit information from any available source concerning any aspect of an SOQ; and seek and review any other information deemed pertinent to the evaluation process.

Interested parties are invited to submit the PQP to serve as the Prime Equipment and Solutions Provider (Prime) and perform the full project scope (e.g. turnkey), providing the solutions that meet the functional and technical requirements set forth in this RFQ and best meet the needs of the BWD.

The Four (4) components of the Project are:

(1) AMI System which includes the supply of water meters, registers, lids, endpoints, AMI network infrastructure and installation of AMI network infrastructure if the Vendor's solution requires it.

(2) Vendor to identify the extra cost for a downstream shut off valve in Cost Proposal. BWD will retain the option to add this feature or not to the AMI Project.

(3) Automatic Meter Data Management System (which includes a website/portal for BWD's use and a customer portal and customer mobile app that gives each customer access to the information about his account) deployment and integration.

(4) Installation services for water meters replacement and retrofit, endpoints installation, and meter box lids replacement.

BWD will consider Proposers' AMI Systems whose network infrastructure consists of traditional fixed radio frequency (RF) (licensed/unlicensed), cellular, or hybrid.

# 3 SUBMITTAL INSTRUCTIONS

## 3.1 Procurement Timeline

Table 2 presents the tentative schedule for procurement of this project. Borrego Water District reserves the right to modify these dates at any time. Any change in the scheduled dates will be advertised in the form of an addendum to this RFQ. The awarded Proposer(s) will be notified following BWD Board of Directors approval.

*Table 2 - BWD Procurement Schedule*

| Proposed Procurement Timeline | |
|---|---|
| **Event** | **Date** |
| **RFQ Release/Advertise** | Friday after board approval(09/15) |
| Pre-Submittal Conference – 2:00pm | 1.5 weeks after release(09/27) |
| Non-Disclosure Agreement Due | 2 weeks after release (09/29) |
| Proposer Questions due – 3:00pm | 2 weeks after release (09/29) |
| Response to Questions Sent | 3 weeks after release (10/06) |
| **PQPs due – 3:00pm** | Monday after 4 weeks from release (10/16) |
| | |
| Notification of Shortlisted Proposers and Issue Request for Interviews | Monday after PQPs received(10/23) |
| Interviews | Following two Weeks(10/30 to 11/10) – depending on vendor availability |
| Notification of Proposers for Proposal with Cost | Following Monday (11/13) |
| Proposal with Cost Due | Two weeks later(11/27 or 12/01 due to Txgiving? |
| Notify of Proposer selected by staff | Two weeks (12/04 or 12/11) |
| Contract Negotiations with selected Proposer/s and District | 12/04 |
| Staff recommendations presented to Board of Directors for Award | 01/09/24 or 01/23/24 meeting |
| AMI Project Kickoff | 02/01/24 |

## 3.2 Pre-PQP Submittal Conference

A pre-submittal conference will be held at X:XX PM Pacific Time, XXXX, XX-XX-2023. The pre-submittal conference is not mandatory, but participation is strongly encouraged. The pre-submittal conference will take place on site and via Go-To-Meeting. Interested firms will have an opportunity to submit questions regarding the requirements outlined in this RFQ.

The in-person meeting will take place at Borrego Water District, Administration Building, 806 Palm Canyon Drive, Borrego Springs CA 92004. Those attending remotely can access the meeting via the Go-To-Meeting link below:

TBD

Or dial in via phone number +1 (XXX) XXX-XXXX, access code XXX-XXX-XXX

To make the meeting more effective for all participants, attendees are encouraged to read this document thoroughly prior to the meeting. Substantial clarifications or changes required as a result of the meeting will be issued in the form of a written addendum to the RFQ. A list of attendees will be distributed to all those who attended the pre- submittal meeting.

A site visit will be made available after the pre-submittal conference. The site visits will be conducted in no more than 2 hours, with each Proposer allowed 1 vehicle maximum. Proposers that are interested in participating are requested to RSVP at least 24 hours in advance. Note that only a limited number of sites will be offered for viewing.

## 3.3 Proposer Questions

Written questions regarding this RFQ shall be submitted inquiries via email to Geoff Poole, Borrego Water District General Manager, at geoff@borregwd.org **and** to Jessica Clabaugh, Finance Officer, at jessica@borregowd.org at any time up until 3:00 PM PST Tuesday, XXXXX XX, 2023. Responses will be published via an addendum(s).

In addition, all signed Non-Disclosure Agreements (Attachment 2) shall be submitted to these same contacts.

## 3.4 Pre Qualifications Packages Submission

**PQPs must be received by 3:00 p.m. PST, XXXXX XX, 2023 and those** PQPs that do not arrive by the specified date and time will be SUBJECT TO REJECTION. Proposers may submit their P Q P any time prior to the above stated deadline; however, these proposals will not be assessed until the deadline. The BWD will not be held responsible for PQPs envelopes mishandled as a result of the envelope not being properly prepared. Facsimile or telephone submittals will NOT be considered.

Provide information on your company, products and services that you feel is important for BWD to know and at least 3 contacts for past AMI projects for agencies of comparable size to BWD (@ 2,200 customers). BWD would prefer to see references from small, rural Agencies with approximately 5,000 connections or less. Following the reference check, a list of qualified Vendors will be created and each invited to continue in the process.

The PQPs shall be submitted via email to Geoff Poole, Borrego Water District General Manager, at geoff@borregwd.org **and** to Jessica Clabaugh, Finance Officer, at jessica@borregowd.org at any time up until the deadline.

## 3.5 Remaining Steps in Selection Process

Selected Prospers will be invited to interview with the selection committee. Invitees should expect to come to the interviews at a minimum prepared with the presentation and the following: software available for demonstrations, metering/box/lid and shut off valve hardware, etc. To allow for adequate time, BWD is planning 1.5 hrs. to cover each presentation. Following completion of the interview process, approximately three vendors will be invited to continue in the process by submitting a Proposal package using the format that follows.

PROPOSAL PACKAGE

The Vendors that are invited by BWD to continue in the selection process will be requested to complete the following Proposal.

Proposers shall limit the Proposal to a total of 50 pages excluding attachments and appendices.

Borrego Water District requires SIX (6) hard copies of the qualifications package to be submitted. In addition, ONE (1) electronic copy of the qualifications package shall be submitted on a USB drive, which will be retained by the BWD. All electronic documents submitted must be in a searchable and bookmarked .pdf file format, with section headings. A filled-out, Microsoft Excel-format copy of Attachment 1 shall be included in the electronic submittal.

Proposals should be addressed to:

**Borrego Water District**

**806 Palm Canyon Dr.**

**Borrego Springs CA 92004**

geoff@borregowd.org and

jessica@borregowd.org

Proposals will also be accepted in person at the Water Administration front counter at the District Administrative building located at 806 Palm Canyon Drive. All components of the Proposal package (paper copies and USB) must be received by the deadline listed above.

SOQs Cost Proposals shall be submitted in a sealed envelope which shall be plainly marked:

**Borrego Water District**

**ADVANCED METERING INFRASTRUCTURE PROJECT**

The envelopes shall also bear the name and business address of the Proposer.

The Borrego Water District reserves the right to reject any or all SOQs and to waive any and all irregularities to choose the firm that, in its opinion, best serves the BWD's interests. The Borrego Water District will not be liable for any costs incurred by the Proposers incidental to the preparation and presentation of SOQs, either orally or in writing.

Prior to submitting an SOQ, the Proposer shall review the BWD's minimum terms and conditions (Attachment 3) and forward it to their appropriate section (risk manager, headquarters, legal counsel, etc.) for examination.

## 3.6 SOQ Outline

This section describes the required SOQ outline. See Section 6 for required content. Proposers are instructed to follow this structure without deviation. The SOQ shall include the following sections:

vi. Title Page

vii. Table of Contents

viii. Prime and Individual Solutions Provider Information Form

ix. Executive Summary

x. Experience

xi. Product Maturity and Future Roadmap

xii. Implementation Approach

xiii. Attachments

*See Section 6 for all required attachments.*

xiv. Appendices

*Including but not limited to:*

c. Resumes

d. Annual reports and/or financial statements

e. Service level agreements

f. Training schedule & sample training plan

g. Installer employee safety program

h. High-level test plan

i. Product cut-sheets

## 3.7 Cost Proposal

PRICING IS TO BE SUBMITTED WITH THE STATEMENT OF QUALIFICATIONS PACKAGE IN A SEALED ENVELOPE.

## 3.8 Evaluation and Award Process

The Borrego Water District has been awarded a DWR Proposition 68 grant to implement a district-wide Advanced Metering Infrastructure system. The grant reimbursement has binding deadlines and it's essential that Proposer's solution can be fully deployed and accepted by BWD within the scheduled timeline. The objective of the procurement effort is to evaluate and select the products and services that meet the functional and business requirements for the Borrego Water District at the **best value**.

BWD's AMI Project is being solicited under following process for those Vendors who passed the initial PRE QUALIFICATIONS evaluation and subsequent interview. Proposers (including Primes and Individual Solution Providers) will be required to submit SOQs in response to this RFQ plus sealed Pricing Proposals The Selection Committee will perform a final ranking of Proposers' technical scores based on the information learned during the interviews according to the evaluation criteria included herein and the SOQ. The cost proposal of each of the shortlisted Prime and individual solution providers will then be opened and evaluated, and a top-ranked Prime (and possibly individual solution provider/s) will be selected.

The scope and cost proposal/s of the top-ranked Prime (and solution provider/s) will be subject to negotiations. Once an agreement is reached regarding the details associated with scope, schedule, contract terms, and cost, the Selection Committee's recommendation will be sent to the District Board for approval. Once Board approval of the award is obtained, the contract is signed and a Notice to Proceed is issued, the work may begin. Should the BWD be unable to reach agreement with the top-ranked Prime (and solution provider's team), negotiations will commence with the second-ranked Prime. This process will continue until a satisfactory contract is negotiated, or Borrego Water District exercises its right to reject all proposals.

The Selection Committee, with input from BWD Legal Counsel, will review the Proposer's responses to determine that all mandatory submittal requirements have been met. SOQs that have not met the mandatory requirements may be deemed non-responsive at the District's sole discretion.

The Selection Committee will evaluate all submittals using the following criteria:

*Table 3 - Evaluation Categories*

| Evaluation Categories | Weight |
|---|---|
| SOQ Completeness | 5% |
| Experience | 25% |
| Product Maturity and Future Roadmap | 25% |
| Technical Requirements | 25% |
| Implementation Approach | 15% |
| Level of Acceptance to the Districts Minimum Contract Terms and Conditions included in Attachment 3 | 5% |

BWD reserves the right to consider other factors and adjust the weighting and/or categories at its discretion.

# 4 GENERAL INFORMATION

## 4.1 Department of Industrial Relations (DIR) Registration

No Contractor or Subcontractor may be listed on an SOQ/proposal for a public works project submitted on or after March 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. No Contractor or Subcontractor may be awarded a contract for public work on a public works project awarded on or after April 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Effective January 1, 2016, no Contractor or Subcontractor may perform on a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the DIR.

SOQs shall be accompanied by proof of Prime's, Individual Solution Provider's, and their Subcontractor's current registration with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Proposers can satisfy this requirement by including their DIR registration number on the enclosed SOQ form where noted.

## 4.2 Agreement and Bonds

The successful Prime will be required to sign an agreement with the Borrego Water District containing certain essential terms and conditions, which are attached hereto as Attachment 3. All Proposers should carefully review these terms and conditions and note any exceptions when submitting their SOQs.

The successful Prime, simultaneously with the execution of the agreement, shall furnish and maintain a payment bond in an amount equal to 100% of the contract price and a faithful performance bond in an amount equal to 100% of the contract price for installation of physical improvements for the Advanced Metering Infrastructure Project (i.e. fixed network antennas / data collectors, meters, endpoints, and Meter Installation Services). The bonds shall be secured from a surety company satisfactory to BWD as an approved and financially sound surety company, authorized to transact business in the State of California.

The bonds shall meet all of the requirements and contain the conditions required by Sections 3247 and 3248 inclusive, of the Civil Code, and other applicable provisions of the law and regulations of the State of California.

Failure to execute the contract and file acceptable bonds and proof of insurance coverage as provided therein within the time set forth herein shall be just cause for the annulment of the award.

Performance and payment bonds shall not apply to the Automatic Meter Data Management System portion of the contract.

## 4.3 Other Requirements

Before entering into a contract, the firm to whom the contract has been awarded shall furnish satisfactory evidence of workers' compensation insurance and public liability and property damage insurance as specified in the special provisions.

Department of Industrial Relations Labor Code section 1773.3 requires that public agencies notify the DIR when public projects are awarded within 30 days of award and the imposition of a fine at a rate of $100 per day, not to exceed $10,000, was authorized for failure to provide notification. At the time of award, the successful Prime will be requested to provide DIR Award Notification Data for each General Contractor and for each Sub-contractor performing work on the project which data will be necessary to notify DIR of the award. If the Prime fails to provide the requested DIR Award Notification Data within 30 days after the issuance of the Notice of Award/Notice to Proceed, thereby causing Borrego Water District to incur the imposition of a fine by the DIR, such fine will be imposed upon the General Contractor for reimbursement.

The contractor(s) or subcontractor(s), without additional expense to Borrego Water District, shall be responsible for obtaining any necessary licenses and for complying with any applicable federal, state, and municipal laws, codes, and regulations in connection with the execution of the services required for this Project.

The Prime Equipment and Solutions Provider must possess a valid Class A (General Engineering) Contractor's License in the State of California. This license must be in place no later than the time invited Proposers submit their Cost Proposals.

The contractor(s) or subcontractor(s) performing meter replacement and/or meter retrofit work must possess a valid Class C 36 (Plumbing) Contractor's License in the State of California.

The contractor(s) or subcontractor(s) performing AMI network infrastructure (fixed network antenna/data collector) installation work must possess a valid C 10 Electrical Contractor's License in the State of California.

Borrego Water District is utilizing State Proposition 68 Grants to pay for the Project. Proposers will be required to comply with the requirements associated with these grant programs.

## 4.4 Regulatory Compliance

The selected Prime (and Solutions Provider/s) shall provide all required, necessary, and reasonably implied services, reports, analyses, correspondence, applications, meetings, and other preparation of documents and communications necessary to obtain approvals and cooperation of agencies such as the Occupational Safety and Health Administration (OSHA), Federal Communications Commission (FCC), Federal Aviation Administration (FAA), U.S. Army Corps of Engineers (USACE), railroads, utilities, and cellular providers, for all activities related to the Project. All correspondence, applications, responses to agencies, and other reports and communications shall be prepared by the Prime (and/or Solutions Provider/s) and reviewed by the Borrego Water District. The Prime shall be responsible for establishing working relationships with agencies to expedite approvals and mitigate negative impacts and shall hand-deliver items when necessary. Applications to agencies shall be signed by the BWD.

# 5 PROJECT OVERVIEW

## 5.1 Project Scope

Borrego Water District is soliciting qualified Proposers for a fully automated Advanced Metering Infrastructure (AMI) system, associated equipment, meters, new AMI-compatible meter box lids, and installation services. BWD is also seeking an Automatic Meter Data Management System (AMDMS) with the capability to provide detailed analytics. The scope of the Project includes the deployment of all hardware and systems, integrations, testing, training, support services, and maintenance of AMI network infrastructure.

The four (4) components of the Project are:

(1) AMI System which includes the supply of water meters, registers, lids, endpoints, AMI network infrastructure and installation of AMI network infrastructure if the Vendor's solution requires it.

(2) Vendor to provide additional pricing and time required to install downstream shutoff valves at all customer meters.

(3) Automatic Meter Data Management System (which includes a website/portal for BWD's use and a customer portal and/or customer mobile app that gives each customer access to the information about his account) deployment and integration with SpringBrook's CivicPay.

(4) Installation services for water meters replacement and retrofit, endpoints installation, and meter box lids replacement.

Borrego Water District is highlighting the following general requirements, utility preferences, and site- specific circumstances surrounding this effort:

- BWD is seeking "tried-and-true" proven technology. BWD is not looking to implement "bleeding edge" technology.
- BWD prefers a 'hosted' AMDMS.
- Proposers shall explain their approach to communications system redundancy in the event of an AMI Network outage.
- Proposers shall explain their approach to adhere to security best practices (cybersecurity, data privacy, etc.).
- If an AMI Network is required, BWD has compiled lists of existing meter locations and District-owned properties/assets that are preferred for the AMI network infrastructure placement. This information will be provided in Appendices 1 and 2, upon receipt of Proposers' signed NDA included in Attachment 2.
- If an AMI Network is required, proposers shall perform a site and propagation study as part of their response and design an AMI Network that best meets the needs of the District. The site and propagation study shall include the Borrego Water District's **entire** meter population to determine the number and placement of any and all AMI network infrastructure for full coverage. If proposed network solution includes cellular connectivity, existing conditions/coverage and proposed new should be accounted for. Propagation studies shall take into account existing frequencies (licensed or unlicensed) currently in operation within BWD's service area. Proposers shall ensure that their proposed AMI Network System will not interfere with any existing

communications systems within the BWD. Specific frequency interference considerations include existing:

  - Local municipal airport
  - SCADA – 900 MHz unlicensed
  - Regional Communications System (RCS) – 800 MHz (public safety, including police and fire)
  - BWD's Microwave Communications Network

- The Criteria for mounting AMI network infrastructure on BWD-owned properties and assets (e.g. buildings, pump stations, BWD-owned water storage tanks, and other structures approved by the BWD), if required is below:
  - AMI network infrastructure must not interfere with access by District personnel to any part of the building or structure on which they are mounted, nor in any way compromise its structural integrity. For each device, the attachment system (e.g. mountings, support system, cabling, etc.) must be pre-approved, as well as inspected and accepted, by a BWD representative.
  - Welded mounts are not allowed. Corrosion resistant, stainless steel mechanical fasteners are preferred.
  - Attachment systems must be designed and constructed in accordance with applicable local codes. Engineering for attachment systems is to be performed by the Proposers, at no additional cost to Borrego Water District.
  - See Appendix 2 for allowable network infrastructure installation sites including details such as: location, name, type of property/asset; whether is power available and other pertinant details.
  - Mounting equipment on water storage tanks will not be allowed. However, placement of new infrastructure adjacent to water tanks, within District-owned property will be allowed but will be subject to each site's local zoning and height limitations.
  - It may be possible to mount AMI network equipment onto existing communication infrastructure (e.g. antenna towers), however Proposers must guarantee that their equipment will not interfere with existing communication infrastructure and locations must be preapproved with other IT Vendors.
- Water meters will measure flow in cubic feet. Interval and register meter reads will be stored in the endpoint, transmitted and stored in the AMDMS at a resolution of 0.1 cubic feet or less. The AMDMS will provide billing determinants to the Springbrook System in truncated 100 cubic foot increments. Other software, such as the Customer Portal, is to be provided with reads at the same resolution as stored in the AMDMS.
- Mechanical water meters are preferred for meters sized from 5/8" to 2". Solid state water meters are preferred for meters sized 3" and above.
- Polymer composite body water meters and/or polymer composite threads will **NOT** be accepted by the Borrego Water District.
- Water meters must have a register that can continue to measure flows and can be read manually in the event of battery failure of the endpoint.
- BWD prefers endpoints that are compatible with a variety of meter manufacturers.

- BWD is interested to receive information on the following additional equipment and services, if offered, which will be treated as contract options that the District may select at its sole discretion:
    - Customer Shutoffs
    - Remote disconnect meters of any material composition or other means of remote disconnect functionality.
- All equipment and services provided must meet all federal, state, and local regulatory requirements (including, but not limited to, Federal Communications Commission regulations). Water meters must meet the latest edition American Water Works Association standards. All water meter components and ancillary materials (e.g. gaskets) that will be in contact with potable water must be NSF Standard 61 certified.
- Proposer will provide services for the Alpha, Beta and Full Deployment Phases.
- The meter installation contractor will return all removed meters back to the District at the end of each work shift. The District will provide a location for return of removed meters as well as staging area for use throughout the Project.
- Please note that a Prevailing wage determination (Attachment 5) has been applied for and received satisfying the Davis Bacon federal prevailing wage requirements. If proposing on installation services, please include in your SOQ consideration.
- Disadvantaged/Women Owned and Small Businesses are encouraged, if qualified to perform the requirements of this procurement, to submit an SOQ. Please state clearly if your organization qualifies for any of these classifications.
- BWD has GPS coordinates for the majority of the meter population (approximately 95%). The District has service addresses for **ALL** of the meter population. This data will be provided to Proposers with Appendix 1. Installers will be required to provide GPS coordinates for each meter/endpoint installed.
- The AMDMS will be the system-of-record for meter consumption information. It will send data to BWD's CIS.
- Working in conjunction with Borrego Water District and/or its contracted Program Manager, all Proposers will participate in recurring status meetings and provide adequate representation and timely responses.
- If a fixed-based AMI solution is being proposed, the Proposer shall include in its SOQ whether they offer a solution for on-call AMI network maintenance services. These services shall be for both emergency and preventative maintenance for the entire AMI network infrastructure (e.g. collectors and repeaters) and shall have a response time within 24 to 48 hours, dependent upon the urgency.

Proposers may propose additional options or **"scope enhancements"** above and beyond the list of tasks/requirements if deemed beneficial to the Project. These ideas/techniques shall be indicated separately from the base scope of work.

## 5.2 Borrego Water District Background

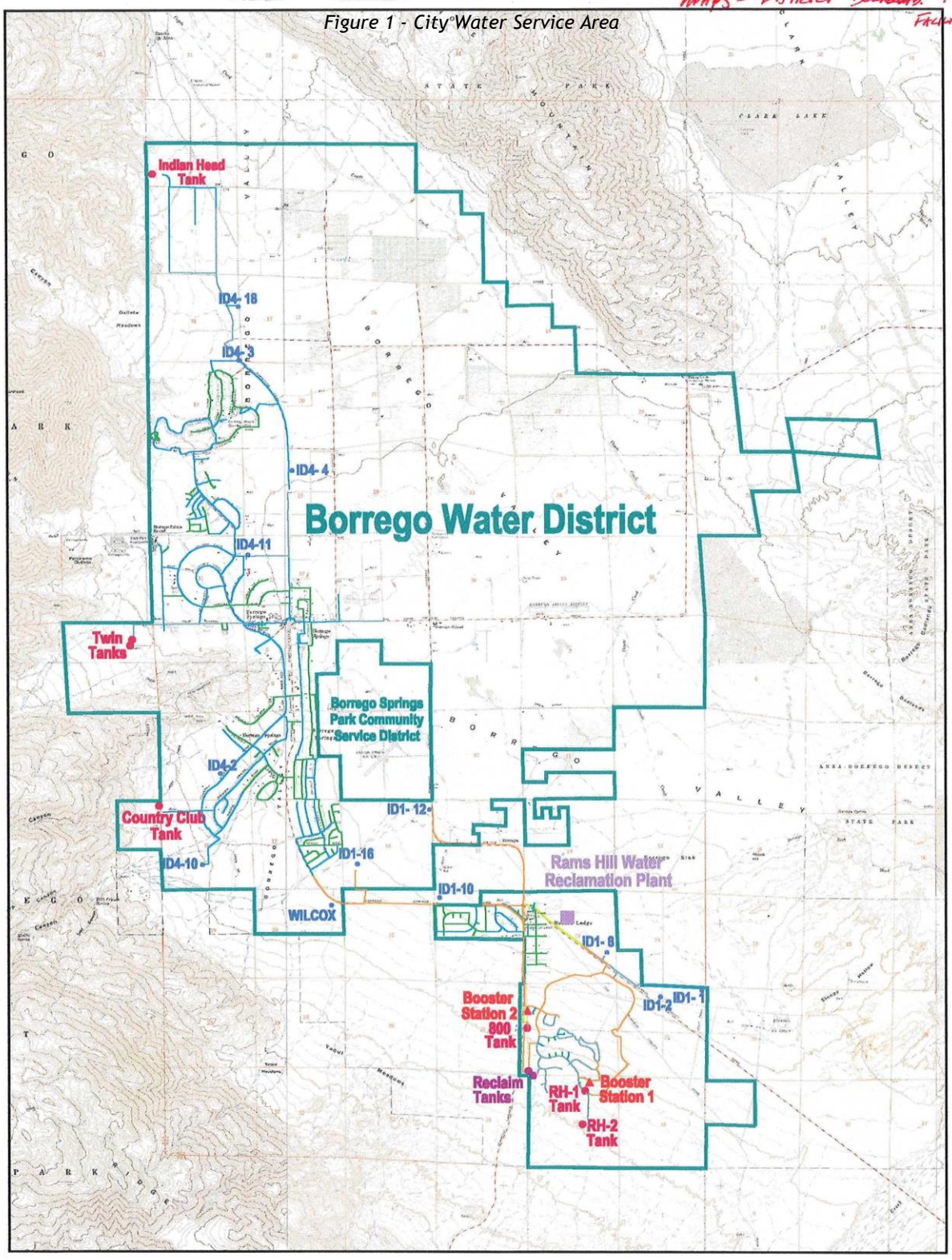
The Borrego Water District was formed in 1962 to protect the groundwater resources of the Borrego Valley from being exported to developments, which were seeking Borrego's water in the Salton Sea area. When the Salton Sea threat was resolved the Borrego Water District became inactive and by 1979 it was being targeted by the Local Agency Formation Commission (LAFCO) for dissolution.

The district was originally formed under Division 13 of the California Water Code as a California Water District (Ref. Sect. 34000 et seq of the Water Code) These provisions are specific to California Water Districts and differ from the statutory requirements of other water agencies formed under different enabling acts, such as Irrigation Districts, Municipal Water Districts, County Water Districts, cities and privately held utilities.

The District is required to operate under the provisions of its enabling act, along with applicable sections of the Government Code, Elections Code and Health & Safety Code among others. In addition, the district is regulated by several other government entities including the State of California, the County of San Diego, California Regional Water Quality Board, and the U.S. Environmental Protection Agency. BWD has also developed its own rules and regulations, resolutions, policies, ordinances and internal administrative procedures, rates and fees. The BWD was originally a landowner voter district and converted to a "registered voter" district in 1981. (Water Code Section 35200).

Elections to the board of directors are held every four years on the first Tuesday after the first Monday in November in odd-numbered years. There are five directors elected "at-large" (district-wide) rather than by division, who serve a four-year term. Directors take office on the last Friday in November following the general election. Terms are staggered by two years such that three positions are open in one election year and two years thereafter, two positions are open. Elections for board offices including President, Vice-President and Secretary/Treasurer are held at the first meeting in January every two years.

*Figure 1 - City Water Service Area*



***Metering***

Borrego Water District maintains approximately 2,055 water meter services. The following table provides an approximate summary of the District's water service accounts by customer class.

*Table 4 - Summary of Water Service Customers*

| **Borrego Water District**<br>**Water Accounts by Customer Class** | | |
|---|---|---|
| **Customer Class** | **Approximate Number of Accounts** | **Percent of Total Accounts** |
| Single-Family Residential | 1817 | 88% |
| Multi-Unit Residential | 37 | 2% |
| Commercial/Institutional | 145 | 7% |
| Irrigation only | 56 | 3% |
| **Total** | **2055** | **100%** |

Water meters are read manually by district staff each month. Most of the District's manual-read water meters are between *10 and 25 years old*. It is the District's preference that full meter change outs are performed on the entire population.

*Table 5 - Water Meter Size Distribution*

Meter lid sizes vary based on the size of the water meter they house and their service area. The following tables describe the various types, sizes, and estimated quantities of lids in the District's existing population.

*Table 6 - Meter Box Lid Inventory*

| Borrego Water District - Lid Inventory | | |
|---|---|---|
| **Type** | **Estimated Quantity** | **Estimated Percentage of Population** |
| Plastic, Jumbo | 1,644 | 80% |
| Concrete | 308 | 15% |
| None/Other | 103 | 5% |
| **Total** | **2,055** | **100%** |

In general, the District does not install meters in areas trafficked by vehicles and most boxes are partially above ground rather than flush. It is estimated that approximately 80% of the District's existing meter box lids are of the standard type listed below and have a 300lb/ft$^2$ load capacity. A small portion of the meter population do not have lids as they are installed either above ground or directly in ground (no vault). The remaining meter lids are mostly concrete and of various types.

*Table 7 - Standard Water Meter Lid Sizes*

| Borrego Water District<br>Standard Lid Size | | |
|---|---|---|
| **Meter Size (in)** | **Lid Size (length x width)** | **Oldcastle Product Serial Number** |
| All | 12" x 20" | 12204082 |

*Piping materials on the District side of the meters are predominantly copper*. However, piping materials on the customer side of the meter vary. The following table provides an estimate of the quantities of piping materials on the existing customer side of the meter.

*Table 8 - Piping Materials on Customer Side of Meter*

| Borrego Water District<br>Piping Materials on Customer Side of Meter | |
|---|---|
| ***Piping Materials*** | ***Estimated Percentage of Service Population*** |
| *PVC* | *49%* |
| *Copper* | *49%* |
| *Blue Poly or Galvanized* | *2%* |

Meters are primarily set on straight pipe and typical service shut offs are angle stops (estimated 90% of service population). The typical depth of existing meter sets (meters sized 2" and below) is estimated to vary between 6 to 12-inches.

***Information Systems***

The District's Springbrook System has been recently upgraded to Version *7.18.7 with cloud access*. All meters, meter attributes and customer data for billing is managed using the Springbrook System. Springbrook is the system of record for billing.

In addition, BWD utilizes CivicPay, a Springbrook product for customer facing account access and bill payment. From discussions with Springbrook, it is fairly easy to integregate MDMS data systems with CivicPay thru PCI capabilties. The BWD prefers to have a solution where customers can access both their CivicPay account and any AMR data by loggin in only once, to the CivicPay portal.

