AGENDA

Borrego Water District Board of Directors Special Meeting September 15, 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
- E. Comments from Directors and Requests for Future Agenda Items
- F. Comments from the Public and Requests for Future Agenda Items (comments will be limited to 3 minutes)

II. CURRENT BUSINESS MATTERS

- A. Discussion of Groundwater Sustainability Agency (GSA) designation under the Sustainable Groundwater Management Act (SGMA) legislation mandate. (2-29)
- **B.** Discussion of potential UCI sponsored workshop on Governance for Sustainability that may impact governance and stakeholder involvement for the GSP required under SGMA. (30)
- C. Discussion of progress meeting the Executive Order B-29-15 requiring a 25% mandatory reduction in water use by the District and the potential necessity for Coachella Valley Water District (CVWD) type excessive water use penalties and water efficiency incentive program. (31-40)
- **D.** Discussion of cash flow projections and future financing needs analysis.
- E. Discussion of FY 2015 accounting issues that may carry over to FY 2016 financial results.
- F. Discussion of potential agenda items for September 23rd board meeting

III. INFORMATIONAL ITEMS

- A. Toilet Rebates (41)
- B. Neighborhood Reinvestment Program Grant (42-51)

IV. CLOSING PROCEDURE

The next Regular Meeting of the Board of Directors is scheduled for September 23, 2015 at the Borrego Water District.



MEMORANDUM

To: DAVID ALADJEM

From: SAMUEL E. BIVINS

Date: OCTOBER 21, 2014

Re: PROPOSITION 218 AND FEES UNDER THE SUSTAINABLE

GROUNDWATER MANAGEMENT ACT

Climat: 41511-00000

I. Question Presented

A water district (the District) plans to adopt a groundwater sustainability plan (GSP) under the Sustainable Groundwater Management Act (SGMA). The GSP entails issuing pumping credits numbered in sequence. Each credit entitles the holder to pump one acre-foot per year. Every five years, the number of valid credits will be reduced until the number of outstanding credits equals the safe yield of the groundwater basin. The District intends to impose a groundwater extraction fee to cover the costs of activities necessary for the groundwater permitting plan to function. Fees will fund activities related to the GSP such as record keeping, monitoring, and enforcement. Must the District comply with the provisions of Proposition 218 prior to imposing a fee to cover these costs?

II. Brief Answer

No. Groundwater extraction fees levied by the district pursuanttoWater Code section 10730 (part of the new groundwater legislation) are not subject to Proposition 218 because they likely qualify as valid regulatory fees and because the limitations against applying those fees to *deminimis* users ensures they are not imposed as an incident of property ownership. In imposing fees under Water Code section 10730 to fund the costs of a GSP, such as monitoring, enforcement, and record keeping,the Districtneed only comply with the procedural requirements of SGMA. Fees levied for the broader management activities of Water Code section 10730.2, however, must comply with the requirements of Proposition 218.

III. Analysis

The District's proposed groundwater extraction fee is consistent with section 10730 and falls outside the ambit of Proposition 218 because it has a valid regulatory purpose and will not be imposed as an incident of property ownership. Proposition 218 requires fees imposed as an incident of real property ownership to undergo public scrutiny and approval. One California court has determined that groundwater extraction fees are fees "incident to property ownership" under Proposition 218. (Pajaro Valley Water Mgmt. Agency v. Amrhein (2007) 150 Cal.App.4th 1364, 1393 (hereinafter "Amrhein").) In that case, a water management agency imposed fees on groundwater extraction in order to cover the costs of constructing a pipeline system, procurement of water rights, development of additional supplies, and construction of distribution system. (Id. at 1372-73). A purely regulatory fee, however, is not property based and thus is not subject to

Proposition 218 constraints. (*Id.* at 1389-90.) Under the *Amrhein* formulation, an extraction fee is purely regulatory if it is based on actual userather than on estimated use, and thus could encourage conservation and efficiency in water use. (*Id.* at 1390)The *Amrhein* court rejected an argument that the water management agency's groundwater extraction fees were regulatory in nature, but noted that a non-regulatory extraction fee might still escape the dictates of Proposition 218 with respect to residential wellsif it were structured in a way that avoided imposing the fee as an incident of property ownership. (*Id.* at 1389-90.) This could be accomplished if the fee were imposed only on extractions beyond those required for purely domestic uses, such as extractions for irrigation. (*Id.*)

A valid regulatory fee is one that is necessary to carry out the purposes and provisions of the regulation (California Farm BureauFederation v. State Water Resources Control Bd. (2011) 51 Cal.4th 421, 438 (hereinafter "California Farm Bureau").)In California Farm Bureau, plaintiffs challenged the State Water Resources Control Board's (SWRCB) imposition of fees under Water Code section 1525. That section required the SWRCB to set annual fees that would cover the cost of operating the Water Rights Division. (Id. at431-32.) The plaintiffs argued that the section 1525 fees were a tax rather than a regulatory fee. The Court held that a regulatory fee is validwhen the amount of the fee constitutes the cost of carrying out the purposes and provisions of the regulation. (Id. at 438.) Although the fee need not perfectly match the cost of carrying out the purposes of the regulation, it should not be formulated so that it generates funds for general revenue collection. (Id.)

The SGMA contains two sections allowing groundwater sustainability agencies (GSAs) to impose groundwater extraction fees. Assembly Bill 1739, Water Code section 10730 (hereinafter "Section 10730") allows extraction fees to be imposed "to fund the costs of a groundwater sustainability program, including, but not limited to, preparation, adoption, and amendment of a groundwater sustainability plan, and investigations, inspections, compliance...and program administration, including a prudent reserve." Permitting fees may also be imposed for these purposes. No fees may be imposed under section 10730 on de minimisextractors unless the GSA has already regulated them. De minimis extractors are defined as persons who "extract, for domestic purposes, two acre-feet or less per year." (Water Code section 10721.) Here, the District has already adopted water conservation requirements for its ratepayers and it is likely that those requirements will be tightened in the future, from the current 0.6 af/yr to 0.3 af/yr or less. Fees imposed for these purposes require only that the GSA hold at least one public meeting, give notice of the meeting, and make the data upon which the proposed fee is based available to the public before imposing the extraction fee by ordinance or resolution. (Water Code section 10730(b)-(c).) If fees imposed under section 10730 are not regulatory in nature, however, then Proposition 218 would likely govern under the Amrhein court's holding that groundwater extraction fees are "incident to property ownership." (Amrhein, 150 Cal.App.4th at 1393.)

Extraction fees imposed for broader management activities under Water Code section 10730.2 ("Section 10730.2"), on the other hand, requirecompliance with Proposition 218. (See Water Code section 10730.2(c) (requiring compliance with Cal. Const. Art. XIII D section 6(a)-(b).) These activities include "administration, operation, and maintenance...[a]cquisition of

lands or other property, facilities, and services...[s]upply, production, treatment, or distribution of water...[and] other activities necessary or convenient to implement the plan." (Water Code section 10730.2(a)(1)-(4).)In order to impose extraction fees for these purposes, the District must comply with the following procedures: first, the District must identify the parcels on which the fee will be imposed, calculate the amount of the fee, and provide written notice by mail of the proposed fee to the record owner of each identified parcel. (Cal. Const. Art. XIII D section 6(a)(1).) The notice must include the amount of the fee, the basis upon which the amount of the fee was calculated, the reason for the fee, and the date, time, and location of a public hearing on the fee. (Id.) Second, the District must conduct a public hearing upon the proposed fee not less than 45 days after mailing the notice. (Id. at (a)(2).) If a majority of owners of the identified parcels present written protests against the proposed fee, the District must not impose it. (Id.) Any fee imposed by the District must ensure that revenues from the fee do not exceed the funds required to provide the services, that revenues derived from the fee are not used to fund any service other than that for which the fee was imposed, and that the amount of the fee does not exceed the proportional cost of the service attributed to the parcel. (Id. at (b)(1)-(3).) The District must also ensure that the service is actually used by or immediately available to the owner of the property in question and that the service to be funded is not available to the public at large in substantially the same manner as it is to identified property owners. (Id. at (b)(4)-(5).) Section 10730.2 does not require compliance with California Const. Art. XIII D section 6(c), which requires the property owners subject to the fee to approve it by an affirmative majority vote. (See Water Code section 10730.2(c); Cal. Const. Art.XIII D section 6(c).); see also Pajaro Valley Water Mgmt. Agency v. Griffith (2013) 220 Cal. App. 4th 586, 596 (holding that a groundwater extraction fee is a water service charge within the meaning of Cal. Const. Art. XIIID $\S6(c)$ and thus exempt from the voter approval requirement).)

Here, the District would like to impose extraction fees to fund the cost of developing, monitoring, and enforcing the GSP's permitting system under section 10730. So long as the fees imposed are related to the cost of funding the GSP, they constitute valid regulatory fees. Moreover, fees imposed by the District pursuant to § 10730 will not be levied directly on *de minimis* users and therefore will not be imposed as an incident of property ownership. Instead, they will be levied on a municipal water provider that already regulates domestic water use and passed through to individual residential customers via water rates. Therefore, the District may impose extraction fees to fund its GSP under section 10730 without complying with Proposition 218's requirements.

There are several reasons why the District's proposed groundwater extraction fee under section 10730 should be considered regulatory in nature and thus not subject to the requirements of Proposition 218. First, because the fees levied by the District pursuant to that section will be based on actual water use, not property ownership, they are not fees incident to property ownership under *Amrhein*. (See Amrhein, 150 Cal.App.4th at 1390.)

Second, the purposes for which extraction fees may be imposed under section 10730 are distinguishable from the purposes for which the fees were imposed in *Amrhein*. The District's proposed fee under section 10730 will fund a GSP involving a permitting system, record keeping, and monitoring and enforcement of the GSP's permitting system. In *Amrhein*, the

groundwater extraction fees were imposed in order to fund the development of sizable infrastructure projects, the procurement of water rights in the Central Valley, and the development of new water resources. (*Amrhein*, 150 Cal.App.4th at 1372-73.) These are the types of management activities contemplated by § 10730.2, which does require Proposition 218 compliance.

