

AGENDA
Borrego Water District Board of Directors
Regular Meeting
December 16, 2015 9:00 a.m.
806 Palm Canyon Drive
Borrego Springs, CA 92004

I. OPENING PROCEDURES

- A. Call to Order
- B. Pledge of Allegiance
- C. Roll Call
- D. Approval of Agenda (1-2)
- E. Approval of Minutes
 - Regular meeting of October 28, 2015 (3-6)
 - Regular meeting of November 18, 2015 (7-9)
- F. Comments from Directors and Requests for Future Agenda Items
- G. Comments from the Public and Requests for Future Agenda Items (comments will be limited to 3 minutes)
- H. Correspondence:

II. CURRENT BUSINESS MATTERS

- A. Presentation of President's Special Recognition Awards from ACWA/JPIA (11-14)
- B. Update on Basin Boundary Adjustment process
- C. Discussion of progress meeting the Executive Order B-29-15 requiring a 25% mandatory reduction in water use by the District
- D. Discussion of FY 2017-FY 2021 rate study time line and data request (15)
- E. Discussion of Groundwater Sustainability Plan (GSP) development costs sharing among municipal, recreation and agricultural groundwater users (16-24)
- F. Report from Ad Hoc Citizen's Committee regarding water conservation policy recommendations (25-34)
- G. Consideration and possible approval of process for handling claims received for Tier 2 refunds. (35)
- H. Review of planning calendar (36-37)

III. STAFF REPORTS

- A. Financial Reports – November 2015 (39-54)
- B. General Manager / Operations Report (55-56)
- C. Water and Wastewater Operations Report – November 2015 (57)
- D. Water Production/Use Records – November 2015 (58-61)

IV. ATTORNEY'S REPORT

V. COMMITTEE REPORTS & PROPOSALS:

Ad Hoc Committees

- | | |
|--------------------------------------|----------------------|
| 1. Audit Committee | (L. Brecht, Tatusko) |
| 2. Due-Diligence | (L. Brecht, Tatusko) |
| 3. Strategic Planning Committee | (Hart, L. Brecht) |
| 4. Executive Committee | (Estep, Hart) |
| 5. Operations & Management Committee | (Delahay, Tatusko) |
| 6. Parks Committee | (Hart, Estep) |

7. CFD Committee
8. Conservation Committee

(Estep, Delahay)
(Hart, Tatusko)

VI. INFORMATIONAL ITEMS

- A. Article for the Borrego Sun by Jim Melvin (62-64)

VII. CLOSING PROCEDURE

The next Special Meeting of the Board of Directors is scheduled for January 19, 2016 at the Borrego Water District
The next Regular Meeting of the Board of Directors is scheduled for January 27, 2016 at the Borrego Water District

Teleconference Site: 7815 Rush Rose Drive, #302, Carlsbad, CA 92009

**Borrego Water District
MINUTES
Regular Meeting of the Board of Directors
Wednesday, October 28, 2015
9:00 AM
806 Palm Canyon Drive
Borrego Springs, CA 92004**

I. OPENING PROCEDURES

- A. Call to Order:** President Hart 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 Hart, Vice-President Brecht,
Secretary/Treasurer Tatusko, Delahay

Absent: Estep

Staff: Jerry Rolwing, General Manager
Kim Pitman, Administration Manager
Diana Del Bono, Administrative Assistant
Wendy Quinn, Recording Secretary

Public: Julie Taylor Ray Shindler
Jeannie Beck, *Borrego Sun* Harry Ehrlich
Dennis Daoust Trey Driscoll, Dudek
Jack Simes, Bureau of Reclamation Jack Hartman, Bureau of Reclamation

- D. Approval of Agenda:** ***MSC: Brecht/Tatusko approving the Agenda as written.***

- E. Approval of Minutes:**

Special meeting of September 15, 2015

MSC: Brecht/Delahay approving the Minutes of the Special Meeting of September 15, 2015 as corrected (Item II.A, paragraph 2, delete the last sentence; Item II.D, second sentence, change in part to read, "He asked that the Operations and Management Committee also review extend the Capital Improvement Plan . . ."; Item II.E, second sentence, change 2007 to 2010; fourth sentence, change in part to read, ". . . the Calpers pension plan should be increased from \$300,000 to \$669,000; next-to-the-last sentence, change to read, "The reserves should potential cost may be \$172,000, depending on how far back a claimant may be entitled to reimbursement."

Regular meeting of September 23, 2015

MSC: Brecht/Delahay approving the Minutes of the Regular Meeting of September 23, 2015 as corrected (Item I.H, next-to-the-last sentence, change in part to read, ". . . potable and nonpotable water lines are cross connected"; Item II.G, second sentence, change in part to read, "deferrals of repair and replacement rehabilitation may be necessary"; next-to-the-last sentence, change "operations and maintenance" to "repair and replacement"; Item II.H, last paragraph on Board package page 8/Minutes page 3, delete the second sentence; Item III.A, next-to-the-last sentence, change "Viking Ranch" to "Compass Bank"; Item V.1, first paragraph, change \$199,000 to \$699,000; second paragraph, change Rudy Monica to Viking Ranch"). Director Tatusko voted against the motion, and all other Directors present voted in favor.

- F. Comments from Directors and Requests for Future Agenda Items:** None

G. Comments from the Public and Requests for Future Agenda Items: Ray Shindler spoke about the pros and cons of adjudication based on his conversations with a water attorney and several other districts. Water loss is a possible outcome that some districts experienced and

some didn't, and legal fees associated with adjudication are expensive. Some districts that negotiated stipulated adjudication said if they had it to do over they would go with a GSP.

Dennis Daoust asked why his potential refund of Tier 2 rates covered a three-year period, not four. President Hart explained that the State requires only three years as a statute of limitations on claims. Mr. Daoust stated that his attorney felt the District should pay him interest, and President Hart agreed to check with the District's counsel.

H. Correspondence: Jerry Rolwing referred to a letter from Robin Michaelson Fiduciary Services, LLC, on behalf of their clients. They are interested in donating a 0.67-acre parcel of land at Borrego Springs Road and Ynez Path to the District for charitable tax deduction purposes. The District would lose only \$33 per year in taxes and would incur no liability if the property is not altered. It might be a good site for a future booster station. The Board directed Mr. Rolwing to accept the offer.

II. CURRENT BUSINESS MATTERS

A. Discussion of comment letters submitted to Department of Water Resources on the Draft Critical Overdraft for Borrego Valley Basin: Mr. Rolwing explained that the DWR has reconsidered its earlier determination that the Borrego Basin is not in critical overdraft and has proposed to designate it as critical. If approved, this would move the District's GSP due date from 2022 to 2020 and improve chances of grant funding. Imperial County is concerned about the proposed designation because they are now included in the Borrego Basin and are not in overdraft. BWD is working with Imperial County to change the basin boundaries and exclude them. AAWARE has expressed opposition to the critical designation.

Jack Simes and Jack Hartman from the Bureau of Reclamation joined the meeting. Mr. Simes reported that he hoped the BOR's Southeast Regional California Basin Study would be released in November and available on the BOR website. Among other things, the study addresses possible solutions to the aquifer overdraft.

B. Discussion of Groundwater Sustainability Plan (GSP) process and incorporation of water credit program: Mr. Rolwing reported that the District has applied to be a GSA and expects the County of San Diego to do so as well. The two agencies will work together. Imperial County has already applied, and if the proposed boundary adjustment is not approved, BWD and the County of San Diego will work with them also. A facilitator from the State Water Resources Control Board is assisting with development of the GSP, and a series of public meetings is planned. The District needs to incorporate the water credit program into the GSP, and Director Tatusko is working with Mr. Rolwing and Trey Driscoll of Dudek on this. Discussion followed regarding potential grant funds for GSP development, including the Water Rights Fund and Proposition 1. Mr. Shindler will check into the Water Rights Fund, and Mr. Driscoll will check with Dudek's grant specialist.

C. Discussion of a Groundwater Sustainability Agency (GSA) regulatory fee to complete the development of a Groundwater Sustainability Plan (GSP) as required under the Sustainable Groundwater Management Act (SGMA): Mr. Rolwing explained that upon the District's approval as a GSA, it can track pumping in the valley and collect fees to fund the GSP development. Director Brecht asked whether GSP development costs expended prior to GSA approval could be reimbursed from these fees, and Mr. Rolwing agreed to check. Director Tatusko recommended that the District begin work on putting regulatory fees into effect, and the Board concurred. Director Brecht requested that the Groundwater Sustainability Plan (GSP) Development Costs Estimate (Board package page 18) be amended to change the last item from "All Pumpers (including District)" to "Remaining GSP Development Costs."

D. Discussion of Raftelis Blended Share model of cost distribution for the GSP: Mr. Rolwing presented an interactive slide show depicting various cost distribution scenarios for GSP development. Various percentage contributions could be plugged into the categories of

acreage, assessed value and estimated water use. Further discussion will be included in the next Agenda.

E. Discussion and possible approval of a budget to retain Dudek to complete its work on the Borrego Valley Groundwater Basin (BVGB) boundary adjustment and economic work on the costs associated with groundwater supply and quality necessary for Raftelis to begin its rate-tier modeling work for a 2016 Proposition 218 process: Director Brecht invited the Board's attention to a handout, Dudek's proposal for the referenced support. The tasks outlined would prepare for the basin boundary adjustment application in January and also support Raftelis in preparing for the 218 process by justifying tiered rates based on costs associated with the depletion of a capital asset (water) by high users. **MSC: *Tatusko/Delahay approving the contract with Dudek according to their October 27, 2015 proposal for a cost not to exceed \$89,020.***

F. Discussion of progress meeting the Executive Order B-29-15 requiring a 25% mandatory reduction in water use by the District: Mr. Rolwing announced a ten percent reduction in water use through the end of September. Director Brecht questioned whether all high water users should be penalized. There are some beautifully landscaped yards in area which benefit the community, and their owners are willing to pay to irrigate them. He suggested perhaps a better approach would be to purchase farmland and fallow it. Harry Ehrlich stated that the citizens committee is looking into this and should have a report by the December meeting. Mr. Rolwing emphasized the importance of water conservation education. President Hart reported that Riverside County has filed a lawsuit seeking exemption from the Executive Order on the grounds that they have sufficient groundwater. Mr. Rolwing agreed to follow up.

G. Consideration and possible approval of process for handling claims received for Tier 2 refunds: Director Tatusko explained that the prior "tiered rates" were actually conservation fees but put into a tiered structure. The funds were used for conservation rebates. Director Brecht pointed out that the San Juan Capistrano court case did not actually relate to tiered rates, but to the failure of the City to create a nexus between its rates and the cost of providing water. BWD will probably return to tiered rates because such a nexus exists, but rebates are being offered because the analysis wasn't done earlier. **MSC: *Brecht/Delahay approving the six claims totaling \$8,006.37 as outlined in Ms. Pitman's memo to the Board dated October 28, 2015.***

H. Discussion and possible approval of Resolution 2015-10-03 REVISING THE SCHEDULE OF REGULAR MEETINGS to meet on November 18th and December 16th, 2015: **MSC: *Brecht/Delahay approving Resolution 2015-10-03 Revising the Schedule of Regular Meetings to meet on November 18th and December 16th, 2015.***

I. Review of planning calendar: Director Brecht asked that the audit report be forwarded to Compass Bank and Andrew Ciocca.

III. STAFF REPORTS

A. Financial Reports – September 2015: Ms. Pitman reported that water revenues are down slightly. Two medical insurance payments were sent accidentally so there will be none next month. The solar project is under budget.

B. General Manager/Operations Report: Mr. Rolwing reported on a GSP Workshop he attended on October 21. The GSP regulations are expected by June 2016, with a draft to be released earlier. BWD is now Number 4 on the San Diego Gas & Electric rebate list for its solar project. The rebate would be \$65,000 over five years.

C. Water and Wastewater Operations Report – September 2015: Mr. Rolwing reported a couple of breaks in the line on Country Club Road.

D. Water Production/Use Records – September 2015: The Water Production/Use Records were included in the Board package.

IV. ATTORNEY'S REPORT

None

V. COMMITTEE REPORTS & PROPOSALS

Ad Hoc Committees

1. Audit Committee

Director Tatusko reported that the audit had been accepted.

2. Due-Diligence

Director Brecht reported the Committee was working with Dudek and Raftelis on the water credit policy.

3. Strategic Planning Committee/IRWM

Director Brecht reported the Committee was interacting with the County on the GSA issue and working with the Borrego Water Coalition.

4. Executive Committee

President Hart reported that the Committee had worked with Ms. Pitman on the letter to Tier 2 users regarding the availability of refund claims.

5. Operations & Management Committee

Director Tatusko requested a meeting with Mr. Rolwing and Greg Holloway regarding Capital Improvement Program costs.

6. Parks Committee

Director Brecht asked whether the District should provide input concerning the proposed new park in Borrego Springs. Director Tatusko stated that he had attended a meeting on the subject and sent an e-mail recommending restrooms. President Hart added that the Committee plans to obtain additional information.

7. CFD Committee

No report.

8. Conservation Committee

Conservation Committee issues were discussed previously.

VI. INFORMATION ITEMS

A. DRAFT discussion document: *Economics of Overdraft* prepared by Director Brecht. This discussion deck is Director Brecht's own analysis based on his research and not representative of the District or the Board's views: Director Brecht's discussion document was included in the Board package.

VII. CLOSING PROCEDURE

There being no further business, the Board adjourned at 11:40 a.m. The next Regular Meeting of the Board of Directors is scheduled for November 18, 2015 at the Borrego Water District.

