

**AGENDA**  
**Borrego Water District Board of Directors**  
**Regular Meeting**  
**November 16, 2011, 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. Approval of Minutes
  - Special meeting of October 18, 2011 (page 2-3)
  - Regular meeting of October 26, 2011 (page 4-6)
- 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:
  - Letter from R. Martinez family (page 7)
  - Letter from R. La Frate (page 8-26)
- I. Staff Reports:
  - A. Financial Reports – October 2011 (page 28-47)
  - B. Manager / Operations Report (page 48-51)
- J. Attorney's Report

**II. CURRENT BUSINESS MATTERS**

- A. Discussion and possible action of solar electric generation
- B. Discussion and possible approval of *Resolution 2011-11-1 authorizing investment of monies in the Local Agency Investment fund* (page 53-54)
- C. Review of CASGEM Groundwater Monitoring plan (page 55-62)
- D. Discussion and possible action on updating existing MOU on Groundwater Management issues. (page 63-64)
- E. Discussion and possible action regarding a motion: for General Counsel to research the form of legislation necessary for the District to have GWM authority for the Borrego Valley Groundwater Basin and for the Strategic Planning Committee to identify the costs associated with passing this legislation.
- F. Discussion and possible action regarding increase IRWM budget to allow for RMC's additional meetings.
- G. Discussion and possible action regarding ABD-IRWM grant proposal budget development and 25% share.

**III. COMMITTEE REPORTS & PROPOSALS**

**Ad Hoc Committees**

- |                                      |                                  |
|--------------------------------------|----------------------------------|
| 1. Audit Committee                   | (M. Brecht, L. Brecht)           |
| 2. Due-Diligence                     | (M. Brecht, L. Brecht) (page 65) |
| 3. Strategic Planning Committee/IRWM | (Hart, L. Brecht) (page 66-82)   |
| 4. Executive Committee (Cameron)     | (Estep, Hart)                    |
| 5. Operations & Management Committee | (M. Brecht, Hart)                |
| 6. Asset Ad Hoc Committee            | (Hart, M. Brecht)                |
| 7. Christmas Circle Committee        | (Estep, Hart)                    |
| 8. Negotiating                       | (Estep, M. Brecht)               |

**IV. STAFF REPORTS**

- A. Water and Wastewater Operations Report – October 2011 (page 83)
- B. Water Production/Use Records – October 2011 (page 84-87)

**V. ADJOURNMENT UNTIL 3:00 P.M.**

**VI. ADDITIONAL BUSINESS MATTERS**

- A. Discussion of and possible appointment of new Director (page 89-90)

**VII. CLOSING PROCEDURE, Adjournment**

The next Regular Meeting of the Board of Directors is scheduled for December 14, 2011 at the Borrego Water District.

**Borrego Water District  
MINUTES  
Special Meeting of the Board of Directors  
October 18, 2011  
9:00 a.m.  
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 Lyle Brecht, Secretary/Treasurer Marshal Brecht, Estep  
Staff:             Jerry Rolwing, General Manager/Operations Manager  
                          Wendy Quinn, Recording Secretary  
Public:            Ray Delahay                     Casey Jones, *Borrego Sun*  
                          Jim Engelke, Lundberg         Dan Mayko
- D. Approval of Agenda: *MSC: L.Brecht/Estep approving the Agenda as amended (moving Item II.J to the first Current Business Matter).*
- E. Comments from Directors and Requests for Future Agenda Items: President Hart thanked the staff for preparing a display honoring the late Judy Meier.
- F. Comments from the Public and Requests for Future Agenda Items: None

**II. CURRENT BUSINESS MATTERS**

- J. Discussion of condensing minutes: After discussion, it was agreed to try a condensed format for the minutes to facilitate the possible transition to a new Recording Secretary.
  - A. Discussion of Christmas Circle consideration requests: President Hart reported on the October 11 Christmas Circle Ad Hoc Committee meeting. A Parks Coalition comprised of Christmas Circle Park, Borrego Village Association, Community Park Committee and Community Plan Committee has been formed and is requesting that Borrego Water District activate its park powers and serve as a conduit for funding. The issue will be considered at the October 26 Board meeting.
  - B. Discussion of District saving measures and selling of District assets: A summary of District cost saving measures since December 2010 was included in the Agenda. The Board discussed the possible sale of some District assets, including real estate and vehicles, but it was the consensus not to sell at this time. The reasons were that it didn't make financial sense to the District and the ratepayers, there are safety issues supporting retention of the vehicles, the property values for the real estate are at a low level and the property may be needed later for mitigation.
  - C. Discussion of Proposition 218 Governance: President Hart prepared a synopsis of Proposition 218, short and long versions, for information to the public and the Parks Coalition. It will be included on the District website.
  - D. Discussion of FY 2011 audit progress: Director Lyle Brecht reported that the audit process began last July and he hoped to have a presentation in December.

**President Hart declared a recess at 10:45 a.m. Thereafter, the Board reconvened.**

- E. Discussion and possible action regarding San Diego County Groundwater Mitigation Ordinance and MOA with the BWD: Mr. Rolwing distributed a marked up copy of Special Minutes: October 18, 2011

the County Groundwater Mitigation Ordinance and MOA. Discussion followed regarding the irrigation efficiency rating, water credit banking issue, the addition of "or any other lawful use" to the requirement that remaining irrigation of fallowed land be limited to single family residences, rounding of partial credits, and the issue of whether to date fallowing from the date the easement was applied for versus the date it was issued. Mr. Rolwing will discuss these issues with Jim Bennett at the County before the next meeting.

**F. Discussion regarding ABD-IRWM grant proposal budget development and 25% share:** The Board discussed the issue of whether BWD could contribute part of its in-kind contributions to other IRWD members. A concern is whether, for example, Canebrake could take part of our in-kind contributions to the USGS study since they did not benefit.

**G. Discussion of availability charges collection:** Director Marshal Brecht, with Diana Del Bono's assistance, had investigated the origin of the availability charges. Mr. Rolwing confirmed that they are renewed annually. President Hart reported that the County needs to see the originating document in order to advise on collection procedures. Mr. Rolwing will prepare a spread sheet showing which owners in Montesorro owe availability charges and how much. If necessary, Lisa Foster will be consulted.

**H. Discussion of power cost pass through charges:** This matter was referred to the Due Diligence Committee.

**I. Discussion and possible approval of Cal Pers Second Tier Plan:** Director Marshal Brecht presented options to save money on the District's retirement plan. Canceling the existing plan would be costly, but we could add a Second Tier for new hires at less expense. ***MSC: Estep/L.Brecht requesting Ms. Foster to draft a resolution for the October 26 Board meeting implementing a Second Tier Cal Pers retirement plan for future employees.***

**K. Consideration of moving the November and December Regular Board meeting dates:** A resolution will be presented to the Board at its next meeting, consolidating the workshop and regular meetings and setting them for November 16 and December 14.

Mr. Rolwing reported that Bill Mills had resigned from his position as District consultant. The radios used in the Supervisor Control and Data Acquisition System (SCADA) are ten years old and failing rapidly. The Board concurred in expending approximately \$25,000 to replace them.

### **III. CLOSED SESSION**

**A. Conference with Real Property Negotiators pursuant to Govt. Code section 54956.8:**

Property: 199-080-21  
Agency negotiators: Lee Estep, Beth Hart, and Jerry Rolwing  
Negotiating party: Jack Cameron  
Under negotiation: price and terms

The Board adjourned to closed session at 12:30 p.m., and the open session reconvened at 1:10 p.m. Mr. Rolwing announced no reportable action.

### **IV. CLOSING PROCEDURE**

**Adjournment:** There being no further business, the meeting adjourned at 1:10 p.m. The next Regular Meeting of the Board of Directors is scheduled for October 26, 2011 at the Borrego Water District.

**Borrego Water District**  
**MINUTES**  
**Regular Meeting of the Board of Directors**  
**Wednesday, October 26, 2011**  
**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 Lyle Brecht, Secretary/Treasurer Marshal Brecht, Estep

Staff: Jerry Rolwing, General Manager  
Kim Pitman, Administration Manager  
Diana Del Bono, Administrative Assistant  
Lisa Foster, McDougal Love Eckis Beohmer & Foley  
Wendy Quinn, Recording Secretary

Public: Casey Jones, *Borrego Sun* Ray Delahay  
Dick Walker Jim Moxham, Cameron Brothers  
Jim Engelke Gary Dix, Borrego Sunshine Farms  
Jim Wilson, CCCP Brent Dix, Borrego Sunshine Farms  
Lane Sharman, BWX Thomas Ray, Seley Ranches  
Dan Wright, The Springs, Bob Moore, The Springs,  
Roadrunner Club Roadrunner Club  
Bob McKee Greg Young, Cocopah  
Craig Armstrong, Ray Shindler  
Thermiculture/Dunlop Sylvia Caldwell, Borrego Valley Ranch

**D. Approval of Agenda:** *MSC: L.Brecht/Estep approving the Agenda as written.*

**E. Approval of Minutes:**

Special meeting of September 20, 2011

*MSC: L.Brecht/Estep approving the Minutes of the Special Meeting of September 20, 2011 as written.*

Regular meeting of September 28, 2011

*MSC: L.Brecht/Estep approving the Minutes of the Regular Meeting of September 28, 2011 as amended (correcting the first sentence in Item I.F to indicate that Director Marshal Brecht would replace President Hart on the ad hoc committee addressing legal issues relative to Montesoro).*

**F. Comments from Directors and Requests for Future Agenda Items:** Director Lyle Brecht requested three Agenda items for the January workshop: (1) Begin tracking revenues to date versus forecast; (2) revisit the sale of District assets; and (3) discuss public outreach. These issues may be discussed by the Strategic Planning Committee prior to the workshop.

President Hart and Director Lyle Brecht tentatively agreed to make themselves available to the public for questions and comments sometime during the week of November 14. Director Lyle Brecht suggested a table at the farmers' market.

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

**H. Correspondence:**

Letter from C. Stuart

Mr. Rolwing will respond to Charles Stuart that his request for suspension, but not removal, of his water meter is contrary to District policy.

Letter from B. Mills

Bill Mills has resigned from his consulting role with the District.

Letter from Diehl, Evans & Company, LLP

Diehl Evans is merging with another company to form White Nelson Diehl Evans LLP.

**I. Staff Reports:**

**A. Financial Reports – September 2011**

Kim Pitman summarized her written report, which was included in the Agenda, and answered questions from the Board.