Finally, the fees the District wishes to enact to fund the costs of its GSP under section 10730 have a regulatory purpose that fees imposed by the agency in *Amrhein* and fees imposed under 10730.2 do not:they are meant to "conserve a supplied resource"and deter waste and encourage efficiency" by allowing the GSP to be developed, monitored, and enforced. (*See Amrhein*, 150 Cal.App.4th at 1390.) Although the District's proposed fee itself will probably not do much to deter waste, the GSP it will ultimately fund will clearly do so by restricting groundwater pumping to the basin's sustainable yield over time. Furthermore, these fees are clearly needed to fund the costs of carrying out the directives of SGMA and the permitting system the District wishes to implement under its GSP.(*California Farm Bureau*, 51 Cal.4th at 438.) Accordingly, so long as the fee is related to the costs of developing and administering the GSP, it should be considered regulatory in nature and immune from the requirements of Proposition 218. (*Id.*; *California Farm Bureau*, 51 Cal.4th at 438.) In these ways, the District's proposed fee fits squarely into *Amrhein*'s exceptions for compliance with Proposition 218.

Furthermore, the Legislature clearly intended extraction fees under section 10730 to be regulatory fees. Based on the different procedural requirements in sections 10730 and 10730.2. it is reasonable to conclude that the Legislature envisioned extraction fees used to fund the costs of GSPs as regulatory in nature, but considered broader groundwater management activities such as those described in section 10730.2 to be non-regulatory and thus subject to Proposition 218. The language of section 10730 supports this conclusion in that it mirrors California Farm Bureau: it speaks to "investigations, inspections, compliance assistance, enforcement, and program administration." (Water Code section 10730; compare with California Farm Bureau, 51 Cal.4th at 438 ("Such costs include all those incident to the issuance of the license or permit. investigation, inspection, administration, maintenance of a system of supervision and enforcement." (citations and quotation marks omitted)).) These are precisely the activities the District wishes to fund with its proposed extraction fee. In contrast, section 10730.2 lacks this textual correspondence to California Farm Bureau. Instead, the purposes for which fees may be imposed under section 10730.2 correspond to those the Amrhein court found were not regulatory in nature. (See Amrhein, 150 Cal.App.4th at 1372-73 (extraction fees used to fund the development of infrastructure projects, the procurement of water rights, and the development of new water resources).)

In order to ensure that the District's section 10730 groundwater pumping fee withstands a Proposition 218 constitutional challenge, the District must structure its fee appropriately. The fees must not be imposed on persons extracting two acre-feet or less per year for domestic purposes unless those domestic users have already been regulated under Part 2.74 of Division 6

of the Water Code.¹ (Water Code section 10730(a); § 10721; see Amrhein, 150 Cal.App.4th at 1390 (fee imposed on water extracted for nonresidential purposes possibly not imposed as an incident of property ownership).) The fee should be used solely for funding the GSP, but not broader groundwater management projects. Finally, the fees imposed should be roughly proportional to the cost of funding activities such as developing the GSP, establishing a permitting system, maintaining adequate records, and monitoring and enforcing the permitting program. This ensures that the fees imposed under section 10730 constitute a valid regulatory fee under California Farm Bureau. (51 Cal.4th at 438.) Assuming these requirements are met, the District may impose extraction fees to fund the GSP under section 10730 without following the procedural requirements of Proposition 218.



¹ Here, the fees imposed by the District pursuant to section 10730 will not be imposed directly on *de minimis* users. Instead, they will be levied on a municipal water provider that already regulates domestic water use and passed through to individual residential customers via water rates. Moreover, the District already imposes water conservation regulations on its ratepayers. Accordingly, the fee will both comply with section 10730(a) and will not be imposed as an incident of property ownership under *Amrhein*.



MAIN OFFICE 605 THIRD STREET ENCINITAS, CALIFORNIA 92024 T 760 942 5147 T 800.450 1818 F 760.632.0164

August 10, 2015 7801.0001

Jerry Rolwing, General Manger
Borrego Water District
806 Palm Canyon Road
PO Box 1870
Borrego Springs, CA 92004
(Submitted via e-mail: jerry@borregowd.org)

Subject: DRAFT Support to Develop Borrego Valley Groundwater Basin

Groundwater Sustainability Plan

Dear Mr. Rolwing:

Attached is a draft scope of workand fee for Dudekto provide project management, engineering, hydrogeology and environmental services to the Borrego Water District (BWD)indeveloping a Groundwater SustainabilityPlan (GSP). Since the development of such plans and processes hasnot been fully defined by the California Department of Water Resources (DWR), Dudek has developed a scope of work that is adaptable to the potential changes in the approach and level-of-effort. When specific work efforts within this general scope of services become defined, Dudek staff will develop work product in coordination with BWD staff (with associated products, scope, budget and schedule) for your approval.

The primary product of this work effort is developing the GSP. The aim of the GSP will be to restore balance to regional water resources within approximately 20 years and eliminate the critically over-drafted status of the Borrego Valley Groundwater Basin (BVGB). The GSP and associated activities will comply with the Sustainable Groundwater Management Act (SGMA, or "the Act") and applicable components of adopted regulations for evaluating and implementing GSPs, which are currently under development by DWR.

GROUNDWATER SUSTAINABLITYPLAN

The GSPis intended to minimize serious economic, social, and environmental damage to the Borrego Valley. The intent of the plan is to develop a GSP to assist the landowners and residents of the Borrego Valley to sustainably manage their groundwater resources. This would restore a balance of those resources within a reasonable time (approximately 20 years). It would establish an orderly process to manage the local aquifer to eliminate the critically overdrafted status.

WWW DUDEK.COM

AGENDA PAGE 7

Working closely with BWD staff, Dudek will prepare an optimum GSP. Development of the GSP will include the following tasks: (1) Project Administration; (2) Funding; (3) Data Collection; (4) Revise DWR Basin Boundary Delineation(5) Basin Analyses and Studies for Plan Development; (6) Projects and Programs to Meet Goals and Objectives of the Plan; (7) Prepare Draft GSP; (8) Quality Assurance/Quality Control; (9) Prepare Final GSP; (10) Agency Coordination and Public Outreach. A detailed description of each task is provided in Exhibit A – Scope of Work and Cost Estimate. The GSP and its implementation will provide a sound framework to sustainably manage and steward the groundwater resources of the Borrego Valley.

TOTAL COSTFOR GSP\$590,552.00

We look forward to discussing this project further with you and BWD staff. Please contact me at 760.415.1425, tdriscoll@dudek.com or Peter Quinlan at 760.479.4127, pquinlan@dudek.com with any questions or communications.

Sincerely,

Trey Driscoll, PG No. 8511, CHG No. 936 Senior Hydrogeologist/ Project Manager

Peter T. Quinlan

Vice President, Manger Hydrogeology Div.

Att: Exhibit A, Excel Cost Spreadsheet
cc: Beth Hart, BWD Board President
Lyle Brecht, BWD Board Vice President
Joe Tatusko, BWD Board Secretary/Treasurer

Lee Estep, BWD Board Director Ray Delahay, BWD Board Director

EXHIBIT A DRAFT Scope of Work and Cost Estimate

Borrego Valley Groundwater Sustainability Planning

August 10, 2015

The following descriptions and assumptions were used to characterize, quantify and otherwise describe the products and components contained within the Scope of Services.

GROUNDWATER SUSTAINABILITYPLAN

California Water Code (CWC) codifies the SGMArequired components of development and implementation of a GSP. The following table presents the components of the GSP as expounded in CWC – Chapter 6: Groundwater Sustainability Plans [Sections 10727- 10728].

Table 1
RequiredGSP Components UnderThe SGMA

Water Code Section	GSP Element	
CWC Section	10727.2, Required Plan Elements	
Section 107.2(a)	A description of the physical setting and characteristics of the aquifer system	
Section 10727.2 (1), (2) and (3)	Historical data, groundwater levels, groundwater quality, subsidence, groundwater-surface water interaction, a discussion of historical and projected water demands and supplies	
Section 10727.2 (4)	A map that details the area of the basin and boundaries	
Section 10727.2(5)	A map identifying existing and potential recharge areas that substantially contribute to the recharge of the basin	
Section 10727.2 (d)(1), (2), (3), (4) and (5)	The monitoring and management of groundwater levels, water quality, groundwater quality degradation, and inelastic surface subsidence	
Section 10727.2 (e)	A summary of the type of monitoring	
Section 10727.2 (f)	The monitoring protocols	
Section 10727.2 (b) (1)	Measurable objectives, as well as interim milestones in increments of five years, to achieve the sustainability goal in the basin within 20 years of the implementation of the plan	
CWC Section	10727.4, Additional Plan Elements	
10727.4 (a)	The control of saline water intrusion	
10727.4 (b)	Wellhead protection areas and recharge areas	
10727.4 (c)	Migration of contaminated groundwater	
10727.4 (d)	Well abandonment and well destruction program.	
10727.4 (e)	Replenishment of groundwater extractions	
10727.4 (f)	Activities implementing, opportunities for, and impediments to, conjunctive use or underground storage	
10727.4 (g)	Well construction policies	

Table 1
RequiredGSP Components UnderThe SGMA

Water Code Section	GSP Element
10727.4 (h)	Measures addressing groundwater contamination cleanup, recharge, diversions to storage, conservation, water recycling, conveyance, and extraction projects
10727.4 (i)	Efficient water management practices, as identified in Section 10902, for the delivery of water and water conservation methods to improve the efficiency of water use
10727.4 (j)	Efforts to develop relationships with state and federal regulatory agencies
10727.4 (k)	Processes to review land use plans and efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality and quantity
10727.4 (I)	Impacts on groundwater dependent ecosystems
CWC Section 10727.8Public	c Notification and Participation; Advisory Committee
10727.8 (a)	Manner in which interested parties may participate in the development and implementation of the groundwater sustainability plan (i.e. Advisory Committee)
10727.8 (a)	Groundwater sustainability agency shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the groundwater sustainability plan (i.e. Outreach).