The following table lists all relevant software applications currently used by the District:

*Table 9 - Software Applications in use by BWD*

| System Function | Name/Model | Manufacturer |
|---|---|---|
| CIS/Utility Billing | Enterprise 7.18.7 | Springbrook |
| Customer Payment | CivicPay | Springbrook |
| ERP – Accounting, Financial, Purchasing, Procurement, Payroll | Enterprise 7.18.7 | Springbrook |
| Meter Reading - Manual Read | SPMR | Datamatic |
| District Wide Work Order Management | N/A | N/A |
| Water Utility Asset Management (plant assets, pump stations, etc.) | Enterprise 7.18.7 | Springbrook |
| GIS | AutoCAD Civil 3D | Bently |
| SCADA | Wonderware | Aviva |
| Call Center Software | N/A | N/A |
| Customer Web Portal | CivicPay | Springbrook |
| Reporting | Enterprise 7.18.7 | Springbrook |
| Local Area Network (LAN) | Windows Server w/Sonicwall | Microsoft/Sonicwall |
| Meter Reading Data | Enterprise 7.18.7 | Springbrook |

Information technology (IT) operations are contracted externally.

## 5.3 Project Drivers

The AMI project is intended to accomplish the following goals:

- Enhance customer service
- Reduce water consumption, increase water conservation and water-use efficiency.
- Implement features including but not limited to:
    1. Timely leak detection
    2. Providing customers with near real-time water consumption data

3. Customizable alerts to customers and District staff to identify abnormal water use and proactively resolve potential issues (detecting leaks, vacant consumption, etc.)

- Replace aging infrastructure
- Improved efficiency in District's billing processes, including disputes and claims resolution
- Improve District's personnel safety
- Greenhouse gas reduction by reducing the number of District vehicle miles per year required to manually read meters
- Increase access to analytical tools for tracking state-mandated water conservation efforts and other water supply modeling initiatives.

## 5.4 Project Phasing

Work will be performed in a phased approach to avoid interruption of the metering and billing process; therefore, the District must be able to run the new AMI system and the existing meter reading and billing system in parallel, until such time as all of the meters are converted to the new AMI system. The Proposer will provide and execute a project plan and schedule that aligns with the District's phased deployment approach.

The AMI Project will commence with an initial deployment phase that is further sub-divided into "Alpha" and "Beta". The underlying philosophy of the initial deployment is to minimize financial risk to the utility while reaching basic system functionality (Alpha) and complete coverage verification (Beta) as early as possible in the project. See Figure 2 for an anticipated project timeline. *To satisfy conditions of the Prop68 Grant Award, **all meters and the full AMI Network must be installed and operational before April 30th of 2025**.*

| Borrego Water District AMI<br>Project Timeline | | |
|---|---|---|
| AMI Procurement | | |
| RFQ/RFP *will update final version to match schedule in Table 2 | | |
| Selection | | |
| Contract Negotiation | | |
| District Award | | |
| Permitting (if required) | | |
| Notice to Proceed | | |
| AMI Implementation | | |
| Implementation Planning and Preparation | | |
| Alpha Phase (Full Software Integration, Minimal Meters, Full AMI Network Infrastructure (if needed)) | | |
| Beta Phase (Expanded Meter Population) | | |
| Full Deployment | | |
| Prop 68 Grant – Phase 1 Project Completion (x,xxx meters installed) by **XXX 20XX** | | |

*Figure 2 - BWD AMI Project Timeline*

During contract negotiations, the District will incorporate specific milestones into the contract(s) that will be tied to a payment structure during the initial deployment phases. For example, payment milestones may be established that tie to scheduled activities: software installation, CIS-AMDMS integration, testing of installation procedures, etc.

A holistic summary of each deployment phase is as follows:

vi. Alpha Deployment

The purpose of the Alpha phase is to demonstrate full system functionality. The Alpha Deployment Phase involves setting up and configuring the AMDMS software; the integration of meter data to the AMDMS and integration with BWD's CIS and Customer Payment servers, Manual meter read system, and GIS where needed. If the Proposer's solution employs a proprietary radio network the Alpha phase must include the installation and testing of the full network infrastructure (collectors, repeaters, etc.) for the entire District service area. It is anticipated that the meter/endpoint installations for the Alpha phase will be performed by the Proposer. The meter population deployed will be representative of each meter size up to 2-inch. The Alpha Phase is estimated to be completed in approximately 2-3 months, following the contract Notice to Proceed.

vii. Beta Deployment

The purpose of the Beta phase is to prove full district-wide coverage connectivity. The Beta Deployment Phase will involve the installation of up to several hundred meters and endpoints by the Proposer. The Beta Deployment meter/endpoint install locations are expected to be geographically dispersed throughout the District's service area and incorporate multiple sizes/types of meters. Prospective locations will be representative of the variety of geographical terrain (hilly areas, flat areas, etc.) and proximity to network infrastructure. The District intends to finalize the Beta Deployment scope of work with the selected Proposer during contract negotiations. This phase is estimated to begin following Alpha Deployment completion and be completed in a 3-month timeframe.

viii. Full Deployment Phase

The Full Deployment phase will replace all the district's remaining meters. Before proceeding to Full Deployment, the District intends to give authorization to proceed based on mutually agreed upon acceptance criteria underlying the Alpha and Beta phase of the deployment. Criteria to be established during contract negotiations. The Full Deployment phase of the project is expected to be completed within approximately 6 months with the installation contractor performing all installations.

# 6 SOQ CONTENTS DETAIL

What follows is an outline of the contents of the SOQ to be submitted.

6.1 Prime and Individual Solutions Provider Information Form

## STATEMENT OF QUALIFICATIONS
## TO
## BORREGO WATER
## DSITRICT FOR THE
## ADVANCED METERING INFRASTRUCTURE PROJECT

Name of Proposer: _____

Contractor License Number and Class (if applicable):_____

DIR Registration Number (if applicable):_____

Business Address: _____

Point of Contact: _____

Phone No.: _____

The site of the work to be constructed and referred to herein is in the County of San Diego, California.

**The work is to be in accordance with the specifications and contract documents and as described in the Request for Qualifications titled:**

BORREGO WATER DISTRICT

ADVANCED METERING INFRASTRUCTURE PROJECT

Proposer shall submit to BWD the following information as part of the SOQ:

1. The name and location of the place of business of each subcontractor proposed to perform the work, labor or render construction services and each subcontractor licensed by the State of California specially fabricating and installing improvements according to detailed drawings or the plans and specifications.

2. The portion of the work to be done by each subcontractor.

3. California Contractor's license number of its listed subcontractors under the requirements for subcontractor listing and shall be solely responsible to correct any errors in the listing of the California Contractor's license number. Contractor shall submit corrected California Contractor's license number information within 24 hours of request by BWD or upon discovery by Contractor by submitting the correction to BWD representative provided within the Request for Qualifications. Contractor's failure to submit a corrected California Contractor's license number in compliance with the process set forth above will cause the SOQ to be nonresponsive.

The Contractor shall list proposed subcontractors for each portion of the work identified in the Request for Qualification.

| DIVISION OF WORK OR TRADE | NAME OF SUBCONTRACTOR (LICENSE# / CLASSIFICATION) (DIR REGISTRATION NO.) | LOCATION OF MILL SHOP, OR OFFICE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

## 6.2 Executive Summary

Provide the following information in the executive summary:

- A summary of your qualifications package. Include a statement confirming whether you are proposing on all project components (e.g. turnkey) or only on specific components (in which case, specify the component/s).
- Why your firm is qualified to handle this project – differentiators and strengths of your company and project team.
- Which subcontractors, if any, are part of the proposed project team.
- An affirmation of no conflict of interest/non-collusion.
- An original authorized signature.

## 6.3 Experience

vi. **Company Information**

Provide the following information in your response:

c. Name of firm and mailing address, phone, and fax number of the Proposer's principal place of business.

d. A brief company history, including ownership, size, and number of national offices. Recent acquisitions or changes in ownership must be clearly disclosed.

e. Overall company experience in AMI, MDM, network operations, systems integration, and meter installations (use the appropriate categories).

f. The employee turnover rate within the last 5 years.

g. Confirmation that your company and personnel are legally allowed to work in the state of California.

h. The capital position and financial health of your company and, if Proposer is a distributor, provide the requested information for the manufacturer of the equipment you propose to provide. Provide annual reports and/or financial statements for the division of the company directly responsible for the products and services proposed in this RFQ for each of the last three fiscal years as an appendix. The financial information shall include:

   i. Summary Financial Statements (either from SEC filings or Certified Annual Financial Reports)

   ii. Annual overview of gross revenue and net income

   iii. Annual contribution to research and development

i. State whether there are pending or prior legal disputes or lawsuits with any existing or previous clients of your company and, if Proposer is a distributor, provide the requested information for the manufacturer of the equipment you propose to provide. If so, state all such disputes, including dates, as well as any facts and outcomes regarding these disputes.

vii. **Subcontractor Information**

If SOQ include the use of subcontractors, the Proposer must:

c. Identify the subcontractors and the specific requirements of this RFQ for which each proposed subcontractor will perform services.

d. Provide the name of the firm, the name of a contact person, mailing address, phone, and fax number of the Subcontractor's principal place of business.

e. Describe the relationships amongst the different entities proposing jointly, how long you have worked together, what projects were successfully implemented jointly, projects that were not successful, and whether any of the companies submitting jointly have vested interest in one another.

viii. **Proposer References**

Proposers shall provide a minimum of three (3) references from similar projects performed for client utilities within the last five (5) years.

District *prefers* references for water utilities of comparable size and terrain to Borrego Water District (1,000 to 10,000 service connections in a challenging terrain and temperatures) and same billing system as Borrego Water District (Springbrook).

For Proposers of meter installation services, provide experience and references for projects in which you performed installation of large water meters (3" meters and above).

The Evaluation Committee may contact references and/or conduct site visits.

These references shall be provided with the following information:

*Table 10 - Requested Reference AMI Project Information*

| | |
|---|---|
| Utility Name | |
| Address | |
| Location (City/State/Zip) | |
| Contact Name | |
| Telephone | |
| E-mail Address | |
| Project Name | |
| Project Start Date | |
| Project End Date | |
| Project Scope | |
| Number of AMI Meters Installed | |
| Name of Utility Billing System | |
| Option for a Site Visit? (Yes/ No) | |

Proposers shall also provide a comprehensive matrix/master list of projects in which they provided AMI, MDM and/or installation services in the United States similar to those that are being proposed for the District's AMI project (e.g. water services, **NOT** power/gas/electric). Please use the following format:

*Table 11 - Requested Master List of AMI Projects*

| Utility Name | Location (City, State) | Services/Equipment Provided | | | Installation Dates (Start and End/Ongoing) | Number of AMI Water Services |
|---|---|---|---|---|---|---|
| | | AMI | MDM | Installation | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

## 6.4 Product Maturity and Future Roadmap

Provide information on products and future roadmaps for equipment and solutions you propose to provide to the District. This section does not pertain to meter installation services.

vi. AMI System

c. Provide the exact name and a narrative description of the AMI solution, from meter to software systems.

d. Describe whether the system is available as Hosted or On-Premise or both.

e. Software hosting is preferred. Specify the differences in hosting versus on-premise (if Proposer can provide either solution).

f. Include a discussion of cyber-security measures applicable to protect: BWD's network, equipment, software, and customer data. Describe any security certifications currently held related to the proposed solution(s).

g. For a hosted AMI solution, an overview of respective NOCs, including third-party cloud services, uptime percentage, physical locations, security (both physical and cyber), and redundancy.

h. Proposer should provide documentation to support future scalability and expandability beyond what is initially required to support BWD's implementation.

i. Provide the implementation process for releasing and applying software and firmware upgrades, bug fixes, and patches. Include overall implementation timeframe, Proposer effort/time/resources, and client effort/time/resources. Discuss the quality assurance (QA) procedures currently in place to ensure bug fixes, patches, and upgrades are fully tested and validated prior to release. Discuss QA procedures currently in place to ensure the identification and correction of system security vulnerability.

j. Summarize the system maintenance agreement including terms and conditions. Provide a copy of Proposer's user support Service Level Agreement (SLA) as an

appendix. The SLA should clearly indicate the severity levels, description of each level, guaranteed response times, availability of maintenance and support staff, and associated cost.

vii. Meter Details

c. All meters must conform to NSF 61 standard.

d. Specify the meter types being proposed and provide their product information/brochures/cutsheets.

e. Polymer composite body water meters and/or polymer composite threads will **NOT** be accepted.

f. Describe how the product is configured (e.g. using handheld with IR port).

g. Confirm the product can be pre-configured in the factory.

h. Describe the maximum number of digits that can be transmitted for a meter read for each meter size and the reading resolution of the meter.

i. Describe ability to re-program registers in the field and hardware that is required to support this activity.

j. Describe any accessories that are necessary for operation and maintenance of the product.

k. Verify that the production capacity for meters can satisfy the number and timeline identified in this RFQ.

l. Provide the register battery type (e.g. alkaline, lithium, etc.) and life warranty provided (in years). Describe the conditions of these warranty(ies).

m. Describe how meters are identified and labeled. The meter shall be permanently labeled on the outside with the manufacturer's name, model number, meter identification or serial number, bar code of this number, and date of manufacture. The label should be weatherproof and attached to the meter where normal installation will not obscure it.

n. Battery life/replacement process.

viii. Endpoint Details

c. Specify the endpoints being proposed and provide product information/brochures/cutsheets.

d. Provide a detailed water meter compatibility matrix.

e. Describe the frequency of data recording, hourly reads should be stored, more frequent recording is preferred.

f. Describe how many days of meter reads can be stored before there's loss of data.

g. Registers must be able to detect and record low flow. For each meter type state the minimum flow that is guaranteed to be detected in gallons per time, e.g. 0.5 gallons in 5 minutes

h. Describe how the product is configured (e.g. using handheld with IR port).

i. Confirm the product can be pre-configured in the factory.

j. Describe the maximum number of digits that can be transmitted for a meter

read for each meter size.

k. Describe ability to re-program endpoints over the air and in the field and hardware that is required to support this activity.

l. Provide a complete list of events and alarms supported by the AMDMS.

m. Provide the endpoint battery type (e.g. alkaline, lithium, etc.) and life warranty provided (in years). Describe the conditions of these warranty(ies).

Provide the reading frequency that the battery life warranty is based on. Explain if On-Demand Reads affect this warranty and, if so, to what extent. Describe battery replacement process.

n. Indicate if any remote antennae will be used (where the portion protruding through the lid relays the signal), the specifications around such device, and whether such device is traffic rated. Indicate how far above the lid the antenna protrudes. Installation must be in compliance with ADA requirements. The BWD prefers that no part of the antenna be higher than the plane of the top of the lid, particularly for meters in pedestrian areas.

o. In the case any remote antennae will be used protruding through Bilco-style vault doors or steel plates, Proposer shall provide an installation option that does not compromise the integrity and safety of the door or plate.

p. Describe any accessories that are necessary for operation and maintenance of the product.

q. Verify that the production capacity for endpoints can satisfy the number and timeline identified in this RFQ.

k. If an AMI Network is required, provide radio frequency information to be used by the endpoints and whether licensing with FCC is required.

l. Indicate how the AMI system will obtain readings from meters in ravines, canyons, vaults, and other transmission constraining settings.

m. If proposed AMI solution includes cellular endpoints, explain the proposed solution for areas with cellular dead spots.

n. If the proposed AMI solution includes cellular endpoints, provide the cellular carriers supported.

o. Describe how endpoints are identified and labeled. The endpoint shall be permanently labeled on the outside with the manufacturer's name, model number, endpoint identification or serial number, bar code of this number, any required FCC labeling, input/output connections, and date of manufacture. The label should be weatherproof and attached to the endpoint where normal installation will not obscure it.

For the pit-installed products, provide:

p. Preferred mounting method and photographs of sample installations.

q. Height of endpoint (antenna) above the meter lid. Note ADA compliance requirements and BWD's preferences stated above.

r. Minimum requirements of the meter pit lid (material construction, maximum thickness, and diameter of hole if required).

s. Minimum clearance needed between the top of meter/register to the bottom of pit lid.

t. Description of how the radio is wired to the register (e.g. connector, **no splicing will be allowed**).

ix. Meter Box Lid Details

c. Provide the product information (e.g. technical data sheet, schematic, and/or cut sheets), for proposed lids as an appendix to your SOQ. Include photographs, dimensions, and weight of proposed equipment.

d. The BWD has numerous boxes, extensions, and lids from various manufacturers already installed throughout its service area as described in Section 5.2. Required product must be universal to allow for use with existing installed standard size product from other manufacturers.

e. BWD requires lids that are:

    i. AMI compatible

    ii. "bee-resistant"

    iii. Do not have full penetration through holes (except for the endpoint antenna).

    iv. ADA compliant once installed.

f. BWD prefers that lids that are available in 10k and 20k (H-20) load ratings.

g. Verify that the production capacity for lids can satisfy the number and timeline identified in this RFQ.

x. AMI Network Infrastructure

c. Provide the product cut sheets as an appendix to your SOQ. Include photographs, dimensions, and weight of proposed equipment.

d. Proposer's network design shall provide an adequate communications infrastructure to ensure that for all AMI meters, 98.5 percent will successfully report all daily readings within the last 72 hours, 97.5 percent will successfully report all daily readings within the last 48 hours and that at least 95 percent of all meters will successfully report all daily readings within the last 24 hours (Meters that have temporary physical barriers beyond the control of the District or the selected Proposer are excluded from these performance metrics). Proposer to define in detail any qualifiers to these requirements.

e. Provide the guaranteed **interval read** success rate and reporting duration for the proposed AMI system.

f. Provide the guaranteed **register read** success rate and reporting duration for the proposed AMI system.

g. Provide the guaranteed **on-demand read** success rate and response duration for the proposed AMI system for a single request.

h. The BWD will require a test and live production for the AMI Network Infrastructure. Describe the AMI go-live process and timing for transition from test to production.

i. Provide a list describing and a map showing the locations of each component of the proposed AMI network infrastructure and the antenna height (reference Appendix 2 for the preferred locations and maximum antenna heights). Proposer is solely responsible for determining the mix of network infrastructure (e.g. data collectors and repeaters), endpoint placement strategies, and endpoint communication configuration needed to meet or exceed the performance requirements described herein.

j. The network infrastructure shall be sufficient to ensure that at least 70% of all the endpoint transmissions are received by two or more different components of the network infrastructure (e.g. data collectors, repeaters).

k. Indicate the percentage of endpoints from which transmissions are expected to be received by only 1, 2, and 3 or more components of the proposed AMI Network system.

l. State any special mounting requirements, including minimum height, pole, tower, and bracing restrictions, the recommended sighting, and the minimum separation from other radio, cellular, microwave, or other sources of potential interference.

m. If pole- or tower-mounted, explain if the unit can be installed at the base with the antennae mounted on the tower.

n. Verify that the production capacity for network infrastructure can satisfy the number and timeline identified in this RFQ.

o. Describe the proposed approach to managing the installation of the AMI Network.

p. Indicate the approximate time to construct the full AMI Network system, including manufacture, installation, commissioning of equipment, operation, testing, and certification.

q. Describe the backhaul transports that are supported (e.g., Wi-Fi, cellular).

r. Explain if the product has the capability to store multiple readings in the case of a receiver being unavailable. If so, provide the storage limit of backup reads.

s. Direct access to data is a requirement for the BWD. For a hosted system, describe how this access is provided, how security is ensured, and who 'owns' the data. The BWD prefers at least ninety days of interval data to be readily available.

t. Describe any preventative maintenance requirements for the network infrastructure and the anticipated frequency of maintenance activities. Indicate in terms of FTEs the level of effort required to maintain the proposed network solution. Describe the type of work expected if the BWD performs the maintenance internally.

u. Briefly describe maintenance procedures in the event of a device malfunction or damage.

u. Describe if Proposer offers maintenance agreement for Proposer to perform maintenance or a Network as a Service (NaaS) option.

v. Describe how the Proposer plans to safeguard performance levels over time if non-District devices are added within the service territory that cause additional 'noise' within the AMI Network. Describe procedures that will be used use to regularly check for, identify and remove interlopers on its licensed frequency(ies) or overpowered signals on unlicensed frequencies. Indicate who will be responsible for this effort. If BWD, describe provisions offered by Proposer or its system to assist in this effort. If Proposer, indicate the length of time such protection will be offered in association with this proposal/contract.

w. Describe your recommended approach for adding additional infrastructure to cover areas of planned future developments.

xi. AMDM System

Provide, for the AMDMS being proposed, the following information regarding the application and the application Proposer:

c. The formal name and software version being proposed for implementation.

d. Describe if the solution is available as Hosted or On-Premise or both. The District prefers a hosted solution.

e. The AMI solution will provide extensive new information to the District to better manage its customers and their accounts, to provide insights in water use, to better run its operations, to reduce water loss through leaks, among others. Describe its capabilities and user interface(s).

f. Diagnostic tools are essential to the efficient use of BWD field staff's time. Describe the diagnostic tools and their interfaces (e.g., a field technician handheld, text messages to staff cell phones, emails etc.).

g. Describe the solution's resiliency in times of network outages. If the solution provides a means to read meters via a nearby handheld device and transmit the reads from the handheld to the AMDMS, describe it.

   i. How long will the handheld operate between battery recharging?

   ii. How many meter reads can it store internally?

   iii. How are the meter reads transmitted to the AMDMS?

h. Timely and accurate alerts to leaks and other potential problems will enable the District to reduce water loss in the system.

   i. Describe the alerts for undesirable conditions, such as leaks, backflows and tampering

   ii. Describe the methods of alert notification.

i. Describe any capabilities to locate leaks in BWD's system

j. Currently the only customer access to BWD systems is for payment of bills, which is provided by Springbrook's CivicPay portal. The AMDMS solution must provide a website that can be accessed thru the CivicPay portal and preferably additional iPhone and Android mobile applications, Customer Portal. Describe the capabilities provided to BWD's customers in both the website and on the mobile applications:

   i. How is metered usage data displayed, graphically, tabular, other? How much history will be maintained? Is the display of this information configurable?

   ii. Can the user set alerts, if so what are they and how are they set? Also how are the alerts delivered to the customer?

   iii. What other information and analytics are available?

k. Direct access to data is a requirement for the BWD. For a hosted AMDMS, describe how this access is provided, how security is ensured, and who 'owns' the data. *The BWD expects at least three (3) years of interval data to be readily available in the hosted AMDMS*. The BWD requires access to hosted

data periodically for their own use beyond the three-year (3) requirement. Describe how the Proposer would meet these requests/requirements. Indicate whether there is a charge for this service (do not specify the amount).

l. A narrative description of the proposed AMDMS, system components, and capabilities. Clearly state what is included in the base offering. Include the following:

   i. The system must provide alerts for undesirable situations such as leaks, backflows, tampering and error conditions.

      1. The alerts must be configurable so BWD can tune the system to best meet its needs, explain the flexibility the AMDMS alert system has when it comes to configuring alerts and alert delivery.

      2. Alert delivery: Explain how the AMDMS alert system would integrate into BWD's current notification system. BWD field and key office staff are issued cell phones for business use. During the weekday work hours alerts are received by office staff and if field staff is needed the office staff will call the lead on duty. For non-business hours customer calls are taken by an answering service who will call the designated on-duty BWD person. If that person cannot be reached the answering service will call the backup. Designated on-duty and backup staff are rotated weekly and the answering service is updated.

      3. Alert severity: Alerts have different severities and require different responses and response times. Severe problems missed because of an alert or alert delivery failure must be avoided. Also, over alerting can be just as problematic, if there are too many non-urgent alerts sent, it becomes noise and the alert system can be ignored because it's too difficult to screen out the real problems. Explain how the AMDMS ensures delivery of high quality actionable alerts.

   ii. Leaks: Water in BWD's desert district is precious and the loss of water through leaks is not only wasteful but upsetting to the community and can cause a loss of goodwill. Discuss:

      1. Can the system detect leaks on the consumer side? If so, what conditions, (e.g. slow leak, burst pipe, etc.) can trigger an alert?

      2. Can it detect leaks in BWD's pipes? If so, how does it detect the location of a leak in the pipeline? If so, what conditions, (e.g. slow leak, burst pipe, etc. can trigger an alert? How accurate is the leak location detection?

      3. Can BWD set thresholds for leak detection (e.g. 0.1 gpm for a 3/4" meter)? If yes, describe.

      4. Can customer set thresholds for leak detection (e.g. 0.1 gpm for their meter)? If yes, describe.

   iii. The AMDMS must have the ability to generate analytic data to readily assist the utility with predictive meter maintenance, water loss, consumptive water use by group or subgroups of meters.

      1. The system should be able to differentiate indoor versus irrigation

water use and produce associated analytical reports.

2. The system should be able to maintain analytics for special classifications of meters such as hydrant meters and irrigation meters.

3. The system shall be able to maintain analytics for special classifications of meters such as hydrant meters and irrigation to assist in in water loss calculations and consumptive use by account classification. Provide details on the AMDMS analytic capabilities and their user interface(s).

iv. A discussion of Validation, Estimation, and Editing (VEE) capabilities.

v. A concise list and description of all operational reports (e.g., system monitoring, meter status, VEE exceptions, etc.) and analytics (e.g., historical use trends, revenue forecasting, leak detection, etc.) available.

vi. A discussion on virtual metering (DMA or aggregated) capabilities:

1. Can user-defined aggregated meters be individually configurable, depending on the user, and can the individual configurations be stored? Can a virtual meter be selected by any attribute within the billing system, such as residential, commercial, etc.? Can a user define stored alerts/alarms for each virtual meter? Can each user define multiple virtual meters?

2. Describe the methods for defining virtual meters. Can virtual meters be selected based on attributes synchronized with the billing system such as customer classes (residential, commercial, industrial) or account status or meter size? Can ESRI GIS-generated meter numbers be imported to define a virtual meter such as each water meter within a water pressure zone? Can user-generated lists of meter numbers be imported to define a virtual meter? Describe any other methods/tools available to define virtual metering.

3. Is any training or assistance available to support definition of virtual meters for the Utility?

4. Once a virtual meter is created, can the user define the name of the virtual meter and store it in a library for others to use?

5. Can virtual metering data be exported for use in ESRI GIS or third-party reporting applications?

vii. Describe individual user ability to establish user-defined alarms based on user-defined thresholds for operational reports and virtual metering.

m. Discuss the AMDMS resiliency. BWD maintains a 24x7 water service for its customers and needs the tools to ensure the AMI system is running correctly. However, it is not uncommon for wireless communication systems to have outages or missing data transfers. Describe the tools (reports, alerts, other) that alert BWD to problems. Include:

i. Describe how the system works if a register fails to transmit a daily update. Does the AMI system estimate usage for the missing data and display the estimates? If so, how many consecutive days of missing data

will the system fill in estimated usage data? Is there any notification or indication that estimated data is being used? If so how?

ii. If a register fails to transmit data for multiple days in a row, how is BWD notified? Can BWD specify the number of consecutive missed days that will trigger the notification?

iii. Describe the other register/meter failure or problem modes (e.g. low battery) and how those are made available to BWD.

iv. If a register fails to work the meter information must be read and entered in the AMI Vendor's system. Describe how this works. Are manual reads keyed into the handheld device application? Can a picture of the meter be taken and stored in the system?

n. Discuss methodology and roll-out approach. Include:

i. A discussion on what interface mechanisms are available to facilitate integration with other utility systems (e.g., MultiSpeak, REST API, etc.).

ii. The District will require a test and production environment for the AMDMS. Describe the AMDMS go-live process and timing for transition from test to production.

o. Include discussion of cyber-security measures applicable to protect the District's software and customer data.

p. For a hosted AMDMS solution, an overview of respective NOCs, including third- party cloud services, uptime percentage, physical locations, security (both physical and cyber), and redundancy.

q. Proposer should provide documentation to support future scalability and expandability beyond what is initially required to support BWD's implementation.

r. Provide the implementation process for releasing and applying software and firmware upgrades, bug fixes, and patches. Include overall implementation timeframe, Proposer effort/time/resources, and client effort/time/resources. Discuss the internal QA procedures currently in place to ensure bug fixes, patches, and upgrades are fully tested and validated prior to release. Discuss internal QA procedures currently in place to ensure the identification and correction of system security vulnerability.

s. Summarize the system maintenance agreement including terms and conditions. Provide a copy of Proposer's user support SLA as an appendix. The SLA should clearly indicate the severity levels, description of each level, guaranteed response times, availability of maintenance and support staff, and associated cost.

t. Software hosting is preferred. Specify the differences in hosting versus on-premise (if Proposer can provide either solution).

xii. Research & Development Activities/Strategic Product Direction

Provide for the AMI and AMDMS systems:

c. A discussion on the evolution of the proposed AMI and MDM product from the first major release of the product through to the present. Include a historical timeline.

d. A discussion of the AMI and MDM product development roadmap outlining the vision and strategy for the future of the proposed system. Include a description of the upgrades/enhancements that are in the planning or design stage.

e. Past and future research and development budgets. What percent does the company (or if Proposer is a distributor, provide the requested information for the manufacturer of the equipment you propose to provide), invest of its profit into research and development for future products?

f. An overview of additional sensors/optional equipment (Proposer-owned or third-party) supported by the system (such as remote disconnect, pressure sensors, main line leak detections, etc.).