Borrego Water District
MINUTES
Regular Meeting of the Board of Directors
Wednesday, November 18, 2015
9:00 AM
806 Palm Canyon Drive
Borrego Springs, CA 92004

I. OPENING PROCEDURES

- A. Call to Order: President Hart 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 Hart, Vice-President Brecht,

Secretary/Treasurer Tatusko, Delahay, Estep

Staff: Jerry Rolwing, General Manager

 Kim Pitman, Administration Manager

 Diana Del Bono, Administrative Assistant

 Wendy Quinn, Recording Secretary

Public: Ray Shindler Trey Driscoll, Dudek

- D. Approval of Agenda: *MSC: Brecht/Tatusko approving the Agenda as written.*

- E. Approval of Minutes:

Special meeting of October 20, 2015

MSC: Brecht/Delahay approving the Minutes of the Special Meeting of October 20, 2015 as corrected (Item II.C, paragraph 3, line 3, change the word "aquifer" to "basin"; Item II.H, first line on Minutes page 3/Board package page 5, change in part to read, ". . . review the California Drought Contingency Plan and information from the National Drought Mitigation Center.")

- F. Comments from Directors and Requests for Future Agenda Items: None

G. Comments from the Public and Requests for Future Agenda Items: Ray Shindler reported that The Springs golf course had removed a considerable amount of turf, and he planned to talk to representatives of the Borrego Springs and De Anza Country Clubs about doing the same. He further reported a conversation with a Borrego Water Coalition member concerning a stipulated agreement to buy farmers' water, a plan which Mr. Shindler opposed. Director Brecht explained that the District may need to purchase water to use, but not to retire.

- H. Correspondence: None

II. CURRENT BUSINESS MATTERS

A. Review of DRAFT discussion deck for Due Diligence Committee conference call with Dudek and Raftelis describing an analytical framework for establishing rate tier requirements that meet Capistrano court case nexus standards: Director Brecht narrated a slide presentation in preparation for the Committee's conference call with Dudek and Raftelis regarding rates. From the San Juan Capistrano court case it is clear that tiered rates must be justified by a nexus between water use levels and costs to the District. Director Brecht explained the difference between water non-volumetric charges (basic service) and volumetric (potable water, energy pass through, groundwater planning fee, basin overdraft fee and water use reduction fee). The basic service charge could be based on the American Waterworks Association (AWWA) capacity factor according to meter size. Director Brecht hoped to keep this fee constant over the next five years and possible lower it. He also suggested consideration of four tiers. Dudek may be asked to come up with a replacement cost for groundwater, a capital asset which is being depleted and may require additional treatment in the future. Non-residential tiers will be considered, and Director Delahay pointed out that those costs could be passed on to

consumers. Director Brecht went on to address sewer and wastewater treatment, meter size capacity factors and sample non-residential tiers from Rancho Cucamonga. He also touched on water use reduction fees in the event of a drought emergency, general water supply shortage or excessive wastage. Droughts could be classified into three stages of severity, and water use reduction fees could be classified into four stages depending on the level of water use restriction. In conclusion, Director Brecht asked what's next in order to meet the San Juan Capistrano court case nexus requirement. Dudek, District Counsel and Raftelis will need to work together. Discussion followed regarding a proposed task for District Counsel, development of a District policy to include the costs of supply and quality in its tiers, and whether this was necessary. President Hart asked Director Estep to discuss the issue with Morgan Foley and the Executive Committee, then report the conclusions to the Due Diligence Committee. It was agreed to schedule the conference call with the Due Diligence Committee, Dudek and Raftelis after Thanksgiving.

B. Discussion of Groundwater Sustainability Plan (GSP) process and incorporation of water credit program: Director Brecht reported that a 4:1 water mitigation ratio was supported by Dudek's research. Now the value of the credits and the District's policy need to be addressed. President Hart added that we need to look at the different types of credit. Mr. Rolwing stated that he had discussed changes to the water credit policy with David Aladjem, who suggested the possibility of a phased approach. Mr. Rolwing hoped to be able to offer credits for water use reduction.

C. Discussion of progress meeting the Executive Order B-29-15 requiring a 25% mandatory reduction in water use by the District: Mr. Rolwing reported a 17 percent reduction in October, but due to the 14 percent increase in September the overall reduction is 11 percent. The District's report to the State is due December 15, and Director Brecht recommended including a narrative. Mr. Rolwing is working on this with Mr. Aladjem and will submit it to the Strategic Planning Committee for review prior to submission.

D. Consideration and possible approval of process for handling claims received for Tier 2 refunds: Kim Pitman reported that 45 claims were received in October for a total of \$24,250.80. **MSC: *Brecht/Delahay approving the claims as reported.***

E. Review of planning calendar: Director Brecht submitted written changes to Diana Del Bono.

III. STAFF REPORTS

A. Financial Reports – October 2015: Ms. Pitman reported that salaries were up slightly because of work at Rams Hill on the entrance irrigation. A booster station motor to assist in getting water to Indian Head will be an expense in November. A new truck was purchased, and the final payment was made to USGS.

B. General Manager/Operations Report: Mr. Rolwing invited the Board's attention to his written report in the Board package. The main item of interest was evaluation of the water credit program, and an inventory was included in his report. The "critical" designation for the Borrego Basin overdraft has not yet been determined. DWR will be evaluating all GSA applications for completeness and any overlap. The BWD solar facility is still Number 4 on SDG&E's list for rebates.

C. Water and Wastewater Operations Report – October 2015: Mr. Rolwing reported an issue with the 800 Tank, which has experienced continuing problems. The contractor has inspected it and will submit a plan to the District.

D. Water Production/Use Records – October 2015: The Water Production/Use Records were included in the Board package.

IV. ATTORNEY'S REPORT

None

V. COMMITTEE REPORTS & PROPOSALS

Ad Hoc Committees

- 1. Audit Committee

No report.

- 2. Due-Diligence

Director Brecht reported the Committee was working on GSP costs.

- 3. Strategic Planning Committee/IRWM

President Hart reported that the Committee would be meeting with the County tomorrow to work on a framework for a GSA overlap agreement.

- 4. Executive Committee

President Hart reminded the Board that the Committee would be contacting Mr. Foley.

- 5. Operations & Management Committee

Director Delahay reported that the Committee had been meeting with the citizens group. Director Tatusko added that they had also discussed the budget and the solar facilities.

- 6. Parks Committee

President Hart sent an e-mail to the County Parks and Recreation Department and received a reply that they received it and will take it into consideration. She further noted that the District's contract with Club Circle will end next year, and asked Director Estep to urge the Homeowners Association to address the golf course operation issue.

- 7. CFD Committee

Mr. Rolwing reported that the Rams Hill bonds would be going through a restructuring.

- 8. Conservation Committee

Director Tatusko reported on recent low flow appliance installations.

VI. INFORMATION ITEMS

A. Toilet and Turf Rebates from Department of Water Resources: President Hart announced that she and Director Tatusko were willing to help those who needed it to apply for rebates, which requires computer expertise.

VII. CLOSING PROCEDURE

There being no further business, the Board adjourned at 11:15 a.m. The next Regular Meeting of the Board of Directors is scheduled for December 16, 2015 at the Borrego Water District.

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December 4, 2015

JOINT POWERS
INSURANCE AUTHORITY

P. O. Box 619082
Roseville, CA 95661-9082

phone

916.786.5742
800.231.5742

direct line

916.774.7050
800.535.7899

general fax

916.774.7040

claims fax

916.786.0209

www.acwajpia.com

President

E.G. "Jerry" Gladbach

Vice President

Tom Cuquet

Chief Executive Officer

Walter "Andy" Sells

Executive Committee

Tom Cuquet

David Drake

E.G. "Jerry" Gladbach

David T. Hodgin

W.D. "Bill" Knutson

Melody A. McDonald

Charles W. Muse

J. Bruce Rupp

Kathleen J. Tiegs

Jerry Rolwing
Borrego Water District
P.O. Box 1870
Borrego Springs, CA 92004-1870

Dear Jerry:

Each year at Fall Conference, the JPIA recognizes members that have a Loss Ratio of 20% or less in either of the Liability, Property, or Workers' Compensation programs (loss ratio = total losses / total premiums).

The members with this distinction receive the "**President's Special Recognition Award**" certificate for each Program that they qualify in.

The JPIA is extremely pleased to present Borrego Water District with this special recognition and commends the District on the hard work in reducing claims.

Congratulations to you, your staff, Board, and District. Keep up the good work!

The JPIA wishes you the best in 2016.

Sincerely,

Walter "Andy" Sells
Chief Executive Officer

Enclosure: President's Special Recognition Award(s)

President's Special Recognition Award

The President of the
ACWA Joint Powers Insurance Authority
hereby gives Special Recognition to

Borrego Water District

for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Liability Program for the period 10/01/2011 – 09/30/2014
announced at the Board of Directors' Meeting in Indian Wells.

E. G. "Jerry" Gladbach
E. G. "Jerry" Gladbach, President



November 30, 2015

President's Special Recognition Award

The President of the
ACWA Joint Powers Insurance Authority
hereby gives Special Recognition to

Borrego Water District

for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Property Program for the period 04/01/2011 – 03/31/2014
announced at the Board of Directors' Meeting in Indian Wells.

E. G. "Jerry" Gladbach
E. G. "Jerry" Gladbach, President



November 30, 2015

President's Special Recognition Award

*The President of the
ACWA Joint Powers Insurance Authority
hereby gives Special Recognition to*

Borrego Water District

*for achieving a low ratio of "Paid Claims and Case Reserves" to "Deposit Premiums"
in the Workers' Compensation Program for the period 07/01/2011 – 06/30/2014
announced at the Board of Directors' Meeting in Indian Wells.*

E. G. "Jerry" Gladbach
E. G. "Jerry" Gladbach, President



November 30, 2015

Date	Milestone	Notes
12-11-2015	CIP Provided to RFC	Per 12-7-2015 CC
12-18-2015	All required data provided to RFC to meet Proposed Schedule	Includes everything within data request
1-29-2016	Preliminary Rates Disseminated	Rates will be provided in PowerPoint structure
2-19-2016	Rates Finalized	Final rates for Notice (no changes will occur to hit PH Date)
2-24-2016	Initial Draft Report Disseminated	1 st draft of Report which would be on file in preparation of Prop. 218 Notices
2-26-2016	Prop. 218 Notice Mailed	Meets 45-day requirement
March 2016	Receive edits and Finalize Report	Edits will be incorporated, but no substantive changes are expected
4-15-2016	Public Hearing	Conduct hearing on proposed rates

Groundwater Sustainability Plan (GSP) Development Costs Estimate

Best Estimate ~\$1,385,000 over ~18 months

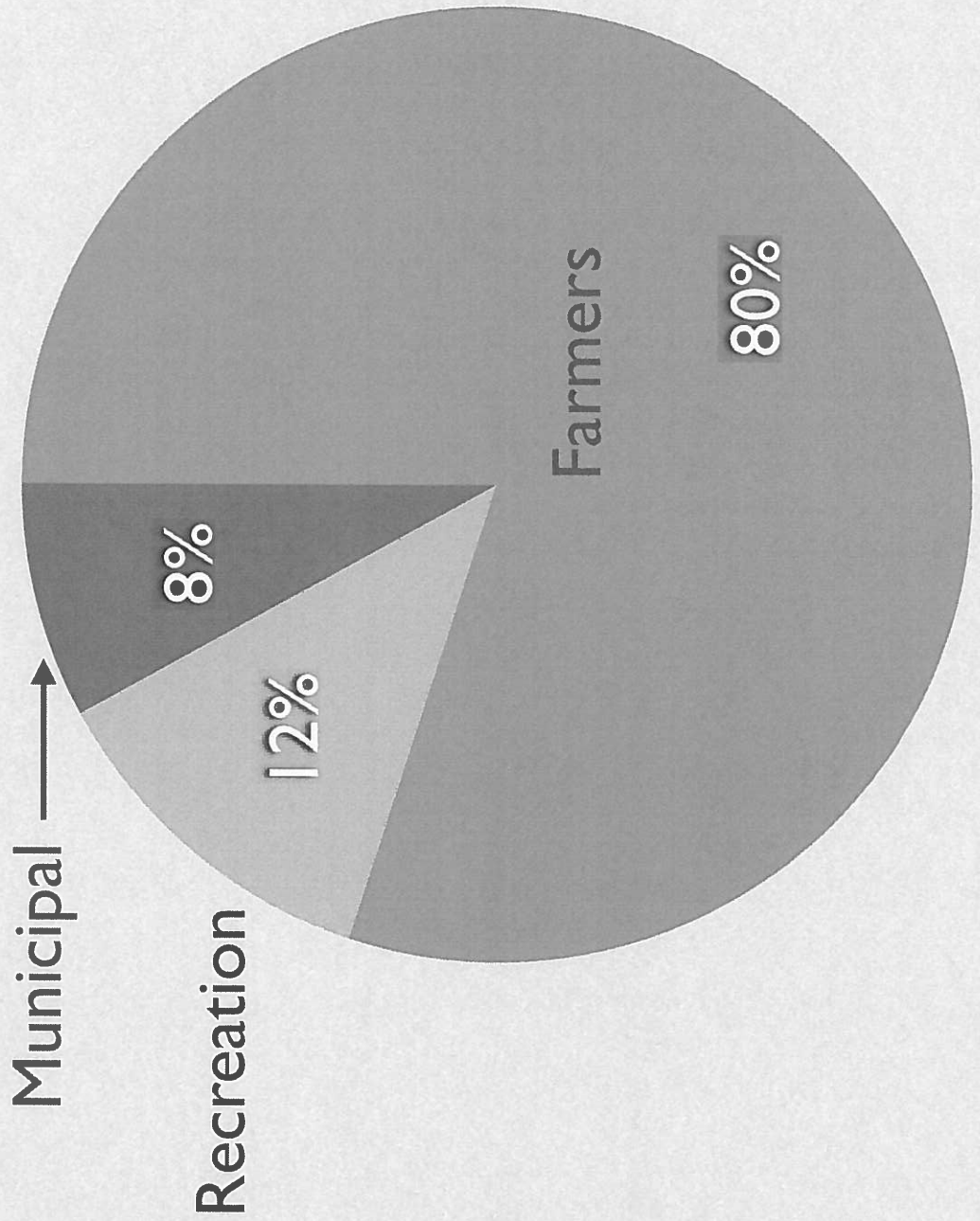
WHO PAYS?