Task 1 Project Administration

The BWD will take the lead on submitting the Groundwater Sustainability Application to form a Groundwater Sustainably Agency (GSA) for the BVGB (Basin delineation to be revised as Task 4). Dudek will develop a comprehensive description of GSP processby identifying the tasks and products required to develop, approve and implement the GSP, define the dependencies and linkages among the tasks/products and estimate the schedule and budget necessary to complete each task/product. This GSP process roadmap will be based on the recently approved legislation, existing regulation and the experience of the consultant and agency staff. The draft Roadmap would be developed by Dudek with coordination with BWD staff. The draft would be available for presentation to the BWD Board by staff in Fall/Winter 2015. Presentation materials will include a table of tasks and products, a chart depicting the process and a table listing the anticipated schedule and budget for each major product. Detailed descriptions of the subtasks and products will also be developed. Dudek anticipates that project management for the GSP will average about 4 hours per week for the project manager, Trey Driscoll, over 2 years including monthly meetings, progress reports and general project management. Dudek also anticipates that quarterly working meetings will be conducted with the County and potentially DWR to coordinate preparation of the GSP.

Deliverables:

- Project Roadmap and Schedule
- Project Kick-off Meeting, 24 Monthly Progress Reports and Meetings and General Project Management
- Eight Quarterly Meetings with County and potentially DWR

Total for Task 1......\$119,304.00

Task 2 Funding

Dudek will assist the BWD in developing a defensible funding mechanism for the GSP. Dudek anticipates this effort may require assistance from the BWD's financial water rates consultant (Raftelis Financial Consultants, Inc.) and legal counsel. Dudek's in-house grants specialist, Jane Gray, has identified applicable grants to pursue to fund part of the GSP and provide detailed justification for pursuing the grant (Table 2). Dudek will prepare the grant application in coordination with the BWD.

Table 2
Proposition 1 Funded Grant Programs Applicable to Borrego Water District

Administering Agency	Program	Water Code Section	Guideline Release/Workshops	Application Date
Department of Water Resources (DWR)	Groundwater Plans & Project Grant Program	79775	Draft Guidelines in December 2015	Winter/Early Spring 2016 *CASGEM compliance required
State Water Resources Control Board (SWRCB)	Groundwater Sustainability	79771	In process of development Likely in 2016 (at the end of the FY) Waiting for cleanup legislation Scoping meetings will begin late spring/early summer	In process of developmentLikely in late FY 2016 or early FY 2017 *CASGEM compliance required
State Water Resources Control Board (SWRCB)	Small Community Wastewater	79723	Draft Guideline in Feb 2015 Workshops in March – March 26, 9:00 – 3:00 pm, Santa Ana Regional Water Quality Control Board, Riverside	Final Guidelines in June with on-going application submittal
State Water Resources Control Board (SWRCB)	Clean, Safe and Reliable Drinking Water	79724 (a) (1)	Draft Guidelines in April Public Workshops in May	Final Guidelines in August with on-going application submittal
Water Commission	Water Storage Investment Project	79750 (b)	In process of development Dudek is monitoring monthly meetings for Regulation Package	In process of developmentDudek is monitoring monthly meetings for Regulation Package

Deliverables:

- Technical Memo on Defensible Funding Mechanism (Support Provided By Other Consultants)
- Evaluation of Applicable Grants and Justification to Pursue Grant Application
- Grant Application

Total for Task 2......\$29,480,00

Task 3 Data Collection

Dudek will collectdata from all available sources. This includes collaborating with the ongoing USGS study of the BVGB. As part of this effort, Dudek will ensure that the data collected corresponds withthe data requirements list developed for the GSP. Dudek will identify any data gaps and make recommendations to the GSP Development Team on how to fill data gaps, if necessary.

Deliverables:

- Digital library of data
- Develop list of data gaps identified

Total for Task 3......\$20,800,00

Task 4 Prepare Application to DWR to Re-designate the Boundaries of the Borrego Valley Groundwater Basin

The Groundwater Sustainability Act provides for the possibility of re-designating the boundaries of groundwater basins to match basins to logical management units to address overdraft. DWR presented the areal extent of the Borrego Groundwater Basin shown in Bulletin 118 in 1975 and revised it slightly in 1980. In 2003, DWR enlarged the boundaries approximately quadrupling the area. The 2003 revision divided Ocotillo Wells and extended the basin boundaries some 20 miles farther south. DWR appears to have based this revision on the alignment of the Coyote Creek Fault, the Superstition Mountain Fault and other unnamed faults trending northwest – southeast. The southern extension appears to include several separate watersheds and sparsely populated areas remote from groundwater production and the associated water level declines in Borrego Springs.Based on Water Code § 10722.2. (a) A local agency may request that the department revise the boundaries of a basin, including the establishment of new subbasins. A local agency's request shall be supported by the following information: (1) Information demonstrating that the proposed adjusted basin can be the subject of sustainable groundwater management. (2) Technical information regarding the boundaries of, and conditions in, the

proposed adjusted basin. (3) Information demonstrating that the entity proposing the basin boundary adjustment consulted with interested local agencies and public water systems in the affected basins before filing the proposal with the department. (4) Other information the department deems necessary to justify revision of the basin's boundary. Dudek will prepare an application to revise the boundaries based on historicalwater level data and the lack of response to the overdraft in the Ocotillo Wells area, geophysical survey data, fault projections and lithological cross-sections that define the area in likely hydraulic connection with the basin in the vicinity of Borrego Springs will be completed. Dudek assumes that this document will go through two rounds of review and revision.

Deliverables:

• Technical Memorandum and Application for DWR Revision to Bulletin 118 Basin Boundaries

Total for Task 4......\$26,260.00

Task 5 Basin Analyses and Studies for Plan Development

Review available data, including reports, plans, studies, and papers on the BVGB, Basin conditions, existing wells, historical water quality data, overdraft status, available pumping records, estimate of additional undocumented pumping, water level and water quality monitoring, and other pertinent information for GSP development. Identify data gaps and need for additional data collection.

Deliverables:

• Technical Memorandum summarizing Basin Analyses and Studies

Total for Task 5......\$84,080,00

Task 5.1 Viking Ranch Recharge Evaluation

For surface groundwater recharge, the soils must be suitable from the standpoint of allowing surface water infiltration to the aquifer, and the geology of the aquifer must have acceptable storage capacity and transmissibility to allow recharged water to flow away from the recharge site. Dudek will conduct an initial review of available information to evaluate the feasibility of using the Viking Ranch for groundwater recharge and to identify any potential "fatal flaws" to potential recharge. Dudek will conduct additional reviews for available data on the area's geology, groundwater, and soils to aid with understanding the characterization of the groundwater basin and aquifers underlying the Viking Ranch recharge site. Specifically, Dudek will review drillers' well completion reports and U.S. Department of Agriculture, Natural

Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) database. Petra Geotechnical (2005) indicated that potentially a portion of Coyote Creek's surface run-off could be used for groundwater recharge on the Viking Ranch property to reduce the loss of surface water by evaporation either in route to the playa, or by the playa. Dudek will review the historical USGS data for Gauge Number 10255800 on Coyote Creek and evaluate the baseflow recession data. If possible, Dudek will use the stream data to estimate the natural stream groundwater recharge and, how much surface water might be saved from evaporation by recharging at the Viking Ranch. However, it is possible that the data is insufficient to determine the potential surface water evaporation savings. Recommendations for additional field work such as an infiltration study and installation of additional stream gauge(s) will be included in the technicalmemorandum if locating a recharge facility at the Viking Ranch is feasible.

Deliverables:

Technical Memorandum summarizing Recharge Evaluation

Total for Task 5.1.....\$14,900.00

Task 5.2 Agricultural Land Fallowing Dust and Erosion Analysis

There are approximately 3,700 acres of irrigated agricultural land overlying the BVGB, most of which is occupied by orchard crops (e.g., citrus). In order to meet the goals and objectives of the GSP, the majority of this agricultural land will need to be fallowed. Fallowed agricultural land, particularly in a desert environment, introduces a potential erosion and dust suppression problem that will need to be addressed. Dudek will review existing fallowing practices that have been undertaken on several properties in Borrego Springs and investigate their potential effectiveness to suppress airborne dust. As a component of this investigation, Dudek will evaluate sites with differing types of fallowing techniques over differing lengths of time to develop an estimate of approximate longevity and sustainability for various techniques. Dudek will also research dust mitigation practices that have been implemented in similar desert environments and provide estimated costs per acre by mitigation type. The results of the analysis will be used to support recommendations for fallowing and dust suppression in the GSP.

Deliverables:

• Technical Memorandum summarizing Agricultural Land Fallowing Analysis

Total for Task 5.2.....\$20.258.00

Task 5.3 Basin-wide Water Quality Study

The USGS has provided the BWD scope and fee to evaluate groundwater quality in support of GSP development in their proposal dated July 8, 2015. The USGS study will evaluate vertical distribution of water chemistry within select wells and construct monitoring well(s) to determine the vertical rate of movement of water, collect water samples in the unsaturated zone, and to monitor changes in water chemistry from the land surface through the unsaturated zone to the water table. This work is proposed to be completed in the 2016/2017federal fiscal year, which is from October 1, 2015 to September 30, 2017. The USGS will provide unpublished results as they become available to support the preparation of the GSP. Additional historical water quality data and data collected by the BWD in 2015/2016 will be used to evaluate the potential for significant adverse impacts to water quality that may impair water supplies. Dudek will complete a water quality analysis to characterize the BWD contribution sources from the upper, middle and lower aquifers. Dudek will review exiting conditions and potential future scenarios based on projected water level declines to evaluate potential changes in contribution and water quality from the three aquifer zones.

