

**Borrego Water District Board of Directors**  
**Regular Meeting**  
**August 25, 2020 @ 9:00 a.m.**  
**806 Palm Canyon Drive**  
**Borrego Springs, CA 92004**

COVID-19 UPDATE: This Borrego Water District Board of Directors Meeting will be held as scheduled on the day and time listed above. BWD will be providing public access to the Meeting thru electronic means only to minimize the spread of the COVID-19 virus, based upon direction from the California Department of Public Health, the California Governor's Office and the County Public Health Office. Anyone who wants to listen to the meeting is encouraged to observe the GO TO MEETING a:

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**I. OPENING PROCEDURES**

- A. Call to Order:
- B. Pledge of Allegiance
- C. Roll Call
- D. Approval of Agenda
- E. Approval of Minutes
  - 1. July 14, 2020 Special Board Meeting (4-7)
  - 2. July 28, 2020 Regular Board Meeting (8-11)
- F. Comments from the Public & Requests for Future Agenda Items (may be limited to 3 min)
- G. Comments from Directors
- H. Correspondence Received from the Public- (12-16)
  - 1. San Diego County Water Authority Regional Conveyance System Project:
    - i. Letter from T2 and La Casa del Zorro principals to BWD Board regarding SDCWA RCS pipeline project (
    - ii. BWD Board final letter sent to SDCWA Board regarding potential RCS pipeline alignment through Borrego

**II. ITEMS FOR BOARD CONSIDERATION AND POSSIBLE ACTION**

- A. FY 2021-2029 Final Proposed CIP Comprehensive Descriptions and Cost Estimates used for Development of Cost of Service Study and Financing Plan – D Dale (17-58)
- B. Initial Results for developing in-house capability to construct various CIP pipeline projects – D Dale (59-60)

AGENDA: August 25, 2020

All Documents for public review on file with the District's secretary located at 806 Palm Canyon Drive, Borrego Springs CA 92004

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

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

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

- C. Draft of Important Risk Management areas for BWD continuance of service requirements for discussion by Interim Watermaster now that a Watermaster Executive Director has been hired (61-65)
- D. Endorsement request for Borrego Minister Association's COVID-19 Emergency letter to San Diego Gas & Electric Company (SDG&E) -L Brecht (66-68)
- E. BWD responses to public comments regarding the Stipulated Judgement submitted to the California Department of Water Resources for SGMA-compliance review – G Poole (69-114)
- F. Analysis of Existing BWD Solar Electricity Systems and Energy Efficiency Analysis – G Poole (115-139)
- G. Risk Management Policy Update DRAFT: COVID-19 Procedures – D Del Bono (140-144)
- H. Posting Borrego Springs Community Sponsor Group Agendas on BWD Website – L Brecht (145)
- I. Borrego Springs Interim Watermaster Board – G Poole/D Duncan/ K Dice - VERBAL (146)
  - 1. Selection of Executive Director/Technical Consultant
  - 2. BWD Request for Pumping Credit to Offset Admin Support Costs
  - 3. County of San Diego Accepts Permanent Participation on WM Board
  - 4. August 27 Agenda Items

### III. **STANDING AND AD-HOC BOARD COMMITTEE REPORTS –**

#### A. **STANDING:**

- 1. Operations and Infrastructure – Delahay/Duncan
- 2. AD HOC:
  - a. Stipulated Judgment Implementation – Brecht/Duncan
  - b. Risk Management/Pandemic – Brecht/Dice
  - c. Grant Funding – Dice/Johnson
  - d. Association of California Water Agencies/Joint Powers Authority – Dice/Johnson
  - e. Organizational Staffing - Dice/Duncan
  - f. Prop 218 and BWD Developers' Policy – Brecht

### IV. **MONTHLY FINANCIAL & OPERATIONS REPORTS**

- A. Financial Reports: June 2020 (147-162)
  - 1. Water and Sewer Revenue Comparison – J Clabaugh
- B. Water and Wastewater Operations Report: July 2020 (163-169)

### V. **STAFF REPORTS - VERBAL (170)**

- A. Administration -D Del Bono
- B. Waste Water Operations – R Martinez
- C. Water Operations – A Asche
- D. General Manager - G Poole
  - 1. Proposed schedule for Developer's Policy and Cost of Service studies and rate setting requirements through July 1, 2021
  - 2. Discussion of Superior Court's Stipulation Judgement Legal Service Process Required for a Comprehensive Adjudication of Subbasin Water Rights

AGENDA: August 25, 2020

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3. Update on High School Interpretive Skills Training Class at Borrego Springs High School: The required \$10,000 has been raised

**VI. CLOSED SESSION:**

- A. Conference with Legal Counsel - Significant exposure to litigation pursuant to paragraph (3) of subdivision (d) of Section 54956.9: (Two (2) potential cases)
- B. Conference with Legal Counsel – Existing Litigation (BWD v. All Persons Who Claim a Right to Extract Groundwater, et al. (San Diego Superior Court case no. 37-2020-00005776)

- VII. CLOSING PROCEDURE:** The next Board Meeting is scheduled for September 8, 2020 to be available online. See Board Agenda at [BorregoWD.org](http://BorregoWD.org) for details, available at least 72 hours before the meeting.



AGENDA: August 25, 2020

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**Borrego Water District Board of Directors**

**MINUTES**

**Special Meeting**

**July 14, 2020 @ 9:00 a.m.**

**806 Palm Canyon Drive**

**Borrego Springs, CA 92004**

**I. OPENING PROCEDURES**

- A. Call to Order: President Dice called the meeting to order at 9:00 a.m.
- B. Pledge of Allegiance: Those present stood for the Pledge of Allegiance.
- C. Roll Call: Directors: Present: President Dice, Vice-President Brecht, Delahay, Johnson

Absent: Secretary/Treasurer Duncan  
Staff: Geoff Poole, General Manager  
Jessica Clabaugh, Finance Officer  
Esmeralda Garcia, Administrative Assistant  
Wendy Quinn, Recording Secretary

Public: Rebecca Falk Cathy Milkey  
Tamara Baker Nehal Thumar, Taussig  
Trey Driscoll, Dudek Lora Carpenter  
Meet Panchal

D. Approval of Agenda: **MSC: Johnson/Delahay approving the Agenda as written.**  
*The motion passed by unanimous roll call vote of those present.*

- E. Approval of Minutes: None
- F. Comments from the Public and Requests for Future Agenda Items: None
- G. Comments from Directors: None
- H. Correspondence Received from the Public: None

**II. ITEMS FOR BOARD CONSIDERATION AND POSSIBLE ACTION**

A. Summary of Annual Fixed Charged Levies for Borrego Water District: Nehal Thuman reported that Taussig had prepared annual reports for various levies, including two Mello Roos districts. These assessments will be placed on the County tax roll. The assessment on Community Facilities District 2017-1 increased approximately 68 percent because of debt service on the bond, and CFD 2007-1 increased approximately 3 percent. The fixed charge levies remain the same as last year.

B. Annual Levying Standby Charges Resolutions: **MSC: Johnson/Delahay adopting the following Resolutions:**

*Resolution No. 2020-07-01, Resolution of the Board of Directors of the Borrego Water District Restating and Adopting a Statement of Investment Policy;*

*Resolution No. 2020-07-02, Resolution of the Board of Directors of the Borrego Water District, San Diego County, California, Levying Standby Charges and/or Acreage Assessments to Defray the Cost of Operations and Maintenance of the District and Requesting the Levy and Collection of Said Standby Charges and/or Acreage Assessments on Land Within the District for the Fiscal Year 2020-21;*

*Resolution No. 2020-07-03, Resolution of the Board of Directors of the Borrego Water District, San Diego County, California, Levying Standby Charges and/or Acreage Assessments to Defray the Costs of Operations and Maintenance for Improvement District No. 1 and Requesting the Levy and Collection of said Standby Charges and/or Acreage Assessments on Certain Land in Improvement District No. 1 for the Fiscal Year 2020-21;*

*Resolution No. 2020-07-04, Resolution of the Board of Directors of the Borrego Water District, San Diego County, California, Levying Charges and/or Acreage Assessments to*

***Defray the Cost of Providing Pest Control Services by the District and Requesting Levy and Collection of Said Charges and/or Acreage Assessments for the Fiscal Year 2020-21;***

***Resolution No. 2020-70-05, Resolution of the Board of Directors of the Borrego Water District, San Diego County, California, Levying Standby Charges and/or Acreage Assessments to Defray the Cost of Operating and Maintaining the Water Facilities within Improvement District No. 3 of the District and Requesting the Levy and Collection of Said Standby Charges and/or Acreage Assessments for the Fiscal Year 2020-21;***

***Resolution No. 2020-07-06, Resolution of the Board of Directors of the Borrego Water District Acting as the Legislative Body of Community Facilities District No. 2017-1 of the Borrego Water District Authorizing the Levy of Special Taxes Within Community Facilities District No. 2017-1 for the Fiscal Year 2020-21;***

***Resolution No. 2020-07-07, Resolution of the Board of Directors of the Borrego Water District Acting as the Legislative Body of Community Facilities District No. 2007-1 of the Borrego Water District Authorizing the Levy of Special Taxes Within Community Facilities District No. 2007-1 for the Fiscal Year 2020-21.***

***The motion passed by unanimous roll call vote of those present.***

**C. FY 2021-2029 Additional Budget Work for Raftelis' September/October Restart of Cost of Service (COS) Study:** Geoff Poole reported that the District had commissioned Raftelis to start the Proposition 218 process. The Cost of Service study was delayed for several reasons. Raftelis is identifying expenses and revenues for the next five years to justify any rate increases. The budget has been adjusted to accommodate the new schedule. Director Brecht noted that the Board had approved a provisional budget in May for FY 2022. If the District spends its reserves and doesn't replace them, it could increase future debt cost; but many of the CIP projects should not be delayed. Repairs after a failure cost more than preventive maintenance or replacement. Fieldman Rolapp has been requested to develop a financing plan. It is assumed that the District needs \$11 million in debt. Fieldman Rolapp's financing plan will be driven into the Cost of Service program that Raftelis is doing. Mr. Poole added that the CIP is being evaluated one more time. ***MSC: Delahay/Johnson authorizing Mr. Poole to negotiate an agreement with Raftelis and approving additional budget to cover the cost. The motion passed by unanimous roll call vote of those present.***

**D. Fieldman Rolapp Associates (FRA) financing plan development for COS study:** Mr. Poole said he was comfortable with the FRA proposal, included in the Board package. ***MSC: Brecht/Delahay approving the Fieldman Rolapp Associates financing plan development for the COS study. The motion passed by unanimous roll call vote of those present.***

**E. BWD Cost Calculations for Possible Watermaster Assistance: Meter Related Services:** Mr. Poole reported that meter reading will begin October 1, and pumpers have the option of automated or manual reading. BWD has been asked to consider handling the manual reading. Staff averaged the pay and benefits for the three meter readers and came up with a rate of \$45.63 per hour. There are also engineering related expenses to evaluate the meters and make sure they conform to industry standards. That would be at David Dale's hourly rate plus benefits, \$104.24. With the BWD Board's concurrence, Mr. Poole will present the proposal to the WMB on Thursday. Director Brecht recommended a ten percent administrative fee (ten percent of the total amount charged). ***MSC: Brecht/Delahay authorizing Mr. Poole to present the meter related services proposal to the WMB. The motion passed by unanimous roll call vote of those present.***

**F. COVID-19 Update: HR 7073 Support Letter:** Mr. Poole reported that HR 7073 would make a percent of State money available to special districts to deal with COVID. It is sponsored by the California Special Districts Association. A draft letter of support was included in the Board Package. ***MSC: Brecht/Delahay authorizing submittal of the letter of support for HR 7073. The motion passed by unanimous roll call vote of those present.***

**G. Basin Monitoring Plan, Responsibilities and Cost (water levels & water quality):** Director Brecht pointed out that within the next 24 months, groundwater monitoring will be developed by the WMB Technical Advisory Committee. Trey Driscoll is BWD's TAC representative. All water quality monitoring done before the Stipulation was signed will continue, including the 31 wells used under the GSP and CASGEM. Director Brecht wanted to focus on basin monitoring, not just water quality. BWD has three wells that are at risk of losing their production capability if water levels drop too fast too soon, and they might need to be replaced sooner than anticipated. Rebecca Falk asked whether the plan developed by Mr. Poole, John Peterson and Jay Jones for inexpensive monitoring to fill in data gaps was going forward. Mr. Poole explained that the plan was to use production wells and contract with the property owners. It was part of a grant application that was deemed too expensive and the work is being done in house. Ms. Falk agreed to send contact information for one of the well owners considered to Mr. Poole.

**H. SDCWA Transmission Pipeline Project:** Mr. Poole referred to a presentation months ago by the County Water Authority explaining three alternative that were being evaluated for a future transmission pipeline, so that farmers could improve irrigation rather than fallowing. One of the alternative routes would go through Borrego Springs. Two of the three alternatives are still being evaluated, including the one through Borrego. Director Johnson showed slides depicting the Regional Conveyance System, which would include some Colorado River water through the All American Canal. The Borrego option is the least risky from an environmental standpoint, and there is a possibility of using our basin for storage. On July 23, the CWA will vote on whether to go forward with the investigation.

**I. Board Meeting Schedule: August 2020:** After discussion, the Board agreed to meet in August instead of going dark as usual.

**J. Announcement of Board of Directors Openings and Election Schedule:** Mr. Poole reported that the seats occupied by Directors Delahay and Johnson are up for election this year. Director Brecht asked what would happen if no one runs. Would the BWD Board or the County appoint? Mr. Poole agreed to look into it, and encouraged everyone to consider possible candidates. Director Johnson reported she had requested forms from the Registrar of Voters and plans to file.

**K. Interim Water Credits Process:** Mr. Poole explained that although the water credits will eventually be transferred to BPAs, it will not be official until the interim budget is filed, probably in three to six months. He had received two inquiries from prospective buyers and one from a current holder. Until the new policy becomes effective, he recommended following the existing water credit policy. Director Brecht expressed concern regarding liability, i.e. whether the water credits still have value. Mr. Poole agreed to discuss the matter again with Steve Anderson and bring the matter back to the Board at the next meeting.

**L. Budget Discussion Document:** Director Brecht presented a list of issues relative to the Raftelis COS study.

### **III. STAFF REPORTS**

**A. Water Sales and Revenues Update:** Ms. Clabaugh reported that she was accumulating data from Springbrook, going back to 2017. She presented comparisons in water revenue between last year and this year, an increase of approximately 10.5 percent. She prepared an aging report and will e-mail it to the Board members. Aging accounts have increased by about \$60,000 since February, primarily due to arrears from Mesquite Trails.

**B. FY 2020 Audit Schedule:** Ms. Clabaugh reported that staff is getting reading for the fiscal year ending audit, using the same firm used last year. Some requested information has already been transmitted. A list of items and deadlines was included in the Board package. She hoped to have a draft on October 27 and adopt it on November 10.

C. BWD Draft Website: Mr. Poole reported that Meet Panchal and Esmeralda Garcia had worked on a new BWD website. Organization and appearance have been improved, and legally required information is included. Mr. Panchal described features of the new site and asked that any suggestions be submitted to him with copies to Mr. Poole and Ms. Garcia. Director Johnson noted that “judgment” needed to be spelled consistently (only one “e”). Mr. Poole noted that Mr. Panchal’s fellowship is ending soon. He will be recognized on the next Agenda.

D. Status of Abandoned Wells Enforcement and Associated Costs: Mr. Poole reported that the County’s letter in response to his request for assistance in identifying abandoned wells was on its way. There are over 100 wells of unknown status.

E. Draft BWD responses to Stipulation comments to be sent to the California Department of Water Resources (DWR): Mr. Poole reported that Mr. Driscoll had put together some draft responses to the comments received regarding the Stipulation. They are under internal review and will be presented to the Board at its next meeting.

F. Replacement Well #2 Construction Schedule: Mr. Poole reported that phase one of the environmental review for Replacement Well #2 is virtually done. Half of the District’s \$500,000 grant was spent on Dr. Jones and LeSar, and the pilot hole drilling for Well #2 was supposed to come from the balance. The grant money runs out at the end of the year, so Mr. Poole suggested billing for the pilot hole for Replacement Well #1 instead. Bond funds can be used for Well #2.

#### IV. CLOSED SESSION:

A. Conference with Legal Counsel – Significant exposure to litigation pursuant to paragraph (3) of subdivision (d) of Government Code Section 54956.9: (One (1) potential case):

B. Conference with Legal Counsel – Existing Litigation (*BWD v. All Persons Who Claim a Right to Extract Groundwater, et al.*, San Diego Superior Court case no. 37-2020-00005776):

C. Performance Evaluation of General Manager: GM Performance Review – Conference for Public Employee Performance Evaluation – Title: General Manager Employee Performance Review – pursuant to subdivision (d)(4) of Government Code Section 54957:

The Board adjourned to closed session at 11:20 a.m., and thereafter, the open session reconvened. There was no reportable action.

#### V. CLOSING PROCEDURE

The next Board Meeting is scheduled for July 28, 2020 at Borrego Water District, 806 Palm Canyon Drive, Borrego Springs, CA 92004. There being no further business, the Board adjourned.

**Borrego Water District Board of Directors**

**MINUTES**

**Regular Meeting**

**July 28, 2020 @ 9:00 a.m.**

**806 Palm Canyon Drive**

**Borrego Springs, CA 92004**

**I. OPENING PROCEDURES**

- A. Call to Order: President Dice called the meeting to order at 9:00 a.m.
- B. Pledge of Allegiance: Those present stood for the Pledge of Allegiance.
- C. Roll Call:     Directors:     Present:     President Dice, Vice President Brecht, Secretary/Treasurer Duncan, Delahay, Johnson

Staff:           Geoff Poole, General Manager  
                  David Dale, District Engineer  
                  Jessica Clabaugh, Finance Officer  
                  Alan Asche, Operations Manager  
                  Roy Martinez, WTF Operator III  
                  Esmeralda Garcia, Administrative Assistant  
                  Wendy Quinn, Recording Secretary

Public:           Rebecca Falk           Tammy Baker

D. Approval of Agenda: **MSC: Approving the Agenda as written. The roll call vote was unanimous.**

E. Approval of Minutes:

1. June 9, 2020 Special Board Meeting. **MSC: Johnson/Duncan approving the Minutes of the Special Board Meeting of June 9, 2020 as corrected (Item II.A, last paragraph, change “Municipal Advisors” to “Financial Advisors” and correct the spelling of Fieldman, Rolapp; Item III.B, fourth paragraph, change “State funds” to “Bureau of Reclamation Funds”; Item III.B, last paragraph, delete the last sentence (“Director Brecht did not believe it was economically feasible”). The roll call vote was unanimous.**

2. June 23, 2020 Regular Board Meeting.

**MSC: Brecht/Johnson approving the Minutes of the Regular Board Meeting of June 23, 2020 as written. The roll call vote was unanimous.**

F. Comments from the Public and Requests for Future Agenda Items: None

G. Comments from Directors: Director Brecht recommended scheduling a meeting with David Dale to review and finalize the CIP prior to referring it to Fieldman, Rolapp.

H. Correspondence Received from the Public: The correspondence will be addressed in closed session.

**II. ITEMS FOR BOARD CONSIDERATION AND POSSIBLE ACTION**

A. COVID-19 Impacts and Response:

1. Water and Sewer Revenue Comparison. Jessica Clabaugh presented graphs showing water revenue comparisons from 2017 through FY 2020 and water consumption. Sewer revenues are relatively stable. An aging report showed late payments from 30 days late to over 120. Esmeralda Garcia will put a notice in the newsletter offering help with payment plans if necessary.

B. Interpretive Skills Training Funding Update: Director Johnson reported that the Rotary Foundation had agreed to donate between \$2,000 and \$3,000 to the High School Interpretive Skills Training Program. At tomorrow’s meeting she planned to request more. Martha Deichler is investigating a grant, and Ms. Garcia, a graduate of the program, will speak to Rotary.

C. Recognition of Meet Panchal, Civic Spark Fellow: Geoff Poole announced there would be a farewell party for Meet Panchal later in the week. President Dice noted that Mr. Panchal's one-year fellowship was nearly complete. He was energetic and committed, working on the GSP, abandoned wells, and the new BWD website, among other things. Mr. Poole added that Mr. Panchal was a pleasure to work with.

D. Interim Borrego Springs Subbasin WaterMaster Board:

1. BWD Confirmation No Unresolved Deficiencies Exist on Water Credits Issued. Mr. Poole referred to his report at the last meeting, that the WMB had requested a letter from BWD confirming that there are no unresolved deficiencies relative to following under the water credit program and everything was done according to BWD requirements. The water credits will eventually be changed to BPAs. Mr. Poole worked with Mr. Anderson on the letter. He requested Board approval to send it to the WMB. *MSC: Brecht/Johnson authorizing Mr. Pole to sign the letter for President Dice and send it to the WMB. The roll call vote was unanimous.*

2. Items for July 30<sup>th</sup> Agenda. Mr. Poole reported that the July 30 WMB Agenda would include a continued discussion of the appointment of the Executive Director/Technical Consultant in closed session, and a carryover from the last meeting of steps to ensure everything is ready to begin meter reading on October 1. Director Duncan reported that he had asked about guidelines for sharing information from the WMB closed sessions with the BWD Board in closed session, and the WMB suggested he discuss it with the new WMB Legal Counsel.

3. Recruitment of Executive Director and Technical Consultant Update. Mr. Poole noted that he would be surprised if the WMB made a decision on Thursday. There are some questions remaining for the preferred choice, and the contract has not yet been completed. Once the decision is made and the contract signed, BWD can pass on the administrative functions they have been performing – probably next month. Director Brecht recommended letting the WMB know that BWD intends to cease administrative support at the end of August, and Mr. Poole agreed to put it on the next Agenda.

Director Johnson reported that Martha Deichler asked whether she and Mark Jorgensen, as Alternate and Community WMB representatives, should attend BWD meetings. Director Brecht suggested that Director Duncan and President Dice could brief them, and Director Duncan said they were already doing so as to the important issues.

### III. **STANDING AND AD-HOC BOARD COMMITTEE REPORTS**

A. STANDING:

1. Operations and Infrastructure. No report.

B. AD-HOC:

a. Stipulated Judgment Implementation. No report.

b. Risk Management/Pandemic. Director Brecht reported he sent a letter to the COVID-19 Task Force asking specific questions, and they advised him to contact the County. He would like to send the same type of letter to the County. As a critical infrastructure sector, BWD has to follow directions from the Department of Homeland Security. President Dice concurred.

c. Grant Funding. No report.

d. Association of California Water Agencies/Joint Powers Authority. President Dice noted that this was the week she would have been attending the ACWA conference in Monterey.

e. Organizational Staffing. No report.

f. Prop 218 and BWD Developers' Policy.

1. PPT Discussion Deck on FY 2022 – FY 2029 Cost of Service Issues. Mr. Poole had included Director Brecht's report, which was discussed at the last meeting, Minutes: July 28, 2020

in the Board package for information. Director Brecht explained that BWD is in a business that is capital intensive and needs cash to operate. To satisfy the requirements of the Stipulation, \$7.5 million will be needed - \$6 million from State and federal agencies and \$1.5 million from the BWD ratepayers.

Director Brecht narrated a slide presentation, beginning with a list of measures taken by BWD since 2011 to restore its credit. He noted that a negative cash flow is predicted for FY 2021. Since the District plans to incur debt in the next three or four years, the approved Prop 218 rates may need to be implemented. In the new 218 process, sufficient cash flow to afford the debt is important. In the CIP, he recommended concentrating on projects that are necessary instead of “nice to have.” On the other hand, waiting until something fails before repairing or replacing it costs more than being proactive.

President Dice inquired about revisiting the tier system. Director Brecht replied that it wasn’t in the current Raftelis COS study. He explained prior legal difficulties with the system, which were eventually resolved. A three-tier system is now being considered.

Director Johnson asked whether the solar installation at La Casa Del Zorro would affect BWD’s site work. Rebecca Falk reported that the Sponsor Group had asked La Casa to reconsider its proposed location, and they said there was no other suitable location on their property. The Sponsor Group will delay its vote until the environmental reports are submitted, probably in the spring of next year.

#### **IV. MONTHLY FINANCIAL & OPERATIONS REPORTS**

**A. Financial Reports: June 2020:** Ms. Clabaugh reported a cash balance of \$1.85 million. The auditing process is underway. Revenue is slightly higher than budgeted. Director Johnson asked why the total bills were 50 percent higher than projected, and Mr. Poole agreed to look into it and put it on the next Agenda. Ms. Clabaugh continued, reporting that staff is working to build up the surplus. Major expenses included the fire hydrant project and Well 5 rehab.

**B. Water and Wastewater Operations Report: June 2020:** The Water and Wastewater Operations Report was included in the Board package.

**C. Water Production/Use Records: June 2020:** The Water Production/Use Records were included in the Board package.

#### **V. STAFF REPORT**

**A. Wastewater Operations:** Roy Martinez reported that Downstream was working on the La Casa Del Zorro sewer lines. There is a problem with grease in the lines, and they are being videoed. Staff is working with SDG&E to inject oxygen into the force main, which should help with gases and fumes. Mr. Poole reported that staff is working with La Casa on a plan to address the grease problem.

**B. Water Operations:** Alan Asche was pleased to report there were no line breaks during the past month. Staff is working on meter exchanges and the Well 5 upgrade. The Well 9 pump house is nearly complete, and the Department of Drinking Water will inspect it. The fire hydrant replacements will continue through the end of August. Mr. Asche is working with a contractor to upgrade the communication system.

**C. General Manager/Administration:**

1. Publishing Copy of Signed Budget Resolution for FY 2021 – Passed on June 23, 2020. Mr. Poole invited the Board’s attention to the signed Budget Resolution in the Board package.

2. Process for Filling BWD Board Position if no Candidate Applies for Open Position. Ms. Garcia reported she had contacted the County concerning the process for filling the upcoming vacant Board position of no candidate applies. The Board of Supervisors can

assign a registered voter in the area, and will continue selection until a candidate accepts. Director Johnson noted that she knew a couple of potential candidates.

3. Social Media Activities: First BWD Facebook Post. Ms. Garcia reported that the new BWD Facebook page lists meetings and provides a way to communicate with the community. Information on maintenance and repair issues is included. Director Brecht asked how negative and nuisance comments would be handled, and Ms. Garcia replied that comments requiring response would be passed on to staff or the Board.

## **VI. CLOSED SESSION**

**A. Conference with Legal Counsel – Significant exposure to litigation pursuant to Government Code paragraph (3) of subdivision (d) of Section 54956.9 (Two (2) potential cases):**

**B. Conference with Legal Counsel – Existing Litigation (BWD v. All Persons Who Claim a right to Extract Groundwater, et al. (San Diego Superior Court case no. 37-2020-00005776)):**

**C. Performance Evaluation of General Manager: GM Performance Review – Conference for Public Employee Performance Evaluation – Title: General Manager Employee Performance Review – pursuant to Subdivision (d)(4) of Government Code Section 54957:**

**D. Replacement Well Number Two Site – Conference with Real Property Negotiators (Gov. Code §54956.8); Property APN: APN 198-270-13-00, 36.53 acres. BWD negotiator: Geoff Poole. Negotiating Parties: Geoff Poole, General Manager, and Owner: Borrego Springs Unified School District. Under Negotiation: Price and Terms of Payment:**

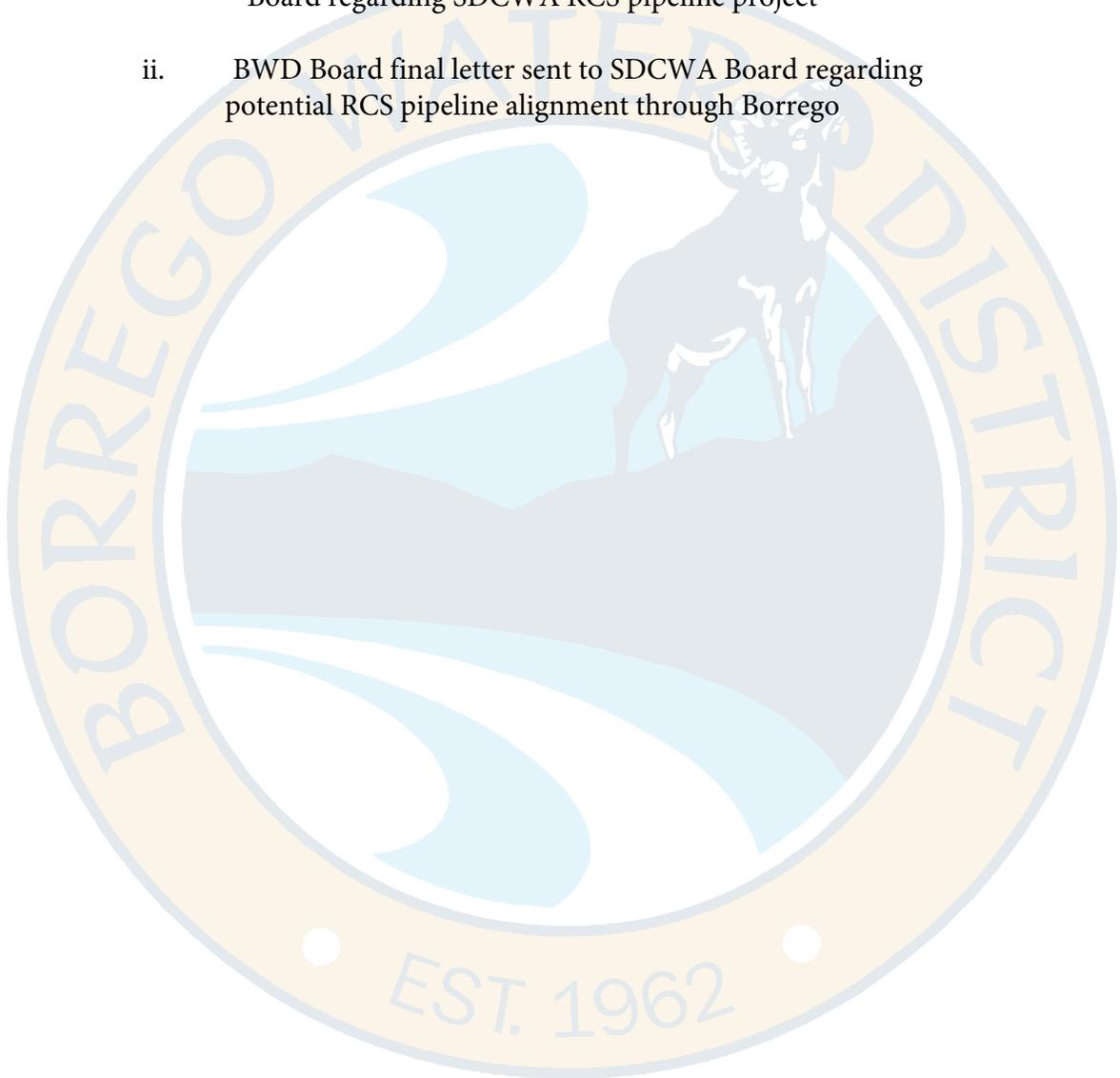
The Board adjourned to closed session at 11:00 a.m., and thereafter, the open session reconvened. There was no reportable action.

## **VII. CLOSING PROCEDURE**

The next Board Meeting is scheduled for August 25, 2020, to be available on line. See Board Agenda at BorregoWD.org for details, available at least 72 hours before the meeting. Mr. Poole noted that a Special Meeting may be scheduled on August 11 to discuss the CIP. There being no further business, the meeting adjourned.

# Correspondence

- i. Letter from T2 and La Casa del Zorro principals to BWD Board regarding SDCWA RCS pipeline project
- ii. BWD Board final letter sent to SDCWA Board regarding potential RCS pipeline alignment through Borrego



Board of Directors  
Borrego Water District  
PO Box 1870  
Borrego Springs, CA 92004  
C/O: Geoff Poole, General Manger  
*via email*

August 10, 2020

Dear Directors:

This letter is regarding the upcoming agenda item “SDCWA Transmission Pipeline Project – D Garmon Public Request” for the BWD’s August 11, 2020 public meeting. Based on a review of the materials and relevant background, we understand the BWD intends to write the San Diego County Water Authority (“SDCWA”) regarding the Regional Conveyance System Feasibility Review, which has been funded by 18 of the Member Agencies of the SDCWA. We have requested, via Cathy Milkey of Rams Hill, but have not yet received, copies of the documents that David Garmon refers to in his letter to the Board.

The SDCWA is currently considering whether to continue the Feasibility Study into its planned Phase B. This phase of the study would include a “more detailed analysis of potential partnerships,” for the two proposed routes that make technical, engineering, and economic sense. We had not heard there was opposition to moving forward with continued discussion and analysis until we read the BWD Board agenda. With this letter, we want to clearly voice our support in moving forward. We encourage you to support this further study for the following reasons:

1. It is premature to voice opposition to this potential project. Let us gain the facts and a better understanding first, and then any necessary conditions can be established. The pipeline project is many years away, possibly decades away, and the upcoming SDCWA vote is merely to pursue a study for additional research so that a more-informed decision can be made, including by the BWD.
2. For future generations of Borrego residents, diversification of water sources in Borrego may be vitally important. Borrego is a single-source aquifer, and while we do know that the Borrego basin will be brought into balance by the year 2040 per SGMA, we cannot predict all that the future holds. Refusing to consider an option that could be good for future generations by making a decision today that forestalls the possibility of diversification seems unwise, and some might say even foolish, at this early stage. The BWD Administrative Code provides that the Board will “assure the delivery of the services” to its customers. Turning our back on future possibilities today seems to run contrary to the commitment the BWD makes to its customers.

3. We do not know what future technology will provide, and storage of water in Borrego's aquifer is not a part of the project plan today. As currently proposed, we understand the pipeline would run through Borrego without an offtake point. Even while use of pipeline water in Borrego is not a part of the current plan, if later science or agreements suggest this would provide local benefits, the expressed fears about water quality, should they have merit after further study, could be addressed in new ways. For example, pipeline water could be used for irrigation purposes, thereby reducing the demand on the aquifer for irrigation uses. A lower demand on the aquifer would seem consistent with the BWD commitment to "assure the delivery of the services" to its customers.
  
4. The SDCWA is proposing Phase B of this study at no cost to the BWD or its ratepayers. Borrego's basin is currently critically overdrafted, and its community is severely disadvantaged. Studying potential outside sources of water without paying the millions of dollars for such studies is in the best interests of the ratepayers. Discouraging a neighboring water authority whose mission is also to provide for "a safe and reliable supply of water" from studying these possibilities at no local cost is irresponsible.

We urge the BWD Board to consider these points at this early stage and implore you to support the SDCWA with the continued study of this alternative. Of course, there is no guaranty that this pipeline option is the best alternative for Borrego or the SDCWA. Let us move forward with prudence to gain the best available information and learn if this option is feasible.

In order to provide the BWD with further resources on this matter, we have attached a potential letter to the SDCWA that the BWD could send. Please feel free to reach out if you'd like to discuss this further. We will also be present at the August 11, 2020 Board meeting to express these opinions and discuss the potential project further. Thank you for your consideration of this important matter.

Sincerely,



Jack McGrory  
JM Roadrunner, LLC and  
CWC La Casa Del Zorro, LLC



Shannon Smith  
Rams Hill Golf Course  
T2 Borrego, LLC

enc.



# BORREGO WATER DISTRICT

August 12, 2020

To: SDCWA Board of Directors:

It has come to the attention of the Board of Directors of the Borrego Water District (BWD) that there is belief “Borrego is entirely behind the proposed SDCWA’s Regional Conveyance System to transfer water from the Imperial Irrigation District (IID) to San Diego.” The BWD Board understands further that the purported rationale for Borrego’s support for this project is the potential for storage of IID water in the Borrego Springs Subbasin, which is currently designated as *critically* overdrafted by the California Department of Water Resources (DWR). This is topic that has not yet been discussed in the community as a whole and no such support has been registered.

The BWD Board would like to make it perfectly clear to the SDCWA Board that it has neither the inclination nor information, at present, to support or to oppose SDCWA’s proposed Regional Conveyance System.

The proposed Regional Conveyance System as a solution to the Borrego Springs Subbasin’s *critical* overdraft situation and impact on municipal water rates is tenuous at best, as no economic study has been developed nor presented to the BWD for review.

Furthermore, storage and later withdrawals of IID water for SDCWA use (conjunctive use) in the Borrego Springs Subbasin is neither a given nor externalities-free. Much additional hydrological and economic study would necessarily be required before the BWD Board could support such a proposition.

One example of a major concern is that there are numerous toxins in Colorado River water, which are presently not found in Subbasin water deposits, and which are hard if not impossible to remove with common advanced treatment technologies. Some of these are known MCL contaminants, some are already being regulated in other US states and in countries other than the US, and some are presently being considered for future regulation here in California. Would BWD be willing to assume the additional financial risk of adding new contaminants to the Subbasin? This is a question for a future BWD Board to answer; hopefully with data, not opinion.

Another example is consideration for the structural integrity of the Subbasin; certain time and quantity conditions for storage and withdrawals of IID water could result in compaction and subsidence in Borrego. No amount of hydrological study can with 100% confidence render such an outcome

exceptionally unlikely (<1% probability). Such a claim would not be reliable science, but merely wishful thinking. Instead, any decision to use the Subbasin must be made based on a thorough understanding of the financial risk and rewards for municipal water service, and for the potential externalities that, if they occur, would potentially be borne by the Borrego community's public sector. Since Borrego is designated as a Severely Disadvantaged Community, the economic risks are a major concern.

In closing, while the BWD Board does not have the necessary information at this time to formally support or oppose the proposed pipeline alignment at this time, we would welcome gaining more scientific and economic data, including risks and benefits for further discussion with SDCWA in the future.

Sincerely,

For the BWD Board



Kathy Dice, President

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.A

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: FY 2021-2029 final proposed CIP projects' comprehensive descriptions and cost estimates package sent to Fieldman Rolapp Associates on behalf of BWD Board – D Dale

**RECOMMENDED ACTION:**

Receive Staff Report and continue with Cost of Service Study and Financing Plan

**ITEM EXPLANATION:**

David Dale has updated the Capital Improvement Plan by adding the two Projects presented to the Board at the last meeting: Club Circle Water and Sewer Lines and Transmission Main to Country Club Tank. The cost estimate for the Bending Elbow was also increased from \$170,000 to \$330,000. Attached is the updated CIP including the changes mentioned above.