- all present basin users pay their fair proportional share

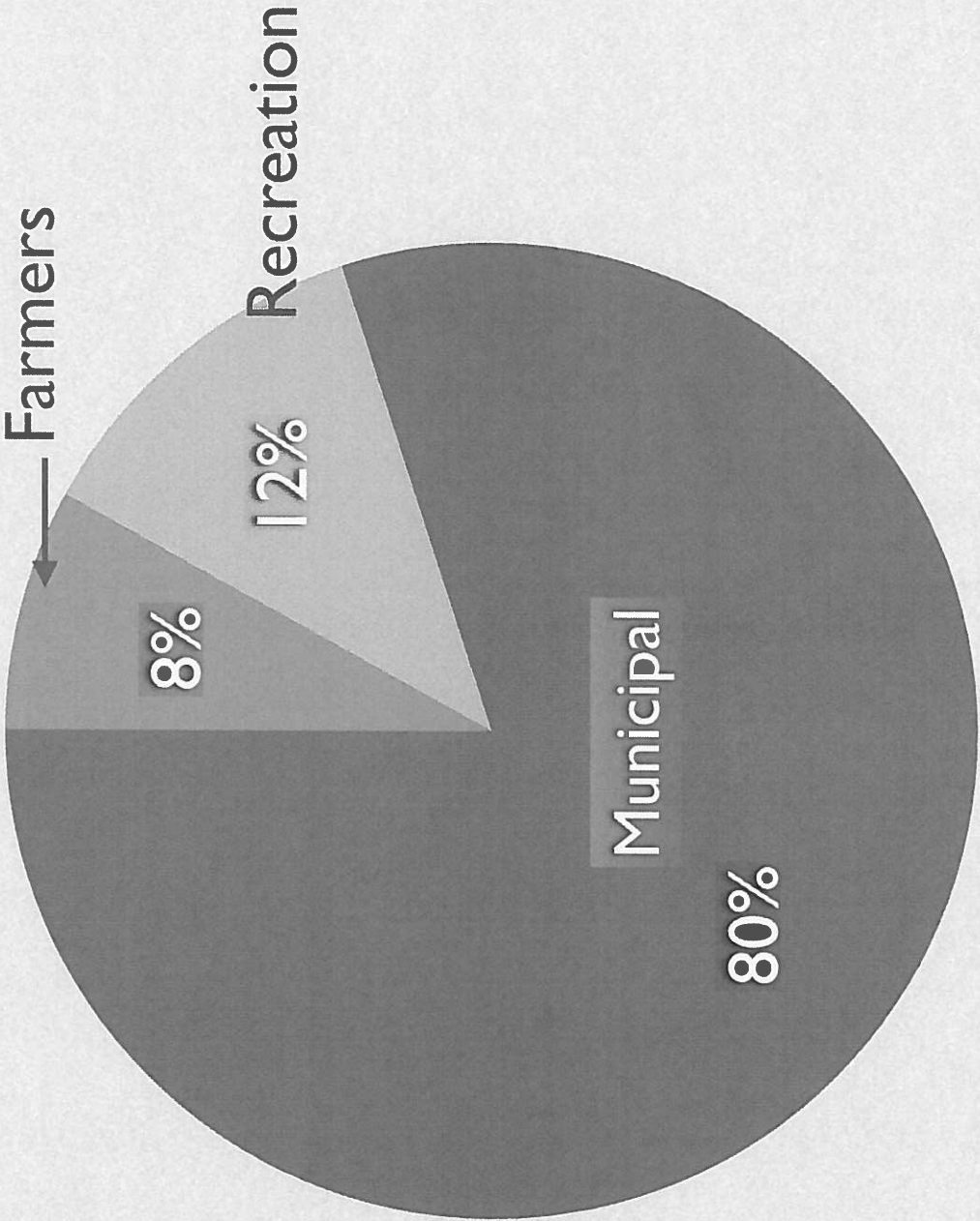
WHAT IS FAIR PROPORTIONAL SHARE OF GSP DEVELOPMENT?

- annual withdrawals
 - assessed property values
 - acreage
- blended proportional share

PROPORTIONAL SHARE OF ANNUAL WITHDRAWALS



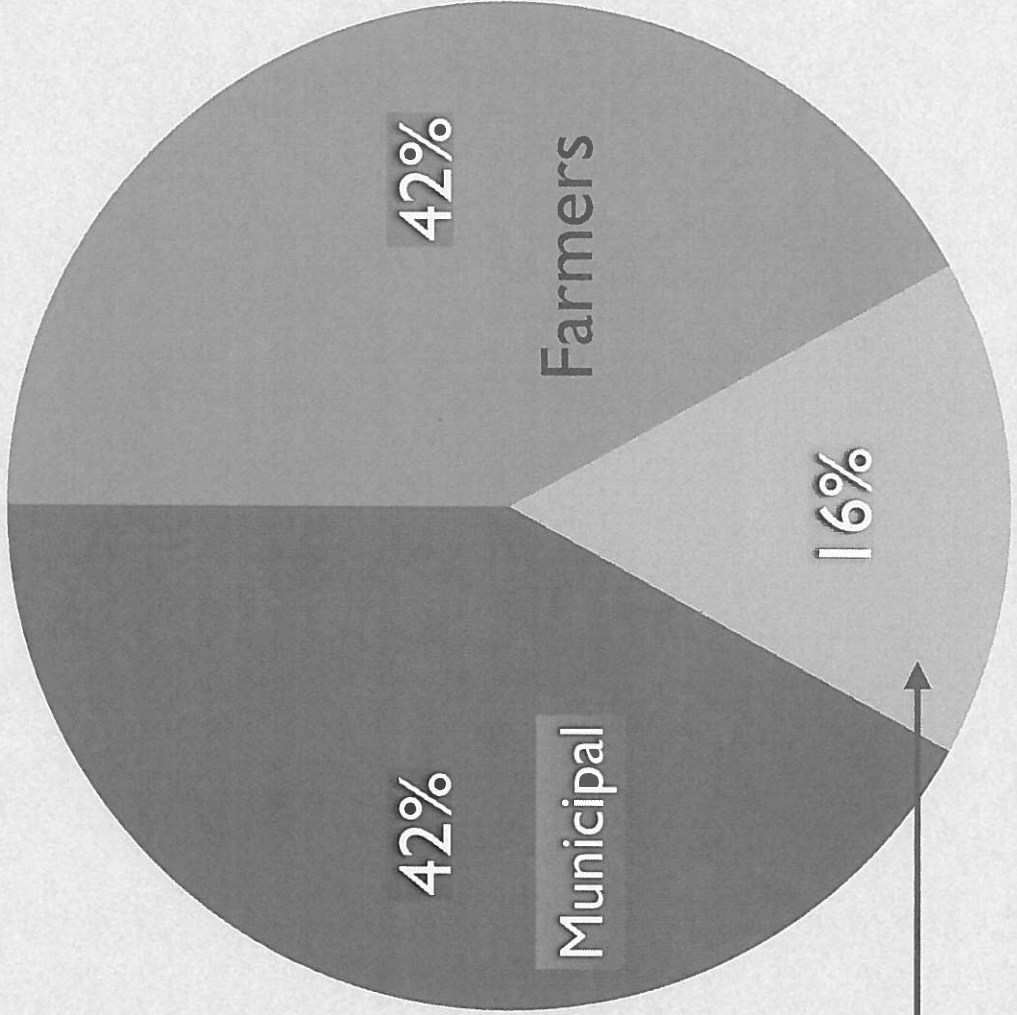
PROPORTIONAL SHARE OF ASSESSED PROPERTY VALUES



PROPORTIONAL SHARE OF OWNED ACREAGE

- unfair
- three largest land owners in Valley - Anza Borrego Desert State Park, Anza-Borrego Foundation and Dennis Avery estate are some of the lowest water users

BLENDING PROPORTIONAL SHARE



Recreation

BLENDDED APPORTIONED COSTS

	FARMERS	RECREATION	MUNICIPAL
SHARE OF TOTAL	\$580,000	\$220,000	\$580,000
ANNUAL SHARE PAID 3-YEARS	\$190,000	\$70,000	\$190,000
ANNUAL SHARE PAID 5-YEARS	\$116,000	\$44,000	\$116,000
COST/ AF OF WITHDRAWALS	\$9.00 - \$14.60	\$11.00 - \$17.50	\$58.00 - \$95.00

MUNICIPAL COSTS (ESTIMATED)

# OF RATEPAYERS	USAGE (AFY AVERAGE)	ANNUAL COST FOR 5-YEARS	MONTHLY COST FOR 5-YEARS
141	0	\$0.00	\$0.00
838	0.33	~\$19.15	~\$1.60
275	0.55	~\$31.90	~\$2.65
350	> 1.00	>\$58.00	>\$4.85

December 9, 2015

To: Board of Directors, Borrego Water District

From: Ad Hoc Water Conservation Policy Recommendations Citizen's Committee (Committee)

Subject: Draft Recommendations from the Committee

As you are aware a Committee composed of John Peterson, Harry Ehrlich, Rick Alexander, Julie Taylor, Jerry Rolwing, Dennis Bostad, Ken O'key, Emily Brooks, and Board members Ray Delahey and Joe Tatusko was formed to provide policy recommendations to your Board regarding District efforts toward water conservation. The committee completed a Mission Statement that was approved by your Board on September 23, 2015 (See Attachment #1).

Following this direction the Committee has been meeting over the last several months to draft recommendations to your Board. The Committee identified three topic areas for review: 1) recommendations for baseline water consumption usage, 2) recommendations for potential incentives and disincentives to encourage water consumption, and 3) a proposed public information plan and strategy to help reduce water consumption.

These draft recommendations are attached for your review and consideration. These include Attachment #2 regarding baseline usage, Attachment #3 addressing incentives and disincentives, and Attachment # 4 addressing public information action items.

It is noted that the committee reached consensus on all of these recommendations, however one committee member expressed opposition to the proposed water use baseline recommendations for residential users.

The Committee solicits your direction and recommendations to revise the draft report so that the final report can be presented to your Board at the January 19, 2016 hearing regarding this topic.

Thank you for your consideration.

November 25, 2015

From: Harry Ehrlich and John Peterson

To: Water Advisory Subcommittee

RE: Issues related to Baseline water use

- 1) The task was assigned to Harry and myself to make some recommendations to the committee regarding baseline water use for the five different type of water users. Baseline is defined as the amount of water that would reflect conservative and efficient water use for the use type.
- 2) It is understood that all baselines values for the different use types would be multiplied by .75 (resulting in a savings of 25%) to determine the tier 1 pricing level.
- 3) All baseline usage determination would be appealable to the Water District General Manager and his determination is appealable to the Borrego Water District Board.
- 4) All water demand is given in acre-feet per year and it is understood that this can be modified later for the summer/winter six month period of times.

The different use types include: **Residential, Multiple Units, Public Agencies, Commercial, and Irrigation.**

Baseline Determination:

Residential:

Typical Residential Use Type is considered to be equivalent to the “normal” ~6,000 sq ft residential lot. This is just a typical residential home (occupancy up to 3 persons) and water demand includes inside and landscaping around the residential unit. **.5 acre-feet per year, which is 218 units of water.**

Atypical Residential Use Type includes residential units which clearly do not meet the definitions as provided within Tier one. Examples of which include: 1) existing large lots with established landscaping, 2) parcels located in communities such as

De Anza and Rams Hill which require extensive landscaping, 3) existing “estates” which cannot be treated as a “typical” residential home.

For atypical residential units it is recommended that the baseline residential usage (for indoor uses) be assigned a use factor of .3 acre-foot and an additional .5 acre-foot for each acre of improved area as of date of implementation of the conservation water rate program. Any additional improvements or added demand of water would be considered above baseline and subject to additional water rate costs to encourage conservation and generate funds to offset the additional use in other manners and programs. This includes any landscaping expansions initiated following the adoption of these guidelines.

Multiple Units:

This class includes condo, mobile home parks and communities where individual residential units are provided with water from a common meter.

Baseline would be determined by usage consumed in 2013. However it is understood that owners have the right to ask for an allowance if occupancy has significantly change (increased by at >10%) within the community.

Public Agencies and Commercial:

This class includes churches, schools, and businesses.

Baseline would be determined by usage consumed in 2013.

Irrigation:

These users include various users which irrigate common areas and/or parks. Baseline is calculated via an irrigation evaluation of acreage and irrigation type with known and established efficient use rates. This could be determined via application of the Irrigation Manual from the County of San Diego or other acceptable source. In place of a specific evaluation it could be possible to use an acceptable use rate of ~5.3 ac-ft/yr/ac for lawns and turf and ~2.5 ac-ft/yr/ac for ornamental plantings.

Note: All uses shall be subject to reduction from prior demands by 25 % to strive to meet the State Mandated Conservation Standard adopted by the SWRCB in May 2015 or until modified or cancelled.

Water Conservation Policy Recommendations Citizens Committee

Mission Statement

Adopted October 9, 2015

The Mission of the Committee is to develop recommendations to the Borrego Water District (District) Board of Directors for set of water conservation policies to help the District meet a State mandated 25% system wide reduction in water consumption by November 19, 2015. These policies may be applied in coordination with a new set of water rates currently under development, and should rely on a combination of incentives and disincentives, including potential penalties for excessive water use. The policies must be fair and equitable, apply appropriately to all five user group classes which the District serves, Single and multi-family residential, commercial, irrigation/HOAs, and public entities; and provide for flexibility if conditions or requirements change over the course of implementation. The policies should acknowledge conservation actions already undertaken by customers, and include recommendations to provide comprehensive public information and water conservation education programs; and for voluntary conservation actions including landscape management and modifications and actions to reduce indoor water use.