## 6.5 Implementation Approach

i. Project Team

Provide the following regarding the proposed project team:

a. An organizational chart outlining the structure of the proposed project team (including subcontractors) to be assigned to support this project.

b. Names and positions of persons to be assigned to this project, including a description of their chief role and their base location. Indicate desirable certifications such as Project Management Professional, Six Sigma, etc. Resumes of key staff are to be included in the appendices. All personnel proposed for the project are subject to approval by BWD.

c. Proposer shall attest to the availability of key staff to fulfill the obligations of this engagement in a professional and timely manner. If there are any scheduling issues of concern, then proposing firms shall disclose those other commitments in its SOQ and indicate how such other commitments will be addressed to mitigate their effect on services rendered to BWD.

d. Confirm your company's commitment to having an on-site presence as required to fulfill project scope and deliverables.

ii. Project Management

The Proposer will provide and execute a project plan and schedule that aligns with the BWD phased deployment approach. Provide your published methodology or describe at a high level your general approach to the management of an AMI, MDM and Installation Services Project. Ensure the following topics are covered in your response:

a. Risk management and risk mitigation. Please describe your methods of identifying, assessing, and mitigating project risks.

b. Problem resolution and exception management. Describe the problem identification and resolution process employed during the project. Describe how exceptions are managed, such as instances where installation cannot occur as there is no access to the property.

c. Communications and Reporting. This project will involve multiple entities (contractors, equipment providers, etc.) and multiple BWD departments. BWD anticipates having weekly project status meetings and written status reports. Confirm you will provide representation and proactive

communication for these activities.

d. Quality Assurance. Describe how quality is measured, reported, and enforced. Consider the following in your response: data quality, quality of installation, success of training.

e. Schedule. Describe how plans are monitored and maintained in order to keep the project on track.

f. Scope Change. Describe how changes in scope are managed.

iii. Testing

Rigorous testing is a priority for the BWD. Describe the proposed test plan/ strategy and testing tools to be employed to support and ensure user acceptance. Include Proposer's high-level test plan as an appendix. Clearly describe roles and responsibilities and anticipated level of effort & involvement from District staff. Please note, there is no template being provided by District. Proposers should provide test plans in their preferred format.

iv. Training

Provide a list of all applicable training courses to be provided on-site, via the Internet, and at off-site locations. The training must be comprehensive enough to ensure that District staff can effectively install all products offered and operate all systems and software. Areas that shall be included (but are not limited to) in the training are:

- AMI Training
  - Networked components
  - Overview of the AMI product components and AMDMS system
  - System operations and troubleshooting of all components of the system.
  - Identification and resolution of reads (e.g. truncation, change units of measurement), events and alarms
- Endpoint Installation Training
  - Installation
  - Troubleshooting
  - Ratepayer Portal Training
- AMDMS Training
- Meter Installer Training

Also provide an optimal user training schedule, and a recommended training plan for the District (including when during the project to perform which training sessions) covering all items as outlined in this Training section as an appendix.

v. Documentation

The following will be required as provisions within the agreed-upon contract between the District and the Proposer/s for the AMI and AMDMS solutions. Confirm your ability to provide:

a. Description of major system components

b. Hardware/software operations & maintenance manuals

c. Training materials

d. Samples of all standard reports with narrative descriptions of all fields displayed on the report, input parameters, and an explanation of how to execute each report

e. All error codes, messages, and their explanations displayed online and/or on reports with action required or options available

f. Updated system documentation available concurrent with the release of new software updates

g. Troubleshooting and installation information

h. Technical specifications and installation guides

i. Proposed system acceptance test plan for your product

vi. System Integration Services

Provide a summary of work and describe how integrations and data exchanges will be managed for the BWD. The District's preference is a hosted solution for AMI and AMDMS (versus on-premise). Figure 3 presents a high-level network diagram illustrating all hardware and software applications for the desired future connectivity post-AMI and MDM deployment. See Section 5.2 for a list of systems currently in place.

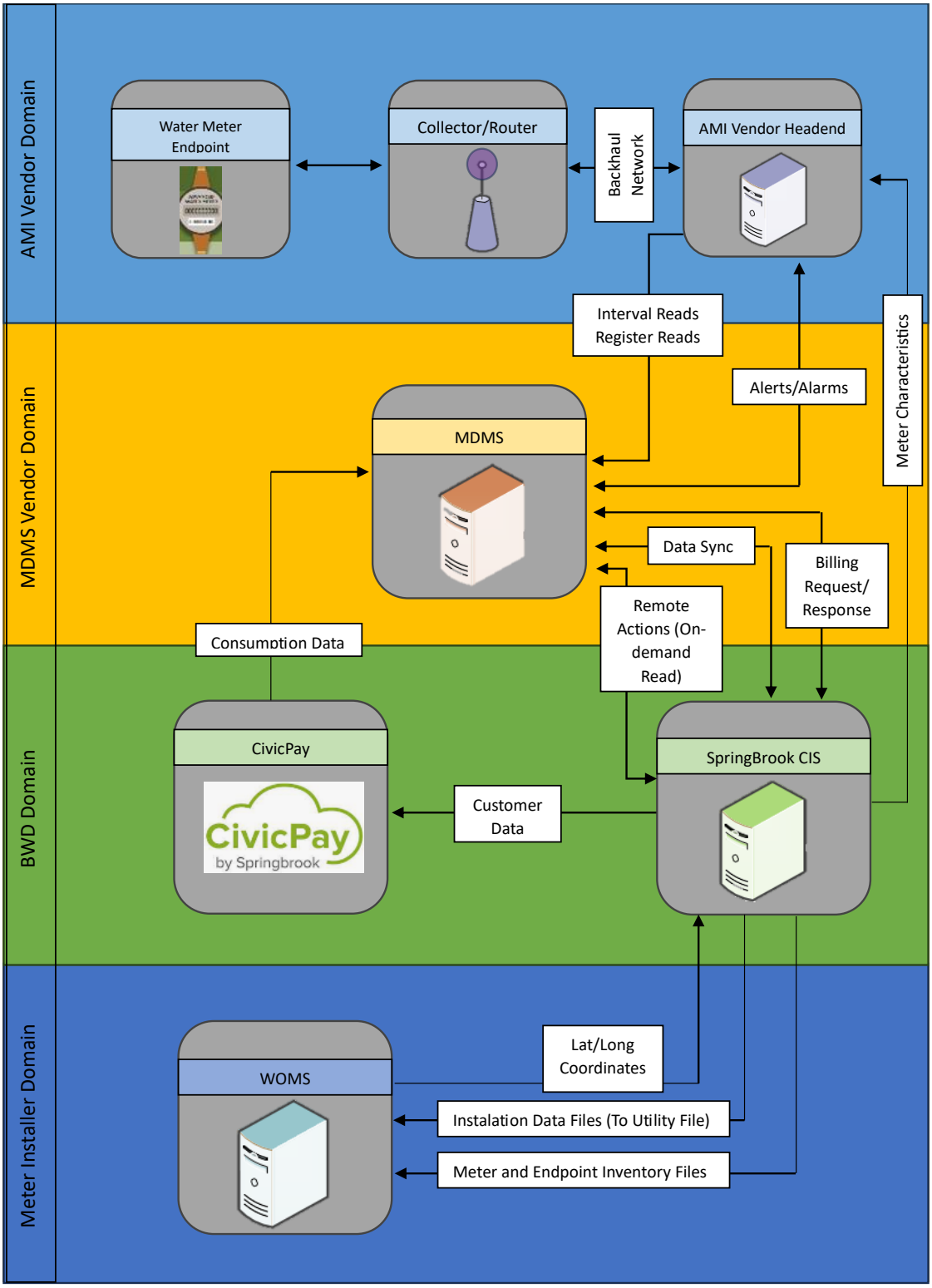



*Figure 3 - BWD Anticipated Future State IT Network Diagram*

Proposer to describe how you handle the integration of AMI systems with other computer systems.

a. Does your company manage the integration of AMI software with ACCELA/Springbrook? What is your experience integrating with Springbrook Enterprise 7.18.7?
    - How will this integration be managed on behalf of BWD?
    - Describe what functions are integrated.
    - What services will be required from the *Springbrook (ACCELA)* to facilitate integration with the AMI software?
b. Does your company manage the integration of AMDMS software with Springbrook? What is your experience integrating with *Springbrook* Enterprise 7.18.7?
    - How will this integration be managed on behalf of BWD?
    - Describe the functions that must be integrated.
    - What services will be required from the *Springbrook provider (ACCELA)* to facilitate integration with the *AMDMS and AMI HES software*?
c. Does your company manage the integration of AMDMS software with Customer Portals? What is your experience integrating with CivicPay?
    - How will this integration be managed on behalf of BWD?
    - Describe the functions that must be integrated.
    - What services will be required from the Customer Portal manufacturer to facilitate integration with the AMDMS software?
d. Does your company manage the uploading of geospatial data acquired when AMI devices and meters are installed to utilities' GIS and Asset Management systems?
    - If so, how will this integration be managed on behalf of BWD?
    - What services will be required from the GIS vendor, Asset Management vendor, Springbrook vendor, AMDMS vendor, or BWD to facilitate data transfer?

vii. Meter/Endpoint Installation Procedures

Describe the procedures you plan to employ in the Borrego Water District AMI Project. Include in your response the following topics:

a. Describe the process by which you determine the optimum strategy for deployment. Explain how crews are scheduled to perform work.

b. Describe your proposed installation team, including Installation Manager. Describe anticipated staffing of your proposed team, including use of your own

full-time W-2 employees, contract/temporary employees, subcontractor/s, or a combination of these.

c. Describe all site preparation activities and timing related to deployment. Provide detail on all equipment (i.e. vehicles, uniforms, tools, forklifts, bins, etc.) required.

d. Describe how inventory is tracked and inventory control procedures.

e. BWD will communicate with the District's customers. Describe how appointments are scheduled; what credentials your employees carry; and how employees are dressed. District's customer service will be incorporated to support this communication.

f. **Quality assurance, quality control is a priority for the District**. Describe how you plan to maintain an effective quality assurance program that proactively identifies problems related to safety, workmanship, and customer satisfaction before they become big issues for the District.

    - Describe how, after equipment has been installed, it is verified that it has been installed correctly, that equipment is working correctly, and that the customer's property is as it was before installation.

g. Describe the methods used to record information from each installation, particularly the serial number of the AMI endpoint and meter, the service address, GPS location of meter/endpoint, site photos before and after install, and the last read. Include example screenshots and descriptions of the work order management system utilized.

h. Describe the process for communicating with the project team including but not limited to the District's Field Staff, Project Manager, and Program Manager. Include in this discussion, communicating with field staff, transmittal of daily reports, and tracking and reporting of installation metrics including productivity and schedule.

i. Describe your procedures for installation of **Small** (1" and below) and **Intermediate** (1.5" and 2") Water meters.

j. Describe your procedures and experience for installation of **Large** (3" and above) water meters.

    - Proposers shall describe their proposed approach to **Large** water meter installations for the District considering the following:

        - *For Large water meter installations, the District's standard includes: bypass connection (where possible/required by customer), District valve, strainer, meter, check valve, test port, downstream customer valve, and bypass connection (where applicable).*

        - *Photographs and locations of large meters are included in Appendix 1.*

        - For replacement and retrofits of Large water meters, the BWD desires the following components be installed to bring each location up to proposed new District standard:

            1. Test port
            2. Strainer

3. Check valve

- District will ask selected Proposer to furnish and install the meter, test port, strainer, and check valve.
- *For purposes of the SOQ and the eventual Proposal, Proposers are to assume each large meter is installed in a vault and the lay length inside the existing vault will accommodate all three components.*
- For reference, Table 12 describes District's total Large water meter population (X) and, of that total, the X that are eligible for retrofit (in lieu of replacement).

*Table 12 – Inventory of Large Water Meters*

| Meter Size | Total Large Meters | Large Meters Eligible for Retrofit |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| **Total** | | |

k. Describe the process for dealing with the following site conditions, which Proposers should anticipate encountering at times during the Project, while minimizing the instances of Return to Utility (RTU) situations:

- difficult-to-access/locate meters
- locked gates
- work in confined spaces such as vaults
- work in alleys
- traffic control
- meter boxes full or partially filled with sand or other debris
- meter boxes in poor structural condition requiring replacement/repair
- inoperable angle stops or customer side ball valves
- leaking angle stops or customer side ball valves

- register retrofits

l. BWD intends to provide a staging area for use during the project implementation. Provide any other storage, material handling equipment, or physical site requirements. Describe the size of the staging area and what equipment/materials/vehicles (and quantity) are required.

m. Describe the process for complying with DIR Wage Determination requirements (see Section 4.1 above).

## 6.5 Requirements

Proposers must submit the completed requirements workbooks (Attachment 1) for each component that propose to perform in Excel format with their SOQ. The following tabs are required to be returned by the Prime and/or Individual Solution Providers, as applicable.

**1. AMI System Requirements Tab**

In general, the AMI system is considered to be a data collection field area network consisting of various apparatuses designed to automate the meter reading function while having the capability to execute remote commands acting either upon the attached meter or upon itself. As there are many possible implementations of systems with similar functionality, this structure attempts to remove constraints upon SOQ in order to elicit the best possible system configuration.

- The system requirements outlined in this Section are expressed in categories of features that have similar characteristics or functions. *A point-by-point response must be completed and submitted in the Microsoft Excel format presented.*

Referring to a particular requirement is done by specifying the category and the requirement ID number, for example:

- "**General AMI - 8**" refers to the requirement, "The AMI AMDMS system must be able to store at least 60 days of hourly interval data."

As outlined in the *Instructions* tab in the workbook, Proposer shall select one of the following statements of conformance from the drop-down menu in Column D as well as any supporting explanation or description in Column E:

- ***Current Base*** – The function is provided in the base product today. No modification is required. No additional cost.
- ***Future Base Release*** – This function will be provided in a future base release that will be a general release within 18 months from submission of this response. No modification is required. Proposer will indicate timing of when desired functionality will be available.
- ***Modification*** – This business function can be supported by modifying an existing screen, existing view, or existing native report. There would be no change in the system source code required and it would not break the system upgrade path. One-time modification.

- ***Third Party System*** – This function is provided in another product which is integrated with the base. No modification is required. Proposer must indicate estimated cost if applicable.
- ***Customization*** – This requires a specific enhancement to be developed for the client and will be an additional cost. This enhancement would include, but not be limited to, revisions to the source code of the core system, database objects, and/or custom reports. This type of customization is assumed to break the upgrade path of the core system. Proposer must indicate estimated cost.
- ***Not Provided*** – This functionality is not provided by the Proposer in the proposed solution.

**2. AMDMS System Requirements Tab**

The MDM system requirements are expressed in categories of features that have similar characteristics or functions. *A point-by-point response must be completed and submitted in the Microsoft Excel format presented.*.

Referring to a particular requirement or capability is done by specifying the category and the requirement ID number, for example:

- **"Reporting - 42"** refers to the requirement, "Provide the ability for users to view tabular and graphical data (at interval, daily, monthly levels) from current and prior 36 months of usage for individual meters."

As outlined in the *Instructions* tab in the workbook, Proposer shall select one of the following statements of conformance from the drop-down menu in Column D as well as any supporting explanation or description in Column E:

- ***Current Base*** – The function is provided in the base product today. No modification is required. No additional cost.
- ***Future Base Release*** – This function will be provided in a future base release that will be a general release within 18 months from submission of this response. No modification is required. Proposer will indicate timing of when desired functionality will be available.
- ***Modification*** – This business function can be supported by modifying an existing screen, existing view, or existing native report. There would be no change in the system source code required and it would not break the system upgrade path. One-time modification.
- ***Third Party System*** – This function is provided in another product which is integrated with the base. No modification is required. Proposer must indicate estimated cost if applicable.
- ***Customization*** – This requires a specific enhancement to be developed for the client and will be an additional cost. This enhancement would include, but not be limited to, revisions to the source code of the core system, database objects, and/or custom reports. This type of customization is assumed to break the upgrade path of the core system. Proposer must indicate estimated cost.

- ***Not Provided*** – This functionality is not provided by the Proposer in the proposed solution.

**3. Installer Requirements Tab**

The meter installation requirements are expressed in categories of features that have similar characteristics or functions. *A point-by-point response must be completed and submitted in the Microsoft Excel format presented.* Referring to a particular requirement or capability is done by specifying the Category and the Requirement ID number, for example:

- **"Safety & Appearance - 25"** refers to the requirement, the installation contractor shall "Have all field personnel wear easily recognizable uniforms containing company name, as well as prominently displayed BWD approved picture identification badges on uniform and safety vest."

The Proposer shall select a Yes (Y) or No (N) from the drop-down menu in Column D to indicate conformance. Proposer shall also include any supporting explanation or description in Column E.

# 7 ATTACHMENTS

***Proposers must complete and submit Attachment 1 with their SOQ. Proposers must submit a signed Attachment 2 to receive Appendices 1 and 2.***

7.1 Attachment 1 – Requirements Workbook

*7.2 Attachment 2 – Borrego Water District NDA Form*

7.3 Attachment 3 – Borrego Water District AMI Project – Minimum Contract Terms and Conditions

7.4 Attachment 4 – Borrego Water District Service Area Map

7.5 Attachment 5 – DIR Prevailing Wage Determination

7.6 Attachment 6 – Non-Collusion Affidavit

7.7 Attachment 7 –Prop 68 Grant Funding Opportunity Announcement (FOA) (selected)

7.8 Attachment 8 – FY 2024 and 2025 Prop 68 Grants (applied)

# 8 APPENDICES

8.1 Appendix 1 – Borrego Water District Meter List and Locations

8.2 Appendix 2 – Borrego Water District Allowable AMI Network Infrastructure Installation Locations

8.3 Appendix 3 – Borrego Water District Drawings/Details for Meter Installation

# Borrego Water District
# Attachment 1 - BWD Requirements
## *Instructions*

**Refer to each of the following Requirements tabs:**

- **Proposer shall respond to each requirement/capability based on the response options provided in Column D, "Vendor Response". If additional explanation is required, proposer shall fill out Column F, "Vendor Comment".**

**Refer to the Response Options tab:**

- **A detailed description of each response option is provided in the Response Options tab**

**Borrego Water District**
**Attachment I - Requirements**
***Vendor Function and Feature Responses***

| Vendor Response | Description |
|---|---|
| Current Base | The function is provided in the base product today. No modification is required. No additional cost. |
| Future Base Release | The function will be provided in a future base release that will be a general release within 18 months from submission of this response. No modification is required. Vendor will indicate timing of when desired functionality will be available. |
| Modification | This business function can be supported by modifying an existing screen, existing view or existing native report. There would be no change in the system source code required and would not break the system upgrade path. One time modification. |
| Third Party System | The function is provided in another product which is integrated with the base. No modification is required. Vendor must indicate estimated cost if applicable. |
| Customization | This requires a specific enhancement to be developed for the client and will be an additional cost. This enhancement would include, but not be limited to revisions to the source code of the core system, database objects, and/or custom reports. This type of customization is assumed to break the upgrade path of the core system. Vendor must indicate estimated cost. |
| Not Provided | This functionality is not provided by the vendor in the proposed solution. |

Current Base
Future Base Release
Modification
Third Party System
Customization
Not Provided

**Borrego Water District**
**Requirements - AMI System**

| Category | Req ID | Requirement Description | Mandatory or Preferred | Vendor Response | Vendor Comment |
|---|---|---|---|---|---|
| | | **The AMI System Shall:** | | | |
| General AMI | 1 | Not significantly limit the brands of water meters that the District can install. | Mandatory | | |
| General AMI | 2 | Not interfere with the District's current SCADA, Public Safety or any other current communications system. | Mandatory | | |
| General AMI | 3 | Be capable of securing interval data and logs from meters at a configurable frequency, but at least 4x per day for delivery to the AMI headend. | Mandatory | | |
| General AMI | 4 | Be capable of securing interval data and logs from communications network components at a configurable frequency, but at least 4x per day for delivery to AMI headend. | Mandatory | | |
| General AMI | 5 | Support interval data collection for measured product. | Preferred | | |
| General AMI | 6 | The AMI headend system must be able to store at least 60 days of hourly interval data. | Preferred | | |
| General AMI | 7 | Distinguish between a missing interval and zero consumption. | Mandatory | | |
| General AMI | 8 | Initiate an on-demand read request initiated from another authorized system (i.e., AMDMS, CIS) | Mandatory | | |
| General AMI | 9 | Log all messages sent to and received from all AMI components with the message date/time, event/message type identifier, and source/target(s) identifier. | Preferred | | |
| General AMI | 10 | Log each instance when an event message has been sent to an AMI component when no acknowledgement is received within the configured time frame. | Preferred | | |
| General AMI | 11 | Synchronize internal clock time for all meters and endpoints with a recognized external time source at least 1x per day. | Preferred | | |
| General AMI | 12 | Process Daylight Savings time change. | Mandatory | | |
| General AMI | 13 | Utilize two-way secure communications with all authorized systems and devices such as: | Mandatory | | |
| General AMI | 14 | Optical ports | Mandatory | | |
| General AMI | 15 | Handheld field tools | Mandatory | | |
| General AMI | 16 | AMI network infrastructure including all collectors and repeaters | Mandatory | | |
| General AMI | 17 | If the main communications technology between the collector and the AMI headend is a private radio network, support a secondary cellular communication option | Preferred | | |
| General AMI | 18 | Provides context-sensitive system documentation for online user help. | Preferred | | |
| General AMI | 19 | Provides the capability to assign user specific screen presentation criteria (i.e. personalized home dashboard) based on user sign-in. | Preferred | | |
| General AMI | 20 | Support user capability to export report and query data in SQL, Excel, XML, TXT, or other flat-file format. | Mandatory | | |
| General AMI | 21 | Provide the capability to support a variety of number of dials that contain up to 9 digits on register read. | Mandatory | | |
| General AMI | 22 | Provide the capability to support minimum of 10 digit length serial number. | Mandatory | | |
| General AMI | 23 | Provide a solar power option for collectors. | Preferred | | |
| General AMI | 24 | Be MultiSpeak 4.1 certified or IEC CIM 61968 - 100 compliant. | Preferred | | |
| General AMI | 25 | Support MultiSpeak 4.1.6 (or higher) integrations with Meter Data Management System (AMDMS) and other enterprise IT systems. | Preferred | | |
| General AMI | 26 | Phone/Modem | Preferred | | |
| General AMI | 27 | Radio Frequency | Preferred | | |
| General AMI | 28 | Fiber | Preferred | | |
| General AMI | 29 | AMI communication system shall support a platform to provide connectivity (status and control) to third party devices such as pressure sensors, remote disconnect meters, etc. Name supported devices & manufacturer in comments. | Preferred | | |
| General AMI | 30 | Support and provide backhaul communications for water pressure monitoring devices, including meters that incorporate pressure readings. | Preferred | | |
| General AMI | 31 | Support and provide backhaul communications for leak detection devices. | Preferred | | |
| Remote Connect/ Disconnect | 32 | Provide the capability to perform a remote connect/disconnect for a water meter. | Preferred | | |
| Remote Connect/ Disconnect | 33 | Allow for remote connect/disconnects to be automatically initiated based commands by an authorized application other than the AMI headend (i.e., AMDMS and CIS) | Preferred | | |
| Remote Connect/ Disconnect | 34 | Provide the capability to schedule a remote connect/disconnect operation to be initiated at a specified time by an authorized application other than the AMI headend (i.e., AMDMS and CIS). | Preferred | | |
| Remote Connect/ Disconnect | 35 | Allow for remote connects/disconnects to be manually initiated by a user | Preferred | | |
| Remote Connect/ Disconnect | 36 | Provide state (i.e. closed, open) of meter and last read after remote connect/disconnect command is sent. | Preferred | | |
| Remote Connect/ Disconnect | 37 | Identify and report failed remote connect/disconnect operations. | Preferred | | |
| Remote Connect/ Disconnect | 38 | Support the ability to identify emergency and critical needs customers to prevent remote disconnect. | Preferred | | |
| Events/Alarms | 39 | Automatically resend event notification until a message is acknowledged by the AMI headend. | Mandatory | | |
| Events/Alarms | 40 | Detect and report all critical meter and system alarms and events in near-real time (up to 90 seconds) to the AMI headend. | Mandatory | | |
| Events/Alarms | 41 | Provide mechanism to automatically communicate a certain event and/or alarm to designated recipients via email or SMS text message. | Preferred | | |
| Events/Alarms | 42 | Detect and report meter removal for a water meter. | Preferred | | |
| Events/Alarms | 43 | Detect and report meter tilt/tamper of a water meter register. | Preferred | | |
| Events/Alarms | 44 | Detect and report stopped/dead/non-registering meters. | Preferred | | |
| Events/Alarms | 45 | Detect and report inapproprite access. | Preferred | | |

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| Security | 46 | Receive process requests from other systems (such as the CIS). | Preferred | | |
| Security | 47 | Transmit all data received from network devices to the AMDMS (e.g. usage, logs, alerts, receipts, etc.). | Mandatory | | |
| Security | 48 | Satisfy retail security and personal information protection requirements established by the Federal government and by the State of California. | Mandatory | | |
| Security | 49 | Log invalid login attempts. | Mandatory | | |
| Security | 50 | Support a lockout for a configurable number of failed login/access attempts. | Mandatory | | |
| Security | 51 | Comply with FIPS 140-2 (Level 1) Security Requirements or equivalent for Cryptographic Modules. | Mandatory | | |
| Security | 52 | Support industry standard encryption. | Mandatory | | |
| Security | 53 | Support functions which allow for secure device authentication, registration, and revocation of registration. | Mandatory | | |
| Security | 54 | Supply mechanisms which audit and store all security related events including all messages, access, and modification events within the system. | Mandatory | | |
| Security | 55 | Supply access control mechanisms (i.e., Identification & Authentication mechanisms) which prevent unauthorized access of information and resource. | Mandatory | | |
| Security | 56 | Restrict access to reconfiguration commands based upon user role. | Mandatory | | |
| Security | 57 | Reject messages/requests that are received from unauthorized systems or devices. | Mandatory | | |
| Security | 58 | Reject messages that indicate mass disconnect operation, including those transmitted via AMDMS. | Preferred | | |
| Configuration | 59 | Display and Log configuration parameters. | Mandatory | | |
| Configuration | 60 | The capability to change configuration settings of the endpoint shall be available via remote action without removing device. | Mandatory | | |
| System Performance and Reliability | 61 | Deliver the results of all received alarms, outages and remote testing and diagnostic results to the AMDMS in near-real time. | Mandatory | | |
| System Performance and Reliability | 62 | Be capable of securing an overall 98.5% success rate of all expected reads (interval and register) transmitted within 72 hours of read timestamp, processed at the head end and available for analysis/billing. | Mandatory | | |
| System Performance and Reliability | 63 | The AMI System and network design shall be capable of securing 100% of all expected billing and interval reads for 100% of deployed meters by the end of a 30-day billing period (only exceptions are for variables outside of the vendors control). | Mandatory | | |
| System Performance and Reliability | 64 | Automatically select from redundant communications paths if available. | Mandatory | | |
| System Performance and Reliability | 65 | Perform data flow control after a communication outage to prevent network resources from being overloaded. | Mandatory | | |
| System Performance and Reliability | 66 | Transmit and log, at a minimum, the following information for each event: Event Timestamp, Event Type, AMI RF endpoint, and/or meter ID. | Mandatory | | |
| System Performance and Reliability | 67 | Transmit high priority events to the AMI headend as soon as they occur. | Mandatory | | |
| System Performance and Reliability | 68 | Support remote configuration of all user-controllable parameters. | Mandatory | | |
| System Performance and Reliability | 69 | Support remote configuration of multiple devices in a batched mode. | Preferred | | |
| System Performance and Reliability | 70 | Log all configuration commands and results. | Preferred | | |
| System Diagnostics | 71 | Respond to requests for on-demand access to meter and log data. | Preferred | | |
| System Diagnostics | 72 | Send non-usage messages and alarms to the AMI headend that contain date/time stamp from internal meter clock, message code/type, and meter identifier. | Preferred | | |
| System Diagnostics | 73 | Detect, log, and report program or memory failure. | Preferred | | |
| System Diagnostics | 74 | Detect, log and report communications link failures. | Preferred | | |
| System Diagnostics | 75 | Log the communication signal strength (RSSI) and report it back to the AMI headend with every transmission. | Preferred | | |
| System Diagnostics | 76 | Provide diagnostic log information on-demand from AMI headend. | Preferred | | |
| System Diagnostics | 77 | Support a remotely and locally initiated meter test for communications with diagnostics to include network interface and link information, network association status, signal level status. | Preferred | | |
| System Diagnostics | 78 | Support a remotely and locally initiated meter test for internal meter timekeeping accuracy. | Preferred | | |
| System Diagnostics | 79 | Automatically issue a remote meter test upon on-demand read request failure. | Preferred | | |
| System Diagnostics | 80 | If communication is via a private radio network, remotely detect and report on network communications problems including loss of redundant communications pathways, diminishing signal strength, or poor interval performance. If communication is via cellular detect and report on transmission failures. | Mandatory | | |
| System Diagnostics | 81 | Log the results of all remote testing and diagnostics activities and any automatic actions taken based on those results. | Preferred | | |
| System Diagnostics | 82 | Support configurable alert levels and notifications based on the severity of a problem detected and the number of endpoints affected. | Preferred | | |
| System Diagnostics | 83 | Support classification of specific testing/diagnostic results to either require or not require human intervention (configurable). | Preferred | | |
| System Diagnostics | 84 | Provide reports/views that contain key diagnostics and statistics from all AMI meters, devices, and field communication network elements. Reports shall include (at a minimum) meter read status reports, event/transaction status reports, trouble reports, and meter additions/removals. | Mandatory | | |
| System Diagnostics | 85 | System will provide a display map of District-designated infrastructure components (e.g., meters, pump stations, pressure zones, etc.) | Preferred | | |