**NEXT STEPS**

Use this information for development of the Cost of Service Study

**FISCAL IMPACT**

TBD

**ATTACHMENTS**

1. Capital Improvement Plan

# MEMORANDUM

**DATE:** 8/25/20

**TO:** Board of Directors BWD

**FROM:** David Dale, BWD District Engineer & Geoff Poole, General Manager

**Re:** Borrego Water District – FY 2020/21 through FY 2028/29 CIP Project Summary and Narratives

The following table shows the summary of the revised FY 2020/21 through FY 2028/29 CIP projects. The CIP projects are described in detail on the following pages.

## **Overall Program Engineering/Planning**

### **CAPITAL IMPROVEMENT PROJECTS FISCAL YEARS 2020/21-2028/29 SUMMARY**

	<b><u>CASH RESERVE WATER PROJECs</u></b>
1	Bending Elbow Pipeline Project
2	El Tejon Road Pipeline Project
3	Flying H Road Pipeline Project
4	ID-5 Well VFD
5	Replace and upgrade Booster Pump Station 5
6	SCADA replacement
7	Facilities Maintenance - Office Internal Repairs
8	Program Engineering/Construction Management Consulting
9	Emergency System Repairs

	<b><u>CASH RESERVE WASTEWATER PROJECTS</u></b>
10	Sewer Line Repairs/Manhole Replacements/Refurbishment
11	Install Diffusers at sludge holding tank
12	Engineering/Construction Management Consulting

	<b><u>GRANT CIP PROJECTS</u></b>
	<b><u>Water Projects</u></b>
13	Replace Twin Tanks-(Prop 1 grant)
14	Replace Wilcox Diesel Motor-(Prop 1 grant)
15	Replace Indianhead Reservoir-(Prop 1 grant)
16	Rams Hill #2, 1980 galv. 0.44 MG recoating -(Prop 1 grant)
	<b><u>Sewer Projects</u></b>
17	Plant-Grit removal at the headworks-(Prop 1 grant)
18	Clarifier Upgrade/Rehabilitation -(Prop 1 Grant)

	<b><u>2018 BOND FUNDED CIP PROJECTS</u></b>
19	De Anza Pipeline Replacement Project
20	Replacement Well #2 (\$250,000 DWR Grant Approved for 20-21 included)
21	Fire Hydrant Replacement
22	Oxygen Injection System at Pump Station Borrego Valley Road

	<b><u>POTENTIAL FUTURE BOND FUNDED CIP PROJECTS</u></b>
	<b><u>Wells, Booster Stations, Reservoirs &amp; Associated Transmission Mains</u></b>
23	Borrego Springs Road Pipeline Replacement
24	Sun Gold Pipeline Replacement
25	Deep Well Pipeline Replacement
26	West and East Star Road Pipeline Replacement
27	Country Club Tank Recoating, 1999 1.0 MG
28	Water Treatment Facility (phase 1)
29	Water Treatment Facility (phase 2)
30	New production well
31	Solar Project
32	Well 5 Transmission Main Project
33	Club Circle Water and Sewer Pipeline Replacement Project

*CIP PROJECTS FY 2020/21 – FY 2028/29 NARRATIVES*

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## CASH RESERVE WATER PROJECTS

### CIP ITEM No. 1-3: Pipeline Replacement Projects

#### A. Project Description / Justification

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Each year there are water pipe breaks that the District repairs. The CIP has included these costs as routine repairs each year. The District's water distribution system was piecemealed together over time as the District took over smaller Districts in the area. The smaller pipelines were interconnected in partial measures. The District has identified three pipeline replacement projects that should be implemented for a more dependable system. The water pipe lines have service laterals that would be replaced to the property lines.

#### B. Project Design / Process Flow:

These projects will be designed by a professional engineer in the State of California. After design is complete, the projects will be put out to bid. The lowest responsible bidder will be awarded the project. These pipelines are in need of replacement within the next three years.

#### C. Cost Estimate

Estimates were derived using pipeline lengths and cost per unit length. Not enough information is available to do a detailed analysis at this time.

Bending Elbow Pipeline Project	\$170,000
El Tejon Road Pipeline Project	\$140,000
Flying H Road Pipeline Project	\$137,500

Total: \$447,500

#### D. Project Estimated Timeline:

Bending Elbow Pipeline Project	FY 2020-21
El Tejon Road Pipeline Project	FY 2021-22
Flying H Road Pipeline Project	FY 2022-23

#### E. Impacts of Deferral:

Potential devastating water pipeline breaks; disruption in water service for prolonged periods; unreliable water service. The projects should be completed as shown in the above timeline due to the frequency of water pipeline breaks which cause lack of service to the District's customers.

## CIP ITEM No.4 – 8 and 12: ID-5 Variable Frequency Drive Replacement, Booster Pump Station 5 Upgrade, SCADA system Replacement, Facilities Maintenance and Engineering/Construction Management Consulting

### A. Project Description / Reasons for Capital Expense

#### CIP #4: Budget \$150,000 – ID-5 VFD Replacement

The variable frequency drive (VFD) is a controller that monitors the pressure in the system and changes the speed of the pumps to maintain a steady pressure. It is a high powered computer system that drives the electric motor by varying the frequency and voltage supplied to the motor, thus adjusting the speed of the motor of the pump. VFDs have a specified life span, and the technology of the VFDs increases each year. VFDs usually don't do well in high heat and dust situations. Therefore, the District is planning on replacing the VFD at ID-5 well in FY 23-24.

#### CIP #5: Budget \$100,000 – Replace and Upgrade Booster Pump Station 5

Booster Pump Station 5 pumps water to the Indian Head Tank. If Well 18 is inoperative, Booster Pump Station is used. It will need to be upgraded for capacity in the future.

#### CIP #6 - Budget \$100,000 – SCADA System Replacement

The existing SCADA system is outdated is inoperative and needs to be replaced. The heat had damaged the system, radios, etc. Some of the system is running on "hand" (manual). Includes firmware, hardware, antennas, and software.

#### CIP #7: Budget \$27,000 - Facilities Maintenance – Office Repairs

The office carpet is beyond its useful life and should be replaced. This is scheduled for FY 20-21. The stucco on the outside of the building requires repairs. This is scheduled for FY 21-22.

#### CIP #8 and #12: Budget \$556,557 (average \$70.820/year)– Program Engineering/Construction Management Consulting

This item is for Engineering and Construction Management for items identified in the CIP, both for water projects and wastewater projects. The cost for these items depends largely on the details of the projects.

### B. Project Design/Flow

The District works with firms that provide the labor and materials. Quotes will be requested at the time of replacement.



## CIP ITEM No. 9: Emergency Water Pipeline Repairs

### A. Project Description / Reasons for Capital Expense

Budget \$425,000 (average \$47,222 per fiscal year)

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Each year there are water pipe breaks that the District repairs. The CIP has included these costs as routine repairs each year.

Emergency Water Repairs are common in older distribution systems.

### B. Project Design/Flow

When a pipeline breaks, the District responds immediately to repair the leak. If the roadway is affected, the County sends an inspector to the project site.

### C. Cost Estimate

The cost in the CIP is based on historical trends. It is estimated that the emergency water system repair costs will be reduced as water pipeline replacement projects are completed. The first year estimate is \$60,000, then as pipeline projects are completed the costs are diminished each year through FY 2024.

### D. Timeline

The schedule for this item is based on whenever the pipelines break and deferral is not an option.

## CIP ITEM No. 10: Sewer Main Repairs/Manhole Replacements/Refurbishments

### A. Project Description / Reasons for Capital Expense

Budget: \$435,000 (Average \$43,000/year)

The District acquired Improvement District 5 (ID-5) in 2008. Club Circle is part of ID-5, and the infrastructure therein was installed in 1960's. The sewer collection system pipelines are composed of a clay material. The sewer main that runs from Yaqui Pass Road east/southeast through the Casa Del Zorro parallel to Borrego Springs Road should be video inspected and any deficiencies repaired. Manholes in this area have deteriorated in this area and should be rehabilitated or replaced as necessary.

### B. Project Design/Flow

The designs for pipeline repairs will start with a topographic survey that will show the elevations of all the existing tops of manholes, inverts of existing sewer pipe, identify the type and size of pipe, other utilities, rights of ways, existing structures, etc. The design plan will show the locations, size and type of the new sewer pipelines and manholes. The existing sewer system will remain in service until the new sewer collection system is installed. As an alternative, the sewer pipelines may be slip lined, depending on the engineer's recommendations. Slip lining is used to repair leaks or restore structural stability to an existing pipeline. Slip lining is completed by installing a smaller, "carrier pipe" into a larger "host pipe", grouting the annular space between the two pipes, and sealing the ends. The most common material used to slip line an existing pipe is high-density polyethylene (HDPE), but fiberglass-reinforced pipe (FRP) and PVC are also common. Slip lining can be used to stop infiltration and restore structural integrity to an existing pipe. There are two methods used to install a slip line: continuous and segmental.

Continuous slip lining uses a long continuous pipe, such as HDPE, Fusible PVC, or Welded Steel Pipe, that are connected into continuous pieces of any length prior to installation. The continuous carrier pipe is pulled through the existing host pipe starting at an insertion pit and continuing to a receiving pit. Either the insertion pit, the receiving pit, or both can be manholes or other existing access points if the size and material of the new carrier pipe can maneuver the existing facilities.

Segmental slip lining is very similar to continuous slip lining. The difference is primarily based on the pipe material used as the new carrier pipe. When using any bell and spigot pipe such as FRP, PVC, HDPE or Spirally Welded Steel Pipe, the individual pieces of pipe are lowered into place, pushed together, and pushed along the existing pipe corridor. Using either method the annular space between the two pipes must be grouted. In the case of sanitary sewer lines, the service laterals must be reconnected via excavation.

### C. Cost Estimate

A budget of \$435,000 (average of \$43,000/year) was allocated in the CIP for this project. Actual costs will depend on the type of rehabilitation or construction selected. The CIP shows expenses every other year for this item.

D. Project Timeline.

There are several areas within the collection system that need to be repaired. The District completed a video inspection of some of the system, which revealed sags, cracks and other issues within the system. Further investigation of the condition of the system is needed to prevent sewer collection system issues.

The projects are proposed to begin in FY 2020-21 and continue every other year. This is highly dependent on any issues that may present themselves as priority to keep the system functional.

E. Impact of Deferral:

Further investigative work is needed to determine the condition of the Casa Del Zorro pipelines and manholes.. Deferring this item could contribute to reduced service and possible failures in extreme situations.

## CIP ITEM No. 11: Install Diffusers at the Sludge Holding Tank

A. Project Description / Reasons for Capital Expense

Budget \$100,000

An air diffuser or membrane diffuser is an aeration device typically in the shape of a disc, tube or plate, which is used to transfer air and with that oxygen into the sewage or industrial wastewater. Oxygen is required by microorganisms/bacteria residents in the water to break down the pollutants. Diffusers use either rubber membranes or ceramic elements typically and produce either fine or coarse bubbles.

The existing sludge holding tank needs diffusers to have adequate mixing and desired performance.

B. Project Design/Flow

The District will contact several vendors for pricing of the diffusers.

C. Cost Estimate

The cost estimate is \$100,000 to install the diffusers in the existing sludge holding tank.

D. Timeline

Due to operational issues, the diffusers should be installed FY 20-21.

# GRANT WATER PROJECTS

## CIP ITEM No. 13: Replace Twin Tanks

### A. Project Description / Justification

The District contracted a dive inspection on February 2, 2017 to determine the condition of the interior of the tanks. The last inspection occurred October 14, 2014. Inspections occur approximately every three years. The inspection of the Indian Head Tank identified that the tank may be at the end of its useful life and requires replacement. BWD is working with the State of California to receive Grant funding for this expenditure.



Figure 1 - Location of the Twin Tanks

B. Project Design/Flow

A Preliminary Engineering Report has been completed. It is recommended that the (2) tanks with 220,000 gallons each (440,000 total) be replaced with (1) bolted steel tank with 500,000 gallons nominal storage capacity. It has the least cost and the shorter tank would have less aesthetic impact to the local desert park. A new altitude valve would be installed to prevent water from spilling over the tank overflow, as the tank would be located at a lower elevation (approximately 860 feet). The benefit of having the tanks at the higher elevations is that gravity supply into the distribution system provides constant pressures without the need for a Variable Frequency Drive (VFD) or emergency backup power at the tank locations. Please note that a geotechnical report will be necessary to determine if the concrete ringwall is necessary. The geotechnical report is out of the scope of this report.

C. Cost Estimate

ALTERNATIVE # 1B - REPLACE TANKS WITH (1) LARGER TANK					
Twin Tanks Replacement					
No.	Qua	Unit	Description	Unit Cost	Total Cost
<b>1 Construction Cost</b>					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 35,000.00	\$ 35,000
1.2	2	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 23,500.00	\$ 47,000
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 3,500
1.4	1	LS	Survey Tank Location	\$ 2,500.00	\$ 2,500
1.5	125	CY	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 275.00	\$ 34,375
1.6	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.7	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16’ high and 73’ diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 344,214.00	\$ 344,214
1.8	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10” flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 28,500.00	\$ 28,500
1.9	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.10	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
				Project Construction Cost:	\$ 518,389
				10% Contingency:	\$ 51,839
				<b>Total Construction Cost:</b>	<b>\$ 570,228</b>
<b>2 Admin and Engineering</b>					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (5%)	\$ 28,511	\$ 28,511
2.02	1	LS	Construction Management	\$ 25,000	\$ 25,000
				<b>TOTAL PRELIMINARY PROJECT ESTIMATED COST</b>	<b>\$ 623,739</b>

## D. Timeline

This project should be completed as soon as possible. The District has identified extreme corrosion in the tanks. Catastrophic failure could result if the tanks are not replaced.

## CIP ITEM No. 14: Replace Wilcox Diesel Motor

### A. Project Description / Justification

Budget \$75,000

The District has received a Notice of Violation (number 225200) from the APCD on July 7, 2015. In the violation notice, the APCD indicated that the diesel engine must be replaced with an emissions compliant engine, the engine must be refitted with emissions equipment or the engine taken out of service. Due to the age of the engine it is not feasible to install aftermarket controls to meet the new emissions requirement. Therefore, the options include replacement or taking the well out of service (revoking the existing permit to operate). The Wilcox Well is considered an emergency source of water when the electric power is out of service, so it is a critical component of the water distribution system and must be kept online. The alternative to replace the engine is the most cost effective and environmentally friendly option.

The proposed project includes new equipment purchase, necessary construction permits of the APCD, removal of the existing diesel engine and installation of the new compliant engine.

The proposed project includes replacing the existing 80hp diesel engine with a Tier 4 emissions compliant for standby diesel engines. This is considered a green component due to the enhanced energy efficiency of the engine and near-zero emissions. Replacing the existing diesel engine is much more cost effective than to bring electric power to the site and install an electric engine. BWD is working with the State of California to receive Grant funding for this expenditure.

### B. Project Design / Process Flow

On May 11, 2004, EPA signed the final rule introducing Tier 4 emission standards, which are phased-in over the period of 2008-2015. The Tier 4 standards require that emissions of PM and NOx be further reduced by about 90%. Such emission reductions can be achieved through the use of control technologies, including advanced exhaust gas after treatment.

The new diesel engine will comply with EPA Tier 4 Final and EU Stage IV emissions standards. It will employ Diesel Oxidation Catalyst (DOC) technology or Diesel Particulate Filters (DPF) to meet the Tier 4 Final/Stage IIIB requirement for near-zero Particulate Matter (PM) emissions. The Tier 4 regulation and later amendments for Engine power between 75hp and 175hp have numeric not-to exceed values for various pollutants and also include a number of provisions:

- *Smoke Opacity*—Existing Tier 2-3 smoke opacity standards and procedures continue to apply in some engines. Exempted from smoke emission standards are engines certified to PM emission standards at or below 0.07 g/kWh (because an engine of such low PM level has inherently low smoke emission).

- *Crankcase Ventilation*—The Tier 4 regulation does not require closed crankcase ventilation in nonroad engines. However, in engines with open crankcases, crankcase emissions must be measured and added to exhaust emissions in assessing compliance.
- *DEF Refill Interval*—For SCR-equipped nonroad diesel engines, a minimum DEF (urea solution) refill interval is defined as at least as long (in engine-hours) as the vehicle’s fuel capacity.
- *Emergency Operation*—In order to facilitate the use of certain nonroad engines in temporary emergency situations, the engines can be equipped with an AECD to override performance inducements related to the emission control system—for example, to allow engine operation without urea in the SCR system during an emergency. This flexibility is intended primarily for engines used in construction equipment and portable equipment used for temporary power generation and flood control.
- *ABT Program*—Similarly to earlier standards, the Tier 4 regulation includes such provisions as averaging, banking and trading of emission credits and FEL limits for emission averaging.

C. Cost Estimate:

<b>Replace Wilcox Diesel Motor with APCD Compliant Motor</b>					
No.	Qua	Unit	Description	Unit Cost	Total Cost
<b>1</b>	<b>Construction Cost</b>				
1.00	1	LS	Replace Wilcox Diesel Motor	\$ 65,000.00	\$ 65,000
				Project Construction Cost:	\$ 65,000
				10% Contingency:	\$ 6,500
				<b>Total Construction Cost:</b>	<b>\$ 71,500</b>
<b>2</b>	<b>Admin and Engineering</b>				
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications	\$	2,000
2.02	1	LS	Construction Management	\$	2,000
				<b>TOTAL PRELIMINARY PROJECT ESTIMATED COST</b>	<b>\$ 75,500</b>

D. Project Timeline.

APCD is requiring replacement of the motor to meet air quality standards. BWD staff has negotiated an agreement with APCD to defer enforcement until BWD receives State Grant proceeds are received, projected for mid-2018.

Planning Initiated:	2020-21
Bid Project:	2020-21
Construction:	2020-21

- E. Impact of Deferral: BWD was informed that APCD requirements mandate replacement of the motor. Deferral of this project creates the potential of further enforcement action by APCD.

## CIP ITEM No. 15: Replace Indian Head Reservoir

### A. Project Description / Justification

The District contracted a dive inspection on February 2, 2017 to determine the condition of the interior of the tanks. The last inspection occurred October 14, 2014. Inspections occur approximately every three years. The inspection of the Indian Head Tank identified that the tank may be at the end of its useful life and requires replacement. BWD is working with the State of California to receive Grant funding for this expenditure.

### B. Project Design/Flow

The tank will be replaced with a single 220,000-gallon bolted steel tank. No change in capacity is proposed. The tank will be installed at the same location as the existing tank. The bolted steel tank will be approximately 38 feet in diameter and 24 feet high. The coating will be fusion or powder coated steel.

The estimated life of the tank is approximately 30 years if it is properly maintained. After completion of the tank, it will be filled with water. The water will be tested for Volatile Organic Compounds (VOC) and bacteria prior to putting the tank into service. No change in capacity is proposed.



**Figure 4 - Location of Indianhead tank**

C. Cost Estimate:

<b>Indian Head Tank Replacement</b>					
No.	Qua	Unit	Description	Unit Cost	Total Cost
<b>1</b>	<b>Construction Cost</b>				
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$ 25,000.00	\$ 25,000
1.2	1	LS	Demolish existing bolted 220,000 gallon steel tank. Remove and dispose of the tank.	\$ 17,500.00	\$ 17,500
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 3,500
1.4	1	LS	Survey Tank Locations	\$ 2,500.00	\$ 2,500
1.5	150	CY	Prepare Tank Pad – Install Class 2 Base 24 inches thick. Install ½” Fiber expansion joint material on top of the rock.	\$ 225.00	\$ 33,750
1.7	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.8	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16’ high and 50’ diameter. After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 135,000.00	\$ 135,000
1.9	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10” flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 19,500.00	\$ 19,500
1.10	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.11	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 3,800.00	\$ 3,800
			Project Construction Cost:	\$	260,050
			10% Contingency:	\$	26,005
			<b>Total Construction Cost:</b>	<b>\$</b>	<b>286,055</b>
<b>2</b>	<b>Admin and Engineering</b>				
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (7%)	\$	20,024
2.02	1	LS	Construction Management	\$	15,000
			<b>TOTAL PRELIMINARY PROJECT ESTIMATED COST</b>	<b>\$</b>	<b>321,079</b>

D. Project Estimated Timeline:

The extent of the corrosion in the tank requires replacement as soon as possible. The project would have started earlier but construction is delayed due to the time needed to complete the Grant Application.

Planning Initiated: 2020-21

Bid Project: 2020-21  
 Construction: 2020-21

E. Impact of Deferral

Observed corrosion in the Indian Head Tank has prompted BWD to recommend replacement instead of repair. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

CIP ITEM No. 16: Rams Hill #2 Tank Replacement

A. Project Description / Justification

Budget: \$616,000

The District contracted a dive inspection on October 19, 2016 to determine the condition of the interior of the tanks. The last inspection occurred in 2012. Inspections occur approximately every three years. The inspection of the Twin Tanks has identified areas inside the tank that require repair. BWD is working with the State of California to receive Grant funding for this expenditure.

Rams Hill #2 Tank Areas	
55'	Diameter
24'	Height
FT^2	Area
4147	interior walls
2376	Interior floor
2376	interior roof
38	Center Support
600	Rafters/etc.
9536	Total Interior
FT^2	Area
2376	exterior roof
4147	exterior shell
6523	Total Exterior
SF=square feet	

B. Project Design/Flow

It may be possible to rehabilitate the tank; however substantial steel repairs and replacement would be required. For purposes of comparison in this report, the costs of the steel repairs is only estimated because the tank would need to be drained, sandblasted fully inspected and an estimate from a

licensed contractor obtained. The condition of the metal will not be known until sandblasting operations are complete. The costs of replacement of the tank and the rehabilitation of the tank are similar, so it is recommended to replace the tank in lieu of rehabilitation.

C. Cost Estimate:

<b>Rams Hill Replacement</b>					
No.	Qua	Unit	Description	Unit Cost	Total Cost
<b>1 Construction Cost</b>					
1.1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Insurance,	\$ 45,000.00	\$ 45,000
1.2	1	LS	Demolish existing bolted 440,000 gallon steel tank. Remove and dispose of the tank.	\$ 45,000.00	\$ 45,000
1.3	1	LS	Provide tank submittal, stamped and signed by a Registered Engineer in the State of California. Payment after acceptance.	\$ 2,500.00	\$ 2,500
1.4	120	CY	Prepare Tank Pad – Install new galvanized steel ring around the perimeter of the tank. Install 1-inch No. 4 Rock eight inches thick. Install ½" Fiber expansion joint material on top of the rock.	\$ 275.00	\$ 33,000
1.5	1	LS	Survey Tank Location	\$ 2,500.00	\$ 2,500
1.6	1	LS	Furnish and Install OSHA exterior locking ladder kit and railing around the roof hatch	\$ 7,500.00	\$ 7,500
1.7	1	LS	Install fusion powder coated bolted steel tank, nominal dimensions 16' high and 73' diameter (500,000 Gallon Nominal Capacity). After installation, complete holiday testing of interior coating and repair all holidays to the satisfaction of the engineer.	\$ 344,214.00	\$ 344,214
1.8	1	LS	Install piping, valves, transition couplings, fittings, Tideflex valve, expansion joints, check valves, pipe supports, 10' flow meter (relocate existing), ductile iron risers, thrust blocks, anti-vortex hardware, and other appurtenances as necessary for a functional system and as shown on the plans. Connect to existing piping.	\$ 19,500.00	\$ 19,500
1.9	1	EA	Install Altitude Valve	\$ 12,000.00	\$ 12,000
1.10	1	LS	Hydrostatic Testing, VOC Testing, Wash-down and Cleaning of the interior, Disinfection, and Bacteriological Testing. Water provided by the District at no charge.	\$ 5,000.00	\$ 5,000
			Project Construction Cost:	\$	516,214
			10% Contingency:	\$	51,621
			<b>Total Construction Cost:</b>	<b>\$</b>	<b>567,835</b>
<b>2 Admin and Engineering</b>					
2.01	1	LS	Preliminary Engineering, Engineering Plans and Specifications (5%)	\$	28,392
2.02	1	LS	Construction Management	\$	25,000
			<b>TOTAL PRELIMINARY PROJECT ESTIMATED COST</b>	<b>\$</b>	<b>621,227</b>

D. Project Timeline:

Observed corrosion in the tank has prompted BWD to proceed with re-coating as soon as possible. This project is also part of the ongoing State Grant process, which has delayed construction.

Project scheduled to be completed in FY 2020-21

## E. Impact of Deferral

Observed corrosion in RH #2 has prompted BWD to recommend repairs. Deferral of this Project leads to the potential for further degradation of the tank and possible failures.

## CIP ITEM No. 17: Plant Grit Removal at the Headworks

### A. Project Description / Reasons for Capital Expense

Budget \$214,000

The wastewater treatment facility headworks consist of an influent flowmeter (Parshall Flume), a grit settling basin, positive displacement air blower system, and an “auger-style” grit separator. Recent improvements to the headworks include installation of a new ultrasonic flow meter unit, repair of the original bar screen, replacement of comminutor (Muffin Monster) unit, and replacement of the positive-displacement style blower unit that provides aeration to the aerobic sludge digester.

The existing “auger-style” grit separator housing and drive unit are extremely corroded (see photos below), do not adequately process settled grit, and leak raw influent wastewater onto the surface area. Furthermore, according to operations staff, the original air-lift system has not worked properly for quite some time, and should be replaced with a fluid pumping system capable of pumping settled grit and solids from the bottom of the grit chamber to the separator. Without a functional grit removal system, floating solids are transported through the WWTF facility. BWD is working with the State of California to receive Grant funding for this expenditure.



### B. Project Design/Flow:

The headworks dimensions are 54” tall x 30” wide x 18 ½’ Long. The primary channel includes a Muffin Monster Grinder. There is also a by-pass stationary bar screen. The onsite power is 240V 3 phase 60 Hz. The alternatives for this are to replace the existing failed grit separator, or no action. If nothing is done, solids and particulate matter can enter the WWTF, causing problems with the treatment process and possible effluent violations.



## CIP ITEM No. 18: Clarifier Upgrade at WWTP

### A. Project Description / Reasons for Capital Expense

Budget \$240,000

The water plant is comprised of (2) gravity settling basins (clarifiers) intended to separate and settle our stabilized solids (MLSS) from the secondary effluent stream. The clarifiers are equipped with a center-well structure, skimmer/scrapper arms, and main drive unit.

**Deficiencies noted in this area:** The exposed steel components in the clarifiers exhibit notable signs of corrosion and wear. Skimmer/scrapper arms should be replaced to ensure efficient collection and removal of settleable and floatable material from the effluent stream. The center-well structure and related piping should be sandblasted and recoated to extend service life, and the main drive units display significant signs of excess wear and should be completely replaced in order to ensure continued operation.



B. Cost Estimate: \$118,000

C. Project Timeline. Why is 2019 Proposed?

The clarifier is a critical component at the beginning of the waste water treatment process. The existing equipment is very close to the end of its useful life.

The project is scheduled to be completed in FY 2020-21

D. Impact of Deferral:

Replacement of the clarifier will improve WWTP Plant operations and deferral of this improvement increases the risk of maintenance issues and/or equipment failure

## 2018 Bond Funded CIP Projects

### CIP ITEM No. 19: De Anza Pipeline Replacement Project

#### A. Project Description / Justification

Budget: \$430,000

The work shall include the procurement of materials and the A. installation of a new 6- inch diameter water main pipeline along De Anza Drive, Yaqui Road and Fairway Lane. The work also includes the tie-ins to the existing 6 inch water lines. The work also includes the installation of new fire hydrants along De Anza Drive and Fairway Lane.

#### B. Project Design / Process Flow:

The project was designed by Dynamic Consulting Engineers, Inc., and was put out to bid. Rove Engineering, Inc. was the low bidder on the project.

#### C. Cost Estimate:

The low bid is \$387,365 from Rove Engineering, Inc. Assuming 10% for contingencies (change orders), the budget has been set at \$430,000.

#### A. Project Estimated Timeline:

Rove Engineering, Inc. is set to start construction in September 2020 and be complete with the project by February 2021.

#### B. Impacts of Deferral:

Cannot be deferred since there is a contract in place already.

## CIP ITEM No. 20: Replacement Well #2

### D. Project Description / Justification

Budget: \$1,250,000

BWD has identified that a new well will need to be installed as a part of the 2018 Bond proceeds. Wells ID1-8, and ID1-10 cannot be rehabilitated again and falling groundwater levels are contributing to the problem.

### E. Project Design / Process Flow:

Dudek prepared a report "Draft Working Technical Memorandum" dated June 16, 2017 that describes three separate Subbasin within the BWD service boundary. The report identifies that the Central Management Basin has the best chance for water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22.

The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and will further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Once a site has been selected, an exploration phase will commence. If the water quality and depth is acceptable, the land will be acquired for the wellsite and the well will be constructed to municipal standards.

### F. Cost Estimate:

The well is estimated to cost \$1,250,000 to construct.

### C. Project Estimated Timeline:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to investigate and construct the replacement well before any existing well fails. Recent award of State of California to BWD provides initial funding for the investigation, there it is time to begin the process.

Exploration and land acquisition for Replacement Well #1:	FY 2020-21
Construct Replacement Well #1:	FY 2020-21

### D. Impacts of Deferral:

Construction of this well is needed before complete failure of certain wells in the distribution system to ensure maximum water availability flow, operations flexibility and emergency response for BWD Customers. Deferring installation of the well increases the likelihood experiencing these problems in the future.

## CIP ITEM No. 21: Replacement of Fire Hydrants

### A. Project Description / Justification

Budget: \$540,000

The District's water distribution system is aging. Some parts of the distribution system were installed in the 1960's and are starting to reach their life expectancy. The pressure in the system is over 100psi in many areas. Some fire hydrants have already been replaced, but there remains approximately 45 hydrants that still need to be replaced. These fire hydrants are substandard and beyond their useful life.

### B. Project Design / Process Flow:

BWD Staff will replace the fire hydrants one at a time, including the valves from the laterals if necessary.

### C. Cost Estimate:

The fire hydrants cost approximately \$12,000 each to replace. The replacement includes the laterals, valves, and risers. There are approximately 45 hydrants, so the total cost estimate is \$540,000.

### E. Project Estimated Timeline: Why is the project proposed for FY 2020:

Due to the age of the hydrants, some are not functional and some are not standard. There is potential liability for the District if a fire hydrant fails or is unable to be used during a fire.

### F. Impacts of Deferral:

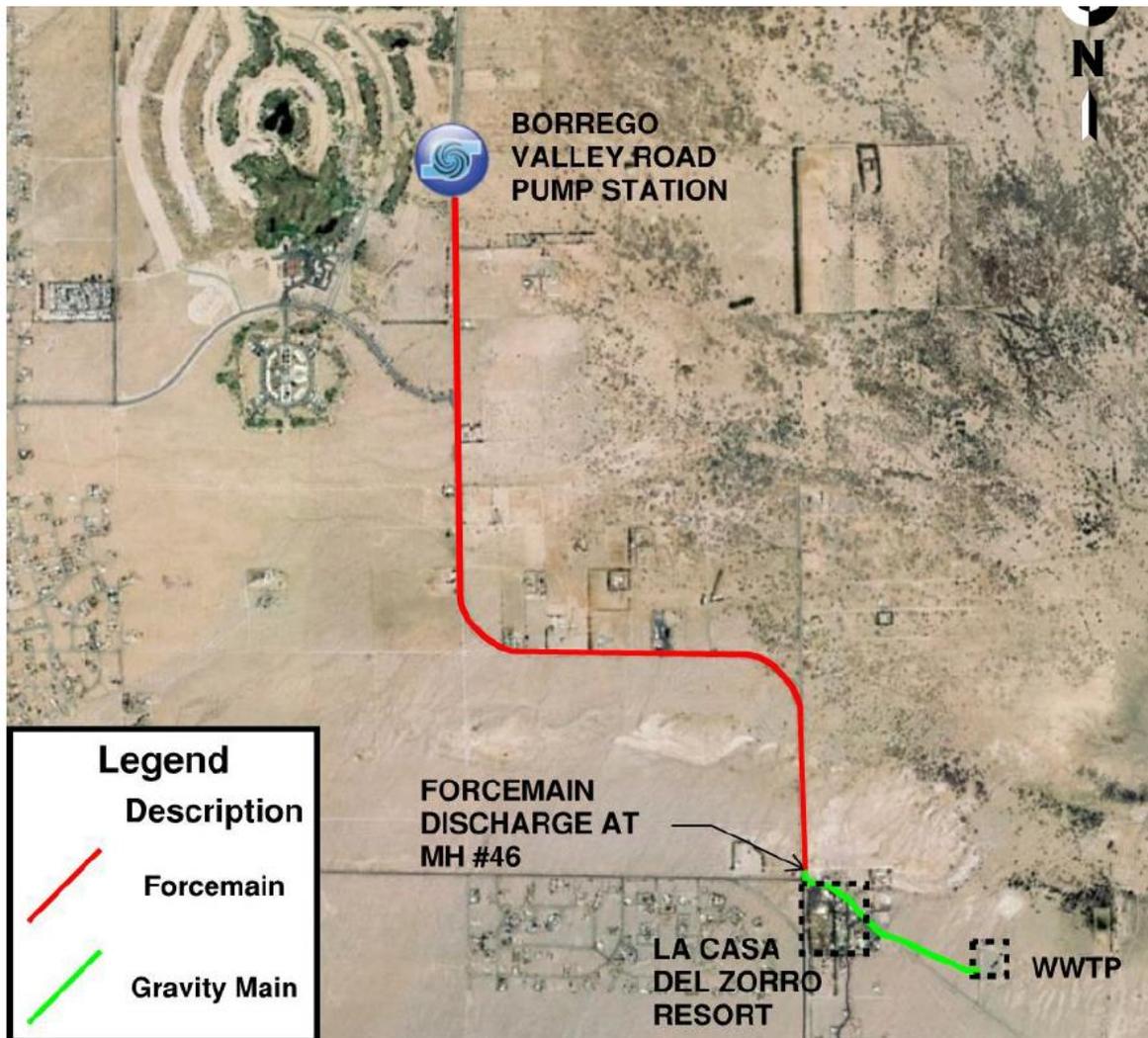
Due to the age of the hydrants, some are not functional and some are not standard. There is potential liability for the District if a fire hydrant fails or is unable to be used during a fire.

## CIP ITEM No. 22: Oxygen Injection System at Sewer Pump Station at BVR

### A. Project Description / Justification

Budget: \$450,000

The Borrego Water District is undertaking an improvement program to address deficiencies in the District's sewer collection system. To assist in this effort, Dudek prepared a Technical Memorandum, which included an evaluation and preliminary condition assessment of the District's Borrego Valley Road Pump Station, 2.8 miles of forcemain, and 3,500 feet of gravity sewer with 11 manholes along the La Casa del Zorro Resort and Spa (Resort) and Borrego Springs Road.



The Borrego Valley Road Pump Station is located along Borrego Valley Road approximately 0.6 miles north of Tilting T Drive. During the summer months, flows average 25,000 gpd. During the winter months, flows reach 130,000 gpd. Wastewater is pumped a distance of 2.8 mile through a 10-inch PVC forcemain before discharging to gravity at Manhole #46. Along the forcemain, there is one air-vacuum valve located at the intersection of Borrego Valley Road and Rango Way. The air-vacuum valve is contained inside a manhole

structure. Air-vacuum valves are typically installed at high points on pressure pipe and are designed to allow air to enter or escape the system during filling and draining operations. No other manholes exist along the forcemain.

The District has reported severe levels of hydrogen sulfide (H<sub>2</sub>S) odors originating at the forcemain discharge and detected throughout the gravity main. Implementing and coordinating an odor control improvement program would address the odor issue as well as the manhole corrosion issue.

B. Project Design / Process Flow:

BWD staff will coordinate the project with the District Engineer. A bid package will be prepared for public bidding.

C. Cost Estimate:

The oxygen injection system is estimated to be \$450,000.

G. Project Estimated Timeline: Why is the project proposed for FY 2020:

The District has been struggling with Hydrogen Sulfide odor issues in the Casa Del Zorro area. Adding oxygen at the pump station will help reduce these levels.

H. Impacts of Deferral:

Although recent efforts, such as the installation of blow offs, flushing the forcemain and installation of a weir at the end of the forcemain have helped remediate the problem, at times the problem still exists. Hydrogen Sulfide is a dangerous gas that causes severe odor problems.

## Potential Future Bond Funded CIP Projects

### CIP ITEM No. 23-26: Pipeline Replacement / Improvement Program

#### A. Project Description/ Reason for expense.

Water pipelines are out of sight and “out of mind” until there are breaks and water leaks. Many parts of the distribution system are approaching their useful life. Every year the District is proactive in replacing and installing new water pipelines in the distribution system. The District has identified and prioritized several sections of pipelines within the distribution system. They are the following:

Project
Borrego Springs Road Project
Sun Gold Pipeline Project
Deep Well Pipeline Project
West and East Star Road Project

#### B. Project Design/ Flow

The regularly scheduled water pipeline replacement program could be completed by in house District staff as they become available, or professionally designed, publically bid and constructed by a contractor.