Water Conservation Policy Recommendations Citizen's Committee

Figure 1 – 12/16/2015

Potential Water Conservation Incentives and Related Actions (BWD-BOD Discussion Draft)

INCENTIVE	APPROPRIATE for BWD? Used before ++	COST TO DISTRICT ?	OUTSIDE FUNDING AVAILABLE?	WATER SAVINGS L-M-H	PAY OFF POTENTIAL L-M-H	
Irrigation Audits	++Yes	\$200/audit	USBR***	H	H	-High water conservation/low cost
Irrigation Seminars/Public Info. Materials: Eng. & Span.	++ Yes		AWWA/ACWA	H	H	-High conservation payoff -Previous Success
Complimentary Rate Structure	No	None		H	H	-Important! /no cost
Turf replacement	++Yes	\$0-2 per sq'	CA-DWR**	H	H	-High water conservation -Outside funding necessary
Coordinated Public Water Conservation Information Program	Yes	?	USBR***	H	H	-Budget for a more aggressive program -Strategy for community outreach
Conservation Kits	++Yes	Varies	SDGE	H	M	
Info Booth	++Yes	\$400 setup/supplies	Borrego Chamber of Commerce	H	M	-Builds community support
School Essay/Poster Contest	++Yes	\$300 grant	CSDA	M	M	-Builds community support
Conservation Awards	++Yes	\$200		M	M	-Builds community support
Smart Irrigation Controller	++Yes	\$50 rebate	USBR***	M	M	
Replace Irrigation Valves/System Retrofit	++ Yes	20% rebate	USBR***	M	M	
High Efficiency Toilet Rebate	++Yes	\$0-100 rebate	CA-DWR*	L	L	-Low water savings -Family size issue -Outside funding required
High Efficiency Washer Rebate	++ Yes	\$85-400 Rebate	CA-DWR	L	L	-Low water savings -Outside funding required

Actions Below This Line Are Not Recommended							
Rotating Sprinkler Nozzles	No	\$0-4 each, 30 minimum		L	L		
Home/Business Water Outlets, single service gray water system retrofit	No	\$75 rebate		L	L		
Irrigation Rain Sensor	No	\$25 rebate-device		L	L		

* Currently \$6M statewide; up to \$100 of one high efficiency toilet (1.28 gal/flush). Rebate direct to consumer from DWR. District could advertise availability to ratepayers.

** Currently \$24M Statewide; up to \$2 per sq.ft. per eligible household. Rebate directly to homeowner from DWR. District could advertise availability to ratepayers/assist with application.

*** It is suggested that BWD combine these and potentially other actions, into a grant request to the US Bureau of Reclamation for a Water Smart Program grant. The current application period closes January 20, 2016.

Water Conservation Policy Recommendations Citizen's Committee

Figure 2 -- 12/16/2015

District-wide Water Use Restrictions (BWD-BOD Discussion Draft)

(May be associated with a Level 2 Drought Alert which requires an Adopted Drought Response Plan)

- Water between 6PM and 10AM.
- Do not water for at least 48 hours after rain.
- Eliminate irrigation runoff.
- Repair leaks within 24 hours.
- Use recirculated water in fountains and water features.
- Use a hose with a positive shutoff nozzle when washing vehicles.
- Do not wash down hardscape unless required for public safety.
- Restaurants may serve water upon request only.
- Hotels should offer guests the option of not laundering towels and linens daily.

Water Conservation Policy Recommendations Citizen's Committee

Figure 3 – 12/8/2015

Violations and Penalty Structure for Water Overuse (BWD BOD Discussion Draft)

Discussion:

Once BWD determines a Water Use Baseline (see Ehrlich/Peterson memo 11/25/2015), the next step could be to use the Baseline to determine water overuse by an individual customer, as established by a Target Water Allocation (TWA) which is typically something greater than the Baseline to provide the customer some flexibility.

Customers using more than the TWA would be notified of their overage and given one (1) full billing cycle to bring their usage below the TWA. Failure to do so may result in the implementation of the following administrative fines levied as follows, and/or other measures the District may determine.

Here is an EXAMPLE of a Violations and Penalties section from Drought Response Plans currently adapted in San Diego County; it is pretty typical of the ones reviewed for this report. This could be accompanied by a set of Exemptions and Appeals.

EXAMPLE:

Violations and Penalties

Any customer who uses, causes to be used, or permits the use of water in violation of the Drought Response Plan during a Level 2 – Drought Alert condition, or Level 3 – Drought Critical condition, or Level 4 – Drought Emergency condition is guilty of an offense punishable as provided:

- A) Each day that a violation of a prohibited water conservation measure occurs is a separate offense.
- B) Progressive administrative fines may be levied for each violation as follows:
 - 1. First violation of any prohibition – written warning.
 - 2. Second violation of any prohibition within one (1) year -- \$100.
 - 3. Third violation of any prohibition within one (1) year -- \$200 + recovery of administrative and collection costs.
 - 4. Fourth violation of any prohibition within one (1) year -- \$500 + recovery of administrative and collection costs.
 - 5. Each violation thereafter of any prohibition within one (1) year -- \$500 + recovery of administrative and collection costs.
 - 6. Any violation occurring more than one (1) year from the previous will be treated as a first violation.

Should mandatory water use reductions as described be activated by resolution, any person who willfully uses, causes to be used, or permits the use of water in violation of the Drought Response Plan, adopted by Resolution _____ is guilty of an offense punishable as provided herein.

- A. Each violation of this Drought Response Plan may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding one thousand dollars (\$1000-U.S.A. currency), or by both, as provided in California Water Code Section 377.
- B. Willful violations of mandatory conservation measures which may be put into place during any drought level may be enforced by discontinuing service to the property at which the violation occurs, as provided by California Water Code Section 356 et seq.
- C. All remedies provided herein, both civil and criminal, shall be cumulative, and not exclusive.

Community Action Plan for Residential and Business Water Conservation

The following ideas were developed by Julie Taylor, Emily Brooks and Ken Okey to offer a social marketing plan for the residences and businesses here in the Borrego Valley. This plan will take time and substantial effort on a continuing basis to get the message out. Additionally, by using this approach we will demonstrate to other large users (golf courses and agriculture) that we are taking the depletion of our aquifers as a major problem which requires a positive and ongoing solution.

Design a Best Practices brochure. Ken will furnish an initial draft with graphics and words which can then be reworked by Judy and Emily and then presented to the committee. This will be done after reviewing the web for similar material to avoid reinventing the wheel. Precautions will be taken to make sure all of our information is desert related.

Design logo and label for placement at homes and businesses where the owners have decided to conserve water through a series of actions spelled out in a best practices brochure.

Design a small sign (not too small) to be placed on the entrance to restaurants stating something to the effect "This Restaurant Participates in Saving Borrego's Water". Again, we will review material in the public domain first before proceeding.

Encourage desert water irrigation education through the ARTFARM and ABDNHA aimed at Borrego homeowners and given in conjunction with the development of a small teaching syllabus. This course can also discuss steps to take inside the house. It is recommended this approach be given at the field level with a possibility of using the ABDNHA garden area.

Write a monthly article in the Sun about local residence saving water and money through the use of our educational materials.

Design a "renter packet" and encourage use by businesses who are engaged in renting out homes in Borrego.



BORREGO WATER DISTRICT

December 16, 2015

MEMO TO: Board of Directors

FROM: Kim Pitman, Administration Manager

SUBJECT: Board to consider and possibly approve claims received for
"Tier 2" Conservation rate refunds

Since Board approval of Tier 2 refunds on November 18, Twenty-five (25) more claim forms have been completed and returned to the office. I have reviewed and concur with the total refund requested for each claim. Each claim complies with Resolution/Policy NO. 2015-06-01, stating overpayment of water rates, by paying tier 2 rates. The total of these claims comes to \$8,501.72.

Including the above claim, the total paid out to date is \$40,758.89.

Thank you for your consideration in this matter.

	Contract / Project	January	February	March	April	May
	PAYMENTS					
1	T2 Borrego	1/1/15: Pay spare cost in advance			Raftelis spare capacity cost analysis	5/1/15 Notice of 2015/2016 spare capacity due.
2	P & I Payment for ID4 COP's			1st half of payments due		
3	Compass Bank		2016 - payment due March 1st.			2016 - payment due June 1st.
4	CONTRACTS					
5	American Red Cross-can cancel any time for any reason					
6	Club Circle (Cameron)		option to renew lease by 2/28/2017			
7	Green Desert Landscape		discuss w/ Bob the option of continuing with contract 2/28/2017			
8	Xerox					
9	Secap - postage machine				4/1/2017 send letter of cancellation if desired	
10	San Diego Mailing Solutions (Annual maintenance - postage and stuffer machine)					
11	Ramona Disposal - Club Circle					
12	Ramona Disposal - BWD Dumpsters					
13	REPORTS					
14	CASGEM				Submit CASGEM water level data	
15	CCR					
16	Cameron Bros. Water Usage Report (golf course) to county					
17	Santago Estate					
18	Annual EAR Report (CDHS)			Due 3/31 for previous year		
19	Check fallow property for water usage					
20	ADMINISTRATIVE					
21	Audit					
22	Budget			Pump check	CIP meeting, draft budget document	Final Budget document / FY Rate Resolution
23	Business Plan	Raftelis begins rate analysis	February 2016 -Update Development Fees (water credits & infrastructure buy-in costs for new connections)	Prop 218 rate for FY 2017 - Fy 2021 public hearing		FY Budget and new rates approved
24	Groundwater Sustainability Plan (GSP)	District Meeting Jan. 20 to discuss policy recommendations, DRAFT MOU between County & District. Submit boundary adjustment to DWR	District Meeting February 17th to discuss policy recommendations, Draft MOU of County and District with Coalition; proposal for mechanism(s) to pay for GSP development		District Meeting March 17th to discuss policy recommendations, Draft MOU between County and District; DRAFT MOU of County and District with Coalition; proposal for mechanism(s) to pay for GSP development	
25	Investment Policy					
26	Special Assessments / tax bill resolutions-Taussig					
27	Town Hall Meeting			March 2016'		
28	Water Credit Policy			2015- Check if pricing needs to be adjusted (moved to due diligence)		

	June	July	August	September	October	November	December
1	6/15/15: commitment of annual spare capacity due from T2 6/30/15: T2 to fallow 200 acre feet 6/30/15: T2 to pay BWD \$110 per a/f over 800.	7/1/17: establish water budget					12/31/14: T2 to purchase land to fallow 12/31/18 lease expires Send invoice for Spare Capacity
2				2nd half of payments			
3		1st payment due September 1st			Payment due December 1st.		
4							
5							
6	Lease expires 6/30/2017						
7	Agreement expires 6/30/2017	Cost of Water Adjustment each July 1st. With Cameron					
8		Lease contract expires 7/2020					
9		lease expires 7/2017					
10			Annual maintenance contract expires 10/6/16				
11			contact RDS re: contract renewal 2015				rate valid until 12/2015
12			contact RDS re: contract renewal 2015				rate valid until 12/2015
13							
14						Submit CASGEM water level data	
15					10/1/15 Mail CCR Certification form		
16					Send to County DPLU by 10/31		
17	Occupancy report due						
18							
19				Annual fallow property check			
20							
21			Begin audit	Review of draft audit report			
22							
23		New rates go into effect		March 2015-Identify & Implement Mechansim to pay for GSP costs. March 2016- Update rate structure & water, sewer & WWT rates			
24				DRAFT MOU of County and District with Coalition; proposal for mechanism(s) to pay for GSP development			Agree on GSP funding mechanism; start GSP development
25	Investment polices restated						
26	Special Assessments resolutions due						
27							
28							

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ITEM III A

FINANCIALS

	C	D	BO	BP	BQ	BR	BS
1	BWD		5/27/2015				CASH FLOW
2	CASH FLOW		ADOPTED	ACTUAL	PROJECTED	ACTUAL	YTD + PROJ MONTHS
3	2015-2016		BUDGET	NOVEMBER	NOV	YTD	PROJECTED
4			2015-2016	2015	2015	2015-2016	2015-2016
5	REVENUE						
6	WATER REVENUE						
7	Residential Water Sales		932,150	77,538	81,976	399,545	894,089
8	Commercial Water Sales		128,750	10,018	12,342	54,480	125,520
9	Irrigation Water Sales		143,170	12,209	14,318	68,315	137,286
10	GWM Surcharge		117,420	9,623	10,588	50,388	112,171
11	Water Sales Power Portion		373,890	31,134	34,225	163,157	356,043
12	Drought Penalty-1%		(9,045)	(1,405)	(1,489)	(7,359)	(1,207)
13	Drought Rates-5.5%		(40,781)			-	(40,781)
14	TOTAL WATER COMMODITY REVENUE:		1,645,554	140,523	151,960	728,525	1,575,762
15							
16							
17	Readiness Water Charge		1,335,180	112,399	112,880	542,011	1,332,171
19	RH Golf Course surplus capacity lease		0	0	0	9,630	9,630
20	Meter Installation		0	0	0	6,876	6,876
22	Reconnect Fees		1,700	340	340	1,020	2,040
23	Backflow Testing/Installation		6,500	0	0	-	6,500
24	Bulk Water Sales		0	0	0	241	241
25	Penalty & Interest Water Collection		9,600	1,447	800	6,659	12,259
26	TOTAL WATER REVENUE:		2,998,534	254,709	265,980	1,278,215	2,928,732
27		Receivables					
28	PROPERTY ASSESSMENTS/AVAILABILITY CHARGES	as of 12/08/15					
29	641500 1% Property Assessments -	54,675	64,000	2,124	2,124	4,890	62,661
30	641502 Property Assess wtr/swr/flid -	100,037	60,000	1,617	1,617	2,702	59,756
32	641501 Water avail Standby -	72,349	84,000	5,063	5,063	7,071	85,748
34	641504 ID 3 Water Standby (La Casa)	30,681	34,000	756	756	884	33,761
35	641503 Pest standby	16,368	17,000	239	239	508	15,725
36	TOTAL PROPERTY ASSES/AVAIL CHARGES:	274,109	259,000	9,799	9,799	16,054	257,650
37							
38	SEWER SERVICE CHARGES						
39	Town Center Sewer Holder fees		171,240	14,274	14,270	71,432	171,322
40	Town Center Sewer User Fees		39,960	3,330	3,330	16,650	39,960
41	Sewer user Fees		333,900	27,860	27,825	137,832	332,607
45	TOTAL SEWER SERVICE CHARGES:		545,100	45,464	45,425	225,953	543,928
46							
47	OTHER INCOME						
51	Miscellaneous Income (net csd fee/JPIA rebate/check free)			45	0	888	888
52	Water Credits income			0	0	1,000	1,000
56	Interest Income		80	0	2	24	81
57	TOTAL OTHER INCOME:		80	45	2	1,912	1,969
58							
59	TOTAL INCOME:		3,802,713	310,017	321,206	1,546,240	3,756,385
60							
61	CASH BASIS ADJUSTMENTS						
62	Decrease (Increase) in Accounts Receivable			5,924	0	(27,838)	(27,838)
64	Other Cash Basis Adjustments-Tier 2 refund			(24,251)	0	(31,407)	(31,407)
65	TOTAL CASH BASIS ADJUSTMENTS:			(18,327)	0	(59,245)	(59,245)
66							
67	TOTAL INCOME RECEIVED:		3,802,713	291,690	321,206	1,486,995	3,697,140