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| System Diagnostics | 86 | System will support requests for on-demand reading and pinging of meters from users directly or from other departmental applications such as CIS or AMDMS. | Preferred | | |
| Software/Firmware Releases | 87 | Upgrades and enhancements shall be backwards compatible for at least three (3) releases. | Mandatory | | |
| Software/Firmware Releases | 88 | All upgrades and software releases shall be identifiable by release number. | Mandatory | | |
| Software/Firmware Releases | 89 | Upgrades and enhancements shall be thoroughly tested and pass Quality Assurance review (Unit Testing, Systems Acceptance Testing) before being released to the customer. | Mandatory | | |
| Software/Firmware Releases | 90 | All upgrades and software releases shall have ability to be scheduled at the District's discretion. | Mandatory | | |
| Software/Firmware Releases | 91 | Provide corrections (e.g., patches) for AMI application software if program errors are discovered at another user's site. | Mandatory | | |
| Software/Firmware Releases | 92 | All point releases for AMI Software are made available to all customers. | Mandatory | | |
| Software/Firmware Releases | 93 | Automatically revert to the previous version if a failed firmware upgrade is detected. | Mandatory | | |
| Software/Firmware Releases | 94 | Support remote and local reading of a system device's current software/firmware version. | Mandatory | | |
| Software/Firmware Releases | 95 | Be configurable to retain stored register reads over a full software/firmware upgrade. | Mandatory | | |
| Software/Firmware Releases | 96 | Be configurable to reset stored register reads over a full software/firmware upgrade. | Mandatory | | |
| Software/Firmware Releases | 97 | Retain all AMI meter configuration settings, statuses, customer information, and event logs over a full software/firmware upgrade. | Mandatory | | |
| Software/Firmware Releases | 98 | Log firmware download and show success statistics (including upgrade attempts, failures, successes, reversions with timestamp). | Mandatory | | |
| Software/Firmware Releases | 99 | Report firmware upgrade status (successful or unsuccessful) to the AMI headend. | Mandatory | | |
| Software/Firmware Releases | 100 | Accept and install firmware upgrades remotely (over-the-air) via the AMI network. | Preferred | | |
| Software/Firmware Releases | 101 | Firmware upgrades shall also be able to be accomplished in the field at the meter location. | Preferred | | |
| Software/Firmware Releases | 102 | Continue normal operation while downloading software/firmware upgrades until instructed to switch to the new version. | Preferred | | |
| Software/Firmware Releases | 103 | Allow reprogramming of meters remotely (over-the-air) via the AMI network. | Preferred | | |
| Software/Firmware Releases | 104 | Support group firmware updates to reduce system maintenance time. | Preferred | | |
| | | **The AMI Endpoint Shall:** | | | |
| Endpoint | 105 | Be supplied with a scannable bar code label affixed to the endpoint. | Preferred | | |
| Endpoint | 106 | For meter pit installations, the endpoint must be capable of continuous operation in a submerged environment. | Mandatory | | |
| Endpoint | 107 | Support local data exchange with a field programming tool of all AMI Meter and communications data and logs. | Preferred | | |
| Endpoint | 108 | Provide security / authentication for local AMI Meter data exchange to ensure that data exchanges can only be executed by authorized District users or users authorized by the District with designated field tools. | Mandatory | | |
| Endpoint | 109 | Collect and report non-usage data (i.e. battery level, alarms, temperature, pressure, etc.) | Mandatory | | |
| Endpoint | 110 | Log all local data exchange attempts in History Log Tables (reference Section 9.8 of the ANSI C12.19 Standard). | Preferred | | |
| Endpoint | 111 | Have storage capacity at the meter for 30 days, which includes interval and register read and event data for purposes of disaster recovery. | Mandatory | | |
| Endpoint | 112 | Keep time even if there is no communication with the AMI network. | Mandatory | | |
| Endpoint | 113 | Maintain holdover accuracy to ANSI C12.19 specifications. | Preferred | | |
| Endpoint | 114 | Be equipped with a diagnostic self-test, such as displaying a warning and transmiting a signal to the AMI headend. | Mandatory | | |
| Endpoint | 115 | Have a unique identification number that can be read electronically when the meter is interrogated and transmitted to or stored in the AMI Endpoint. | Mandatory | | |
| Endpoint | 116 | Radio battery enclosure on endpoints for water meters shall be fully sealed and waterproof. | Mandatory | | |
| Endpoint | 117 | Have an option to be mounted through the lid via a pit mount interface device. | Preferred | | |
| Endpoint | 118 | Have an option to be remote mounted outdoors if a non-pit mounted product. | Mandatory | | |
| Endpoint | 119 | Support configurable meter data intervals in at least hourly increments for all water meters. | Preferred | | |
| Endpoint | 120 | Through the lid endpoint devices must not extend more than ¼" above the lid and be ADA compliant. | Mandatory | | |
| Endpoint | 121 | Communicate bi-directionally with a field programming tool without use of the AMI Network. | Preferred | | |
| Endpoint | 122 | Have storage capacity at the meter for 60 days, which includes interval and register read and event data for purposes of disaster recovery. | Preferred | | |
| Endpoint | 123 | Have storage capacity at the meter for 90 days, which includes interval and register read and event data for purposes of disaster recovery. | Preferred | | |
| Endpoint | 124 | Have an option to be wall mounted. | Preferred | | |
| Endpoint | 125 | Have an option to be pit mounted (under the lid). | Preferred | | |
| Endpoint | 126 | Have an option for two or more register inputs from one endpoint (water meters). | Preferred | | |

**Borrego Water District**
**Requirements - Automatic Meter Data Management System**

| Category | Req ID | Requirement Description | Mandatory or Preferred | Vendor Response | Vendor Comment |
|---|---|---|---|---|---|
| | | **The MDM System Shall:** | | | |
| General AMDMS | 1 | Accept and store meter data characteristics (e.g. Meter ID, Account ID, etc.) according to District's CIS data structure. | Mandatory | | |
| General AMDMS | 2 | Support up to 9 digits for meter reading display. | Mandatory | | |
| General AMDMS | 3 | Support configurable units of measure and interval lengths for meters. | Mandatory | | |
| General AMDMS | 4 | Provide a Graphical User Interface (GUI) for internal system users. | Mandatory | | |
| General AMDMS | 5 | Provide a web-enabled platform for remote access by internal system users, including field services crew. | Preferred | | |
| General AMDMS | 6 | Provide meter status for all meters. | Mandatory | | |
| General AMDMS | 7 | Provide robust ability to aggregate meters (i.e., virtual metering, DMA, aggregation) to perform analytics. | Preferred | | |
| General AMDMS | 8 | Provide reporting capabilities and exportability of data screens to other file formats (such as .csv and .xlsx) | Mandatory | | |
| General AMDMS | 9 | Retain a minimum of three (3) years of interval and register reads for immediate (online) access. | Mandatory | | |
| General AMDMS | 10 | Receive and retain a minimum of three (3) years of events and alarms originating from the AMI headend. | Mandatory | | |
| General AMDMS | 11 | Process all meter and collector communication issues received from the AMI headend system to include at a minimum:<br>• Non-communicating meters<br>• Intermittent meter communications<br>• Collector communications issues if using a private radio network | Mandatory | | |
| General AMDMS | 12 | Process all meter issues received from the AMI headend system to include at a minimum meters with missing reads | Mandatory | | |
| General AMDMS | 13 | Process all customer/consumption related issues received from the AMI headend system to include at a minimum:<br>• Consumption on a vacant account<br>• Zero consumption on an active account<br>• Highusage<br>• Backflow | Preferred | | |
| General AMDMS | 14 | Allow for configurable event notifications based on District business rules (e.g. meter has not communicated with the AMI headend system within x number of days) | Preferred | | |
| General AMDMS | 15 | Accept and store the billing determinants and meter multipliers used by the CIS. | Mandatory | | |
| General AMDMS | 16 | Provide system synchronization to ensure all register and interval readings remain in alignment. | Mandatory | | |
| General AMDMS | 17 | Allow for manual review of VEE exceptions based on business rules defined by the District, including: negative usage, high/low tolerance, zero read, spike check, missing reads, and multiplier checks. | Preferred | | |
| General AMDMS | 18 | Allow manual editing of missing or estimated/allocated data. Preferred: changed data marked by quality flag (original data should not be disturbed). | Mandatory | | |
| General AMDMS | 19 | Automatically estimate meter data to fill gaps in interval usage data. | Preferred | | |
| General AMDMS | 20 | Accept register reads via manual entry. | Mandatory | | |
| General AMDMS | 21 | Process Daylight Savings time change. | Mandatory | | |
| General AMDMS | 22 | Support on-demand meter reads by authorized users. | Mandatory | | |
| General AMDMS | 23 | Provide the capability to schedule an on-demand read operation to be initiated at a specified time. | Preferred | | |
| General AMDMS | 24 | Track meter events by billing account (i.e. flags, relocation, reconfiguration, tampering, etc.). | Mandatory | | |
| Remote Connect/ Disconnect | 25 | Allow for remote water connects/disconnects in AMI headend to be initiated by a user via the AMDMS GUI. | Preferred | | |
| Remote Connect/ Disconnect | 26 | Provide the capability to schedule a remote connect/disconnect operation to be initiated at a specified time. | Preferred | | |
| Remote Connect/ Disconnect | 27 | Correlate scheduled commands to weather or other logical data events. (For example, do not disconnect customer until average temperature is above 32°F or do not disconnect on weekends or holidays). | Preferred | | |
| Remote Connect/ Disconnect | 28 | Identify emergency and critical needs customers to prevent remote connect/disconnect. | Preferred | | |
| Performance | 29 | System performance is optimized for handling real-time event and alarm data (e.g. outages, system failures, etc.). | Mandatory | | |
| Performance | 30 | Load all pages, including reports, within 15 seconds. | Preferred | | |
| Performance | 31 | On Demand reads must be received within 90 seconds from when the command is initiated. | Preferred | | |
| Ops - Water | 32 | Receive interval and register data and perform VEE on AMI headend system water meters. | Preferred | | |
| Ops - Water | 33 | Support at a minimum, the following water event data from the AMI headend system, with District-configurable thresholds:<br>• Tamper detection<br>• Leak (Abnormal flow) detection<br>• Reverse flow (Backflow) detection<br>• Low battery<br>• Service disconnection/reconnection<br>• Health diagnostics | Preferred | | |

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| Reporting | 34 | Provide the ability for users to view tabular and graphical data (at interval, daily, monthly levels) from current and prior 36 months of usage for individual meters. | Mandatory | | |
| Reporting | 35 | Provide reports that compare multiple years (>2) of historical data side-by-side. | Preferred | | |
| Reporting | 36 | Provide reporting tool to allow user-defined date range in graphical and tabular data views. | Mandatory | | |
| Reporting | 37 | Identify and report success or failure of all remote connect/disconnect operations. | Preferred | | |
| Reporting | 38 | Provide configurable KPI Dashboards depending on the users needs (i.e. - meter health, AMI health, revenue health, conservation program health, outage management health, revenue protection health). | Preferred | | |
| Reporting | 39 | Provide AMI performance reports that provides overall AMI system performance and facilitates troubleshooting of AMI system components and meter communication failures.<br>This should display at a minimum:<br>• Non-communicating meters<br>• Intermittent meter communications<br>• Communications issues<br>• GIS map showing status of field equipment | Mandatory | | |
| Reporting | 40 | Allow for user-defined aggregated meter groups (e.g. irrigation only meters). Defined virtual meters will be remembered and should be contained in a library for access by other users. | Preferred | | |
| Reporting | 41 | Meter groups for reporting aggregation should be selectable from attributes synchronized with the billing system (e.g. by pressure zone, customer class, customer status, meter type, or as a summation of ERTs on vault or deduct meters). | Preferred | | |
| Reporting | 42 | Individual user will be able to establish defined alarms / thresholds for each virtual meter and will have the ability to establish user defined alarm levels. | Preferred | | |
| Reporting | 43 | Ability to send emails, SMS based on user defined alarm exceedance. | Mandatory | | |
| Reporting | 44 | Ability to export data based on user defined meter aggregations. | Preferred | | |
| Reporting | 45 | Provide ability to correlate alerts, events and alarms for all utility services for a location / premise. | Preferred | | |
| Reporting | 46 | Identify customers with leaks due to continuous consumption alerts | Mandatory | | |
| Reporting | 47 | Provide consumption forecasting tools that can identify consumption patterns - with weather data inputs - and predict future consumption based on historical trends and weather predictions. | Preferred | | |
| Reporting | 48 | Revenue analysis tools will support, at a minimum, revenue profiling daily, monthly and annually; revenue profiling for billing customer classes or based on user-selected virtual metering. | Preferred | | |
| Reporting | 49 | Provide rate analysis tools. | Preferred | | |
| Reporting | 50 | Provide water conservation consumption reporting. Provide the ability to identify accounts with high water consumption based on monthly consumption targets | Preferred | | |
| Reporting | 51 | Incorporate external data (weather, property, climate) into reporting and analytical reporting tools. | Preferred | | |
| Reporting | 52 | Incorporate data from more than 1 local weather source, and include data on: temperature, rainfall, humidity and all other available data. | Preferred | | |
| Reporting | 53 | Support identification of customer impacted by main breaks and be capable of integrating with an IVR for customer notification. | Preferred | | |
| Security | 54 | Provide a secure login (i.e. authentication with LDAP) in compliance with ISO27001 or other industry standard to prevent access by unauthorized users. | Mandatory | | |
| Security | 55 | Support user authentication and authorization by role in compliance with ISO27001 or other industry standard | Mandatory | | |
| Security | 56 | Provide authorized users' access to audit logs in compliance with ISO27001 or other industry standard that shall track all changes to interval usage, register meter reads and configuration data. | Preferred | | |
| Security | 57 | All user Web interfaces must be secure (i.e. 'https') and utilize appropriate encryption and authentication. | Mandatory | | |
| Security | 58 | All file transfers must be secured/encrypted with one of the available security options (ex. SFTP, AES 256 bit encryption, RSA key). | Mandatory | | |
| Security | 59 | Support a lockout for a configurable number of failed login/access attempts. | Mandatory | | |
| System Admin | 60 | Provide for at a minimum 25 simultaneous users and 2 system admins. | Mandatory | | |
| System Admin | 61 | Store audit logs for up to three (3) years or a configurable length of time up to seven (7) years. | Mandatory | | |
| System Admin | 62 | Upgrades and enhancements shall be backwards compatible for at least three (3) releases. | Mandatory | | |
| System Admin | 63 | Be identifiable by release number. | Mandatory | | |
| System Admin | 64 | Provide all point releases to all customers. | Mandatory | | |
| System Admin | 65 | Provide corrections (e.g., patches) for system if program errors are discovered at another user's site. | Mandatory | | |
| System Admin | 66 | Be supported with a bug and security patching process for test and release, including addressing vulnerabilities and patches associated with the server operating system. | Mandatory | | |

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| System Admin | 67 | Have all upgrades and enhancements thoroughly tested and pass Quality Assurance review (Unit Testing, Integration Testing, and Systems Acceptance Testing) before being released to the customer. | Mandatory | | |
| System Admin | 68 | Allow set up or change of data validation and estimation rules, user screens, and alarm/event notifications without modifying source program code and without any proprietary language skills. | Mandatory | | |
| System Admin | 69 | Ability to monitor and generate notifications or alarms for individual processes, group of processes, and work or data flows within the system to ensure reliable operation. | Preferred | | |
| System Admin | 70 | Maintain 3 years of online historical data for all reporting and customer portal tools. | Mandatory | | |
| Systems Integration | 71 | Interface with the CIS via web services for AMI reads. | Mandatory | | |
| Systems Integration | 72 | Support MultiSpeak 4.1.6 (or higher) or other industry standard integrations with Advanced Metering Infrastructure System (AMI) and other enterprise IT systems. | Preferred | | |
| Systems Integration | 73 | Be built on database platform that can integrate with standard reporting tools (such as Microsoft SQL Server reporting services). | Preferred | | |
| Systems Integration | 74 | Receive and process daily register meter reads from AMI headend. | Mandatory | | |
| Systems Integration | 75 | Originate and receive real-time data transfers with the AMI headend (i.e., on demand read request/response). | Mandatory | | |
| Systems Integration | 76 | Be capable of interfacing with email and SMS to send alarms or status reports to designated recipients. | Preferred | | |
| Systems Integration | 77 | Be capable of interfacing with ESRI GIS. | Preferred | | |
| Systems Integration | 78 | Capable of receiving meters identified in ESRI GIS to the MDM for virtual meter aggregation. Capable of sending meter data to ESRI GIS including virtual meter aggregations. | Preferred | | |

# Borrego Water District
# Requirements - Installation

| Category | Req ID | Requirement Description | Mandatory or Preferred | Vendor Response | Vendor Comment |
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| | | **The Installation Contractor:** | | | |
| Data Capture | 1 | Capture clear and legible digital images of pre-install meter site, legacy meter face for out-read, new meter face immediately following install, and site as left by installer. | Mandatory | | |
| Data Capture | 2 | Photo shall include an accurate time stamps. | Mandatory | | |
| Data Capture | 3 | Photos shall be searchable by meter number assigned by the District or alternatively another unique identifier as determined by the utility. | Mandatory | | |
| Data Capture | 4 | Install contractor shall review and validate meter reads that have been entered in their work order management system against the meter face photo taken during installation. Validation of read or read accuracy shall be 99.9%. | Mandatory | | |
| Data Capture | 5 | Integrate and/or export meter exchange data (meter ID, last meter read, new meter read, installation date, meter model, location, GPS, service order number, etc.) to a format acceptable to the District's Billing System. | Mandatory | | |
| Data Capture | 6 | Install meters in accordance with the manufacturer's specifications and recommendations. | Mandatory | | |
| Data Capture | 7 | Include a detailed Quality Assurance / Quality Control (QA/QC) process including an District-defined checklist during installation and post-installation. | Mandatory | | |
| Data Capture | 8 | Provide a QA/QC process for verification of the meter reading of removed meters. | Mandatory | | |
| Data Capture | 9 | Perform a visual inspection and document/ notify the District of general condition, potential damage, malfunction, or other notable issues such as a tamper or theft condition found during a meter exchange. This includes but is not limited to safety issues, infrastructure concerns, etc. | Mandatory | | |
| Data Capture | 10 | Collect GPS coordinates within 5-foot accuracy and provide the meter location in reference to the premise. | Mandatory | | |
| Data Capture | 11 | Verify the existing Lat/Long information and achieve 100% accurate meter locations. | Mandatory | | |
| Data Capture | 12 | Provide customer and utility side leak analysis and report leaks to the District. | Mandatory | | |
| Data Capture | 13 | Provide daily data uploads and ensure accuracy. | Mandatory | | |
| Data Capture | 14 | Verify that the new meter is fully functional and properly installed before leaving site. | Mandatory | | |
| Data Capture | 15 | Assist the District with the development of inventory tracking system to transfer ownership of materials from the contractor to The District. | Mandatory | | |

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| Other | 16 | Be able to anticipate and remediate the possible complications during meter installation: root intrusion, buried meters, meters under water, frozen curb stops, mineral deposits, misaligned services (property and District side), services high or low, meter boxes high or low, oval meter boxes (devices may not fit), various natural hazards (rattlesnakes, black widows, honey bee hives, poison oak), hypodermic needles. | Mandatory | | |
| Other | 17 | Be available to respond to calls from the the District and/or customers concerning leaks, loss of service, or other issues associated with the installation within 18 hours from receipt of a customer complaint or issue identified by the District for a minimum of 60 days following completion of install/retrofit. | Mandatory | | |
| Other | 18 | Be responsible for repairing leaks or damage resulting from meter retrofit, endpoint exchange and/or full meter replacement. Repairs range will extend 3 feet from point of connection to the utility service line. | Mandatory | | |
| Other | 19 | Provide printing services for standard size, two-sided and four color design door hangers and other materials required as part of the customer notification process. | Preferred | | |
| Other | 20 | Deliver all meters back to the District's yard. | Mandatory | | |
| Other | 21 | Coordinate with the District regarding meter scrap procedures. | Mandatory | | |
| Other | 22 | Legally dispose any waste items including lids, boxes and dirt, etc. | Mandatory | | |
| Other | 23 | Have all installers sign an NDA. | Mandatory | | |
| Safety & Appearance | 24 | The fleet of contractor vehicles shall be consistent in appearance and approved by the District. Utility approved signage will be required on all service vehicles. (No magnets.) | Preferred | | |
| Safety & Appearance | 25 | Have all field personnel wear easily recognizable uniforms containing company name. | Preferred | | |
| Safety & Appearance | 26 | Be trained on how to address customer inquiries and when to transfer a customer to the District. | Mandatory | | |
| Safety & Appearance | 27 | Installer will leave the customer site in the same condition or better than it was encountered. | Mandatory | | |
| Safety & Appearance | 28 | Submit the employee safety / training program to the District for approval. Please include in the appendices. | Mandatory | | |
| Scheduling | 29 | Provide own electronic work management system and scheduling system for coordinating installers. | Mandatory | | |
| Scheduling | 30 | Coordinate scheduling and provide adequate notice to the District prior to the meter installation. | Mandatory | | |
| Scheduling | 31 | Be responsible for traffic control and confined space entry meeting all rules, regulations and policies applicable. Assistance may be available upon request from the District. | Mandatory | | |

| | | | | | |
|---|---|---|---|---|---|
| Scheduling | 32 | Notify customer a minimum of 48 hours prior to commencement of installation. Notice shall contain contractor name and contact information in case of an emergency, a description of the work being done, an estimated date and duration. The District will need to approve notice prior to use. | Mandatory | | |
| Scheduling | 33 | Make no less than three attempts within a 72 hour period to contact the customer to gain access to the meter, should it not be initially accessible. | Mandatory | | |
| Scheduling | 34 | Be responsible for return visits where errors/damage was caused by the installer. | Mandatory | | |
| Scheduling | 35 | Assist/ coordinate meter installation scheduling according to The District's deployment strategy. The District retains the right to prioritize routes, neighborhoods, and customers as needed. | Mandatory | | |
| Scheduling | 36 | Be available at a minimum during the District's regular working hours in addition to Saturdays and Sundays from 8 a.m. - 4 p.m. upon request. | Mandatory | | |
| Scheduling | 37 | Willing to accommodate pre-determined after-hours or weekend scheduling. | Mandatory | | |
| Scheduling | 38 | Emergency responses for out of service meters will be responded to within 30 minutes. | Mandatory | | |
| Scheduling | 39 | Have the designated project manager available for kick-off sessions and other activities upon notice of award. | Mandatory | | |
| Scheduling | 40 | Have the designated project manager along with key team members onsite and participating in weekly project status meetings. | Mandatory | | |
| Scheduling | 41 | Daily installation progress updates will be provided to The District via email. | Mandatory | | |
| Scheduling | 42 | Complete a route at 90% or more before moving on to new routes. | Mandatory | | |
| Scheduling | 43 | Provide call center services with different levels of response and support from 7:30 a.m. – 5 p.m. After hour calls will be directed to the District's answering service. | Preferred | | |
| Scheduling | 44 | The call center will have both English and Spanish operators available. | Preferred | | |
| Scheduling | 45 | Include the same supervisor or project manager on the installation team for both the initial deployment and full deployment phases. | Preferred | | |
| Scheduling | 46 | Have availability to participate in a meter installation training or briefing if deemed necessary by the meter vendor or the District. | Mandatory | | |

## Water System Information

Borrego Water District is a community water system formed in 1962 by an election of the landowners in Borrego Valley as a public agency under the California Water District Act of the Water Code. The purpose of the agency is to provide water, sewer, and flood control services within its service area. The Borrego Water District is located in Borrego Springs, CA in San Diego County. Borrego Water District acquired neighboring Borrego Springs Water Company in 1997 and in 2009 consolidated with Borrego Springs Park Community Services District.

The community of Borrego Springs is completely surrounded by the Anza-Borrego Desert State Park. The community's population ranges from less than 3,000 in summer months to over 8,000 in the height of the winter season.

The Borrego Water District (District) provides water and wastewater services to the rural unincorporated community of Borrego Springs. The community is supplied domestic water service from the Borrego Valley Groundwater Basin (BVGB) which has been determined by the California Department of Water Resources to be in a "critical overdraft" status. The District is in the process of developing a Groundwater Sustainability Plan under provisions outlined in the Sustainable Groundwater Management Act of 2014. In accordance with this new law, the BVGB will be required to reduce groundwater extractions by 70% to achieve sustainability. It is anticipated that these reductions will come from a variety of conservation measures, including water reuse.

Borrego Water District is comprised of 5 Improvement Districts. Borrego Water District operates facilities in four pressure zones:

1) 900 feet – Served by ID3 and includes the Deep Well Trail subdivision, the Rancho Borrego area, and La Casa del Zorro Resort.
2) 880 feet – Served by ID4 and includes the previous Borrego Springs Water Company, the majority of the Borrego Springs community, and the newly incorporated Borrego Springs Park Community Services District area.
3) 900 feet – Served by ID1 and includes the Rams Hill subdivision.
4) 1,000 feet – Served by ID1 and includes the Rams Hill subdivision.

The Borrego Water District owns and operates a network of nine groundwater wells (with one standby well) 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 below ground surface. The wells are upgradient of the WWTP. The wells were tested in 2006 and the following constituent concentrations were resultant:

| Constituent | ID1-Well 12 | ID1-Well16 | ID4-Well 3 | ID4-Well 11 |
|---|---|---|---|---|
| Total Dissolved Solids | 410 | 370 | 790 | 430 |
| Chloride | 52 | 75 | 71 | 46 |
| Nitrate-Nitrogen | 0.32 | 1.2 | 2.6 | 0.43 |
| Sulfate | 92 | 58 | 390 | 90 |
| Fluoride | 0.5 | 0.5 | 0.4 | 0.3 |

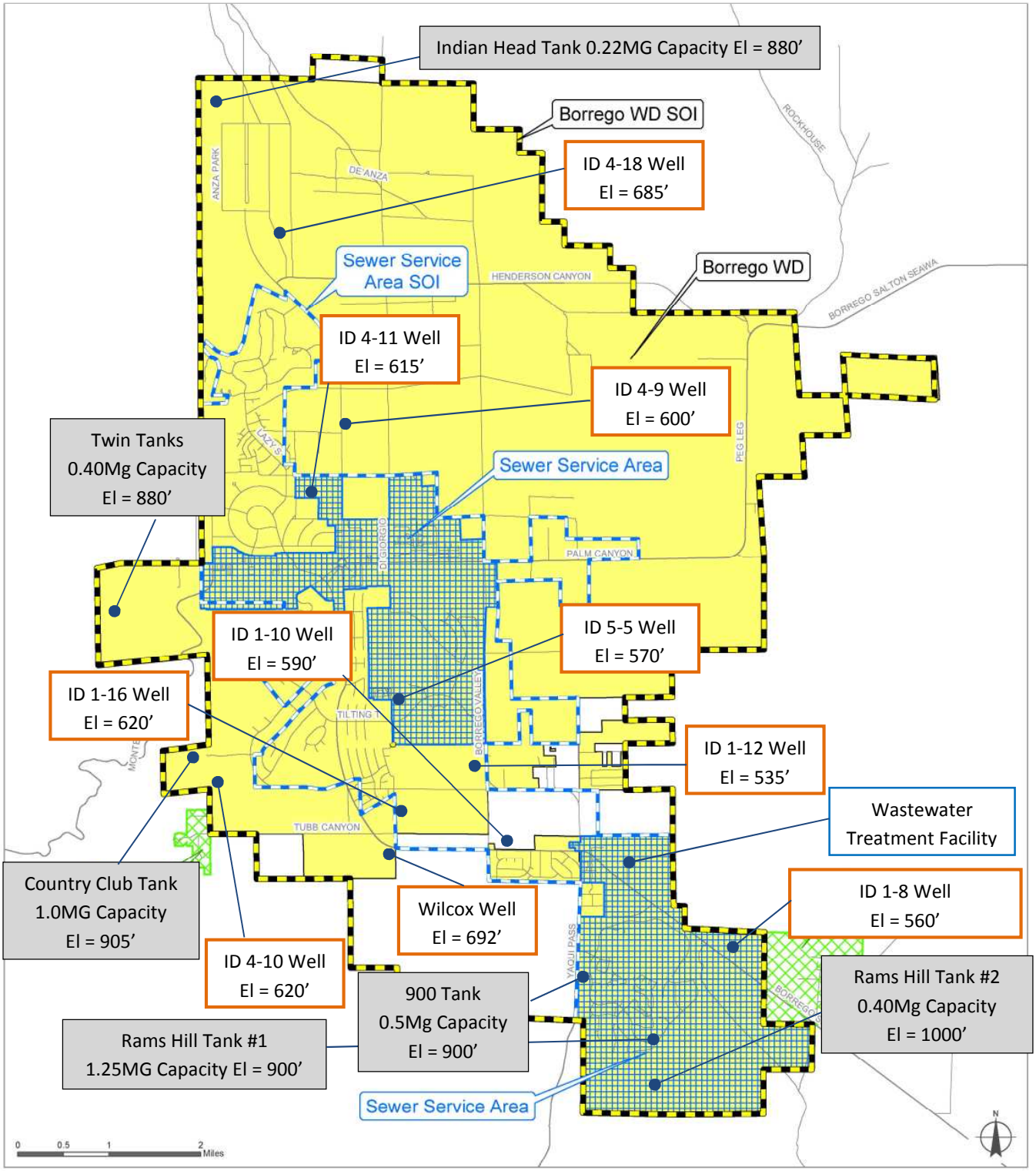
The Borrego Water District (District) encompasses the entire unincorporated community of Borrego Springs. Located in the extreme northeastern corner of San Diego County, the community is completely surrounded by the 600,000 acre Anza-Borrego Desert State Park (ABDSP). The sole source of water, the Borrego Valley Groundwater Basin, has been in a critical overdraft situation for many years. The desert climate ranges from cool winters to harsh summer temperatures reaching 120 degrees. The summer months are susceptible to violent monsoonal events and occasional tropical storms travelling up the Gulf of California. The area usually experiences one extended power outage per season due to power poles broken by high winds. Many recent outages have lasted more than 20 hours.

Extensive upgrades to provide emergency water supplies have been achieved over the years. The water distribution system was built over time by several entities that were purchased or consolidated into the current District boundary. The major portion of the populated area was subdivided and developed by the Burnand Family. Burnand also created the Borrego Springs Water Company (Company) with its first production well in 1947. As the land was subdivided, they created infrastructure to serve water to residents through the water-Company. Some areas were served by a single well and above ground reservoir, but were later connected to the adjacent system for emergency interties. When more subdivisions were added, water mains were small sized and were located in the most cost effective manner for the developer. The Company had very little storage and in times of power outages, ran out of public drinking water in as little as two hours. The Company was purchased by the District in 1997 and renamed Improvement District #4 (ID-4).