#### C. Cost Estimate

Install new 10" C900 PVC on the west side of Borrego Springs Road  
from Walking H Drive to Tilting T Drive  
2150FT of 10" C900 PVC and 9 service laterals

Estimated total pipe length 2,150 feet and 9 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$175.00 a foot = \$376,250

Install new 10" C900 PVC on the east side of Borrego Springs Road  
from Tilting T Drive to Country Club Road  
3600FT of 8" C900 PVC and 7 service laterals

Estimated total pipe length 3,600 feet and 7 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$175.00 a foot = \$630,000

#### SUN GOLD PIPELINE PROJECT

Replace all Distribution A/C pipelines in the Sun Gold area with C900 PVC

1160FT of 6" C900 PVC pipe on Falchion Drive and 8 service lateral lines  
500FT of 6" C900 PVC pipe on Bartizon Drive and 3 service laterals  
500FT of 6" C900 PVC pipe on Cuisse Lane and 5 service laterals  
250FT of 6" C900 PVC pipe on Ballista Drive and 3 service laterals

Estimated total pipe length 2,400 feet and 19 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$361,500

1600FT of 6" C900 PVC pipe on Hauberk Drive and 12 service lateral lines  
350FT of 6" C900 PVC pipe on Hauberk Court and 4 service laterals  
1300FT of 6" C900 PVC pipe on Fenoval Drive and 15 service lateral lines

Estimated total pipe length 3,250 feet and 31 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$487,500

1600FT of 6" C900 PVC pipe on Trebuchet Drive and 14 service laterals  
1250FT of 6" C900 PVC pipe on Velite Drive and 10 service laterals  
750FT of 6" C900 PVC pipe on Quintain Drive and 2 service laterals

Estimated total pipe length 3,600 feet and 26 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$150.00 a foot = \$540,000

1150FT of 6" C900 PVC pipe on Arbalest Drive and 4 service laterals  
400FT of 6" C900 PVC pipe on Mangonel Drive and no service laterals  
600FT of 6" C900 PVC pipe on Onager Drive and 6 service laterals

Estimated total pipe length 2,150 feet and 10 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$268,750

#### DEEP WELL PIPELINE PROJECT

Replace all Distribution A/C pipelines in the Deep Well Area with C900 PVC

1550FT of 6" C900 PVC pipe on Anzio Drive and 9 service laterals  
3700FT of 6" C900 PVC pipe on Sarasoto Drive an 18 service laterals  
210FT of 6" C900 PVC pipe on Borica Court an 3 service laterals

Estimated total pipe length 5,460 feet and 30 service laterals  
Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$682,500

2700FT of 6" C900 PVC pipe on Sewanee Drive and 14 service laterals  
380FT of 6" C900 PVC pipe on Owega Court no service laterals

1600FT of 6" C900 PVC pipe on Ynez Path and 8 service laterals

Estimated total pipe length 4,680 feet and 22 service laterals

Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$585,000

2700FT of 6" C900 PVC pipe on Pecos Drive and 13 service laterals

600FT of 6" C900 PVC pipe on Utica Drive and 2 service laterals

300FT of 6" C900 PVC pipe on Neches Court and 5 service laterals

300FT of 6" C900 PVC pipe on Quanah Court and 5 service laterals

700FT of 6" C900 PVC pipe on Escudro Drive and 2 service laterals

Estimated total pipe length 4,600 feet and 27 service laterals

Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$575,000

2600FT of 6" C900 PVC pipe on Hopi Path and 7 service laterals

1750FT of 6" C900 PVC pipe on Zuni Trail and 17 service laterals

Estimated total pipe length 4,350 feet and 24 service laterals

Estimated cost including pipe, valves, hydrants and labor \$125.00 a foot = \$543,750

#### WEST AND EAST STAR ROAD PROJECT

Replace Distribution A/C pipeline on West and East Star Road

4500FT of 6" C900 PVC and 26 service laterals

Estimated total pipe length 4500 feet and 26 service laterals

Estimated cost including pipe, valves, hydrants and labor \$100.00 a foot = \$450,000

Total Estimated Cost for all Projects = \$5,947,750

#### D. Project Timeline

The CIP shows these projects starting in FY 2024-25 and finishing in FY 2028-29. The projects are needed to replace aging infrastructure, improve system redundancy and water flow.

## CIP ITEM No. 27: Country Club Tank Rehabilitation

### A. Project Description / Justification

Budget \$ 250,000

The Country Club Tank is located approximately 1-½ mile west of the intersection of Title T and Borrego Springs Road (S3). The tank has a capacity of 1.0 million gallons and is composed of coated steel. The California Department of Health Services requires the District to physically inspect the inside of the domestic water reservoirs every three years. This service is performed by a consultant that utilizes divers and provides a written report as well as a video. The tank was constructed approximately 17 years ago. The tank is in good condition currently, but it is anticipated that it will need to be recoated on a regular schedule in fiscal year 2024-25.

### B. Project Design / Process Flow:

After the inspection report is delivered and the tank needs recoating, the District Engineer will prepare engineering documents and the project will be sent out for public bidding with Board approval.

### C. Cost Estimate:

Without a recent dive inspection, an accurate cost estimate is difficult because the number of metal repairs necessary is unknown. Experience with past projects gives an approximate cost estimate of \$250,000 to recoat and repair the tank.

### D. Project Estimated Timeline. Why is Project Proposed for 2023:

Based on experience, it is estimated that a recoating will be needed in 2023. The actual date of recoating will be determined following the periodic video inspections. Following is the estimated schedule based on this timeline:

Dive Inspection:	February 2023
Receive Dive Inspection Report:	March 2023
Engineering/design completion:	March 2023 – April 2023
Project Bidding:	April 2024 – May 2024
Repair Recoat Tank:	June 2024 – July 2024

### E. Impacts of Deferral:

Following completion of planned inspections, the magnitude of the corrosion will be known and a plan to repair developed. Deferral of the necessary maintenance could lead to increased repair costs or the need for replacement of the Reservoir completely before the end of its useful life.

Item	Quan	Unit	Description	Unit Cost	Amount
1	1	LS	Mobilization/ Demobilization, Temporary Facilities, Construction Sign, Insurance, Payment Bond, Taxes, Permits, Fees and Similar Expenses	\$22,500	\$ 22,500
2	18,800	SF	Sandblast Complete Interior Including Columns, Rafters, Appurtenances, Exterior Roof Coatings to SSPC-SP 10. Remove and Legally Dispose of Spent Blast Material.	\$ 3.75	\$ 70,500
3	1	LS	Remove and replace metal components as necessary	\$ 3,500	\$ 3,500
3	18,800	SF	Recoat Interior Surfaces. This Item to be Considered Lump Sum Unless the Area is Shown to be Materially Different than shown.	\$ 5.10	\$ 95,880
4	1	LS	Coating Inspection and Testing	\$ 3,500	\$ 3,500
5	1	EA	Replace Manway Gasket	\$ 750	\$ 750
6	1	LS	Hydrostatic Testing, VOC Testing, Disinfection of Tank, Bacteriological Testing	\$ 3,800	\$ 3,800

Construction Subtotal: \$200,430  
Contingency (10%): \$ 20,043  
Subtotal Construction: \$220,473

Engineering/Contract Document Preparation \$ 20,000  
Construction Inspection: \$ 9,527  
Total Project Estimate: \$250,000



Country Club Tank Location

## CIP ITEM No. 28 AND 29: Water Treatment Facility (Phase 1 and 2)

### A. Project Description / Justification

Budget: \$1,785,000

The following are excerpts from “Draft Working Technical Memorandum” prepared by Dudek, written to the Borrego Water District dated June 16, 2017:

As a public water system, the BWD is regulated by the State Water Resources Control Board’s Department of Drinking Water. California regulations related to drinking water are contained within California Code of Regulations (CCR) Title 17 and Title 22. California drinking water MCLs that shall not be exceeded in the water supplied to the public are listed in CCR Title 22 Chapter 15. The BWD samples groundwater quality from water wells at intervals required by the DDW.

While none of the BWD’s wells currently exceed California drinking water MCLs, treatment alternatives for COCs are discussed herein to explore options in the event that groundwater quality were to become impaired. Non-treatment and treatment options to meet drinking water standards typically include blending, wellhead treatment, or supplementing the impaired source of supply.

The Borrego Springs Groundwater Subbasin of the Borrego Valley Groundwater Basin (BVGB) has been determined to be in overdraft. There is a potential risk associated with temporal changes in groundwater quality that may result in exceedances of California drinking water maximum contaminant levels (MCLs) in Borrego Water District (BWD) production wells due to the long-standing critical overdraft. Thus, it assesses current and historical groundwater quality data and the inter-relationship between groundwater levels and groundwater quality. The main constituents of concern (COCs) are arsenic, nitrate, sulfate, fluoride, total dissolved solids (TDS), and radionuclides. Of primary concern is the potential for water quality degradation and the relative risk that the groundwater supply will not meet MCLs.

The USGS found that concentrations of TDS and nitrate exceed their respective water quality standard thresholds in portions of the upper aquifer of the Borrego Springs Groundwater Subbasin (for reference with depth the BVGB is comprised of three aquifers: upper, middle, and lower). The highest concentrations of both constituents were generally found in the northern portion of the Borrego Springs Groundwater Subbasin, and the concentration of TDS was found to increase as groundwater levels decline. Sulfate, another COC, was also found to increase in concentration as groundwater levels decline. In addition to nitrate, TDS, and sulfate, other potential COCs in the BVGB include arsenic and gross alpha radiation, though the latter appears to be confined to the Ocotillo Wells Groundwater Subbasin. Since the compilation of available groundwater quality data by the USGS in 2015, additional data have been collected by the BWD for its active production wells in 2016 and for seven private wells located in the South Management Area (SMA) of the Borrego Springs Groundwater Subbasin. This recent data indicates that arsenic concentrations exceed the California drinking water MCL of 10 micrograms per liter ( $\mu\text{g/L}$ ) in portions of the lower aquifer in the SMA. Additionally, review of historical arsenic data for BWD wells located in the SMA indicates an increasing arsenic trend in well ID1-2, and a linear regression analysis indicates a good correlation of fit among arsenic concentration, groundwater production, and declining groundwater levels in well ID1-8. Based on the 2-year lag linear regression of groundwater production and arsenic data from well ID1-8, groundwater production

in excess of 300 AFY at well ID1-8 is possible and further analysis is needed before conclusions can be reached. Thus, arsenic concentrations in the lower aquifer of the Borrego Springs Groundwater Subbasin are determined to be a primary COC. Because groundwater quality data for the Borrego Springs Groundwater Subbasin are limited, further data collection and evaluation is required to verify the predicted exceedance of the arsenic drinking water standards in well ID1-8 and potential for other wells in the Borrego Springs Groundwater Subbasin to exceed the arsenic drinking water standard or other COC.

**B. Project Design / Process Flow:**

Once it has been determined if a treatment process is necessary, an engineering report will be prepared indicating the best and most efficient method of treatment. The CIP breaks the treatment into phases. Environmental documents will be prepared and distributed. After approval, the project(s) will be sent out to public bidding and then constructed. The CIP shows these projects starting in FY 2022-23.

**C. Cost Estimate:**

Project costs are highly speculative at this time due to the fact that current water quality does not require treatment. Due to the falling groundwater table, this may change in the future with depth dependent water quality. The budget is \$1,785,000.

**D. Project Estimated Timeline: Why is the project proposed for FY 2026 :**

Since there is no immediate risk of water contamination in BWD Production wells, it is yet to be determined when and where future treatment will be necessary based on the factors outlined above. For planning purposes, it is assumed that treatment will be needed in FY 2026.

**E. Impacts of Deferral:**

It is risky to wait this long, but once contamination is realized, deferring the improvements is not an option. Fines, public backlash and other interventions from State regulators would occur if drinking water standards are not met.

## CIP ITEM No. 30: New Production Well

### G. Project Description / Justification

Budget: \$2,000,000

A new production well may need to be installed in the next five years. Wells ID1-8, and ID1-10 cannot be rehabilitated again and falling groundwater levels are contributing to the problem.

### H. Project Design / Process Flow:

Dudek prepared a report "Draft Working Technical Memorandum" dated June 16, 2017 that describes three separate Subbasin within the BWD service boundary. The report identifies that the Central Management Basin has the best chance for water that meets the requirements of California Code of Regulations (CCR) Title 17 and Title 22.

The BWD has already initiated preliminary review of potential new sources of supply in the Borrego Springs Subbasin and will further identify strategic sources of supply that meet Title 22 potable drinking water quality requirements.

Once a site has been selected, an exploration phase will commence. If the water quality and depth is acceptable, the land will be acquired for the wellsite and the well will be constructed to municipal standards.

### I. Cost Estimate:

The well is estimated to cost \$2,000,000 to construct.

### I. Project Estimated Timeline: Why is the project proposed for FY 2025:

Due to the fact that certain BWD wells have reached the end of their useful life, it is imperative to investigate and construct the replacement well before any existing well fails. Recent award of State of California to BWD provides initial funding for the investigation, there it is time to begin the process.

Exploration and land acquisition for Replacement Well:	FY 2025-26
Construct Replacement Well #1:	FY 2025-26

### J. Impacts of Deferral:

Construction of this well is needed before complete failure of certain wells in the distribution system to ensure maximum water availability flow, operations flexibility and emergency response for BWD Customers. Deferring installation of the well increases the likelihood experiencing these problems in the future.

## CIP ITEM No. 31: Solar Project

### A. Project Description / Justification

Budget: \$500,000

As electricity costs increase, solar generation through Photovoltaic cells becomes more efficient and cost savings increase. Borrego Springs has some of the best conditions for solar power generation in the country.

### B. Project Design / Process Flow:

An engineering analysis will be prepared to determine the feasibility of the project on a cost/benefit basis for the next 25 years. If it is deemed appropriate with the relevant estimated savings, the BWD District Engineer will prepare plans and specifications for the project. The project will then go to public bidding and the lowest responsible bidder will be awarded a contract to construct the project.

### C. Cost Estimate:

The well is estimated to cost \$500,000 to construct.

### D. Project Estimated Timeline: Why is the project proposed for FY 2025:

This project will be reviewed if the District deems bonding to be appropriate to fund the CIP starting in FY 2025-26.

### E. Impacts of Deferral:

For costs savings to be realized, the sooner this project is implemented the better.

## CIP ITEM No. 32: Well 5 Transmission Main Project

### A. Project Description / Justification

Budget: \$1,215,000

Well #5 is used to supply water to ID-4 and ID-5, and to fill the 1.0 million gallon capacity Country Club Tank. Pipeline sizes range from 6-inches to 10-inches in diameter. The pipeline along Tilting T from Well 5 is 10 inches in diameter from the well to the intersection of Titling T and Borrego Springs Road. After this intersection, the pipeline reduces to 8-inches in diameter, then reduces further to 6-inches in diameter along Country Club Road and Broken Arrow Road. Also along these areas, there are residential connections. A transmission pipeline would have no connections, and would allow water to be pumped directly from Well #5 to the Country Club tank. There are certain advantages to having a transmission line. First, a larger pipeline would allow the tank to fill faster, save electricity from friction losses in the pipe. Second, if in the

future there are any water quality problems, they could be addressed at the tank instead of the well. Additionally, the District is exploring the possibility of drilling a new well (Well #2) at the intersection of Tilting T and Di Giorgio Road. The larger pipelines would allow for both Well #5 and Well #2 to fill the Country Club Tank. Having two wells in this area would provide redundancy if one of the wells is out of service.

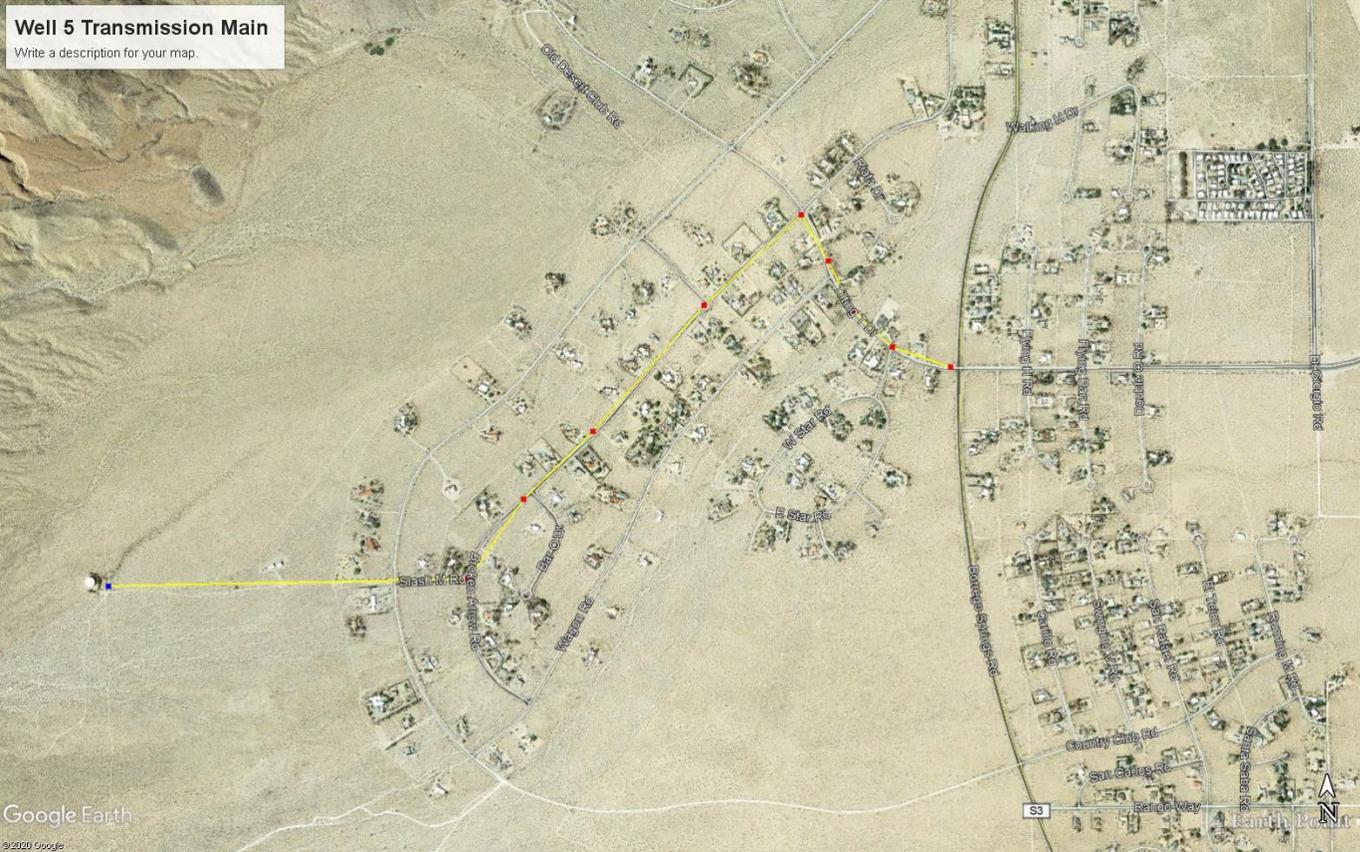


Figure 2 - Proposed Well 5 Transmission Main

B. Cost Estimate:

1	1	LS	Mobilization of equipment and material, Performance Bond, Payment Bond, General Liability Insurance, Workman's Compensation Insurance, Construction water, freight, project signs, Air pollution control district requirements and fees, Restroom Facilities, Vehicle Insurance, Taxes, Permits, Business license, and Similar expenses and other costs not specifically addressed within this bid item list.	\$ 170,000.00	\$ 170,000.00
2	1	LS	Preparation of Traffic Control Plan, Implementation of Traffic Control and Construction Area Signs	\$ 13,500.00	\$ 13,500.00
3	1	LS	Potholing of the Existing Underground Utilities and Pipelines as indicated on Improvement Plans.	\$ 7,500.00	\$ 7,500.00
4	10,000	LF	Furnish and Install New 12-inch Dia. AWWA C-900 DR 18 - Pressure Class 150 PVC Water Pipeline, Including Native Material Backfill and Compaction, fittings	\$ 75.00	\$ 750,000.00
5	1,300	CY	Install Granular Sand Pipe Bedding	\$ 55.00	\$ 71,500.00
6	10	EA	Furnish and Install New 12-Dia. Ductile Iron Resilient Wedge Gate Valve with Valve Cover and Riser.	\$ 3,000.00	\$ 30,000.00
7	7	EA	Furnish and Install New Fire Hydrant Assembly Including gate Valve, lateral and Valve Can	\$ 12,000.00	\$ 84,000.00
8	1	LS	Contractor to Complete Hydrostatic Pressure Testing per Specifications.	\$ 12,500.00	\$ 12,500.00
9	1	LS	Contractor to Complete Disinfection of the New Pipeline per Specifications	\$ 9,500.00	\$ 9,500.00
10	5,000	LF	Sawcut Existing AC Pavement	\$ 3.50	\$ 17,500.00
11	10,000	SF	Remove and Dispose AC Pavement	\$ 2.50	\$ 25,000.00
12	100	Tons	Install 4 Inches of AC Pavement 3/4" Type III Class B3 (Per San Diego County Standards and Specifications)	\$ 165.00	\$ 16,500.00
13	150	CYS	Install 9 Inches of Class II Base	\$ 50.00	\$ 7,500.00
<b>Total Base Bid Items</b>				<b>\$</b>	<b>1,215,000.00</b>

C. Project Estimated Timeline:

The water distribution system of ID-4 was not designed to convey the flows from Well#5 to the Country Club tank. Well #5 was incorporated into the BWD ID-4 system many years after ID-4 came into being. The system is working with the assistance of booster pumps. The transmission mains should be installed before Well #2 is operational.

D. Impacts of Deferral:

The system can continue to operate adequately in its current condition; however it is not efficient. Also with the addition of Well #2 in the area, it will become necessary to upgrade the system pipelines to the Country Club tank. Also, if water quality issues arise at Well #5 or the proposed Well #2 location, a centralized treatment system can be installed at the Country Club Tank with a transmission line.

### CIP ITEM No. 33: Club Circle Water and Sewer Pipeline Replacement Project

E. Project Description/ Reason for expense.

The Club Circle development was constructed in the 1960's, along with the water distribution system and the sewer collection system. The water and sewer pipelines are beyond their expected lifespan. The sewer pipelines are constructed of a fragile clay material. Recently the District completed a video inspection of the sewer pipelines. There was not an immediate need to replace the sewer pipelines at the time; however there were some root intrusion.

Due to their age and condition, the water pipelines inside the development are known to break when the pressure is over 80 psi. The water pipelines need to be replaced. The water and sewer infrastructure is beneath the asphalt paved roads. Therefore, when the water pipelines are to be replaced it would be efficient to replace the sewer pipelines at the same time since the asphalt paving will need to be removed and replaced. Additionally, it is likely that due to construction of the water pipes, that the vibration will cause damage to the old clay sewer pipes. Replacing both water and sewer pipelines will required that the entire roadways inside the Club Circle Development be replaced and repaved.

F. Cost Estimate

The cost estimate (see next page) to complete the improvements at Club Circle is \$2,286,000.

<b>Water Improvements Base Bid Items:</b>					
ITEM	QUANTITY	UNIT	ITEM	UNIT COST	AMOUNT
1	1	LS	Mobilization of equipment and material, Performance Bond, Payment Bond, General Liability Insurance, etc.	\$ 170,000.00	\$ 170,000.00
2	1	LS	Preparation of Traffic Control Plan, Implementation of Traffic Control and Construction Area Signs	\$ 13,500.00	\$ 13,500.00
3	1	LS	Potholing of the Existing Underground Utilities and Pipelines as indicated on Improvement Plans.	\$ 7,500.00	\$ 7,500.00
4	3,600	LF	Furnish and Install New 8-inch Dia. AWWA C-900 DR 18 - Pressure Class 150 PVC Water Pipeline, Including Native Material Backfill and Compaction, fittings	\$ 75.00	\$ 270,000.00
5	3,600	LF	Install New 8-inch Dia. SDR35 sewer pipeline, Including Native Material Backfill and Compaction.	\$ 75.00	\$ 270,000.00
6	1,000	CY	Install Granular Sand Pipe Bedding	\$ 55.00	\$ 55,000.00
7	14	EA	Furnish and Install New 8-Dia. Ductile Iron Resilient Wedge Gate Valve with Valve Cover and Riser.	\$ 2,200.00	\$ 30,800.00
8	7	EA	Furnish and Install New Fire Hydrant Assembly Including gate Valve, lateral and Valve Can	\$ 12,000.00	\$ 84,000.00
9	2	EA	Install New Blow-Off Assembly per Construction Keynote 4 .	\$ 1,900.00	\$ 3,800.00
10	1	LS	Contractor to Complete Hydrostatic Pressure Testing per Specifications.	\$ 12,500.00	\$ 12,500.00
11	1	LS	Contractor to Complete Disinfection of the New Pipeline per Specifications	\$ 9,500.00	\$ 9,500.00
12	14,400	LF	Sawcut Existing AC Pavement	\$ 3.50	\$ 50,400.00
13	28,800	SF	Remove and Dispose AC Pavement	\$ 2.50	\$ 72,000.00
14	3,000	Tons	Install 4 Inches of AC Pavement 3/4" Type III Class B3 (Per San Diego County Standards and Specifications)	\$ 165.00	\$ 495,000.00
15	4,000	CYS	Install 9 Inches of Class II Base	\$ 50.00	\$ 200,000.00
16	58	EA	Water Service Laterals	\$ 1,200.00	\$ 69,600.00
17	58	EA	Sewer Laterals	\$ 2,800.00	\$ 162,400.00
18	1	LS	Bypass Sewer Pumping	\$ 200,000.00	\$ 200,000.00
19	11	EA	Rehabilitate Manholes	\$ 10,000.00	\$ 110,000.00
<b>Total Base Bid Items</b>					<b>\$ 2,286,000.00</b>



Figure 3 - Club Circle Development



CAPITAL IMPROVEMENT PROJECTS		FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	TOT 2020-29
<b>CASH RESERVE FUNDED WATER PROJECs</b>											
<b>Water Projects</b>											
1	Bending Elbow Pipeline Project	\$ 330,000									\$ 330,000
2	El Tejon Road Pipeline Project		\$ 140,000								\$ 140,000
3	Flying H Road Pipeline Project			\$ 137,500							\$ 137,500
4	ID-5 Well VFD				\$ 150,000						\$ 150,000
5	Replace and upgrade Booster Pump Station 5				\$ 100,000						\$ 100,000
6	SCADA replacement	\$ 50,000	\$ 50,000								\$ 100,000
7	Facilities Maint - Office Internal Repairs	\$ 15,000									\$ 15,000
8	Facilities Maint - Office External Repairs		\$ 20,000								\$ 20,000
9	Water Treatment Facility (phase 2)									\$ 250,000	\$ 250,000
10	Emergency System repairs	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 540,000
11	Program Engineering/Construction Management Consulting	\$ 25,000	\$ 40,000	\$ 41,200	\$ 42,436	\$ 43,709	\$ 45,020	\$ 46,371	\$ 47,762	\$ 49,195	\$ 380,693
<b>SUBTOTAL WATER CASH RESERVE PROJECTS</b>		<b>\$ 480,000</b>	<b>\$ 310,000</b>	<b>\$ 238,700</b>	<b>\$ 352,436</b>	<b>\$ 103,709</b>	<b>\$ 105,020</b>	<b>\$ 106,371</b>	<b>\$ 107,762</b>	<b>\$ 359,195</b>	<b>\$ 2,163,193</b>
<b>Sewer Projects</b>											
12	Oxygen Injection System at Pump Station Borrego Valley Road	\$ 20,000									\$ 20,000
13	Manhole Replacements/Refurbishment	\$ 43,000	\$ 45,150	\$ 47,408	\$ 49,778	\$ 52,267	\$ 54,880	\$ 57,624	\$ 60,505	\$ 63,531	\$ 474,142
14	Install Diffusers at sludge holding tank	\$ 100,000									\$ 100,000
15	Engineering/Construction Management Consulting	\$ 18,000	\$ 18,540	\$ 19,096	\$ 19,669	\$ 20,259	\$ 20,867	\$ 21,493	\$ 22,138	\$ 22,802	\$ 182,864
<b>SUBTOTAL SEWER CASH RESERVE PROJECTS</b>		<b>\$ 181,000</b>	<b>\$ 63,690</b>	<b>\$ 66,504</b>	<b>\$ 69,447</b>	<b>\$ 72,526</b>	<b>\$ 75,747</b>	<b>\$ 79,117</b>	<b>\$ 82,643</b>	<b>\$ 86,332</b>	<b>\$ 777,006</b>
<b>TOTAL CASH WATER/SEWER CIP PROJECTS 2021 THROUGH 2029</b>		<b>\$ 661,000</b>	<b>\$ 373,690</b>	<b>\$ 305,204</b>	<b>\$ 421,883</b>	<b>\$ 176,235</b>	<b>\$ 180,767</b>	<b>\$ 185,488</b>	<b>\$ 190,405</b>	<b>\$ 445,527</b>	<b>\$ 2,940,200</b>
<b>Total 3 Year Water/Sewer Cash Reserve Projects:</b>				<b>\$ 1,339,894</b>							
<b>FACILITIES MAINTENANCE DETAIL</b>											
<i>Stucco Building and Replace Failing Solar Cells</i>			\$ 20,000								
<i>Carpet/Paint Office and Install Energy Efficient Lighting</i>		\$ 15,000									
<b>TOTAL CASH RESERVES CAPITAL IMPROVEMENTS PROGRAM</b>		<b>\$ 661,000</b>	<b>\$ 373,690</b>	<b>\$ 305,204</b>	<b>\$ 421,883</b>	<b>\$ 176,235</b>	<b>\$ 180,767</b>	<b>\$ 185,488</b>	<b>\$ 190,405</b>	<b>\$ 445,527</b>	<b>\$ 2,940,200</b>
<b>TOTAL CASH RESERVES SHORT LIVED ASSETS</b>		<b>\$ 405,000</b>	<b>\$ 470,000</b>	<b>\$ 25,000</b>	<b>\$ 37,000</b>	<b>\$ 10,000</b>	<b>\$ 400,000</b>	<b>\$ 138,000</b>	<b>\$ 275,000</b>	<b>\$ 200,000</b>	<b>\$ 1,960,000</b>
<b>TOTAL CASH RESERVES CIP AND SHORT LIVED ASSETS ANNUAL BUDGET</b>		<b>\$ 1,066,000</b>	<b>\$ 843,690</b>	<b>\$ 330,204</b>	<b>\$ 458,883</b>	<b>\$ 186,235</b>	<b>\$ 580,767</b>	<b>\$ 323,488</b>	<b>\$ 465,405</b>	<b>\$ 645,527</b>	<b>\$ 4,900,200</b>
<b>Total 3 Year Cash Reserve and Short Lived Assets:</b>				<b>\$ 2,239,894</b>							



	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	TOT 2020-29
<b>GRANT FUNDED CIP PROJECTS</b>										
<b>Water Projects</b>										
16 Replace Twin Tanks-(Prop 1 grant)	\$ 630,000									\$ 630,000
17 Replace Wilcox Diesel Motor-(Prop 1 grant)	\$ 75,000									\$ 75,000
18 Replace Indianhead Reservoir-(Prop 1 grant)	\$ 435,000									\$ 435,000
19 Rams Hill #2, 1980 galv. 0.44 MG recoating -(Prop 1 grant)	\$ 616,000									\$ 616,000
<b>Sewer Projects</b>										
20 Plant-Grit removal at the headworks-(Prop 1 grant)	\$ 214,000									\$ 214,000
21 Clarifyer Upgrade/Rehabilitation -(Prop 1 Grant)	\$ 240,000									\$ 240,000
<b>TOTAL WATER/SEWER GRANT CIP PROJECTS</b>	<b>\$ 2,210,000</b>									<b>\$ 2,210,000</b>
<b>2018 BOND FUNDED CIP PROJECTS</b>										
22 De Anza Pipeline Replacement Project	\$ 430,000									\$ 430,000
23 Replacement Well #2 (\$250,000 DWR Grant Approved for 20-21)	\$ 1,250,000									\$ 1,250,000
24 Fire Hydrant Replacement	\$ 540,000									\$ 540,000
25 Miscellaneous Sewer System Improvements	\$ 410,000									\$ 410,000
<b>TOTAL 2018 BOND FUNDED CIP PROJECTS</b>	<b>\$ 2,630,000</b>	<b>\$ -</b>								<b>\$ 2,630,000</b>
<b>POTENTIAL FUTURE BOND FUNDED CIP PROJECTS</b>										
<b>Wells, Booster Stations, Reservoirs &amp; Associated Transmission Mains</b>										
26 Borrego Springs Road Pipeline Replacement					\$ 862,000					\$ 862,000
27 Sun Gold Pipeline Replacement					\$ 1,711,500					\$ 1,711,500
28 Deep Well Pipeline Replacement					\$ 2,225,000					\$ 2,225,000
29 West and East Star Road Pipeline Replacement					\$ 450,000					\$ 450,000
30 Country Club Tank Recoating, 1999 1.0 MG					\$ 250,000					\$ 250,000
31 Water Treatment Facility (phase 1)							\$ 900,000			\$ 900,000
32 Water Treatment Facility (phase 2)								\$ 650,000		\$ 650,000
33 New production well						\$ 2,000,000				\$ 2,000,000
34 Solar *Updated to convert approximately 85% of BWD Wells to Solar						\$ 1,200,000				\$ 1,200,000
35 Club Circle Water and Sewer Pipeline Replacement Project							\$ 2,286,000			\$ 2,286,000
36 Well 5 Transmission Main Project						\$ 1,215,000				\$ 1,215,000
<b>TOTAL FUTURE BOND CIP PROJECTS</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,498,500</b>	<b>\$ 4,415,000</b>	<b>\$ 3,186,000</b>	<b>\$ 650,000</b>	<b>\$ -</b>	<b>\$ 13,749,500</b>
<b>Total 9 Year CIP (Including all proposed projects):</b>										<b>\$ 23,489,700</b>

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.B

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Initial Results for developing in-house capability to construct various CIP pipeline projects – D Dale

**RECOMMENDED ACTION:**

Receive Staff Report and utilize information during Cost of Service Study and Financing Plan

**ITEM EXPLANATION:**

David Dale has begun an evaluation of the potential cost impacts of utilizing in-house construction crew for some of the projects in the CIP. More time is needed to refine the analysis and Staff would like to update the Board on the work done to date.

Attached is a summary of the comparison of In-House and Outsourced alternatives. These numbers are still preliminary and subject to change. David has also added a brief SWOT analysis that provides a sense of the issues considered.

**NEXT STEPS**

Use this information, as needed, for consideration during development of the Cost of Service Study and Financing Plan.

**FISCAL IMPACT**

TBD

**ATTACHMENTS**

1. Summary of Initial In House vs Outsourced Comparison

Description	In House Crew for Most Water Pipelines (1-Mile Per Year)	Water Lines by Contractor
Water Pipeline Replacement Program	\$ 6,660,000	\$ 8,601,000
Water Treatment Facilities	\$ 1,800,000	\$ 1,800,000
Emergency Water Line Repairs	\$ 180,000	\$ 540,000
Fire Hydrant Replacement	\$ 540,000	\$ 540,000
Booster Pump Station	\$ 100,000	\$ 100,000
VFD Replacement	\$ 150,000	\$ 150,000
CIP Engineering/Construction Management	\$ 292,865	\$ 513,558
Water Storage Tanks	\$ 2,006,000	\$ 2,006,000
Production Wells	\$ 3,250,000	\$ 3,250,000
Wastewater Treatment Facility	\$ 454,000	\$ 454,000
Sewer Line Replacement	\$ 1,186,000	\$ 1,186,000
Manhole Rehab/Replacement	\$ 474,142	\$ 474,142
Wastewater Other	\$ 510,000	\$ 510,000
SCADA	\$ 100,000	\$ 100,000
Solar Project	\$ 1,200,000	\$ 1,200,000
Facilities	\$ 35,000	\$ 35,000
Short Lived Assets	\$ 1,960,000	\$ 1,960,000

TOTAL PROPOSED 9-YEAR CIP

\$ 20,898,007	\$ 23,419,700
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BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.C

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Draft of Important Risk Management Areas for BWD Continuance of Service for Discussion by Interim Watermaster now that a Watermaster Executive Director has been Hired – L Brecht

**RECOMMENDED ACTION:**

Receive Report from Director Brecht

**ITEM EXPLANATION:**

Director Brecht wanted to share his thoughts on Risk Management issues.

**NEXT STEPS**

Use this information, as needed, in the future

**FISCAL IMPACT**

TBD

**ATTACHMENTS**

1. Risk Management Issues

**BORREGO WATER DISTRICT (BWD) RISK MANAGEMENT ISSUES  
FOR WATERMASTER CONSIDERATION & ACTION**

In addition to pumping controls, the Borrego Springs Subbasin (Basin) Watermaster will need to adequately manage groundwater quality within the Basin to attain “no undesirable results” for compliance under the requirements of the Sustainable Groundwater Management Act (SGMA). BWD’s concern is that certain discrete events that can affect water quality, if/when they may occur are not amenable to adaptive management processes. That is because they may represent “tipping points” of material changes in the groundwater system that are effectively irreversible. Instead, proactive risk reduction strategies are likely more useful.

A major reason BWD wishes to discuss these issues with the Watermaster at this time is that the BWD is presently engaged in a Proposition 218 Cost of Service rate setting study. Currently, water treatment is not necessary due to generally good water quality in the Basin. However, if advanced water treatment does become necessary for Basin groundwater, this would be a potentially overwhelming cost for BWD’s municipal customers to bear.<sup>1</sup>

For BWD, risk management is an important aspect for assuring its future financial stability and affordable water rates. Inadequate Basin coverage, lax testing standards, and/or infrequent water quality monitoring risks unexpected multimillion dollar capital costs associated with BWD’s production wells. Given the public health responsibilities of BWD to assure continuance of potable water service to its municipal customers, these groundwater quality management issues are of critical importance to BWD and to the wider Borrego community. Water quality must also be considered an issue of concern to the Watermaster as it attempts to meet SGMA requirements. Some important issues at this time are:

1) Improperly Abandoned Wells

Presently, San Diego County asserts its authority over wells in the Basin. The County even has an ordinance regarding the proper abandonment of unused wells. However, the County takes no responsibility for enforcing this ordinance. There presently is no enforcement. Thus, there exists a disconnect between authority and responsibility. Essentially, each improperly abandoned well in the Basin is a ticking time bomb that may or may not go off in any specific time period. An improperly abandoned well can potentially cause only minimal property damage or widespread, consequential damage to groundwater quality in the Basin.

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<sup>1</sup> The estimated cost of basin-wide water quality degradation requiring BWD to implement advanced treatment for its municipal water system is approximately \$40 million (capital & operating costs during the 30-year economically useful life of the treatment system). See Dudek, “Water Replacement and Treatment Cost Analysis for the Borrego Valley Groundwater Basin” (November 24, 2015).

**BORREGO WATER DISTRICT (BWD) RISK MANAGEMENT ISSUES  
FOR WATERMASTER CONSIDERATION & ACTION**

Improperly abandoned wells are a public health nuisance. Arguments that because well-related aquifer contamination has not occurred in past time periods, damage to the aquifer will not occur in future time periods is a false, pernicious narrative (*availability fallacy*). Therefore, it is imperative to the safety and well-being of the Borrego community that special care is given to locate, then properly seal or destroy abandoned water wells. When groundwater becomes contaminated, it is often difficult or in some cases impossible to clean up. Groundwater contamination is often an expensive process, especially for municipal water customers.