**B. Manager/Operations Report**

Mr. Rolwing added an information item to his written report in the Agenda. The District has received a permit to reinstall one of three former gauging stations. Once the cost has been determined the item will be brought back to the Board.

**J. Attorney's Report: The Attorney's Report will be incorporated in later Agenda items.**

**II. CURRENT BUSINESS MATTERS**

**A. Solar presentation by Lane Sharman: Lane Sharman narrated a PowerPoint presentation, "Solar and the Borrego Water District," on behalf of Solana Energy. He proposed a solar project on 20 fallowed acres formerly occupied by the Dragon Fruit Farm.**

**B. Discussion of Best Management Practices for commercial and irrigation customers: Don McKelvey, who investigated this issue on behalf of the Conservation Committee, will present a report at the next meeting.**

**C. Discussion and possible action regarding the San Diego County Proposed Groundwater Ordinance Amendment and BWD MOA: A summary of Mr. Rolwing's discussion with Jim Bennett of the County and comments from the Strategic Planning Committee and the public were included in the Agenda. *MSC: L.Brecht/Estep authorizing Mr. Rolwing to submit the proposed comments to the County, emphasizing the critical issue of water credit banking and including suggested language providing for it.* Mr. Rolwing will work with Lisa Foster on the language, and the submittal will be reviewed by the Strategic Planning Committee before it is sent.**

**D. Discussion of General Counsel's research regarding potential mechanisms for collecting water extraction fees: Ms. Foster summarized her memo in the Agenda. Of the options available, establishing a fee pursuant to the Groundwater Management Act or pursuing special legislation are the most viable. Mr. Rolwing pointed out that partnering with other entities in the area to activate BWD's police powers would offer local control of our destiny, and President Hart suggested involving the IRWM stakeholders.**

**E. Discussion and possible approval of Resolution 2011-10-02 Cal Pers Second Tier Plan: A resolution of intent to establish a revised retirement plan for new employees will be presented to the Board at its December meeting.**

**F. Discussion and possible approval of Resolution 2011-10-01 revising the schedule of Regular Meetings: *MSC: L.Brecht/Estep adopting Resolution 2011-10-01 revising the schedule of Regular Meetings to November 16 and December 14, 2011.***

**III. COMMITTEE REPORTS & PROPOSALS**

**Ad Hoc Committees**

**1. Audit Committee**

Director Marshal Brecht expected the audit to be complete by the December Board meeting.

2. Due-Diligence

An information item on tiered rates was included in the Agenda.

3. Strategic Planning Committee/IRWM

The minutes of the last IRWM meeting were included in the Agenda.

4. Executive Committee (Cameron)

A special Board meeting was scheduled for November 1, 2011 at 10:30 a.m. to consider agreements with Cameron Brothers Construction LLP and Bob Moore of Green Desert.

5. Operations & Management Committee

The Committee is continuing to work on the Second Tier retirement plan.

6. Asset Ad Hoc Committee

President Hart reported that at its meeting last week the Board decided not to pursue the sale of District assets at this time.

7. Christmas Circle Committee

A proposed letter to Supervisor Horn from the Parks Coalition will be considered at the Special Board Meeting on November 1.

8. Negotiating

Mr. Rolwing will contact Allison Burns and present a report at the next meeting.

**IV. STAFF REPORTS**

A. Water and Wastewater Operations Report – September 2011:

B. Water Production/Use Records – September 2011:

C. Year to Date Meter Installations:

D. Meter Installation History:

The staff reports were included in the Agenda.

**V. INFORMATIONAL ITEM**

Director Lyle Brecht thanked the staff members for their good work.

**VI. CLOSED SESSION**

A. CONFERENCE WITH REAL PROPERTY NEGOTIATORS – Reference Government Code section 54956.8:

Property: 199-080-21

District Negotiator: Lee Estep, Beth Hart, and Jerry Rolwing

Negotiating Party: Jack Cameron

Under negotiation: Price and terms

The closed session was continued to November 1.

**VIII. CLOSING PROCEDURE**

Adjournment. There being no further business, the meeting adjourned at 11:20 a.m. The next Regular Meeting of the Board of Directors is scheduled for December 16, 2011 at the Borrego Water District.

November 3, 2011

Board of Directors, Borrego Water District  
P.O. Box 1870  
Borrego Springs, CA 92004

Dear Board of Directors:

We own the property located at 3140 Club Circle West in Borrego Springs. On June 19th we experienced a devastating fire that destroyed our home. We do not plan to rebuild but would like to keep water service to the vacant lot. At this time we are also paying a monthly sewer fee and CSD fee which includes trash disposal.

Since we will no longer be requiring sewage and trash disposal at this location, can we get an exemption from the sewer and CSD fees?

Thank you for your consideration.

Sincerely,

Rogelio Martinez Family

November 4, 2011

To: Borrego Water District  
Mr. Jerry Rowling, General Manager  
Water Board Members

As you suggested, Mr. Rowling, I am sending this letter to be presented at your next Board meeting.

As a resident of Borrego Springs and a Borrego Water District customer, I have two concerns that I want to bring to your attention.

The first concern is BWD's water storage tank at the end of Slash M Road. On 10/27/2011 I witnessed thousands of gallons of water being discharged into the desert from a 10" overflow pipe connected to the top of the tank. Noting the level on the outside of the tank, made it obvious that the tank was full. Why is the aquifer being over-pumped only to be let out into the desert causing vast amounts of waste and erosion? I talked with a neighbor whose walk is a ritual every day in that area and he told me he has been trying to get an answer to this question for the past six years. We are constantly reminded from the Borrego Water District that the aquifer is being depleted faster than it is being recharged. The thought of water being wasted on this scale by the Borrego Water District, the very entity promoting water conservation in this community, is an injustice to our community.

The other concern on the same thread of wasted water is the tamarisk trees that are planted around the water tank and to add insult to injury they are being irrigated. It is a known fact these trees consume vast amounts of water from the aquifer. State and Federal agencies across the southwest, view these trees an exotic and are doing their best to eradicate them. I have attached just a few of the reports from different agencies to back this claim.

I spoke to the previous Borrego Water District Manager, Rich Williamson on this issue. He told me those were pine trees planted at the tank. I knew better. It was obvious in our conversation that he was not interested in my concern in conserving groundwater.

I am hoping you have a more active role to the concerns of your customers and community and will address these issues.

Nothing less than removing the tamarisk trees from the tank is the only solution. This is the approach being taken by federal and state levels.

I have observed the storage tank from a distance and if it wasn't for the trees, the tank would blend in with the surrounding desert better because of the color the tank is. The bright green trees bring your attention to the tank rather than concealing it.

Please conserve our aquifer by correcting the problem at the water tank and remove the invasive trees. The Borrego Water District can set the trend for the rest in the community who aren't aware of how much water these trees are taking from our finite source.

Sincerely,



Roberta La Frate



# **BORREGO WATER DISTRICT**

November 7, 2011

Ms. Roberta La Frata  
P.O. Box 1750  
Borrego Springs, CA 92004

Dear Ms. La Frata:

Thank you for your letter date November 4, 2011. This letter will be included as a "correspondence" item in the agenda of the next regular Board of Directors' Meeting, scheduled for November 16, 2011.

Sincerely,

Jerry Rolwing  
General Manager

[Print](#) | [Close Window](#)

**Subject:** RE: Discharge of water into the desert  
**From:** jerry@borregowd.org  
**Date:** Thu, Nov 03, 2011 2:56 pm  
**To:** "roberta lafrate" <hmom007@att.net>

Hi Ms. La Frata, please write a letter to our Board of Directors and I will include it in the next Board package.

Jerry Rolwing  
General Manager  
Borrego Water District  
760/767-5806

----- Original Message -----

**Subject:** Re: Discharge of water into the desert  
**From:** roberta lafrate <[hmom007@att.net](mailto:hmom007@att.net)>  
**Date:** Thu, November 03, 2011 2:41 pm  
**To:** <[jerry@borregowd.org](mailto:jerry@borregowd.org)> <[jerry@borregowd.org](mailto:jerry@borregowd.org)>  
**Cc:** [diana@borregowd.org](mailto:diana@borregowd.org), [robertperdue@waterboards.ca.gov](mailto:robertperdue@waterboards.ca.gov),  
[jcarmona@waterboards.ca.gov](mailto:jcarmona@waterboards.ca.gov), [peggy.j.bartels@usace.army.mil](mailto:peggy.j.bartels@usace.army.mil),  
[watersheds@sdcounty.ca.gov](mailto:watersheds@sdcounty.ca.gov)

Dear Mr Rowling,

I believe nothing less than removing the tamarisk trees from the tank will be the only solution. This is the approach being taken by federal and state levels. Did you know that a program using the tamarisk beetle to destroy these trees has been implemented in states such as Utah and Arizona? I have an article from the National Park Service discussing the use of the beetles to rid the west of the invasive pest. if you are interested in reading it, I can provide you with a copy.

I have observed the storage tank from a distance and if it wasn't for the trees, it would blend in with the surrounding desert because of it's color. The bright green trees bring your attention to the tank rather than concealing it. Please conserve our aquifer and remove these invasive trees. The Borrego Water District can set the trend for the rest in the community who aren't aware of how much water these trees are taking from the our finite source.

Sincerely,  
Roberta La Frate

On Nov 3, 2011, at 6:48 AM, <[jerry@borregowd.org](mailto:jerry@borregowd.org)> <[jerry@borregowd.org](mailto:jerry@borregowd.org)> wrote:

Hello Ms. La Frata, over the years we have had periods where the tank did overflow - for a while you could even see the green trail leaving the northeast side of the tank from the grade. We try to do the best we can. We bought the saplings from Ray Burnand and that was the name he gave us. I have sent the crew out to investigate the situation and we will work to improve it.

Jerry Rolwing

General Manager  
Borrego Water District  
760/767-5806

----- Original Message -----

Subject: Re: Discharge of water into the desert  
From: roberta lafrate <[hmom007@att.net](mailto:hmom007@att.net)>  
Date: Wed, November 02, 2011 3:24 pm  
To: <[jerry@borregowd.org](mailto:jerry@borregowd.org)> <[jerry@borregowd.org](mailto:jerry@borregowd.org)>  
Cc: [diana@borregowd.org](mailto:diana@borregowd.org), [robertperdue@waterboards.ca.gov](mailto:robertperdue@waterboards.ca.gov),  
[jcarmona@waterboards.ca.gov](mailto:jcarmona@waterboards.ca.gov), [peggy.j.bartels@usace.army.mil](mailto:peggy.j.bartels@usace.army.mil),  
[watersheds@sdcounty.ca.gov](mailto:watersheds@sdcounty.ca.gov)

Dear Mr. Rolwing,

Thank you for your quick response. You say this is a temporary situation but how do you explain that my neighbor has seen this happen over the past six years and was never given an explanation when he asked for one?