The District is now comprised of five service areas, established as smaller private mutual water companies and one public community services district and later merged together. At present, with increased storage, backup power supplies and system interties, the District has been able to withstand a 24-hour outage with no impacts to the water and wastewater operations. However, the current patchwork system is in need of repairs and upgrades to insure future reliability during power outage emergencies.

The Colorado River Basin Regional Water Quality Control Board has jurisdiction over the BWD water system

# Borrego WD




San Diego County
Local Agency Formation Commission
Regional Service Planning | Subdivision of the State of California



Created by Dieu Ngu – 2/13/2020

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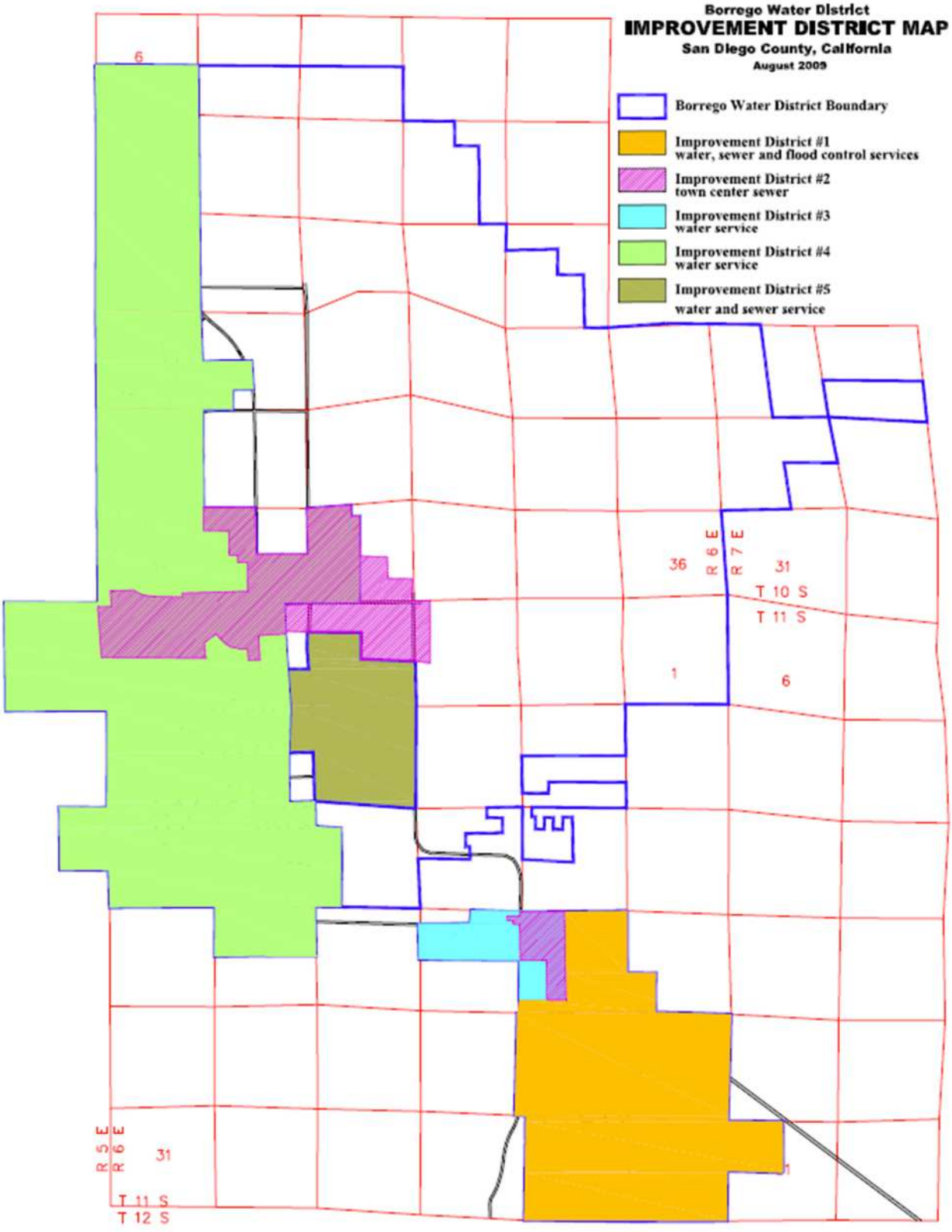
*SOI Adopted: 1 / 6 / 1986*
*SOI Affirmed: 8 / 6 / 2007*
*SOI Affirmed: 10 / 1 / 2007*
*SOI Affirmed: 2 / 4 / 2013*

*SOI = Sphere of Influence*




**BWD Improvement District Map**

THE CALIFORNIA DEPARTMENT OF
**WATER RESOURCES**

# Sustainable Groundwater Management Grant Program

*Helping communities promote the sustainable use of groundwater*

**The mission** of the SGM Grant Program is to provide funding to Groundwater Sustainability Agencies (GSAs) and other responsible entities under SGMA to promote healthy and sustainable groundwater basins, to reduce and eliminate undesirable effects, and to promote projects that provide multiple benefits while also improving groundwater supply and quality.

**The vision** of the SGM Grant Program is to achieve sustainable water balance in California, where GSAs and other responsible entities work cooperatively and innovatively to manage surface and groundwater together in a holistic and integrated manner.

To achieve our mission and vision we:

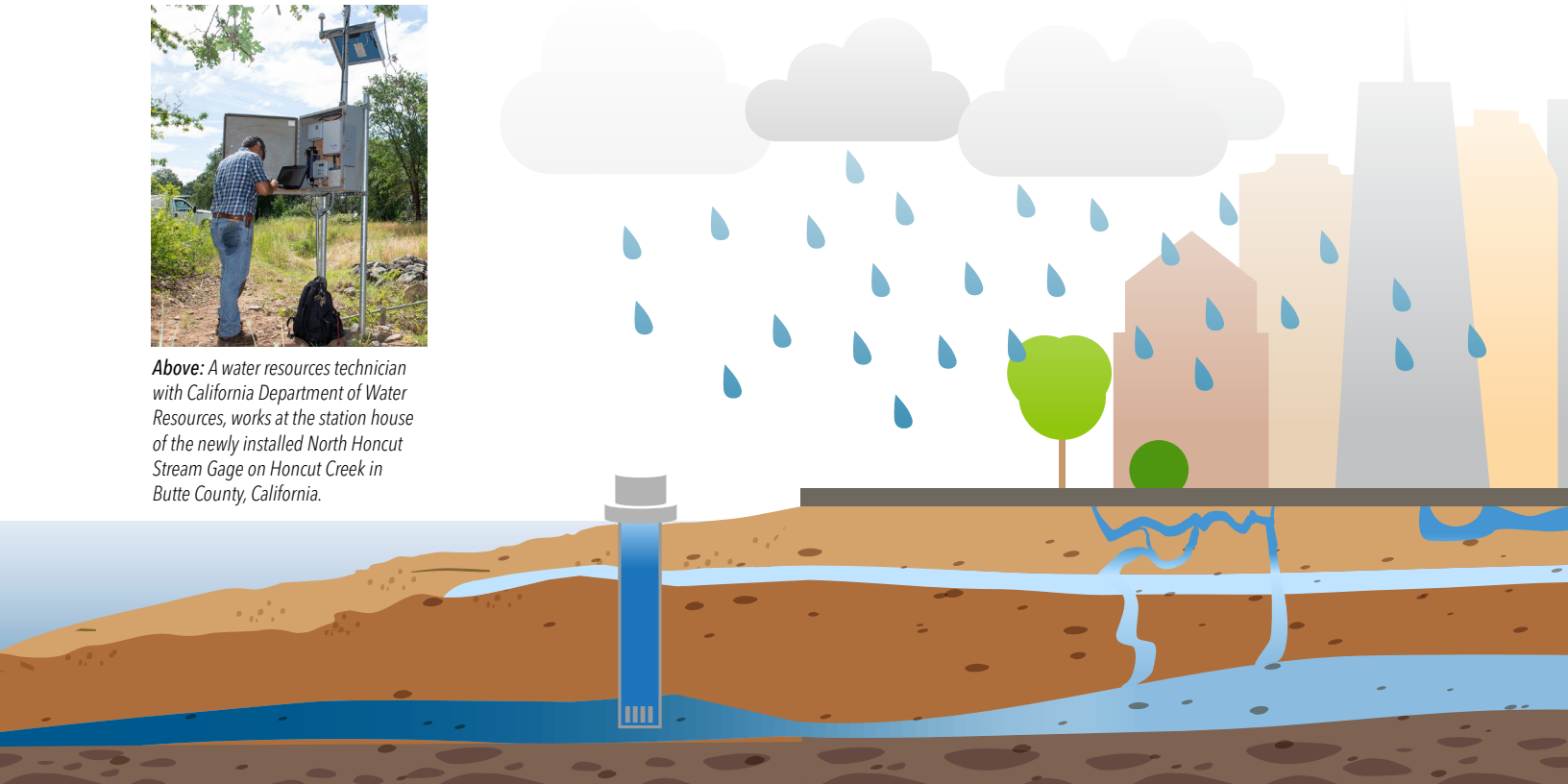
- Offer funding for projects that promote the sustainable use of groundwater
- Educate the public on groundwater sources, uses and ways to sustainably manage groundwater
- Provide a mapping tool that identifies the location and benefits of groundwater projects
- Offer technical assistance for Tribes and other underrepresented communities

## Tentative Schedule for the SGMA Implementation Grant Solicitations

| Milestones | Tentative Date* |
|---|---|
| SGMA Implementation Round 2 Grant Solicitation Opens | Opens October 2022 |
| SGMA Implementation Round 2 Grant Solicitation Closes | End of November 2022 |
| Announce SGMA Implementation - Round 2 Grant Draft Award List | April 2023 |
| Announce Final SGMA Implementation Grant Award List | July 2023 |



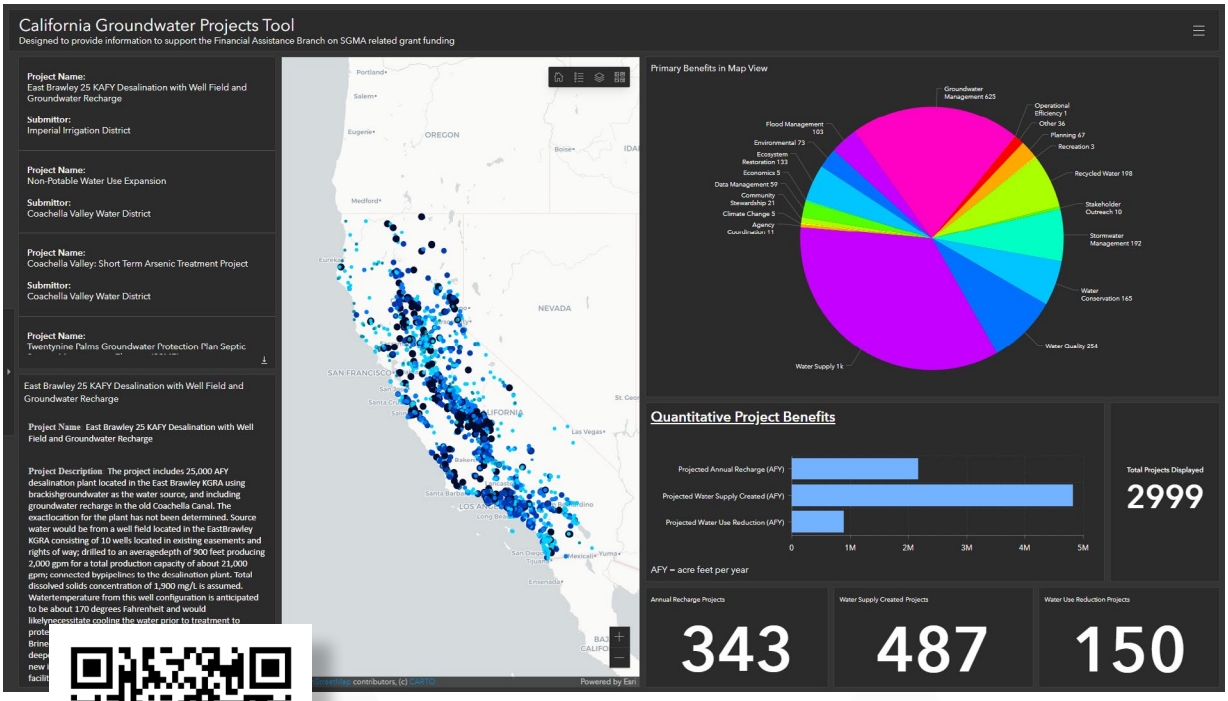
***Above:*** *A water resources technician with California Department of Water Resources, works at the station house of the newly installed North Honcut Stream Gage on Honcut Creek in Butte County, California.*



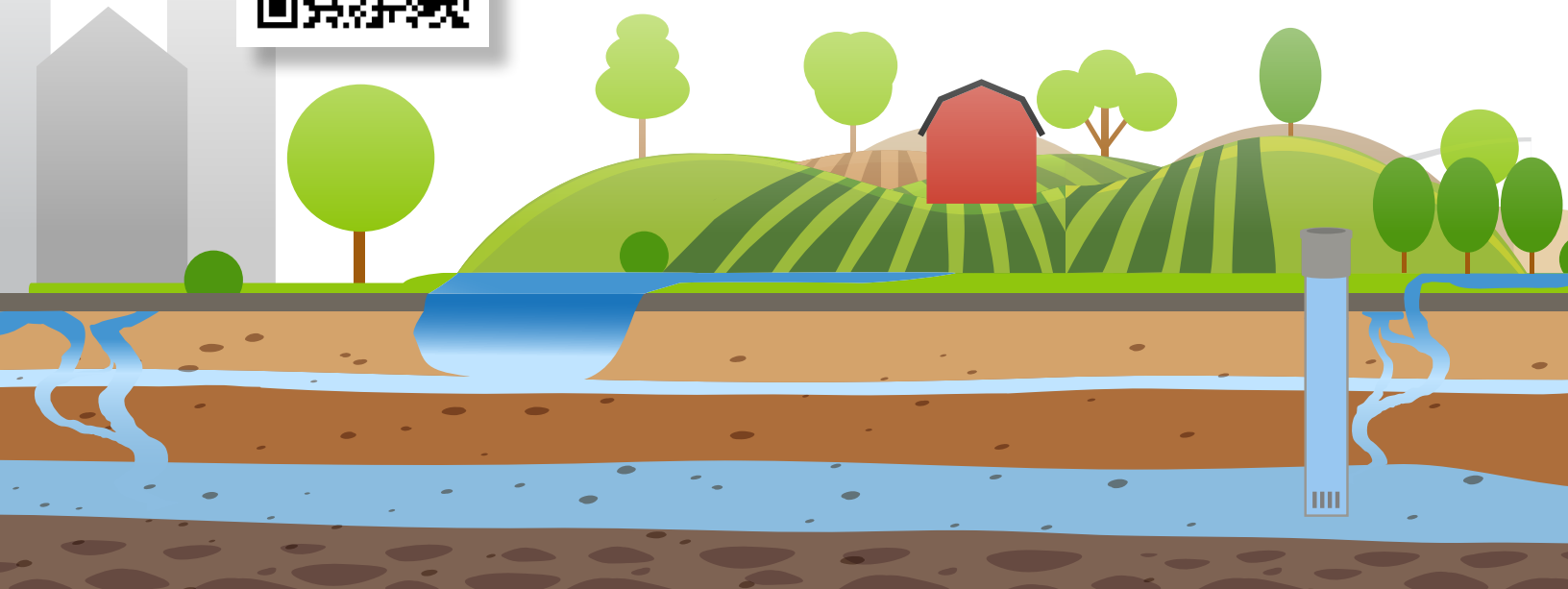
# *California Groundwater Projects Tool:*

The California Groundwater Implementation Projects Protocol Tool is an interactive map application that allows users to view groundwater management project information in a digital format. The tool is intended to provide information on outcomes from grant funded SGMA related projects as well as potential SGMA related projects.

- Explore an online database of nearly 3,000 groundwater recharge projects
- Understand individual project benefits and effectiveness
- Includes details of different project types and key protocols for monitoring a project post-construction to track measurable evaluation of benefits
- View more than 20 case studies to learn more about real groundwater projects throughout the State




***Above:*** *A screenshot of the California Groundwater Projects Tool dashboard allows users to the filter projects by geographical boundaries, project type, sustainability indicator, or outcome.*

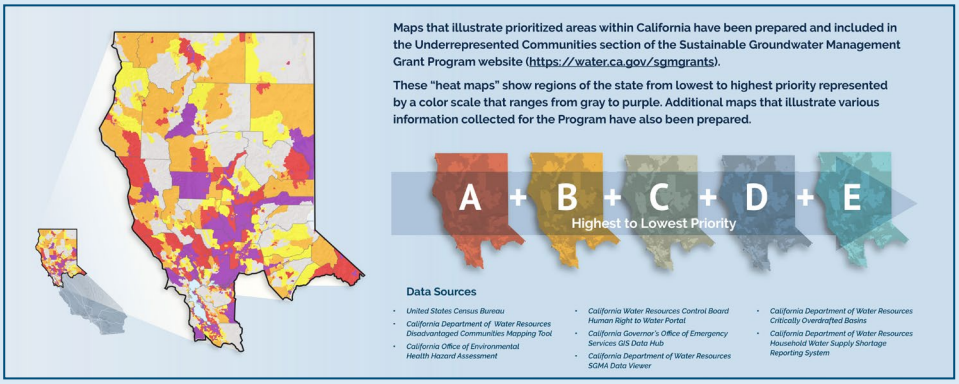


# *Underrepresented Community Technical Assistance Program:*

DWR's Underrepresented Community Technical Assistance Program provides support to water systems in Tribal Communities and underrepresented communities by:

- Identifying the community's needs, risks and vulnerabilities with respect to implementing SGMA
- Identify potential projects for future funding
- Providing educational materials in multiple languages on groundwater and SGMA
- Educating on the basics of the SGMA and the role and responsibilities of the entity responsible for implementing SGMA in their geographic area


***Above:*** *A screenshot of a social media graphic developed to engage underrepresented communities.*




***Above:*** *A screenshot of the community maps developed to represent regions of the state from lowest to highest priority by a color scale that ranges from gray to purple.*

## For more information:

**water.ca.gov/SGMGrants**

**or contact the SGM Grant Program:**

**sgwp@water.ca.gov**

**Underrepresented Community Technical Assistance Program:**

**water.ca.gov/URCTAProgram**

**California Department of Water Resources**

715 P Street, Sacramento, CA 95814

**water.ca.gov**

## Table 1 – Sustainable Groundwater Management (SGM) Grant Program's SGMA Implementation – Round 1

Disclaimer: The Recommended Award are conditional until final terms and conditions are agreed upon and an agreement has been executed. The awarded grant amount listed in the executed agreement can be less than the Recommended Award amount listed here based upon final negotiations between the Awardee and DWR. DWR staff may determine certain tasks are not eligible or do not meet the requirements outlined in the 2021 SGM Grant Program Guidelines and 2021 SGM Grant Program Implementation PSP and are subject to change. DWR staff may also determine that certain components provided in the application would be better suited combined into one for ease of quarterly reporting and closeout reporting.