BWD requests the Watermaster pursue conversations with the County as to who will be responsible for enforcement of improperly abandoned wells. BWD believes the Basin cannot be properly managed without enforcement of improperly abandoned wells. For example, one could easily imagine a situation where the Basin is brought into sustainable use by 2040, but the groundwater has been polluted and the economic affordability for both irrigation and municipal water users is damaged irreversibly. Hopefully, proactive action to address this situation will occur before the Basin is damaged, massive amounts of capital is required for relocation of BWD production wells to avoid contamination of the municipal water supply, and/or the public's health is compromised.

2) Conjunctive Use of Basin to Store Colorado River Water

Presently, under the auspicious of the proposed Stipulated Judgement, the use of the Basin's potential storage capacity is under the authority of the Watermaster. However, storage that adversely alters the water chemistry of the groundwater in the Basin is likely to primarily impact the finances of BWD and municipal customers' future rates. Thus, there exists a disconnect between authority and financial responsibility, as well as potential liability.

To date, when these storage issues have been brought up in public forums, BWD has been told by some "Not to worry," or "This is too far in the future to be concerned with." Unfortunately, all this has been said before to folks years ago in the groundwater-dependent city of Tucson, Arizona. Adding a new water supply to an existing system can have unexpected and adverse water quality and infrastructure impacts, for example as Tucson experienced when it added Colorado River water to its groundwater supply distribution system in the 1990s. The water chemistry was very different and the imported water caused minerals in the distribution system to be mobilized causing discolored (brown) water, stained clothing, etc.<sup>2</sup>

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<sup>2</sup> See: <https://www.csmonitor.com/1994/0524/24031.html>

**BORREGO WATER DISTRICT (BWD) RISK MANAGEMENT ISSUES  
FOR WATERMASTER CONSIDERATION & ACTION**

BWD requests that the Watermaster adopt a policy at this time that acknowledges that a water quality analysis, including assessing the two water sources and their combined water chemistries, and how this mixed water chemistry affects Borrego's groundwater supply and existing municipal infrastructure be conducted by an independent technical advisor to the Watermaster before any decision is made by the Watermaster on use of the Subbasin to store or use Colorado River Water.<sup>3</sup>

3) Quality Assurance of Accuracy & Completeness of Basin Groundwater Monitoring Data

BWD requests that the Watermaster assure data accuracy and completeness of groundwater monitoring data by considering and adopting the following quality assurance policies and practices:

- WEI should be required to provide detailed information regarding all calculations performed using HydroDaVE. For instance, if WEI uses this program to calculate the annual change in Basin storage, BWD would need this information to confirm WEI's results;
- For quality assurance reasons, the Watermaster should require telemetry metering platforms to store all of the data locally or have a meter that can be read manually (telemetry systems can "drift" or become inaccurate over time). The Watermaster should further assure that manual reads prevail over any faulty remote readings, should they occur;
- For additional quality assurance, the Watermaster should consider requiring that telemetry meters be read manually at least semi-annually to verify that the data being collected via telemetry is reliable. Also, which telemetry technology is being used to perform the remote reads is required to avoid known technical difficulties that impact accuracy that has been experienced with several telemetry platforms;
- For data assurance reasons, the Watermaster should consider requiring WEI to use HydroDaVE to store data on the approximate acreage irrigated by each well and crop type so that the Watermaster can more easily determine whether the reported water use is reasonable, as well as to evaluate water use efficiency;

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<sup>3</sup> Much of the Basin has pretty good water (TDS <500 mg/L). Colorado River water, even after treatment, can a) have a higher TDS and b) chemically react with groundwater and cause minerals to be released from water distribution lines. Conversely, storage of imported water in areas like the Borrego Sink could degrade any imported water and place added demand on good water quality of the groundwater in other areas of the Basin, such as those areas that support BWD's municipal water supply.

**BORREGO WATER DISTRICT (BWD) RISK MANAGEMENT ISSUES  
FOR WATERMASTER CONSIDERATION & ACTION**

- BWD did not perform the Spring 2020 Subbasin water quality monitoring due to lack of funding. However, Dudek and DWR did complete the Spring 2020 water level monitoring. BWD recommends the Watermaster adopt the Sampling and Analysis Plan prepared under the GSP to conduct groundwater level and water quality monitoring for data collection this fall. This monitoring should be completed by no later than October 2020 to avoid further data gaps in water quality monitoring.

4) Timeliness and Sharing of Basin Groundwater Monitoring Data

The Watermaster should be aware that the court's minimal reporting requirements under the Stipulated Judgement may not remotely address the economic risk management requirements of either BWD and some other pumpers of the Basin. Also, the format and timeliness of reported Basin monitoring data is a potential salient issue.

For example, BWD presently uses an open source database management system (DMS; a \$50K investment). The Watermaster has chosen to use a proprietary system, HydroDaVE, for its data. For regulatory and risk management reasons, BWD needs to continue to update the DMS with production, water level, and water quality data. This data is especially important and timely to BWD, as BWD may need 3-4-years advance analysis to determine if specific municipal production wells may require redrilling, removal from production, or replacement due to basin water level or water quality trends. Since BWD decisions on production wells may be as much as a \$2 million capital cost, this analysis of the data must be performed by the BWD district engineer and/or BWD independent consultants.

BWD requests that the Watermaster direct WEI, on timely basis, to develop a data file format that can directly export data from HydroDaVE to BWD's DMS, as needed by BWD.

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.D

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Endorsement Request for Borrego Minister Association's COVID-19 Emergency letter to San Diego Gas & Electric Company (SDG&E) – G Poole

**RECOMMENDED ACTION:**

Receive letter and consider endorsement

**ITEM EXPLANATION:**

The Borrego Minister Association has requested the following, Draft Letter Attached:

Dear Geoff - I am sending you a letter that The Borrego Ministers wrote along with the Rotary requesting that SDG&E forgive payment of unpaid bills when payment finally comes due at the end of this COVID crisis.

The BMA is hoping that as many organizations in town as possible will co-sign with us.

would you put this on the meeting agenda for the board?

Many thanks,  
Laura+

--

Rev. Laura Berger Brecht, Rector  
St. Barnabas Episcopal Church

**NEXT STEPS**

TBD

**FISCAL IMPACT**

N/A

**ATTACHMENTS**

1. Draft Letter Issues



**BORREGO MINISTERS' ASSOCIATION**  
P.O. Box 2183 • Borrego Springs, California 92004

TO: SDG&E

On behalf of the Borrego Ministers' Association (BMA) and the other undersigned organizations in Borrego Springs which are concerned for the residents of our desert community, we ask that SDG&E consider this request for assistance.

Before the COVID-19 pandemic, Borrego Springs had already been designated a "Severely Disadvantaged Community." Many Borregans had to work more than one job to support their families, in some, both parents work more than one job. For months now since the COVID-19 emergency, many of our residents have lost their livelihoods as well as their health insurance.

Presently, our community is doing all that it can to help our residents in need. The community has established nine food distributions each month. The BMA has been receiving record donations from our community to help people in need with rent payments, food, water, electric and gas utilities, and other necessities. Unfortunately, as organizations individually and collectively, we cannot cover the full amount of each request.

The electric utility bills here in the desert are especially high in the summer months with the vital need for air conditioning. We are writing in hopes that SDG&E would forgive the remaining debt that is accruing on utility bills that our residents are unable to pay during this crisis. Even when our folks are able to return to jobs (if they still exist) or to get new employment, they could be facing a mountain of debt (and not just for electric utilities) that they could not dig out from under.

For anyone requesting help with their utilities, the BMA works with them to see how to reduce their usage, use evaporative cooling instead of air conditioning, use at low rate times of day, etc. The BMA also assists them in getting on the "Level Pay," CARE or FERA programs. Even with these

reductions, the BMA cannot keep up with the electricity bill payment assistance that is needed.

We are well aware that you are a regulated industry. Nevertheless, we are asking that SDG&E present this case to the Public Utilities Commission to approve it so that SDG&E could forgive the unpaid portions of the electricity utility bills at such time as payment is required.

We are greatly concerned that our financially vulnerable residents not be at risk of having their electricity service discontinued because of unpaid bills that accrued during this COVID-19 pandemic. Losing electricity service during the heat of the summer here in Borrego Springs can truly become a public health crisis – a matter of life and death.

Thank you for your help in considering this and taking action on this matter, if possible, as requested.

Respectfully,

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.E

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: BWD Responses to Public Comments Regarding the Stipulated Judgement Submitted to the California Department of Water Resources for SGMA: Compliance Review – G Poole

**RECOMMENDED ACTION:**

Review responses

**ITEM EXPLANATION:**

Dudek Engineering was commissioned by BWD to create responses received during the CA Department of Water Resources Public Comment Period, attached. The document has also been vetted by the other Basin Pumpers and their Legal Representatives.

**NEXT STEPS**

TBD

**FISCAL IMPACT**

N/A

**ATTACHMENTS**

1. Response to Public Comment

## RESPONSES TO COMMENTS

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Borrego Water District (BWD) submitted to Department of Water Resources (DWR) a proposed Stipulated Judgment including a groundwater management plan (GMP), constituting a “Physical Solution” for DWR’s review and approval to serve as an “Alternative” to a Groundwater Sustainability Plan (GSP) for the Borrego Springs Groundwater Subbasin (Subbasin) (DWR Basin No. 7.024.01) of the Borrego Valley Groundwater Basin in compliance with the Sustainable Groundwater Management Act (SGMA). The Alternative to a GSP was submitted to DWR on January 30, 2020.

The DWR solicited comments from the public and from other agencies concerned with the Alternative. The Alternative was made available by the DWR for public review on the DWR Alternatives SGMA Portal.<sup>1</sup> The public comment period was open for 75 days. While DWR will not respond to public comments directly, it will consider comments during its evaluation of the Alternative. There is no statutory or regulatory requirement for how agencies handle public comments submitted to DWR. As such, agencies have discretion regarding what to do with those public comments. Agencies, organizations, and individuals submitting comments on the Alternative are listed below, organized by category.

Letter Number	Organization/Commenter
I1	Rebecca Falk
O1	Borrego Air Ranch Mutual Water & Improvement Co.
O2	Tubb Canyon Desert Conservancy
S1	California Department of Water Resources
S2	California Department of Fish and Wildlife

**Notes:** I = individual; O = organization; S = state agency.

All comments received on the Alternative have been coded to facilitate identification and tracking. Each of the written comment letters were assigned an identification letter and number, provided in the list above. These letters were reviewed and divided into individual comments, with each comment containing a single theme, issue, or concern. Individual comments and the responses to them were assigned corresponding numbers. Each letter is the submittal of a single individual, agency, or organization. The comment letters’ identification consists of two parts. The first part is the letter and number of the document and the second is the number of the comment. As an example, Comment S2-1 refers to the first comment made and addressed in Comment Letter S2. The BWD has prepared the following responses to comments that were received during the DWR public review period. These responses to comments are meant to inform further discussion regarding the issues raised and shall not be constituted as a complete and final analysis.

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<sup>1</sup> <https://sgma.water.ca.gov/portal/gsp/all>



## I1 – REBECCA FALK COMMENT LETTER

Borrego Valley's Groundwater Management Plan and the Public Interest

A year ago, on May 20, 2019, I submitted a comment letter on the DWR web page regarding the transition from work on a GSP for Borrego to a privately negotiated settlement. The comment letter was entitled "Regarding Integration of a possible negotiated settlement/stipulated agreement among major pumpers and the GSP." I am going to restate some issues raised in that comment letter, updated in the light of a few months of meetings of the Interim Watermaster Board, which is functioning to implement the Stipulation Judgement now in place as Borrego's sustainable water plan. The GSP that was the product of 2.5 years of meetings and work is now incorporated with some modifications as part of the GMP (Groundwater Management Plan), which is the term used for the Stipulation Judgement and associated documents.

The intention of the comment letter from 2019 was to point out that the private negotiations that eventually resulted in the Stipulation Judgement did not conform to the public participation aspects of SGMA, and that in such negotiations, the Borrego Water District was considered one pumper among others, instead of being acknowledged as the one pumper who represents thousands of residents and visitors, and is responsible for delivering water that will make the town of Borrego Springs viable into the future. I stated then that one voice for the town of Borrego Springs could not be sufficient.

Perhaps partly in response to that comment, the Watermaster Board that is to manage the basin in line with the GMP was designed to have a Community Representative in addition to Representatives for Agricultural and Recreational interests, as well as a Borrego Water District Representative and potentially a seat for the County of San Diego, which is yet to be filled.

I also mentioned in the previous comment letter that when the stakeholder GSP Advisory Committee meetings were occurring, we were advised by the GSA in place then (by representatives of San Diego County and the Borrego Water District), that there would be a fully transparent public process to determine the Projects and Management Actions that would govern the parts of the GSP that are mentioned but were left to be determined in the future, like the water reduction program, fallowing program, and water trading program. I suggested that those matters should be discussed and decided in a public manner with public participation. But those matters were addressed instead in the private negotiations and resulted in the Stipulation Judgement.

In response to concerns like the one I expressed in my comment letter advocating for public decision-making, the Stipulation Judgement included an agreement by the pumpers who signed it to conduct meetings of the Watermaster Board (currently the



## I1 – REBECCA FALK LETTER

Interim Watermaster Board) in accordance with the Brown Act, providing for a publicly transparent management of the basin.

I1-3

In light of my previously submitted concerns regarding public transparency and participation, and now, having attended the two Watermaster Board Meetings that have occurred so far, I have the following concerns, while acknowledging the very positive addition of a Community Representative to the Watermaster Board and also the agreement that the Watermaster Board will follow the Brown Act in order to be transparent and have public participation:

1. The Watermaster Board is very much lawyer-led. While that is in part temporary until an Executive Director can be chosen and hired, the fact that the Board is composed of only four members at present, three of whom have their own attorneys in attendance, and the fact that attorneys were primary drafters and negotiators of the Stipulation Judgement, means that the Watermaster Board currently favors those Board Members with lawyers. Again, this will in part shift when the Watermaster Board hires its own attorney, but it will remain the case that the Community Representative is the only Member without a private attorney to advise him. This raises a concern about the weight that can or will be given to the public's interests in decisions made by the Board.
2. A proposal on the Agenda for the May 14, 2020 Watermaster Board Meeting was for an External Communication Policy, limiting what Board Members can say to the press and other media while identifying themselves as a Watermaster Board Members. This is concerning as it indicates a desire to limit public knowledge to those who are able to attend meetings and to the official statements for the Watermaster Board made by a yet-to-be-hired Executive Director. An excessive External Communications Policy proposed to such a small Watermaster Board by one of its Members is concerning. Is the commitment to transparency to the public strong enough to be in accordance with SGMA's intent? The discussion held at the meeting may lead to some changes in the policy. I have no quarrel with a need to have a consistent voice about Watermaster Board policies. My concern is that the public not be shut out of understanding and becoming familiar with Watermaster Board matters, as it would, for instance, if Watermaster Board Members were prohibited from identifying themselves as such when engaging in external communications, so that these could only be offered as an individual's opinion, not an opinion or perspective of a Member of the Watermaster Board.
3. My understanding of SGMA is that is based on the idea that groundwater is a public resource and has to be managed sustainably in order to continue to be a public resource. My sense of the major pumpers, with the exception of BWD, is that they think of groundwater as belonging to them because the right to pump is conceived of as ownership of the public resource. Having control of managing

I1-4

I1-5

I1-6

# I1 – REBECCA FALK LETTER

the basin in the few hands of the major pumpers lends itself to this conception as well. The remedy I can imagine now that we are on the GMP (privately negotiated) path versus the GSP (publicly negotiated) path is for DWR and the State Water Resources Control Board to provide oversight that emphasizes the public nature of the resource, and not to waive close oversight of that resource because a management plan is in effect.

I1-6

4. I still have a concern for impacts on water quality from the water trading program and on air quality from the fallowing program. With the small number of interests represented on the Watermaster Board deciding which consultants to hire, what needs monitoring, and what will be financed, oversight beyond a judge is needed to protect the public resource. Borrego Water District will play an important role in these issues, but itself is limited in its finances, staff and expertise. I hope that State Agencies responsible for ensuring good water quality and air quality will play a role and also help fortify the public accountability that was built into SGMA.

I1-7

Rebecca Falk  
May 14, 2020

**RTC.1 INDIVIDUALS****Letter I1****Commenter: Rebecca Falk****Date: May 14, 2020**

- I1-1** The BWD acknowledges the statement that the commenter submitted a comment letter entitled “Regarding Integration of a possible negotiated settlement/stipulated agreement among major pumpers and the GSP” and dated May 20, 2019. The BWD notes that Ms. Falk asserts that private negotiations that eventually resulted in the Stipulation Judgement did not conform to the public participation aspects of SGMA, and that in such negotiations, the BWD was considered one pumper among others, instead of being acknowledged as the one pumper who represents thousands of residents and visitors, and is responsible for delivering water that will make the town of Borrego Springs viable into the future and that one voice for the town of Borrego Springs could not be sufficient. The BWD notes that the commenter considers adding a Community Representative and the County of San Diego to the Watermaster Board as potentially addressing concerns regarding BWD being the only voice for the Borrego Springs community.
- I1-2** The BWD acknowledges that at the GSP Advisory Committee it was stated that there would be a fully transparent public process to determine the Projects and Management Actions that would govern the parts of the GSP that are mentioned but were left to be determined in the future, like the water reduction program, fallowing program, and water trading program. The “Initial Rampdown” through 2024-2025 Water Year and meter installation programs have been developed consistent with the Alternative. Further evaluation and development of Projects and Management Actions will occur through the public processes established by the Alternative including the Technical Advisory Committee, Environmental Working Group, and Watermaster Board proceedings.
- I1-3** The BWD acknowledges the commenter’s statement that the Watermaster Board has agreed to conduct meetings in accordance with the Brown Act. Section IV.B(4) of the Stipulated Judgment provides that all Watermaster Board meetings and hearings must be conducted in substantial accordance with the requirements of the Brown Act and identifies differences specific to Watermaster Board meetings. Also, the Stipulated Judgement anticipates that TAC meetings shall also be governed by the Brown Act.

- I1-4** The BWD acknowledges the commenter’s opinion the Watermaster Board is “lawyer-led” and in the absence of an Executive Director favors Board members with legal representation at the potential detriment to public interests. The interim Watermaster Board began meeting regularly on March 31, 2020. During the start-up period before hiring Watermaster legal counsel, Executive Director, and Technical Consultant, BWD staff primarily, as well as individual Watermaster Directors and attorneys for the stipulating parties provided administrative support in preparing and presenting agenda reports for Watermaster Board meetings, and assisting in conducting the meetings. The Watermaster has now hired its own legal counsel, and is currently in the process of hiring an Executive Director and Technical Consultant so that Watermaster staff is able to undertake regular and ongoing interim Watermaster administrative functions.
- I1-5** The BWD acknowledges the commenter’s concerns with the potential limitations of the External Communications Policy. This policy was discussed and considered at the May 14, 2020 public meeting of the Watermaster Board.
- I1-6** The BWD acknowledges the comment that the major pumpers think of the groundwater as belonging to them because the right to pump is conceived of as ownership of the public resource, and that the check on a few major pumpers managing the resource through the Watermaster Board is oversight by the Department of Water Resources (DWR) and the State Water Resources Control Board (SWRCB) . The Alternative implements the State Legislature’s intent to, among other things, enhance local management of groundwater consistent with water rights. (Water Code section 10720.1.) The Watermaster Board includes representatives of the County, BWD and the community at large in addition to representatives of the recreation sector and agricultural sector. Notwithstanding, the Watermaster Board’s decision making must adhere to DWR’s and SWRCB’s groundwater and water quality requirements.
- I1-7** The BWD acknowledges the statement that oversight beyond a judge is needed to protect the public resource including impact on water quality and air quality from the fallowing program and the potential inability of the BWD, given its limited resources, to evaluate these issues, and that the oversight of state agencies is essential to ensure protection of public resources. The Alternative establishes an iterative process to achieve the Sustainable Groundwater Management Act’s (SGMA’s) sustainability goals inclusive of technical recommendations by the Watermaster Technical Advisor, Technical Advisory Committee and Environmental Working Group; data collection and monitoring by Watermaster

staff; and management oversight by the Watermaster Board and Court that may exceed minimum requirements set by the DWR and/or SWRCB.

O1 – PARKS & SOLAR BORREGO AIR RANCH LETTER



March 30, 2020

Via Upload to SGMA Portal
California Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Re: 7-024.01 Borrego Springs Subbasin of the Borrego Valley Groundwater Basin (the "Basin")

Dear Sir/Madam:

Our firm represents Borrego Air Ranch Mutual Water & Improvement Co., a California public benefit corporation (the "Air Ranch").

The Air Ranch is located at 2580 Stinson Road, Borrego Springs, CA. The Air Ranch expects to be served with the complaint in, and therefore to become bound by that certain stipulated judgment (the "Stipulated Judgment") proposed for entry in, San Diego County Superior Court Case No. 37-2020-00005776-CU-TT-CTL. Capitalized terms that are used in this letter without definition and that are defined in the Stipulated Judgment are used herein as so defined.

The Borrego Water District ("BWD"), together with the County of San Diego ("County"), established a GSA for the Basin pursuant to the Sustainable Groundwater Management Act, California Water Code sections 10720 et seq. ("SGMA"), in 2016. However, the County withdrew as a GSA, effective December 31, 2019.

Although it expects to be made party to the Stipulated Judgment, the Air Ranch is not located within the boundary of BWD, which is now the sole proponent of the GSP for the Basin. We understand that representatives of the California Department of Water Resources ("DWR") reached out to BWD to express the Department's concern that the Stipulated Judgment cannot apply to the Air Ranch and at least two other Persons who are similarly situated. As a result, we understand these three pumpers who are outside the jurisdiction of BWD could be subject to oversight by DWR. This creates ambiguity in that the Air Ranch could be subject to reporting groundwater usage and to paying groundwater pumping fees to both the watermaster that will be appointed by the Court pursuant to the Stipulated Judgment (the "Watermaster") and to DWR.

The Air Ranch is considering becoming a Stipulating Party by executing the Stipulated Judgment (as opposed to being bound by the Stipulated Judgment solely by virtue of being served with the complaint). Prior to deciding, however, the Air Ranch is requesting (1) certain clarifying changes to the proposed Stipulated Judgment and (2) resolution of the ambiguity described in the foregoing paragraph. The purpose of this letter is to make comments to DWR



# 01 – PARKS & SOLAR BORREGO AIR RANCH LETTER

Letter to Department of Water Resources  
March 30, 2020  
Page 2

addressing these two requests.

A. Suggested Changes to Stipulated Judgment.

(i) Paragraphs 1 and 2 on page 23 of the Stipulated Judgment should be modified as follows (with the proposed modifications underlined or stricken through, as appropriate, and an explanatory comment following each requested modifications):

1. Good Standing and Intervention Requirements. Permanent Transfers and Leases may only be completed in accordance with these rules by Parties to this Judgment (~~including without limitation those Persons that have become subject to this Judgment by virtue of having been named and served with the Complaint~~) in good standing (meaning both buyer and seller have paid all applicable Pump assessments, fees, charges or will do so prior to completion of the transfer, and are otherwise in compliance with this Judgment). A transferee who is not already a Party must intervene as a Party as a condition of completing any Lease or Permanent Transfer.

COMMENT: This proposed change is for clarification only. The reason for this proposed change is that some Persons may not sign the Stipulated Judgment, but nevertheless will become bound by it only as a result of having been named and served with the Complaint. The Air Ranch may find itself in this position.

O1-2

2. Anti-Speculation Provision. A buyer of BPA pursuant to a Permanent Transfer must own at least one acre overlying the Basin for every five acre-feet of BPA transferred to the buyer (the "Eligibility Requirement"). The "Anti-Speculation" provisions of this paragraph do not apply to BWD, the County, a mutual water company, or an owner of an Original BPA Parcel; provided, however, that the "Anti-Speculation provisions shall not apply to an owner of an Original BPA Parcel only so long as either (i) the BPA owner retains the same or greater quantity of acreage in proportion to its Original BPA or (ii) the BPA owner does not hold an amount of Annual Allocation in excess of the quantity of its originally granted BPA. As a condition of completing a Permanent Transfer, the Watermaster may demand that a BPA buyer (excepting BWD, the County, a mutual water company and an owner of an Original BPA Parcel satisfying the criteria specified above) submit a deed reflecting the buyer's ownership in fee duly recorded, or Court order evidencing ownership by the buyer, of a legal parcel or parcels overlying the Basin of sufficient acreage to satisfy the buyer's satisfaction of the Eligibility Requirement (the "Eligibility Proof").

COMMENT: This proposed change also is for clarification only. The reason for this proposed change is that, under the Stipulated Judgment, BPA is recorded in the name of a mutual water company, such as the Air Ranch, and not in the name of the individual lot owners. The

O1-3

**01 – PARKS & SOLAR BORREGO AIR RANCH LETTER**

Letter to Department of Water Resources  
 March 30, 2020  
 Page 3

proposed change is intended to clarify that the Eligibility Requirements do not apply to the Air Ranch, a mutual water company, which, like the County or BWD, is a water service provider that delivers water to a large area or to numerous water service customers, but the Air Ranch, like BWD, owns solely well sites and associated infrastructure. The proposed change would put the Air Ranch on the same footing as BWD and the County, which is how a mutual water company is treated elsewhere in the Stipulated Judgment.

(ii) Paragraph 4 on page 24 of the Stipulated Judgment should be modified as follows (with the proposed modifications underlined or stricken through, as appropriate, and an explanatory comment following the requested modifications):

4. Transfer Records. Except for BWD, the County and a mutual water company, Upon completion of the Permanent Transfer, the BPA will be assigned to the buyer's Parcel(s) on the records of the Watermaster. Notwithstanding the foregoing, upon completion of the Permanent Transfer to BWD, a mutual water company, or the County, the BPA will be assigned on the records of the Watermaster to BWD, the mutual water company or the County, as applicable.

O1-3

COMMENT: This proposed change also is for clarification only. The reason for this proposed change is that, under the Stipulated Judgment, BPA is recorded in the name of a mutual water company, such as the Air Ranch, and not in the name of the individual lot owners. The proposed change is intended to clarify that, upon completion of a Permanent Transfer, BPA will be assigned to a mutual water company (and to BWD or the County, as applicable), and not to the individual lot owners. This change would be consistent with how BWD, the County and mutual water companies are treated elsewhere in the Stipulated Judgment.

**B. DWR Concerns Over GSA.**

As previously indicated, the Air Ranch expects to be made a party to the Stipulated Judgment, it is not located with the boundary of BWD (i.e., the sole proponent of the GSP for the Basin), and DWR has expressed concern that the Stipulated Judgment cannot apply to the Air Ranch, which is outside of BWD's jurisdiction. This creates the possibility that the Air Ranch could be subject to oversight by the Watermaster (because the Air Ranch is located within the area of the Stipulated Judgment) and also by DWR (because the Air Ranch is outside of BWD's territorial jurisdiction), which could subject the Air Ranch to reporting groundwater usage and to paying groundwater pumping fees to both the Watermaster and to DWR.

O1-4

In view of the foregoing, the Air Ranch requests that one of the following alternatives be implemented:

(i) If the Air Ranch becomes a Stipulating Party by executing the Stipulated Judgment, then the Air Ranch would report groundwater usage and pay groundwater pumping fees solely to the Watermaster in accordance with the Stipulated Judgment. DWR would acknowledge in writing that such reporting and payment to the Watermaster satisfies any

**O1 – PARKS & SOLAR BORREGO AIR RANCH LETTER**

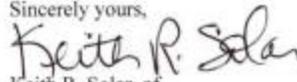
Letter to Department of Water Resources  
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obligation of the Air Ranch to report groundwater usage and to pay groundwater pumping fees to DWR.

(ii) If the Air Ranch does not become a Stipulating Party by executing the Stipulated Judgment, then the Air Ranch would report groundwater usage and pay groundwater pumping fees solely to DWR. The Stipulated Judgment would be modified to reflect that such reporting and payment to DWR satisfies any obligation of the Air Ranch to report groundwater usage and to pay groundwater pumping fees to the Watermaster under the Stipulated Judgment.

Thank you for your consideration. Should you have any questions, please contact the undersigned at your convenience.

Sincerely yours,



Keith R. Solar, of  
Parks & Solar, LLP

KRS:  
Cc: Bill Carpenter (via email)  
Cary Lowe, Esq. (via email)

O1-4

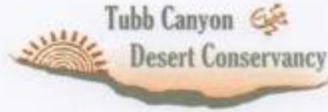
**RTC.2 LOCAL AGENCY****Letter L1**

**Commenter: Parks & Solar LLP on Behalf of the Borrego Air Ranch Mutual Water & Improvement Co. (“Air Ranch”)**

**Date: March 30, 2020**

- O1-1** This comment provides introductory information about the Borrego Air Ranch Mutual Water & Improvement Co. (“Air Ranch”) and steps taken to date to comply with the SGMA in the Subbasin. The BWD acknowledges that the Air Ranch is not located within the boundary of the BWD, and the concern that the Air Ranch and other pumpers outside the BWD boundary would be subject to DWR oversight as an unmanaged area rather than oversight by the Alternative. We also note this creates ambiguity for the Air Ranch and other pumpers outside the BWD boundary regarding to whom to report groundwater extractions and pay fees. Subsequent communications with the commenter indicate that the State Water Resources Control Board is working to resolve the ambiguity such that basin areas managed pursuant to agreement or court order in an adjudication will not be classified as “unmanaged areas” subject to state oversight.
- O1-2** The BWD acknowledges that the Air Ranch is considering becoming a Stipulating Party by executing the Stipulated Judgment and that the Air Ranch is requesting specific changes to the proposed Stipulated Judgment and resolution of ambiguity regarding jurisdiction. BWD acknowledges your proposed modifications to the *Good Standing and Intervention Requirements* section of the proposed Stipulated Judgment and will take these proposed revisions under consideration.
- O1-3** The BWD acknowledges your proposed modifications to the *Anti-Speculation Provision and Transfer Records* sections of the proposed Stipulated Judgment and will take these proposed revisions under consideration.
- O1-4** As discussed in response L1-1, the Air Ranch, while located outside of the boundary of the BWD, will become formally managed when the affected well owners become stipulating parties or the court approves the proposed Stipulated Judgment that covers the entire Subbasin. At this time, there is no indication that DWR will manage any portion of the Subbasin.

## O2 – TUBB CANYON DESERT CONSERVANCY



May 14, 2020

Via Upload to SGMA Portal  
California Department of Water Resources  
P.O. Box 942836  
Sacramento, CA 94236-0001

To Whom It May Concern:

I am submitting these comments regarding the alternative to a Groundwater Sustainability Plan (GSP) that has been submitted by the Borrego Water District (BWD) to the Department of Water Resources (DWR). My understanding is that the Physical Solution thus submitted is in essence the GSP that could have been approved by the County of San Diego and BWD. Further, it is my understanding it is now DWR's job to determine if the Physical Solution substantially meets requirements of the Sustainable Groundwater Management Act (SGMA). And finally, it is my understanding this may be DWR's last chance to influence the Physical Solution that would henceforth be monitored by the courts.

O2-1

I have three areas of concern and associated questions of DWR:

**Reduction Period.** Does the Physical Solution have sufficiently clear metrics for determining if 20 years is too long to reach basin sustainable yield? Does the Physical Solution assume fast enough reductions to avoid excessive costs to BWD for redrilling, replacing, and/or abandoning some of its production wells prematurely due to declining water levels? It takes years and millions of dollars to relocate a municipal well.

O2-2

**Water Quality Monitoring.** In my reading of the Physical Solution, it is not clear what metrics will be used for basin-wide water quality monitoring. My belief is that the entire basin is potentially the sole source for municipal water supply. Thus, it may be prudent that there be a clearly defined basin-wide water quality standard. If water quality standards for monitoring wells are radically different from existing BWD production wells, such a discrepancy adds greater uncertainty to the need for advanced treatment and potentially much higher rates for municipal customers. This additional cost for municipal water would be a hardship for a community that has been designated as a Severely Disadvantaged Community (SDAC).

O2-3

8899 University Center Lane, Suite 170, San Diego, CA 92122  
Phone 858 535-9121 Fax 858 535-9156

## O2 – TUBB CANYON DESERT CONSERVANCY

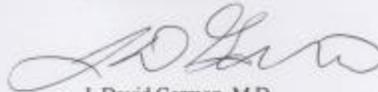
Page 2 of 2

**Fallowing Standards.** The Physical Solution has little in the way of fallowing standards, even as reductions assume the non-irrigation of potentially thousands of acres of previously irrigated farmland in the basin. The Stipulation describes some rudimentary fallowing standards but provides no analytical basis to support the conclusion that these standards are adequate to prevent public health impacts from blowing dust. Is this something that DWR or SGMA cares about — deleterious public health impacts from declining air quality from implementing SGMA?

O2-4

Thank you for this opportunity to provide input into this critical process. Please do not hesitate to contact at the number listed below if you require any additional information.

Sincerely yours,



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

JDG: ms

8899 University Center Lane, Suite 170, San Diego, CA 92122  
Phone 858 535-9121 Fax 858 535-9156

## RTC.3 ORGANIZATIONS

### Letter O2

**Commenter: J. David Garmon (Tubb Canyon Desert Conservancy)**

**Date: May 14, 2020**

**O2-1** This comment provides introductory information about the DWR's role in reviewing the Alternative submitted by the BWD. BWD and other stipulating parties submitted to DWR a proposed Stipulated Judgment including a GMP, constituting a "Physical Solution" for DWR's review and approval to serve as an Alternative to a GSP for the Subbasin in compliance with the SGMA. The comment suggests this may be DWR's last chance to influence the Physical solution. Basins with approved alternatives are required to continue implementing plans and provide annual reports and five-year progress updates to DWR. Accordingly, DWR's role extends beyond the initial review of the GMP and proposed Stipulated Judgment to cover the entire implementation period of the Alternative.

**O2-2** This comment concerns the 20 year reduction period and metrics for determining whether this period is sufficient to achieve Subbasin sustainability. Several comments were received on the Draft GSP requesting implementation of the GSP to be less than 20 years. The GSP regulations (Title 23 CCR Section 350, et seq.) state: "Each Agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline. The Plan shall include a description of the sustainability goal, including:

- information from the basin setting used to establish the sustainability goal,
- a discussion of the measures that will be implemented to ensure that the basin will be operated within its sustainable yield, and
- an explanation of how the sustainability goal is likely to be achieved within 20 years of Plan implementation and is likely to be maintained through the planning and implementation horizon" (Title 23 CCR Section 354.24).

As presented in the Alternative, the Subbasin's sustainability goal is to ensure that by 2040, and thereafter within the planning and implementation horizon of this GSP

[GMP] (50 years), the Subbasin is operated within its sustainable yield and does not exhibit undesirable results.

Conditions within the Subbasin will be considered sustainable when the long-term, aggregate groundwater use is less than or equal to the Subbasin's estimated sustainable yield, as defined by SGMA. Section III.F of the proposed Stipulated Judgment requires the Watermaster to develop, fund, and implement a technical study and update of the sustainable yield every five years through 2040 with input from the Technical Advisory Committee and oversight by the Superior Court anticipated to enter the Stipulated Judgment. This adaptive management approach specifically correlates the rate of Rampdown from 2025 through 2040 to an analytically determined recalculation of sustainable yield every five years so that the cumulative pumping is ramped down to the revised sustainable yield by no later than January 2040, which by that time, will have been through four separate technical studies pursuant to Section III.F of the proposed Stipulated Judgment.

The BWD regularly evaluates its water infrastructure and plans for capital improvement projects including replacement of water wells once the well(s) reach their useful life. Under a Proposition 1 SDAC Grant, BWD prepared a Water Vulnerability/New Extraction Well Site Feasibility Analysis (Dudek 2018), which informed replacement BWD well ID4-4 with new production well ID4-9 that was drilled and constructed in 2019. Currently, the BWD is planning for the replacement of a second production well in 2020. BWD will continue to proactively evaluate its wells and replace them as required to ensure sufficient water supply capacity and water quality for its customers.

**O2-3** This comment concerns the basin-wide water quality monitoring and suggests that clearly defined basin-wide quality standards should be developed to address uncertainty regarding need for advanced treatment because any additional cost would be a hardship for the Severely Disadvantaged Community.

The quality of groundwater resources in the Subbasin varies geographically from north to south and with depth in the aquifer based on present and historical data. The Subbasin is located within the Colorado River Basin Regional Water Quality Control Board (Region 7) (RWQCB) and within the Anza Borrego Hydrologic Unit per the RWQCB Basin Plan. The Basin Plan recognizes that some hydrologic units contain multiple aquifers that may each support different beneficial uses. The beneficial uses for groundwater for the Anza Borrego Hydrologic Unit are Municipal and Domestic Supply, Industrial Service Supply and Agriculture Supply. As indicated in the previous response, long-term groundwater use is required to be sustainable, as defined by SGMA. In order to ensure groundwater use does not significantly and unreasonably degrade water quality, the interim Watermaster is continuing the County-initiated program of water quality monitoring that was conducted through March 2019 on an interim basis until the Court approves the Stipulated Judgment and the Technical Advisory Committee develops an approved water quality monitoring

program that meets DWR's and SWRCB's requirements based on updated data (Settlement Agreement section 4.3; Stipulated Judgment section VI.B(2)).

**O2-4** This comment concerns fallowing standards and suggests that there is no analytical basis to support the rudimentary standards presented in the GMP to prevent public health impacts from blowing dust. The comment questions whether potential public health impacts that result from implementation of management actions is a concern of SGMA. BWD does not agree with the characterization of the fallowing standards as rudimentary. However, BWD acknowledges that no analytical work to date has suggested that the fallowing standards alone presented in the GMP are adequate to protect the Borrego community from public health hazard due to blowing dust.

## S1 – CALIFORNIA DEPARTMENT OF WATER RESOURCES

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, Governor

## DEPARTMENT OF WATER RESOURCES

DIVISION OF FLOOD MANAGEMENT  
PO Box 219000  
Sacramento, CA 95821-9000

May 14, 2020

Via Electronic Mail and Online Submission

Craig Altare  
Supervising Engineering Geologist  
Sustainable Groundwater Management Office  
California Department of Water Resources  
901 P Street, Room 213  
Sacramento, California 94236  
Email: [Craig.Altare@water.ca.gov](mailto:Craig.Altare@water.ca.gov)

Subject: Comments on Groundwater Sustainability Plans for Borrego Springs  
GSP #7-024.01

Dear Mr. Altare:

The California Department of Water Resources Division of Flood Management (DWR-DFM) has recently provided the attached comments to Kathy Rice and Helen Robins-Myers GSP Plans Contacts regarding the Groundwater Sustainability Plan (GSP) prepared for the Borrego Springs Subbasin. DWR-DFM is transmitting those comments to your office for your consideration.