	BT	BU	BV	BW	BX	BY	BZ
1							
2	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
3	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
4	2015	2016	2016	2016	2016	2016	2016
5							
6							
7	75,160	58,801	54,142	56,555	84,844	67,841	97,201
8	8,486	10,002	9,023	10,208	12,902	10,324	10,096
9	8,351	7,704	6,663	7,425	12,736	11,672	14,420
10	7,830	6,942	6,993	7,366	10,876	10,888	10,888
11	25,372	22,514	22,672	23,874	33,590	31,743	33,122
12	(1,207)						
13		(5,621)	(5,265)	(5,592)	(8,315)	(7,079)	(8,910)
14	123,992	100,341	94,228	99,837	146,632	125,389	156,817
15							
16							
17	112,880	112,880	112,880	112,880	112,880	112,880	112,880
19	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0
22	0	340	0	340	0	340	0
23	0	6,500	0	0	0	0	0
24	0	0	0	0	0	0	0
25	800	800	800	800	800	800	800
26	237,672	220,861	207,908	213,857	260,312	239,409	270,497
27							
28							
29	21,205	13,843	1,906	2,102	18,015	500	200
30	5,115	47,856	1,018	693	1,072	1,000	300
32	22,571	29,014	2,438	3,015	4,363	15,277	2,000
34	3,922	14,052	346	889	1,046	12,132	490
35	2,936	6,354	329	416	2,063	2,597	523
36	55,749	111,118	6,038	7,114	26,558	31,506	3,513
37							
38							
39	14,270	14,270	14,270	14,270	14,270	14,270	14,270
40	3,330	3,330	3,330	3,330	3,330	3,330	3,330
41	27,825	27,825	27,825	27,825	27,825	27,825	27,825
45	45,425	45,425	45,425	45,425	45,425	45,425	45,425
46							
47							
51	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0
56	2	16	3	2	16	2	16
57	2	16	3	2	16	2	16
58							
59	<u>338,848</u>	<u>377,421</u>	<u>259,375</u>	<u>266,398</u>	<u>332,311</u>	<u>316,342</u>	<u>319,451</u>
60							
61							
62	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0
66							
67	<u>338,848</u>	<u>377,421</u>	<u>259,375</u>	<u>266,398</u>	<u>332,311</u>	<u>316,342</u>	<u>319,451</u>

C	D	BO	BP	BQ	BR	BS
1	BWD	5/27/2015				CASH FLOW
2	CASH FLOW	ADOPTED	ACTUAL	PROJECTED	ACTUAL	YTD + PROJ MONTHS
3	2015-2016	BUDGET	NOVEMBER	NOV	YTD	PROJECTED
4		2015-2016	2015	2015	2015-2016	2015-2016
68	EXPENSES					
69						
70	MAINTENANCE EXPENSE					
71	R & M Buildings & Equipment	185,000	3,403	15,000	49,966	179,966
72	R & M - WWTP	132,000	4,041	16,000	18,000	110,000
73	Telemetry	10,000	0	850	1,050	6,800
74	Trash Removal	4,000	264	350	1,495	3,945
75	Vehicle Expense	18,000	3,395	1,500	13,601	24,101
76	Fuel & Oil	25,000	1,636	2,000	9,898	24,398
77	TOTAL MAINTENANCE EXPENSE:	374,000	12,739	35,700	94,011	349,211
78						
79	PROFESSIONAL SERVICES EXPENSE					
80	Tax Accounting (Taussig)	3,000	0	0	1,055	2,555
81	Administrative Services (ADP/Bank Fees)	6,000	199	500	2,717	6,217
82	Audit Fees	14,439	0	0	14,439	14,439
83	Computer billing-TBD	9,900	2,375	825	3,380	9,155
84	Consulting/Technical/Contract Labor	1,200	0	100	50	750
85	Engineering	35,000	30,271	3,000	94,073	115,073
86	District Legal Services	30,000	1,172	2,500	3,969	21,469
87	Testing/lab work	12,000	1,110	1,000	3,921	10,921
88	Regulatory Permit Fees	33,000	6,799	7,350	25,034	36,551
89	TOTAL PROFESSIONAL SERVICES EXPENSE:	144,539	41,926	15,275	148,638	217,130
90						
91	INSURANCE/DEBT EXPENSE					
92	ACWA Insurance	59,000	0	0	24,670	59,670
93	Workers Comp	16,000	0	0	4,016	16,016
94	COP 2008 Installment	254,525		0	198,838	254,525
95	Viking Ranch Debt Payment	143,312	35,852	35,852	71,724	143,468
96	TOTAL INSURANCE/DEBT EXPENSE:	472,837	35,852	35,852	299,247	473,679
97						
98	PERSONNEL EXPENSE					
99	Board Meeting Expense (board stipend/board secretary)	16,500	1,535	1,500	5,010	15,510
100	Salaries & Wages (gross)	761,000	66,019	67,350	315,461	756,411
101	Taxes on Payroll	20,000	1,145	945	6,399	21,328
102	Medical Insurance Benefits	185,000	18,986	15,093	100,562	194,980
103	Calpers Retirement Benefits	169,200	7,244	8,270	104,179	162,069
104	Salaries & Wages contra account	(14,520)	(2,155)	(1,320)	(6,184)	(15,424)
105	Conference/Conventions/Training/Seminars	7,000	310	395	4,274	6,917
106	TOTAL PERSONNEL EXPENSE:	1,144,180	93,084	92,233	529,700	1,141,791
107						
108	OFFICE EXPENSE					
109	Office Supplies	18,000	1,703	1,500	7,704	18,204
110	Office Equipment/ Rental/Maintenance Agreements	25,000	1,810	3,288	12,810	25,110
111	Postage & Freight	13,000	6	75	4,086	12,686
112	Taxes on Property	2,500	141	0	2,388	2,388
113	Telephone/Answering Service	8,400	779	700	3,605	8,505
114	Dues & Subscriptions	3,600	0	0	116	3,152
115	Printing, Publications & Notices	1,000	0	0	816	1,574
116	Uniforms	5,400	359	450	2,230	5,380
117	OSHA Requirements/Emergency preparedness	4,000	274	400	578	2,778
118	TOTAL OFFICE EXPENSE:	80,900	5,072	6,413	34,333	79,778
119						
120	UTILITIES EXPENSE					
121	Pumping-Electricity	430,000	30,311	33,000	154,264	361,264
122	Office/Shop Utilities	19,000	1,370	1,321	13,104	21,817
123	Cellular Phone	7,500	594	625	3,495	7,870
124	TOTAL UTILITIES EXPENSE:	456,500	32,275	34,946	170,863	390,951
125						
126	TOTAL EXPENSES:	2,672,956	220,948	220,419	1,276,792	2,652,539
127						
128	CASH BASIS ADJUSTMENTS					
129	Decrease (Increase) in Accounts Payable		(42,798)	0	29,521	29,521
130	Increase (Decrease) in Inventory		5,395	0	12,982	12,982
131	Other Cash Basis Adjustments-Loss on water credit sold			0	-	0
132	TOTAL CASH BASIS ADJUSTMENTS:		(37,403)	0	42,502	42,502
133						
134	TOTAL EXPENSES PAID:	2,672,956	183,544	220,419	1,319,295	2,695,042
135						
136	NET CASH FLOW (O&M)	1,129,758	108,145	100,787	167,700	1,002,098

	BT	BU	BV	BW	BX	BY	BZ
1							
2	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
3	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
4	2015	2016	2016	2016	2016	2016	2016
68							
69							
70							
71	15,000	15,000	15,000	15,000	15,000	40,000	15,000
72	6,000	6,000	6,000	56,000	6,000	6,000	6,000
73	850	850	850	800	800	800	800
74	350	350	350	350	350	350	350
75	1,500	1,500	1,500	1,500	1,500	1,500	1,500
76	2,500	2,000	2,000	2,000	2,000	2,000	2,000
77	26,200	25,700	25,700	75,650	25,650	50,650	25,650
78							
79							
80	0	0	0	0	0	0	1,500
81	500	500	500	500	500	500	500
82	0	0	0	0	0	0	0
83	825	825	825	825	825	825	825
84	100	100	100	100	100	100	100
85	3,000	3,000	3,000	3,000	3,000	3,000	3,000
86	2,500	2,500	2,500	2,500	2,500	2,500	2,500
87	1,000	1,000	1,000	1,000	1,000	1,000	1,000
88	0	0	1,250	4,722	422	3,000	2,123
89	7,925	7,925	9,175	12,647	8,347	10,925	11,548
90							
91							
92	0	0	0	35,000	0	0	0
93	4,000	0	0	4,000	0	0	4,000
94	0	0	0	55,688	0	0	0
95			35,872			35,872	
96	4,000	0	35,872	94,688	0	35,872	4,000
97							
98							
99	1,500	1,500	1,500	1,500	1,500	1,500	1,500
100	64,750	61,750	61,750	64,650	61,750	63,150	63,150
101	1,050	5,000	2,390	1,078	1,612	2,200	1,600
102	15,093	15,325	16,000	16,000	16,000	16,000	0
103	8,270	8,270	8,270	8,270	8,270	8,270	8,270
104	(1,320)	(1,320)	(1,320)	(1,320)	(1,320)	(1,320)	(1,320)
105	479	48	790	500	100	600	126
106	89,822	90,573	89,380	90,678	87,912	90,400	73,326
107							
108							
109	1,500	1,500	1,500	1,500	1,500	1,500	1,500
110	1,584	1,665	1,552	2,000	2,000	1,500	2,000
111	2,100	50	2,100	75	2,100	75	2,100
112	0	0	0	0	0	0	0
113	700	700	700	700	700	700	700
114	0	248	134	200	2,360	50	45
115	94	353	94	116	0	0	100
116	450	450	450	450	450	450	450
117	400	400	250	250	300	300	300
118	6,828	5,366	6,780	5,291	9,410	4,575	7,195
119							
120							
121	33,813	27,000	25,554	25,633	30,000	32,000	33,000
122	1,030	1,543	1,165	1,286	1,079	1,100	1,511
123	625	625	625	625	625	625	625
124	35,468	29,168	27,344	27,544	31,704	33,725	35,136
125							
126	<u>170,242</u>	<u>158,732</u>	<u>194,251</u>	<u>306,497</u>	<u>163,022</u>	<u>226,147</u>	<u>156,855</u>
127							
128							
129	0	0	0	0	0	0	0
130	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0
133							
134	<u>170,242</u>	<u>158,732</u>	<u>194,251</u>	<u>306,497</u>	<u>163,022</u>	<u>226,147</u>	<u>156,855</u>
135							
136	<u>168,605</u>	<u>218,689</u>	<u>65,123</u>	<u>(40,099)</u>	<u>169,289</u>	<u>90,195</u>	<u>162,596</u>

	C	D	BO	BP	BQ	BR	BS
1	BWD		5/27/2015				CASH FLOW
2	CASH FLOW		ADOPTED	ACTUAL	PROJECTED	ACTUAL	YTD + PROJ MONTHS
3	2015-2016		BUDGET	NOVEMBER	NOV	YTD	PROJECTED
4			2015-2016	2015	2015	2015-2016	2015-2016
137	NON O & M EXPENSES						
138	Water						
139	Twin Tanks, 1970's-inside coating (rescheduled into 2015-2016)		125,000			-	125,000
140	Pickup		30,000			28,784	28,784
141	Backhoe		150,000			-	150,000
142	ID 5-5, 200 HP		10,000			-	10,000
143	Pipeline-Bending Elbow Road-Second Half		55,590			-	55,590
145	Pump and Cleaning Well ID4-4		70,000			-	70,000
146	Booster Station Motors-Country Club & ID1 station 1 #2 30 hp		8,000			14,054	14,054
148	Air Quality Compliance-Wilcox Well		37,000			-	37,000
151	Sewer						
153	WWTP-Portable engine driven trash pump/Backup generator		92,000			-	92,000
155	WWTP-Rehab grit chamber		6,000			-	6,000
157	WWTP-Rehab Clarifier/pump/bearings		66,500			6,709	66,500
159	WWTP-Solar Project		205,088		39,179	118,620	205,151
162	GWM						
164	GWM -legal/Misc.-prop 1 grant/USGS		60,000	457	5,000	25,837	60,837
165	District portion of GSP		80,000	22,351	6,500	22,351	80,000
172	218 Process		110,000		9,200	-	110,000
177	OTHER						
181	GPS Locating System		12,000			-	12,000
183	New Computer for server and new Software system		85,500	2,889		87,393	95,973
191	TOTAL NON O&M EXPENSES		1,202,678	25,697	59,879	303,749	1,218,890
192							
193	CASH RECAP						
194	Cash beginning of period		2,611,448	2,633,892	2,525,998	2,852,387	2,852,387
195	Net Cash Flow (O&M)		1,129,758	108,145	100,787	167,700	1,002,098
196	Total Non O&M Expenses		(1,202,678)	(25,697)	(59,879)	(303,749)	(1,218,890)
197	CASH AT END OF PERIOD		2,538,528	2,716,341	2,566,906	2,716,341	2,635,596
198							
199	RESERVES						
200	Debt Reserves		(400,000)	(400,000)	(400,000)	(400,000)	(400,000)
201	Working Capital (4 months)		(900,000)	(900,000)	(900,000)	(900,000)	(900,000)
203	Contingency Reserves (10% O&M)		(270,000)	(270,000)	(270,000)	(270,000)	(270,000)
204	Rate Stabilization Reserves		(480,000)	(480,000)	(480,000)	(480,000)	(480,000)
205	Available for Emergency Reserves		488,528	666,341	516,906	666,341	585,596
206	Target Emergency Reserves		2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
207	Emergency Reserves Deficit		(1,511,472)	(1,333,659)	(1,483,094)	(1,333,659)	(1,414,404)
208							
209							
210	SIGNIFICANT ITEMS			ACTUAL	PROJECTED		
211							
212	Total Maintenance Expense			12,739	35,700	(22,961)	Projected more than spent
213							
214	Engineering Expense			30,271	3,000	27,271	\$23,000 RHGC
215	District portion of GSP			22,351	6,500	15,851	Projected July-Oct
216				65,361	45,200	20,161	first month exp