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| **3-001/ Santa Cruz Mid-County** | **Santa Cruz Mid-County Groundwater Agency** | **Santa Cruz Mid-County SGMA Implementation – Planning and Projects Grant** | | | **$10,090,000** | **$7,600,000** |
| | | | Cunnison Lane Groundwater Well | This Component is a planned groundwater extraction well that will assist with reducing reliance on groundwater pumping from wells near the coast and increase pumping more inland. This Component would extract an average of 426 acre-feet per year (afy) with the operations of Pure Water Soquel and could be reduced to 329 afy when the City's Aquifer Storage and Recovery (ASR) wells were brought on-line. In addition, is expected to increase the groundwater elevations in the Basin and modeling results are included in the GSP. | $2,500,000 | $1,675,000 |
| | | | Aquifer Storage and Recovery, Beltz Well 10 | ASR would inject excess surface water, treated to drinking water standards, into the natural structure of the Santa Cruz Mid County Groundwater Basin (MCGB) for use as an underground storage reservoir, and extract this stored water during periods of water supply shortages, or drought. The ASR project modeled for the GSP optimizes existing City infrastructure, demonstrating that this as an efficient use of available resources. Drinking water stored in the Basin as a result of an ASR project would provide a drought supply for the City service area and any ASR project would need to be designed with additional capacity to contribute to the restoration of the Basin. | $2,700,000 | $1,650,000 |
| | | | Park Avenue Transmission Main/Bottleneck Improvements | The Component increases the intertie connection of the District's Sub Area 1 and Sub Area 2 which will mitigate current hydraulic restrictions due to an undersized water main in this region and allow for more optimal redistribution of municipal groundwater pumping. The current 1380 LF 8-inch distribution pipeline (AC and CI material) will be replaced by a 12" PVC transmission line from the existing 12" McGregor transmission main and Pump Station to Subec Lane. This corridor is an important network that will increase system reliability and allow more flexibility to reduce groundwater extraction of the District's coastal wells and shift pumping more inland. | $800,000 | $800,000 |
| | | | Technical Development of Group 1 and 2 Projects | Modeling to refine the development of projects in the GSP for implementation. Groundwater and hydraulic modeling will compare and contrast Group 1 and Group 2 projects and consider additional IPR and ASR implementation with potential conjunctive use of resources between agencies. Together with water quality and economic analyses, sufficient data will then exist to develop an efficient and highly-optimized plan. Task 2 is the compilation of the data into an implementation plan that will include defined projects, timelines, budgets and operational strategies for all basin users as appropriate. | $1,900,000 | $1,900,000 |
| | | | Sustainable Groundwater Management Evaluation and Planning | This Component includes activities grouped into two Task that are essential to informing the MGA's assessment of progress towards achieving sustainability in the Basin (Task 1) as well as Basin planning and reporting activities required under the Sustainable Groundwater Management Act (Task2). | $1,575,000 | $1,575,000 |
| | | | Inland Groundwater Pumping Optimization | This Component is included in Group 1 of the GSP Project and Management Actions: 'Installation and Redistribution of Municipal Groundwater Pumping'. As Soquel Creek Water District operates a network of 16 active wells, the pumping and redistribution of groundwater extraction to wells more inland is a critical component to basin sustainability. In addition, the District will continue to implement groundwater adaptive management and extraction for various groundwater wells such that inland wells near the Pure Water Soquel's seawater intrusion prevention wells (SWIP) will continue to be optimized. | $615,000 | $0 |
| **3-002.01/ Pajaro Valley** | **Pajaro Valley Water Management Agency** | **Pajaro Valley Sustainable Groundwater Project** | | | **$10,000,000** | **$7,600,000** |
| | | | College Lake Integrated Resources Management Project | Develop facilities to use College Lake water as an alternative to groundwater for ag irrigation to help eliminate overdraft and seawater intrusion. Project will increase storage capacity of the lake to 1,700 AF and supply between 1,800-2,300 AFY of water. | $10,000,000 | $7,600,000 |
| **3-004.01/ Salinas Valley - 180/400 Ft Aquifer** | **Salinas Valley Basin GSA** | **180/400-Foot Aquifer Groundwater Sustainability Plan Implementation Phase 1** | | | **$9,659,500** | **$7,600,000** |
| | | | Grant Administration | | $600,000 | $400,000 |
| | | | Dry Chlorine Scrubber Upgrade at Monterey One Water Recycled Water Plant | This component will include design and installation of a dry scrubber system for the Salinas Valley Reclamation Project (SVRP) which is owned and operated by the Monterey One Water (M1W) Recycled Water Plant and will allow the recycled water system to operated year-round, which will improve both the ability to reliably irrigate agricultural land with recycled water and the sustainability of the Salinas Valley Groundwater Basin and decrease the need to rely on groundwater. This component will enable reduced use of MCWRA's Supplemental Wells during wintertime chlorine system shutdowns by approximately 345 acre-feet per year, which will reduce the potential for increased seawater intrusion by improving the overall water balance of the groundwater basin and maintaining the groundwater elevations in the vicinity of these wells, which primarily draw water from the 400-Foot Aquifer of the Subbasin. | $1,185,000 | $1,185,000 |
| | | | Castroville Seawater Intrusion Project Distribution System Upgrades | This component enhances water production and conveyance in the Castroville Seawater Intrusion Project (CSIP) Distribution System through several upgrades. The first upgrade involves creating a dynamic hydraulic modeling, using information from already installed Remote Monitoring Units (RMUS) to track water use at turnouts. This modeling will enable CSIP operators to identify the most critical conveyance deficiencies, including use of algorithms for meeting demands in a variety of seasonal and diurnal water use scenarios, then uses the modeling to implement a water scheduling system whereby farmers submit water orders, and water deliveries are scheduled to increase the use of recycled and River water. This Component will also upgrade critical CSIP pipeline, specifically at the A-1 Monitoring Station, to be able to convey higher flows to most of the CSIP system and to optimize pressure. | $2,500,000 | $2,150,000 |
| | | | Stakeholder Outreach and Engagement | This component provides stakeholder outreach and engagement activities by the SVBGSA for feasibility assessments completed and for the demand management discussions. Extensive stakeholder outreach and engagement is necessary to refine projects, assess feasibility and gain project cost understanding. This project will potentially provide additional stakeholder outreach and engagement to DACs and SDACs in the subbasin with the intent to keep these communities engaged in feasibility assessment and basin conditions as projects are completed. | $430,000 | $279,500 |
| | | | Conduct Feasibility Study on Aquifer Storage and Recovery | This component will conduct a feasibility assessment of Salinas River Diversion Facility (SRDF) Winter Flow Injection (Preferred Project 9 in the 180/400-Foot Subbasin GSP) which would divert winter flows from the Salinas River using the existing SRDF facilities and inject the water into the 180/400-Foot Aquifer Subbasin to maintain groundwater elevations, improve water quality, and prevent further seawater intrusion, or alternatively, diverted water could be treated used for beneficial reuse that would reduce groundwater pumping. The feasibility assessment will include technical feasibility as well at determining the operational permitting constraints and alignment with existing water rights and permitting and the future Habitat Conservation Plan for the reservoir operations. | $500,000 | $300,000 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | Demand Management Feasibility | This component will assess the feasibility of a Demand Management Program within the Subbasin to determine which demand-side management projects could reduce the total volume of supply that needs to be generated to reach sustainability as well as determining how extraction can be fairly divided and managed within the Subbasin. | $204,000 | $200,000 |
| | | | Compliance Reporting and Data Expansion | This component will create additional data sets (the Aquifer properties test, and well registrations and metering) in order to fill gaps in the data system and complete two Annual Reports during the grant period. The Aquifer properties tests will provide characterization data for the aquifer that was identified as a data gap in the 180/400-Foot Aquifer GSP. The well registration will establish a relatively accurate count of all active wells in the Subbasin. Well metering will improve estimates of the amount of groundwater extracted from the 180/400-Foot Aquifer (well metering will not include de minimis well users). | $2,090,500 | $1,850,500 |
| | | | Operationalize Deep Aquifer Study Recommendations | This component will begin the Deep Aquifer Study focusing on the outcomes and recommendations including guidance for management. SVBGSA will work with agency partners on the study to ensure the study and the resulting long-term local and regional management will promote groundwater sustainability as defined in the GSP. | $550,000 | $40,000 |
| | | | Conduct Feasibility Study for Seawater Intrusion Pumping Barrier with Evaluation of Brackish Water Treatment for direct Municipal Use | This component will conduct feasibility studies for the Seawater Intrusion Pumping Barrier which will focus on evaluating the technical efficacy of groundwater desalting and developing conceptual facility concept s and estimates of capital and operating costs. Additional feasibility analysis will include well location determination, land acquisition needs, conveyance and distribution systems, and end-user assessment. Discussions with Monterey One Water and other agencies will lead to a conceptual agreement on the brine disposal options for the desalting plant. The feasibility study will include outreach to address the willingness and ability of beneficial users, including agriculture and domestic users, to fund the project. | $1,600,000 | $1,195,000 |
| **3-004.06/ Salinas Valley - Paso Robles Area** | **County of San Luis Obispo** | **Paso Robles GSP Projects and Management Actions Implementation – Phase 1** | | | **$10,000,000** | **$7,600,000** |
| | | | Grant Administration | | $250,000 | $250,000 |
| | | | City of Paso Robles Recycled Water Project | Build infrastructure to deliver recycled water from WWTP to east Paso Robles to be used as irrigation for parks, golf courses, and vineyards, in lieu of pumping. This project will have the capability to deliver up to 4,900 AFY to east Paso Robles. Excess water not used for irrigation will be discharged to the Huero Creek for additional recharge benefits. | $3,500,000 | $3,500,000 |
| | | | San Miguel Recycled Water Project | Upgrade infrastructure to WWTF to produce irrigation water for agricultural vineyards, in lieu of pumping. This project could provide between 200 and 450 AFY of water. Included infrastructure to be built is a new recycled water pumping station, pipeline, and turn-out infrastructure to provide water delivery. | $1,000,000 | $1,000,000 |
| | | | Address GSP Data Gaps – High Priority | This project will expand and improve the existing basin monitoring network by adding monitoring wells, stream gauges, and climatologic stations in areas where data gaps exist. This will provide improved understanding of the hydrogeologic conceptual model of the basin by combining existing data with new data. | $1,400,000 | $1,400,000 |
| | | | High Priority Management Actions | 1. A well verification and registration program will be created to obtain spatial of groundwater use is correct and will help fill data gaps. 2. Non-De minimis GW pumpers will be required to report extractions annually. 3. Develop and implement a drinking well impact mitigation program to protect drinking water wells. 4. Develop and implement a voluntary multi-benefit land repurposing program that will facilitate the conversion of high-water use irrigated agricultural land to low water use agriculture use or open space | $800,000 | $800,000 |
| | | | Supplemental Water Supply Feasibility / Engineering Studies | Engineering study to assess the feasibility of a proposed blending facility and pump stations to blend water from the city of Paso Robles and the Nacimiento Water Project to be used as irrigation water. Another Engineering study to evaluate the potential benefits of increasing the storage capacity of the Salinas Dam. | $650,000 | $650,000 |
| | | | Medium Priority Management Actions | Develop and implement a regulatory program to equitably allocate a groundwater Base Pumping Fee and Allocation. Once the program is implemented, individual non-de minimis pumper's will be provided an annual groundwater BPA which may be based on historically used quantities of water. | $700,000 | $0 |
| | | | Groundwater Basin Recharge Technical / Engineering Studies | Engineering study to assess the feasibility of developing floodplain / stream channel modifications, perform design alternatives analyses and develop recommendations for the final project design | $400,000 | $0 |
| | | | Address Data Gaps – Medium Priority | Address medium priority data gaps to update and recalibrate the basin hydrogeologic model. These locations are to be determined after results have been gathered from filing the high priority data gaps. | $250,000 | $0 |
| | | | SGMA Compliance Activities | Preparation of GSP Annual Reports, Bi-Annual monitoring of Basin Conditions, and regular updates of the GSP. | $1,050,000 | $0 |
| **3-013/ Cuyama Valley** | **Cuyama Basin GSA** | **Cuyama Basin Groundwater Sustainability Spending Plan** | | | **$10,080,000** | **$7,600,000** |
| | | | Grant Administration | | $300,000 | $300,000 |
| | | | Ongoing Monitoring and Enhancements | Enhancements to the entire Basin's monitoring network which includes the installation of piezometers, installation of dedicated monitoring wells, DMS enhancements, groundwater levels and quality monitoring, and stream gages. This will provide additional data to ensure accurate and informed management and decision making within the basin. | $3,130,000 | $3,130,000 |
| | | | Project Management Action Implementation | This project includes updating and calibration of the CBWRM Model, developing and implementing framework for pumping allocations, analysis of water management action implementation options, providing adaptive management support, performing a precipitation enhancement technical analysis, and performing a technical analysis of flood and stormwater capture for the Basin. | $965,000 | $965,000 |
| | | | GSP Implementation, Outreach, and Compliance Activities | This project includes continued program management for GSP implementation activities, continued stakeholder engagement and community outreach, the preparation of annual reports, modifying the GSP to respond to the DWR determination letter, and preparing the five-year GSP update. | $3,050,000 | $3,050,000 |
| | | | Improving Understanding of Basin Water Use | This project includes the development of an updated satellite-based survey off basin-wide land use 2021 to better understand current and cyclical land use trends, as well as to improve estimation of water use in the Basin. The improved understanding will assist with the implementation of components 3 & 4. | $155,000 | $155,000 |
| | | | Additional Dedicated Monitoring Well Installation in Lower Priority Areas | This project includes the installation of additional dedicated monitoring wells in lower priority areas. This additional information would benefit the basin but in lower priority areas. | $1,380,000 | $0 |
| | | | Flood and Stormwater Capture Detailed Feasibility Study | This project includes preparing a detailed feasibility study for flood and stormwater capture in the Basin to provide additional groundwater supplies, alleviate groundwater quality issues, and reduce long-term economic cost associated with groundwater pumping. | $1,100,000 | $0 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| **4-006/ Pleasant Valley** | **Fox Canyon GMA** | **Implementation Project for the Pleasant Valley Basin** | | | **$10,957,398** | **$7,600,000** |
| | | | Grant Administration | Grant Administration | $150,000 | $0 |
| | | | PVCWD Recycled Water Connection Pipeline | Install 5,300 ft of 24-inch HDPE connecting the east and west zones of the District's distribution system to more effectively distribute up to 4,000 AFY of recycled water and an additional 1,000 to 2,000 AFY of water from the Conejo Creek. | $5,600,000 | $5,260,000 |
| | | | PVCWD Private Reservoir Program | Outreach, developing a database of existing private storage volume, preparing the program framework, projecting the costs and benefits, piloting the program with 2 customers, modifying the plan as necessary, and implementation over the course of 2 years. | $590,000 | $550,000 |
| | | | FCGMA Install Multi-Depth Monitoring Wells at Three Locations in the Pleasant Valley Basin | Installation of multi-depth monitoring wells at 3 locations, fill spatial data gap in understanding aquifer conditions for reporting both groundwater levels and change in storage for the annual reports. Data from the construction of the wells will help define aquifer properties in each of the principal aquifers. | $2,550,158 | $1,075,000 |
| | | | FCGMA Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies, the Semi-Perched Aquifer, and the Principal Aquifers | Installation of three shallow monitoring wells to assess groundwater conditions along Arroyo Las Posas, Conejo Creek, and Calleguas Creek. These wells will be used to help understand the relationship between surface water and groundwater along the stream courses. Data from the construction of the wells will help define aquifer properties in the younger and older alluvium, and data on groundwater conditions in these wells will be used to help assess whether riparian vegetation is accessing groundwater in the Shallow Alluvial Aquifer. | $493,442 | $382,500 |
| | | | Camarillo Stormwater Diversion to WRP Feasibility Study | Feasibility Study of diverting stormwater flows from the stormwater collection system to the Water Reclamation Plant (WRP) to be treated and turned into recycled water for agriculture irrigation purposes. This project would increase the amount of recycled water provided to farmers. Any excess recycled water produced by the WRP will be distributed to the Camrosa Water District via an existing connection where the recycled water is then used for agricultural uses as well. This is a multi-benefit project in that it helps the recharge basin and keep it sustained, helps the region comply with the regional MS4 Permit, as well as supply the farming community with recycled water thereby reducing water use from the basin. | $350,000 | $332,500 |
| | | | Camarillo Airport Feasibility Study | Feasibility study seeks to investigate diverting stormwater flows from the Camarillo Hills Drain to an underground infiltration or detention basin for groundwater recharge. This project also helps with compliance of TMDL's for Revlon Slough and Beardsley Wash. The study would investigate and propose a suitable location, provide required testing, and other reports as required to fully evaluate project feasibility. | $300,000 | $0 |
| | | | Camarillo Desalter Expansion Feasibility Study | Feasibility Study will look to expand the North Pleasant Valley Desalter Treatment Facility (Desalter) to increase the amount of groundwater treated by the facility for the benefit of regional agencies and multiple basins. Benefits of the project could include treating additional brackish groundwater in the Pleasant Valley Basin so that it could be used by Camarillo or other agencies thereby reducing groundwater demand in neighboring areas. | $350,000 | $0 |
| | | | Camarillo Hills Drain Diversion to WRP Feasibility Study | Feasibility Study of diverting a portion of stormwater flows from the Camarillo Hills Drain near the Camarillo Airport to the Camarillo Sanitary District (CSD) sanitary sewer Pump Station No.3 near the intersection of Las Posas Road and Pleasant Valley Road where stormwater would be pumped approximately 4 miles east to the CSD Water Reclamation Plant (WRP). The WRP could treat the stormwater flows and produce reclaimed water to be used for irrigation purposes in the Camarillo and Camrosa Services areas. This is a dual benefit project in that it helps recharge the basin as well as comply with the regional MS4 Permit requirements for TMDL's for Revlon Slough and Beardsley Wash. | $300,000 | $0 |
| | | | FCGMA Pleasant Valley Basin Transducer Installation | This project proposes installation of transducers in seven representative monitoring points, or key wells in the Pleasant Valley Basin. Fill data gaps to contour spring high and fall low groundwater conditions in the basin and better understanding of whether the basin is being managed sustainably. The temporal data gaps have persisted in reporting groundwater levels in storage for the annual reports. The addition of transducers will help ensure that spring high and fall low water levels are collected from the representative monitoring points within a 2-week window, as recommended by DWR. | $123,798 | $0 |
| | | | Camarillo Infiltration Basin Feasibility Study | The Camarillo Sanitary District (CSD) has an existing flood management project near the Water Reclamation Plant (WRP) and this project request would study the feasibility of adding stormwater infiltration or detention areas to the west of the WRP. The study would investigate and propose a suitable location, provide required testing, and other reports as required to fully evaluate project feasibility. Communities served include the City of Camarillo and unincorporated areas of Ventura County. Study to be completed within 2 years. | $300,000 | $0 |
| **4-022.02/ Oxnard** | **Fox Canyon GMA** | **Implementation Project for the Oxnard Subbasin** | | | **$13,836,448** | **$7,600,000** |
| | | | Grant Administration | Grant Administration | $150,000 | $0 |
| | | | UWCD Ferro-Rose Artificial Recharge of Groundwater | Expansion and extension of existing conveyance structures and connection to Ferro-Rose basin to allow for more recharge and to increase diversions from the Santa Clara River during high-flow events when suspended sediment concentrations are high. Increased volume of diverted water will be used for artificial recharge and conjunctive use in Oxnard Basin, and a smaller amount for conjunctive use in Pleasant Valley Basin. The PTP and PVP areas will receive surface-water deliveries for conjunctive use, reducing pumping in those areas, which will increase groundwater elevations and improve groundwater quality, while reducing potential for subsidence. The El Rio and north Oxnard areas, with their severely disadvantaged and underrepresented communities, as well as their small mutual water companies, will be the most direct and immediate communities to benefit, particularly with increased groundwater levels and groundwater in storage, and with improved groundwater quality and also with reduced potential for seawater intrusion or land subsidence. | $4,000,000 | $2,510,300 |
| | | | UWCD Laguna Road Recycled Water Interconnection | New interconnection pipeline to allow conveyance of recycled water from PVCWD's system to United's Pumping Trough Pipeline (PTP) system to allow full utilization of available recycled water. This interconnection will also allow delivery of water from the PTP system to the PVCWD distribution system when such movement would optimize conjunctive use opportunities to improve sustainable yield in the Pleasant Valley Basin. Benefits of using more recycled water in the PTP system, and optimizing supplies for the Pleasant Valley Pipeline (PVP) system, will include higher groundwater levels, more groundwater in storage, improved groundwater quality, and reduce potential for seawater intrusion or land subsidence in both Oxnard and Pleasant Valley Basins. The PTP area will receive additional recycled water for agricultural use, reducing pumping in those areas, which will increase groundwater elevations and improve groundwater quality, while reducing potential for subsidence. | $4,225,000 | $2,651,500 |
| | | | UWCD Monitoring Well Construction and Data Collection for Design of Extraction Barrier and Brackish Water Treatment | Construct up to six monitoring well clusters and collect data in vicinity of United's proposed Extraction Barrier and Brackish Water Treatment Project to aid in optimizing design and will be used to collect groundwater quality and level data from the aquifers that will be pumped as part of the extraction barrier, as well as the Semi-perched Aquifer. The data collected from these wells will be used to: 1) refine understanding of horizontal and vertical conductivity of the aquifers and confining layers; 2) provide additional data regarding geochemistry of the aquifers; and 3) assess whether contaminants in the Semi-perched aquifer are likely to migrate toward the extraction wells, now or in the future. | $2,100,000 | $1,317,900 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | FCGMA Installation of 3 Monitoring Wells to Assess the Hydraulic Connectivity Between Surface Water Bodies, the Semi-Perched Aquifer, and the Principal Aquifers | Installation of 3 shallow monitoring wells to assess groundwater conditions along the Revolon Slough, Calleguas Creek, and the Santa Clara River. Fill data gaps in the understanding how surface water and shallow groundwater interact with the deeper primary aquifers in the Oxnard Subbasin to help understand the relationship between surface water and groundwater adjacent to the waterways and help define aquifer properties in the semi-perched aquifer and Oxnard Aquifer, and data on groundwater conditions in these wells will be used to help assess groundwater gradients that may influence the source of water for GDEs. | $493,442 | $382,500 |
| | | | FCGMA Install Multi-Depth Monitoring Wells at Two Locations in the Oxnard Subbasin | This project proposes installation of multi-depth monitoring wells at two locations in the Oxnard Subbasin to assess groundwater conditions in the principal aquifers in the areas of the Oxnard Subbasin that lack data. The addition of multi-depth monitoring wells, completed in each of the principal aquifers in these locations ill help refine the understanding of groundwater flow directions and vertical gradients in the vicinity of areas for which there is little available data | $1,700,580 | $737,800 |
| | | | FCGMA Destruction of Wells to Reduce Interaction between Upper and Lower Aquifer Systems | This project proposes identifying and destroying up to 10 wells in the Oxnard Subbasin in order to reduce the aquifer cross-connection provided by boreholes that are screened in multiple aquifers. Previous investigations of Oxnard Subbasin determined that water can migrate vertically through casings of wells that have been abandoned. Groundwater quality sampling and the results of numerical groundwater modeling indicate that seawater that has intruded into the UAS in the vicinity of Point Mugu may migrate vertically into the Lower Aquifer System contributing to poor water quality in the Hueneme, Fox Canyon, and Grimes Canyon Aquifers in this area. | $1,008,664 | $0 |
| | | | Oxnard Sub Transducer Installation | This project proposes installation of transducers in nine representative monitoring points (key wells) to help fill temporal data gaps in the understanding of aquifer conditions in the Oxnard Subbasin. These data gaps limit the number of wells that can be used to contour spring high and fall low groundwater conditions, which then limits the understanding of whether the Subbasin is being managed sustainably. The temporal data gaps have persisted in reporting groundwater levels in storage for the annual reports. | $158,762 | $0 |
| **5-022.01/ Eastern San Joaquin** | **Eastern San Joaquin Groundwater Authority** | **Eastern San Joaquin Subbasin Sustainable Groundwater Management Grant Application** | | | **$12,242,000** | **$7,600,000** |
| | | | Grant Administration | | $580,000 | $100,000 |
| | | | Eastern San Joaquin Geophysical Investigations and Groundwater Recharge Program | Development & Geotechnical Characterization and Groundwater Storage Pre-Design & Constraint; which includes geophysical and geotechnical analysis of Water Available for Recharge (WAFR) and recharge sites; analysis of floodplain expansion opportunities; coordination and outreach with growers; pilot and demonstration recharge activities; modeling of benefits and impacts; project formulation, screening and selection of a preferred design alternative. Then the Mokelumne Recharge Flood Plan Enhancement - Environmental/Design which will consist of development of preferred project and an Environmental Impact Report (EIR) and Preliminary Design Report. | $5,500,000 | $3,350,000 |
| | | | Delta Water Supply Project (DWTP) Groundwater Recharge Improvements Project Geotechnical Investigation | Geotechnical investigation and hydrogeologic characterization of a portion of the Delta Water Supply Project (DWTP) site for direct groundwater recharge and recovery potential. Specifically, the purpose of this effort is to conduct a subsurface investigation at the DWTP site to determine soil profile characteristics for suitability of infiltrating surface-applied water for direct recharge: subsurface lithology, groundwater levels, potential storage volume (volume of water that can be recharged and recovered while avoiding local impacts), specific yield, hydraulic conductivity, and water quality. Data acquired and conclusions from this first phase work effort will be used to confirm the feasibility of a direct DWTP site recharge project. Engineering design, environmental review, water rights and project funding will be the focus of a future project (phase II) provided the results of this work confirm the suitability of this site for groundwater recharge and recovery. | $800,000 | $250,000 |
| | | | North San Joaquin Water Conservation District North System Improvement Project - Phase 1 | The District's North System Improvement Project – Phase 1 will enable the District to use surface water when available to recharge the Subbasin and includes the following: 1) modernization of the North System pump station; 2) modernization of a portion of the North System pipeline; 3) implementation of a direct groundwater recharge project on land known as the Lakso property; 4) extensive landowner outreach to add surface water users for irrigation and additional parcels for FloodMAR. | $5,362,000 | $3,900,000 |
| **5-022.04 / Merced** | **Merced Irrigation Urban GSA** | **Merced Subbasin 2022 GSP Implementation and Sustainability Program** | | | **$13,699,885** | **$7,600,000** |
| | | | Grant Administration | This component will provide the general grant oversight and management and ensure invoicing, reporting, and deliverables are turned in on time and in the final format. This will include preparing reports detailing work completed during reporting period as outlined in a grant agreement. | $100,000 | $100,000 |
| | | | LeGrand-Athlone Water District Intertie Canal - Phase 2 | The LGAWD Intertie Canal would capture and store floodwaters by constructing an approximately 2-mile canal to connect MID's Booster Lateral 3 to Dutchman Creek northeast of Santa Fe Road. The new Intertie Canal would be built to convey 125 cubic feet per second (cfs) of floodwater for Flood Managed Aquifer Recharge (Flood-MAR) on approximately 40,000 acres of productive farmland in the Merced Subbasin. | $1,000,000 | $1,000,000 |
| | | | Merced Subbasin Integrated Managed Aquifer Recharge Evaluation Tool (MercedMAR) | The component involves enhancing the Merced Water Resources Model (WRM) and Groundwater Recharge Assessment Tool (GRAT) models then integrating the models into a robust, user-friendly tool that runs recharge opportunities and optimization scenarios across the Subbasin with the ultimate aim of informing sustainable groundwater management decisions in the Merced Subbasin. | $725,000 | $725,000 |
| | | | Vander Dussen Subsidence Priority Area Flood-MAR Project | This component will build a 1.25 mile earthen canal from Merced Irrigation District's El Nido Canal to and 685-acres of agricultural fields, of which approximately 325-acres are located within Sandy Mush Mutual Water Company and 333-acres in the Madera County GSA. With 90 days of flood flows, the 20 cubic feet per second (CFS) canal will yield ~3,600 acre-feet (AFY) of recharge. | $798,735 | $798,735 |
| | | | Vander Woude Storage Reservoir | The component will build a 30-acre storage reservoir with a capacity of 250 acre-feet (AF). The component will divert flood water from Mariposa and Owens Creeks and store it for later use to meet crop demand and/or Flood-MAR. The total project benefit is 900 AFY. | $300,000 | $300,000 |
| | | | Filling Data Gaps Identified in Data Gaps Plan | This component completes a planning project of filling in the data gaps identified in the Merced Data Gaps Plan. Filling these gaps will help to improve scientific understanding, support ongoing basin management and policy making and can be used in developing future updates to the GSP. | $400,000 | $400,000 |
| | | | Amsterdam Water District Surface Water Conveyance and Recharge Project | This component estimates a benefit of 6,580 acre-feet per year (AFY). A pipeline component would build approximately 1-mile of 21" pvc pipeline to convey surface water from Canal Creek to an existing 125 acre-foot irrigation reservoir. 3 recharge ponds would be built totaling approximately 53-acres. | $100,000 | $100,000 |
| | | | GSP Project 31: Crocker Dam Modification | This component will provide construction of groundwater recharge conveyance system infrastructure and also provide flood protection, climate change mitigation, reduction in potential evacuation events, increased water reliability, recreational opportunities, and habitat creation. In addition, this component encompasses installation of automatic gates at MID's Crocker Dam. | $1,500,000 | $1,500,000 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | G Ranch Groundwater Recharge, Habitat Enhancement & Floodplain Expansion Project - Planning | This component will consist of the planning, design, and environmental permitting of the combination of groundwater recharge ponds and floodplain re-establishment. This component will enhance 270-acres of existing wetlands and re-establish the remaining 169 acres of double-cropped farmland to floodplains. The entire component would be utilized for habitat enhancement and groundwater recharge. | $250,000 | $250,000 |
| | | | Merquin County Water District (MCWD) Sustainable Yield Management Plan and Plan Implementation | The management plan will include determination of optimal locations for recharge facilities as well as activities to minimize salinity of delivered water and evaluation of optimal location of pumping wells, pipelines, and long-term groundwater recharge needed for MCWD to be sustainable. Implementation plan will identify up to 300 acres of land where recharge activities could be conducted. | $66,000 | $66,000 |
| | | | Purdy Project (E. Purdy, W. Purdy, and Kevin Recharge Basins) (Project No. 38) | This component will recharge stormwater on 195.8 acres of farmland and will have the capacity to recharge up to 1,400 acre-feet/year of storm event run off captured during above normal and wet hydrologic year types by Stevinson Water District distribution facilities and the East Side Canal assuming a two-month period of operation when stormwater is available for recharge. | $110,400 | $110,400 |
| | | | Purdy Project (East Pike Recharge Basin) (Project No. 37) | The project will have the capacity to recharge up to 3,100 acre-feet/year of storm event runoff captured during above normal and wet hydrologic year types by Steninson Water District distribution facilities and the East Side Canal assuming a two-month period of operation during years when storm water is available for recharge. This recharge volume is equivalent to 4.68 inches per day of operation. | $73,750 | $73,750 |
| | | | Buchanan Hollow Mutual Water Company Floodwater Recharge Project | This component would complete a Groundwater Recharge and Recovery Suitability Study to determine the suitability of recharge within BHMWC. If the soils are deemed suitable for groundwater recharge and recovery, BHMW would construct up to three recharge ponds utilizing floodwater from Dutchman Creek. The total yield of the Project would be approximately 1,030 AFY. | $26,000 | $26,000 |
| | | | G Ranch Groundwater Recharge, Habitat Enhancement & Floodplain Expansion Project - Implementation | This component would consist of the implementation and construction of groundwater recharge ponds. This component would enhance 270-acres of existing wetlands and re-establish the remaining 169 acres of double-cropped farmland to floodplains. The entire component would be utilized for habitat enhancement and groundwater recharge, providing additional wetland habitat for migrating waterfowl. | $750,000 | $750,000 |
| | | | Turner Island Water District (TIWD) Water Conservation | This component would consist of the construction of a surface water reservoir and installation of pumps/piping to return water to the head of the TIWD system. It is believed that this storage/return system could be incredibly beneficial in further reducing demand on TIWD wells, potentially to the tune of an additional 750-1,000 AF per year. | $1,000,000 | $1,000,000 |
| | | | TIWD Shallow Well Drilling | This component would entail the construction of wells, screened above the Corcoran Clay to minimize subsidence impacts. This would require the scoping of the locations of the wells to ensure good production, followed by the drilling and installation of new wells at those desired locations. These shallow wells would be intended to replace existing deeper wells. | $500,000 | $400,115 |
| | | | MIUGSA Groundwater Extraction Measurement Program | This component would include in the installation of flow measurement devices throughout MIUGSAs, with the primary goal of collecting accurate groundwater extraction data from within the GSA. As part of the 2021 SGMA Implementation Grant, MIUGSA is proposing the installation of up to 200 flow meters on production wells within MIUGSA's boundaries | $1,500,000 | $- |
| | | | Deadman Creek Canal Off Stream Storage and Recharge | This component includes the construction of a 675-acre-foot storage and regulating reservoir situated on 160 acres (gross) and an 80-acre recharge project which will be built in stages following the separate estimated Spring 2022 completion of the 2-mile-long 100 CFS Deadman Creek Canal linking Deadman Creek and terminus ends of MID's Benedict and Case Beer canals with Lone Tree MWC's Fenceline canal. | $1,000,000 | $- |
| | | | Tri City's Water Recharge/Underground Storage Feasibility | This component will perform geo technical analysis to determine FloodMAR recharge feasibility and aquifer conditions to determine if a suitable aquifer or geological feature exists beneath the surface to store recharged water. Also the study will analyze the ability to recharge outside of Corcoran clay to benefit sub Corcoran water levels further west in the basin. | $3,500,000 | $- |
| **5-022.05 / Chowchilla** | **Triangle T Water District GSA** | **Chowchilla Subbasin SGMA Implementation Round 1** | | | **$10,000,000** | **$7,600,000** |
| | | | Grant Administration | This component will provide the general grant oversight and management and ensure invoicing, reporting, and deliverables are turned in on time and in the final format. | $760,000 | $760,000 |
| | | | Groundwater Sustainability Plan (GSP) Revisions | This proposal aims to address potential GSP deficiencies in a practical manner, primarily by completing GSP text revisions and additional non-modeling analyses to clarify and refine the selection of sustainable management criteria and the characterization of groundwater conditions in the Chowchilla Subbasin. | $336,306 | $336,306 |
| | | | Triangle T WD Poso Pipeline Extension | The proposed pipeline would convey purchased surface water to lands within the Inter Basin Coordination Committee's Subsidence Priority Area. The surface water would originate from the Central California Irrigation District's Poso Canal and be used for recharge or to irrigate cropland within and outside TTWD. There would also two approximately 30-acre regulating reservoirs. | $2,606,250 | $2,606,250 |
| | | | Sierra Vista MWC Recharge Basin | The proposed project would plan, design, and build an approximately 30-acre recharge pond within Sierra Vista Mutual Water Company. The water would be diverted from a 20 cfs pump in the Chowchilla River. The recharged surface water would be extracted with existing shallow wells and utilized on lands primarily served with groundwater pumped from beneath the Corcoran Clay, which is known to cause subsidence. | $674,535 | $674,535 |
| | | | Madera County Eastside Bypass Flood Flow Recharge Program | The component will develop and construct 3 points of diversion on the Chowchilla Bypass, development and construction of one 20-acre recharge basin and related facilities, facilities to deliver water to approximately 700 acres of fields for Flood-MAR, including 6,100 linear feet of 27 inch PVC pipeline and 6 grower turnouts, and development and installation of one (1) deep dual completion monitoring well. | $5,622,909 | $3,222,909 |
| **5-022.06 / Madera** | **Root Creek Water District** | **Madera Subbasin SGM Grant Funding Proposal** | | | **$13,213,300** | **$7,600,000** |
| | | | Grant Administration | Grant Administration will provide the general grant oversight and management and ensure invoicing, reporting, and deliverables are turned in on time and in the final format. This will include preparing reports detailing work completed during reporting period as outlined in a grant agreement. | $760,000 | $760,000 |
| | | | Madera Subbasin GSPs – Plan Updates | This component will update the four (4) Groundwater Sustainability Plans (GSPs) that together cover the entire Madera Subbasin. The GSP plan updates will primarily focus on revisions to the four GSPs to address potential deficiencies that may preclude DWR's approval of the GSPs. | $614,300 | $614,300 |
| | | | Madera Water District GSA – Madera Lake Pump & Pipeline Project | This component will include the installation of a siphon in Madera Lake, siphon inlet channel, booster pump, pipelines, sump, and grower turnout to obtain a flowrate of up to 8,000 gpm from Madera Lake, with up to 6,000 gpm (13.4 cfs) delivered into MWD and up to 2,000 gpm delivered to the neighboring grower property from MID or other outside water supplies. | $3,525,000 | $3,525,000 |
| | | | Root Creek Water District GSA – In-lieu Pipeline Expansion Project | This component is a proposed pipeline to mitigate groundwater overdraft by using surface water, when available, in place of groundwater use on agricultural land in the RCWD. The District proposes to expand their in-lieu pipeline about 2 miles, providing an average annual delivery of 1,874 AF of surface water in place of groundwater and 275 AF of wet year groundwater recharge. | $2,192,600 | $2,192,600 |
| | | | County of Madera GSA - Madera – Chowchilla Bypass Flood Water Recharge Project 2 | This component will complete the development and construction of one point of diversion on the Chowchilla Bypass, as well as construction of facilities to deliver water to approximately 900 acres of fields for Flood-MAR, including 8,300 linear feet of 27 inch PVC pipeline and eight (8) grower turnouts (12 inches each, equipped with magnetic flow meters). | $2,908,100 | $508,100 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | Root Creek Water District GSA – Parkway Water Conservation Project | This component envisions the construction and implementation of small embankment dams with associated upstream percolation areas that have the ability to intentionally recharge surface water supplies. The component is anticipated to annually recharge 1,000 AFY. | $3,213,300 | $- |
| **5-022.07 / Delta-Mendota** | **Del Puerto Water District** | **Delta-Mendota Subbasin – Planning and Projects** | | | **$32,579,551** | **$7,600,000** |
| | | | Grant Administration | | $760,000 | $0 |
| | | | San Joaquin Valley Eligible Recharge Projects | This component includes three tasks (projects) that all meet the eligibility requirements for the San Joaquin Valley funding: Los Banos Creek Recharge and Recovery Project, Flood Water Capture Project, and the Cottonwood Creek Recharge Project. All three tasks (projects) will capture and recharge stormwater to support basin sustainability. In doing so, all three tasks (projects) will reduce peak flows thereby reducing downstream flooding and will create seasonal habitat through the creation of shallow open water habitat during known periods of migration along the Pacific Flyway. | $10,018,597 | $4,000,000 |
| | | | Recharge and Water Supply Reliability Projects | This component includes: Lateral 4-North (4N) Recapture and Recirculation Reservoir project will capture tailwater and put this water to beneficial use and fully use WSID's existing surface water right; Phase I of the Ceres component of the North Valley Regional Recycled Water Program (NVRRWP), allowing DPWD to receive a much-needed increase in reliable surface water supply that is climate change resilient and providing up to an additional 1,736 acre-feet per year (AFY) throughout the year; Farmers Water District Water Bank Investigation will build off a pilot water bank project to recharge the Upper Aquifer system through the recharge of surface water from the Mendota Pool into recharge ponds located within FWD; and the Los Banos Creek (LBC) Detention Reservoir Regulation and Storage Project, will allow the LBC Detention Dam to be operated in the October through February time period to release natural LBC flow downstream for use by riparian lands directly or via the Delta-Mendota Canal to create space in the LBCDD to be used to temporarily store water for later use during peak irrigation or for wildlife water management. | $17,640,954 | $2,037,800 |
| | | | Data Gaps and Monitoring | This component address data gaps and improve subbasin monitoring, which includes: Subbasin-wide monitoring for subsidence as identified during the Subsidence Characterization Study; Dedicated Interconnected Surface Water (ISW) Monitoring Network and pair those wells with stream gages; Aliso Water District GSP Data Gaps and Monitoring; Farmers Water District GSP Data Gaps and Monitoring; and Fresno County Management Areas A and B GSP Data Gaps and Monitoring. | $2,710,000 | $867,200 |
| | | | GSP Revisions/Updates/Modifications | This component includes five tasks, allocating funding for addressing required edits to the submitted GSPs to address DWRs comments in their determination letter. Aliso WD, Farmers WD, Fresno County Management Areas A & B, Grassland WD and the San Joaquin River Exchange Contractors have all identified a need for this funding to offset the cost of GSP modifications and to reduce the financial burden on the disadvantaged communities in their GSP area. | $850,000 | $425,000 |
| | | | Outreach and Engagement | This component includes four tasks, all focused on outreach and engagement, including funding for intra-basin and inter-basin coordination and continued outreach to Subbasin stakeholders and the public. Farmers WD, Fresno County Management Areas A & B, Grassland WD and the San Joaquin River Exchange Contractors have all identified a need for this funding to offset the cost of GSP modifications and to reduce the financial burden on the disadvantaged communities in their GSP area. | $450,000 | $225,000 |
| | | | Studies and Investigations | This component includes one task (project) - the Aliso Water District Study - Effects of Composite Well Pumping. This study will improve the understanding of the effects of landowner's composite wells within Aliso Water District's service area. The study plans to analyze pumping effects of these wells on the Upper and Lower Aquifers, how water levels are impacted, how these wells contribute to subsidence, and how much water these wells extract from the Upper and Lower Aquifers in addition to any potential water quality issues | $150,000 | $45,000 |
| **5-022.08 / Kings** | **Fresno Irrigation District** | **Kings Subbasin 2022 GSP Implementation Projects (SGM Project)** | | | **$11,288,365** | **$7,600,000** |
| | | | Grant Administration | Grant Administration will provide the general grant oversight and management and ensure invoicing, reporting, and deliverables are turned in on time and in the final format. This will include preparing reports detailing work completed during reporting period as outlined in a grant agreement. | $30,000 | $30,000 |
| | | | Consolidated Irrigation District Recharge Program Phase 1 Project | Component includes planning, design and construction of 4 recharge basin sites varying in size from approximately 20 to 60 acres. The project will include construction of various components like basin cells and embankments, connections to existing District irrigation system infrastructure, basin inlet and piping, flowmeters. The project will provide recharge benefit estimated at 6,000 AFY. | $5,025,000 | $5,000,000 |
| | | | James Irrigation District James Bypass Basins 1 and 2 Storage & Recharge Project | Project includes the planning, design and construction of a check structure on the James Bypass auxiliary channel to allow for recharge in the James Bypass Basins 1, 2 and 3. The average annual project yield for 31 days of water availability is estimated at 1,770 AFY. | $1,231,065 | $1,000,000 |
| | | | Laguna Irrigation District Laton North Recharge Project | Component includes the planning, design and construction of a conveyance system to deliver water to the Laton North Recharge Project site from Cole Slough on the Kings River. This component will construct the conveyance system needed to deliver water to the basin. Estimated annual yield is 3,030 AFY. | $1,537,300 | $1,070,000 |
| | | | Fresno Irrigation District Bybee Recharge Basin Project | Component includes the planning, design, and construction of an approximately 40-acre recharge basin. The component will include construction of basin cells and embankments, basin inlet and piping, flowmeter, and perimeter fencing. It will provide an estimate annual average groundwater recharge benefit of 840 acre-feet per year (AFY) and 140 AF of new storage for floodwater. | $3,465,000 | $500,000 |
| **5-022.09 / Westside** | **Westlands Water District GSA** | **Westside Subbasin Recharge Optimization Study and Program** | | | **$10,500,000** | **$7,600,000** |
| | | | Westside Subbasin GSP 5-year Update | This component consists of preparing the 2025 5-year amendment with best available information and data for the Westside Subbasin GSP. The amendment will be updated to reflect progress towards achieving the Westside Subbasin 2040 sustainability goals, project implementation, and SGMA regulations compliance. | $500,000 | $500,000 |
| | | | Storage Treatment Aquifer Recharge Program, Phase 1 | New aquifer storage and recovery (ASR) facilities will be built and existing wells will be rehabilitated/retrofitted throughout the basin to allow for temporary storage of surplus surface water into the aquifer. Injections are anticipated in wet hydrologic years when surplus surface water supplies (i.e., CVP water risk of spill and flood water) are typically available, and recovery would occur in a subsequent dry hydrologic years. This project is included in the Westside-San Joaquin Regional Stormwater Resources Plan and is an early implementation of an existing regional flood management plan. | $8,000,000 | $7,100,000 |
| | | | Westside Subbasin Geophysical Investigation of Recharge Potential | Geophysical investigations will be conducted on lands within the Westside Subbasin to identify groundwater recharge potential. Data collected will help interested parties such as growers and/or the District determine if a site is feasible for groundwater recharge. | $2,000,000 | $0 |
| **5-022.11 / Kaweah** | **Greater Kaweah GSA** | **2022 Kaweah Subbasin Groundwater Sustainability Planning and Implementation Projects** | | | **$15,039,900** | **$7,600,000** |
| | | | Grant Administration | Grant administration and reporting by the Greater Kaweah GSA for the grant agreement with DWR covering all grant components. | $30,000 | $ - |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | Kaweah Subbasin GSP Determination Response | The Kaweah Subbasin GSAs received an Incomplete Determination on their respective GSPs and Coordination Agreement. The Kaweah Subbasin GSAs will be coordinating and re-evaluating their GSPs related to three deficiencies by July 27, 2022 | $250,000 | $200,000 |
| | | | Kaweah Subbasin GSP 2025 Update | The Kaweah Subbasin GSAs submitted their GSPs in January 2020. Per the SGMA Regulations, each GSP must be updated and evaluated on progress related to the established Sustainable Management Criteria at 5 year increments. The first update is due in January 2025. | $750,000 | $600,000 |
| | | | Kaweah Subbasin MODFLOW Model Update | The Kaweah Subbasin partnered with Stanford University to incorporate a Subsidence package into the Kaweah Subbasin Hydrologic Model. As that process is wrapping up, the Kaweah Subbasin and their consultants intend to update the Model with new data collected or better understood since the GSP to re-evaluate items related to Water Budget and forecasted impacts through projects and management actions. | $250,000 | $200,000 |
| | | | East Kaweah Water Quality Study | The EKGSA is interested in increasing groundwater recharge within its boundaries, but desires to do so without negatively impacting groundwater quality for beneficial uses/users. The groundwater quality data set currently available to the EKGSA has data gaps, thus deriving the need to perform a more focused water quality study in the area with the intention of locating areas where additional recharge from smaller footprint facilities such as shallow dry wells will result in positive impacts for beneficial uses/users. | $200,000 | $200,000 |
| | | | Mid-Kaweah Water Quality Study | The MKGSA is interested in increasing groundwater recharge within its boundaries, but desires to do so without negatively impacting groundwater quality for beneficial uses/users. The groundwater quality data set currently available to the EKGSA has data gaps, thus deriving the need to perform a more focused water quality study in the area with the intention of locating areas where additional recharge from smaller footprint facilities such as shallow dry wells will result in positive impacts for beneficial uses/users. | $200,000 | $200,000 |
| | | | KCWD Delta View Project – Phase 1 | The Kings County Water District is looking to develop a new 40-acre recharge basin near Grangeville Avenue and Cross Creek between the cities of Visalia and Hanford. The basin will have the ability to fill by gravity from North Mill Creek through a new turnout and pipeline to the basin. There will also be the ability to fill from a new lift pump in Cross Creek to pump water into the new basin. | $1,824,025 | $1,374,025 |
| | | | KDWCD Kaweah Oaks Preserve Flood-Recharge Project | The Kaweah Delta Water Conservation District is looking to develop additional recharge in the Kaweah Oaks Preserve north of the City of Farmersville. The Preserve has rolling topography and sandier soils adjacent Deep Creek. This project proposes to install a new lift pump that will deliver water from Deep Creek into the Oaks Preserve for recharging. Water will be passively recharged in lower areas of the Preserve property instead of grading new basins, conserving the natural Preserve characteristics. | $787,875 | $425,975 |
| | | | EKGSA Cottonwood Creek Recharge Project | The EKGSA is looking to develop a larger turnout from the Friant-Kern Canal to divert water into Cottonwood Creek to utilize the Creek as a linear recharge basin as it is a sandier component with the East Kaweah. The project will modify Creek banks that are too low to support increase water diversions. It will also incorporate measurement structures along the alignment for measurement and control capability. | $750,000 | $750,000 |
| | | | EID Yokohl Creek Recharge Project | The Exeter Irrigation District is looking to develop larger diversion capability from its system into Yokohl Creek to utilize the Creek as a linear recharge basin for increase recharge capacity within the District boundary. The project will modify road crossings that currently limit flow capacity within the Creek. It will also incorporate measurement structures along the alignment for measurement and control capability. | $500,000 | $500,000 |
| | | | SJWD Vanderstelt Recharge Project | The St Johns Water District is looking to develop a new recharge basin north of the City of Visalia adjacent to the St. Johns River. The basin will be approximately 35 acres and have the ability to divert high-flow water from the St. Johns River for recharge. There will also be the ability to return water back into the St. Johns River when peak flows have passed allowing for better control and delivery of flood flows. | $4,200,000 | $400,000 |
| | | | LSID Upper Lewis Creek Recharge Project | The Lindsay-Strathmore Irrigation District is looking to develop larger diversion capability from its system into the upper portions of Lewis Creek to utilize the Creek as a linear recharge basin for increase recharge capacity within the District boundary. The project includes slide gates and piping from the District's existing Friant-Kern Canal Turnout, expanding the District's El Mirador Reservoir to have more capacity for holding more water in wet years and prolonging the ability to divert water into Lewis Creek. It will also incorporate new SCADA measurement for telemetry control and measurement capability. | $2,090,000 | $375,000 |
| | | | Visalia Cameron Creek Linear Recharge Project | The City of Visalia is looking to construct new check structures in Cameron Creek to utilize the Creek as a linear recharge facility behind a series of checks. The project will allow the City to partner with Tulare Irrigation District to recharge water in the Creek. | $2,208,000 | $2,000,000 |
| | | | SBMWC Flood Capture Project | Sentinel Butte MWC is looking to develop a basin on a parcel west of Woodlake to better handle flood water coming off the Kaweah River through the Wutchumna Ditch as well as the drainages around the City of Woodlake. Better control and capture of these flows will allow for better management and delivery of water to areas north of Woodlake and north/northeast of Ivanhoe. | $1,000,000 | $375,000 |
| **5-022.12 / Tulare Lake** | **Mid-Kings River GSA** | **Tulare Lake Subbasin Groundwater Recharge and Sustainability Projects** | | | **$13,000,000** | **$7,600,000** |
| | | | KCWD Recharge Basins Project | The construction of a new 35-acre recharge basin and improvements to several existing recharge basins (expansion of existing basin by 6 acres). This component will also install or renovate existing structures in each basin and install groundwater monitoring wells to assess improvements to change in groundwater levels, storage, and quality. These basins are designed to capture floodwaters in wet years and benefit local communities by providing flood protection, reducing groundwater demand by converting ag land to recharge basins. | $3,000,000 | $3,000,000 |
| | | | KRCD Kings River Channel Reclamation Project | This is a flood management project that will remove approximately 280,000 cubic yards of accumulated sediments along the South Fork Section of the South Fork Kings channel to restore 100-year flood capacity along the channel. This will improve the South Fork King surface water delivery system by bringing irrigation and floodwaters to the area to be used in lieu of groundwater. Flood risks will be reduced for the area while minimizing groundwater pumping. | $1,600,000 | $1,600,000 |
| | | | CID Basin Recharge Project | A new 237-acre recharge basin with associated structures, diversion deliver canal, and monitoring wells will be built. This new basin will provide capture in an area that has been previously underutilized. The project will have a direct benefit to the City and the Tulare Lake Subbasin (TLS) by decreasing flood risk, increasing groundwater availability and stabilization by recharging the aquifer, reducing groundwater pumping, and increasing groundwater quality. | $2,000,000 | $2,000,000 |
| | | | Basin Assessment Studies | The GSP Assessment Studies project consists of activities related to the GSP implementation. Included in this are updates to the GSP, identifying location for potential expansion of representative monitoring sites for land subsidence, identifying locations for potential expansion of RMS for increased groundwater quality, sustainable yield analysis, and addressing identified data gaps. Each of these projects was selected to achieve the Project and Management Actions described in the GSP and broaden the data available for analysis in order to better characterize basin conditions. | $1,000,000 | $1,000,000 |
| | | | KCWD North Hanford Basin Project | This component consists of construction of a new recharge basin facility within proximity to the City of Hanford. This will require property purchase to utilize water rights from the Peoples Ditch to provide surface water for the basin. The basin is anticipated to be 10 to 20 acres in size and be up to 5 feet deep and include a large diameter turnout facility with associated structures and equipment. It is anticipated to provide up to approximately 1,000 to 2,000 acre-feet of recharge within 4 to 5 years. | $1,400,000 | $ - |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | ASR Evaluation Project | This is a developmental effort to establish a full-scale ASR program across the South Fork Kings GSA or throughout the subbasin. Additional testing and environmental impact assessment is needed after a successful pilot test was conducted. Technical research needs include further analysis of geochemical interactions and well performance changes, assessment of different agricultural well designs, and assessment of different portions of the B-aquifer zones within the Tulare Lake Subbasin. | $1,000,000 | $ - |
| | | | Monitoring Wells/Subsidence Network | This component is an assessment and expansion effort to the existing RMS network. The project is focused on resolving portions of the data gaps identified in the monitoring network in the TLS GSP. Installation of new monitoring points will aid in the refinement and availability of reliable data to inform the hydrogeologic model and justify the measurable objectives and minimum thresholds for sustainability outline in the GSP. | $1,000,000 | $ - |
| | | | CID North Reservoir | New reservoirs for water storage and recharge basins will be constructed with a proposed area between 300 and 900 acres. The project will have a direct benefit to the Tulare Lake Subbasin (TLS) by increasing groundwater availability and stabilization by recharging the aquifer, reducing groundwater pumping, and increasing groundwater quality. | $2,000,000 | $ - |
| **5-022.13 / Tule** | **Lower Tule River Irrigation District GSA** | **Tule Subbasin Groundwater Recharge and Sustainability Projects** | | | **$14,940,908** | **$7,600,000** |
| | | | Grant Administration | Grant Administration | $150,000 | $150,000 |
| | | | DEID Turnipseed Phase V Recharge Basin | The groundwater recharge project includes the construction of a 156-acre water spreading facility that has the potential of an average annual net increase water benefit to the Subbasin of 4,785 AF based on historical flood water available to the District and removal of production ag land. | $5,084,000 | $2,172,127 |
| | | | TCWA Allensworth Project | The 80-acre groundwater recharge project will construct a series of groundwater basins to capture flood waters from the White River, a pipeline to divert flood waters from the White River Channel, a berm along the proposed High-Speed Rail alignment, wildlife habitat, and local recreational park. This has the potential of an average annual net increase water benefit to the Subbasin of 1,500 AF based on historical flood water available to the District and removal of production ag land. | $2,389,718 | $1,866,897 |
| | | | LTRID Tipton CSD Recharge Collaboration | The 20-acre groundwater recharge project will convert farmed ground outside the southern boundary of Tipton into a dedicated recharge basin by capturing flood flows. This has the potential of an average annual net increase water benefit to the Subbasin of 1,200 AF based on historical flood water available to the District and removal of production ag land. | $2,457,000 | $607,000 |
| | | | LTRID Woodville PUD Recharge Collaboration | The 25-acre groundwater recharge project will convert farmed ground along the southern boundary of Woodville into a dedicated recharge basin by capturing flood flows. This has the potential of an average annual net increase water benefit to the Subbasin of 750 AF based on historical flood water available to the District and removal of production ag land. | $981,750 | $506,750 |
| | | | Pixley ID Teviston Recharge Collaboration | The 40-acre groundwater recharge project will convert farmed ground along the southern boundary of the SDAC of Teviston into a dedicated recharge basin by capturing flood flows. This has the potential of an average annual net increase water benefit to the Subbasin of 396 AF based on historical flood water available to the District and removal of production ag land. | $937,650 | $204,703 |
| | | | Pixley ID Pixley PUD Recharge Collaboration | The 10-acre groundwater recharge project will convert farmed ground along the southern boundary of the SDAC of Pixley into a dedicated recharge basin by capturing flood flows. This has the potential of an average annual net increase water benefit to the Subbasin of 396 AF based on historical flood water available to the District and removal of production ag land. | $408,450 | $207,515 |
| | | | PID Southeast Service Area Lateral | The component will construct a canal to divert flood flows from the Friant-Kern Canal and potentially provide an average annual net increase of 2,300 AF to the Subbasin based on historical flood water available to the District. It would also provide surface water to 1,670-acres ag lands historically completely reliant on groundwater as in-lieu to groundwater pumping, as well as support landowner developed recharge/banking projects to capture flood flows from the Tule River and Friant Kern Canal. | $2,033,000 | $1,513,313 |
| | | | Tulare County Water Security Project | The core objective of this regional planning project is to develop a suite of new water projects that help secure safe drinking water supplies for disadvantaged communities in southern Tulare County. This project directly relates to the Tipton, Woodville, Pixley, and Teviston projects included in this spending plan. The project will help all GSAs in the subbasin by informing long-term management strategy and infrastructural development that promotes recharge to support municipal and domestic systems. | $499,340 | $371,695 |
| **5-022.14 / Kern** | **Kern Groundwater Authority GSA** | **Kern Subbasin Spending Grant Projects** | | | **$11,564,231** | **$7,600,000** |
| | | | Grant Administration | Grant Administration | $100,000 | $100,000 |
| | | | Basin Study | Basin Study to develop a systematic technical analysis to better represent and understand the flow of groundwater and surface water into, through and out of the Kern Subbasin. | $2,910,450 | $2,910,450 |
| | | | Evapotranspiration Analysis & Study - Field by Field | Project compliments the Basin Study by groundwater truthing the water demand part of SGMA. The Component will provide data on the soil types and farming methods to further investigate the different crops planted and best way to meet water demands, providing a more accurate account of water usage. | $2,636,781 | $2,636,781 |
| | | | Subsidence Investigation and Study - Priority Area #1 | Data collection: Data to set the SMC for Kern subsidence. Strategically placed extensometers would provide the data necessary to set SMC as well as considering the other activity of extractions occurring in the basin, oil extractions. | $1,563,000 | $1,563,000 |
| | | | New or Converted Monitoring Wells | Improve existing monitoring network throughout the Kern subbasin. | $4,354,000 | $389,769 |
| **6-054/ Indian Wells** | **Indian Wells Valley Groundwater Authority** | **Indian Wells Valley Groundwater Basin Spending Plan Application** | | | **$18,619,600** | **$7,600,000** |
| | | | Grant Administration | Grant Administration | $300,000 | $300,000 |
| | | | Imported Water Interconnection Project | Alignment study, design, permitting, environmental compliance, right-of-way, and coordination of delivery terms for constructing the new 50 mile pipeline and pump stations to convey new purchased imported water supplies to the Basin. The alignment study will begin concurrent with required project environmental compliance, which is anticipated to include a joint CEQA-NEPA study since the U.S. Bureau of Land Management has jurisdiction over most of the southern portion of the Basin. In addition to 90% design plans. | $8,184,900 | $7,300,000 |
| | | | Water Recycling Project | This proposed component will first consist of furnishing a recycled water alternatives analysis to identify the most feasible and cost-effective beneficial use(s) of recycled water in the Basin. The alternatives analysis is intended to serve as a basis for design, permitting, environmental compliance, and right-of-way acquisition for the Authority and City's ultimate goal for recycled water use(s). The Authority will also conduct significant public and stakeholder outreach/coordination throughout the planning and design phases of the recycled water effort to inform local regulatory agencies of project progress and to inform the public of changes to Basin water supply operations | $5,150,500 | $0 |
| | | | Data Gap Evaluation, Data Collection, and Monitoring Program | Previously conducted a reconnaissance field trip to identify key Basin areas that may contain viable GDE communities and that were favorable for measurement of groundwater characteristics. For this component, the Authority will plan to conduct a second reconnaissance field trip at different potential monitoring sites based on the results of the reconnaissance field trip, and a subsequent GDE monitoring plan will be developed based on the findings of the 2nd reconnaissance field trip. The GDE monitoring plan will identify key GDE monitoring sites and associated monitoring wells that may assist in quantifying GDE health. | $1,066,200 | $0 |