As you know, the Sustainable Groundwater Management Act (SGMA), requires state agencies to consider SGMA policies when carrying out their functions:

*California Water Code §§10720.9. All relevant state agencies, including, but not limited to, the board, the regional water quality control boards, the department, and the Department of Fish and Wildlife, shall consider the policies of this part, and any groundwater sustainability plans adopted pursuant to this part, when revising or adopting policies, regulations, or criteria, or when issuing orders or determinations, where pertinent.*

Subsequently, DWR-DFM has reviewed the GSPs for critically overdrafted groundwater basins submitted to your office in January 2020 to consider their potential effects on flood management and flood risk. DWR-DFM appreciates the opportunity to provide comments on GSPs and looks forward to further dialogue with Groundwater Sustainability Agencies and local floodplain managers to further explore groundwater – flood management linkages. If you have any questions please contact S. Greg Farley at [Stuart.Farley@water.ca.gov](mailto:Stuart.Farley@water.ca.gov) or 916-764-7280.

S1-1

## S1 – CALIFORNIA DEPARTMENT OF WATER RESOURCES

Mr. Craig Altare  
May 14, 2020  
Page 2

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael Mierzwa", with a long horizontal flourish extending to the right.

Michael Mierzwa, P.E.  
State Floodplain Manager

Attachment: Borrego Springs Subbasin comment letter

# SS1 – CALIFORNIA DEPARTMENT OF WATER RESOURCES

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, Governor

## DEPARTMENT OF WATER RESOURCES

DIVISION OF FLOOD MANAGEMENT  
PO Box 219000  
Sacramento, CA 95821-9000



May 14, 2020

Ms. Kathy Dice, President  
Borrego Water District  
806 Palm Canyon Drive  
Borrego Springs, California 92004

Ms. Helen Robins-Meyers  
County of San Diego Chief Administrative Officer  
1600 Pacific Highway  
San Diego, California 92101

Dear Ms. Dice and Ms. Robins-Meyers,

Thank you for your important work in developing the Borrego Springs Sub-basin Groundwater Sustainability Plan (GSP) as required by the Sustainable Groundwater Management Act of 2014 (SGMA). As you know, the California Department of Water Resources (DWR) has direct responsibilities in implementing SGMA, including evaluating GSPs and issuing plan assessments. These tasks are being carried out by DWR's Sustainable Groundwater Management Office, who will continue to work with you throughout the SGMA process. DWR has additional, separate responsibilities, similar to other stakeholders, to review GSPs and consider potential effects on and relationships to DWR's other important programs. To that end, DWR's Division of Flood Management (DWR-DFM) has reviewed your GSP and is providing comments regarding its potential effects related to flood risk.

DWR-DFM is dedicated to preventing loss of life and reducing property damage caused by floods by monitoring weather and river conditions, issuing forecasts, coordinating flood response, managing emergency information, participating in flood control projects, implementing FloodSAFE California and the Central Valley Flood Protection Plan, and inspecting and maintaining levees, bypasses, weirs, and other flood control structures. In addition to carrying out specific mandates for operating and maintaining the State Plan of Flood Control within the Central Valley, DWR-DFM aids and supports local flood management efforts across the state including cooperation with the Federal Emergency Management Agency (FEMA) and local communities in carrying out the requirements of FEMA's National Flood Insurance Program (NFIP).

S1-2

**S1 – CALIFORNIA DEPARTMENT OF WATER RESOURCES**

Ms. Dice and Ms. Robins-Meyers  
May 14, 2020  
Page 2

DWR recognizes that there are important links between flood management and groundwater management. Significantly, land subsidence can result in loss of conveyance capacity in floodways, diminished levee effectiveness, damage to flood control structures and drainage structures, and increased land area subject to inundation. Activities which increase flood risk have the added effect of potentially increasing local and State liability, as well as the cost of flood insurance premiums offered to property owners by FEMA's NFIP.

Based on DWR-DFM's review, your GSP reports that no or minor subsidence has occurred historically within the plan's boundaries and has not resulted in significant known effects. However, we are also aware of historic alluvial fan flooding in the Borrego Springs community. As you move forward with implementation of your GSP under SGMA, DWR-DFM recommends that you expand your consideration of Undesirable Results to include potential effects of subsidence on flood risk.

DWR-DFM appreciates the opportunity to review the Borrego Springs Sub-basin GSP. If you have any questions or would like to explore how DWR-DFM might be of assistance to your Groundwater Sustainability Agency in implementation of your GSP, please contact Ricardo Pineda, P.E., at [Ricardo.Pineda@water.ca.gov](mailto:Ricardo.Pineda@water.ca.gov) or (916) 574-0632.

Sincerely,



Michael Mierzwa, P.E.  
State Floodplain Manager

S1-3



**RTC.4 STATE AGENCIES****Letter S1****Commenter: Michael Mierzwa (California Department of Water Resources)****Date: May 14, 2020**

**S1-1** This comment provides introductory information pertaining to DWR’s role overseeing and implementing the SGMA. The comment explains DWR’s Division of Flood Management (DWR-DFM) role to explore groundwater – flood management linkages and indicates that these comments provided by DWR are specific to potential effects on flood management and flood risk.

**S1-2** This comment provides additional introductory information pertaining to DWR-DFM mission to prevent loss of life and reducing property damage caused by floods through monitoring and forecasts and flood response.

**S1-3** This comment points out the nexus between flood management and groundwater management and the potential for subsidence to result in impacts to flood structures. DWR emphasizes that they are aware of historic alluvial fan flooding in the Borrego Springs community and recommends that undesirable results be expanded to include potential effects of subsidence on flood risk. BWD points out that subsidence is one of SGMAs undesirable results as was evaluated in the Alternative, which concluded that, “Land subsidence has been minimal to date and is unlikely to produce undesirable results in the foreseeable future.” The Watermaster may endeavor to provide additional information to DWR-DFM to demonstrate that subsidence in the Subbasin is unlikely to impact infrastructure, including potential impacts to flood structures.

**S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

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State of California – Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 South Coast Region  
 3883 Ruffin Road  
 San Diego, CA 92123  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
 CHARLTON H. BONHAM, Director



May 15, 2020

Via Electronic Mail and Online Submission

Craig Altare  
 Supervising Engineering Geologist  
 California Department of Water Resources  
 901 P Street, Room 213  
 Sacramento, CA 94236  
[Craig.Altare@water.ca.gov](mailto:Craig.Altare@water.ca.gov)

Dear Mr. Altare:

**Subject: COMMENTS ON THE BORREGO SPRINGS GROUNDWATER SUBBASIN PROPOSED STIPULATED JUDGEMENT AND GROUNDWATER MANAGEMENT PLAN**

The California Department of Fish and Wildlife (Department) Region 5 South Coast Region is providing comments on the Borrego Water District (BWD) Proposed Stipulated Judgement and Draft Final Groundwater Management Plan for the Borrego Springs Groundwater Subbasin (GMP), prepared as an alternative to a Groundwater Sustainability Plan (GSP), pursuant to the Sustainable Groundwater Management Act (SGMA). Through a Stipulated Judgement establishing a Watermaster, the BWD proposes to withdraw as a Groundwater Sustainability Agency (GSA). As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish & Game Code §§ 711.7 and 1802).

Development and implementation of GSPs under SGMA represents a new era of California groundwater management. The Department has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters, including ecosystems on Department-owned and -managed lands within SGMA-regulated basins, and ecosystems on Department lands that fall within an alluvial groundwater basin adjacent to the Borrego Springs Groundwater Subbasin (7-024.02). SGMA and its implementing regulations afford ecosystems and species specific statutory and regulatory consideration, including the following as pertinent to Groundwater Sustainability Plans:

- Groundwater Sustainability Plans must **identify and consider impacts to groundwater dependent ecosystems (GDEs)** [23 CCR § 354.16(g) and Water Code § 10727.4(l)];
- Groundwater Sustainability Agencies must **consider all beneficial uses and users of groundwater**, including environmental users of groundwater [Water

S2-1

*Conserving California's Wildlife Since 1870*

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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Mr. Craig Altare, Supervising Engineering Geologist  
 California Department of Water Resources  
 May 15, 2020  
 Page 2

Code §10723.2 (e)); and Groundwater Sustainability Plans must **identify and consider potential effects on all beneficial uses and users of groundwater** [23 CCR §§ 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3)];

- Groundwater Sustainability Plans must **establish sustainable management criteria that avoid undesirable results** within 20 years of the applicable statutory deadline, including **depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water** [23 CCR § 354.22 *et seq.* and Water Code §§ 10721(x)(6) and 10727.2(b)] and **describe monitoring networks** that can identify adverse impacts to beneficial uses of interconnected surface waters [23 CCR § 354.34(c)(6)(D)]; and
- Groundwater Sustainability Plans must **account for groundwater extraction for all water use sectors** including managed wetlands, managed recharge, and native vegetation [23 CCR §§ 351(a) and 354.18(b)(3)].
- Alternatives to Groundwater Sustainability Plans may be submitted by a local agency [Water Code §§10733.6 and 10737.4] **that will not substantially impair the ability to achieve sustainable groundwater management** [Water Code § 10737.8].

S2-1

Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to navigable surface waters or surface waters supporting fisheries, and surface waters tributary to navigable surface waters or surface waters supporting fisheries, are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (*Environmental Law Foundation v. State Water Resources Control Board* (2018), 26 Cal. App. 5th 844; *National Audubon Society v. Superior Court* (1983), 33 Cal. 3d 419). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters.

In the context of SGMA statutes and regulations, and Public Trust Doctrine considerations, the Department values groundwater planning that carefully considers and protects environmental beneficial uses and users of groundwater including fish and wildlife and their habitats, groundwater dependent ecosystems, and interconnected surface waters.

### COMMENT OVERVIEW

The Department supports ecosystem preservation and enhancement in compliance with SGMA and its implementing regulations based on Department expertise and best available information and science. The proposed Stipulated Judgement is proposed to, in combination with the GMP, constitute the physical solution and achieve sustainable

S2-2

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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 California Department of Water Resources  
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groundwater management provided that the provision of the Judgement controls over and supersedes any contrary provisions with the GMP.

The Department recommends the Proposed Stipulated Judgement specify that groundwater extraction will be reduced to the sustainable yield estimate of 5,700 acre-feet a year (AFY) by 2040, provide for mandatory reductions in groundwater extractions by entities that pump more than their yearly allocation, and specifically defer to the GMP with regard to the use of the best available science to develop the water budget, adequately estimate sustainable yield, address data gaps, and address undesirable results to groundwater dependent ecosystems (GDEs). The GMP consists of the previously reviewed GSP that includes modifications to the Draft Borrego Valley Groundwater Basin GSP (BVGSP) to conform its terms to the proposed Stipulated Judgement. Consistent with comments on the Borrego Valley Groundwater Sustainability Agency's *Draft Groundwater Sustainability Plan for the Borrego Valley Groundwater Basin* (2019) previously submitted to the Borrego Valley GSA on May 20, 2019 (Attachment A), the Department recommends the GMP adequately describe the basin setting, rely on the best available science to develop the water budget, adequately estimate sustainable yield, address data gaps associated with potential groundwater flux at the Coyote Creek fault, include undesirable results to GDEs in adjacent groundwater basins, and address data gaps in the proposed monitoring. Where the Department's initial comments have not yet been fully addressed, they are restated in this letter with updated page citations or sections numbers when available.

S2-2

### COMMENTS AND RECOMMENDATIONS

The Department comments are as follows:

1. **Proposed Stipulated Judgement, Section II.E (Determination of Sustainable Yield).** The determination of sustainable yield is not based on the best available science. This section proposes that a refined and specific sustainable yield will be determined by the Watermaster by January 1, 2025 and periodically updated thereafter but does not specify the details on how this determination will be made or commit to a specific procedure. The section refers to the recommendations of a Technical Advisory Committee that are to be based on, "...best science and data..." and the use of the U.S. Geological Survey (USGS) Borrego Valley Hydrological Model (BVHM), but does not specify the assumptions and input to be used. It is noted that the initial sustainable yield is 5,700 acre-feet per year (AFY) and that this sustainable yield determination is based on the 2015 BVHM that was modified for the BVGSP and supported by the information within the GMP. Based on the use of the more recent time period of 2007-2016 as described in Table 1 (Section 2.6.8 of *Update to United States Geological Survey Borrego Valley Hydrologic Model for Borrego Valley Sustainability Agency* dated July 2019; Appendix D1 of the Plan), the sustainable yield estimate could reasonably be calculated to be as low as the 2007-2016 inflow estimate of 4,737 AFY. Considering that California's Fourth Climate Change Assessment indicates

S2-3

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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 California Department of Water Resources  
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future higher temperatures and trends of less precipitation for California's southern desert areas (Bedsworth et. al. 2018), the Department believes that a higher sustainable yield estimate in the GMP is not reasonable or scientifically supported.

- a. Issue: The methodology to calculate sustainable yield proposes use of the BVHM but does not adequately specify the assumptions and input to be used. The Department has previously expressed concerns (see Comment # 6) that the assumptions used for the BVHM do not represent the best available science.
- b. Recommendations: First, revise assumptions and input used in the BVHM as specified below (see Comments # 5, 6, 11,12, and13) prior to using the BVHM to revise sustainable yield estimate. Second, submit a specific procedure for calculation of sustainable yield estimate to the DWR for approval. Third, specify in Section II.E that the sustainable yield estimate used be no more than 5,700 AFY.

S2-3

2. **Proposed Stipulated Judgement, Section II.E (Judgement as a basis of SGMA Compliance for the Basin).** Insufficient information and data are known to formulate a reasonable and justified allocation of existing groundwater supplies. The GMP includes multiple data gaps (see Comments # 5, 11, 12, and 13) where the data needed to sustainably manage the Borrego Springs Groundwater Subbasin (BS Subbasin) does not exist.

- a. Issue: Multiple data daps have been identified in the GMP (see Comments 5, 11, 12, and 13). The currently available information and data is inadequate to define and assess reasonable sustainable management criteria as required by Title 23 CCR section 354.12.
- b. Recommendation: Incorporate a plan to address existing data gaps through monitoring efforts (see Comments # 5, 11, 12, and 13) within the GMP prior to adjudication.

S2-4

3. **Proposed Stipulated Judgement, Section III.F (Process for Determining Sustainable Yield and Implementation of Subsequent Rampdown).** The implementation of the rampdown schedule as described may not achieve sustainable groundwater management within 20 years of the applicable statutory deadline, including depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water [23 CCR § 354.22 *et seq.* and Water Code § 10727.2(b)].

S2-5

- a. Issue: Section A Introduction and Background Information states that, "This Judgment considered together with the Groundwater Management Plan ("GMP") attached hereto as Exhibit "1" constitutes the Physical Solution; provided, however, that the provisions of this Judgment control

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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 California Department of Water Resources  
 May 15, 2020  
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over and supersede any contrary provisions contained in the GMP." At multiple locations in the GMP (e.g., Section 1.2), it is stated that the sustainability goal is to be met by 2040.

- b. Recommendation: In order to be aligned with applicable statutory deadlines, the Judgement should specify in Section III.F that the sustainability goal is to be met by 2040.

S2-5

4. **Proposed Stipulated Judgement, Section III.G (Overproduction).** The safeguards to achieve sustainable groundwater management by controlling overproduction are not adequate.

- a. Issue: The procedure of solely using an Overproduction Penalty Assessment fee as a means of preventing groundwater extraction in excess of the Baseline Pumping Allocation (BPA) is inadequate to deter overpumping. Penalty fees may be as little as \$500 per acre-foot and, given sufficient financial incentive, some entities may choose to "buy in" and pay the penalty. This does not comply with SGMA and would not support sustainable groundwater management.

S2-6

- b. Recommendation: The Department recommends overproduction be offset with a mandatory reduction in the BPA for the subsequent year. If the overproduction is not offset in the subsequent year, penalty fees should be imposed such that there is no financial incentive to overproduce. Repeated overproduction should be penalized by a suspension of the BPA.

5. **Groundwater Management Plan, Section 2.2 (Basin Setting).** The Basin Setting is not adequately described. Section 2.2.1.2 acknowledges that the hydraulic connectivity across the Coyote Creek fault between the BS Subbasin and the adjacent Ocotillo-Clark Valley Groundwater Basin is not precisely known, and the range of flux across this fault is estimated to be anywhere between 32 AFY and 3,200 AFY. This is noted as a data gap in the "Data Gaps" subsection as well (section 2.2.2.1; Groundwater Elevation Data). Data gaps in the GMP are a continued concern of the Department. Appendix G of the GMP includes the responses of the Borrego Valley GSA to the Department's May 20, 2019 letter providing Comments on the Draft BVGSP (included as Attachment B). The Department does not agree with the response to Comment # 1 of the letter that the identification of data gaps equates to adequacy to use the available information to develop the water budget (Response S1-2). While we are in alignment with the statement that "...if the flow across the Coyote Creek Fault into the subbasin is substantial, it would have a positive rather than a negative effect on meeting the GSA's sustainability criteria;" such an inflow would have a negative effect on the adjacent Ocotillo-Clark Valley Groundwater Basin that needs to be thoroughly identified and assessed. The analysis of potential impact

S2-7

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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 California Department of Water Resources  
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of the inflow to the adjacent Ocotillo-Clark Valley Groundwater Basin (Basin 7-025) needs to be included in order to accurately describe the Basin Setting. As a point of reference, the annual recharge of the Ocotillo-Clark Valley Groundwater Basin is about 2,300 AFY as identified in *California's Groundwater Bulletin 118, Colorado River Hydrologic Region, Ocotillo-Clark Valley Groundwater Basin* available at <https://water.ca.gov/> and included as Attachment C. The potential flux across the Coyote Creek fault may be as large (up to 3,200 AFY) as the entire estimated recharge for the adjacent Ocotillo-Clark Valley Groundwater Basin.

S2-7

- a. Issue: The BS Subbasin cannot be accurately characterized with such a wide range of potential influx. The influx range is inadequate to define and assess reasonable sustainable management criteria as required by Title 23 CCR section 354.12. This issue has been identified as a data gap on pp. 2-58 and 2-59.
- b. Recommendation: The existing data gaps should be addressed, first, through installation of monitoring wells in the above-referenced basin and subbasin. After the data is collected, it should be analyzed and included in the GMP in order to provide a more comprehensive and complete Basin Setting.

6. **Groundwater Management Plan, Section 2.2.3 (Water Budget).** Assumptions are used for the BVHM that do not represent the best available science. The BVHM is used to develop the water budget and is appropriate to model groundwater in an agricultural setting with an arid/semi-arid environment; however, the output of the BVHM is dependent on the validity of the data set used by the model. If the data input is incorrect, it can yield an inaccurate result. In section 2.2.3.3 it is noted that the BS Subbasin lost 7,300 AFY from storage during the 1945-2016 time-period, and the average loss for the last 10 years was 13,700 AFY. This information indicates that more recent years are characterized by higher extraction rates potentially associated with climatic shifts. In Table 1 within Section 2.6.8 of *Update to United States Geological Survey Borrego Valley Hydrologic Model for Borrego Valley Sustainability Agency* dated July 2019 (included as Appendix D1 of the Plan), the average annual inflow (including unsaturated zone recharge) was calculated to be 6,700 AFY based on a simulation period of 1929 to 2010. Based on the most recent 20-year period (1997-2016) that inflow is 5,751 AFY, and on the most recent 10-year period (2007-2016) the amount is 4,737 AFY. Inclusion of older data to develop the model output can introduce a bias into model output.

S2-8

Currently, the GMP does not adequately quantify the current inflows and outflows for the BS Subbasin using the most recent hydrology, water supply, and water demand information as required by Title 23 CCR section 354.18(c)(1) or provide a quantitative assessment of the historic water budget as required in Title 23

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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 California Department of Water Resources  
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CCR section 354.18(c)(2)(B). The Department does not contest, as stated in Response S1-4, "...that uncertainty exists within precipitation and recharge variability..." Rather, we consider climate change to be a factor that will add to this already existing uncertainty through an increase in temperatures, a decrease/variability in precipitation, and an increase in variability of recharge. It is understood from BWD's Comment S1-4 response to the Department that the period from 1929-1944 in the model is a "spin-up" period. The Department does not agree with the use of the longer time period as described in Response S1-5 that "[a]verage inflows from the entire run of the model update provide a reasonable estimate of potential basin inflows because they capture a variety of climatic conditions." The Department considers the most recent time periods to be more reflective of current and future climatic conditions.

S2-8

- a. Issue: Using a long historical record of groundwater use can result in skewed BVHM outputs and water budget calculations towards inflow/outflow numbers that are not reflective of current climate and groundwater use patterns.
- b. Recommendation: The GMP should use datasets from the most recent 50-year period for precipitation, evapotranspiration, and streamflow information; and the GMP should use only the most recent 10-year period of a quantitative assessment of the historical water budget to estimate and project future water budget information and future aquifer response to proposed groundwater management practices.

**7. Groundwater Management Plan, Section 3 (Sustainable Management Criteria).** Section 3 lacks page numbers on most pages.

S2-9

- a. Issue: Lack of page numbers in Section 3 causes difficulty in referencing specific information within the GMP.
- b. Recommendation: Add page numbers to Section 3.

**8. Groundwater Management Plan, Section 3.3 (Minimum Thresholds).** The list of elements required by Title 23 CCR Section 354.28(b) is misnumbered as numbers 4 through 9.

S2-10

- a. Issue: Mis-numbering obscures reference and suggests the list is incomplete.
- b. Recommendation: Use correct numbers in list (numbers 1 through 6).

**9. Section 3.3 (Minimum Thresholds).** Title 23 CCR section 354.28(e) states, "...the description of minimum thresholds shall include the following: ...[h]ow minimum thresholds have been selected to avoid undesirable results in adjacent

S2-11

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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basins or affecting the basins ability to achieve sustainability goals." Because of the unknown flux across the Coyote Creek fault and the known overdraft of the BS Subbasin, groundwater extraction in the BS Subbasin may be impacting recharge in the adjacent Ocotillo-Clark Valley Groundwater Basin. San Felipe Creek is a GDE within the Ocotillo-Clark Valley Groundwater Basin that has been experiencing groundwater declines that is causing severe impacts to State- and federally-endangered desert pupfish (*Cyprinodon macularius*) and designated critical habitat (DCH) for this species (see Attachment D).

S2-11

- a. Issue: Minimum thresholds do not include consideration of undesirable results in adjacent basins.
- b. Recommendation: Include a consideration of GDEs in adjacent Ocotillo-Clark Valley Groundwater Basin within section 3.3.7 (Groundwater Dependent Ecosystems-Minimum Thresholds) and section 3.4.7 (Groundwater Dependent Ecosystems-Measurable Outcomes).

**10. Groundwater Management Plan, Section 3.3.1.3 (Minimum Threshold Impacts to Adjacent Basins).** Section 3.3.1.3 states that, "...adjacent Ocotillo-Clark Valley Groundwater Basin and Ocotillo Wells Subbasin are both "very low" priority basins not required to prepare GSPs. As such, they are not expected to develop descriptive undesirable results or quantitative minimum thresholds and measurable objectives." Desert pupfish are protected under the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA). Potential impacts to desert pupfish and desert pupfish DCH at San Felipe Creek (see Attachment D) should be considered an undesirable result per Title 23 CCR section 354.28(e).

S2-12

- a. Issue: Minimum thresholds do not include consideration of undesirable results in adjacent basins.
- b. Recommendation: A consideration of GDEs in adjacent Ocotillo-Clark Valley Groundwater Basin should be included within section 3.3.7: Groundwater Dependent Ecosystems-Minimum Thresholds and section 3.4.7:Groundwater Dependent Ecosystems-Measurable Outcomes.

**11. Groundwater Management Plan, Section 3.5.4.2 (Identification of Data Gaps) Groundwater Elevation subsection.** Section 3.5.4.2 states that, "[m]ulticompletion wells or well clusters screened at discrete intervals in the upper, middle and lower aquifers would be required to determine potentiometric surface by aquifer unit. However, the average potentiometric surface measured at wells that are screened over one or more aquifer units appears to sufficiently represent groundwater conditions..." The Department does not agree that wells screened at more than one aquifer sufficiently represent groundwater conditions. The Department agrees with the recommendation included within section 6 on p.23 of the *Update to Borrego Valley Hydrologic Model* where it is recommended

S2-13

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to, "[c]onduct aquifer tests at wells screened only in the upper aquifer and only in the middle aquifer to obtain site-specific estimates of hydraulic conductivity and specific yield for each aquifer unit. This information may be used to enhance the calibration of the model to these hydraulic properties and our understanding of storage in the BVGB." This information is also identified in the BVHM subsection 3.5.4.2 to address the aforementioned data gap. The use of wells screened only for the upper and middle aquifers will, "...develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation" as required by Title 23 CCR section 354.34(a).

S2-13

- a. Issue: The proposed use of wells screened at more than one aquifer would be inadequate to monitor groundwater conditions within each aquifer.
- b. Recommendation: Plan and install multicompletion wells or well clusters screened only in the upper aquifer and only in the middle aquifer to specifically monitor aquifer conditions within each aquifer.

**12. Groundwater Management Plan, Section 3.5.4.2 (Identification of Data Gaps) Groundwater Elevation subsection.** The BVHM subsection 3.5.4.2 also identifies the previously mentioned data gap associated with potential flux across the Coyote Creek fault (see Comment 5). The Department recommends that monitoring wells be installed on both sides of the Coyote Creek fault to evaluate subsurface inflow and outflow along and across the Coyote Creek fault in order to, "...develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation," as required by Title 23 CCR section 354.34(a).

S2-14

- a. Issue: There is an unknown amount of groundwater flux across and/or along the Coyote Creek Fault.
- b. Recommendation: Plan and install monitoring wells on both sides of the Coyote Creek Fault and incorporate data analysis into the GMP.

**13. Groundwater Management Plan, Section 3.5.4.2 (Identification of Data Gaps).** The BVHM subsection 3.5.4.2 does not mention a data gap associated with spring systems. However, Figure 2.2-17 identifies multiple spring systems that may be associated with the Borrego Springs Groundwater Basin. Springs constitute a GDE. The Department recommends identifying what springs, if any, should be considered GDEs potentially impacted by the GMP through a phased approach. Springs that would potentially be impacted by groundwater decline in

S2-15

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the Borrego Springs Groundwater Basin would most likely be associated with a regional fault system that provides a hydrologic connection between the springs and the alluvial basin. Springs associated with regional faults would likely exhibit elevated temperatures in comparison to springs that are not associated with the fault system. A simple procedure of measuring temperatures of the neighboring springs can identify those associated with the basin. A second method, such as measurement of dissolved Helium isotope ratio of those springs with elevated temperatures can positively identify those systems associated with a fault system. Waters in contact with regional fault systems tend to exhibit an atypical Helium isotope ratio (in comparison to surface waters) that is indicative of exposure to mantle derived Helium. If springs are associated with regional fault systems they should be considered potential GDEs and included within the Plan in order to, "...develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation," as required by Title 23 CCR section 354.34(a). It is acknowledged that, as stated in Response S1-11, that neither the Hydrogeological Conceptual model (HCM) nor the HCM developed to evaluate GDEs support the idea that there would be a hydrologic connection between springs originating in bedrock outside the BS Subbasin and the sediments within the BS Subbasin; however, it appears to be assumed that no such conditions exist without any supporting direct evidence.

S2-15

- a. Issue: It is unknown if springs have a hydrologic connection to the BS Subbasin.
- b. Recommendation: Measure water temperatures among springs to identify those with potential hydrologic connection to regional fault systems and basin. Also, perform tests and calculate the Helium isotope ratio to verify potential GDEs.

### 14. Funding for the Environmental Working Group.

- a. Issue: The GMP does not provide a budget or dedicate funds to support the Environmental Working Group and protect public trust resources, including the GDEs.
- b. Recommendation: Implement an administrative fee on each acre-foot pumped to fund the Environmental Working Group or a Biological Resources Trust Fund that could be created in the Stipulated Judgement to better protect public trust resources, including the GDEs.

S2-16

## S2 – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

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### CONCLUSION

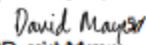
In conclusion, the BWD Proposed Stipulated Judgement and Draft Final Groundwater Management Plan for the Borrego Springs Groundwater Subbasin does not comply with all aspects of SGMA statute and regulations, and the Department finds the plan is not presently sufficient to consider impacts on fish and wildlife beneficial users of groundwater. The Department recommends that the Department of Water Resources determine the GMP inadequate and require the BWD to address shortcomings before approving the plan for the following reasons derived from regulatory criteria for plan evaluation:

1. The assumptions, criteria, findings, and objectives, including the sustainability goal, undesirable results, minimum thresholds, measurable objectives, and interim milestones are not reasonable and/or not supported by the best available information and best available science. [23 CCR 355.4(b)(1)] (See Comments #1, 3, 6, 9, and 10).
2. The Plan does not identify reasonable measures and schedules to eliminate data gaps. [23 CCR §355.4(b)(2)] (See Comments # 2, 5, 11, 12, and 13).
3. The sustainable management criteria and projects and management actions are not commensurate with the level of understanding of the basin setting, based on the level of uncertainty, as reflected in the Plan. [23 CCR §355.4(b)(3)] (See Comments # 1, 2, 5, 11, 12, and 13).
4. The projects and management actions are not feasible and/or not likely to prevent undesirable results and ensure that the BS Subbasin is operated within its sustainable yield. [23 CCR §355.4(b)(5)] (See Comments # 1, 3, 4, 6, 9, 10, and 13).
5. The Plan does not include a reasonable assessment of overdraft conditions or include reasonable means to mitigate overdraft, if present. [23 CCR §355.4(b)(6)] (See Comments # 1, 2, 3, 4, and 6).
6. The Plan will adversely affect the ability of an adjacent basin to implement its Plan or impede achievement of its sustainability goal. [23 CCR §355.4(b)(7)] (See Comments #5, 9, 10, and 12)

The Department appreciates the opportunity to provide comments. Please contact Mary Ngo at [Mary.Ngo@wildlife.ca.gov](mailto:Mary.Ngo@wildlife.ca.gov) or Charley Land at [Charles.Land@wildlife.ca.gov](mailto:Charles.Land@wildlife.ca.gov) with any questions.

Sincerely,

DocuSigned by:

 14/2020  
David Mayer

Environmental Program Manager, South Coast Region

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Enclosures (References; Attachments A-D)

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### References

Bedsworth, L., D. Cayan, G. Franco, L. Fisher, S. Ziaja. (California Governor's Office of Planning and Research, Scripps Institution of Oceanography, California Energy Commission, California Public Utilities Commission). 2018.

Statewide Summary Report. California's Fourth Climate Change Assessment. Publication number: SUMCCCA4-2018-013.

Borrego Valley Groundwater Sustainability Agency. 2019. Draft Groundwater Sustainability Plan for the Borrego Valley Groundwater Basin.

Department of Interior, Bureau of Land Management California Desert District, El Centro Field Office. 2017. Information/Briefing Memorandum for the California Desert District, El Centro Field Office – Desert Pupfish Management in San Sebastian Marsh.

Department of Water Resources. 2004. California's Groundwater Bulletin 118, Colorado River Hydrologic Region, Ocotillo-Clark Valley Groundwater Basin available at <https://water.ca.gov/>.

## Letter S2

**Commenter: David Mayer (California Department of Fish and Wildlife)**

**Date: May 15, 2020**

- S2-1** This comment presents introductory information regarding SGMA, the GMP and California Department of Fish and Wildlife’s (Department) role as trustee agency for fish, wildlife and native plants. In particular, Department lands fall within a groundwater basin adjacent to the Subbasin with ecosystems and species that depend on groundwater interconnected with surface water.
- S2-2** This comment provides overview of the relationship between the GMP and proposed Stipulated Judgement to constitute as the physical solution for the Subbasin. The comment provides an overview to the subsequent comments, which are individually addressed in the following responses.
- S2-3** This comment addresses the calculation of the sustainable yield<sup>2</sup> as presented in the Stipulated Judgement. The comment asserts that the details for updating sustainable yield using the BVHM need to be specified, and that the sustainable yield of 5,700 acre-feet per year presented in the stipulated judgement may not be a conservative enough estimate. The comment points to the period between 2007 and 2016 as a period where the inflows to the basin average less than 5,700 acre-feet per year.
- During preparation of the Alternative, it was determined that the BVHM prepared by USGS was the best available science for estimating the sustainable yield. Groundwater extractions are the primary outflow of groundwater from the Subbasin, and a lack of reliable pumping data made it difficult to determine the precise relationship between groundwater elevations and groundwater pumping in the basin. The BVHM was able to overcome this data gap by estimating pumping using historical land use, crop and climate data in the farm package of the One Water MODFLOW modeling code. This allowed for an analysis of how pumping and changes in climate have historically impacted water levels and groundwater storage in the Subbasin. The drawback of this method is that there is little data to calibrate the estimated pumping in model, and therefore there is some amount of uncertainty in estimates produced from the model.

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<sup>2</sup> “Sustainable yield” means the maximum quantity of water, calculated over a base period representative of longterm conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result [CWC Section 10721(w)].

Given the uncertainty in model estimates, it was determined that the sustainable yield as calculated in the July 2019 Update to the BVHM model report prepared by the GSA's consultant and included as Appendix D.1 of the GMP would be used as an initial target for sustainable yield, acknowledging that this estimate should be updated as more reliable data becomes available. Programs established by the Alternative such as metering of groundwater production and ongoing water quality and water level monitoring will likely generate useful data on pumping, climate, and groundwater elevations in 2025 and that can thereby be used to update and potentially recalibrate the model to provide a better estimate of sustainable yield that has less uncertainty than the current estimate. The update of the sustainable yield estimate will take into account all of the relevant data available at the time of the update in 2025. Updates to the Sustainable Yield will be undertaken by the Watermaster, with input from the Technical Advisory Committee, with oversight by the Superior Court, as specified in Section III.F of the proposed Judgment.

**S2-4**

This comment asserts that insufficient information and data are known to formulate a reasonable and justified allocation of existing groundwater supplies and that the GMP includes multiple data gaps such that it is inadequate to define and assess reasonable sustainable management criteria and recommends incorporating a plan to address existing data gaps through monitoring efforts. The BWD points out that GMP Section 3.5.4 provides the identification of data gaps and the Alternative defines plans to address existing data gaps. The BWD also notes that Section 354.38 of the GSP Regulations provide that a GSA should continue to assess and improve the monitoring network throughout the planning and implementation horizon and disagrees with the assertion that there is insufficient information and data to formulate a reasonable and justified allocation of existing groundwater supplies such that the sustainability goals of the Subbasin are not achieved by 2040.

The BWD also notes that Section III.F of the proposed Stipulated Judgment requires the Watermaster to develop, fund, and implement a technical study and update of the sustainable yield every five years through 2040. This adaptive management approach specifically correlates the rate of Rampdown from 2025 through 2040 to the recalculation of sustainable yield every five years so that the cumulative pumping is ramped down to the revised sustainable yield by no later than January 2040, which by that time, will have been through four separate technical studies pursuant to Section III.F of the proposed Stipulated Judgment.

**S2-5**

This comment asserts that the implementation of the rampdown schedule as described may not achieve sustainable groundwater management within 20 years of the applicable statutory deadline, including depletions of interconnected surface water. At multiple locations in the GMP it is stated that the sustainability goal is to be met by 2040. However, the provisions of the proposed Stipulated Judgment control over and supersede any contrary provisions contained in the GMP. As such

the comment suggests that sustainability may not be achieved by 2040. The Department requests that the Stipulated Judgement be revised to specify in Section III.F that the sustainability goal is to be met by 2040. BWD does not agree with the characterization that the sustainability will not be achieved by 2040 under the terms of the Stipulated Judgment. Indeed, as described above in response to comment S2-4, Section III.F requires an adaptive management approach in which the sustainable yield is continuously studied over twenty years through new work plans every five years, with the rate of Rampdown from 2025-2040 specifically correlated to any updated changes in the estimate of the sustainable yield.

**S2-6**

This comment asserts that the safeguards to achieve sustainable groundwater management by controlling overproduction are not adequate. Specifically, the Department suggests that solely using an Overproduction Penalty Assessment fee as a means of preventing groundwater extraction in excess of the Baseline Pumping Allocation (BPA) is inadequate to deter overpumping. The Department recommends overproduction be offset with a mandatory reduction in the BPA for the subsequent year. If the overproduction is not offset in the subsequent year, penalty fees should be imposed such that there is no financial incentive to overproduce and repeated overproduction should be penalized by a suspension of the BPA. The BWD disagrees with the Department's assertion that development of an Overproduction Penalty Assessment is not SGMA compliant. In fact, the Stipulated Judgment requires overproduction to be made up in the following year or an Overproduction Penalty Assessment is imposed. Moreover, the Superior Court will maintain reserved jurisdiction to impose any other necessary remedy to address any violation of the Judgment's terms.

The intention of the Overproduction Penalty Assessment is to discourage overproduction by individual pumpers. Given variability in the actual water demand of a crop from year to year, there is the potential for a pumper to exceed BPA in one year but be under the BPA in another year. The Overproduction Penalty Assessment fee simply establishes for an individual pumper what are the repercussions of overpumping. This does not obviate the requirement to manage the Subbasin sustainably over the implementation period through the proposed rampdowns. Additionally, if one or multiple pumpers exceeds their BPA in a given year, the overall BPA has not necessarily been exceeded but the Assessment fee does penalize those who do exceed their individual BPA.

**S2-7**

This comment addresses the data gap relating to subsurface flow into the BVGB from the Ocotillo-Clark Groundwater Basin across the Coyote Creek fault. In relation to this data gap, it should be noted that the 2019 Update to the BVHM included at GMP Appendix D-1, which was used to estimate the initial sustainable

yield of the basin, assumes no flow across the Coyote Creek fault, and the BVHM is calibrated to groundwater elevations within the basin. Increasing flow across the Coyote Creek fault in the 2019 Update to the BVHM would likely need to be complemented by decreasing other inflows to the basin in order to maintain the calibration of the model. Therefore, it is unlikely that these flows would have a significant impact on the overall calculation of sustainable yield for the basin.