Deliverables:

Technical Memorandum summarizing Basin-wide Water Quality Evaluation

Total for Task 5.3.....\$59,110.00

Task 6 Projects and Programs to Meet Goals and Objectives of Plan

Review and consider all Basin analyses and studies to develop an optimum GSP. Identify and develop specific programs and projects to be included in the GSP. DevelopBasin Management Objectives(BMOs) for, but not limited to, water levels and water quality (e.g. nitrate, arsenic and total dissolved solids). Quantitative thresholds will be set for BMOs to ensure the beneficial uses of the BVGBare preserved and undesirable effects (e.g. water level decline and water quality degradation) are mitigated. Prepare a recharge map with description of recharge areas. Document historical and projected water demands. Develop potential conjunctive use opportunities and constraints for the BVGB. Identify Basin replenishment opportunities and constraints including use of recycled water and, stormwater capture and recharge. Develop potential project list including but not limited to; recharge, storage, conservation, waterrecycling, and fallowing projects.

Deliverables:

- Technical Memorandum summarizing programs, projects and BMOs
- Recharge Map

Total for Task 6......\$62,960.00

Task 7 Prepare and Draft Groundwater SustainabilityPlan

Prepare a Draft GSP utilizing the results from the Basin analyses and studies, Borrego Water Coalition and other stakeholder group recommendations, and information from the GSP Development Team. The GSP will identify activities for the benefit of the BVGB. Circulate the Draft GSP for review and comment to appropriate parties. Receive and review comments to the Draft GSP. Responses to comments will be provided only for comments not incorporated in the Final GSP.

Deliverables:

• Draft Groundwater Sustainability Plan

Total for Task 7......\$72,180.00

Task 8 Quality Assurance/Quality Control (QA/QC)

QA/QC analyses and studies prepared for the development of the GSP will be conducted by the consultant's Principal Hydrogeologist and Senior Hydrogeologist in collaboration with BWD staff and the County. QA/QC BMOs, recharge map and programs developed for the GSP. QA/QC Draft GSP and Final GSP.

Deliverables:

QA/QC list of edits

Total for Task 8......\$17,520.00

Task 9 Prepare Final Groundwater Sustainability Plan

Incorporate comments and changes as determined appropriate to refine the GSP. Prepare Final GSP for BWD Board adoption.

Deliverables:

• Final Groundwater Management Plan

Total for Task 9......\$40,500.00

Task 10 Agency Coordination and Public Outreach

Consistent with CWC Section 10727.8, Dudek will support BWD staff in the development and distribution of the following:

- Public hearings
- Development and maintenanceof contact lists of interested person and land owners

In accordance with CWC Section 10727.8 procedures, citizens, business interests and regulatory agency representatives will be selected to serve on the Stakeholder Advisory Group in order to provide input to the development and implementation of the GSP. This task assumes participation of Dudek staff in four public and four agency meetings.

Total for Task 10	\$23,200.00
TOTAL COSTFOR GSP	\$590, 552,00

August 25, 2015 Best Professional Estimates

У
_

US Bureau of Reclamation	\$850,000	
US Geological Survey	\$211,650	
US Environmental Protection Agency	\$250,000	
California Department of Water Resources	\$ 670,000	
Borrego Water District (ratepayers only)	\$1,056,000	
All Pumpers (including District)	\$1,385,522	
Total Economic Cost to Produce a Defensible GSP	\$4,423,172	

GSP TASK ITEM	CONSULTANT	COST ESTIMATE	ALLOCATION
Basin Characteristics (2015)	US Geological Survey (USGS)	\$740,000	\$422,000 District ratepayers to USGS, \$106,000 District ratepayers to DWR; \$212,000 USGS
Engineering & Economics of Imported Water (2015)	US Bureau of Reclamation (Reclamation)	\$862,000	\$425,000 Reclamation; \$425,000 District ratepayers in-kind services; \$12,000 District ratepayers
Potential sources of augmented supply from nearby basins (2013)	US Environmental Protection Agency (USEPA)	\$746,000	\$496,000 District ratepayers; \$250,000 USEPA
Economics of Reduction options	California Department of Water Resources	\$70,000	\$70,000 California Department of Water Resources (DWR)
Water Level Monitoring	California Department of Water Resources	\$600,000	\$600,000 DWR costs estimated by Tim Ross
GSA application legal costs & basin boundary changes	District special counsel	\$20,000	\$20,000 District ratepayers
GSP governance & stakeholder facilitation services	choice of vendor will depend on whether DWR provides a full grant for these services over next 18-months	\$60,000	all pumpers will share in these costs
Basin depth dependent water quality study necessary to defend reduction timeline	USGS	\$240,000	all pumpers
Project management costs	Dudek	\$120,000	all pumpers
Plan technical requirements to meet DWR regulations	Dudek	\$470,522	all pumpers

CONSULTANT	COST ESTIMATE	ALLOCATION
Orrick bond counsel; investment banking services chosen in future depending on financial structure	\$110,000	all pumpers
District & County legal counsel for GSA	\$35,000	all pumpers
Reserve used only if/when GSP must be defended	\$350,000	all pumpers
	Orrick bond counsel; investment banking services chosen in future depending on financial structure District & County legal counsel for GSA Reserve used only if/when GSP must be	Orrick bond counsel; investment banking services chosen in future depending on financial structure District & County legal counsel for GSA Reserve used only if/when GSP must be

Milestone	estimated date (1)	responsible party
draft withdrawals benchmarks methodology acceptable to DWR, SWRCB, GSAs	June - August 2015	Borrego Water Coalition ("the Coalition) benchmarks committee
establish location of all producing wells in Valley	June - August	Coalition benchmarks committee
establish who owns each producing well in Valley	June - August	Coalition benchmarks committee
finalize depth dependent water quality scope of work	June - July	Borrego Water District ("the District") & San Diego County Department of Planning & Development Services ("the County" or "PDS")
draft MOU among Coalition + County + District for recognition as official stakeholder in GSP process	June - August	Coalition representative committee
GSP development estimated costs proposal finalized	August	District
Raftelis apportionment memo	August	District
final withdrawals benchmark methodology sent to GSAs	September	Coalition
Development costs & apportionment of GSP development costs agreed to	September	Coalition + County + District
County & District have applied for GSA status	September	County + District
GSP governance structure agreed to in writing by parties	September - October	Coalition + County + District
218 process to establish GSP development costs funding mechanism	October	District
Start depth-dependent water quality study	October	District
Contract with main GSP development engineer finalized	November	District
DWR has allowed adjustment of Basin boundary from existing Bulletin 118 boundary	November	County + District
GSP development tasks finalized	December	Coalition + County + District

DRAFT v1.2

Milestone	estimated date (1)	responsible party
218 rate process w/ Raftelis	January/February 2016	District
Begin creation of reduction plan	January	GSAs + Coalition
Town Hall community-wide meeting for GSP	March	Coalition + GSAs
Release of final DWR GSP regulations & conformance w/ work to date	June	GSAs + Coalition
Draft GSP released for public comment	September	Coalition & GSAs
Adoption of GSP	December	GSAs
Court validation process	January - June 2017	GSAs
GSP funding process	July 2017 - January 2018	District

DRAFT v1.2

Draft List of Critically Overdrafted Basins –August 6, 2015

Basin Number	Basin/Subbasin Name	Reason or effects for identification over period of 1989-2009	
3-01	Soquel Valley	Seawater intrusion, local designation of critical	
		overdraft.	
3-02	Pajaro Valley	Previously Identified in 1980	
3-04.01	180/400 Foot Aquifer	Seawater intrusion into the 180 foot aquifer, 5 miles inland by 1995. 2 miles inland for the 400 foot aquifer due to over-pumping by same timeframe	
3-04.06	Paso Robles Area	Groundwater depletion. From 1997-2013 the groundwater table in parts of the basin declined more than 70 feet, due to changes in farming/irrigation practices that steered away from growing alfalfa and use of the land for open range livestock to mainly vineyards and wineries.	
3-08	Los Osos Valley	Seawater intrusion rates of 60 feet/year 1985-2005 accelerating to 200 feet/year 2005-2014	
3-13	Cuyama Valley	Previously Identified in 1980	
4-04.02	Oxnard	Previously Identified in 1980	
4-06	Pleasant Valley	Previously Identified in 1980	
5-22.01	Eastern San Joaquin	Previously Identified in 1980	
5-22.04	Merced	Subsidence in El Nido area 0.6 to 1.0 ft/year (USGS)	
5-22.05	Chowchilla	Previously Identified in 1980	
5-22.06	Madera	Previously Identified in 1980	
5-22.07	Delta-Mendota	Significant, on-going, and irreversible subsidence; about 0.8 feet/year for 2008-2010	
5-22.08	Kings	Previously Identified in 1980	
5-22.09	Westside	Significant, on-going, and irreversible subsidence; about 0.4 feet/year -2007-2011	
5-22.11	Kaweah	Previously Identified in 1980	
5-22.12	Tulare Lake	Previously Identified in 1980	
5-22.13	Tule	Previously Identified in 1980	
5-22.14	Kern County	Previously Identified in 1980	
6-54	Indian Wells Valley	Steady groundwater elevation decline and loss of stored groundwater. Water quality degradation.	
7-24	Borrego Valley	Steady groundwater elevation decline ~2-3 feet per year for 50+ years	



MEMORANDUM

To:

Board of Directors, Borrego Water District

From:

David Aladjem

Rebecca Smith

Date:

June 18, 2015

Re:

Process to Become a Groundwater Sustainability Agency

Summary

The District has requested our guidance on how it may elect to become a Groundwater Sustainability Agency ("GSA") pursuant to the provisions of last year's Sustainable Groundwater Management Act ("SGMA"). In brief, as outlined below, the District can elect to become a GSA during its meeting on July 29, 2015.