In so far as the trees, Mr Rowling, I know better. Government agencies across the west refer to these trees as highly invasive. I encourage you to look at this website:

<http://www.invasivespeciesinfo.gov/plants/saltcedar.shtml>. It will explain to you that the Scientific name, Tamarix spp. is referred to in common form as salt cedar, saltcedar or tamarisk. There is no such species as a non-invasive Salt Cedar tree. The seeds are all over that area. They too will contribute to the downward trend of our aquifer.

Sincerely,  
Roberta La Frate

On Nov 2, 2011, at 1:47 PM, <[jerry@borregowd.org](mailto:jerry@borregowd.org)>  
<[jerry@borregowd.org](mailto:jerry@borregowd.org)> wrote:

Dear Ms. La Frate, thank you for bringing the overflow to my attention. I am very much concerned about wasting water and will do whatever I can to minimize the problem. We have experienced recent communication problems with our computer controls that tell the wells to fill the tanks and to stop when the tanks are full. This is a temporary situation and the Board has recently authorized nearly \$30,000 to address this situation. In so far as the trees, they are a non-invasive version of the Salt Cedar Tree. When we constructed the reservoir in the year 2000, it was decided to attempt to "knock down" the visual impact of the new larger tank. The trees serve a purpose but I will look into the irrigation and make sure it is efficient

as possible.  
Thank you.

Jerry Rolwing  
General Manager  
Borrego Water District  
760/767-5806

----- Original Message -----

Subject: Discharge of water into the desert  
From: roberta lafrate <[hmom007@att.net](mailto:hmom007@att.net)>  
Date: Wed, November 02, 2011 1:27 pm  
To: [jerry@borregowd.org](mailto:jerry@borregowd.org)  
Cc: [diana@borregowd.org](mailto:diana@borregowd.org),  
[robertperdue@waterboards.ca.gov](mailto:robertperdue@waterboards.ca.gov),  
[jcarmona@waterboards.ca.gov](mailto:jcarmona@waterboards.ca.gov),  
[peggy.j.bartels@usace.army.mil](mailto:peggy.j.bartels@usace.army.mil),  
[watersheds@sdcounty.ca.gov](mailto:watersheds@sdcounty.ca.gov)

Dear,  
Mr. Rolwing, General Manager

As a resident of Borrego Springs and a Borrego Water District customer, I have two concerns that I want to bring to your attention.

The first concern is BWD's water storage tank at the end of Slash M Road. On 10/27/2011 I witnessed thousands of gallons of water being discharged into the desert from a 10" overflow pipe connected to the top of the tank. Noting the level on the outside of the tank, made it obvious that the tank was full. Why is the aquifer being over-pumped only to be let out into the desert causing vast amounts of waste and erosion? I talked with a neighbor who's walk is a ritual every day in that area and he told me he has been trying to get an answer to this question for the past six years. We are constantly reminded from the Borrego Water District that the aquifer is being depleted faster than it is being recharged The thought of water being wasted on this scale by the Borrego Water District , the very entity promoting water conservaton in this community, is an injustice to our

community.

The other concern on the same thread of wasted water is the tamarisk trees that are planted around the water tank and to add salt to the wound, they are being irrigated. We all know that these trees consume vast amounts of water from the aquifer. State and Federal agencies across the southwest, view these trees as an exotic and will eradicate them whenever possible. I spoke to the previous Borrego Water District Manager, Rich Williamson on this issue. He told me that the trees were pine trees. I knew better. It was obvious in our phone conversation that he was not interested in my concern in conserving groundwater.

I am hoping you have a more active role to the concerns of your customers and community and will address these issues.

Sincerely,

Roberta La Frate  
3240 Broken Arrow Rd  
Borrego Springs, Ca. 92004  
619-985-7140



Copyright © 2003-2011. All rights reserved.

Search NISIC

- Search all USDA
- Advanced Search
- Search Tips

Browse by Geography

- United States
- International

Browse by Subject

- Aquatic Species
- Plants**
- Animals
- Microbes
- Economic Impacts
- Laws and Regulations
- Manager's Tool Kit
- Resource Library

You are here: Home / Plants / Species Profiles / Saltcedar

# Plants

## Species Profiles

### Saltcedar



Click image to enlarge

**Scientific name:** *Tamarix* spp.

**Common names:** Saltcedar, salt cedar, tamarisk

**Native To:** Eurasia (Carman and Brotherson 1982)

**Date of U.S. Introduction:** Early 1800s (Carman and Brotherson 1982)

**Images:** Invasive.org and Google

**Means of Introduction:** Ornamental (Carman and Brotherson 1982)

**Impact:** Absorbs large amounts of water and creates large deposits of salt (North Dakota. Department of Agriculture 2003)

**Current U.S. Distribution:**

- Northern Distribution Map (PDF | 236 KB) / Invasive Species Maps  
*USDA. FS. Northern Research Station.*
- National Agricultural Pest Information System - Pest Tracker - Reported Status
- PLANTS Database map (see complete PLANTS Profile for county distribution and native status)

**Management Plans:** [Plants / Saltcedar](#)

**Selected Internet Resources:**

- Federal Government**
- State Government**
- University/Academic**
- International**
- Organizations**

**Federal Government**

*Tamarix*  
Integrated Taxonomic Information System.  
Taxonomy

Exotic Weeds I (Saltcedar) - Integrated Pest Management Manual  
*DOI. National Park Service.*  
Identification/Description; Impacts; Life Cycle; Dispersion; Controls; Special Note: Excellent references section

*Tamarix* spp. (Tamarisk or Salt Cedar) - Aquatic Plant Information System (APIS)  
*NOI. USACE. Engineer Research and Development Center*

SHARE

### I Want To...

- Read Recent News Articles
- Find Out What Species Descriptors Mean
- Locate Images
- Find Experts
- More ...

### Plants

- Species Profiles**
- Databases
- Discussion Groups
- Economic Impacts
- Educational Resources
- Image Galleries
- Frequently Asked Questions
- Management
- Publications
- What You Can Do

### Media Help

To view PDF files you must have [Adobe Acrobat Reader](#) installed on your computer.

To view Flash files you must have [Macromedia Flash Player](#) installed on your computer.



Follow us on twitter!

Google Translate



Gadgets powered by Google

# Saltcedar

## Saltcedar, *Tamarix ramosissima*

**Damage:** Once established, saltcedar is tolerant to high salinity and secretes salt at a high rate which is deposited on the soil surface to the detriment of native plant species. Saltcedar increases fire frequency within the riparian habitats it dominates because of its high levels of dead leaves and branches that provide fuel for fires. After fires, saltcedar sprouts rigorously, while native riparian trees and shrubs generally do not. Saltcedar groves push out native species, affecting their reproductive potential and contributing to a loss of natural biodiversity. Research implies that saltcedar could impact the structure and dynamics of streams by trapping and stabilizing sediments, increasing overbank flooding following high flow events and creating permanent sand bars in rivers. This pest also contributes to the decline of wetland communities as habitat refuge for wildlife. Species affected by the spread of saltcedar include the entire gamut of animals and plants associated with riparian communities, including several threatened or endangered species (i.e., desert pupfish, bighorn sheep, southwestern willow flycatcher, etc.).

**Economic Impact:** Saltcedar depletes the genetic diversity of California riparian communities, resulting in direct environmental damage and indirect economic impact on the state. It also may impact recreation opportunities in riparian areas. The dominance of saltcedar in natural communities can be seen as both a cause and a consequence of habitat degradation due to human activities, including dams and agricultural run-off. Saltcedar could also pose a substantial threat to agriculture due to its high use of water and its tendency to clog irrigation canals. It has been estimated that the cost incurred by salt cedar infestations in the southwest USA with respect to water supply, flood control, and wildlife to the benefits of eradicating this weed would be a net total benefit between \$3.8 billion to \$11.2 billion over a 55 year period (Zavaleta 2000, pp. 261-300 in Mooney & Hobbs, Invasive Species in a Changing World).

**Distribution:** Estimates of the saltcedar invasion in the southwest include over one million hectares of sensitive habitat ranging from northern Mexico to southern Canada which have become dominated by this species. States affected include California, Arizona, New Mexico, Texas, Colorado, Utah and Wyoming.

**Research:** Saltcedar control and eradication programs are being conducted throughout the western U.S. In most cases, the goal is to preserve or recover sensitive areas. Research on chemical control, prescribed burning and mechanical removal by bulldozers for





## Bishop

- + What We Do
- + Visit Us
- + Information Center
- + Get Involved
- + Field Offices
- + Contact Us

## Noxious Weeds

### Saltcedar/Tamarisk (*Tamarix ramosissima* Ledeb)

Tamarisk family (*Tamaricaceae*)



Weeds
<a href="#">What is a Weed?</a>
<a href="#">Control and Prevention</a>
<a href="#">Weed Identification Handbook</a>
<a href="#">Weed Glossary</a>
<a href="#">Weed Map</a>

#### GROWTH HABIT:

This deciduous shrub and small tree is native to Turkey, Iran, Southern USSR, China and Mongolia and grows 5 to 20 feet (1.5-6 m) tall. Bark on saplings and young branches is reddish brown turning gray, and fissured with age.

#### LEAVES:

The pale blue green leaves are small and **scale-like**, have a smooth (entire) edge, and are **borne alternately** on highly branched slender stems.

#### FLOWERS:

Flowers are **pink to white**, may occur in spring through late summer and are usually **5-petaled**. Smallflower tamarisk (*T. parviflora* DC.) is similar in appearance, but has 4-petaled flowers, with brown to deep purple bark on the stems. Smallflower tamarisk was introduced from southern Europe, and is also widespread.

#### SEEDS:

Seeds are pollen grain sized, easily dispersed and will germinate readily on any open, moist sites.

#### OTHER:

Originally, salt cedar was introduced as an ornamental and later used as a streambank stabilization species. It has invaded throughout the desert southwest, mostly along waterways, and altering wetland habitats. Its aggressive root system uses copious amounts of ground water, often to the detriment of other species. Few to no plants grow under its canopy, probably because of the high concentrations of salt that builds up in the soil from its accumulated leaf litter and the excretion of salt from glands on the leaves.