As this is noted as a data gap in the GMP, it is anticipated that the update of sustainable yield in 2025 will take into account any new information that becomes available before that time and the Watermaster and Technical Advisory Committee will evaluate measures that could address any existing data gaps more completely.

**S2-8** This comment addresses the water budget as presented in the GMP, and suggests that a shorter period of 10 years should be used instead of the longer time period presented in the GMP.

As stated in the comment, the GMP uses a longer period of climatic data in order to capture a wide variety of climate conditions that have occurred historically in the basin. It is important to note that a 50-year historical climate period is what is presented by SGMA as appropriate for planning for future conditions in the basin. It is important to note that in the Subbasin, recharge is extremely bimodal, with a few very wet years providing a majority of the recharge to the basin. Choosing a 10 year period to assess the sustainability of the basin is likely to either give too much or too little influence to these recharge events, as a 10 year period might not fully capture the total variability in recharge that occurs in the basin. The comment seems to suggest that the final 10-year simulation period of the model (2007-2016) is more representative of potential future climate conditions in the basin, but there is no evidence to suggest that this period is any more representative of future climate conditions than any other 10 year period in the past 50 years. As noted above, additional climate data will be reviewed as available in the 2025 update of sustainable yield to be undertaken by the Watermaster, with input from the Technical Advisory Committee, and oversight by the Superior Court.

**S2-9** BWD notes your comment that the lack of page numbers in Section 3 causes difficulty in referencing specific information within the GMP.

**S2-10** BWD notes your comment that the list of elements required by Title 23 CCR Section 354.28(b) is misnumbered as numbers 4 through 9 and to use correct numbers in list (numbers 1 through 6).

**S2-11** This comment indicates that the GMP does not include consideration of undesirable results in adjacent basins. Specifically, a GDE associated with San Felipe Creek is within the Ocotillo-Clark Valley Groundwater Basin that has been experiencing groundwater declines that is causing severe impacts to State- and federally-endangered desert pupfish (*Cyprinodon macularius*) and designated critical habitat (DCH) for this species. As previously reported in response to comments by the

Department on the Draft GSP, the location of the Desert pupfish habitat is in the lower-most Imperial County reach of San Felipe Creek, near the Salton Sea, downstream of the confluence of Fish Creek with San Felipe Creek. This habitat is not within the Plan Area, but is more than 18 miles southeast of the closest part of the Subbasin boundary. The Desert pupfish habitat is located in the southern part of the Ocotillo-Clark Valley Groundwater Basin. BWD maintains that it is highly unlikely that groundwater extractions in the Subbasin impact (either positively or negatively) the desert pup fish habitat 18 miles southeast of the Subbasin. The Watermaster may undertake additional study to further evaluate potential undesirable results in adjacent basins through the Technical Advisory Committee process.

**S2-12**

This comment asserts that potential impacts to desert pupfish at San Felipe Creek should be considered an undesirable result and the consideration of GDEs in adjacent Ocotillo-Clark Valley Groundwater Basin be included in the GMP. As indicated in response S2-11, the desert pupfish habitat is not within the Plan Area, but is more than 18 miles southeast of the closest part of the Subbasin boundary. In fact, Attachment D to the Department's comment letter states, "Another cause for the sudden drop in water levels in the marsh could potentially be groundwater pumping. However, that seems unlikely for several reasons. One is the location of the closest notable well fields/pumping locations. Wells located in Borrego Valley are located about 20 miles to the north-northwest of the Marsh and about 700 feet higher in elevation. Other known major wells are located downstream in the watershed. There used to be a ranch with active wells located upstream, but most of these agricultural fields have been converted into a solar power plant. Other wells are either located across the Coyote Creek fault, which is likely a groundwater barrier (Faunt et al. 2015) or are most likely too far away to have their cone of depression reach the perched aquifers of underground springs that feed Fish Creek and San Felipe Creek. Further, the water levels dropping suddenly is very unlikely to be caused by distant groundwater pumping. Such effects are more commonly seen in groundwater levels in close proximity to where the pumping occurs and then stops. When pumping occurs within a short distance, the cone of depression is more likely to appear quickly and also to rebound more quickly. Otherwise long distances and lag times would weaken such pumping effects. However, threats of long term water level declines have been observed in many wells within the watershed (Lebo et al. 1982) and Borrego Valley in which San Felipe Creek originates (Faunt et al. 2015). If a known well is suspected to have caused the water level drop, a pump/aquifer test could either confirm or eliminate such suspicion." The comment letter concludes that, "While San Felipe Creek/Fish Creek have apparently had perennial flow for the past 300 years, seismic activity is the most likely culprit for the sudden dis- and reappearance of this perennial flow." BWD emphasizes that based on best available data and science, there is no significant

nexus of groundwater extraction in the Subbasin with groundwater levels in a perched aquifer system located more than 18 miles southeast of the closest part of the Subbasin boundary. As such, BWD has concluded that there is no need to include evaluation of desert pupfish at San Felipe Creek in the adjacent Ocotillo-Clark Valley Groundwater Basin as a component of the GMP.

- S2-13** This comment addresses the measurement of groundwater levels in wells that are screened in multiple aquifers rather than nested monitoring wells. While nested wells would provide more information on groundwater elevations within specific aquifer units, it should be noted that there are no aquitard units separating the upper, middle and lower aquifers in most parts of the Subbasin. Rather, the divisions between aquifer units are based primarily on differences in textures and aquifer properties. As a result, differences in head between the three aquifer units tend to be minimal in most portions of the Subbasin. Therefore, the use of wells completed in multiple aquifers likely provides the best available information on Subbasin conditions to evaluate undesirable results and make informed management decisions and actions.
- S2-14** This comment once again addresses the data gap relating to groundwater flow across the Coyote Creek fault. See response to comment S2-7 for a response to this issue.
- S2-15** The Department asserts that it is unknown what springs have a hydrologic connection to the Subbasin GMP Appendix D4, Draft Final Technical Memorandum Borrego Springs Subbasin Groundwater Dependent Ecosystems, indicates that there are no seeps or springs within the boundaries of the Subbasin. Contributing watersheds along the eastern flanks of the mountainous terrain that abuts the Subbasin to the west were evaluated to identify potential GDEs including springs. The identified springs discharge groundwater as surface water at elevations several hundred feet above the Subbasin's regional groundwater levels. These springs are therefore fed by groundwater that recharges outside of the Subbasin. As such no substantial nexus exists between the Subbasin's regional groundwater levels and the potential GDEs (springs) and additional evaluation of springs is not considered a data gap. BWD disagrees with the Department's assertion that there is no supporting direct evidence. The regional groundwater level which is often several hundred feet below ground surface in the Subbasin cannot flow uphill hundreds of feet to discharge at the springs that are clearly fed by recharge outside of the Subbasin. The Watermaster may endeavor to provide additional information and potentially complete additional study through the Technical Advisory Committee process.

**S2-16** BWD notes the Department's comment that budget and funds to support the Environmental Working Group and protect public trust resources, including the GDEs, are not specifically dedicated in the GMP and the Department's suggestion that an administrative fee be placed on each acre-foot pumped to fund the Environmental Working Group or a Biological Resources Trust Fund that could be created in the Stipulated Judgement to better protect public trust resources, including the GDEs.

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BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.F

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Analysis of Existing BWD Solar Electricity Systems and Energy Efficiency Analysis  
– G Poole

**RECOMMENDED ACTION:**

Review Report

**ITEM EXPLANATION:**

BWD Commissioned an analysis of the existing solar arrays at the BWD office and Waste Water Treatment Plant. The detailed analysis is attached. In summary:

**RECOMMENDATION - BWD MAIN:**

1. Install two new Optimizers on malfunctioning panels: Cost = \$1,100 and Benefit = ~\$380/year
2. Correct intermittent internet connection = Cost TBD
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = ~ \$1500/yr for professional cleaning of both sites 2x times per year. Cleaning can be done by BWD staff with proper training, cleaning equipment and lift equipment

**RECOMMENDATION - WWTP:**

1. Repair Solar Log and Analyze Data
2. Update module wire management
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = \$1,000/yr for professional cleaning 2x times per year. Cleaning can be done by BWD staff with proper training and cleaning equipment

**NEXT STEPS**

TBD

**FISCAL IMPACT**

N/A

**ATTACHMENTS**

1. Solar Analysis



**Borrego Water District**

# **BWD Solar Array and Energy Efficiency Audit**

C Todd Holman  
EnrGen Inc

**Final/Draft Report**

07/30/2020

## **Disclaimer**

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This report uses preliminary information from systems data, Utility data and on-site inspection. The report, by itself, is not intended as a basis for the engineering required to adopt any of the recommendations. Its intent is to inform the site of potential energy saving opportunities and reasonable cost savings expected. The purpose of the recommendations and calculations is to determine whether measures warrant further investigation and or a bid.

## **Author**

C. Todd Holman

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## List of Abbreviations

**AC** – Alternating Current

**DC** – Direct Current

**EEM** – Energy Efficiency Measure

**ECM** – Electronically Commutated Motor

**°F** – degree(s) Fahrenheit

**HVAC** – Heating, Ventilating, and Air-Conditioning

**IT** – Information Technology

**kV** – kiloVolts (thousands of volts of electrical potential)

**kVA** - kiloVolt-Amperes of apparent power

**kW** – kiloWatts of real power

**kWh** – kiloWatt hour

**PDU** – Power Distribution Unit

**PUE** – Power Usage Effectiveness

**TCO** – Total Cost of Ownership

**UPS** – Uninterruptible Power Supply

**V** – Volt(s)

**W/cfm** – Watts (of electrical power input) per cubic feet per minute (of air flow)

**W/gpm** - Watts (of electrical power input) per gallon per minute (of water flow) **W/sf** – watts per square foot

## SOLAR ARRAY & ENERGY EFFICIENCY AUDIT PROCESS AT OFFICE/WAREHOUSE AND WWTP

An audit of historic solar power generation and physical inspection of current solar generating facilities was performed at both the Borrego Water District (BWD) offices/warehouse and Waste Water Treatment Plant (WWTP) on February 26<sup>th</sup> and 28<sup>th</sup> 2020. Evaluation data was obtained from solar providers proprietary software and SDGE (kW consumption) through 18-month bill analysis for both WWTP and building installations. During the same timeframe, an Energy Efficiency Audit was also conducted at BWD main office/warehouse and WWTP facilities. The Audit included an on-site, room by room inspection of lighting, switching, heating/cooling and general electricity usage in all Facilities. The purpose of this Report is to document the observed conditions, identify Following is a listing of the observed conditions and recommended actions with cost/benefit identified.

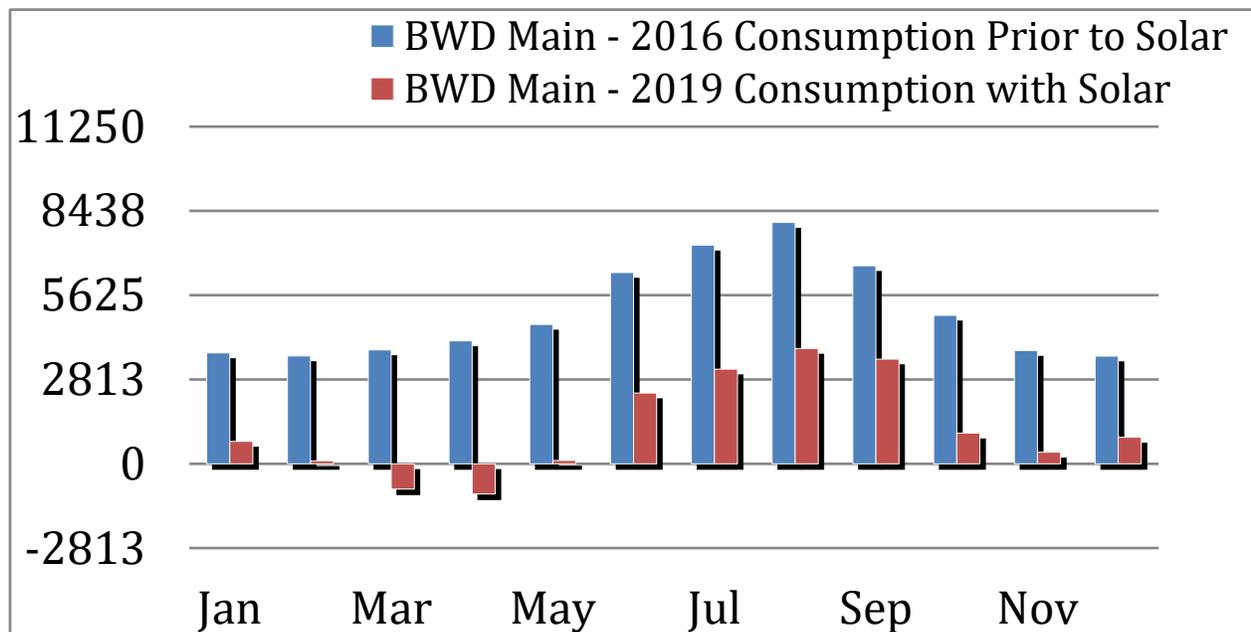
### SOLAR EFFICIENCY OBSERVATIONS/RECOMMENDATIONS BWD MAIN

BWD Main System - 35.4kW roof mounted solar array  
 118 - 300 watt German Solar Modules  
 59 - P400 SolarEdge Optimizers (1 optimizer for 2 Solar Modules)  
 2 - 14.4kW 208v SolarEdge Commercial inverters

#### SOLAR GENERATION DATA ANALYSIS - BWD MAIN:

Data analysis of the BWD Offices/Warehouse solar system was done through the SolarEdge web portal. Internet connectivity is somewhat problematic. While this scenario does not prove to be an issue with longterm data collection since data not immediately transmitted to SolarEdge webPortal can reside on the inverter for weeks in onboard memory. The scenario could present an issue with daily and possibly weekly analysis. The Chart below shows the 2016 energy profile of 60,240kW delivered from SDGE and profile for 2019 shows 4200kW delivered from SDGE. Production expectations for the solar Array were ~53000kW/yr, this estimate production is arrived at by using the solaredge tool that draws data from local weather, module production estimates, and average soiling levels of the modules. The actual production measured for 2019 was 46950kW.

**BWD Energy Profile (KwH)**



## **PHYSICAL INSPECTION - BWD OFFICE SOLAR :**

BWD Main - Solar Equipment appears to be in good shape. No cracks or discolorations. Panels are soiled, limiting optimal production. Equipment assemblies and roof seals are in good shape. Wire management is still secure and spot check of panel clamps were all tightened to specification. During system diagnostics, system showed two optimizers that are not functioning properly and need to be replaced. System is not regularly communicating with the web monitoring portal.

As mentioned above production expectations for the solar array are ~53000kW/yr. Solar BWD Office/Warehouse solar installation is producing 46950kW approximately 11.4% below expectations, which is due to three factors:

1. Two Optimizer Units malfunctioned. Historically, solar systems worked much like Christmas tree lights, if one light goes out the entire string does not work. BWD took the extra steps in the design of its system to include Optimizers, which is the brains for each panel in the system. When functioning, an Optimizer allows for continued system production on the remaining panels when one goes down. Enrgen will provide BWD with a list of qualified solar repair technicians to complete the repair. The estimated cost is ~\$1,100, but once complete, solar production will increase by an estimated 3.5%.
2. The Panels are soiled which can cut down power production by as much as 5%. Power generation is dependent upon the solar rays striking the surface of the solar panels which are covered by glass. The cleanliness of the glass is directly related to the solar power generated. Cleaning the panels as needed or at least every 6 months is recommended to achieve optimal performance. Hiring a qualified cleaner or training BWD staff by Enrgen could take place to perform the task at the appropriate times.
3. Weather - Variations in production due to cloud cover or inclement weather +/-5%-7% of expected production

## **RECOMMENDATION - BWD MAIN:**

1. Install two new Optimizers: Cost = \$1,100 and Benefit = ~\$380/year
2. Correct intermittent internet connection = Cost TBD
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = ~ \$1500/yr for professional cleaning of both sites 2x times per year. Cleaning can be done by BWD staff with proper training, cleaning equipment and lift equipment

## SOLAR EFFICIENCY OBSERVATIONS/RECOMMENDATIONS WWTP

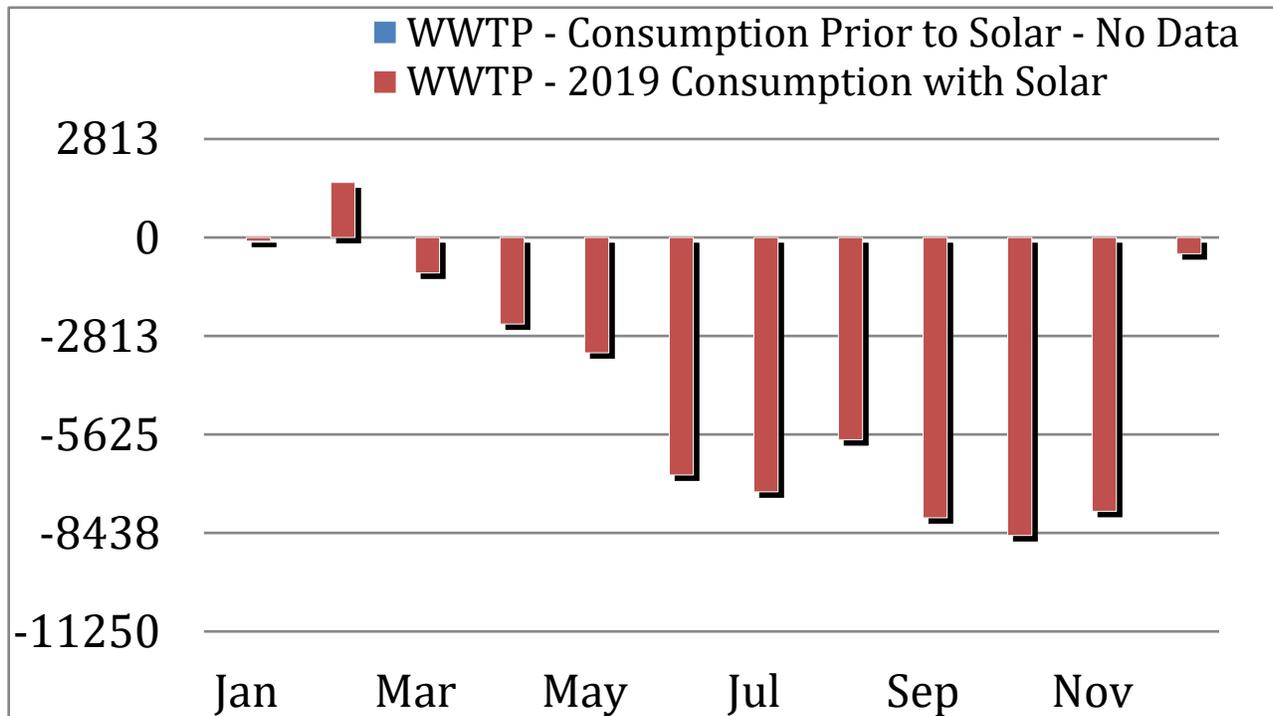
WWTP System - 98.3kW roof mounted solar array  
317 - 310 watt Canadian Solar Solar Modules  
4 - 24000TL SMA Commercial inverters  
Solar-Log Reporting tool

### SOLAR GENERATION DATA ANALYSIS - WWTP:

Prior to WWTP inspection, it was determined that the Solar Log system was malfunctioning and repairs were needed to fully access the data. The necessary repair parts have been ordered but delayed due to supply chain issues in China. The following analysis was prepared using SDGE bills and will be confirmed/updated once the Solar Log is repaired and available data can be analyzed.

Production of the WWTP facility appears to be good. In the analysis of the SDGE data, the system is overproducing significantly every nearly month. The Below graph shows the majority of over production begins in the early summer months through November. This corresponds to the decrease need for pumping and treating of waste water during the off-peak season when only full-time Borrego residents are present in the valley and tourism is at a minimum.

**WWTP Energy Profile (KwH)**



### **Solar Production Credits**

The WWTP solar installation system produces nearly 50,000kW of additional power per year. That power accumulation is in the form of net metering credits in excess of \$5,000. Those credits unfortunately can only be applied to the current meter / account where the solar is installed. The next phase the potential future feasibility study will identify the optimal way to utilize these over production credits to offset billing at other BWD locations.

### **PHYSICAL INSPECTION - WWTP:**

WWTP - Solar equipment is in good working condition. No cracks or discolorations of solar modules. Panels are lightly soiled and could use at least a yearly cleaning to increase production. Inverter equipment is weathered but still fully functional to specifications. Solar log reporting equipment appears to be connected to the web but onsite diagnosis screen is not functional. Spot check of module clamps are all tightened to specifications. Wire management needs to be reworked to secure module wiring to the racking assembly.

BWD WWTP solar installation production % will be determined once the Solar-Log data malfunction is repaired.

1. The Panels are soiled which can cut down power production by as much as 5%. Power generation is dependent upon the solar rays striking the surface of the solar panels which are covered by glass. The cleanliness of the glass is directly related to the solar power generated. Cleaning the panels as needed or at least every 2 months is recommended for optimal performance. Hiring a qualified cleaner or training BWD staff by Enrgen could take place to perform the task at the appropriate times.

### **RECOMMENDATION - WWTP:**

1. Repair Solar Log and Analyze Data
2. Update module wire management
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = \$1,000/yr for professional cleaning 2x times per year. Cleaning can be done by BWD staff with proper training and cleaning equipment

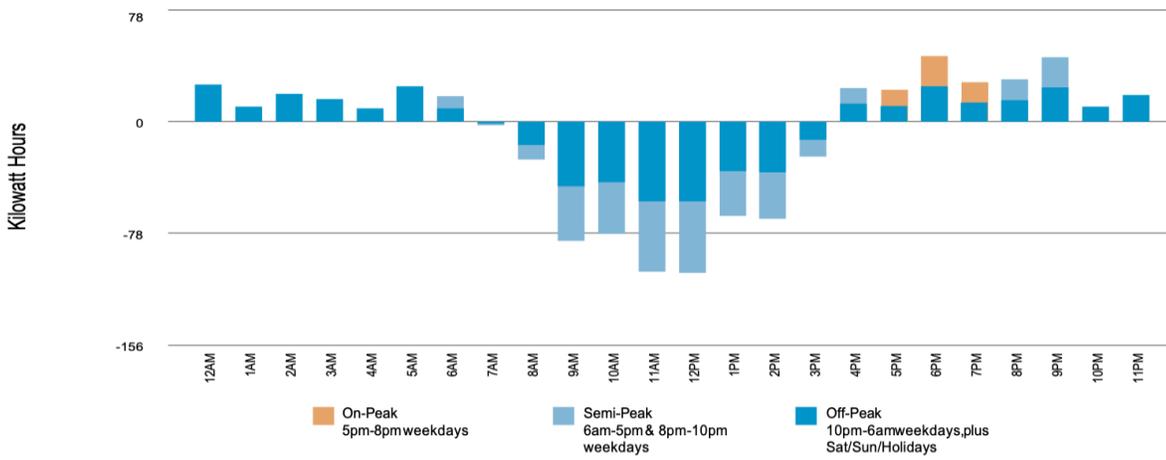
# ENERGY EFFICIENCY MEASURES - WWTP

## POWER CONSUMPTION DATA ANALYSIS

WWTP primary power consumption is the pumping and moving of waste water. The Winter vs. Summer profile shows the consumption is driven by the annual population surge during SnowBird/tourist season with a significant drop off of power consumption during the summer months. While energy efficiency measures will show some impact on energy consumption it will not result in any savings since the installed solar array is overproducing significantly. So any EE measures installed will only increase the amount of credits the facility produces.

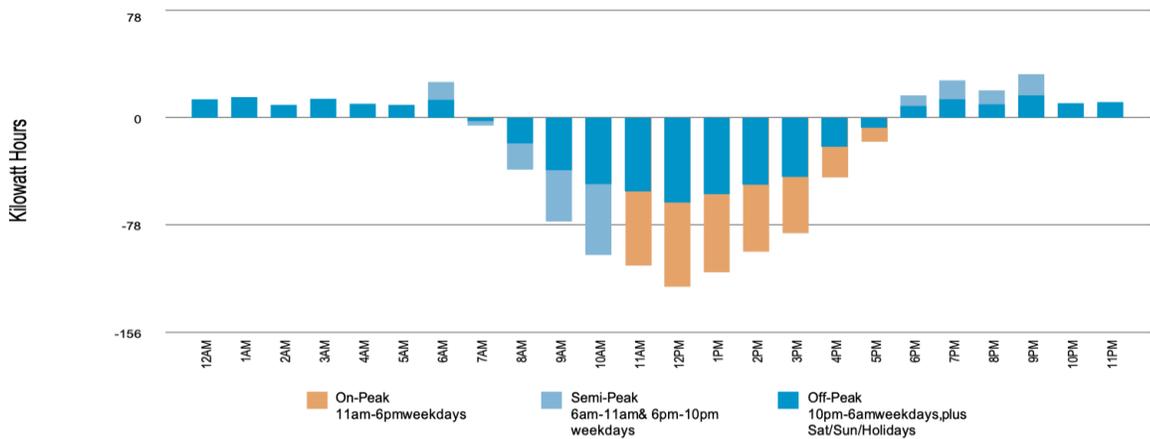
### WWTP - SDGE Winter Profile

#### Average Hourly Electric Usage



### WWTP - SDGE Summer Profile

#### Average Hourly Electric Usage



## **PHYSICAL INSPECTION**

BWD has yet to incorporate many of the commonly used energy conservation techniques at the WWTP, specifically the following are currently installed:

Non motion sensor light switches  
Aged fluorescent fixtures  
Non-Programmable Heating/Cooling controls

## **RECOMMENDATIONS**

Table below summarizes the energy efficiency measures (EEMs), potential savings, and estimated payback identified by the assessment. The table includes cost analysis and estimated savings. The estimated savings can be realized when the BWD takes advantage of RES-XXX rate structure and is able to use the excess credits produced by the WWTP solar array at one of the other SDGE metered sites.

The WWTP installed replacement cost of the all Florescent lighting with LED retrofits ROI is shown below. Retrofitting of the Florescent bulbs should not require replacement of the ballast assembly so cost is isolated to the unit cost of the bulbs and the labor.

Thermostat should be replaced since heating/cooling at the work area accounts for the majority of the electrical consumption at the WWTP work shed. Smart thermostats use available weather data, imbedded sensors to sense occupancy, and historical data to learn and adjust over time.

Lastly changing light switching from basic on/off switches to motion/occupancy sensors switches will cut down on consumption by another 20-30% of total lighting cost. This cost savings could be more depending on occupancy.

Utilize the power wise or energy wise feature found in the operating system software to control the dimming or power saving mode for the computer monitors not in active use.

### **LIGHTING RECOMMENDATIONS:**

- T8 & T10 LED replacement tubes - no specific brand recommendation
- Retrofit external lighting fixtures with LED replacements

### **LIGHT SWITCHING RECOMMENDATIONS:**

- Lutron Maestro Motion sensor Switch - This is an ideal unit for the small offices since it uses a superior motion sensing technology that is able to detect small movements if someone is sitting at their desk.
- LIT-PATH PIR Motion Sensor Light Switch - This is superior motion sensing switch if the location requires three-way switching.

### **THERMOSTAT RECOMMENDATIONS:**

- NEST 3rd Generation Learning Thermostat - Relative ease is installation, simple set up and ease of monitoring. Most advance learning algorithm available.

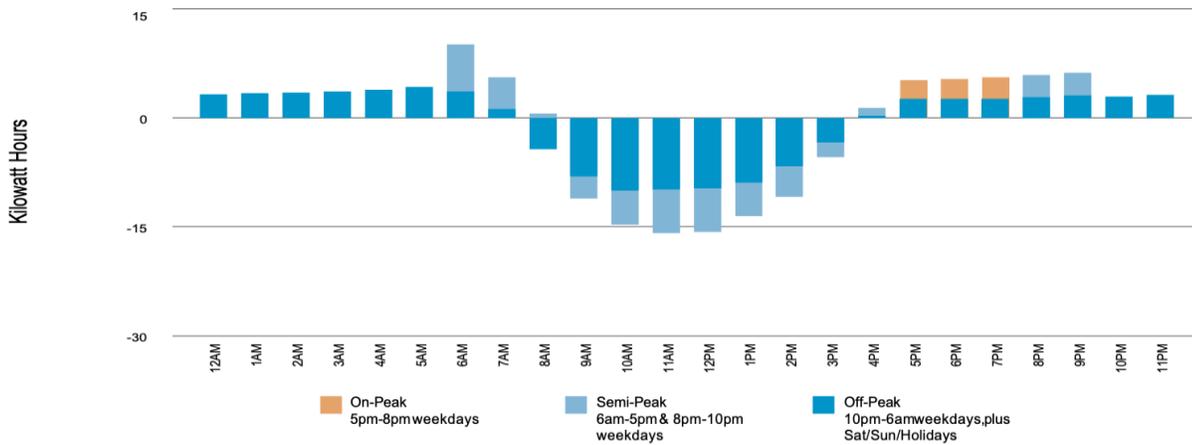
# ENERGY EFFICIENCY MEASURES - BWD OFFICE/WAREHOUSE

## POWER CONSUMPTION DATA ANALYSIS

BWD Main - Consumption analysis - The BWD Main winter profile shows a distribution of power consumption that is typical with an office/warehouse combination. It is determined that the BWD winter profile would benefit from lighting and light switching Energy Efficiency measures. By using more efficient lighting (LED) were possible and installing occupancy/motion detector switches. The analysis of the summer profile shows a considerably exaggerated profile with a significant amount of energy used by the BWD main facility during non-business hours. A significant impact can be made by introducing smart thermostats that will regulate the temperature and allow the building to remain at a higher temperature during non occupancy (after hours and over night).

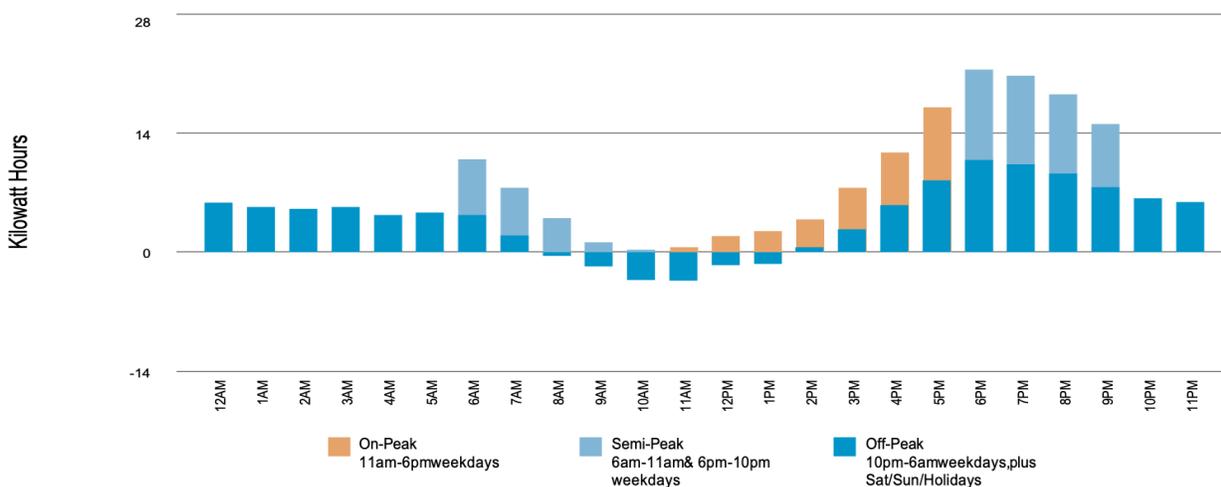
### BWD Main Winter Profile

#### Average Hourly Electric Usage



### BWD Main Summer Profile

#### Average Hourly Electric Usage



## PHYSICAL INSPECTION

BWD has yet to incorporate many of the commonly used energy conservation techniques, specifically the following are currently installed:

Non motion sensor light switches  
Aged fluorescent fixtures  
Non-Programmable Heating/Cooling controls

## RECOMMENDATIONS

Table below summarizes the energy efficiency measures (EEMs), potential savings, and estimated payback identified by the assessment.

The Replacement of the all Florescent lighting with LED retrofits ROI is shown below. Retrofitting of the Florescent bulbs should not require replacement of the ballast assembly so cost is isolated to the unit cost of the bulbs and the labor.

Thermostat replacement will show the best ROI since heating/cooling at the office accounts for over 40% of the total electricity used with a disproportionate amount of that cooling occurring during the summer evening hours. Smart thermostats use available weather data, imbedded sensors to sense occupancy, and historical data to learn and adjust over time.

Lastly changing light switching from basic on/off switches to motion/occupancy sensors switches will cut down on consumption by another 20-30% of total lighting cost.

While I explored HVAC replacement with newer higher efficient models. The efficiency found in the newer models was due to intelligent thermostat. The efficiency of the current HVAC model can be addressed through the use Smart Thermostat replacements such as the NEST Smart Thermostat.

Each of the efficiency measure is a retrofit installation and will not require interruption to the daily routines of the office or warehouse staff.

Utilize the power wise or energy wise feature found in the operating system software to control the dimming or power saving mode for the computer monitors not in active use.

### LIGHTING RECOMMENDATIONS:

- T8 & T10 LED replacement tubes - no specific brand recommendation
- LED replacement/retrofit can lighting - No specific brand recommendation

### LIGHT SWITCHING RECOMMENDATIONS:

- Lutron Maestro Motion sensor Switch - This is an ideal unit for the small offices since it uses a superior motion sensing technology that is able to detect small movements if someone is sitting at their desk.
- LIT-PATH PIR Motion Sensor Light Switch - This is superior motion sensing switch if the location requires three-way switching.

### THERMOSTAT RECOMMENDATIONS:

- NEST 3rd Generation Learning Thermostat - Relative ease is installation, simple set up and ease of monitoring. Most advance learning algorithm available.

Based on an estimated average energy cost of \$.34/kWh, energy cost savings of approximately \$2300yr are possible through measures that have an average payback period of 2.24 years and energy savings in overall energy use for all facilities combined.

### BWD OFFICE / WAREHOUSE ENERGY EFFICIENCY COST TABLE

Grouped Efficiency Measures (EEMs)	Estimated Installed Cost (\$)	Estimated Yearly Energy Savings (kWh)	Estimated Yearly Dollar Savings (\$)	Estimated Simple Payback (Years)	Replacement Lifespan
Lighting 8ft FL Replacements with LED	\$640	830kWh	\$282	2.2yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Lighting 4ft FL Replacements with LED	\$1225	1520kWh	\$511	2.2yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Replace CFL Can Bulbs with LED	\$435	440kWh	\$148	3yrs	
HVAC Replacement of basic Thermostats	\$1130	2200kWh	\$748	1.6yrs	Thermostats AI the savings will increase slightly over time
Timers/Occupancy	\$1300	1764kWh	\$610	2.2	
<b>Total</b>	<b>\$4730</b>	<b>6754kWh</b>	<b>\$2300</b>	<b>2.24 average ROI</b>	

### WWTP ENERGY EFFICIENCY COST TABLE

Grouped Efficiency Measures (EEMs)	Estimated Installed Cost (\$)	Estimated Yearly Energy Savings (kWh)	Estimated Yearly Dollar Savings (\$)	Estimated Simple Payback (Years)	Replacement Lifespan
Lighting 4ft FL Replacements with LED	\$400	384kWh	\$130	3.1yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Replace Exterior flood lights with LED	\$240	300kWh	\$102	2.3yrs	10 year lifespan vs 3 year
HVAC Replacement of basic Thermostats	\$400	600kWh	\$204	2yrs	Due to Theromstats AI the savings will increase slightly over time
Timers/Occupancy	340	420kWh	\$142	2.2	
<b>Total</b>	<b>\$1380</b>	<b>6754kWh</b>	<b>\$578</b>	<b>2.4 average ROI</b>	

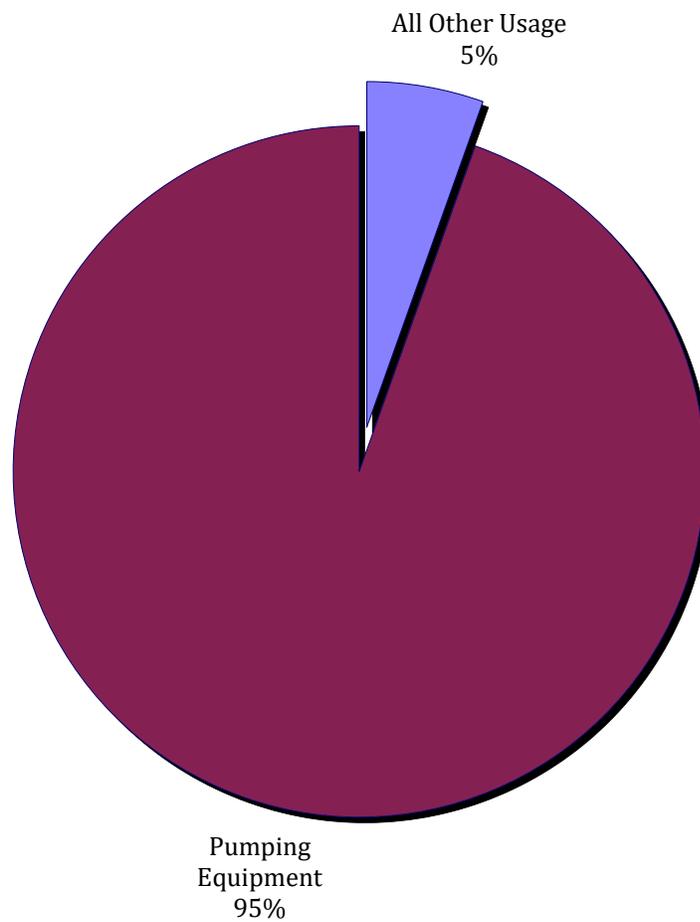
## FACILITY OVERVIEW

### WWTP FACILITY

95% of the WWTP energy consumption is the Pumping and waste water movement equipment. 5% of the consumption is from the work/storage facility shed. Installed lighting is outdated 4ft Florescent tubes. No occupancy or motion detection switching and no smart cooling/heating thermostats. Work/Storage building is comprised of 4 rooms. Main office where computers and facility diagnostic equipment is housed large bathroom with available shower, large work room for storage and repair, and service room with SDGE Electric switch equipment and electrical services.