Discussion

The steps that the District should take to elect to become a GSA are as follows:

- 1. Notice of Public Hearing on Election. The first step in the process is for the District to notice a public hearing on the question of whether the District should elect to become a GSA for the Borrego Valley Groundwater Basin. A form of notice is attached hereto. Notice of that hearing must be published once a week for two weeks in a newspaper of general circulation. Jerry Rolwing has informed us that the District customarily uses the San Diego Union Tribune, which will be perfectly fine.
- 2. Public Hearing. After proper notice, the District must hold a public hearing (which may occur during a regular meeting of the Board of Directors) to hear comments on whether or not the District should elect to become a GSA. If the Board of Directors decides that it wishes to elect to become a GSA, there must be a motion and a recorded vote. A form of resolution electing to become a GSA is attached hereto.
- 3. Notice of Intent to Be Provided to the Department of Water Resources. If the District elects to become a GSA for the Borrego Valley Groundwater Basin, the District must provide the Department of Water Resources with a Notice of Intent to Serve as a GSA within 30 days of that election (i.e., no later than August 28, 2015). The Notice of Intent must include: (1) a description of the service area boundaries the basin the agency is managing, and the other groundwater sustainability agencies operating within the basin; (2) a copy of the resolution forming the new agency; (3) a copy of any new bylaws, ordinances, or new authorities adopted by the local agency; and a (4) a list of interested parties

Borrego Water District Board of Directors June 18, 2015 Page 2

developed pursuant to Water Code §10723.2, and an explanation of how their interests will be considered in the GSA's development and operation, including the implementation and development of the Groundwater Sustainability Plan. In the event that the District elects to become a GSA, we will work with the General Manager to prepare the Notice of Intent.

It is important to note that the District has a right to elect to become a GSA. The *District* may choose not to become a GSA, but that decision is solely within the control of the Board of Directors. We expect that both Counties will also elect to become GSA and that the District will enter into Memoranda of Understanding with both Counties for the collaborative management of the Borrego Valley Groundwater Basin.

We would be happy to provide the District with additional information relating to the decision to become a GSA.

cc: Jerry Rolwing Morgan Foley

Enclosures

Water Code § 10723.2 requires GSAs to consider the interests "of all beneficial uses and users of groundwater, as well as those responsible for implementing groundwater sustainability plans." These interests and users include overlying groundwater users (municipal, agricultural, and domestic), public water systems, environmental users, and local land use planning agencies, among others.

Notice of Hearing - Election to Become Groundwater Sustainability Agency

NOTICE IS HEREBY GIVEN that, pursuant to Water Code section 10723 (SB 1168, Stats. 2014), the Borrego Water District will hold a public hearing during its regular meeting on July 29, 2015, commencing at 9:00 am at the District's offices at 806 Palm Canyon Drive, Borrego Springs, California to determine whether the District will elect to become a Groundwater Sustainability Agency for the Borrego Valley Groundwater Basin. Written comments should be submitted to the District to the attention of Jerry Rolwing, General Manager, no later than 3:00 pm. on July ___, 2015. During the hearing, the District will hear oral testimony and receive additional written comments before making a decision.

[Publish once a week for two weeks in a newspaper of general circulation]

RESOLUTION ___

Electing to Become a Groundwater Sustainability Agency

WHEREAS the Legislature recently adopted the Sustainable Groundwater Management Act of 2014, which authorizes local agencies to manage groundwater in a sustainable fashion; and

- WHEREAS, in order to use the authority granted in the Sustainable Groundwater Management Act, a local agency must elect to become a groundwater sustainability agency; and
- WHEREAS, where more than one local agency overlies a groundwater basin, the Sustainable Groundwater Management Act calls on local agencies to cooperate to manage the groundwater basin in a sustainable manner for the common good; and
- WHEREAS, the District overlies the Borrego Valley Groundwater Basin, together with the Counties of Imperial and San Diego; and
- WHEREAS, it is the intent of the District to work cooperatively with community interests (including but not limited to the Borrego Water Coalition), the County of Imperial, and the County of San Diego, to manage the Borrego Valley Groundwater Basin in a sustainable fashion; and
- WHEREAS, the District has provided informal notice of its intent to serve as a groundwater sustainability agency for the Borrego Valley Groundwater Basin by means of written communications to the Borrego Water Coalition and the Counties of Imperial and San Diego; and
- WHEREAS, on June __ and July ___, 2015, the District caused notice of its election to serve as a groundwater sustainability agency for the Borrego Valley Groundwater Basin in the San Diego *Union-Tribune*; and
- WHEREAS, on July 29, 2015, the District held a public hearing to consider whether it should elect to become a groundwater sustainability agency for the Borrego Valley Groundwater Basin.
- **NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the Borrego Water District as follows:
- 1. The District hereby elects to become a groundwater sustainability agency for the Borrego Valley Groundwater Basin.
- 2. District staff are hereby directed to provide notice of this election to the California Department of Water Resources in the manner required by law.
- 3. District staff are hereby directed to promptly meet with the Borrego Water Coalition and the Counties of Imperial and San Diego in order to begin the process of developing a groundwater sustainability plan for the Borrego Valley Groundwater Basin. District staff are

further directed to develop that plan in consultation and close coordination with the California Department of Water Resources, the Regional Water Quality Control Board, the State Water Resources Control Board, and other interested stakeholders, as contemplated by the Sustainable Groundwater Management Act.

4. District staff are hereby directed to report back to the Board of Directors at least quarterly on the progress toward developing the groundwater sustainability plan for the Borrego Valley Groundwater Basin. The Board of Directors wishes to move forward aggressively to complete the development of this plan as quickly as may be feasible and to ensure that the groundwater basin will be managed in a sustainable fashion at the earliest possible date.

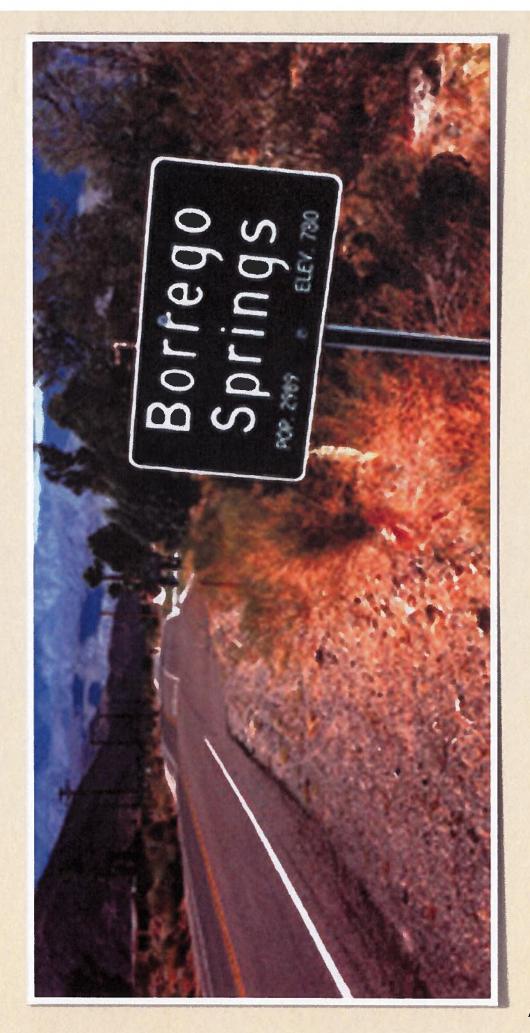
ADOPTED, this __ day of July 2015.

Beth Hart
President, Board of Directors

July ___, 2015

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. adopted by the Board of Directors of the Borrego Water District at its Regular Meeting held on July 29, 2015.

Joe Tatusko Secretary/Treasurer



GOVERNING TOWARDS SUSTAINABILITY See November 20th Workshop Sponsored by UCI Steele/Burnand Anza-Borrego Desert Research Center

DRAFT VI.I SGMA SECTION - FOR DISCUSSION PURPOSES ONLY



201 S. Lake Avenue Suite 301 Pasadena, CA 91101 Phone **626.583.1894** Fax **626.583.1411**

www.raftelis.com

July 24, 2015 Mr. Jerry Rolwing General Manager Borrego Water District 806 Palm Canyon Drive Borrego Springs, CA 92004

Subject: Executive Order B-29-15 Reduction Analysis

Study Background

In April 2015, the State Water Resources Control Board of California (SWRCB) issued regulations for EO B-29-15 in response to the present severe drought in California. One method contained in these SWRCB regulations to achieve the requirements for EO-29-15 is for a Small Water Agency (the District's classification) is to achieve a mandatory system-wide water usage cutback of 25% by November 30, 2015. In order to achieve this mandatory cutback from a baseline of 2013 usage, Raftelis Financial Consultants (RFC) recommends that the District use a target usage cutback factor of 30% for each class of customers (residential, multiple unit, commercial, irrigation and public agency). With a 30% usage cutback factor for each customer class, this should produce an effective system-wide usage reduction of approximately 20.45% from the District's 2013 baseline usage.

In May 2015, the District retained RFC to perform an analysis of the revenue impact associated with a reduction in water usage by the District's customers. As part of the analysis, RFC examined consumption data for each of the District's customers, identified seasonal consumption patterns, and worked with District staff to make assumptions regarding future consumption behavior.

The findings included in this Technical Memorandum will serve as the basis for identifying the District's revenue recovery needs resulting from a temporary 30% cutback factor for each of the District's customer classes – residential, multiple unit, commercial, irrigation and public agency.