| Basin No./ Basin Name | Organization Name | Proposal Title | Component | Component Description | Requested Amount | Recommended Award |
|---|---|---|---|---|---|---|
| | | | Annual Reporting for Indian Wells Valley Groundwater Sustainability Plan | This component will consist of completing four GSP Annual Reports. The Annual Reports will include both data and a narrative description of the Authority's progress towards GSP implementation as described in §356.2 of the GSP Emergency Regulations. The Annual Reports will describe and present the results of the methodology to approximate changes in groundwater storage for the appropriate water year. The Annual Reports will also provide a description of progress in GSP implementation since the previous annual report, including any achieving of interim milestones for relevant projects and management actions. | $160,000 | $0 |
| | | | Pumping Optimization Investigation | Available seismic line data will be reviewed to obtain additional information on EL Paso subbasin lithology and structure including depths to bedrock, depths to consolidated sediments, fault locations, etc. Seismic data will be used to identify potential sites for physical exploration through pilot bores to perform geophysical logging and water quality sampling. Aquifer test work plans will be developed and the aquifer tests will be conducted to provide a greater understanding of El Paso subbasin conditions such as depths-to-water, quantity of available groundwater in storage, and annual recharge quantities, all of which are data gaps identified or discussed in the Authority's GSP. | $3,670,000 | $0 |
| | | | Conservation Feasibility Study | A consultant will review historic local ordinances and restrictions as well as the results of the Authority's Water Conservation Pilot Project for SDACs to identify their potential for implementation throughout the entire Basin and to evaluate whether any further conservation measures can be feasibly implemented. The consultant will develop a Strategic Plan for Water Conservation to document the findings of the domestic/municipal health and safety requirements for water use, discussions with relevant producers, and recommendations for future conservation measures that the Authority could implement throughout the Basin. | $88,000 | $0 |
| **7-024.01/ Borrego Valley** | **Borrego Water District** | **Implementation Project for the Borrego Springs Subbasin** | | | **$6,173,833** | **$6,173,833** |
| | | | Advanced Meter Infrastructure | This component will replace all Borrego Water District (BWD) manual water meters with an Advanced Metering Infrastructure system. This will address demand-side reductions to basin pumping and provide customers with real-time, accurate water usage information. New meters have near 100% water read accuracy which can help BWD account for 5% of water that is lost within their system. | $1,365,000 | $1,365,000 |
| | | | Wastewater Treatment Plant Monitoring Wells | This is a study that will install new monitoring wells to find the fate and transport of nitrate and TDS originating from the discharge of effluent, document existing spare capacity of the facility and evaluate potential modification to the treatment process at the treatment plant. 6 monitoring wells (up to 100 ft deep) have been approved within the vicinity of percolation/evaporation ponds. This will address water quality issues within the basin. | $281,500 | $281,500 |
| | | | Education Project | A career technical education pathway in Energy, Environment, and Utilities for Borrego Springs Middle and High Schools will be implemented (330 hours of new curriculum). This will address the lack of awareness by exposing students to curriculum that will teach all aspects of water as a natural resource. The new curriculum will cover history of water use in Borrego springs, the GMP, Stipulated agreement and sustainable careers in Borrego Springs. | $414,000 | $414,000 |
| | | | Resiliency Strategy | This component has three parts: 1) Establish a network of partners across the basin for community visioning and integrated planning; (2) support education and engagement with the community Plan Update & WM implementation of the GW settlement agreement and GMP; and (3) ensure natural resource and ecological priorities are aligned and protected across the region's primary planning documents. In summary, this will educate the community about water and climate-related risks to Borrego Springs ecosystems and economy; Cultivate informed and equipped community water and climate ambassadors to engage with local decision makers; and Develop a cohesive vision and community resilience strategy with broad community support to ensure a resilient and prosperous Borrego Springs for future generations. | $260,000 | $260,000 |
| | | | Biological Restoration of Fallowed Lands | This component will develop data, information, and criteria to guide the use of biological restoration as a technique to mitigate the potential adverse impacts associated with the fallowing of lands that is expected to occur within the Subbasin. This will achieve these goals through analyses of existing data and information, field reconnaissance, and test cases of biological restoration techniques at existing fallowed lands within the Subbasin. A final report will document the biological restoration strategies that will be most effective within the subbasin. | $755,340 | $755,340 |
| | | | Monitoring, Reporting, and GMP Update | This is a comprehensive monitoring, analysis, data management and reporting program that will ensure the effective implementation of the pumping ramp down, including filling data gaps identified in the GMP. This will be paramount to successfully achieve the sustainability goal of the Basin in a manner that complies with the Borrego Judgment and seeks input from the local community on a regular basis. This component includes engagement and outreach with the public through meetings and through the watermasters website. | $2,061,250 | $2,061,250 |
| | | | Groundwater Dependent Ecosystem (GDE) Identification, Assessment, & Monitoring | A GDE evaluation and monitoring program will be developed and implemented in a phased approach over a three-year period. The main objective will be to determine if the potential GDE's within the Subbasin are dependent on the regional aquifer of the subbasin or not. If the program indicates that GDE's are dependent on the regional aquifer within the subbasin, then the Environmental Working Group will provide recommendations to the watermaster for revisions to the GMP to protect the environmental beneficial uses of groundwater pursuant to the requirements of SGMA. | $1,036,743 | $1,036,743 |
| | | | | | **$257,484,919** | **$150,573,833** |

BORREGO WATER DISTRICT

# Fiscal Year 2024 and 2025 Prop 68 (SGMA Implementation) Grant

September 8, 2023

To Prosperer:

On December 7, 2022 the Borrego Water District entered into Grant Agreement Number 4600014652 with the State of California (Department of Water Resources) for a Sustainable Groundwater Management Act (SGMA) Implementation Grant. State grant funds are provided 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. All work under the grant must to be completed by April 30, 2025. The Borrego Water District was awarded a construction budget of $1,145,000 to execute Grant Component 2: Advanced Meter Infrastructure. The workplan, as defined in the Grant Agreement is inserted on the following pages. The relevant parts of the workplan, as relating to this RFQ are included in Task 3: Pilot Study, also referred to as the Alpha and Beta Phases; Task 4: AMI Implementation for Remaining Customers also referred to as the Full Deployment Phase; and some aspects of Task 5: AMI Outreach and Education particularly relating to the chosen AMI vendor providing Customer and User informational materials. While Tasks 3 and 4 are to be completed under the construction budget of $1,145,000, there may be additional funds available to execute the relevant aspects of Task 5.

Ideally, significant completion of the project shall occur during calendar year 2024. Minimal expenses may be incurred between January 1st and April 30th 2025 as the final work date for grant eligibility is April 30, 2025. The Fiscal Year of the Borrego Water District runs from July 1st to June 30th. This project is budgeted for the second half of Fiscal Year ending June 30, 2024 and the first half of the Fiscal Year ending June 20, 2025. The Borrego Water District has no further constraints on the schedule of disbursements.

All contractor invoices must clearly state the work period covered and, at a minimum, cover quarterly intervals ending on 03/31, 06/30, 09/30 and 12/31 annually. In addition, the costs below are not eligible for reimbursement. Any such expenses must be clearly indicated in the Cost Proposal for the Borrego Water District to approve.

Costs that are not eligible:

- Operation and maintenance costs.
- Travel per diem costs, except for mileage.
- 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 that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the funded project.

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 DWRs accounting office by the final payment 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

Implementing Agency: Grantee

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 geographically dispersed on relatively large lots in sandy soil. This scenario creates 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 Advanced Meter Infrastructure (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

Implementing Agency: Grantee

Historically, elevated levels of nitrates have occurred 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 new monitoring wells will be detecting 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. These wells along with an existing well will be sampled quarterly to generate the data to determine if the WWTP effluent is adversely impacting the groundwater.