WWTP Energy Use Profile:

### Current WWTP - Energy Use Breakdown

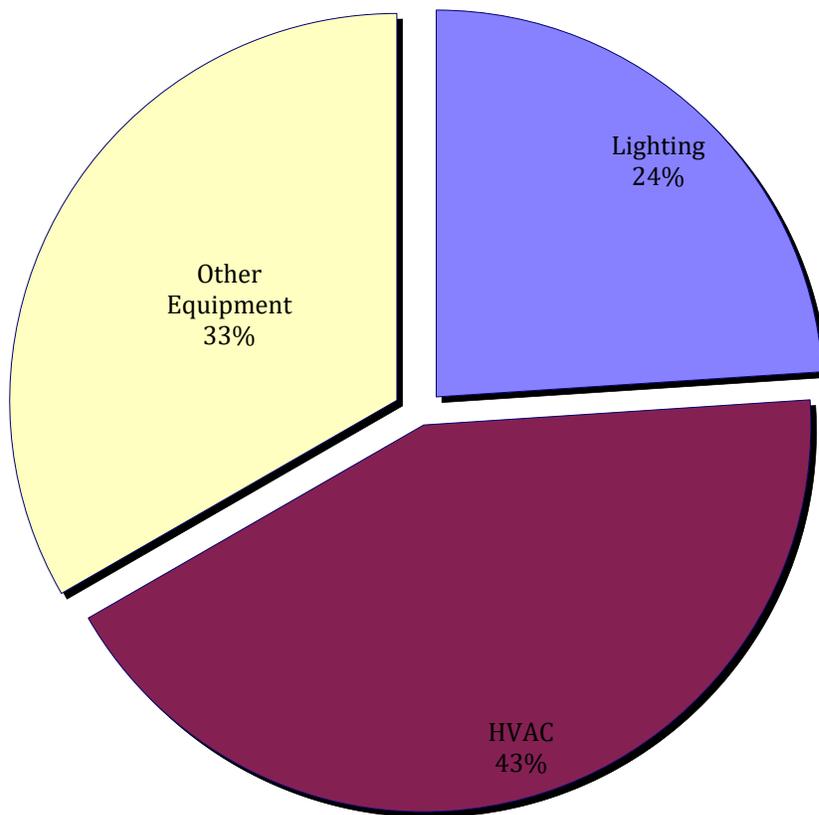


**BWD MAIN**

Main Office facility at 806 Palm Canyon is the administrative office, Main Warehouse with staff offices, secondary Welding shed and a large storage shed. The main office is comprised of a large board room, 5 individual offices, a general-purpose area, 2 bathrooms, a service closet, small storage room and 2 hallways that are dual purposed with document storage areas. Main warehouse is found the pumping equipment storage, vehicle storage, 3 lower level offices 2 bathrooms and an upper level unused office. Both the Welding shed and Storage shed have lighting and none or limited functional swamp coolers.

BWD Main Energy Use Profile:

**Current BWD Main - Energy Use Breakdown**



FACILITY ELECTRICAL LOADS

<b>BWD Main Areas</b>	<b>Rooms</b>	<b>Installed load (kW)</b>
Main Office	General Purpose Area	8 quad tube 4ft CFL main lighting 6 CFL Replacement bulb can lighting Basic Totaline Thermostat Basic power switching
	Board Room	8 quad tube 4ft CFL main lighting 6 CFL Replacement bulb can lighting Basic power switching
	GM Office	3 quad tube 4ft CFL main lighting Basic power switching
	S Office #2	2 quad tube 4ft CFL main lighting Basic power switching
	S Office #3	2 quad tube 4ft CFL main lighting Basic power switching
	S Office #4	2 quad tube 4ft CFL main lighting Basic power switching
	N Office #5	2 quad tube 4ft CFL main lighting Basic Emerson Thermostat Basic power switching
	Storage Room	2 quad tube 4ft CFL main lighting Basic power switching
	Document Storage Area	1 quad tube 4ft CFL main lighting Basic power switching
	Kitchen	2 quad tube 4ft CFL main lighting Refrigerator Microwave H2O heater Basic power switching
	Hallway to Bathrooms	1 quad tube 4ft CFL main lighting Basic power switching
	Bathroom #1	5 CFL Replacement bulb can lighting Basic power switching
	Bathroom #2	5 CFL Replacement bulb can lighting Basic power switching
	Air Handler/IT & Service closet	1 quad tube 4ft CFL main lighting Basic power switching

HVAC	2 units	4 ton unit
Office Equipment	Computers, printers, etc	Computers, Printers, etc
Outside Lighting		Front Entrance Accent light - CFL Backdoor Accent Light - LED replacement bulb 3 incandescent Motion Sensor flood lights _ questionable working condition West Side Accent light - CFL bulb Eastside flood lighting - HID Walkway lighting - Timer & CFL
Warehouse	Main Warehouse	8 quad tube 8ft CFL main lighting Basic power multi switching
Office Equipment		Computers, printers, Microwave, H2O heater, etc
	Exterior	1 Exterior Office Portal light 2 incandescent Motion Sensor flood lights 2 exterior yard flood lights - HID
	Warehouse Office	9 quad tube 4ft CFL main lighting Basic power switching
Welding Warehouse		4 quad tube 4ft CFL main lighting Basic power switching Swamp Cooler - Functional?
Storage Warehouse		1 double tube 8ft general lighting Basic power switching Swamp Cooler - Functional?
<b>WWTP</b>	Exterior	2 exterior yard flood lights Door portal light
	WWTP service building Main work area	4 quad tube 4ft CFL main lighting Basic power switching Basic Thermostat False ceiling for ducting no insulation
	Bathroom #1	2 quad tube 4ft CFL main lighting Basic power switching False ceiling for ducting no insulation
	Storage/work area	4 quad tube 4ft CFL main lighting Basic power switching Eco-smart instant hot water Open ceiling no insulation
	Electrical Service Room	2 quad tube 4ft CFL main lighting Basic power switching Open ceiling no insulation

**BWD MAIN - BREAKDOWN**

The electrical end use breakdown associated with office and warehouse space was determined and is shown in Table below. This breakdown is based on Monthly/Yearly equipment calculations.

<b>BWD Office, Warehouses, &amp; WWTP Electrical</b>	<b>Average Load (kW)</b>	<b>Total Installed Units</b>	<b>Monthly usage</b>	<b>\$/Yr</b>
Quad Tube 8ft FL	75watt	9	202kW	921
Quad Tube 4ft FL	36watt	59	637kW	2599
CFL Replacement Can lighting	26watt	22	171kW	780
Exterior Accent light	100watt	3	108kW	492
Motion Sensor flood lights	200watt	5	120kW	547
Flood lighting - HID	200watt	5	358kW	1462
Portal Light	100watt	1	36kW	164
Walkway lighting	40watt	3	43kW	196
Basic Switching	n/a			
Emerson Thermostat	n/a			
Office Equipment	500watt	15	450kW	1836
Swamp Cooler #1 Welding	Functionality Unknown			
Swamp Cooler #2 Storage	Functionality Unknown			
4 ton Heat pump Northside Main			Unknown since there are no timers	
4 Ton Heat Pump Southside Main			Unknown since there are no timers	
Air Handler North	Controlled by Basic Thermostat			
Air Handler South	Controlled by Basic Thermostat			

## SUMMARY OF RECOMMENDATIONS

### SOLAR ARRAY RECOMMENDATIONS:

#### BWD Main -

1. Install two new Optimizers: Cost = \$1,100 and Benefit = ~\$380/year
2. Correct intermittent internet connection - Cost TBD
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = ~\$1500/yr for professional cleaning of both sites 2x times per year. Cleaning can be done by BWD staff with proper training, cleaning equipment and lift equipment

#### WWTP -

1. Repair Solar Log and Analyze Data
2. Update module wire management
3. Weekly online check of solar system performance: Cost = 15 min of Staff time
4. Bi-Monthly inspection of panels and switches: Cost = 30 min of Staff time
5. Bi-Annual Cleaning of the Panels – Determine if cleaning in house or not.: Outsourced Cost = \$1,000/yr for professional cleaning 2x times per year. Cleaning can be done by BWD staff with proper training and cleaning equipment

### ENERGY EFFICIENCY RECOMMENDATIONS

Below is a summary and detailed information on the energy efficiency measures (EEMs) recommended for further consideration.

#### BWD Office & Warehouses

Grouped Efficiency Measures (EEMs)	Estimated Installed Cost (\$)	Estimated Yearly Energy Savings (kWh)	Estimated Yearly Dollar Savings (\$)	Estimated Simple Payback (Years)	Replacement Lifespan
Lighting 8ft FL Replacements with LED	\$640	830kWh	\$282	2.2yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Lighting 4ft FL Replacements with LED	\$1225	1520kWh	\$511	2.2yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Replace CFL Can Bulbs with LED	\$435	440kWh	\$148	3yrs	
HVAC Replacement of basic Thermostats	\$1130	2200kWh	\$748	1.6yrs	Due to Theromstats AI the savings will increase slightly over time
Timers/Occupancy	\$1300	1764kWh	\$610	2.2	
<b>Total</b>	<b>\$4730</b>	<b>6754kWh</b>	<b>\$2300</b>	<b>2.24 average ROI</b>	

WWTP

<b>Grouped Efficiency Measures (EEMs)</b>	<b>Estimated Installed Cost(\$)</b>	<b>Estimated Yearly Energy Savings (kWh)</b>	<b>Estimated Yearly Dollar Savings (\$)</b>	<b>Estimated Simple Payback (Years)</b>	<b>Replacement Lifespan</b>
Lighting 4ft FL Replacements with LED	\$400	384kWh	\$130	3.1yrs	10 yrs vs 3 years for Florescent tubes/bulbs
Replace Exterior flood lights with LED	\$240	300kWh	\$102	2.3yrs	10 year lifespan vs 3 year
HVAC Replacement of basic Thermostats	\$400	600kWh	\$204	2yrs	Due to Theromstats AI the savings will increase slightly over time
Timers/Occupancy	\$340	420kWh	\$142	2.2	
<b>Total</b>	<b>\$1380</b>	<b>1704kWh</b>	<b>\$578</b>	<b>2.4 average ROI</b>	

**ADDITIONAL RECOMMENDATIONS**

1. Converting additional well and pumping sites to solar if feasible.
2. Adopting a more advantageous rate plan available to sister utilities and government agencies will allow BWD to use the over production currently at the WWTP against other Facility Power accounts.
3. Regular array solar system check and maintenance
4. Bi Monthly cleaning of solar arrays
5. investigation of alternative financing options in order to capture some of the available tax credits
6. Regular evaluation of Energy Efficiency

**APPENDIXES:**

LED Tube Replacements image  
 Motion Sensor options  
 Thermostat - NEST



# Maestro Sensor switch

## Motion sensor switch for hands-free lighting



Tap switch allows manual on/off control of lights

Sensor automatically turns lights on when you enter the room, then automatically off when you leave

Roll over image to zoom in



Size: **1 Pack**

**1 Pack**

2 Pack

- Automatically turns the lights on when you enter the room and off when you leave
  - Features XCT sensing technology which detects fine motion, such as typing at a desk or reading, ensuring lights do not turn off inadvertently
  - Optional: senses daylight so lights do not turn on when there is enough natural light in the room
  - Programmable time out of lights 1, 5, 15 or 30 minutes
  - Works with all bulb types; up to 250 Watt incandescent, halogen, electronic low voltage 200 Watt magnetic low voltage 150 Watt CFL/LED 2 Amp ballasts
  - Single pole only; great for small rooms like kitchens, laundry rooms and closets
  - Installs in as little as 15 minutes; ground wire is required, no neutral required
  - Includes (1) maestro sensor switch; coordinating wallplate sold separately
- › [See more product details](#)

New & Used (32) from \$16.53 & FREE Shipping on orders over \$25.00



Roll over image to zoom in



## LIT-PaTH PIR Motion Sensor Light Switch Wall Switch for Indoor Use – Vacancy & Occupancy Modes, NEUTRAL Wire Required, 3 Way, UL and Title 24 Rated, 2-Pack (White)

by LIT-PaTH

★★★★☆ 47 ratings | 21 answered questions

Price: **\$24.99** **FREE Shipping** on orders over \$25.00 shipped by Amazon or get **Fast, Free Shipping with Amazon Prime & FREE Returns**

**Coupon**  Save an extra 6% when you apply this coupon. [Details](#)

This item is returnable | [Free Amazon tech support included](#)

- **NEUTRAL WIRE REQUIRED:** This motion sensor switch need neutral wire. Please review your wiring setup prior to purchase.
- **Single Pole or 3-Way available.** If you need 3-way function, you need to connect all 5 wires. If you do not need 3-way function, please do not connect the blue wire, just connect other 4 wires. Lights will flash if not correctly connected. If you have any doubt, please consult with a licensed electrician.
- **MAKE YOUR LIFE EASY:** (1) The motion sensor covers 180°, so all motion is detected. (2) Adjustable sensitivity (3) Light level sensing (4) Automatic ON /OFF and Manual ON/Automatic OFF operation, Adjustable time delay from 15sec-1min-5mins-15mins-30mins
- **SECURITY & SAFETY:** Making sure lights automatically turn on allow occupants to see where they are going, improves visibility in an otherwise dark room, and helps prevent accidents. PIR motion sensors turn lights on, allowing security cameras to capture clearer footage of your home or office.
- **3 YEARS WARRANTY:** New replacement or refund will be provided to you if they fail under 3 YEARS WARRANTY.

## Meet the 3rd generation Nest Learning Thermostat



### Auto-Schedule

No more confusing programming. Nest learns the temperatures you like and builds a personalized schedule for your home.



### Home/Away Assist

Don't waste energy heating or cooling an empty home. Nest automatically saves energy when you're away.



### Energy History

The more you know, the more you can save. See how much energy you've used in the last 10 days.



### Remote control

Change the temperature from anywhere with your phone, tablet or laptop.

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.G

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Risk Management Policy Update DRAFT: COVID-19 Procedures – D Del Bono

**RECOMMENDED ACTION:**

Review Procedures and add to Risk Management Policy

**ITEM EXPLANATION:**

Diana Del Bono has created the attached Draft Procedures regarding COVID Procedures

**NEXT STEPS**

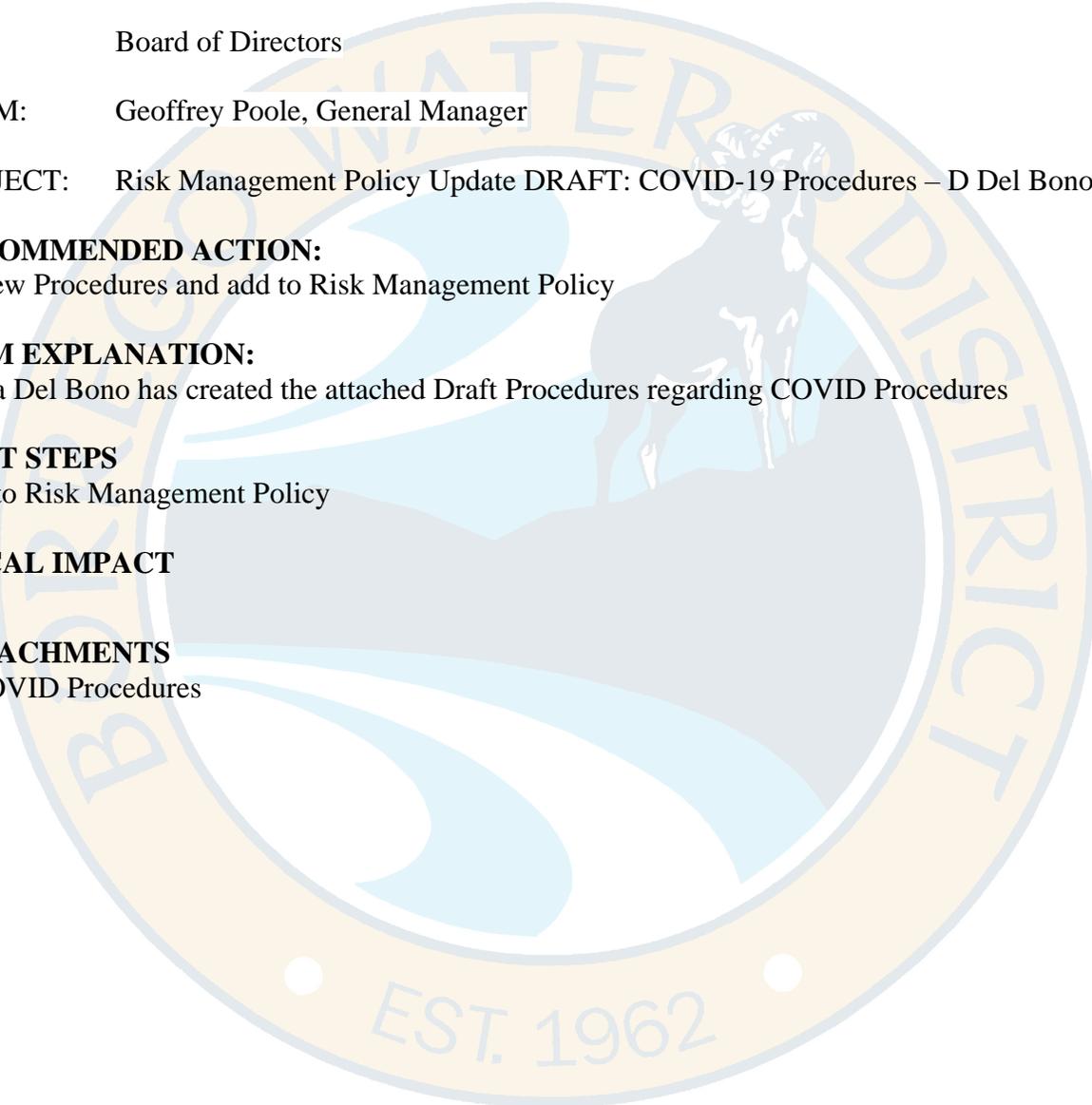
Add to Risk Management Policy

**FISCAL IMPACT**

TBD

**ATTACHMENTS**

1. COVID Procedures



## Borrego Water District response plan to Coronavirus

### **Background Information**

Coronavirus Disease (Covid-19) is a respiratory disease caused by the SARS-CoV-2 virus.

The virus is thought to spread mainly from person-to-person.

- Between people who are in close contact with one another (within 6 feet or closer).
- Through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- People are thought to be most contagious when they are most symptomatic (the sickest).
- Some spread might be possible before people show symptoms
- It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

### **What are the Symptoms**

COVID-19 affects different people in different ways. Infected people have had a wide range of symptoms reported – from mild symptoms to severe illness.

Symptoms may appear 2-14 days after exposure to the virus. People with these symptoms may have COVID-19:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

## **Borrego Water District's response plan**

- Employees are to stay home when sick, except to get medical care
- Employees are to inform management if they have been exposed to the virus or show symptoms of the infection
  - Employee should call a doctor if they develop symptoms, and have been in close contact with a person known to have COVID-19
- Employees should avoid touching eyes, nose and mouth with unwashed hands
- Employees should clean all “high touch” surfaces every day
- Employees should cover cough or sneeze with a tissue and then throw the tissue in the trash
- Employees should wash hands often with soap and water for at least 20 seconds. If soap and water are not readily available, use a hand sanitizer that contains at least 60% ethanol or 70% isopropanol.
- Employees shall wear appropriate PPE base on the task performed and potential exposure. When social distancing is not feasible to perform a task, PPE includes a mask or face shield (or both), gloves and safety glasses.

## **Reporting**

If you are sick or have symptoms

- If you have developed a fever, coughing, or having difficulty breathing, or think you have been exposed to COVID-19, notify your supervisor or Human Resources.
- Stay home if you have a fever and call your PCP for guidance.
- If testing is required, follow your PCP medical guidance and provide the BWD with proof of medical clearance before returning to work.

## **Returning to work**

For an employee to return to work and end home isolation the following standard CDC protocols should be followed:

- If an employee has a fever and a cough, but then gets better without COVID-19 testing or medical care, they would be allowed to return to work after 10 days since first experienced symptoms and are symptom free.
- If an employee who is medically confirmed to have COVID-19 and is showing symptoms then you will be allowed to return to work if:
  - Their fever has been resolved without the use of fever-reducing medications

- Their respiratory symptoms have improved (for example, cough or shortness of breath); and
- They have had two negative COVID-19 tests
- For employees who have a laboratory-confirmed case of COVID-19, but are not showing any symptoms, CDC currently says they may return to work:
  - After at least seven days have passed since the date of their first positive COVID-19 test; and
  - They have had no subsequent illness
  - Employee should continue to limit contact (stay 6 feet away from others) and wear a face covering whenever they are in settings where other persons are present.

### **Steps to take to reduce risk of exposure**

During a COVID-19 outbreak, when it may not be possible to eliminate the hazard, the most effective protection measures are as follows:

#### **Office and shop controls**

- Close the facility to the public
- Installing physical barriers such as clear plastic sneeze guards where applicable
- Implementing social distancing requirements
- Establishing alternating days or telecommuting for administrative staff to reduce the number of onsite employees
- Discontinue District events
- Discontinue in person meetings; use web conferencing
- All internal meetings and gatherings shall be conducted in accordance with CDC guidelines that include social distancing
- Social distancing should be practiced in all workplace areas including the employee lunchrooms.

#### **Personal Protective Equipment**

- Employees shall wear appropriate PPE based on the task performed and potential exposure
- When social distancing is not feasible to perform a task, the minimum PPE includes mask or face shield (or both) gloves and safety glasses
- Regularly inspect, maintain and replace PPE as necessary

#### **Cleaning and Disinfecting**

##### **Cleaning Surfaces**

- Clean dirty surfaces using a detergent or soap and water prior to disinfection
- Use disinfection wipes or cleaner to sanitize surfaces
  - For a bleach solution mix
    - 5 tablespoons (1/3<sup>rd</sup> cup) of bleach per gallon of water or
    - 4 teaspoons bleach per quart of water
- If using a liquid cleaner, safety glasses are advised
- Gloves should be worn when cleaning and removed and disposed of carefully to avoid contamination of the wearer and the surrounding area
- Additional PPE might be required based on the cleaning/disinfectant product being used

## **Hand Hygiene**

Handwashing is one of the best ways to protect yourself from getting sick. Wash your hands often to stay healthy!

- Before, during, and after preparing food
- Before eating food
- Before and after treating a cut or wound
- After using the toilet
- After blowing your nose, coughing or sneezing
- After touching an animal, animal feed or animal waste
- After touching garbage
- Wash your hands for at least 20 seconds
- You can use alcohol bases hand sanitizer that contains 70% alcohol if soap and water are not available. Keep in mind that hand sanitizers do not get rid of all types of germs.

## **Coronavirus Leave**

Should an employee be prevented from working due to one of the following; coronavirus symptoms, a positive test, to care for a family member with symptoms, as a result of the recommendation from a healthcare provider or governmental official to quarantine or if the employee is unable to telecommute and must care for children who's school or daycare is closed due to coronavirus, the employee may be eligible for a number of benefits under State and Federal Laws. For more information, visit <https://labor.ca.gov/coronaviruss2019/#chart> , or contact Human Resources.

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.H

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Posting Borrego Springs Community Sponsor Group Agendas on BWD Website – L Brecht

**RECOMMENDED ACTION:**

Consider assisting Borrego Springs Community Sponsor Group by posting Agenda Packets on BWD site.

**ITEM EXPLANATION:**

Rebecca Falk, Chair of BSCSG made a blanket request via email earlier this week asking if anyone would be willing to post the Agenda Packets for the Organization. The current practice is for Rebecca to send out individual files for the Agenda and related information to an email. Director Brecht requested this item be placed on the Agenda.

If approved, BWD Staff/Esmeralda would take the files from Rebecca, combine them into one .pdf and add a link from the BWD site.

**NEXT STEPS**

TBD

**FISCAL IMPACT**

TBD

**ATTACHMENTS**

1. None

BORREGO WATER DISTRICT  
BOARD OF DIRECTORS MEETING  
AUGUST 25, 2020  
AGENDA ITEM II.I

August 21, 2020

TO: Board of Directors

FROM: Geoffrey Poole, General Manager

SUBJECT: Borrego Springs Interim Watermaster Board – G Poole/D Duncan/ K Dice - VERBAL

1. Selection of Executive Director/Technical Consultant
  2. BWD Request for Pumping Credit to Offset Admin Support Costs
  3. County of San Diego Accepts Permanent Participation on WM Board
  4. August 27 Agenda Items
- 
1. The firm Wildermuth Environmental Inc was selected to serve at Executive Directors (Samantha Adams) and Technical Consultant (Andy Malone). BWD Admin support is no longer needed. The Board, Shannon Smith said some very nice words and was very appreciate of the BWD Board for offering our services.
  2. Director Duncan made the request for a Pumping Credit to offset for costs incurred in #1 above. The Board asked for refinement of the estimate and tabled the issue for a future Agenda.
  3. The County of San Diego accepted the permanent position on the Watermaster Board.
  4. August 27 Agenda has not been released yet.

# IV.A Financial Reports

July 2020





## TREASURER'S REPORT Jul-20

	Bank Balance	Carrying Value	Fair Value	<u>% of Portfolio</u> Current Actual	Rate of Interest	Maturity	Valuation Source
<b>Cash and Cash Equivalents:</b>							
<b>Demand Accounts at CVB/LAIF</b>							
General Account/Petty Cash	\$ 4,120,290	\$ 4,042,117	\$ 4,042,117	51.32%	0.00%	N/A	CVB
Payroll Account	\$ 97,182	\$ 97,182	\$ 97,182	1.23%	0.00%	N/A	CVB
MMA (Bond Funds)	\$ 1,508,713	\$ 1,508,713	\$ 1,508,713	19.15%	2.22%	N/A	CVB
CIP Bond Funds Checking	\$ 179,741	\$ 175,261	\$ 175,261	2.23%	0.00%	N/A	CVB
LAIF	\$ 2,053,427	\$ 2,053,427	\$ 2,053,427	26.07%	2.45%	N/A	LAIF
<b>Total Cash and Cash Equivalents</b>	<b><u>\$ 7,959,354</u></b>	<b><u>\$ 7,876,701</u></b>	<b><u>\$ 7,876,701</u></b>	<b><u>100.00%</u></b>			
<b>Facilities District No. 2017-1A-B</b>							
Special Tax Bond- Rams Hill -US BANK	\$ 352,185	\$ 352,185	\$ 352,185				
<b>Total Cash,Cash Equivalents &amp; Investments</b>	<b><u>\$ 8,311,539</u></b>	<b><u>\$ 8,228,886</u></b>	<b><u>\$ 8,228,886</u></b>				

Cash and investments conform to the District's Investment Policy statement filed with the Board of Directors on June 24, 2019

Cash, investments and future cash flows are sufficient to meet the needs of the District for the next six months.

Sources of valuations are CVB Bank, LAIF and US Trust Bank.

Jessica Clabaugh, Finance Officer

	C	D	E	F	G	H
1						
2	<b>BWD</b>	6/23/2020				
3	<b>PROJECTED BUDGET</b>	ADOPTED	Actual	Projected		Actual
4	<b>2020-2021</b>	BUDGET	July	July	<b>Difference</b>	YTD
5		<u>2020-2021</u>	<u>2020</u>	<u>2020</u>	<b>Explanations</b>	<u>2020-2021</u>
6						
7						
8	<b>WATER REVENUE</b>					
9	Residential Water Sales	866,507	88,630	79,112		88,630
10	Commercial Water Sales	445,791	39,555	40,701		39,555
11	Irrigation Water Sales	203,358	19,762	18,567		19,762
12	GWM Surcharge	173,911	16,586	15,878		16,586
13	Water Sales Power Portion	<u>465,462</u>	<u>45,637</u>	<u>42,497</u>		<u>45,637</u>
14	<b>TOTAL WATER COMMODITY REVENUE:</b>	2,155,031	210,170	196,754		210,170
15						
16	Readiness Water Charge	1,210,230	101,173	100,853		101,173
17	Meter Install/Connect/Reconnect Fees	1,725	(25)	144		(25)
18	Backflow Testing/Installation	5,100	50	50		50
19	Bulk Water Sales	2,440	600	203		600
20	Penalty & Interest Water Collection	<u>34,000</u>	<u>120</u>	<u>2,833</u>	<i>No Penalty(CV)</i>	<u>120</u>
21	<b>TOTAL WATER REVENUE:</b>	3,408,526	312,087	300,837		312,087
22						
23	<b>PROPERTY ASSESSMENTS/AVAILABILITY CHARGES</b>					
24	641500 1% Property Assessments	55,000	660	4,583		660
25	641502 Property Assess wtr/swr/fld	75,000	503	6,250		503
26	641504 Water avail Standby	91,000	2,010	7,583		2,010
27	641503 Pest standby	<u>14,000</u>	<u>253</u>	<u>1,167</u>		<u>253</u>
28	<b>TOTAL PROPERTY ASSES/AVAIL CHARGES:</b>	235,000	3,427	19,583		3,427
29						
30	<b>SEWER SERVICE CHARGES</b>					
31	Town Center Sewer Holder fees	196,640	20,275	16,387		20,275
32	Town Center Sewer User Fees	97,194	8,305	8,100		8,305
33	Sewer user Fees	<u>288,288</u>	<u>24,690</u>	<u>24,024</u>		<u>24,690</u>
35	<b>TOTAL SEWER SERVICE CHARGES:</b>	582,122	53,270	48,510		53,270
36						
37	<b>OTHER INCOME</b>					
38	Water Credits income	0	-			-
39	JPIA Insurance Rebate	0	-			-
40	Interest Income	<u>76,000</u>	<u>1,012</u>	<u>1,000</u>		<u>1,012</u>
41	<b>TOTAL OTHER INCOME:</b>	76,000	1,012	1,000		1,012
42						
43	<b>TOTAL INCOME:</b>	4,301,648	369,796	369,931		369,796
44						
45	<b>CASH BASIS ADJUSTMENTS</b>					
46	Decrease (Increase) in Accounts Receivable		18,824			18,824
48	Construction Meter Deposit Refund		<u>(1,200)</u>			<u>(1,200)</u>
49	<b>TOTAL CASH BASIS ADJUSTMENTS:</b>		17,624			17,624
50						
51	<b>TOTAL OPERATING INCOME RECEIVED:</b>		387,420			387,420

	C	D	E	F	G	H
52						
53	<b>EXPENSES</b>	<b>PROPOSED</b>				
54		<b>BUDGET</b>				
55		<b>2020-2021</b>				
56	<b>MAINTENANCE EXPENSE</b>					
57	R & M Buildings & Equipment	250,000	11,303	20,833		11,303
58	R & M - WTF	120,000	1,889	10,000		1,889
59	Telemetry	10,000	2,050	833		2,050
60	Trash Removal	5,500	440	458		440
61	Vehicle Expense	18,000	891	1,500		891
62	Fuel & Oil	35,000	3,734	2,917		3,734
63	<b>TOTAL MAINTENANCE EXPENSE:</b>	<b>438,500</b>	<b>20,308</b>	<b>36,542</b>		<b>20,308</b>
64						
65	<b>PROFESSIONAL SERVICES EXPENSE</b>					
66	Tax Accounting (Taussig)	3,000	-	250		-
67	Administrative Services (ADP)	3,000	239	250		239
68	Audit Fees (Leaf & Cole)	17,000	2,200	1,417		2,200
69	Computer billing (Accela/Parker)/Cyber Security	31,000	4,858	2,583		4,858
70	Financial/Technical Consulting (Raftelis/Fieldman)	80,000	2,698	6,667		2,698
71	Engineering (Dudek)	35,000	295	2,917		295
72	District Legal Services (BBK)	45,000	1,062	3,750		1,062
73	Grant Acquisitions (TRAC) 17170+17180	30,000	-	2,500		-
74	Testing/lab work (Babcock Lab/Water Quality Monitoring)	24,000	1,597	2,000		1,597
75	Regulatory Permit Fees (SWRB/DEH/Dig alerts/APCD)	36,500	4,764	3,042		4,764
76	<b>TOTAL PROFESSIONAL SERVICES EXPENSE:</b>	<b>304,500</b>	<b>17,713</b>	<b>25,375</b>		<b>17,713</b>
77						
78	<b>INSURANCE EXPENSE</b>					
79	ACWA/JPIA Program Insurance	60,000	43,390	45,000		43,390
80	ACWA/JPIA Workers Comp	18,000	4,684	4,500		4,684
81	<b>TOTAL INSURANCE EXPENSE:</b>	<b>78,000</b>	<b>48,074</b>	<b>49,500</b>		<b>48,074</b>
82						
83	<b>DEBT EXPENSE</b>					
84	Compass Bank Note 2018A/B	388,939	-	-		-
85	Compass Bank Note 2018B	-	-	-		-
86	Pacific Western Bank 2018 IPA	499,406	-	-		-
87	<b>TOTAL DEBT EXPENSE:</b>	<b>888,345</b>	<b>-</b>	<b>-</b>		<b>-</b>
88						
89	<b>PERSONNEL EXPENSE</b>					
90	Board Meeting Expense (board stipend/board secretary)	23,000	1,485	1,917		1,485
91	Salaries & Wages (gross)	930,000	79,327	77,500		79,327
92	Salaries & Wages offset account (board stipends/staff project)	(80,000)	(18,187)	(6,667)		(18,187)
93	Consulting services/Contract Labor	10,000	1,000	833		1,000
94	Taxes on Payroll	23,700	1,297	1,975		1,297
95	Medical Insurance Benefits	212,700	12,205	17,725		12,205
96	Calpers Retirement Benefits	210,000	11,906	17,500		11,906
97	Conference/Conventions/Training/Seminars	18,000	-	1,500		-
98	<b>TOTAL PERSONNEL EXPENSE:</b>	<b>1,347,399</b>	<b>89,033</b>	<b>112,283</b>		<b>89,033</b>
99						

	C	D	E	F	G	H
100		PROPOSED				
101		BUDGET				
102		2020-2021				
103	<u>OFFICE EXPENSE</u>					
104	Office Supplies	24,000	1,726	2,000		1,726
105	Office Equipment/ Rental/Maintenance Agreements	50,000	2,130	4,167		2,130
106	Postage & Freight	15,000	219	1,250		219
107	Taxes on Property	3,300	-	-		-
108	Telephone/Answering Service/Cell	20,000	1,588	1,667		1,588
109	Dues & Subscriptions (ACWA/CSDA)	23,000	62	1,917		62
110	Printing, Publications & Notices	2,500	196	208		196
111	Uniforms	7,000	580	583		580
112	OSHA Requirements/Emergency preparedness	5,500	619	458		619
113	<b>TOTAL OFFICE EXPENSE:</b>	<b>150,300</b>	<b>7,120</b>	<b>12,250</b>		<b>7,120</b>
114						
115	<u>UTILITIES EXPENSE</u>					
116	Pumping-Electricity	325,000	31,859	27,083		31,859
117	Office/Shop Utilities	6,000	888	500		888
118		331,000	32,747	27,583		32,747
120						
121	<u>GROUNDWATER MANAGEMENT EXPENSE</u>					
122	Pumping Fees	69,300	-	5,775		-
123	Physical Solution Development	-	-	-		-
124	Reimbursements (Physical Solution Development)	(100,000)	(77,941)	(100,000)		(77,941)
125	Stipulation Legal	85,000	23,138	7,083		23,138
126	Reimbursements (Stipulation Legal)	(65,000)	(12,676)	(65,000)		(12,676)
127	Interim Judgement Legal Support	45,000	-	3,750		-
128	Interim Judgement Technical Support	45,000	12,486	3,750		12,486
129	Misc. & Contingency	20,000	-	1,667		-
130	BPA Transactions that meet CEQA requirements	5,000	-	417		-
131	<b>TOTAL GWM EXPENSE:</b>	<b>104,300</b>	<b>(54,994)</b>	<b>8,692</b>		<b>(54,994)</b>
132						
133	<b>TOTAL EXPENSES:</b>	<b>3,642,343</b>	<b>247,740</b>	<b>272,225</b>		<b>247,740</b>
134						
135	<u>CASH BASIS ADJUSTMENTS</u>					
136	Decrease (Increase) in Accounts Payable		111,955			111,955
137	Increase (Decrease) in Inventory		431			431
138	<b>TOTAL CASH BASIS ADJUSTMENTS:</b>		<b>112,386</b>			<b>112,386</b>
139						
140	<b>TOTAL OPERATING EXPENSES PAID:</b>	<b>3,642,343</b>	<b>360,127</b>			<b>360,127</b>
141						
142	<b>NET OPERATING INCOME:</b>	<b>459,304</b>	<b>27,293</b>	<b>97,706</b>		<b>27,293</b>
143						

	C	D	E	F	G	H
144	<b>CIP PROJECTS</b>	<b>PROPOSED</b>				
145		<b>BUDGET</b>				
146		<b>2020-2021</b>				
147	Air Quality Study		1,343			1,343
148	Prop 86 Grant (Reimbursable)		10,143			10,143
149						
150	<b>CASH FUNDED - WATER</b>					
151	Bending Elbow Pipeline Project	170,000	-			-
152	SCADA Replacement	50,000	-			-
153	Facilities Maintenance - Office Interior	15,000	-			-
154	Emergency System Repairs	60,000	-			-
155	Engineering/Construction Management Consulting	25,000	-			-
156	<b>TOTAL CASH CIP EXPENSES WATER:</b>	<b>320,000</b>	<b>-</b>			<b>-</b>
157						
158	<b>CASH FUNDED - SEWER</b>					
159	Oxygen Injection at Borrego Valley Rd Pump	20,000	-			-
160	Difussers at Sludge Holding Tank	100,000	-			-
161	Manhole Replacement/Refurbishments	43,000	-			-
162	Engineering/Construction Management Consulting	18,000	-			-
163	<b>TOTAL CASH CIP EXPENSES SEWER:</b>	<b>181,000</b>	<b>-</b>			<b>-</b>
164						
165	<b>CASH FUNDED - Short Lived Asset Replacement Progra</b>	<b>405,000</b>				<b>-</b>
166						
167	<b>TOTAL CASH FUNDED CIP EXPENSES:</b>	<b>906,000</b>	<b>11,486</b>			<b>11,486</b>
168						
169	<b>CASH RECAP</b>					
170	Cash beginning of period	6,009,406	6,025,193			6,025,193
171	Operating Income	459,304	27,293			27,293
172	Total Non O&M Cash Funded Expenses	(906,000)	(11,486)			(11,486)
173	<b>CASH RESERVES AT END OF PERIOD</b>	<b>5,562,711</b>	<b>6,041,000</b>			<b>6,041,000</b>
174	<b>FY Reserves Target</b>	<b>7,710,218</b>	<b>7,710,218</b>			<b>7,710,218</b>
175	<b>Reserves Surplus/(Shortfall)</b>	<b>(2,147,507)</b>	<b>(1,669,217)</b>			<b>(1,669,217)</b>
176						