Allocation Assumptions & Methodology

To more accurately estimate the effective reduction of a system-wide 25% mandatory water usage cutback, a specific portion of water must be considered irreducible. This is the amount of a water a particular account will likely usage regardless drought conditions. The irreducible portion of water usage is referred to as the baseline water allocation.

To develop a baseline water allocation for each customer, three factors were taken into consideration:

Executive Order Reduction Analysis

Borrego Water District July 20, 2015

- 1. Type or class of customer account
- 2. Seasonal usage
- 3. Consumption history

For residential customer classes, it is assumed a certain baseline usage will occur for basic health and sanitary usage. For non-residential customer classes, this baseline is not present. In addition, the District experiences significantly different consumption for summer months (June through November) and winter months (December through May). Figure 1 below shows the seasonal consumption behavior for the District's residential customers for fiscal years (FYs) 2013 through 2015, as well as the estimated consumption for FY 2016.

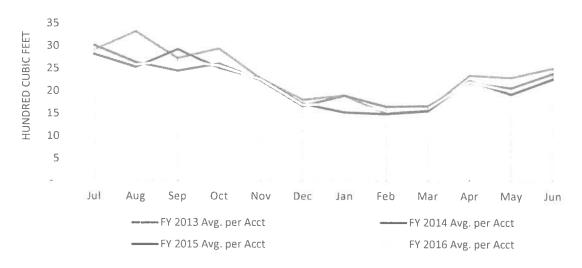


Figure 1: Average Residential Consumption

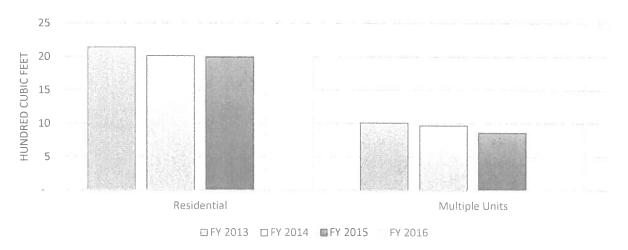
In consideration of the sizable difference in consumption between seasons, the District developed different baseline allocations for the summer (May - October) and winter (November - April) months for residential customers, which assumes higher usage during warmer months.

Monthly average consumption was used to determine a baseline allocation for Residential and Multiple Unit customers. As shown in Figure 2 below, Multiple Unit customers had a projected average monthly usage of approximately 10 units for FY 2016. Multiple Unit customers were assigned a constant baseline allocation of 10 units because it is assumed that these customers do not have any outdoor usage and therefore would not require higher usage in the summer months to maintain landscaping. Residential customers had an average monthly usage of 20 units, which was used as the baseline allocation for the summer months. For winter months, the baseline allocation was reduced to 12 units because it is assumed outdoor usage will decrease in the winter months.



Executive Order Reduction AnalysisBorrego Water District July 20, 2015

Figure 2: Monthly Average Consumption per Account



Non-residential customers do not have a baseline allocation, so it is assumed that the entirety of their usage is reducible. The baseline allocations for each customer class for both the winter and summer seasons are shown in Table 1 below.

Table 1: Baseline Allocations for Each Customer Class by Season

Customer Class	Winter	Summer
Residential	12.00 hcf	20.00 hcf
Multiple Units	10.00 hcf	10.00 hcf
Public Agencies	0.00 hcf	0.00 hcf
Commercial	0.00 hcf	0.00 hcf
Irrigation	0.00 hcf	0.00 hcf

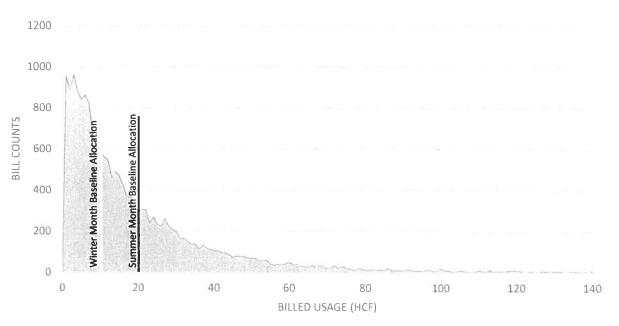
Even with a baseline allocation of 20 units in the summer months, many of the District's Residential class customers will be affected by the 30% reduction. Figure 3 below shows the distribution of water bills for all Residential accounts. Approximately 34% of the District's Residential customers use more than 20 units of water per month on average. In addition, there are 161 Residential customers who use over 140 units per month that are not shown in the chart in Figure 3 due to the formatting of the chart for readability purposes.



Executive Order Reduction Analysis

Borrego Water District July 20, 2015





While the target reduction of 30% was applied across all customer classes, the effective reduction on usage varies among the customer classes. Since the non-residential customer classes (Public Agency or Institutional, Commercial, and Irrigation) have no baseline allocation, their existing usage is simply reduced by 30% to estimate their drought-period usage. For example, a Commercial account with an existing usage of 66 units per month would have an estimated target usage of 46 units per month:

(Existing usage)
$$\times$$
 (1 - target reduction)
66 units \times (1 - .3)
66 units \times .7 = 46.2 \approx 46 units

For residential customers, the 30% reduction is only applied to the units consumed beyond the baseline allocation. For example, a Multiple Unit customer using 19 units of water would have an estimated usage of 16 units.

(Existing usage – baseline allocation)
$$\times$$
 (1 – target reduction) + baseline allocation
 $(19-10) \times (1-.3) + 10$
 $9 \times .7 + 10$
 $6.3 + 10 = 16.3 \approx 16$ units

For residential customers, the baseline allocation shifts from 12 units in the winter months to 20 units in the summer months. Following the same methodology as above, a residential customer using 38 units of water July would have an estimated usage of 33 units.



Executive Order Reduction AnalysisBorrego Water District July 20, 2015

$$(38-20) \times (1-.3) + 20$$

 $18 \times .7 + 20$
 $12.6 + 20 = 32.6 \approx 33 \text{ units}$

For any Residential or Multiple Unit customer where the existing usage is below the baseline allocation, the existing usage is used as the estimated drought period usage. In other words, a customer who uses below the baseline allocation in non-drought periods, would be expected to do the same in drought periods. For example, a Multiple Unit customer that has 7 units of existing usage (below the baseline allocation of 10 units) would have an estimated usage of 7 units for the drought period.

Results

The calculation performed above was performed for all customers for every month between July 2013 and June 2015 (a total of 36 months) to estimate how each account's usage would respond to the 30% target cutback on a month-by-month basis. These monthly water usage estimations were then averaged to determine an estimated usage for FY 2016. For example, the estimated usages for August 2013, August 2014, and August 2015, were averaged together to create an estimated usage for August 2016. This calculation was then performed for every month of the year to determine the seasonal and tiered usage for the District. Aggregating the data across all customer classes, yields the total estimated usage for FY 2016, as shown in Table 2.

Table 2: Estimated Usage (HCF) for FY 2016

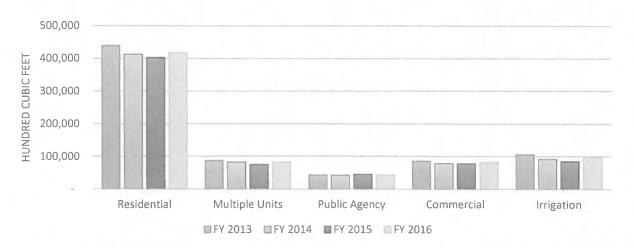
	Winter	Summer	Total
Tier 1	187,297	246,420	433,717
Tier 2	54,719	84,927	139,646
Total	242,016	331,347	573,363

Figure 4 summarizes the actual usage for FYs 2013 through 2015 and the projected usage for FY 2016 without the 30% target cutback, under non-drought conditions.



Executive Order Reduction AnalysisBorrego Water District July 20, 2015

Figure 4: Annual Water Sales under Non-Drought Conditions for FY 2016



Adding together the FY 2016 usage for each customer class shown in Figure 4, Table 3 shows the total usage by season and tier.

Table 3: Estimated Baseline Usage (HCF) for FY 2016

	Winter	Summer	Total
Tier 1	183,595	237,965	421,560
Tier 2	126,026	181,605	307,631
Total	309,621	419,570	729,191

A 30% target cutback in water usage does not yield a 30% effective reduction in overall usage, considering there is a portion of Residential and Multiple Unit usage that is projected to be irreducible. Comparing the totals from both Table 2 and Table 3, the expected overall reduction in usage is 21.37%.

$$(729,191 - 573,363) / 729,191 = 21.37\%$$

For non-residential customers, the 30% cutback leads to a 30% reduction in estimated usage. However, since there is a baseline allocation for both Residential and Multiple Unit customers, the 30% cutback is not fully realized. Table 4 summarizes the targeted reduction and the actual reduction compared to 2013 for each customer class.

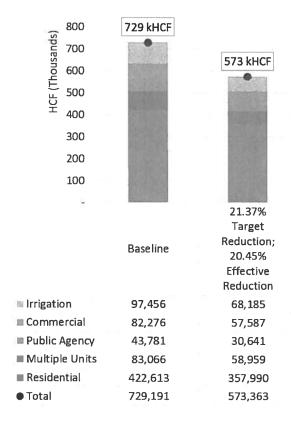


Table 4: Expected Reduction by Customer Class

Reduction Targets	Reduction Targets	Expected Reduction	Summer Season Reduction from 2013
Residential	30.00%		15.42%
Multiple Units	30.00%		29.10%
Public Agencies	30.00%		30.00%
Commercial	30.00%		30.00%
Irrigation	30.00%		30.00%
Total Reduction		21.37%	19.75%

The target usage from Table 2 and the baseline usage from Table 3 are shown by customer class in Figure 5 below.

Figure 5: FY 2016 Baseline/Non-Drought and Target/Drought Usage



When this usage data is multiplied by the District's single water commodity rate of \$2.42 per unit, the lost commodity revenue to the District is \$377,104 as a result of the 30% target cutback. The revenue loss by customer class is summarized in Figure 6 below.