	BT	BU	BV	BW	BX	BY	BZ
1							
2	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
3	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
4	2015	2016	2016	2016	2016	2016	2016
137							
138							
139					125,000		
140							
141							150,000
142	10,000						
143			35,000	20,590			
145		35,000		35,000			
146							
148		37,000					
151							
153	92,000						
155		6,000					
157	20,000		6,500		20,000		13,291
159	63,531	23,000					
162							
164	5,000	5,000	5,000	5,000	5,000	5,000	5,000
165	8,500	8,500	8,500	8,500	8,500	7,500	7,649
172	5,000	17,000	17,000	17,000	18,000	18,000	18,000
177							
181		12,000					
183		5,720	2,860				
191	204,031	149,220	74,860	86,090	176,500	30,500	193,940
192							
193							
194	2,716,341	2,680,915	2,750,384	2,740,647	2,614,458	2,607,247	2,666,942
195	168,605	218,689	65,123	(40,099)	169,289	90,195	162,596
196	(204,031)	(149,220)	(74,860)	(86,090)	(176,500)	(30,500)	(193,940)
197	2,680,915	2,750,384	2,740,647	2,614,458	2,607,247	2,666,942	2,635,596
198							
199							
200	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)	(400,000)
201	(900,000)	(900,000)	(900,000)	(900,000)	(900,000)	(900,000)	(900,000)
203	(270,000)	(270,000)	(270,000)	(270,000)	(270,000)	(270,000)	(270,000)
204	(480,000)	(480,000)	(480,000)	(480,000)	(480,000)	(480,000)	(480,000)
205	630,915	700,384	690,647	564,458	557,247	616,942	585,596
206	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
207	(698,427)	(506,450)	(401,877)	(575,451)	(1,442,753)	(1,383,058)	(1,414,404)
208							
209							
210							
211							
212							
213							
214							
215							
216							



BORREGO WATER DISTRICT

	BALANCE SHEET		BALANCE SHEET		MONTHLY
	November 30, 2015		October 31, 2015		CHANGE
	(unaudited)		(unaudited)		(unaudited)
ASSETS:					
CURRENT ASSETS					
Cash and cash equivalents	\$	2,716,340.40	\$	2,633,892.18	\$ 82,448.22
Accounts receivable from water sales and sewer charges	\$	378,483.20	\$	384,407.06	\$ (5,923.86)
Inventory	\$	136,153.17	\$	130,758.17	\$ 5,395.00
Prepaid expenses	\$	33,692.09	\$	33,692.09	\$ -
TOTAL CURRENT ASSETS	\$	3,264,668.86	\$	3,182,749.50	\$ 81,919.36
RESTRICTED ASSETS					
Debt Service:					
Deferred amount of COP Refunding	\$	122,550.33	\$	122,550.33	\$ -
Unamortized bond issue costs	\$	85,965.97	\$	85,965.97	\$ -
Viking Ranch Refinance issue costs	\$	56,000.00	\$	56,000.00	\$ -
Deferred Outflow of Resources-calPERS	\$	138,759.00	\$	138,759.00	\$ -
Total Debt service	\$	403,275.30	\$	403,275.30	\$ -
Trust fund:					
Investments with fiscal agent -CFD 2007-1	\$	88,507.65	\$	88,507.65	\$ -
Total Trust fund	\$	88,507.65	\$	88,507.65	\$ -
TOTAL RESTRICTED ASSETS	\$	491,782.95	\$	491,782.95	\$ -
UTILITY PLANT IN SERVICE					
Land	\$	2,321,191.65	\$	2,321,191.65	\$ -
Flood Control Facilities	\$	4,319,603.58	\$	4,319,603.58	\$ -
Capital Improvement Projects	\$	479,223.59	\$	476,334.68	\$ 2,888.91
Sewer Facilities	\$	5,533,268.63	\$	5,533,268.63	\$ -
Water facilities	\$	10,620,984.07	\$	10,620,984.07	\$ -
Pipelines, wells and tanks	\$	151,699.02	\$	151,699.02	\$ -
General facilities	\$	1,006,881.13	\$	1,006,881.13	\$ -
Equipment and furniture	\$	312,133.38	\$	312,133.38	\$ -
Vehicles	\$	591,420.89	\$	591,420.89	\$ -
Accumulated depreciation	\$	(11,581,213.50)	\$	(11,581,213.50)	\$ -
NET UTILITY PLANT IN SERVICE	\$	13,755,192.44	\$	13,752,303.53	\$ 2,888.91
OTHER ASSETS					
Water rights -ID4	\$	185,000.00	\$	185,000.00	\$ -
TOTAL OTHER ASSETS	\$	185,000.00	\$	185,000.00	\$ -
TOTAL ASSETS	\$	17,696,644.25	\$	17,611,835.98	\$ 84,808.27

Balance sheet continued

	BALANCE SHEET November 30, 2015 (unaudited)	BALANCE SHEET October 31, 2015 (unaudited)	MONTHLY CHANGE (unaudited)
LIABILITIES:			
CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS			
Accounts Payable	\$ 130,370.12	\$ 87,572.14	\$ 42,797.98
Accrued expenses	\$ 113,983.36	\$ 113,983.36	\$ -
Deposits	\$ 22,943.75	\$ 22,943.75	\$ -
TOTAL CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS	\$ 267,297.23	\$ 224,499.25	\$ 42,797.98
CURRENT LIABILITIES PAYABLE FOM RESTRICTED ASSETS			
Debt Service:			
Accounts Payable to CFD 2007-1	\$ 88,507.65	\$ 88,507.65	\$ -
Tier 2 Rate Refund Payable	\$ 139,937.83	\$ 164,188.63	\$ (24,250.80)
TOTAL CURRENT LIABILITIES PAYABLE FROM RESTRICTED ASSETS	\$ 228,445.48	\$ 252,696.28	\$ (24,250.80)
LONG TERM LIABILITIES			
2008 Certificates of participation	\$ 2,475,000.00	\$ 2,475,000.00	\$ -
BBVA Compass Bank Loan	\$ 1,082,237.81	\$ 1,104,442.20	\$ (22,204.39)
Net Pension Liability-calPERS	\$ 699,055.00	\$ 699,055.00	\$ -
Deferred Inflow of Resources-calPERS	\$ 160,113.00	\$ 160,113.00	\$ -
TOTAL LONG TERM LIABILITIES	\$ 4,416,405.81	\$ 4,438,610.20	\$ (22,204.39)
TOTAL LIABILITIES	\$ 4,912,148.52	\$ 4,915,805.73	\$ (3,657.21)
FUND EQUITY			
Contributed equity	\$ 9,611,814.35	\$ 9,611,814.35	\$ -
Retained Earnings:			
Unrestricted Reserves/Retained Earnings	\$ 3,172,681.38	\$ 3,084,215.90	\$ 88,465.48
Total retained earnings	\$ 3,172,681.38	\$ 3,084,215.90	\$ 88,465.48
TOTAL FUND EQUITY	\$ 12,784,495.73	\$ 12,696,030.25	\$ 88,465.48
TOTAL LIABILITIES AND FUND EQUITY	\$ 17,696,644.25	\$ 17,611,835.98	\$ 84,808.27



BORREGO WATER DISTRICT

TREASURER'S REPORT NOVEMBER, 2015

Bank Balance	Carrying Value	Fair Value	% of Portfolio				Valuation Source
			Current Actual	Rate of Interest	Maturity		

Cash and Cash Equivalents:

Demand Accounts at WFB/UB/LAIF

WFB/UB General Account/Petty Cash	\$ 2,702,932	\$ 2,685,060	\$ 2,685,060	98.85%	0.00%	N/A	UB
Payroll Account	\$ 12,317	\$ 10,282	\$ 10,282	0.38%	0.01%	N/A	UB
LAIF	\$ 20,999	\$ 20,999	\$ 20,999	0.77%	0.22%	N/A	LAIF

Total Cash and Cash Equivalents	\$ 2,736,248	\$ 2,716,340	\$ 2,716,340	100.00%			
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Facilities District No. 2007-1

First American Treas Obligation -US BANK	\$ 88,508	\$ 88,508	\$ 88,508				
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Total Cash, Cash Equivalents & Investments	\$ 2,824,756	\$ 2,804,848	\$ 2,804,848				
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Cash and investments conform to the District's Investment Policy statement filed with the Board of Directors on June 24, 2015.

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

Sources of valuations are Umpqua Bank, Wells Fargo Bank (WFB), LAIF and US Trust Bank.



 Kim Pitman, Administration Manager



BORREGO WATER DISTRICT

To: BWD Board of Directors
 From: Kim Pitman
 Subject: Consideration of the Disbursements and Claims Paid
 Month Ending November, 2015

Vendor disbursements paid during this period: **\$ 223,528.74**

Significant items:

San Diego Gas & Electric	\$	31,186.78
CalPERS Payments	\$	10,041.83
Medical Health Benefits	\$	20,275.23
BBVA Compass Bank quarterly Debt Service	\$	35,852.08
SWRCB-Annual Permit Fees	\$	6,787.00

Capital Projects/Fixed Asset Outlays:

Springbrook/Accela -Computer software upgrade
 Server upgrades
 BSE Engineering/Universal Racking-Solar WWTP/LTS Solar

Total Professional Services for this Period:

Downey Brand, Attorneys	GWM	\$	450.00
Dudek-to be reimbursed	RHGC	\$	22,961.00
	GWM	\$	3,155.06
	GSP	\$	16,976.40
		\$	43,092.46
Dynamic Consulting Engineers	WWTP	\$	2,655.00
McDougal Love Eckis	Legal-general	\$	1,171.50
Raftelis Financial	GSP	\$	5,375.00

Payroll for this Period:

Gross Payroll	\$	66,018.22
Employer Payroll Taxes and ADP Fee	\$	1,334.93
Total	\$	67,353.15

BORREGO WATER DISTRICT
FOR BOARD CONSIDERATION AND APPROVAL
NOVEMBER 30, 2015

GENERAL ACCOUNT

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
30172	12/08/15	U.S.BANK CORPORATE PAYMENT SYS SEE INVOICE FOR DETAILS SEE INVOICE FOR DETAILS	5,756.53
30159	12/01/15	ABILITY ANSWERING/PAGING SER ANSWERING SERVICE	236.30
30160	12/01/15	ACCELA, INC. #774375 HP9000 PROGRAMMING	2,375.00
30192	12/09/15	CB&T ACWA-JPIA HEALTH COVERAGE FOR DECEMBER	20,275.23
30110	11/18/15	AFLAC EMPLOYEE PAID SUPPLEMENTAL	1,889.44
30173	12/08/15	AMERICAN BACKFLOW SPECIALTIES BACKFLOW SPARE PARTS	81.26
30174	12/08/15	AMERICAN LINEN INC. ACCOUNTS RECEIVABLE	359.49
30121	11/19/15	ANN KEENAN TIER 2 REFUND	150.60
30122	11/19/15	ANN WHITE TIER 2 REFUND	679.80
30175	12/08/15	AT CONFERENCE CONFERENCE CALLS	6.94
30176	12/08/15	AT&T MOBILITY EMERGENCY PHONES	594.27
30177	12/08/15	AT&T-CALNET 2 PHONES	348.14
30123	11/19/15	BARBARA TARTRE TIER 2 REFUND	472.82
30098	11/12/15	BBVA COMPASS INSTALLMENT ON LOAN 00-1000689-0, LOAN #18	35,852.08
30161	12/01/15	BENITO ARTEAGA REIMBURSE FOR WORK BOOTS	113.39
30178	12/08/15	BORREGO SPRINGS BOTTLED WATER WATER FOR CREW	8.00
30111	11/18/15	PUBLIC EMP'S RETIREMENT SYSTEM EMPLOYEE RETIRMENT BENEFITS	4,883.13
30162	12/01/15	PUBLIC EMP'S RETIREMENT SYSTEM EMPLOYEE RETIRMENT BENEFITS	5,158.70
30124	11/19/15	N.R. CRISS FAMILY TRUST TIER 2 REFUND	58.12
30125	11/19/15	DAN PERRY TIER 2 REFUND	262.79
30126	11/19/15	DAVID LEIBERT TIER 2 REFUND	1,321.21
30179	12/08/15	JAMES G HORMUTH/DBA TRUE VALUE ACCOUNTS RECEIVABLE	190.29
30099	11/12/15	DEBBIE MORETTI PEST CONTROL	113.00
30127	11/19/15	DONALD BLAIKIE TIER 2 REFUND	352.74