	C	D	E	F	G	H
177	<b>DEBT &amp; GRANT ACCOUNTING</b>	<b>PROPOSED</b>				
178		<b>BUDGET</b>				
179	<b>GRANT(PROP 1) FUNDED CIP - WATER</b>	<b>2020-2021</b>				
180	Replace Twin Tanks	630,000	-			-
181	Replace Wilcox Diesel Motor	75,000	-			-
182	Replace Indianhead Reservoir	435,000	-			-
183	Rams Hill #2, 1980 galv. 0.44 MG recoating	616,000	-			-
184	<b>TOTAL GRANT CIP EXPENSES WATER:</b>	<b>1,756,000</b>	<b>-</b>			<b>-</b>
185						
186						
187	<b>GRANT(PROP 1) FUNDED CIP - SEWER</b>					
188	Plant-Grit removal at the headworks	214,000	-			-
189	Clarifyer Upgrade/Rehabilitation	240,000	-			-
190	<b>TOTAL GRANT CIP EXPENSES SEWER:</b>	<b>454,000</b>	<b>-</b>			<b>-</b>
191						
192	<b>TOTAL GRANT CIP EXPENSES:</b>	<b>2,210,000</b>				<b>-</b>
193						
194	<b>BOND FUNDED CIP - WATER</b>					
195	De Anza Pipeline Replacement Project	430,000				-
196	Production Well 2 Investigation and Construction	1,250,000	-			-
197	Replace 30 fire hydrants 17160	540,000	60,591			60,591
199	Production Well #1 ID4-Well #9-17110	-	2,539			2,539
200	Replace 5 well discharge manifolds and electric panel upgra	-	2,663			2,663
202	<b>TOTAL BOND FUNDED CIP:</b>	<b>2,220,000</b>	<b>65,793</b>			<b>65,793</b>
203						
204	<b>BOND FUNDED CIP - SEWER</b>					
205	Miscellaneous Sewer System Improvements	410,000	20,569			20,569
207	<b>TOTAL SEWER BOND FUNDED CIP:</b>	<b>410,000</b>	<b>20,569</b>			<b>20,569</b>
208						
213	<b>TOTAL BOND FUNDED CIP EXPENSES:</b>	<b>2,630,000</b>	<b>86,363</b>			<b>86,363</b>
214						
215	<b>ANTICIPATED GRANT PROCEEDS</b>					
216	Prop 1 DWR Grant (SDAC)	2,210,000	-			-
217	<b>TOTAL GRANT PROCEEDS:</b>	<b>2,210,000</b>				<b>-</b>
218						
219		<i>Beg Bond Bal</i>				
220	<b>UNEXPENDED DEBT PROCEEDS:</b>	<b>1,859,942</b>	<b>1,773,579</b>			<b>1,773,579</b>
221	<b>UNEXPENDED GRANT PROCEEDS:</b>		-			-
222	<b>TOTAL EXPENSES AND UNEXPENDED DEBT/GRANT PROCEEDS</b>	<b>3,642,343</b>	<b>2,021,320</b>			<b>2,021,320</b>
223						
224	<b>TOTAL INCOME, GRANT &amp; DEBT PROCEEDS BALANCE</b>	<b>4,301,648</b>	<b>1,800,873</b>			<b>1,800,873</b>
225						
226						



	<b>BALANCE SHEET</b> <b>July 31, 2020</b> (unaudited)	<b>BALANCE SHEET</b> <b>June 30, 2020</b> (unaudited)	<b>MONTHLY</b> <b>CHANGE</b> (unaudited)
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	\$ 6,192,726.44	\$ 6,025,193.29	\$ 167,533.15
Accounts receivable from water sales and sewer charges	\$ 723,559.51	\$ 704,761.00	\$ 18,798.51
Inventory	\$ 120,011.93	\$ 119,581.21	\$ 430.72
Prepaid expenses	\$ 5,964.25	\$ 5,964.25	\$ -
<b>TOTAL CURRENT ASSETS</b>	<b>\$ 7,042,262.13</b>	<b>\$ 6,855,499.75</b>	<b>\$ 186,762.38</b>
<b>RESTRICTED ASSETS</b>			
Debt Service:			
Deferred amount of COP Refunding	\$ -	\$ -	\$ -
Unamortized bond issue costs	\$ 125,185.22	\$ 125,185.22	\$ -
Viking Ranch Refinance issue costs	\$ (19,564.91)	\$ (19,564.91)	\$ -
Deferred Outflow of Resources-CalPERS	\$ 311,059.00	\$ 311,059.00	\$ -
Total Debt service	\$ 416,679.31	\$ 416,679.31	\$ -
Trust/Bond funds:			
Investments with fiscal agent -CFD 2017-1	\$ 352,184.62	\$ 356,849.83	\$ (4,665.21)
2018 Certificates of Participation to fund CIP Projects	\$ 1,683,974.51	\$ 1,857,262.83	\$ (173,288.32)
Total Trust/Bond funds	\$ 2,036,159.13	\$ 2,214,112.66	\$ (177,953.53)
<b>TOTAL RESTRICTED ASSETS</b>	<b>\$ 2,452,838.44</b>	<b>\$ 2,630,791.97</b>	
<b>UTILITY PLANT IN SERVICE</b>			
Land	\$ 2,240,863.65	\$ 2,240,863.65	\$ -
Flood Control Facilities	\$ 4,287,340.00	\$ 4,287,340.00	\$ -
Capital Improvement Projects	\$ 472,017.02	\$ 439,849.05	\$ 32,167.97
Bond funded CIP Expenses	\$ 3,659,800.43	\$ 3,594,119.76	\$ 65,680.67
Sewer Facilities	\$ 6,175,596.99	\$ 6,175,596.99	\$ -
Water facilities	\$ 11,621,513.88	\$ 11,621,513.88	\$ -
General facilities	\$ 1,006,881.07	\$ 1,006,881.07	\$ -
Equipment and furniture	\$ 597,312.57	\$ 597,312.57	\$ -
Vehicles	\$ 715,321.23	\$ 715,321.23	\$ -
Accumulated depreciation	\$ (12,532,142.81)	\$ (12,532,142.81)	\$ -
<b>NET UTILITY PLANT IN SERVICE</b>	<b>\$ 18,244,504.03</b>	<b>\$ 18,146,655.39</b>	<b>\$ 97,848.64</b>
<b>OTHER ASSETS</b>			
Water rights -ID4	\$ 185,000.00	\$ 185,000.00	\$ -
<b>TOTAL OTHER ASSETS</b>	<b>\$ 185,000.00</b>	<b>\$ 185,000.00</b>	
<b>TOTAL ASSETS</b>	<b>\$ 27,924,604.60</b>	<b>\$ 27,817,947.11</b>	<b>\$ 106,657.49</b>



Balance sheet continued

	<b>BALANCE SHEET</b> <b>July 31, 2020</b> <b>(unaudited)</b>	<b>BALANCE SHEET</b> <b>June 30, 2020</b> <b>(unaudited)</b>	<b>MONTHLY</b> <b>CHANGE</b> <b>(unaudited)</b>
<b>LIABILITIES</b>			
<b>CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS</b>			
Accounts Payable	\$ 144,034.90	\$ 255,990.30	\$ (111,955.40)
Accrued expenses	\$ 206,146.74	\$ 206,146.74	\$ -
Watermaster Payments Received	\$ 157,802.51	\$ 67,185.02	\$ 90,617.49
Deposits	\$ 40,181.81	\$ 38,981.81	\$ 1,200.00
<b>TOTAL CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS</b>	<b>\$ 548,165.96</b>	<b>\$ 568,303.87</b>	<b>\$ (20,137.91)</b>
<b>CURRENT LIABILITIES PAYABLE FOM RESTRICTED ASSETS</b>			
Debt Service:			
Accounts Payable to CFD 2017-1	\$ 352,184.62	\$ 356,849.83	\$ (4,665.21)
<b>TOTAL CURRENT LIABILITIES PAYABLE FROM RESTRICTED ASSETS</b>	<b>\$ 352,184.62</b>	<b>\$ 356,849.83</b>	<b>\$ (4,665.21)</b>
<b>LONG TERM LIABILITIES</b>			
2018A & 2018B Refinance ID4/Viking Ranch	\$ 2,842,618.83	\$ 2,842,618.83	\$ -
2018 Certificates of Participation to fund CIP Projects	\$ 4,930,000.00	\$ 4,930,000.00	\$ -
Net Pension Liability-CalPERS	\$ 850,153.00	\$ 850,153.00	\$ -
Deferred Inflow of Resources-CalPERS	\$ 34,862.00	\$ 34,862.00	\$ -
<b>TOTAL LONG TERM LIABILITIES</b>	<b>\$ 8,657,633.83</b>	<b>\$ 8,657,633.83</b>	<b>\$ -</b>
<b>TOTAL LIABILITIES</b>	<b>\$ 9,557,984.41</b>	<b>\$ 9,582,787.53</b>	<b>\$ (24,803.12)</b>
<b>FUND EQUITY</b>			
Contributed equity	\$ 9,611,814.35	\$ 9,611,814.35	\$ -
Retained Earnings:			
Unrestricted Reserves/Retained Earnings	\$ 8,754,805.84	\$ 8,623,345.23	\$ 131,460.61
Total retained earnings	\$ 8,754,805.84	\$ 8,623,345.23	\$ 131,460.61
<b>TOTAL FUND EQUITY</b>	<b>\$ 18,366,620.19</b>	<b>\$ 18,235,159.58</b>	<b>\$ 131,460.61</b>
<b>TOTAL LIABILITIES AND FUND EQUITY</b>	<b>\$ 27,924,604.60</b>	<b>\$ 27,817,947.11</b>	<b>\$ 106,657.49</b>



To: BWD Board of Directors  
 From: Jessica Clabaugh  
 Subject: Consideration of the Disbursements and Claims Paid  
 Month Ending July, 2020

**Vendor disbursements paid during this period:** \$ 370,413.36

**Significant items:**

Auditor/Controller SD County	Annual LAFCO Dues	\$ 4,722.26
Trench Plate Rental Co.	Trenchplates for Crew	\$ 4,271.83
SC Fuels	Fuel for fleet & generators	\$ 1,134.83
Medical Health Benefits		\$ 14,276.54
CalPERS (includes unfunded liability)		\$ 11,905.66
ACWA/JPIA Insurance	Workers Comp 04/01-06/30/20	\$ 5,680.75
	Property FYE 2021	\$ 11,062.08
	Diff in Conditions FYE 2021	\$ 32,328.00
Empire Southwest	Generator Maintenance	\$ 1,989.71
	Backhoe Repairs	\$ 3,048.99

**Capital Projects/Fixed Asset Outlays:**

Pacific Pipeline Supply - Hydrant - BOND	\$ 25,138.57
Fredericks Services - Hydrant - BOND	\$ 27,464.00
Brax Company	\$ 110,808.81
	\$ 1,000.00
Dudek	\$ 6,580.00

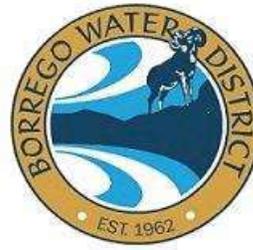
**Total Professional Services for this Period:**

Best Best & Krieger	Legal-general	\$ 8,798.91
	GWM	\$ 7,611.00
	Stipulated	\$ 15,597.00
Travis Parker	D Dale Computer & misc. IT	\$ 3,437.35
Dudek	Prop 1 Grant	\$ 34,095.59
	Rams Hill Water Supply	\$ 6,959.67
Geoffrey Poole	FYE2020 Expense Reimbursement	\$ 1,716.35
Greg Holloway	Consulting Services	\$ 2,475.00
Leaf & Cole LLP	Audit Progress Billing	\$ 2,200.00
Raftelis	Cost of Service Study	\$ 2,420.00

**Payroll for this Period:**

Gross Payroll	\$ 79,327.28
Employer Payroll Taxes and ADP Fee	\$ 1,535.52
<b>Total</b>	<u>\$ 80,862.80</u>

**AP Board Report  
July 2020**



Check No	Check Date	Name	Amount
33956	7/7/2020	AIR POLLUTION CONTROL DISTRICT, SAN DIEGO COI	75.00
33957	7/7/2020	AMERICAN LINEN INC.	472.38
33958	7/7/2020	AWWA CALIF-NEVADA SECTION	285.00
33959	7/7/2020	JAMES HORMUTH DE ANZA TRUE VALUE	204.00
33960	7/7/2020	DUDEK	34,095.59
33961	7/7/2020	HOME DEPOT CREDIT SERVICES	1,178.07
33962	7/7/2020	JC LABS & MONITORING SERVICE	950.00
33963	7/7/2020	LUPE'S GARDENING MAINTENANCE INC.	585.00
33964	7/7/2020	NORTH COUNTY LAWNMOWER	359.48
33965	7/7/2020	PROGRAPHICS SCREENPRINTING,INC	459.85
33966	7/7/2020	QUADIENT FINANCE USA, INC.	2,000.00
33967	7/7/2020	QUADIENT INC	405.75
33968	7/7/2020	RAMONA DISPOSAL SERVICE	3,883.88
33969	7/7/2020	SAN DIEGO GAS & ELECTRIC	5,925.63
33970	7/7/2020	LORETO MOLINA TITO'S AUTO CARE	1,415.74
33971	7/7/2020	U.S.BANK CORPORATE PAYMENT SYS	2,106.18
33972	7/7/2020	UNDERGROUND SERVICE ALERT	18.25
33973	7/7/2020	USABLUEBOOK	185.72
33974	7/7/2020	ZITO MEDIA	264.78
33975	7/14/2020	ACWA / JPIA Finance Dept.	5,680.75
33976	7/14/2020	BABCOCK LABORATORIES	2,089.00
33977	7/14/2020	BEST BEST & KRIEGER ATTORNEYS AT LAW	32,006.91
33978	7/14/2020	BORREGO SPRINGS BOTTLED WATER	72.70
33979	7/14/2020	DE ANZA READY MIX	1,697.99
33980	7/14/2020	DISH	61.74
33981	7/14/2020	DUDEK	6,959.67
33982	7/14/2020	EMPIRE SOUTHWEST	1,989.71
33983	7/14/2020	RAFTELIS FINANCIAL CONSULTANTS, INC.	2,420.00
33984	7/14/2020	T.S. INDUSTRIAL SUPPLY	282.13
33985	7/14/2020	USABLUEBOOK	84.45
33986	7/14/2020	VERIZON WIRELESS	235.52
33987	7/14/2020	XEROX FINANCIAL SERVICES	377.00
33988	7/16/2020	3E COMPANY ENVIRONMENTAL ECOLOGICAL & ENC	632.50
33989	7/16/2020	AT&T MOBILITY	660.79
33990	7/16/2020	CENTER MARKET	5.98
33991	7/16/2020	DUDEK	80.00
33992	7/16/2020	TRENCH PLATE RENTAL CO.	4,271.83
33993	7/16/2020	AUDITOR/CONTROLLER/SAN DIEGO	4,722.26
33994	7/16/2020	BORREGO SUN	125.50
33995	7/16/2020	EMPIRE SOUTHWEST	3,048.99
33996	7/16/2020	LEAF & COLE LLP	2,200.00
33997	7/16/2020	DEBBIE MORETTI	122.00
33998	7/16/2020	SC FUELS	891.81

33999	7/16/2020 DAVID TAUSSIG & ASSOCIATES,INC	1,167.01
34000	7/28/2020 MEDICAL ACWA-JPIA	14,276.54
34001	7/28/2020 ABILITY ANSWERING/PAGING SER	230.00
34002	7/28/2020 ACWA / JPIA Finance Dept.	43,390.08
34003	7/28/2020 AFLAC	1,468.86
34004	7/28/2020 BORREGO SPRINGS WATER LLC	44.22
34005	7/28/2020 BORREGO SUN	70.00
34006	7/28/2020 DIAMOND MMP, INC	826.10
34007	7/28/2020 R. GREG HOLLOWAY	2,475.00
34008	7/28/2020 JOHNSON CONTROLS SECURITY SOLUTIONS	282.58
34009	7/28/2020 POOL & ELECTRICAL PRODUCTS	293.03
34010	7/28/2020 HUGO RODARTE	188.56
34011	7/28/2020 SC FUELS	1,134.83
34012	7/28/2020 TRAVIS PARKER	3,437.35
34013	7/30/2020 COUNTY OF SAN DIEGO DEPT OF PUBLIC WORKS	310.00
34014	7/30/2020 GEOFFREY POOLE	1,716.35
34015	7/30/2020 WENDY QUINN	225.00
1132	7/7/2020 HOME DEPOT CREDIT SERVICES	1,944.11
1133	7/14/2020 BRAX COMPANY, INC.	110,808.81
1134	7/14/2020 DE ANZA READY MIX	352.83
1135	7/14/2020 DUDEK	2,100.00
1136	7/14/2020 PACIFIC PIPELINE SUPPLY INC	25,138.57
1137	7/16/2020 BRAX COMPANY, INC.	1,000.00
1138	7/16/2020 FREDERICKS SERVICES INC	27,464.00
1139	7/28/2020 DUDEK	4,480.00
		370,413.36

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1			BOND CIP FUNDS											
2			RECONCILIATION-FY 2019/2021											
3						Well 12-17100/ 4-5 Well upgrades		Prod Well #1 ID4-9	Pipeline Project Phase 1/2	Prod Well #2	Sewer Inspect Club Cir 17150		Firehydrants	
4						10117140		10117110	10117120/17200	10117130	10117210		10117160	
5				Bond Proceeds	Interest paid	Cost of Issuance	Misc.							Totals
6														
7														
8		07/10/18	Pacific Western Bank-Loan Proceeds	\$ 5,586,000.00										\$ 5,586,000.00
9		07/10/18	Cost of Issuance	\$ (68,707.13)										\$ (68,707.13)
10		07/17/18	US Bank Interest Fee			\$ 1,700.00								\$ (1,700.00)
11		07/17/18	Nixon Peabody-Cost of issuance			\$ 10,000.00								\$ (10,000.00)
12		07/17/18	Kutok Rock-Cost of Issuance			\$ 10,000.00								\$ (10,000.00)
13		07/20/18	MMA Interest paid		\$ 2,282.99									\$ 2,282.99
14		07/31/18	MMA Interest paid		\$ 693.25									\$ 693.25
15		08/01/18	Grant Thornton-Cost of Issuance			\$ 1,500.00								\$ (1,500.00)
16		08/01/18	Brandis Tallman-Cost of Issuance			\$ 17,500.00								\$ (17,500.00)
17		08/01/18	Fieldman, Rolapp & Assoc.-Cost of Issuance			\$ 50,231.67								\$ (50,231.67)
18		08/01/18	Best Best & Krieger-Cost of Issuance			\$ 55,000.00								\$ (55,000.00)
19		08/31/18	MMA Interest paid		\$ 4,683.02									\$ 4,683.02
20		09/31/18	MMA Interest paid		\$ 4,535.86									\$ 4,535.86
21		10/31/18	MMA Interest paid		\$ 4,690.98									\$ 4,690.98
22		11/30/18	MMA Interest paid		\$ 6,498.24									\$ 6,498.24
23		12/31/18	MMA Interest paid		\$ 8,125.10									\$ 8,125.10
24		12/31/18	Fedex Bond issuance costs			\$ 62.02								\$ (62.02)
25		01/31/19	Dudek-Construction Mgmt Prod well #2					\$ 8,295.00						\$ (8,295.00)
26		01/31/19	BBK-Review Bid documents					\$ 855.50	\$ 3,635.00					\$ (4,490.50)
27		01/31/19	Harland Check order-partial charge					\$ 70.12	\$ 70.13	\$ 70.13				\$ (210.38)
28		01/31/19	MMA Interest paid		\$ 9,878.83									\$ 9,878.83
29		02/28/19	BBK-Review final specs Pipeline #1						\$ 306.00					\$ (306.00)
30		02/28/19	BBK-Finalize Bid documents					\$ 2,657.00	\$ 1,799.50	\$ 1,453.50				\$ (5,910.00)
31		02/28/19	Dudek-Construction Mgmt Prod well #1					\$ 11,535.00		\$ 8,422.50				\$ (19,957.50)
32		02/28/19	MMA Interest paid		\$ 8,529.85									\$ 8,529.85
33		03/31/19	Dudek-Construction Mgmt					\$ 5,467.50		\$ 7,232.50				\$ (12,700.00)
34	1007	03/31/19	Dudek-Construction Mgmt					\$ 5,264.68		\$ 5,006.25				\$ (10,270.93)
35	1006	03/31/19	BBK-Review Bid documents					\$ 740.00	\$ 879.00	\$ 867.50				\$ (2,486.50)
36		03/31/19	MMA Interest paid		\$ 9,460.57									\$ 9,460.57
37			Reallocate interest to Admin 7122		\$ (59,378.69)									\$ (59,378.69)
38			Well 12 repairs from O&M to Bond funds-check #32867					\$ 13,537.82						\$ (13,537.82)
39			Well 12 repairs from O&M to Bond funds-check #32970					\$ 82,640.56						\$ (82,640.56)
40		04/04/19	Big J Fencing-Fencing for Well ID4 Well 9					\$ 16,975.00						\$ (16,975.00)
41		04/08/19	BBK					\$ 561.00	\$ 1,377.00	\$ 535.50				\$ (2,473.50)
42		04/08/19	Hidden Valley Pump-Well 12/Well 5/Well 16 Transfer switch					\$ 36,033.00						\$ (36,033.00)
43		04/08/19	Hidden Valley Pump-Well 12/Well 5/Well 16/11 Transfer switch					\$ 253,731.68						\$ (253,731.68)
44		04/23/19	Dudek-Construction Management					\$ 3,690.00		\$ 1,927.50				\$ (5,617.50)
45		04/23/19	Fedex-Mailing of NOE to County New Well #1					\$ 30.53						\$ (30.53)
46		04/23/19	Pacific Pipe-Well 12					\$ 1,337.83						\$ (1,337.83)
47		05/29/20	Pacific Pipeline					\$ 38.45						\$ (38.45)
48		05/20/19	Well 12 repairs transferred from Admin					\$ 83,223.56						\$ (83,223.56)
49		05/29/19	Hidden Valley Pump-Electric panel well 12					\$ 2,503.88						\$ (2,503.88)
50		05/29/19	DeAnza Ready Mix-Road base well 12					\$ 1,547.09						\$ (1,547.09)
51		05/29/19	Dynamic Consulting-Phase I & 2 Pipeline						\$ 71,010.00					\$ (71,010.00)
52		05/29/19	Bobs Trailer-Office trailer Well 1 ID4-9 and well 2					\$ 4,500.00		\$ 4,500.00				\$ (9,000.00)
53		05/29/19	Pacific Pipe-Well 12					\$ 12,635.68						\$ (12,635.68)
54	1022	05/29/19	BBK-bid review					\$ 612.00	\$ 153.00					\$ (765.00)
55		05/29/19	Big J Fencing-Fencing for Well ID4 Well 9					\$ 16,975.00						\$ (16,975.00)
56		05/29/19	De Anza Ready Mix					\$ 700.38	\$ 40,057.36					\$ (40,757.74)
57		05/29/19	Dudek-investigation of second production well							\$ 2,672.50				\$ (2,672.50)
58		05/29/19	Hidden Valley Pump-ID1 well 9 repairs					\$ 3,086.18						\$ (3,086.18)
59		05/29/19	Pacific Pipe-construction supply line					\$ 498.23						\$ (498.23)
60		05/29/19	Southwest Pump-construction of well 4-9					\$ 104,500.00						\$ (104,500.00)
61		05/29/19	State of California-Fee for Bond cost			\$ 1,396.50								\$ (1,396.50)
62		06/10/19	Deanza Ready Mix-Road base well 4-9					\$ 2,116.53						\$ (2,116.53)
63		06/10/19	Hidden Valley Pump-Step down transformer well 4-9					\$ 8,292.37						\$ (8,292.37)
64	1033	06/10/19	US Bank-Remote office supplies well 4-9					\$ 891.56		\$ 808.51				\$ (1,701.07)
65		06/18/19	BBK-Correspondence to A&R						\$ 127.50					\$ (127.50)
66		06/18/19	Dudek-Construction management well 4-9					\$ 20,697.01						\$ (20,697.01)
67		06/18/19	One Eleven Services-Construction Mgmt well 4-9					\$ 4,500.00						\$ (4,500.00)
68		07/01/19	Southwest Pump-construction of well 4-9					\$ 543,866.73						\$ (543,866.73)
69		07/03/19	Hidden Valley Pump-Well 5 Manual Transfer Switch					\$ 399.00						\$ (399.00)
70		07/03/19	Pacific Pipe-Fire hydrant extensions										\$ 1,377.80	\$ (1,377.80)
71		07/08/19	De Anza Ready Mix-Concrete well 12					\$ 658.01						\$ (658.01)
72		07/08/19	De Anza Ready Mix-Concrete well 5					\$ 344.21						\$ (344.21)
73		07/08/19	Hidden Valley Pump-Well 5 pull pump replace bowls/video					\$ 141,472.45						\$ (141,472.45)

	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1			BOND CIP FUNDS											
2			RECONCILIATION-FY 2019/2021											
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	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1			BOND CIP FUNDS									Sewer Inspect		
2			RECONCILIATION-FY 2019/2021									Club Cir 17150		
3								Well 12-17100/ 4-5 Well upgrades	Prod Well #1 ID4-9	Pipeline Project Phase 1/2	Prod Well #2	La Casa	Firehydrants	
4				Bond Proceeds	Interest paid	Cost of Issuance	Misc.	10117140	10117110	10117120/17200	10117130	10117210	10117160	
5														
142	1107	04/13/20	DeAnza Ready Mix - Concrete for Hydrants										\$ 596,74	\$ (596,74)
143	1108	04/13/20	Home Depot										\$ 2,124,37	\$ (2,124,37)
144	1109	04/13/20	Fredericks Services Inc										\$ 25,395,00	\$ (25,395,00)
145	1110	04/21/20	Pacific Pipeline Supply										\$ 27,708,72	\$ (27,708,72)
146	1111	04/28/20	Dudek								\$ 2,385,00		\$	\$ (2,385,00)
147	1112	04/28/20	Fredericks Services Inc									\$ 24,399,00	\$	\$ (24,399,00)
148	1113	05/05/20	Borrego Landfill									\$ 176,65	\$	\$ (176,65)
149	1114	05/05/20	Pacific Pipeline Supply									\$ 28,324,07	\$	\$ (28,324,07)
150	1115	05/12/20	DeAnza Ready Mix									\$ 1,302,38	\$	\$ (1,302,38)
151	1116	05/12/20	Home Depot									\$ 877,33	\$	\$ (877,33)
152	1117	05/19/20	Fredericks Services Inc									\$ 25,379,00	\$	\$ (25,379,00)
153	1118	05/19/20	Pacific Pipeline Supply									\$ 1,163,76	\$	\$ (1,163,76)
154	1119	05/26/20	BBK								\$ 4,484,50		\$	\$ (4,484,50)
155	1120	05/26/20	Dudek								\$ 2,690,00		\$	\$ (2,690,00)
156	1121	06/04/20	Aggregate Products Inc. - Asphalt									\$ 995,62	\$	\$ (995,62)
157	1122	06/04/20	Borrego Landfill									\$ 205,61	\$	\$ (205,61)
158	1123	06/04/20	Brax Company - Underground electric & Panels				\$ 60,000,00					\$	\$	\$ (60,000,00)
159	1124	06/04/20	Fredericks Services Inc									\$ 25,457,00	\$	\$ (25,457,00)
160	1125	06/04/20	Pacific Pipeline									\$ 31,955,72	\$	\$ (31,955,72)
161	1126	06/09/20	DeAnza Ready Mix									\$ 596,74	\$	\$ (596,74)
162	1127	06/09/20	Home Depot									\$ 878,96	\$	\$ (878,96)
163	1128	06/09/20	Pacific Trans Environmental									\$ 604,95	\$	\$ (604,95)
164	1129	06/18/20	Fredericks Services Inc									\$ 10,244,00	\$	\$ (10,244,00)
165	1130	06/22/20	Downstream-Video manhole #8 to #4 by La Casa									\$ 2,680	\$	\$ (2,680,00)
166	1131	06/22/20	Fredericks Services Inc									\$ 26,697,00	\$	\$ (26,697,00)
167	1132	07/07/20	Home Depot									\$	\$	\$ (1,944,11)
168	1133	07/14/20	Brax Company, Inc.				\$ 110,809		\$ 1,944			\$	\$	\$ (110,808,81)
169	1134	07/14/20	De Anza Ready Mix									\$ 352,83	\$	\$ (352,83)
170	1135	07/14/20	Dudek								\$ 2,100		\$	\$ (2,100,00)
171	1136	07/14/20	Pacific Pipeline									\$ 25,138,57	\$	\$ (25,138,57)
172	1137	07/16/20	Brax Company, Inc.				\$ 1,000					\$	\$	\$ (1,000,00)
173	1138	07/16/20	Fredericks Services Inc									\$ 27,464,00	\$	\$ (27,464,00)
174	1139	07/28/20	Dudek						\$ 1,648		\$ 2,833		\$	\$ (4,480,00)
175			BOND FUND BALANCE	\$ 5,517,293	\$ -	\$ 147,390	\$ 905	\$ 835,946	\$ 1,607,775	\$ 807,402	\$ 56,959	\$ 95,484	\$ 416,331	\$ 1,549,099,58
176														
179										7/31/2020	MMA			\$ 1,508,713
180										7/31/2020	Checking			\$ 175,261
181										7/31/2020	Total Bond funds Balance			\$ 1,683,974

Borrego Water District  
 Groundwater Management Expenses  
 FYE 2021



Month	(54810) BBK	Legal BBK/JT	Watermaster	DUDEK	Wendy Quinn Minutes	Town Hall/ Advertising/Postage	Staff Allocation	Conf/Classes Misc.	Jerry Consulting	G/L Total
	<u>Stipulated</u>	<u>GWM</u>	<u>BWD Staff</u>							
July 2020	16,175.77	7,611.00	3,900.54				7,801.08	9.99	125.00	35,623.38
<b>Total</b>	<u>16,175.77</u>	<u>7,611.00</u>	<u>3,900.54</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,801.08</u>	<u>9.99</u>	<u>125.00</u>	<u>35,623.38</u>

IV.B  
Wastewater Production  
Report  
July 2020





# BORREGO WATER DISTRICT

**JULY 2020**

## **WATER OPERATIONS REPORT**

<u>WELL</u>	<u>TYPE</u>	<u>FLOW RATE</u>	<u>STATUS</u>	<u>COMMENT</u>
ID1-8	Production	350	In Use	
ID1-10	Production	300	In Use	
ID1-12	Production	900	In Use	
ID1-16	Production	750	In Use	
Wilcox	Production	80	In Use	Diesel backup well for ID-4
ID4-4	Production	400	In Use	
ID4-11	Production	900	In Use	Diesel engine drive exercised monthly
ID4-18	Production	150	In Use	
ID5-5	Production	850	In Use	

**System Problems:** All production wells are in service. All reservoirs are in operating condition.

## **WASTEWATER OPERATIONS REPORT**

**Rams Hill Wastewater Treatment Facility serving ID-1, ID-2 and ID-5 Total Cap. 0.25 MGD (million gallons per day):**

**Average flow:** 46753 (gallons per day)

**Peak flow:** 74100 gpd Thursday, JULY 17 2020



## BORREGO WATER DISTRICT

RAMS HILL WASTEWATER TREATMENT FACILITY

4861 Borrego Springs Rd, BORREGO SPRINGS, CA 92004  
(760) 767-5806 FAX (760) 767-5994

08/06/2020

CALIFORNIA REGIONAL WATER QUALITY  
CONTROL BOARD – REGION 7  
73-720 FRED WARING DR. SUITE 100  
PALM DESERT, CA. 92260

Attn: Adriana Godinez/WRCE

RE: JULY 2020 Borrego Springs WWTP

Dear Adriana,

Please find attached the JULY 2020 monthly monitoring reports and Nitrate Study Lab results for Borrego springs district WWTP.

We are pleased to inform you that there's no known violations for this month.

If you have any questions please contact ROGELIO MARTINEZ/WT-III. (760)419-2764.

Respectfully,

Rogelio Martinez/ water plant operator III

CC: Geoff Poole/GM

# **MONTHLY REPORT: R.H.W.T.F**

**MONTH: JULY**

**YEAR: 2020**

BORREGO WATER DISTRICT,  
RAMS HILL WASTEWATER TREATMENT FACILITY,  
4861 BORREGO SPRINGS ROAD,  
BORREGO SPRINGS, CA 92004  
760-767-5806; phone  
760-767-5994; fax

COMMENTS: THERE ARE NO SPILLS TO REPORT FOR JULY 2020; THE FLOW REPORT IS ATTACHED.

Submitted by: ROGELIO MARTINEZ/BWD TO: GEOFF POOLE/BWD;JOE CORNEJO/JC LABS  
Date:08/06/2020

JUL 2020	DAILY FLOW GAL.	TOTAL FLOW GAL.
1	40200	32618200
2	57200	32675400
3	44600	32720000
4	52000	32772000
5	47800	32819800
6	36300	32856100
7	37100	32893300
8	41700	32935000
9	36500	32971500
10	40500	33012000
11	44000	33056100
12	45200	33101400
13	42600	33144000
14	37600	33181600
15	37050	33218650
16	74100	33255800
17	43300	33299100
18	50500	33349600
19	48700	33398500
20	45600	33444200
21	57200	33501400
22	53900	33555400
23	50300	33605700
24	51200	33656900
25	54700	33711700
26	56800	33768600
27	48000	33816700
28	39800	33856600
29	46100	33902800
30	46200	33949000
31	42600	33991600

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

WDID NO.: **7A 37 0125 001**  
ORDEF NO.: **R7-2019-0015**

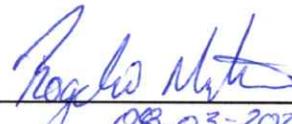
**MONITORING AND REPORTING  
BORREGO WATER DISTRICT - RAMS HILL WWTF  
MONTH:       JULY        
YEAR:       2020**

REPORTING FREQUENCIES: MONTHLY

JULY

TYPE OF SAMPLE:	INFLUENT			PONDS		
CONSTITUENTS:	Flow	BOD	TSS	DO	pH	Freeboard
FREQUENCY:	Daily	Monthly	Monthly	Twice Monthly	Twice Monthly	Twice Monthly
DESCRIPTION:	Measurement	Grab	Grab	Grab	Grab	Measurement
UNITS:	gpd	mg/L	mg/L	mg/L	s.u.	ft
REQUIREMENTS						
30-DAY MEAN:						
MAXIMUM:						
MINIMUM:						
DATE OF SAMPLE	JULY					
1	40200	63	100	6.36	7.66	3.5
2	57200					
3	44600					
4	52000					
5	47800					
6	36300					
7	37100					
8	41700					
9	36500					
10	40500					
11	44000					
12	45200					
13	42600					
14	37600					
15	37050			6.99	7.78	3.5
16	74100					
17	43300					
18	50500					
19	48700					
20	45600					
21	57200					
22	53900					
23	50300					
24	51200					
25	54700					
26	56800					
27	48000					
28	39800					
29	46100					
30	46200					
31	42600					
<b>30-DAY MEAN</b>	<b>46753</b>	<b>63</b>	<b>100</b>	<b>6.68</b>	<b>7.72</b>	<b>3.5</b>
<b>MAXIMUM</b>	<b>74100</b>	<b>63</b>	<b>100</b>	<b>6.99</b>	<b>7.78</b>	<b>3.5</b>
<b>MINIMUM</b>	<b>36300</b>	<b>63</b>	<b>100</b>	<b>6.36</b>	<b>7.66</b>	<b>3.5</b>

I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:   
Date: 08-03-2020

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

WDID NO.: **7A 37 0125 001**  
ORDER NO.: **R7- 2019-0015**

**MONITORING AND REPORTING  
BORREGO WATER DISTRICT - RAMS HILL WWTF  
MONTH:       JULY        
YEAR:       2020**

REPORTING FREQUENCY **MONTHLY**

JULY

TYPE OF SAMPLE:	EFFLUENT					
CONSTITUENTS:	BOD	TSS	SS	T. Nitrogen	TDS	pH
FREQUENCY:	Twice Monthly					
DESCRIPTION:	Grab	Grab	Grab	Grab	Grab	Grab
UNITS:	mg/L	mg/L	ml/L	mg/L	ml/L	mg/L
REQUIREMENTS						
30-DAY MEAN:						
MAXIMUM:						
MINIMUM:						
DATE OF SAMPLE						
1	0.0	29	0.3	8.2	540	7.69
2						
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15	0.0	11.0	0.0	6.1	540	7.82
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31						
<b>30-DAY MEAN</b>	<b>0.0</b>	<b>20.0</b>	<b>0.2</b>	<b>7.2</b>	<b>540</b>	<b>7.76</b>
<b>MAXIMUM</b>	<b>0.0</b>	<b>29.0</b>	<b>0.3</b>	<b>8.2</b>	<b>540</b>	<b>7.82</b>
<b>MINIMUM</b>	<b>0.0</b>	<b>11.0</b>	<b>0.0</b>	<b>6.1</b>	<b>540</b>	<b>7.69</b>

I declare under the penalty of law that I personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: *[Handwritten Signature]*  
Date: 08-03-2020

# V. STAFF REPORTS - VERBAL

- A. Administration -D Del Bono
- B Waste Water Operations – R Martinez
- C. Water Operations – A Asche
- D. General Manager - G Poole
  1. Proposed schedule for Developer’s Policy and Cost of Service studies and rate setting requirements through July 1, 2021
  2. Discussion of Superior Court’s Stipulation Judgement Legal Service Process Required for a Comprehensive Adjudication of Subbasin Water Rights
  3. Update on High School Interpretive Skills Training Class at Borrego Springs High School: The required \$10,000 has been raised