Executive Order Reduction Analysis

Borrego Water District July 20, 2015

Figure 6: FY 2016 Baseline/Non-Drought and Target/Drought Revenue

\$2.0 \$1.8 \$1.6 \$1.4 \$1.2 \$1.0 \$0.8	\$1.8 M	\$1.4 M	
\$0.6			\$0.4 M
\$0.4	11-11-11		
\$0.2			P. S. S. S.
\$-		21.37% Target	(4.00)
		Reduction;	
	Baseline	20.45%	Revenue Loss
		Effective	
		Reduction	
■ Irrigation	\$235,843	\$165,008	\$70,834
■ Commercial	\$199,107	\$139,360	\$59,747
■ Public Agency	\$105,950	\$74,152	\$31,798
■ Multiple Unit	\$201,019	\$142,682	\$58,337
■ Residential	\$1,022,724	\$866,336	\$156,388
■ Total	\$1,764,643	\$1,387,539	\$377,104



California drought: CVWD OKs \$1.5M for grass removal

Sammy Roth, The Desert Sun

8:16 a.m. PDT September 9, 2015





(Photo: Jay Calderon/The Desert Sun)

The Coachella Valley Water District approved \$1.5 million Tuesday to help homes and businesses tear out grass. But even with that money, it's anyone's guess whether the agency's customers will cut their water use 36 percent, as mandated by Gov. Jerry Brown in response to California's historic drought.

Homes and businesses served by the Coachella Valley Water District slashed consumption 27 percent in August, following a banner 41 percent cut in July, officials said at a board meeting Tuesday night. After the first three months of Brown's mandate — which calls for a 36 percent cut between June 2015 and February 2016 — they've slashed water use by just 30 percent overall.

That might not seem like a lot of ground to make up between now and February. But water experts stress that exceeding the targets early on is critical, because the potential for water savings is greatest in the summer. Due to high evaporation and low rainfall, water use peaks in the summer, meaning the easiest time to save is now.



DESERT SUN

Learning from Sin City: How Las Vegas saves so much water

(http://www.desertsun.com/story/news/environment/2015/08/27/learning-sin-city-las-vegas-saves-much-water/32471441/)

John Powell Jr., president of the water district's board of directors, said Tuesday he's optimistic the agency will meet its target. He praised the board's strategy of charging penalties for excessive water use rather than restricting outdoor water use. The district collected about \$1.6 million in penalty fees in August, down from about \$1.9 million in July.

"We're the only water district in California that took this approach," Powell said. "We asked our customers to reduce their use in a manner that would work best for them, recognizing that each customer is unique."



Dry turf being removed stands in contrast to the green grass on the other side of the wall at the Casablanca gated community at the comer of Hovley Ln and Portola in Palm Desert, Tuesday, August 18, 2015. (Photo: Jay Calderon/The Desert Sun)

Powell also noted that desert residents usually overseed their grass starting in October, meaning there's still a lot of room for savings over the next few months. State officials are comparing water consumption this year to the same months two years ago.

"One hundred percent overseeding, for anyone in our district who chooses to do that — it's going to be expensive," Powell said.

AGENDA PAGE 39



DESERT SUN

CA drought: Grass removal funds only available to some

(http://www.desertsun.com/story/news/environment/2015/08/18/ca-drought-grass-removal-funds-available/31947175/)

District officials are banking on widespread grass removal to help meet the 36 percent goal.

The Coachella Valley Water District's \$1-per-square-foot rebates for tearing out grass have already proven immensely popular. Dave Koller, the agency's conservation manager, said his staff got about 12 applications per day in August, using up the approximately \$3 million in funding the agency had made available for the fiscal year that began July 1.

Koller estimated that another \$3.6 million would get the district through the end of the fiscal year, June 30. The board of directors voted unanimously Tuesday to add about \$1.5 million in funding, saying they'd revisit the issue if the money runs out.



Some homes at the master-planned inspirada community in Henderson, Nevada, have artificial grass and drought-tolerant landscaping in their backyards. (Photo: Jay Calderon/The Desert Sun)

Board member Peter Nelson said he expects the new funding to dry up quickly, as residents consider the benefits of artificial turf and desert landscaping.

"There are so many brown lawns now, and they're going to come to a decision point," Nelson said. "Either make it green, or, am I going to live with this crappy-looking yard for another six months?"

Experts say tearing out grass is the easiest and cheapest way to cut urban water use. Homes that apply for grass removal rebates from the Coachella Valley Water District are eligible for up to \$1,000 per project, with up to two projects per home. Businesses and homeowners associations can apply for as much as \$25,000 per project. More information is available at http://www.cvwd.org/217/Rebates-Discounts (http://www.cvwd.org/217/Rebates-Discounts).

Sammy Roth writes about energy and water for The Desert Sun. He can be reached at sammy.roth@desertsun.com (760) 778-4622 and Sammy.roth@desertsun.com (76

Read or Share this story: http://desert.sn/1UFOeo4



J	C.	Y	T	O	1	L	E	T	R	E	B	A	T	E
w	-	8		\sim	- 8	- Promi	_	3	11	Been	1	1	- 1	-



Program Overview

REPLACE YOUR TOILET AND RECEIVE UP TO \$100

The Department of Water Resources (DWR) is offering a rebate program for replacing toilets at California single-family residences to support the State's drought response.

The \$6 million program budget is expected to support the replacement of 60,000 toilets throughout the state. Up to \$100 will be rebated for purchase and installation of one qualified high-efficiency toilet (1.28 gallons per flush or less) per household for replacement of a less-efficient toilet (using more than 1.6 gallons per flush).

HOW TO GET YOUR TOILET REBATE

The rebate process is simple. Here is how the process works:

- 1. Check the website to determine if funds are still available for the program
- 2. Identify a qualified US Environmental Protection Agency WaterSense certified high-efficiency toilet (1.28 gallons per flush or less)
- 3. Purchase a toilet from the qualifying models list
- 4. Complete the on-line toilet rebate application
- 5. Receive your rebate approval notice
- 6. Receive your rebate check!

SUBMIT YOUR HIGH-EFFICIENCY TOILET APPLICATION

806 Palm Canyon Drive Borrego Springs, CA 92004

September 7, 2015

Supervisor Bill Horn

Haley Peterson - Policy Advisor/Director of Community Affairs

325 S. Melrose Ave. Suite 5200

Vista, CA 92081

Dear Supervisor Horn:

The Borrego Water District (BWD) a San Diego County government agency provides fresh water and waste water treatment to the small disadvantaged community of Borrego Springs. I believe this is the first neighbor reinvestment program grant applied for by the BWD. This program falls under the categories of Environmental awareness, Health, and Social service. The State of California and foresight of the Borrego Water Coalition (BWC) has mandated as a result of the Sustainable Groundwater Management Act (SGMA) that the local aquafer of Borrego Springs reduce its overdraft and come into balance. In order to do this some agriculture and planted areas will continue to be fallowed. This will create potential dust movement and poor air quality issues thru out the town of about 3,000 full time residents. BWD has teamed with University of California Irvine (UCI) - UCI, Steele/Burnand Anza-Borrego Desert Research Center to begin monitoring the air quality from the West to East boundaries of the Anza-Borrego State park at 5 locations including the Borrego Springs Unified School District grounds. BWD approved and provided a \$15,000 check in August 2015 for UCI to purchase 5 particulate air quality monitors that UCI will mount on poles, maintain, monitor/record and provide reports to the Borrego Springs Community as well as the County of San Diego. The fixed capital system should be operational by the

end of 2015. We hope you take this grant into consideration and ultimately honor our grant request.

Sincerely,

Joseph Tatusko - BWD Director Secretary/Treasurer

COUNTY OF SAN DIEGO APPLICATION FOR FISCAL YEAR 2015/16 NEIGHBORHOOD REINVESTMENT PROGRAM GRANT

CLICK HERE TO READ INSTRUCTIONS FIRST ALL SECTIONS MUST BE COMPLETED ELIGIBILITY: Only non-profit or government/public agencies operating in San Diego County may apply. What is the legal status of your organization? ○ Non-profit Corporation Government/Public Agency Federal Tax Identification Number (TIN or EIN): Organization Name: (Must match name filed under Federal Tax Identification Number) Address 286 Street Address: Mailing Address: ☐ Same as above State A Zip Code 9200 CITY BURREGO SPAINGS Popular Name or d.b.a.: Supervisorial District (by street address where organization is located): 1 12 13 14 5 (Select only one) Title of Grant Request: † Contact Person (Individual who will sign the grant agreement and be responsible for the expenditure of the funds) **Telephone Number:** CIMML. Grant Administrator (Individual who will sign the grant agreement and be responsible for the expenditure of the funds) (This individual must be different from the Contact Person listed above) Name: Title: Telephone Number: Email: c