#### KEY CHARACTERS:

- Flowers are pink, small, 5-petaled, and borne in long clusters along stems. Leaves are scale-like, on slender, wispy multi-branched, green stems.
- Smooth woody stems are dark brown to reddish-brown.

#### DISTRIBUTION:

Owens Valley floor water-spreading basins, Upper and Lower Owens River channel, Tinemaha Reservoir, Diaz Lake, Owens Lake, and springs in the White and Inyo Mountains.

You are here: News & Events /

## News & Events

### Search

Enter Keywords

Go

- Advanced Search
- Search Tips

### Browse By Subject

- Research
- Products & Services
- People & Places
- News & Events**
  - Search News & Events**
  - News
  - Magazine
    - Subscriptions
    - Editorial Staff
    - Magazine Archives
  - Image Gallery
  - Noticias en español
  - Press Room
  - Video
  - Briefing Room
  - Events
- Partnering
- Careers

### Foreign Agents Imported for Weed Control



Although pretty at certain times of the year, saltcedar is an invasive exotic weed that is harming both agriculture and the environment. Here, it is overtaking native vegetation along the Gila River in Arizona. (K8770-1)

You enter through a thick, metal door. When it closes, only a small window provides light in the room. Next, you go through another door into a room with another small window. The goal: to lure potential escape artists toward a trap in the window rather than allow them to sneak outside.

Through a third door, you enter a network of laboratories and greenhouses that hold beneficial insects from foreign lands. These insects, scientists and landowners hope, may help control some of the United States' worst weed invaders—like leafy spurge, saltcedar, and melaleuca.

"Invasive species, including weeds, cost U.S. consumers and producers billions of dollars each year," says Ernest S. Delfosse, the [Agricultural Research Service's](#) national program leader for weed sciences in Beltsville, Maryland. "Natural enemies from the weeds' homelands may be our most effective and economical tools for long-term control."

When beneficial insects arrive from overseas, they are carefully sorted, screened for parasites, and reared in quarantine facilities like the one just described, which is located at ARS' Western Regional Research Center in Albany, California.



Technician Eve Lednický examines beneficial insects being evaluated within the containment portion of the ARS quarantine facility in Albany, California. (K8796-15)

Though the specifications may differ, about two dozen U.S. quarantine facilities serve as strictly regulated gateways for importing biological control agents. Researchers at some locations focus on beneficial insects like wasps to control insect pests such as alfalfa weevils or gypsy moths. Those at other locations look at diseases and other microscopic agents for both weed and insect control.

This story highlights ARS research on using beneficial insects for biological control of weeds. ARS operates laboratories with quarantine facilities in Albany; Stoneville, Mississippi; and Temple, Texas. New quarantine operations will open in Fort Lauderdale, Florida, and Sidney, Montana, within the next few years.

ARS also collaborates with universities and other state and federal agencies that run additional quarantines, including a long-term program at Gainesville, Florida. Each uses a variety of traps, doors, entryways, and sanitizing procedures to keep the insects inside until they are intentionally



### Saltcedar, *Tamarix* spp.: An Emerging Success

**Economic and Ecological Impact:** Saltcedar, *Tamarix ramosissima* (and related *Tamarix* spp.), is native to central Asia and the Mediterranean area, and is a major invasive riparian weed. This shrub to small tree was deliberately released in the U.S. in 1837 to help control wind and water erosion. It can grow up to 30 feet tall, infests over one million acres, and is still spreading along rivers and streams throughout the West (Fig. 1). Saltcedar uses water otherwise used for irrigation or native vegetation, and has contributed to significant reductions in beneficial vegetation, such as willows, cottonwoods and other plants crucial to agriculture and the natural environment. Saltcedar degrades wildlife habitat and stream channel morphology and flow, and increases soil salinity and wildfire frequency. These changes have had a cascading effect through the ecosystem, resulting in loss of arthropods and other biota that lived in and around the native plant communities. Economic losses from saltcedar have been estimated at millions of dollars per year. A large consortium of Federal, State, local and private sector customers and stakeholders have joined to support biologically based management of saltcedar.

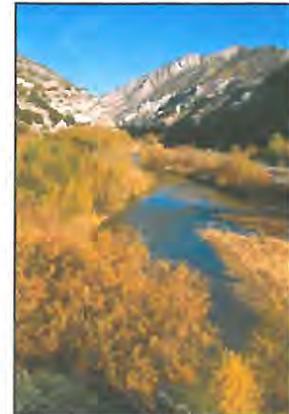


Fig. 1. Saltcedar dominating native vegetation along the Gila River in Arizona.



Fig. 2. Adult *Diorhabda elongata*, the saltcedar leaf-feeding beetle.

**Significant Accomplishments:** ARS scientists at Albany, California, Reno, Nevada, Sidney, Montana, and Temple and Weslaco, Texas, are developing a biologically based integrated weed management program for saltcedar. Classical biological control, using host-specific natural enemies, and revegetation with desirable plants are the keystones of sustainable management of saltcedar. Herbicides and cultural controls are also very valuable tools in this program. The first biological control agent for saltcedar, the leaf-feeding beetle, *Diorhabda elongata* (Fig. 2) was initially released in secure field cages in 1999 at ten sites in six states (California, Colorado, Nevada, Texas, Utah and Wyoming). Cages were removed at these sites in 2001. The original few hundred individuals released have produced millions of offspring. Additional release sites were added in Montana, Oregon and New Mexico in 2003. *Diorhabda* is already impacting saltcedar at release sites (Fig. 3) and is spreading to other locations.

Fig. 3. Dr. C. Jack DeLoach (USDA-ARS, Temple, Texas) standing before saltcedar damaged by *Diorhabda elongata* two years after its release at a site near Lovelock, Nevada.



Fig. 4. The southwestern willow flycatcher, an endangered bird that colonized saltcedar after its preferred native nesting habitat was out-competed by saltcedar. Measuring the recovery of this bird is a priority of this program.

Before releases were initiated, an endangered bird, the southwestern willow flycatcher, *Empidonax traillii extimus* (Fig. 4) was found to use saltcedar as a nesting substrate in parts of Arizona, New Mexico, and Nevada. The flycatcher adopted saltcedar because the weed had resulted in the loss of the native trees and shrubs that are its preferred nesting habitat. To ensure minimal impact on the flycatcher, the U.S. Fish & Wildlife Service was involved in selecting release sites, and is participating in post-release monitoring of *Diorhabda* and impact of saltcedar.

**Future:** Impacts of *Diorhabda* on saltcedar, revegetation, the recovery of the flycatcher, and changes in other biota will be monitored for several years by ARS and our partners and stakeholders. Other natural enemies from the native range of saltcedar are being tested, and may be released in the future if needed.

**Funding and partnerships:** This research is funded from USDA-ARS base funds, a grant from the USDA-Cooperative State Research Education and Extension Service, and contributed funds from various partners and stakeholders. A 60-member *Saltcedar Biological Control Consortium* will continue to oversee research and technology transfer in this project.

**Contact:** Dr. Ernest S. Delfosse, USDA-Agricultural Research Service, National Program Leader for Weed Science, 5601 Sunnyside Avenue, 4-2238, Beltsville, MD 20705-5139. Telephone: 301-504-6470. E-mail: esd@ars.usda.gov.



The leaf beetle *Diorhabda elongata* is the first approved biological control agent for saltcedar in the United States. (K8836-1)

To protect the bird while controlling the weed, the scientists implemented an extra step, in concurrence with APHIS and the U.S. Fish and Wildlife Service: a 3-year experimental phase that begins with the beetles in cages. This will allow scientists to monitor the rate at which the beetles damage the saltcedar before the insects are relocated to other critical habitats.

A consortium of experts from more than two dozen federal, state, and local agencies; universities; and conservation organizations meets periodically to develop monitoring protocols, review progress, and address concerns.

Despite the endangered species concerns, scientists are confident that the biological control approach is the right choice for managing saltcedar.

"Saltcedar is an Old World plant with no close native relatives here," says ARS entomologist Raymond I. Carruthers. "More than 200 natural enemies of saltcedar have been found in China and the former Soviet Union. Insects like the *Diorhabda* beetle feed exclusively on saltcedar, making them ideal for biological control." Carruthers leads the Exotic and Invasive Weed Research Unit at Albany.



*Oxyops vitiosa*, a leaf weevil, is thriving on invasive melaleuca in southern Florida. (K7658-2)

The next likely candidate will be a weevil from France, China, and Kazakhstan, belonging to the genus *Coniatus*. Like the *Diorhabda* beetle, the larvae eat the foliage. But young *Coniatus* pupate on the tree before they emerge as adults, while *Diorhabda* fall to the ground to pupate and can be drowned in wet areas.

Both the leafy spurge and saltcedar projects are using high-tech tools such as aerial photography, remote sensing, and geographic information systems (GIS), to map the weeds over vast areas. ARS ecologist Gerry Anderson in Sidney and ARS rangeland scientist Jim Everitt at Weslaco, Texas, coordinated some of the mapping.

"It is often difficult to determine the extent and distribution of weed populations on rangelands because of the expanse and inaccessibility of these areas," Anderson says. "These technologies will provide a comprehensive way to measure the rate at which the weeds spread and the long-term effectiveness of biological control over wide regions."

### Showing Promise for Water Weeds and Melaleuca, Too

Foreign aquatic plants have also invaded and become weeds. ARS began its search for biological control agents of water weeds by establishing laboratories in Florida in 1959 and Argentina in 1962. Water-hyacinth was one of the original targets and remains a high priority today.

By 1992, water-hyacinth had invaded hundreds of lakes and streams throughout the South and parts of the West and Hawaii. The weed impedes water's natural flow and can destroy native communities of aquatic plants and animals. Biological control has already greatly reduced water-hyacinth in Florida,





Mealybugs (*Trabutina mannipara*) are being considered as a biological control agent for saltcedar. These egg sacs are on saltcedar in quarantine at Temple, Texas. (K8836-2)



In Kazakhstan and western China, the midge *Psectrosema noxium* attacks saltcedar and forms galls on it, killing the terminal stems. (K8836-3)



management (TEAM) Leafy Spurge project in 1997. ARS and APHIS coordinate the project, with participation by dozens of other federal, state, and local organizations and ranchers.