**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

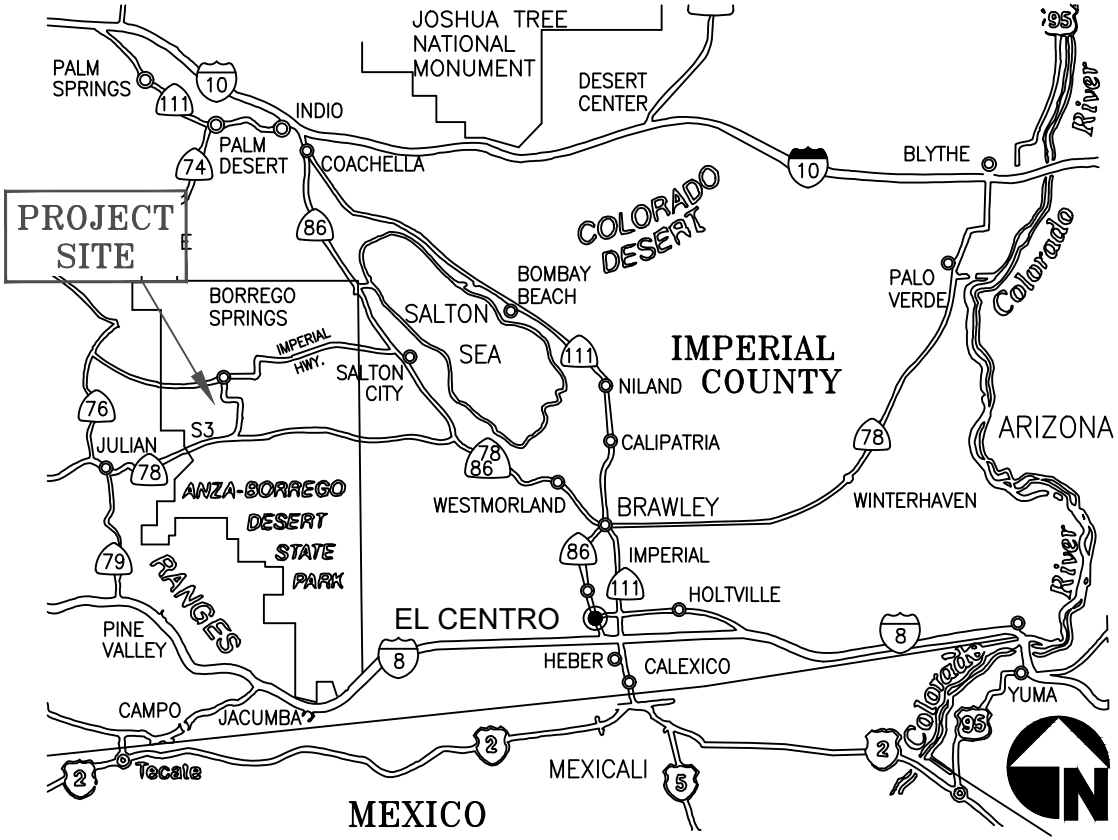
| Account No | Meter ID | Site Name | Description | Address | Coordinates |
|---|---|---|---|---|---|
| 007115-000 | 9930706 | ID1-WELL 8 | Well | 5037 Borrego Springs Road | 3°12'11.4"N 116°18'51.8"W |
| 007116-000 | 70330008 | ID1-WELL 10 | Well with shed and panel. | 4201 Borrego Springs Road | 33°12'42.5"N 116°20'48.5"W |
| 007117-000 | 190029708 | ID1-WELL 12 | Well with shed and panel. | 3352 Borrego Valley Road | 33°13'33.9"N 116°20'53.9"W |
| 007118-000 | 190837810 | ID1-WELL 16 | Well with shed | 951 Rango Way | 33°12'59.7"N 116°21'44.9"W |
| 007121-000 | 20-00215-08 | ID4-WELL 9 | Well | 1775 Borrego Springs Road | 33°27'65.2"N 116°37'34.4"W |
| 007122-000 | 98646610 | ID4-WELL 5 | Well with shed and awning over engine | 3003 Lofter Drive | 33°14'13.4"N 116°21'51.6"W |
| 007124-000 | 190837710 | ID4-WELL 11 | Well, diesel engine and fuel storage | 2201 Diegueno Road | 33°16'02.8"N 116°23'00.1"W |
| 007125-000 | 4028266 | ID4-WELL 18 | Well with a pump shed and power | 1111 Indian Head Ranch Road | 33°18'24.3"N 116°23'05.1"W |
| 007126-000 | 67626 | WILCOX WELL (ID4-20) | Well | 3700 Borrego Springs Road | 33°12'39.4"N 116°21'53.7"W |
| Not yet installed | | Well 5-15 | Well | DiGiorgio & Tilting T | 33°23'31.3"N 116°36'72.7"W |

| Site/Location | Description | Lat/Long | Power | Notes |
|---|---|---|---|---|
| BOOSTER 1 PUMPS 1, 2, and 3 | Booster pump station with 3 pumps. | 33°10'50.0"N 116°19'07.5"W | 440 & 110 V AC | |
| BOOSTER 2 PUMPS 4, 5, and 6 | Booster pump station with 3 pumps inside building. | 33°11'29.1"N 116°19'46.8"W | 440 & 110 V AC | |
| BOOSTER 3 PUMP 7 | Booster pump station with shed and power panel. | 33°13'53.1"N 116°23'19.0"W | 440 & 110 V AC | |
| BOOSTER 4 PUMP 8 | Booster pump station with shed and power panel. | 33°13'06.0"N 116°23'32.0"W | 440 & 110 V AC | |
| BOOSTER 5 PUMP 9 | Booster pump station | | 440 V AC | Borrego Sprins Rd aprx 2 miles north of Xmas Circle and it serves Indian Head Ranch |
| 900 TANK | Reservoir Tank | 33°10'59.2"N 116°19'44.7"W | 110 V AC | |
| COUNTRY CLUB TANK | Reservoir Tank | 33°13'35.0"N 116°24'02.5"W | 110 V AC | |
| INDIAN HEAD TANK | Reservoir Tank | 33°19'40.7"N 116°24'04.9"W | NONE | |
| RAMS HILL 1 | Reservoir Tank | 33°10'50.0"N 116°19'07.5"W | 440 & 110 V AC | At same location as BOOSTER 1 PUMPS 1, 2, and 3 |
| RAMS HILL 2 | Reservoir Tank | 33°10'29.8"N 116°19'08.6"W | NONE | |
| TWIN TANKS | 2 Reservoir Tanks | 33°15'09.6"N 116°24'22.5"W | NONE | Tested good for CPE to district office |
| ID1-WELL 8 | Well | 3°12'11.4"N 116°18'51.8"W | 440 V AC | |
| ID1-WELL 10 | Well with shed and panel. | 33°12'42.5"N 116°20'48.5"W | 440 V AC | |
| ID1-WELL 12 | Well with shed and panel. | 33°13'33.9"N 116°20'53.9"W | 440 V AC | |
| ID1-WELL 16 | Well with shed | 33°12'59.7"N 116°21'44.9"W | 440 V AC | |
| ID4-WELL 9 | Well | 33°27'65.2"N 116°37'34.4"W | 440 V AC | |
| ID4-WELL 5 | Well with shed and awning over engine | 33°14'13.4"N 116°21'51.6"W | 440 V AC | |
| ID4-WELL 11 | Well, diesel engine and fuel storage tank. | 33°16'02.8"N 116°23'00.1"W | 440 V AC | |
| ID4-WELL 18 | Well with a pump shed and power shed. | 33°18'24.3"N 116°23'05.1"W | 440 V AC | |
| WILCOX WELL | Well | 33°12'39.4"N 116°21'53.7"W | NONE | |
| Lift Station | Lift Station | | | 2990 Borrego Valley Rd |
| Well 5-15 | Well | 33°23'31.3"N 116°36'72.7"W | | DiGiorgio and Tilting T |

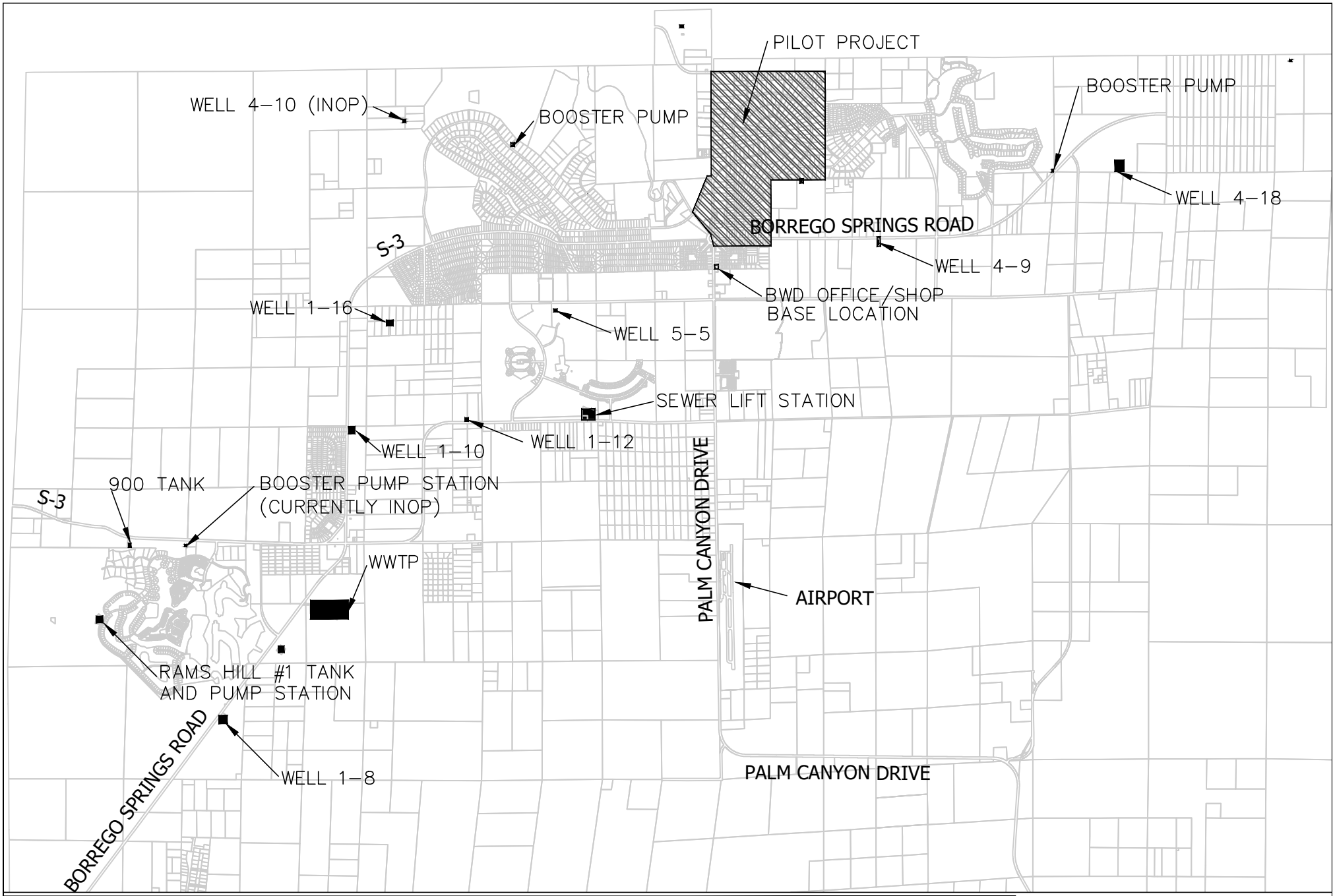
Map of locations available in .kmz file
upon request from
jessica@borregowd.org

.dwg file available uon request from
jessica@borregowd.org

# VICINITY MAP



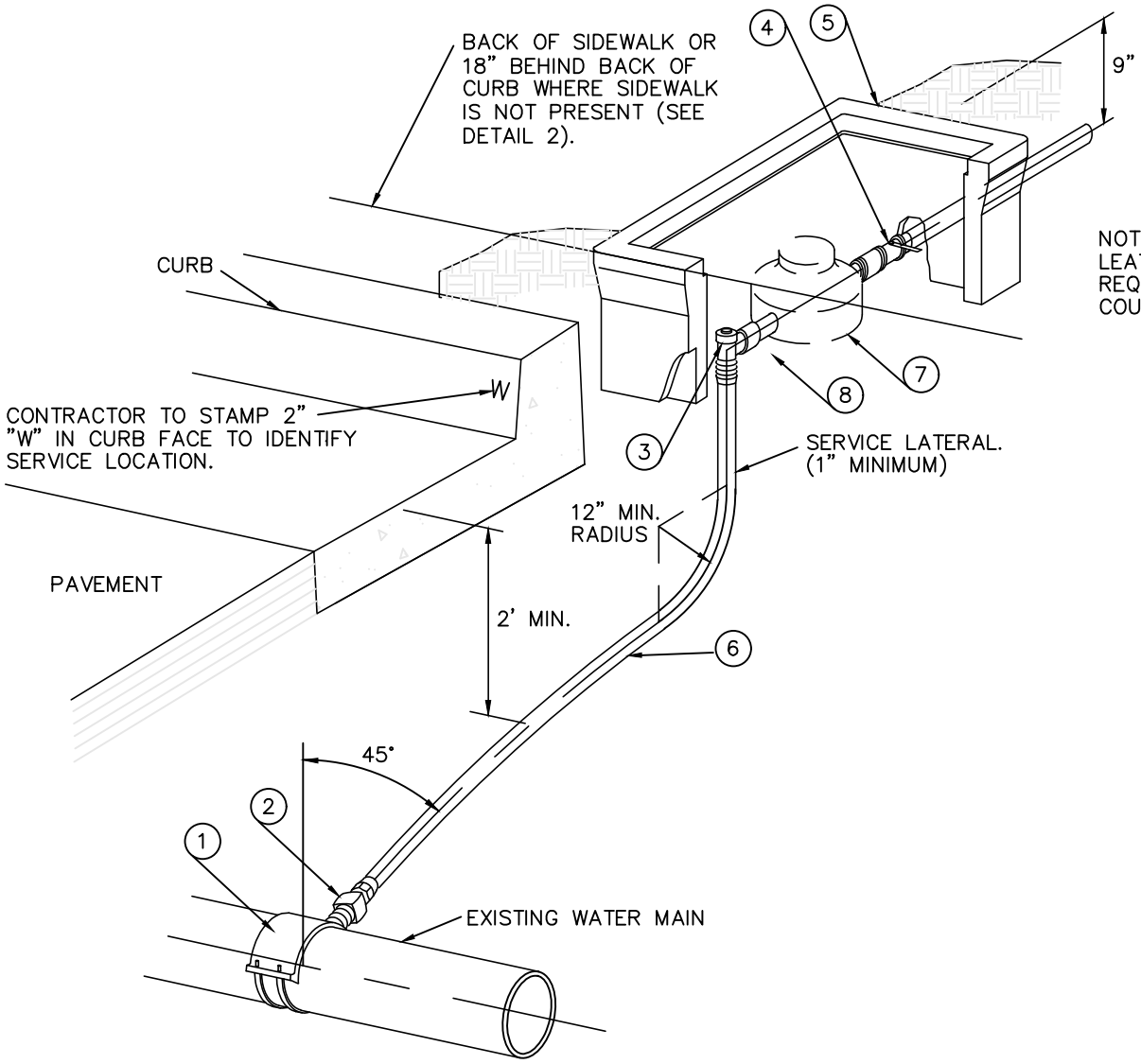

| | | |
|---|---|---|
| | AMI METER REPLACEMENT PROJECT | SHEET: 1 |
| PROJECT VICINITY MAP | BORREGO WATER DISTRICT | OF: 4 |
| | DATE: 12/20/22 BY: DD | |




| BWD SITES WITH POWER | POSSIBLE REPEATER LOCATIONS | SHEET: 2 OF: 4 |
|---|---|---|
| | BORREGO WATER DISTRICT | |
| | DATE: 12/20/22 BY: DD | |

N

NO SCALE




NOTE:
LEATHER WASHERS REQUIRED AT METER COUPLINGS.

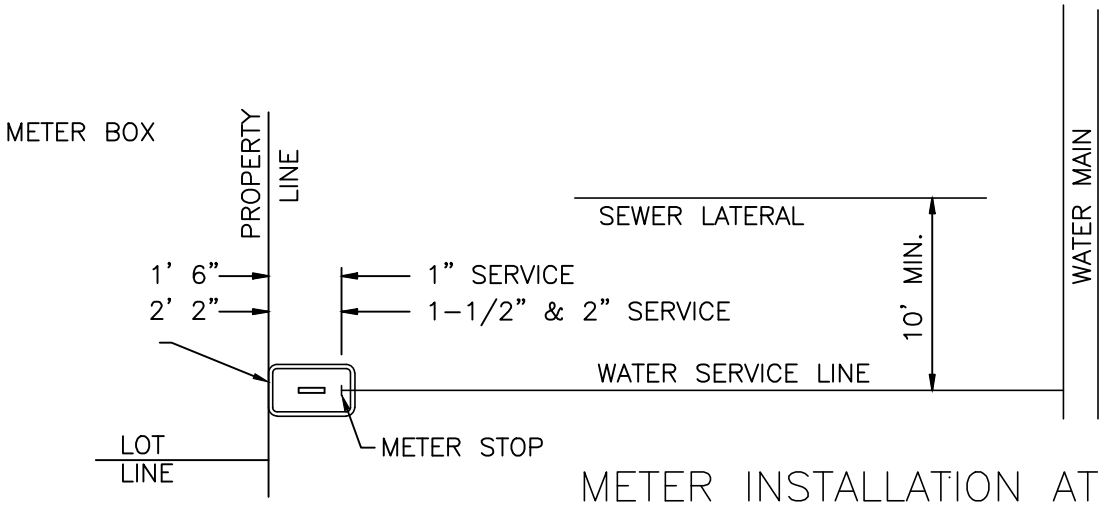
NOTES:

1. EXISTING SADDLE
2. EXISTING CORP. STOP
3. IF NECESSARY REPLACE CORP STOP. JONES J-1964W FOR ¾" OR 1", J-1973W FOR 1 1/2" & 2", O.A.E. RIGHT ANGLE CURB STOP TO MATCH PIPE.
4. INSTALL NEW CUSTOMER BRASS GATE SHUT-OFF VALVE OR S.S. BALL VALVE. SIZE PER METER.
5. REPLACE METER LID. FOR TRAFFIC INSTALLATIONS, SPECIFY POLYMER, LID FOR NON-TRAFFIC, USE CONCRETE LID. AMI VENDOR TO SPECIFY THE METER LID.
6. EXISTING CONTINUOUS SERVICE LATERAL. DETERMINE THE MATERIAL AND SIZE IN THE FIELD.
7. ENDPOINT. METER PER EXISTING SIZE.
8. CONTRACTOR TO CLEAN OUT THE METER BOX. SOME METER BOXES ARE FULL OF DIRT.

1 WATER SERVICE CONNECTION

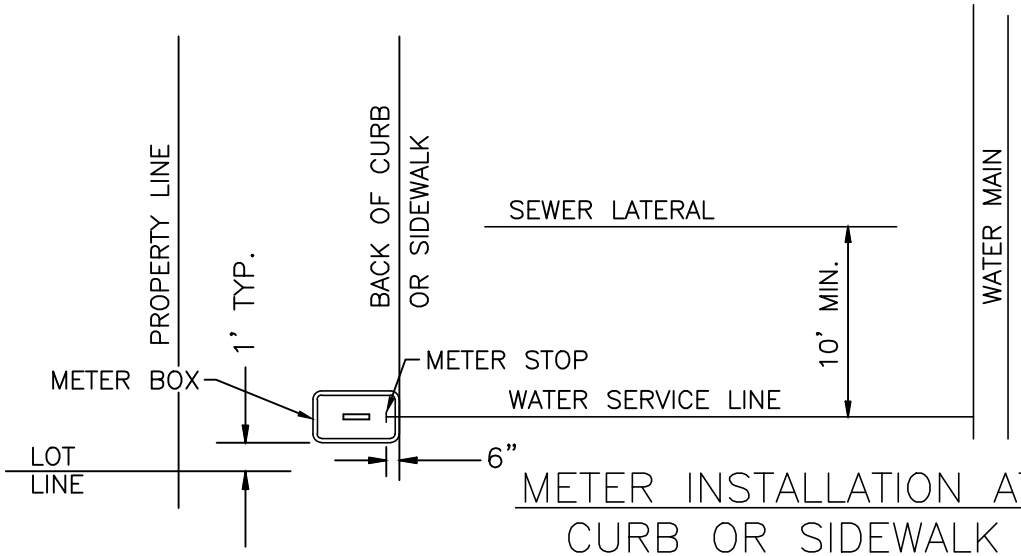
| BWD SITES WITH POWER | POSSIBLE REPEATER LOCATIONS | SHEET: 3 OF: 4 |
|---|---|---|
| | BORREGO WATER DISTRICT | |
| | DATE: 12/20/22 BY: DD | |

NO SCALE




METER INSTALLATION AT PROPERTY LINE

NOT TO SCALE




METER INSTALLATION AT CURB OR SIDEWALK

NOT TO SCALE

2 GENERAL LOCATION OF LOT SERVICES

| BWD SITES WITH POWER | POSSIBLE REPEATER LOCATIONS | SHEET: 4 |
|---|---|---|
| | BORREGO WATER DISTRICT | OF: 4 |
| | | DATE: 12/20/22 BY: DD |

NO SCALE

BORREGO WATER DISTRICT

BOARD OF DIRECTORS MEETING
SEPTEMBER 12, 2023
AGENDA ITEM II.B

September 7, 2023

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Initiation of BWD Intern Program with Borrego Springs High School – D Duncan

**RECOMMENDED ACTION:**
Receive overview from Director Duncan and authorize Staff to initiate Program

**ITEM EXPLANATION:**
Director Duncan has requested BWD participate in the School intern program for the current school year. Beginning on Sept 27 th, 2 students at a time per quarter will be delivered to the BWD office at approximately 1:15 PM and picked up at 2:30 PM on Wednesday when school is in full day session (24 weeks). Therefore, each set of 2 students will have 6 weeks at BWD to rotate between Admin, Water and Wastewater (2 days each).

BWD Legal Counsel has provided a list of issues and Staff is confident that all can be addressed, see below:

IF you want to implement a high school intern program here are some considerations:

- It must be made clear in writing that they interns are volunteers so there are no work permit issues
- It must be clear-the interns are not displacing any normal employees
- Interns must be made aware they will receive no compensation.
- Who will supervise the program from the school and will the school enter into agreement covering any liability issues (colleges who have programs often do cover liability).
- Otherwise for liability-consider parents signing a waiver
- Confirm volunteers covered under your work comp insurance.
- Who is supervising them- the supervisors may be mandated reporters for limited purposes and may need basic training on mandated reporting.

With Board approval, Staff intends to work with Legal Counsel on the issues identified above in preparation to initiate the Program on the 27th.

**NEXT STEPS**
1. Develop the documents identified needed to initiate the program and execute them.

**FISCAL IMPACT**
1. Minima (24 hours at approximately one staff hour per session = 24 total for the school year plus minimal preparation- TBD)

**ATTACHMENTS**
1. None

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
SEPTEMBER 12, 2023
AGENDA ITEM II.C

September 7, 2023

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: BWD/T2 Deposit Agreement

**RECOMMENDED ACTION:**
Review Draft Agreement, amend if needed and approve

**ITEM EXPLANATION:**
Legal Counsel has developed the attached Deposit Agreement for use on the proposed Rams Hill development activities. Legal Counsel will provide an overview and answer any questions from the Board.

**NEXT STEPS**
1. TBD

**FISCAL IMPACT**
1. NONE

**ATTACHMENTS**
1. Deposit Agreement Between Borrego Water District and T2 Borrego

**DEPOSIT AGREEMENT BETWEEN**
**BORREGO WATER DISTRICT AND T2 BORREGO**

This Deposit Agreement ("Agreement") is made and entered into between Borrego Water District, a public agency existing under the laws of the State of California ("District") and T2 Borrego, LLC, a Colorado limited liability company ("Developer"). District and Developer may be referred to individually as "Party" or collectively as "Parties."

## RECITALS

A. Developer is the owner of approximately 3,140 acres of that certain real property located within Borrego Springs, County of San Diego, California commonly known as Rams Hill ("Property").

B. Developer is in the process of amending its existing land use approvals to modify and supplement the previously approved residential, commercial and other future uses of the Property (the "Project").

C. Developer acknowledges that the Project would require, among other things, one or more water supply assessments, review of flood control requirements, preparation of reports and studies, sewer, water and other facility design reviews and inspections, which require significant analysis, evaluation, preparation, consultation, meetings and work on the part of the District, its staff, and consultants.

D. Developer expressly recognizes and agrees that it will provide one or more advanced deposits and fully reimburse the District for any and all costs and fees as set forth in the Agreement.

**NOW, THEREFORE**, in consideration of the foregoing and the promises and covenants contained herein, the District and the Developer mutually agree as follows:

1. Incorporation of Recitals. The Parties agree that the Recitals constitute the factual basis upon which the District and the Developer have entered into this Agreement. The District and the Developer each acknowledge the accuracy of the Recitals and agree that the Recitals are incorporated into this Agreement as though fully set forth at length herein.

2. Term. The term of this Agreement shall commence on the date that this Agreement is approved by the District's Board of Directors and fully executed by the Parties ("Effective Date"), and shall, subject to Paragraph 3, below, continue until the Project is fully built out. The Developer's obligation to reimburse the District as provided in this Agreement shall survive the natural expiration of this Agreement, as well as the termination of this Agreement as set forth herein.

3. Termination. The District may, in its sole discretion, terminate this Agreement prior to the Term set forth herein, without cost or liability to the District, upon thirty (30) days' written notice to the Developer in the event that Developer either: (1) fails to satisfy any obligation of this Agreement; or (2) fails to reasonably prosecute its application(s) for the Project. The Developer may, in its sole discretion, terminate this Agreement prior to the end of the Term set forth herein, upon thirty (30) days' written notice to the District, upon receipt of which District shall cease all work relating to the Project and proceed with case closure; provided, however,

that Developer's right to terminate this Agreement is expressly contingent upon Developer satisfying both of the following: (1) Developer shall give District written notice withdrawing its application(s) for the Project; and (2) Developer shall satisfy all of its obligations, including for deposits and reimbursement to the District, under this Agreement up through the proposed effective date of termination.

4. Reimbursed Services. Developer, in accordance with the terms of this Agreement, shall reimburse the District for One Hundred Percent (100%) for all costs and fees for District staff, legal fees, and consultant time which, in any way, arises from or is related to the District's activity related to the Project, including but not limited to, review, evaluation, and analysis of the Project description, preparation of technical documents, feasibility studies, environmental clearance documents, water, sewer, flood control and related aspects of the proposed Project affecting the District and its services, and related studies, drafting and negotiating a development agreement (if needed), and all other documents and items required to process and evaluate the Project; attendance at meetings with the Developer; attendance at public meetings related to the Project; legal costs of drafting and reviewing Project-related documents; and any other costs and expenses necessary to process the Project, all in the District's sole discretion ("Costs"). These Costs shall deem to have started to incur by the District as of July 1, 2023.

5. Deposit. Within five (5) days of the Effective Date, Developer shall provide to the District an initial deposit of Two Hundred Thousand Dollars ($200,000) which the District shall draw upon to pay the Costs ("Deposit").

a. Developer shall be responsible for ensuring that the Deposit remains adequate to cover the ongoing Costs. To assist Developer in meeting this obligation, District shall notify Developer in writing any time the Deposit drops below Fifty Thousand Dollars ($50,000). Within five (5) working days of receiving District's written notice, Developer shall provide the funds necessary to increase the Deposit by Fifty Thousand Dollars ($50,000). In the event that Developer fails to provide the funds necessary to increase the Deposit within the required five (5) working day period, the District shall cease any work on or related to the Costs and shall recommence such work upon payment of the required funds.

b. Notwithstanding and in addition to the obligations under this Agreement, Developer shall independently pay in a timely manner all fees for applications required for the Project in accordance with the then-current District fee schedule, as adopted by the District Board of Directors.

c. Within fourteen (14) days after what the Parties jointly determine to be the final action on the Project by the District, or early termination pursuant to this Agreement, the District shall provide to Developer an invoice indicating the remaining Deposit balance, and a check for the remaining balance. In the event the Deposit balance is negative, the invoice shall indicate the amount owed to the District by the Developer, and Developer

shall pay the District the total amount owed within five (5) days of receipt of the invoice.

6. No Guarantee or Obligation. Developer hereby acknowledges and agrees that the Developer's duty to reimburse the District is not contingent upon the approval or disapproval of the proposed Project by the County of San Diego, or upon the result of any action of the District, including those actions for which the District holds legal or other form of discretion.

7. Assignment. This Agreement shall not be assigned in whole or in part, without the prior written consent of District.

8. Interpretation. This Agreement is deemed to have been prepared by all of the Parties hereto, and any uncertainty or ambiguity herein shall not be interpreted against the drafter, but rather, if such ambiguity or uncertainty exists, shall be interpreted according to the applicable rules of interpretation of contracts under the law of the State of California.

9. Notice. All Notices permitted or required under this Agreement shall be in writing, and shall be deemed made when delivered to the applicable Party's representative as provided in this Agreement. Additionally, such Notices may be given to the respective Parties at the following addresses, or at such other addresses as the Parties may provide in writing for this purpose.

Such Notices shall be deemed made when personally delivered or when mailed forty-eight (48) hours after deposit in the U.S. mail, first-class postage prepaid, and addressed to the Party at its applicable address.

**DISTRICT**:

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

Attention: General Manager

**DEVELOPER**:

T2 Borrego, LLC
4582 S. Ulster Street, Suite 1410
Denver, CO 80237

Attention: Shannon Smith

10. Governing Law. This Agreement shall be governed by the laws of the State of California.

11. Jurisdiction & Venue. Any action or proceeding brought relative to this Agreement shall be heard in the appropriate court in the County of San Diego, California. The District and Developer each consent to the personal jurisdiction of the court in any such action or proceedings.

12. Entire Agreement; Modification. This Agreement represents the entire integrated Agreement between District and Developer related to the subject of cost reimbursement pertaining to the Project, and supersedes any and all other agreements, either oral or written, between the Parties, and contains all of the covenants and agreements between the Parties. Both Parties to this Agreement acknowledge that no representations, inducements, promises, or agreements, oral or otherwise, have been made by any Party, or anyone acting on behalf of any Party, which are not embodied herein. Any agreement, statement, or promise not contained in the Agreement, and any modification to the Agreement, will be effective only if signed by both Parties.

13. Severability. If any term or provision of this Agreement is found to be invalid or unenforceable, the District and Developer both agree that they would have executed this Agreement notwithstanding the invalidity of such term or provision. The invalid term or provision may be severed from the Agreement and the remainder of the Agreement may be enforced in its entirety.

14. Headings. The headings of each Section of this Agreement are for the purposes of convenience only and shall not be construed to either expand or limit the express terms and language of each Section.

15. Execution. This Agreement may be executed in several counterparts, each of which shall constitute one and the same instrument and shall become binding upon the Parties when at least one (1) copy hereof shall have been signed by both Parties hereto. In approving this Agreement, it shall not be necessary to produce or account for more than one such counterpart.

16. Authority. The Developer has all requisite power and authority to conduct its business and to execute, deliver, and perform this Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and to bind each respective Party.

IN WITNESS WHEREOF, the Parties have executed this Deposit Agreement as of the last date set forth below.

| | |
|---|---|
| BORREGO WATER DISTRICT, a public agency existing under the laws of the State of California | T2 BORREGO, LLC, a Colorado limited liability company |
| | By: _____ |
| By: _____ | |
| Name: Geoff Poole | Name: _____ |
| Title: General Manager | Title: _____ |
| Date: _____ | Date: _____ |

BORREGO WATER DISTRICT
BOARD OF DIRECTORS MEETING
SEPTEMBER 12, 2023
AGENDA ITEM II.D

September 7, 2023

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Borrego Springs Subbasin Watermaster Board – VERBAL D Duncan/K Dice/T Driscoll
1. Update on Board Activities
2. Update on Technical Advisory Committee Activities

**RECOMMENDED ACTION:**
Receive report from Watermaster and TAC Representatives

**ITEM EXPLANATION:**
Receive report from Watermaster and TAC Representatives

**NEXT STEPS**
2. TBD

**FISCAL IMPACT**
2. TBD

**ATTACHMENTS**
1. None