COUNTY OF SAN DIEGO APPLICATION FOR FISCAL YEAR 2015/16 NEIGHBORHOOD REINVESTMENT PROGRAM GRANT

ORGANIZATION NAME: BORREGO WATER DISTRICT (BWP) TITLE OF GRANT REQUEST: AIR QUALITY MONITORING PROJECT
PROJECT LOCATION (see instructions)
Street Address: MUTTPE (5)
Community to be Served: BORREGO SPRINGS, CA 92004
For Capital Projects: Owner of project site: AUTORNIA STATE ARX & BSUITED SHOULE PRO Name of person or entity responsible for project site maintenance (Provide a copy of any maintenance agreements or commitment letters, if applicable.)
Purpose of grant: (Describe the purpose for which you are seeking grant funding. If your request consists of multiple components, please describe each item in priority order and indicate the associated amount requested. A higher priority shall be given to requests for capital projects and/or one-time expenses.)
THE BORREGO WATER DISTRICT (BUD) IS REQUESTRIZE A NRP GRANT OF # 15000 FOR UNETIME CAPITAL FURDS FOR ATR QUALITY MERCURINY SENSORS. THE JOINT PROJECT WITH OUT IN BUREAU SPRING CA 92004 WILL PROVIDE AS BASURE OF AIR QUALITY NOW AND IN THE FUTURE AS BASURE OF AIR QUALITY NOW AND IN THE FUTURE AS AG LAND IS FALLWED. THE STATE HAS REQUIRED BORREGO SPRINGS TO BRING ITS AQUIFER INTO BALLANCE, REDUCING UPLATER CONSUMPTION.
Estimated Total Cost of the project: \$ 15,000 (Provide verifiable cost estimates with this application)
Total Amount requested from the County (minimum \$3,500): \$ \[\frac{15,000}{} \]
Estimated project completion date: 12/2015
Have you made any expenditures to date for this project that you expect to claim under this grant: Yes C No IMPORTANT: This information will be used to determine the effective date of your grant if awarded.
If YES, the date of the first expenditure (Month/Year):
If NO, when do you expect to start the project (Month/Year):

COUNTY OF SAN DIEGO APPLICATION FOR FISCAL YEAR 2015/16 NEIGHBORHOOD REINVESTMENT PROGRAM GRANT

ORGANIZATION NAME: BERREGO WATER DISTRICT	SWD	
TITLE OF GRANT REQUEST: AIR QUARTY MONITORING	PRE	IECT
		7

QUESTIONS 1 & 2 WILL BE USED TO HELP EVALUATE YOUR PROPOSAL

1. Describe how the project will benefit the community. Provide an estimate of how many people will be served.

THE AIRQUINITY MONITORING PROJECT WILL BENEFIT THE BORREGO SPRINGS COMMUNITY BY ESTABLISHING A PARTICULARE QUALITY BASELINE AND GOING FORWARD INTO THE FOTURE AS AG LAND IS FALLOWED. ABOUT 3,000 PEOPLE ARE AFFECTED.

2. What other funding partners/sources do you have for this project?

CI, STEELE/BURNAND AND BORREGO DESENT RESEARCH CENTER 401 TILTINGTIR. POBOX 2098 BORNEGO SPRINGS, CA 92004 (760)465-2656

COUNTY OF SAN DIEGO FISCAL YEAR 2015/16 NEIGHBORHOOD REINVESTMENT PROGRAM GRANT APPLICATION SUMMARY OF FINANCIAL INFORMATION

10140 HOLD 111 HOLD 11 11 10 10 10 10 10 10 10 10 10 10 10	ATEX DISTRICT (BUD)	
TITLE OF GRANT REQUEST: AIR WALT	4 MONTORING PROJECT	
Financial Solvency:	Please Type Initials	RA-T
💢 I hereby certify that this organization is currently financially so	livent and not at risk for insolvency.	941

	PRIOR YEAR ACTUALS	CURRENT YEAR		
FINANCIAL STATEMENT	July 1, 2014 Through June 30, 2015	July 1, 2015 Through June 30, 2016		
Type in Your "Fiscal Year" if different	Through	Through		
COUNTY COMMUNITY ENHANCEMENT GRANTS	\$	\$ \$		
COUNTY NEIGHBORHOOD REINVESTMENT GRANTS (Formerly Community Projects Grants)	\$	\$15,800		
CITY FUNDING City Name:	\$	\$ \$		
OTHER REVENUES (Please itemize below)				
	\$	\$ \$		
	\$	\$		
	\$	\$		
	\$	\$		
	\$	\$		
	\$	\$		
TOTAL REVENUES (If more than \$50,000, attach IRS form 990 or 990EZ. If \$50,000 or less, attach IRS form 990-N e-postcard)	\$	\$15,000		
TOTAL EXPENDITURES	\$	\$ 15,000		
OPERATING SURPLUS (DEFICIT)	\$	\$ 🛇		

Rev. 06/15

RESOLUTION OF THE BOARD OF DIRECTORS

(Organization name)

WHEREAS	, the County of San Diego Neighborho	ood Reinvestment Program provides funding for
non-profit corporat	tions for certain specified purposes; ar	nd (
WHEREAS	, the BORREGO WATE	
wants to file an ap	plication with County of San Diego for	Organization name) Neighborhood Reinvestment Program funding.
	REFORE, BE IT RESOLVED that the	Board of Directors of
	ORREGO WATER D	15TPICT:
Confirms to California co		he laws of the State of California;
2. Approves Reinvestm	the filing of an application with the Co ent Program funding during the Count	unty of San Diego for Neighborhood y's 2015-2016 fiscal year; and
Authorizes Neighborho	s the people listed below to sign a grar ood Reinvestment Program funds for t	nt agreement with the County of San Diego for the 2015-2016 fiscal year.
1. Print Name:	DOSEPH TATUSKO	Signature: Joseph Lature
Title: <u>\(\)</u>	SIRECTOR SECPATE	MY TREASURER BWD
2. Print Name:	JERRY ROLLING	Signature:
Title:(GENERAL MANAGE	R-BWD
3. Print Name:		Signature:
Title:		
	Adopted on this day of	

Secretary, Board of Directors

UCI, Steele/Burnand Anza-Borrego Desert Research Center

August 14, 2015

401 Tilting T Dr. / PO Box 2098 Borrego Springs, CA 92004 (760) 465-2656 dicei@uci.edu

96666

Bill To:

Jerry Rowling Borrego Water District PO Box 1870 Borrego Springs, CA 92004 (760) 767-5806

and Thylis iten it

\$

AMOUNT

DESCRIPTION

Per BWD Board meeting on July 24, 2015 (Agenda item II.M.)

15,000.00

refer to attached Quote 0606/15P-2 from Met One Instruments dated 8/6/15

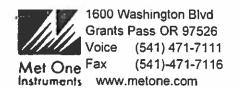
Total

15,000.00

Please make your check out to "UC Regents"

ok par Board decision.

UC Irvine



Central Region Service Center 3206 Main St., Suite 106 Rowlett, Texas 75088

Voice

(972) 412-4747

Fax

(972) 412-4716

UC IRVI	NE		Quotation # 0606	6/15P-2	Date:	8/6/201	5
PO BOX	STEELE/ BURNA	AND ANZA BORREGO CA 92004-2098	Quotation Firm: 90 Terms: NET 30, OA6 Ship Date: 4 WEEK EXW: FACTORY Documentation & Ha	C S, ARO	BELOW		
Line Qty	Item#	Description		Price	Disc Price [Disc%	Extension
1 2		QUOTE : PARTICULATE& ME	T MONITORING				
3		PORTABLE PARTICULATE MO	NITORING SYSTEM				
4 5	ES-642	REMOTE PARTICULATE MONI PM 2.5)	TOR (INCL PM 10,	2,600.00	2,210.00	15%	11,050.00
5 5	81039	SOLAR SHIELD FOR ES-642		85.00	0.00	100%	0.00
7		SOLAR POWER FOR ES-642					
8 5	MX-130	SOLAR SYSTEM, 30 WATT PAI BATTERY	NEL, 32 AMP/HR	1,075.00	1,021.25	5%	5,106,25
9 1 10	LOT	MANUALS & CALIBRATION CE	RTIFICATES	0.00			0.00

Quote By:

Peter Pomponi

Total: (US\$)

16,156.25

Borrego Water District MINUTES

Special Meeting of the Board of Directors

Tuesday, July 14, 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

Wendy Quinn, Recording Secretary

Public: Jeannie Beck, Borrego Sun Jim Dice, UC Irvine

Dennis Daoust Sicco Rood, UC Irvine

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

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

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

II. CURRENT BUSINESS MATTERS

A. <u>Discussion and possible approval of minimal financial assistance for purchasing four particulate monitors for UCI Steele Bernand Anza Borrego Desert Research Center's dust monitoring program for the Borrego Valley:</u> Jim Dice referred to the UCI Steele Bernand Anza Borrego Desert Research Center's grant to locate seven weather stations in the Borrego Valley. They are now considering the addition of dust monitors and have modified the locations to include one at the north end of Di Giorgio Road and one near the Wilcox Reservoir site. BWD has been asked to consider a \$10,000 contribution for four of the dust monitoring stations.

Jerry Rolwing suggested adding a station at Beckman Wash to provide data from fallowed agricultural land. In response to Mr. Rolwing's question, Mr. Dice stated that UCI Steele Bernand would maintain the stations. President Hart recommended that this be memorialized in an agreement, and Director Brecht added that data sharing should also be included. Mr. Rolwing suggested recouping some of the money from developer fees. MSC: Brecht/Tatusko approving expenditure not to exceed \$15,000 for dust monitoring stations at the UCI Steele Bernand weather stations in Borrego Valley. Mr. Rolwing requested a map of the station locations, and Director Brecht asked that the draft agreement be reviewed by the Due Diligence Committee.

B. <u>Discussion of Change in Customer Class for Kennedy/Daoust landscaping meter:</u> Dennis Daoust distributed copies of his letter to the Board from last October. He has two lots which were "married" by the County in 1999, with a meter on each. The two-inch meter is used for landscape irrigation only, while the three-quarter-inch meter is for household water. He understood that the two-inch meter was classified as an irrigation meter originally and reclassified as a residential meter with the institution of tiered rates. Mr. Rolwing explained that the District had always classified it as a residential meter, and that tiered rates have been discontinued. Nevertheless, Mr. Daoust requested that his two-inch meter be classified "irrigation" so that it would be exempt from tiered rates should they be resurrected.

Discussion followed concerning the ramifications of granting Mr. Daoust's request, including the need for County approval of a change to the BWD Administrative Code and whether there are other property owners with similar situations who should be included. The matter will be on the next Agenda for decision, and legal advice will be obtained in the meantime.

Special Minutes: July 14, 2015