TEAM Leafy Spurge is the third in a series of ARS-funded, 5-year IPM projects but the first to target a weed. Researchers examine biological, cultural, and chemical methods individually and in combination to manage the weed. The goal is to find the best tools, from an environmental and economical standpoint, so ranchers and land managers can reclaim rangeland lost to the weed and slow its further spread.

"So far, the project has been a big success," says Spencer. Last summer, TEAM Leafy Spurge distributed for release more than 22 million flea beetles to 206 ranchers and land managers from 50 counties in 7 states.

The *Aphthona* beetles will soon be joined by a gall midge, *Spurgia capitigena*. Unlike flea beetles, the midge prefers moist, shady areas. That will give TEAM Leafy Spurge another tool to slow spurge growth in areas where beetles, grazing sheep and goats, or pesticides aren't effective or practical.

Rouhollah Sobhian, an ARS entomologist, has located a good natural source of the midge in southern France. Scientists in Europe and Montana have studied the midge, and Spencer has already obtained a release permit from APHIS.

#### Chinese Beetles for Saltcedar Control

Landowners in the western United States brought in bushy, deciduous saltcedar (*Tamarix* spp.) trees for erosion control in 1837. Since then, saltcedar has crowded out native trees like willows and cottonwoods along parts of nearly every western river.

In 1987, ARS launched a project to use biological control against the weed. ARS researchers, along with cooperators in China, France, Israel, Kazakhstan, and Turkmenistan, began plant studies and identified potential natural enemies. A leaf beetle, *Diorhabda elongata*, and a mealybug, *Trabutina mannipara*, were shipped to ARS quarantine labs in Albany and Temple for further study.

Last summer, the beetle was approved as the first biological control agent for saltcedar. The adults and young feed on saltcedar leaves, repeatedly defoliating the tree and depriving it of nutrients.

Normally, control agents are approved for direct release into target areas. But this time, researchers faced a unique complication.

"Saltcedar replaced native willows that an

endangered bird—the southwestern willow flycatcher (*Empidonax traillii extimus*)—relied on for nesting," says ARS entomologist Jack DeLoach. "The bird has since adapted to nesting in saltcedar, so we have to ensure that the beetles won't remove the weed faster than we can reestablish native plants for the bird." DeLoach is with the ARS Grassland Protection Research Unit at Temple.

Biological control aims to restore some of a weed's natural complement of enemies, making it less damaging here. This approach has been used successfully and safely for many years. Since 1945, more than 110 insect species have been released in the continental United States and Hawaii against some 57 weeds. Some of the worst pests no longer cause significant damage. "Of course, we have to ensure that we protect our natural resources at the same time," Delfosse says. "The quarantine facilities are just one of the steps we take to keep biological control safe."



In quarantine tests, potential biological control agents are confined in small cages with a test plant (Scotch thistle, in this case) to confirm whether they will feed and reproduce on that plant. **(K8797-4)**

In tandem with the domestic laboratories, ARS operates or collaborates in the operation of several overseas laboratories for hands-on discovery and collection of the weeds' natural enemies (see story on ARS' foreign biological control laboratories, page 7). These labs are in Montpellier, France; Hurlingham, Argentina; Beijing, China; and Indooroopilly, Australia. Often working with local landowners and biologists, ARS researchers look for the insects that will likely do the most damage to the weed and the least damage to anything else. Scientists at the foreign labs study the basic biology of the insect agents. They verify that the insects significantly damage the weed and begin testing to make sure the insects don't eat or reproduce on U.S. native or crop plants.

Together with hundreds of cooperators here and overseas, ARS quarantine and foreign research laboratories serve as an invaluable pipeline for identifying, testing, importing, and releasing biological control agents against some of our most troublesome weeds. USDA's Animal and Plant Health Inspection Service (APHIS) plays a key role in regulating the importation of all beneficial organisms, as well as overseeing quarantine facilities. Several examples highlight this unique research conduit.

#### **A Key Strategy for TEAM Leafy Spurge**

First identified in the United States in 1827, leafy spurge (*Euphorbia esula*) now infests at least 5 million acres in 35 states and Canadian provinces. The weed degrades grazing lands for livestock and wildlife and reduces land values.

ARS began research on biological control of leafy spurge in the 1970s at laboratories in California, Montana, and Italy. Since then, ARS, APHIS, and foreign cooperators have discovered, imported, and released 12 natural enemies.



*Aphthona flava* flea beetle feeding on leafy spurge. **(K2602-4)**

The stars so far have been a group of four related flea beetles from Eurasia that belong to the genus *Aphthona*. The beetles have rapidly expanded from some areas. At one site in North Dakota, where 77 beetles were released, about 2 million were harvested in 1999 for distribution to other spurge-infested areas.

The young beetles burrow into the weed's roots. Adults feed on the leaves. In addition to harming the plant directly, this feeding allows invasion by disease-causing fungi or bacteria and impairs its reproduction. "There is no question that biological control will be a key to long-term control of leafy spurge," says Neal R. Spencer, an entomologist who leads research at ARS' Northern Plains Agricultural Research Station in Sidney, Montana.



Leafy spurge overtaking a natural hillside in Colorado. **(K2602-21)**

To demonstrate biological control and other integrated pest management (IPM) techniques for leafy spurge, ARS formed The Ecological, Areawide Management (TEAM) Leafy Spurge Control Program in 1997.

## News Release

**For Release:** October 7, 2008

**Contact:** David Briery (951) 697-5220; e-mail [dbriery@ca.blm.gov](mailto:dbriery@ca.blm.gov) or Elaine Downing (760) 326-7003; e-mail [edowning@ca.blm.gov](mailto:edowning@ca.blm.gov)  
CA-CDD-09-02

### Volunteers Sought to Help Restore Bonanza Springs

Volunteers willing to roll up their sleeves for a day are needed to help restore Bonanza Springs. As part of the 15th annual National Public Lands Day, Saturday, Nov. 8, 2008, volunteers will help eradicate tamarisk and arundo, which have endangered the spring's vitality, as well as install a pedestrian pass-through gate, maintain and reclaim trails, and install natural stones from the wash as stepping stones.

Lunch will be provided to the first 50 registered volunteers. All volunteers will receive a free NPLD t-shirt and a pass good for one free entry, any day during the next year, at public land sites managed by the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, the BLM, or the US Army Corp of Engineers.

"Last year we reached a monumental participation of 110,000 volunteers on National Public Lands Day, and we are expecting to increase this by an additional 10,000 this year," said Robb Hampton, director of National Public Lands Day. This year, National Public Lands Day commemorates the 75th anniversary of the Civilian Conservation Corps and is sponsored for the ninth consecutive year by Toyota Motor Sales, USA.

Bonanza Springs is a small oasis 45 miles west of Needles, just north of Route 66 between Essex and Chambless, Calif. This small spring in the desert makes surrounding uplands inhabitable by wildlife for up to several miles.

Nearly a decade ago, the Bureau of Land Management (BLM) began clearing Bonanza Springs of noxious weeds, which were choking the life out of the springs. Tamarisk, often called salt cedar, is an evergreen shrub or tree growing to 50 feet in height and forming dense thickets. It can spread both by submerged stems and by seeds. Each flower can produce thousands of tiny seeds that are contained in a small capsule, usually adorned with a tuft of hair that aids in wind dispersal. Seeds can also be dispersed by water. Tamarisk species are fire-adapted and have long tap roots that allow them to intercept deep water tables and exploit natural water resources. They are able to limit competition from other plants by taking up salt from deep ground water, accumulating it in their foliage and depositing it in the surface soil. The salt build ups can be detrimental to other plants.

Arundo is a tall, perennial reed, growing in fresh and moderately saline water. It can grow to 30 feet in ideal conditions. This vegetative growth appears to be well adapted to floods, breaking up into individual clumps, spreading the pieces, then sprouting and colonizing further downstream. In 2007, BLM employees, with the help of volunteers, placed thick, black tarpaulins over the arundo to prevent light from reaching the plant, reducing its ability to photosynthesize. The lack of light eventually depletes the plants energy reserves, causing it to die back. Since the tarps have been in place for more than a year, they will be picked up and moved to other spots within the Bonanza Springs area.

To find out more about the project, including what to bring, directions, or to register as a volunteer, please contact Elaine Downing at [edowning@ca.blm.gov](mailto:edowning@ca.blm.gov) or (760) 326-7003, or visit the website, <http://www.blm.gov/ca/st/en/fo/needles/volunteers.html>.

-BLM-

*California Desert District Office - 22835 Calle San Juan De Los Lagos, Moreno Valley, California - (951) 697-5220*

Last updated: 10-21-2008

[USA.GOV](http://www.usa.gov) | [No Fear Act](#) | [DOI](#) | [Disclaimer](#) | [About BLM](#) | [Notices](#) | [Get Adobe Reader®](#)

### Aerial Spraying of Tamarisk



Helicopter spraying herbicide over tamarisk in Fresno County

The Bureau of Land Management has taken to the air in an effort to control invasive shrubs.

Approximately 350 acres of tamarisk in western Fresno County was sprayed this month with imazapyr (Habitat) and glyphosate (Aquamaster) by helicopter.

Helicopters remove the barriers associated with travel over uneven terrain (vs. ground vehicles) and allows for relatively targeted herbicide application (vs. fixed wing aircraft), said Ryan O'Dell, natural resource specialist in BLM's Hollister Field Office. The effects of the aerial herbicide application treatment will be monitored and treatment with the same method will continue in following years if the results are satisfactory.

Aerial herbicide application to tamarisk by helicopter has successfully been used to control tamarisk on BLM land in New Mexico and Colorado, but this project marks the first time that aerial herbicide application has been conducted on BLM land in California, according to Dianna Brink, BLM California State Office Range and Weed Program lead.

Tamarisk is a noxious, invasive woody shrub that has invaded riparian zones throughout arid regions of the western United States, including Panoche Creek and Silver Creek on BLM Hollister Field Office managed-land in western Fresno County. Tamarisk has displaced native woody riparian vegetation, reducing habitat quality for native plant and animal species and altering riparian zone hydrologic function.

Previous tamarisk control methods at Panoche Creek and Silver Creek have included brush mowing and cut stump application of glyphosate in 2006, basal bark application of triclopyr to re-sprouted plants using backpack sprayers in 2007 and 2008, and foliar application of glyphosate with a boom attached at an elevated position on a small Caterpillar in 2010. All of these ground-level treatments have proven unfeasible at large scales due to uneven terrain and the operational limits of ground vehicles. None of the treatment methods have significantly reduced the tamarisk within the project area.