BORREGO WATER DISTRICT
 FOR BOARD CONSIDERATION AND APPROVAL
 NOVEMBER 30, 2015

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
30112	11/18/15	DOWNEY BRAND PROFESSIONAL SERVICES	450.00
30163	12/01/15	DUDEK PROFESSIONAL SERVICES RHGC DEMAND OFFSET WATER CREDITS POLICY PROFESSIONAL SERVICES INITIAL SUPPORT TO DEVELOP BVGB/GSP	43,092.46
30180	12/08/15	DYNAMIC CONSULTING ENGINEERS RECORD OF SURVEY WWTP	2,655.00
30181	12/08/15	E.S. BABCOCK & SONS, INC. WATER SAMPLES TO LAB	1,050.00
30128	11/19/15	FRANK HUNECK TIER 2 REFUND	53.01
30129	11/19/15	GAIL ALLEN TIER 2 REFUND	426.42
30182	12/08/15	GREEN DESERT LANDSCAPE MANAGEMENT FEE CLUB CIRCLE GC NOVEMBER	4,770.00
30130	11/19/15	GREGORY STUMPF TIER 2 REFUND	458.83
30131	11/19/15	H G SCHUETTE TIER 2 REFUND	346.53
30100	11/12/15	HACH COMPANY CHLORINE TEST KITS	487.14
30132	11/19/15	HAZEL SPENCER TIER 2 REFUND	1,308.33
30183	12/08/15	HOME DEPOT CREDIT SERVICES SEE INVOICE FOR DETAILS	826.46
30133	11/19/15	HOMER HUDSON TIER 2 REFUND	34.51
30134	11/19/15	HUGH GREENWAY, MD TIER 2 REFUND	452.05
30135	11/19/15	JACK & JOANNE SIMS TIER 2 REFUND	88.95
30101	11/12/15	BORREGO AUTO PARTS, INC. TIRES 2008 GMC YUKON BATTERY 2008 GMC YUKON	384.14
30113	11/18/15	BORREGO AUTO PARTS, INC. TIRES 2008 F550	312.92
30164	12/01/15	BORREGO AUTO PARTS, INC. TIRES FOR 2008 YUKON	910.84
30136	11/19/15	JAMES DE MUNCK TIER 2 REFUND	53.21
30184	12/08/15	JC LABS & MONITORING SERVICE WASTEWATER CONSULTING SERVICES	1,500.00
30137	11/19/15	JEF JOHNSON TIER 2 REFUND	31.81
30138	11/19/15	JEFFREY LEINASSAR TIER 2 REFUND	410.04
30139	11/19/15	JOHN HUGHIE TIER 2 REFUND	311.88
30140	11/19/15	JON GILBERT TIER 2 REFUND	416.86

BORREGO WATER DISTRICT
FOR BOARD CONSIDERATION AND APPROVAL
NOVEMBER 30, 2015

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
30141	11/19/15	JOYCE ANDERSON TIER 2 REFUND	274.17
30142	11/19/15	JULIAN PEABODY TIER 2 REFUND	19.95
30143	11/19/15	KATHLEEN BULLOCK TIER 2 REFUND	428.95
30144	11/19/15	KATHY LEINASSAR TIER 2 REFUND	279.64
30102	11/12/15	KENNY STRICKLAND, INC. FUEL FOR DISTRICT VEHICLES	404.02
30185	12/08/15	KENNY STRICKLAND, INC. FUEL FOR DISTRICT VEHICLES FUEL FOR DISTRICT VEHICLES	1,221.66
30103	11/12/15	KHANNA, PUNEET & MONICA REFUND ACCT# 0102382	226.32
30104	11/12/15	McCALLS METERS, INC PRODUCTION WELL METER TOP PLATES 30 1" METERS	7,434.73
30114	11/18/15	McDOUGAL LOVE ECKIS PROFESSIONAL SERVICES	1,171.50
30145	11/19/15	MICHAEL WISNER TIER 2 REFUND	102.90
30186	12/08/15	NAPA AUTO PARTS INC MISC AUTO PARTS	26.56
30146	11/19/15	OTILIA TRONCOSO TIER 2 REFUND	3.48
30147	11/19/15	PATRICK MEEHAN TIER 2 REFUND	32.21
30148	11/19/15	PATRICK MEEHAN TIER 2 REFUND	6,780.36
30149	11/19/15	L R PAYNE TIER 2 REFUND	277.82
30105	11/12/15	CASH PETTY CASH REIMBURSEMENT	440.00
30115	11/18/15	CASH AUTOCAD WORKSHOP	275.00
30150	11/19/15	PHILIP MORGAN TIER 2 REFUND	737.50
30165	12/01/15	QUILL CORPORATION OFFICE SUPPLIES OFFICE SUPPLIES	631.21
30116	11/18/15	RAFTELIS FINANCIAL PROFESSIONAL SERVICES GSP	5,375.00
30151	11/19/15	RALPH HAERR TIER 2 REFUND	362.95
30152	11/19/15	RALPH SINGER TIER 2 REFUND	48.72
30187	12/08/15	RAMONA DISPOSAL SERVICE TRASH REMOVAL STIRRUP ROAD TRASH REMOVAL TRASH REMOVAL WWTP	3,161.54
30153	11/19/15	RAYMOND P. BOLANOS TIER 2 REFUND	1,736.71

BORREGO WATER DISTRICT
 FOR BOARD CONSIDERATION AND APPROVAL
 NOVEMBER 30, 2015

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
30117	11/18/15	RECORDER/COUNTY CLERK'S OFFICE RELEASE LIEN 07-4830-4, BOWMAN	13.00
30154	11/19/15	ROBERT DVORAK TIER 2 REFUND	483.60
30155	11/19/15	ROBERT FRAZIER TIER 2 REFUND	7.83
30166	12/01/15	ROGELIO MARTINEZ REIMBURSEMENT FOR WORK BOOTS	160.65
30167	12/01/15	SAN DIEGO CO VECTOR CONTROL MOSQUITO AND VECTOR DISEASE CONTROL ASSESSMENT 7/15-6/2016	140.63
30168	12/01/15	SAN DIEGO GAS & ELECTRIC ELECTRICITY CHARGES	29,336.78
30188	12/08/15	SAN DIEGO GAS & ELECTRIC ELECTRICITY CHARGES	1,850.15
30189	12/08/15	SAN DIEGO MAILING SOLUTIONS SEALING SOLUTION	59.15
30169	12/01/15	SECAP FINANCE POSTAGE MACHINE LEASE	137.49
30156	11/19/15	SHELLEY NORTHCOTT TIER 2 REFUND	1,947.40
30190	12/08/15	STAPLES CREDIT PLAN OFFICE SUPPLIES	188.92
30106	11/12/15	SWRCB ACCOUNTING OFFICE ANNUAL PERMIT FEE 7A370125001 WD-0113585, 258564 ANNUAL PERMIT FEE 7SS010513 WD-0113869, 258848	6,787.00
30157	11/19/15	TOM STEMNOCK TIER 2 REFUND	1,876.03
30170	12/01/15	TRAVIS PARKER UPDATE NETWORK CABLEING AND PROGRAMMING FOR NEW SERVER	999.91
30191	12/08/15	UNDERGROUND SERVICE ALERT DIG ALERTS	12.00
30193	12/09/15	VILLAS BORREGO HOMEOWNERS REIMBURSE FOR REPAIRS DUE TO BROKEN PIPE - MASTER METER PVC LINE FAILURE	103.65
30118	11/18/15	WENDY QUINN RECORDING SERVICES OCTOBER	190.00
30171	12/01/15	WENDY QUINN RECORDING SECRETARY NOVEMBER	190.00
30158	11/19/15	WILLIAM TORO TIER 2 REFUND	1,160.07
30119	11/18/15	WILLOW INDUSTRIES, LLC BIOLOGIC FOR PLANT	1,841.52
30194	12/09/15	WILLOW INDUSTRIES, LLC BIOLOGIC FOR ODOR CONTROL	1,841.52
30120	11/18/15	XEROX FINANCIAL SERVICES COPIER LEASE	377.88
TOTAL			223,528.74

GROUNDWATER MANAGEMENT
Accounting-FY 2016
01-5480

MONTH	DOWNEY BRAND	UC REGENTS	CONFERENCE/ AT CONF/MEALS	USGS	RAFTELIS	DUDEK	MONTHLY TOTAL	FYE 2016 TOTAL
Jul-15	534.95	15,000.00					15,534.95	15,534.95
Aug-15			8.31				8.31	15,543.26
Sep-15	1,312.50		50.36				1,362.86	16,906.12
Oct-15	1,900.67		211.59	4,426.18			6,538.44	23,444.56
Nov-15	450.00		6.94		5,375.00	16,976.40	22,808.34	46,252.90
Dec-15							-	46,252.90
Jan-16							-	46,252.90
Feb-16							-	46,252.90
Mar-16							-	46,252.90
Apr-16							-	46,252.90
May-16							-	46,252.90
Jun-16							-	46,252.90
Total	<u>4,198.12</u>	<u>15,000.00</u>	<u>277.20</u>	<u>4,426.18</u>	<u>5,375.00</u>	<u>16,976.40</u>	<u>46,252.90</u>	<u>46,252.90</u>

Borrego Water District Management Report – December 2015

By: Jerry Rolwing

FEDERAL LEVEL

U.S. Geological Survey: REPORT FINALLY PUBLISHED! Please check the front page of borregowd.org website for the press release and link. The primary author of the report, Claudia Faunt, made an excellent presentation at the Association of California Water Agencies (ACWA) Fall conference in Indian Wells on December 2nd.

U.S. Bureau of Reclamation: The Southeast California Basin Study is still waiting to be released.

STATE LEVEL

The Dept. of Water Resources (DWR) has released the Basin Boundary Adjustment requirements and procedures. The District will be making application to change the Borrego Valley Groundwater Basin back to the 1975 and 1980 DWR Bulletin 118 configuration.

The Governor's 25% reduction mandate period has closed. As a "Small Water Agency", the District was required to reduce the overall municipal pumping over the June - November 2015 from the baseline period of June -November 2013 by 25%. We did not make this goal as explained in the state report (attachment A). It is expected that the reduction requirements will continue into 2016 but the notice has not been finalized yet.

COUNTY LEVEL

Work continues with County Department of Planning and Development Services on the formation of the Groundwater Sustainability Agency designation.

DISTRICT LEVEL

The Solar Project at the Wastewater Treatment plant construction is completed. The inspection report has been submitted to SDG&E for approval before the array can start generating power. We are still #4 on the rebate mailing list. If approved, \$61K will be reimbursed to the District over the next five years through the SDG&E invoicing process.

HAPPY HOLIDAYS!

Text accompanying the 25% reduction report of the Borrego Water District to the State Water Resources Control Board - December 15, 2015

The Borrego Water District serves the small unincorporated community of Borrego Springs. The community lies entirely within the Anza-Borrego Desert State Park and is considered a "disadvantaged community" in that the average annual income is less than 80% of the State average income. The sole source of water supply is the Borrego Valley Groundwater Basin, which according to a recent U.S. Geological Survey Report (<http://pubs.er.usgs.gov/publication/sir20155150>), contains at least a fifty year supply of groundwater in the uppermost of three aquifers. The District and the County of San Diego are working together to create a Groundwater Sustainability Plan in accordance with the Sustainable Groundwater Management Act of 2014. As part of the overall sustainability goal, the District has spent approximately \$1,218,000 since 2011 to fallow approximately 120 acres of farmland growing citrus, resulting in a reduction in annual water use of approximately 600 acre-feet per year (AFY) or a 30% reduction of groundwater withdrawals from the Basin against municipal usage of approximately 2,000 AFY.

The District was able to achieve an 8% reduction in total municipal water production. When deducting the non-potable sales, the reduction increases to 11%. The arid desert environment of our Valley averages 5" of rainfall per year. The majority of our rainfall is associated with desert monsoonal events. The monsoonal events of 2013 and 2014 were extraordinary by comparison to 2015. Under normal conditions, the District would have been in a much better position to achieve the necessary production reductions of 25%. The District did not apply drought penalties to ratepayers because we didn't have an appropriate drought policy in effect. It took until September for the District to complete its process to draft and adopt drought related Ordinances that could be used for such a purpose and to establish a volunteer citizen stakeholder committee to make recommendations. In June, however, the District created and disseminated multiple resources to assist ratepayers in making reductions, secured assistance of a master gardener and other gardening experts to work directly with ratepayers, conducted individual meetings with large water user groups and met with local landscape contractors. Further it published drought resources on its website in English and Spanish, and disseminated information through the local media and school system.

It is also important to note that the 25% reduction requested by the SWRCB is well beyond the type of temporary reduction that can be accomplished within the timeframe of the Executive Order by means of best management practices. The District would welcome a meeting with the SWRCB to discuss how best to conserve water in our small desert community.



BORREGO WATER DISTRICT

November 2015

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	950	In Use	
ID1-16	Production	850	In Use	
Wilcox	Production	150	In Use	Diesel backup well for ID-4
ID4-4	Production	350	In Use	
ID4-11	Production	1000	In Use	Diesel engine drive exercised monthly
ID4-18	Production	250	In Use	
ID5-5	Production	900	In Use	

System Problems: All Production Wells and reservoirs are in operating condition. The 800 Tank has begun leaking in four location. Layfield is in the process of determining a solution. There were three main breaks in ID4 during the month of November that would add to the percentage of unaccounted for water.

WASTEWATER OPERATIONS REPORT

Rams Hill Water Reclamation Plant serving ID-1, ID-2 and ID-5 Total Cap. 0.25 MGD (million gallons per day):

Average flow: 58,497 (gallons per day)

Peak flow: 91,026 gpd Saturday October 24, 2015



BORREGO WATER DISTRICT

WATER PRODUCTION SUMMARY NOVEMBER 2015

DATE	ID-1	ID-3	ID-4	DISTRICT-WIDE TOTALS
Nov-13	21.45	11.58	118.74	151.77
Dec-13	16.85	6.75	92.64	116.24
Jan-14	12.51	7.44	103.25	123.20
Feb-14	20.59	6.37	93.87	120.83
Mar-14	38.28	6.90	93.46	138.64
Apr-14	55.77	8.32	124.43	188.52
May-14	64.47	8.46	116.31	189.24
Jun-14	78.14	9.52	123.76	211.42
Jul-14	100.19	9.13	141.45	250.77
Aug-14	101.13	9.72	114.76	225.61
Sep-14	89.33	10.49	142.82	242.64
Oct-14	99.66	9.71	130.38	239.75
Nov-14	71.94	10.32	123.00	205.26
Dec-14	38.95	6.96	95.47	141.38
Jan-15	32.95	6.38	85.84	125.17
Feb-15	22.13	6.15	86.06	114.34
Mar-15	16.78	5.94	86.54	109.26
Apr-15	32.79	8.30	129.76	170.85
May-15	29.25	7.28	104.29	140.82
Jun-15	32.44	9.02	116.67	158.13
Jul-15	29.94	10.04	108.89	148.87
Aug-15	28.19	8.51	113.56	150.26
Sep-15	29.17	9.63	132.98	171.78
Oct-15	32.88	9.23	117.32	159.43
Nov-15	25.27	8.24	113.84	147.35
12 Mo. TOTAL	350.74	95.68	1291.22	1737.64

Totals reflect individual improvement district usage. Interties from ID-3 have been subtracted from well pumpage totals and applied to respective ID's. All figures in Acre Feet of water pumped or recorded on intertie meters.