-David Christy, BLM CCD Public Affairs, Mother Lode Field Office, 9-28-11

BLM-California News.bytes, issue 500 -- To **subscribe** to News.bytes, send an e-mail to: <mailto:Join-Newsbytes@List.ca.blm.gov> OR visit our [News.bytes subscription page](#) .

## Tamarisk Removal - Volunteers Needed

### NOTE DATE CHANGE BELOW!!

The Palm Springs-South Coast BLM office is hosting two tamarisk removal events in the Santa Rosa Wilderness to be held November 14th and December 12th, 2009.

Volunteers will hike approximately 1 mile into Sheep Canyon, an area important to the federally endangered Peninsular bighorn sheep (*Ovis canadensis nelsoni*), to help remove the invasive plant species tamarisk (*Tamarix ramosissima*).

Hand saws, loppers and gloves will be provided, but quantities are limited, so volunteers are encouraged to bring their own tools as well. In addition, light snacks and drinks will be provided. Volunteers should bring any personal safety supplies such as sunscreen, hat, closed toe shoes, etc.

For both the November 14th and **December 12th** dates, volunteers are to meet at the Palm Springs BLM office located at 1201 Bird Center Drive at 8AM to carpool to the site, and people should plan on returning to the office by 1PM. Participants shall also receive a 2009 National Public Lands Day t-shirt.

**The December 12th date has been changed to January 30, 2010 due to the possibility of rain.**

Interested parties should RSVP to either Jennifer Taylor, Volunteer Coordinator at 760-833-7117 ( [j5taylor@blm.gov](mailto:j5taylor@blm.gov) ) or Kevin Doran, Natural Resource Specialist at 760-833-7137.

**BLANK PAGE**

# BWD CASH FLOW 2011-2012

	C	D	E	I	J	K	L
4							
5			<b>BUDGET</b>	<b>PRIOR</b>	<b>ACTUAL</b>	<b>PROJECTED</b>	<b>ACTUAL</b>
6			<b>FY 2012</b>	<b>MONTHS</b>	<b>OCTOBER</b>	<b>OCT</b>	<b>YTD</b>
7				<b>2011-2012</b>	<b>2011</b>	<b>2011</b>	<b>2011-2012</b>
8	<b>REVENUE</b>						
9	<b>WATER REVENUE</b>						
10	Residential Water Sales (Assume no water use on Montezoro GC)		424,312	190,949	61,412	68,263	252,361
11	Commercial Water Sales		98,000	27,239	8,029	10,611	35,268
12	Irrigation Water Sales		99,000	33,356	17,507	13,685	50,863
13	GWM Surcharge		94,000	26,678	8,712	9,183	35,390
14	Water Sales Power Portion		277,000	86,039	28,541	26,841	114,580
15	Readiness Water Charge		635,000	194,408	69,831	69,514	264,238
16	Meter Installation		40,000	2,020	0	5,000	2,020
17	Water hook-up charge		0	19,875	0	0	19,875
18	Reconnect Fees		6,500	6,714	680	680	7,394
19	Backflow Testing/installation		3,300	404	391		796
20	Bulk Water Sales		1,200	647	19	100	666
21	Penalty & Interest Water Collection		24,000	8,246	2,934	2,000	11,180
22	<b>TOTAL WATER REVENUE:</b>		<b>1,702,312</b>	<b>596,574</b>	<b>198,056</b>	<b>205,876</b>	<b>794,630</b>
23		Receivables					
24	<b>PROPERTY ASSESSMENTS/AVAILABILITY CHARGES</b>	as of 10/04/11					
25	641500 1% Property Assessments	72,965	69,080	2,382	898	898	3,280
26	641502 Property Assessments wtr/swr/flid		45,000	383	151	151	534
27	641502/641503 Property Assess.-delinq-Montezoro	427,621		0		0	-
28	641501 Water avail Standby	101,331	82,673	2,851	422	422	3,273
29	641504 ID 3 Water Standby			0		0	-
30	641504 ID 3 Water Standby-delinquent La Casa	36,067	33,760	320	0	0	320
31	641503 Pest standby	25,050	17,953	347	52	52	398
32	Penalty & Interest-Avail Charges		1,000	0	0	0	-
33	<b>TOTAL PROPERTY ASSES/AVAIL CHARGES:</b>	<b>663,034</b>	<b>249,466</b>	<b>6,283</b>	<b>1,523</b>	<b>1,523</b>	<b>7,806</b>
34							
35	<b>SEWER SERVICE CHARGES</b>						
36	Town Center Sewer Holder's Fees		180,140	45,035	15,012	15,012	60,047
37	Sewer user Fees		221,400	62,812	22,104	21,000	84,915
38	Penalty Interest-Sewer		1,800	0	0	150	-
39	Sewer Inspection Fees		200	663	0	0	663
40	Sewer Capacity Fees		12,138	9,445	0	0	9,445
41	<b>TOTAL SEWER SERVICE CHARGES:</b>		<b>415,678</b>	<b>117,955</b>	<b>37,116</b>	<b>36,162</b>	<b>155,070</b>
42							
43	<b>PARK/GOLF INCOME</b>						
44	CSD Fees-(trash/maintenance)			17,172	453	5,608	17,625
45	CC Golf Income			115	0	0	115
46	<b>TOTAL PARK/GOLF INCOME:</b>			<b>17,287</b>	<b>453</b>	<b>5,608</b>	<b>17,740</b>
47							
48	<b>OTHER INCOME</b>						
49	Rent Income-San Diego County		7,715	1,929	643	643	2,572
50	Annexation Fees		0	0	0	0	-
51	Fire Hydrant Installation		5,000	0	0	5,000	-
52	Miscellaneous Income		5,000	0	0	417	-
53	Administrative Fee-Water Credits		5,000	0	0	500	-
54	Gain on Asset Sold		1,500	0	0	0	-
55	Stag Grant		125,000	60,590	0	0	60,590
56	Interest Income		1,550	77	32	30	109
57	<b>TOTAL OTHER INCOME:</b>		<b>150,765</b>	<b>62,596</b>	<b>675</b>	<b>6,590</b>	<b>63,271</b>
58							
59	<b>CASH BASIS ADJUSTMENTS</b>						
60	Decrease (Increase) in Accounts Receivable			(49,176)	(9,766)		(58,942)
61	Other Cash Basis Adjustments			0			-
62	<b>TOTAL CASH BASIS ADJUSTMENTS:</b>		<b>0</b>	<b>(49,176)</b>	<b>(9,766)</b>	<b>0</b>	<b>(58,942)</b>
63							
64	<b>TOTAL INCOME RECEIVED</b>		<b>2,518,221</b>	<b>751,518</b>	<b>228,057</b>	<b>255,759</b>	<b>979,575</b>
65							

	M	N	O	P	Q	R	S
4							
5	YTD + PROJ MONTHS>>	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	PROJECTED	NOV	DEC	JAN	FEB	MARCH	APRIL
7	<u>2011-2012</u>	<u>2011</u>	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2012</u>	<u>2012</u>
8							
9							
10	723,073	63,908	59,287	39,276	19,238	39,382	52,353
11	117,810	8,819	9,104	7,459	7,002	8,490	9,988
12	132,812	9,529	9,369	4,498	3,102	7,335	11,881
13	97,254	8,258	7,730	5,071	2,609	5,506	7,263
14	294,928	24,293	22,509	14,690	7,566	16,080	21,311
15	883,514	68,747	68,777	68,845	68,472	68,713	68,442
16	39,040	-	0	0	5,000	0	10,000
17	19,875	-	0	0	0	0	0
18	14,534	680	680	680	680	680	680
19	1,508			1,000			
20	1,697	100	100	100	100	100	100
21	29,517	2,000	2,000	2,000	2,000	2,000	2,000
22	2,355,562	186,334	179,555	143,619	115,769	148,287	184,018
23							
24							
25	73,310	16,467	18,073	0	0	0	34,540
26	45,769	0	20,000	0	0	0	25,000
27	-	0	0	0	0	0	0
28	64,570	0	30,000	0	0	0	30,000
29	33,760	0	16,880	0	0	0	16,880
30	30,640	0	15,000	0	0	0	15,000
31	18,532	0	8,981	0	0	0	8,981
32	1,000	0	500	0	0	0	500
33	267,582	16,467	109,434	0	0	0	130,901
34							
35							
36	195,155	15,012	15,012	15,012	15,012	15,012	15,012
37	272,618	21,000	21,000	21,000	21,000	21,000	21,000
38	1,350	150	150	150	150	150	150
39	663	0	0	0	0	0	0
40	12,138	0	1,012				1,010
41	481,924	36,162	37,174	36,162	36,162	36,162	37,172
42							
43							
44	28,505	514	514	514	514	514	514
45	230	0	0	0	0	0	0
46	28,735	514	514	514	514	514	514
47							
48							
49	8,358	643	643	643	643	643	643
50	-	0	0	0	0	0	0
51	5,000	0	0	0	0	0	0
52	3,749	417	417	417	417	417	417
53	2,000	500	500	500	0	0	0
54	1,500	0	0	0	0	0	0
55	125,590	66,210	0	0	0	0	0
56	359	30	30	30	30	30	30
57	146,555	67,800	1,590	1,590	1,090	1,090	1,090
58							
59							
60	(14,012)						
61	-						
62	(14,012)	0	0	0	0	0	0
63							
64	<u>3,266,346</u>	<u>307,278</u>	<u>328,267</u>	<u>181,885</u>	<u>153,535</u>	<u>186,053</u>	<u>353,695</u>
65							

# BWD CASH FLOW 2011-2012

	T	U	W	X	Y	Z	AA	AB
4								
5	PROJECTED	PROJECTED		PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	MAY	JUNE	PROJECTED	JULY	AUGUST	SEPT	OCT	NOV
7	2012	2012	2012-2013	2012	2012	2012	2012	2012
8								
9								
10	61,408	84,933	941,757	93,482	103,668	106,002	86,621	86,208
11	9,754	11,040	149,388	9,826	17,686	20,624	13,059	10,854
12	11,556	15,560	147,340	12,697	12,562	15,603	16,843	11,728
13	8,477	9,651	118,706	8,136	13,396	14,317	11,605	11,040
14	24,884	28,031	346,629	23,787	38,832	41,089	33,979	32,636
15	68,627	69,216	983,811	54,387	82,512	84,632	85,555	84,611
16	5,000	5,000	40,000	-	5,000	-	5,000	-
17	0	0	19,875	19,875	0	-	0	-
18	680	680	8,160	680	680	680	680	680
19			1,000					
20	100	100	1,304	204	100	100	100	100
21	2,000	2,000	24,000	2,000	2,000	2,000	2,000	2,000
22	<b>192,485</b>	<b>226,211</b>	<b>2,781,969</b>	<b>225,074</b>	<b>276,436</b>	<b>285,047</b>	<b>255,443</b>	<b>239,857</b>
23								
24								
25	0	0	69,080	0	0	0	0	34,540
26	0	0	158,801	0	0	0	0	79,401
27	0	0	-	0	0	0	0	0
28	0	0	82,764	0	0	0	0	41,382
29	0	0	33,760	0	0	0	0	16,880
30	0	0	-	0	0	0	0	0
31	0	0	17,963	0	0	0	0	8,981
32	0	0	1,000	0	0	0	0	500
33	<b>0</b>	<b>0</b>	<b>363,367</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>181,684</b>
34								
35								
36	15,012	15,012	196,407	31,275	15,012	15,012	15,012	15,012
37	21,000	21,000	377,203	31,434	31,434	31,434	31,434	31,434
38	150	150	1,938	288	150	150	150	150
39	0	0	663	663	0	0	0	0
40		671	16,523	9,445	0	0	0	0
41	<b>36,162</b>	<b>36,833</b>	<b>592,733</b>	<b>73,104</b>	<b>46,596</b>	<b>46,596</b>	<b>46,596</b>	<b>46,596</b>
42								
43								
44	514	514	-					
45	0	0	-	0	0	0	0	0
46	514	514	0	0	0	0	0	0
47								
48								
49	643	643	8,304	1,232	643	643	643	643
50	0	0	-	0	0	0	0	0
51	0	0	5,000	0	0	0	5,000	0
52	417	413	5,382	799	417	417	417	417
53	0	0	5,000	1,000	1,000	1,000	500	500
54	0	1,500	1,500	0	0	0	0	0
55	0	0	-	0	0	0	0	0
56	30	30	1,627	252	125	125	125	125
57	<b>1,090</b>	<b>2,586</b>	<b>25,186</b>	<b>3,031</b>	<b>2,185</b>	<b>2,185</b>	<b>6,685</b>	<b>1,685</b>
58								
59								
60			-					
61								
62	0	0	0	0	0	0	0	0
63								
64	<u>230,251</u>	<u>266,144</u>	<u>3,763,256</u>	<u>301,208</u>	<u>325,216</u>	<u>333,828</u>	<u>308,723</u>	<u>469,821</u>
65								

	C	D	E	I	J	K	L
4							
5			<b>BUDGET</b>	<b>PRIOR</b>	<b>ACTUAL</b>	<b>PROJECTED</b>	<b>ACTUAL</b>
6			<b>FY 2012</b>	<b>MONTHS</b>	<b>OCTOBER</b>	<b>OCT</b>	<b>YTD</b>
7				<b>2011-2012</b>	<b>2011</b>	<b>2011</b>	<b>2011-2012</b>
66	<b>EXPENSES</b>						
67							
68	<b>MAINTENANCE EXPENSE</b>						
69	R & M Buildings & Equipment		110,000	23,101	5,980	9,167	29,080
70	R & M Wells/pipelines/Pumps - WWTP		35,000	18,527	1,835	2,000	20,362
71	Telemetry		20,000	3,393	1,488	7,000	4,881
72	Trash Removal		7,500	1,407	469	500	1,877
73	Vehicle Expense		17,000	1,017	576	1,417	1,593
74	Fuel & Oil		38,000	11,469	2,414	2,500	13,883
75	<b>TOTAL MAINTENANCE EXPENSE:</b>		<b>227,500</b>	<b>58,914</b>	<b>12,762</b>	<b>22,584</b>	<b>71,677</b>
76							
77	<b>PROFESSIONAL SERVICES EXPENSE</b>						
78	Accounting		8,000	3,521	0	667	3,521
79	Administrative Services		4,000	1,202	314	333	1,516
80	Audit Fees		26,000	11,600	3,169	5,200	14,769
81	Computer billing		12,000	10,866	1,179	1,000	12,045
82	Consulting/Technical		25,000	0	0	2,083	-
83	Engineering		25,000	0	0	2,083	-
84	Legal Services		60,000	5,266	284	2,500	5,550
85	Testing/lab work		25,000	8,065	1,475	2,083	9,540
86	Regulatory Permit Fees		45,000	7,559	10,651	3,508	18,210
87	<b>TOTAL PROFESSIONAL SERVICES EXPENSE:</b>		<b>230,000</b>	<b>49,304</b>	<b>17,072</b>	<b>19,457</b>	<b>65,153</b>
88							
89	<b>INSURANCE/INTEREST EXPENSE</b>						
90	ACWA Insurance		102,774	31,393	0	0	31,393
91	Workers Comp		20,000	4,920	0	0	4,920
92	Interest-COP 2008/Well 12 Purchase Agreement		194,875	132,438	0	0	132,438
93	<b>TOTAL INSURANCE/INTEREST EXPENSE:</b>		<b>317,649</b>	<b>168,751</b>	<b>0</b>	<b>0</b>	<b>168,751</b>
94							
95	<b>PERSONNEL EXPENSE</b>						
96	Board Meeting Expense (board stipend/board secretary)		22,000	2,190	1,095	1,200	3,285
97	Salaries & Wages (gross)		826,918	222,490	70,643	70,500	293,133
98	Taxes on Payroll		32,930	3,591	1,146	800	4,737
99	Medical Insurance Benefits		232,733	51,477	17,378	17,378	68,856
100	Calpers Retirement Benefits		178,000	43,911	14,327	14,833	58,238
101	Salaries & Wages contra account		(18,000)	(7,494)	(3,574)	(1,500)	(11,068)
102	Conference/Conventions/Training/Seminars		10,500	4,099	218	875	4,317
103	<b>TOTAL PERSONNEL EXPENSE:</b>		<b>1,285,081</b>	<b>320,265</b>	<b>101,233</b>	<b>104,086</b>	<b>421,498</b>
104							
105	<b>OFFICE EXPENSE</b>						
106	Office Supplies		20,000	4,481	1,308	1,500	5,789
107	Office Equipment/ Rental/Maintenance Agreements		32,500	7,433	119	2,708	7,553
108	Postage & Freight		11,000	2,138	2,030	2,000	4,168
109	Taxes on Property		2,291	0	0	2,291	-
110	Telephone/Answering Service		10,700	1,705	651	892	2,356
111	Bad Debt Collection		4,000	298	123	333	421
112	Dues & Subscriptions		8,000	1,053	33	667	1,085
113	Printing, Publications & Notices		5,000	237	0	417	237
114	Uniforms		7,000	1,423	386	583	1,809
115	Osha Requirements/Emergency preparedness		7,500	1,008	182	625	1,190
116	<b>TOTAL OFFICE EXPENSE:</b>		<b>107,991</b>	<b>19,776</b>	<b>4,832</b>	<b>12,016</b>	<b>24,608</b>
117							
118	<b>UTILITIES EXPENSE</b>						
119	Pumping-Electricity		320,000	88,561	29,006	30,419	117,567
120	Office/Shop Utilities		15,000	5,736	1,497	1,250	7,233
121	Cellular Phone		10,000	2,273	627	833	2,901
122	<b>TOTAL UTILITIES EXPENSE:</b>		<b>345,000</b>	<b>96,570</b>	<b>31,130</b>	<b>32,502</b>	<b>127,700</b>
123							

# BWD CASH FLOW 2011-2012

	M	N	O	P	Q	R	S
4							
5	YTD + PROJ MONTHS>>	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	PROJECTED	NOV	DEC	JAN	FEB	MARCH	APRIL
7	<u>2011-2012</u>	<u>2011</u>	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2012</u>	<u>2012</u>
66							
67							
68							
69	107,871	9,167	9,167	9,167	9,167	9,167	9,167
70	47,108	2,000	2,000	2,000	2,000	2,780	2,917
71	23,393	0	6,000	0	0	0	0
72	6,377	500	500	500	500	500	500
73	13,889	1,417	1,417	1,417	1,417	1,416	1,416
74	40,252	2,500	2,500	2,500	2,500	2,500	2,500
75	238,890	15,584	21,584	15,584	15,584	16,363	16,500
76							
77							
78	9,520	667	667	667	667	666	666
79	4,498	333	333	333	333	334	334
80	32,400		5,200				5,200
81	21,621	1,000	1,000	1,000	1,000	1,000	1,000
82	18,751	2,083	2,083	2,083	2,083	2,083	2,083
83	18,751	2,083	2,083	2,083	2,083	2,083	2,083
84	28,995	2,500	2,500	2,500	2,500	2,500	2,500
85	27,887	2,083	2,083	2,083	2,083	2,083	2,083
86	48,678	10,285	12,507	3,800	400	1,000	5,000
87	214,729	21,034	28,456	14,549	11,149	11,749	20,949
88							
89							
90	70,521	0	0	0	0	10,075	29,053
91	19,840	0	0	5,000	0	0	5,000
92	194,876	0	0	0	0	62,438	0
93	285,236	0	0	5,000	0	72,513	34,053
94							
95							
96	13,705	1,200	1,200	1,200	1,200	1,200	1,200
97	935,668	78,000	70,500	70,500	70,500	70,500	70,500
98	20,505	700	600	5,341	3,001	1,380	1,375
99	228,138	17,738	17,738	17,738	17,738	17,738	17,738
100	191,987	14,833	14,833	14,833	14,833	14,833	14,833
101	(21,489)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
102	14,324	875	875	875	875	875	875
103	1,382,838	111,846	104,246	108,987	106,647	105,026	105,021
104							
105							
106	18,954	2,000	1,500	1,500	1,500	1,500	1,500
107	35,193	2,708	2,708	2,708	2,708	2,708	2,708
108	10,988	50	2,000	50	100	2,000	50
109	2,291	2,111	0	0	0	0	0
110	10,351	892	892	892	892	892	892
111	3,370	333	333	333	333	334	334
112	7,736	667	667	667	667	667	667
113	4,042	417	417	417	417	417	417
114	7,138	583	583	583	583	583	583
115	6,770	625	625	625	625	625	625
116	106,834	10,386	9,725	7,775	7,825	9,726	7,776
117							
118							
119	333,789	27,033	25,555	16,838	9,643	18,143	24,392
120	18,864	1,250	1,250	1,250	1,250	1,250	1,250
121	10,676	833	833	833	833	833	833
122	363,329	29,116	27,638	18,921	11,726	20,226	26,475
123							