WATER LOSS SUMMARY (%)

DATE	ID-1	ID-3	ID-4	ID-5	DISTRICT-WIDE AVERAGE
Nov-15	2.69	1.09	16.85	N/A	6.88
12 Mo. Average	2.52	1.78	16.86	N/A	7.05

BORREGO WATER DISTRICT
 Water Production / Use Records
 ID # 1
 Month of November 2015

----- Water Production (Acre Feet) -----									
Date	Well 1	Well 2	Well 8	Well 10	Well 12	Well 16	-Wells1&2	=TotProdn	LessID3&4
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
NOV'14	19.97	10.60	0.05	15.19	30.76	36.26	30.57	82.26	71.94
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
DEC'14	4.60	1.60	0.00	0.00	20.47	25.44	6.20	45.91	38.95
JAN'15	0.00	4.02	0.04	0.00	16.31	22.98	4.02	39.33	32.95
FEB'15	23.23	4.27	0.06	3.62	14.33	10.27	27.50	28.28	22.13
MAR'15	19.16	14.36	0.02	1.81	14.00	6.89	33.52	22.72	16.78
APR'15	31.57	9.59	0.02	0.00	22.01	19.06	41.16	41.09	32.79
MAY'15	26.99	0.00	4.63	0.00	14.61	17.29	26.99	36.53	29.25
JUN'15	29.81	13.05	0.03	0.26	20.84	20.33	42.86	41.46	32.44
JUL'15	31.62	0.00	0.02	0.00	27.10	12.86	31.62	39.98	29.94
AUG'15	29.12	0.00	8.17	2.56	18.88	7.09	29.12	36.70	28.19
SEP'15	26.32	0.00	17.31	8.03	8.96	4.50	26.32	38.80	29.17
OCT'15	22.39	0.00	0.03	3.93	24.16	13.99	22.39	42.11	32.88
NOV'15	10.12	12.75	0.05	10.48	21.01	1.97	22.87	33.51	25.27
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTALS	254.93	59.64	30.38	30.69	222.68	162.67	314.57	446.42	350.74
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

----- Water Use (Acre Feet) -----										
Date	Domestic	Irrigat'n	Constrt'n	Golf Course	Golf Spare Cap	ID 3	ID 4	Total	Water Loss	% Loss
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
NOV'14	10.38	11.94	0.18	0.35	51.35	10.32	0.00	84.52	-2.26	-2.75%
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
DEC'14	8.58	7.05	0.04	0.00	30.83	6.96	0.00	53.46	-7.55	-16.46%
JAN'15	7.88	6.82	0.00	0.00	17.00	6.38	0.00	38.08	1.25	3.17%
FEB'15	7.60	5.30	0.00	0.00	7.72	6.15	0.00	26.77	1.51	5.36%
MAR'15	7.44	6.18	0.00	0.00	3.03	5.94	0.00	22.59	0.13	0.51%
APR'15	9.66	10.38	0.00	0.00	9.29	8.30	0.00	37.63	3.46	8.44%
MAY'15	8.32	9.21	0.00	0.00	9.47	7.28	0.00	34.28	2.25	6.15%
JUN'15	8.74	10.93	0.00	0.00	10.82	9.02	0.00	39.51	1.95	4.72%
JUL'15	10.10	14.86	1.18	0.00	2.47	10.04	0.00	38.65	1.33	3.31%
AUG'15	10.71	13.84	1.16	0.00	0.00	8.51	0.00	34.22	2.48	6.77%
SEP'15	10.22	13.04	1.39	0.00	2.57	9.63	0.00	36.85	1.95	5.02%
OCT'15	10.67	11.10	1.34	0.00	8.19	9.23	0.00	40.53	1.58	3.76%
NOV'15	10.12	8.67	1.36	0.00	4.22	8.24	0.00	32.61	0.90	2.69%
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTALS	110.04	117.38	6.47	0.00	105.61	95.68	0.00	435.18	11.24	2.52%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

BORREGO WATER DISTRICT
 Water Production / Use Records
 ID # 3
 Month of November 2015

Date	La Casa del Zorro Total Acre Feet		Deep Well Trail / Others Acre Feet			Total Irrigat'n	Total Domestic	Total Acre Feet
	Irrigat'n	Domestic	Irrigat'n	Domestic	Total			
NOV'14	0.00	4.80	0.25	5.21	5.46	0.25	10.01	10.26
DEC'14	0.00	2.65	0.06	4.23	4.29	0.06	6.88	6.94
JAN'15	0.00	2.63	0.11	3.47	3.58	0.11	6.10	6.21
FEB'15	0.00	2.39	0.10	3.37	3.47	0.10	5.76	5.86
MAR'15	0.00	2.26	0.10	3.54	3.64	0.10	5.80	5.90
APR'15	0.00	3.03	0.14	4.98	5.12	0.14	8.01	8.15
MAY'15	0.00	2.46	0.25	4.37	4.62	0.25	6.83	7.08
JUN'15	0.00	3.32	0.24	5.17	5.41	0.24	8.49	8.73
JUL'15	0.00	3.46	0.13	5.93	6.06	0.13	9.39	9.52
AUG'15	0.00	3.43	0.16	5.28	5.44	0.16	8.71	8.87
SEP'15	0.00	3.33	0.14	6.03	6.17	0.14	9.36	9.50
OCT'15	0.00	3.36	0.22	5.49	5.71	0.22	8.85	9.07
NOV'15	0.00	3.10	0.08	4.97	5.05	0.08	8.07	8.15
TOTALS	0.00	35.42	1.73	56.83	58.56	1.73	92.25	93.98

Date	Water Produced Acre Feet	Water Delivered Acre Feet	Wtr Loss	% Loss
NOV'14	10.32	10.26	0.06	0.58%
DEC'14	6.96	6.94	0.02	0.29%
JAN'15	6.38	6.21	0.17	2.66%
FEB'15	6.15	5.86	0.29	4.72%
MAR'15	5.94	5.90	0.04	0.67%
APR'15	8.30	8.15	0.15	1.81%
MAY'15	7.28	7.08	0.20	2.75%
JUN'15	9.02	8.73	0.29	3.22%
JUL'15	10.04	9.52	0.52	5.18%
AUG'15	8.51	8.87	-0.36	-4.23%
SEP'15	9.63	9.50	0.13	1.35%
OCT'15	9.23	9.07	0.16	1.73%
NOV'15	8.24	8.15	0.09	1.09%
TOTALS	95.68	93.98	1.70	1.78%

BORREGO WATER DISTRICT
 Water Production / Use Records
 ID # 4
 Month of November 2015

----- Water Production (Acre Feet) -----											
Date	Well 2	Well 3	Well 4	Well 5	Well 10	Well 11	Well 18	Wilcox	Well 85	Total	Less ID5
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
NOV'14	0.00	0.00	46.53	9.13	9.26	54.05	4.03	0.00	0.00	123.00	118.23
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
DEC'14	0.00	0.00	50.05	5.20	9.88	27.86	2.48	0.00	0.00	95.47	95.47
JAN'15	0.00	0.00	46.58	5.52	9.21	22.40	2.13	0.00	0.00	85.84	85.84
FEB'15	0.00	0.00	45.03	5.35	8.85	24.24	2.59	0.00	0.00	86.06	86.06
MAR'15	0.00	0.00	43.04	5.91	8.26	27.25	2.08	0.00	0.00	86.54	86.54
APR'15	0.00	0.00	52.18	10.61	9.98	53.46	3.53	0.00	0.00	129.76	129.76
MAY'15	0.00	0.00	44.16	9.57	6.91	40.55	3.09	0.01	0.00	104.29	104.29
JUN'15	0.00	0.00	50.06	9.12	8.40	45.42	3.67	0.00	0.00	116.67	116.67
JUL'15	0.00	0.00	40.26	18.80	0.00	46.40	3.43	0.00	0.00	108.89	108.89
AUG'15	0.00	0.00	42.85	18.74	0.00	48.91	3.05	0.01	0.00	113.56	113.56
SEP'15	0.00	0.00	47.84	22.20	0.00	59.16	3.74	0.04	0.00	132.98	132.98
OCT'15	0.00	0.00	41.80	20.80	0.00	51.34	3.38	0.00	0.00	117.32	117.32
NOV'15	0.00	0.00	42.96	18.46	0.00	49.35	3.07	0.00	0.00	113.84	113.84
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTALS	0.00	0.00	546.81	150.28	61.49	496.34	36.24	0.06	0.00	1291.22	1291.22
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Date	Water Produced Acre Feet	Water Use Acre Feet	Wtr Loss	% Loss	ID 5 Acre Feet
=====	=====	=====	=====	=====	=====
NOV'14	123.00	106.93	16.07	13.07%	4.77
-----	-----	-----	-----	-----	-----
DEC'14	95.47	77.31	18.16	19.02%	0.00
JAN'15	85.84	66.24	19.60	22.83%	0.00
FEB'15	86.06	69.74	16.32	18.96%	0.00
MAR'15	86.54	73.17	13.37	15.45%	0.00
APR'15	129.76	106.38	23.38	18.02%	0.00
MAY'15	104.29	87.10	17.19	16.48%	0.00
JUN'15	116.67	99.06	17.61	15.09%	0.00
JUL'15	108.89	94.21	14.68	13.48%	0.00
AUG'15	113.56	96.54	17.02	14.99%	0.00
SEP'15	132.98	108.92	24.06	18.09%	0.00
OCT'15	117.32	100.23	17.09	14.57%	0.00
NOV'15	113.84	94.66	19.18	16.85%	0.00
-----	-----	-----	-----	-----	-----
TOTALS	1291.22	1073.56	217.66	16.86%	0.00
=====	=====	=====	=====	=====	=====

Hi Jerry,
For the Sun. Any
Comments welcome
i

NEED CASH? CUT YOUR WATER BILL

The BWD Board, in an effort to replenish its coffers, has increased the price of water by more than 100% over the last several years. Customers have responded as expected by cutting back on water use. Some have responded by cutting back on most or all of their outside watering, with the result that one sees unsightly dead trees and hedges in almost all neighborhoods. But an important method of water conservation, that could elevate the need for such extreme actions, has been largely ignored. Many, and perhaps most of us, use significantly more irrigation water than needed in the winter months.

The fact that residents, on average, water too much in the colder months can be established by looking at the water-use statistics provided by the BWD. In January of 2015 the BWD sold 66.24 af (acre feet) of water compared to 94.21 af in July. Water used consists of indoor use and outside, or irrigation, use. The American Water Works Association has calculated that per capita consumption of water is approximately 70 gallons per day. If one assumes that there are 1000 residents per day in July and 5000 in January, then indoor water use is 6.44 af/m in July and 32.2 af/m in January. Thus there are 87.8 af/m of irrigation water used in July and 45.1 af/m in January. So there was approximately one half as much water used for irrigation in January as in July.

How much less water should be used in January? All plants differ in their water requirements, and specific data that is relevant for the Borrego Valley is not always available. One family of trees for which there is readily available data is citrus, and since these are commonly grown by homeowners, they will provide a useful example. The University of Arizona has produced a publication titled "Irrigating Citrus

Trees” that is readily available online. It provides a handy watering chart plus the formula for doing the calculations for a specific location. We find that an orange tree with a 20 ft diameter canopy will require 60.2 af of water per day in July, and 7.5 af in December and January. Thus simple division shows that an orange tree requires more than eight times as much water in July as in December and January, with the requirement for other months being proportional. Thus, as a simple rule of thumb, if you water every day in July, then you should water 6 days in August, 5 days in September, and so on with one day in January, then increasing by one day a month until July. Even with such fairly substantial reductions you will still be overwatering by about 15% in January and more than 30% in December and February.

How much money is wasted by overwatering in Borrego? We estimated that there was about 45 af of water used for irrigation in December. If we watered appropriately there would be approximately 11 af used ($87.7 / 8$), so we collectively overwater by at least 34 af. The price of water for BWD customers is about \$1054 af so just for the month of December we collectively waste almost \$36,000, and there will be proportionate waste for other months as well. How much could a household save? I have spoken with people who never adjust their watering times. Such a person, who spends \$100 a month for irrigation water, will spend \$1,200. a year. Switching to the schedule described above would cost them less than \$700 for the year with a saving of about \$500.

There are other things to remember for winter watering. Deciduous plants do not need to be watered at all during their dormant period, so one can shut the water off completely when the leaves turn color, and the water need not be turned on again until

the leaves are fully out in the spring. Also remember that when you turn off the water at one emitter, it may increase the pressure, and thus the water flow, at others, and there may not be much water savings unless the other emitters are adjusted. One easy adjustment method is to proportionally reduce the time the water is on.

It has been predicted that we will receive more rain than usual this season. With any significant rainfall, the entire irrigation system can be shut off for at least a week, and perhaps longer. The water requirements for the months of November through February are relatively low, and for January and December are 12% of the amount needed in July, while for February and November are 18%. Thus in a wet year, little or no irrigation will be required in these months.

In summary, many of us substantially overwater in the winter. Overwatering has no benefits and can have costs because it increases the leaching of nutrients from the soil. The bottom line is that if you water every day in July, then if you water more than one day a week in December and January you are overwatering and wasting money.

Jim Melvin December 9, 2015