	T	U	W	X	Y	Z	AA	AB
4								
5	PROJECTED	PROJECTED		PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	MAY	JUNE	PROJECTED	JULY	AUGUST	SEPT	OCT	NOV
7	2012	2012	2012-2013	2012	2012	2012	2012	2012
66								
67								
68								
69	9,167	9,163	120,245	19,412	9,167	9,167	9,167	9,167
70	2,917	2,913	39,344	7,261	2,917	2,917	2,917	2,917
71	7,000	0	20,000	0	0	7,000	0	0
72	500	500	7,500	625	625	625	625	625
73	1,416	1,416	18,385	2,802	1,417	1,417	1,417	1,417
74	2,500	2,500	41,386	6,553	3,167	3,167	3,167	3,167
75	<b>23,500</b>	<b>16,492</b>	<b>246,860</b>	<b>36,653</b>	<b>17,293</b>	<b>24,293</b>	<b>17,293</b>	<b>17,293</b>
76								
77								
78	666	666	8,611	1,278	667	667	667	667
79	334	334	4,358	691	333	333	333	333
80		5,200	31,800	11,000		5,200		
81	1,000	1,000	12,000	1,000	1,000	1,000	1,000	1,000
82	2,083	2,087	26,910	3,993	2,083	2,083	2,083	2,083
83	2,083	2,087	26,910	3,993	2,083	2,083	2,083	2,083
84	2,500	2,500	64,583	9,583	5,000	5,000	5,000	5,000
85	2,083	2,087	27,786	4,869	2,083	2,083	2,083	2,083
86	200	1,000	45,000	2,500	600	5,500	8,508	3,985
87	<b>10,949</b>	<b>16,961</b>	<b>247,958</b>	<b>38,907</b>	<b>13,849</b>	<b>23,949</b>	<b>21,757</b>	<b>17,234</b>
88								
89								
90	0	0	70,521	0	0	31,393	0	0
91	0	0	23,750	8,750	0	0	5,000	0
92	0	0	222,875	98,000	0	0	62,438	0
93	<b>0</b>	<b>0</b>	<b>317,146</b>	<b>106,750</b>	<b>0</b>	<b>31,393</b>	<b>67,438</b>	<b>0</b>
94								
95								
96	1,200	1,200	23,811	3,644	1,833	1,833	1,833	1,833
97	70,500	70,500	803,144	45,136	68,910	68,910	68,910	68,910
98	1,162	1,414	35,658	5,472	2,744	2,744	2,744	2,744
99	17,738	17,738	253,158	39,819	19,394	19,394	19,394	19,394
100	14,833	14,837	194,006	30,839	14,833	14,833	14,833	14,833
101	(1,500)	(1,500)	(18,000)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
102	875	875	11,563	1,938	875	875	875	875
103	<b>104,808</b>	<b>105,064</b>	<b>1,303,340</b>	<b>125,348</b>	<b>107,089</b>	<b>107,089</b>	<b>107,089</b>	<b>107,089</b>
104								
105								
106	1,500	1,500	44,280	3,690	3,690	3,690	3,690	3,690
107	2,708	2,708	-					
108	2,000	600	11,854	1,771	917	913	917	917
109	0	0	2,111	0	0	0	0	2,111
110	890	890	11,595	1,787	892	892	892	892
111	334	334	4,337	670	333	333	333	333
112	667	663	8,672	1,339	667	667	667	667
113	417	417	5,417	830	417	417	417	417
114	583	587	7,611	1,194	583	583	583	583
115	625	625	8,115	1,240	625	625	625	625
116	<b>9,724</b>	<b>8,324</b>	<b>95,877</b>	<b>11,281</b>	<b>7,499</b>	<b>7,495</b>	<b>7,499</b>	<b>9,610</b>
117								
118								
119	27,185	36,655	349,123	55,786	26,667	26,667	26,667	26,667
120	1,250	1,250	16,475	2,725	1,250	1,250	1,250	1,250
121	833	837	10,880	1,713	833	833	833	833
122	<b>29,268</b>	<b>38,742</b>	<b>376,478</b>	<b>60,224</b>	<b>28,750</b>	<b>28,750</b>	<b>28,750</b>	<b>28,750</b>
123								

# BWD CASH FLOW

~~2011-2012~~

	C	D	E	I	J	K	L
4							
5			<b>BUDGET</b>	<b>PRIOR</b>	<b>ACTUAL</b>	<b>PROJECTED</b>	<b>ACTUAL</b>
6			<b>FY 2012</b>	<b>MONTHS</b>	<b>OCTOBER</b>	<b>OCT</b>	<b>YTD</b>
7				<b>2011-2012</b>	<b>2011</b>	<b>2011</b>	<b>2011-2012</b>
124	<b>CASH BASIS ADJUSTMENTS</b>						
125	Decrease (Increase) in Accounts Payable			23,724	37,071		60,796
126	Increase (Decrease) in Inventory			5,137	(3,274)		1,863
127	Other Cash Basis Adjustments			0	0		-
128	<b>TOTAL CASH BASIS ADJUSTMENTS:</b>			<b>28,862</b>	<b>33,797</b>	<b>0</b>	<b>62,659</b>
129							
130	<b>TOTAL EXPENSES PAID</b>		<b><u>2,513,221</u></b>	<b>742,442</b>	<b><u>200,827</u></b>	<b><u>191,045</u></b>	<b><u>942,045</u></b>
131							
132							
133	<b>O&amp;M</b>						
134	<b>NET CASH FLOW (O&amp;M)</b>		<b><u>5,000</u></b>	<b>9,077</b>	<b><u>27,229</u></b>	<b><u>64,714</u></b>	<b><u>37,530</u></b>
135							
136							
137	<b>NON O &amp; M EXPENSES</b>						
138	USGS Basin study		131,500	27,747		0	27,747
139	GWM Planning Costs (150-47-12=91)		91,000	0			-
140	Integrated Regional Water Management Plan/Staff time		47,000	7,604			7,604
141	BOR S.E. Caifornia Regional Basin Study/Staff Time		12,000	0			-
142	STAG Grant/Staff time		40,000	39,200			39,200
143	Viking Ranch Purchase		69,000	6,210			6,210
144	GWM/ABD-IRWM Legal Expenses		10,000	411			411
145	Water Credit Policy legal expenses		27,500	551			551
146	Catchment berm WWTP		0	0			-
147	ID1-10 150 Hp , rewind motor in year 2, pump & casing cleaning in year		0	0			-
148	ID4-11 200 Hp, pump & casing cleaning in yr 1 and rewind motor in yea		60,000	0			-
149	Rams Hill #1 1980 steel needs inside coating, 1.25mg		150,000	0			-
150	Twin Tanks, 1970's-inside coating		40,000	0			-
151	Pickup		0	0			-
152	ID4, Reducing Station design and installation		0	0			-
153	Circle J Drive pipeline (2013)		0	0			-
154	Montezuma Road pipeline project-final		0	11,900			11,900
155	Two water credit refunds-less admin processing fee		10,000	10,000			10,000
156	Telemetry Radio & PLC Upgrades		29,081				
157	<b>TOTAL NON O&amp;M EXPENSES</b>		<b><u>717,081</u></b>	<b><u>103,624</u></b>	<b><u>0</u></b>	<b><u>0</u></b>	<b><u>103,624</u></b>
158							
159	<b>CASH RECAP</b>						
160	Cash beginning of month		779,356	779,356	685,361	685,361	779,356
161	Net Cash Flow (O&M)		5,000	9,077	27,229	64,714	37,530
162	Total Non O&M Expenses		(717,081)	(103,624)	0	0	(103,624)
163	Transfer To/From Reserves		0	0	0		-
164	<b>CASH AT END OF PERIOD</b>		<b>67,275</b>	<b>2,056,582</b>	<b>690,638</b>	<b>663,388</b>	<b>2,747,219</b>
165							
166	Actual cash at end of month			2,056,582	690,638		2,747,220
167	Difference			0	0		0
168							
169	<b>RESERVES</b>						
170	Working Capital		629,555				
171	Contingency (3%)		75,546				
172	Asset replacement		114,791				
173	Emergency		2,500,000				
174	<b>TOTAL RESERVES</b>		<b><u>3,319,892</u></b>				
175							
176							
177	<b>SIGNIFICANT ITEMS</b>	<b>ACTUAL</b>	<b>PROJECTED</b>				
178							
179	<b>INCOME</b>						
180	Meter Installation	0	5,000	Used average of budget-Budget running high			
181	CSD Fees	453	5,608	Subtracted cc golf water bill from fee			
182	Fire Hydrant Installation	0	5,000	Used average of budget-Budget running high			
183		<b>453</b>	<b>15,608</b>	<b>(15,155) Less actual income than projected</b>			
184	<b>EXPENSES</b>						
185	Maintenance expenses	12,762	22,584	Used average of budget-didn't spend as much as projected			
186	Taxes on property	0	2,291	Projected in October-paid in November			
187		<b>12,762</b>	<b>24,875</b>	<b>(12,113) Less actual income than projected</b>			
188	11/9/2011 2:48 PM bwd_cashflow 11.09.11						

	M	N	O	P	Q	R	S
4							
5	YTD + PROJ MONTHS>>	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	PROJECTED	NOV	DEC	JAN	FEB	MARCH	APRIL
7	2011-2012	2011	2011	2012	2012	2012	2012
124							
125	25,240						
126	6,263						
127	-						
128	31,503	0	0	0	0	0	0
129							
130	<u>2,623,359</u>	<u>186,255</u>	<u>192,049</u>	<u>171,216</u>	<u>153,431</u>	<u>236,003</u>	<u>211,174</u>
131	-						
132							
133							
134	<u>642,987</u>	<u>37,831</u>	<u>197,170</u>	<u>10,155</u>	<u>(410)</u>	<u>(25,465)</u>	<u>142,006</u>
135							
136							
137							
138	149,530		76,829				35,141
139	-						
140	61,039	9,120	33,207				
141	12,000						
142	75,864						
143	75,210	0	69,000				
144	5,823						
145	23,103	5,000	3,000	5,000	2,000	3,000	
146	5,000			5,000			
147	-						
148	60,000		0	60,000			
149	150,000	0		0	50,000		50,000
150	40,000					40,000	
151	-						
152	-						
153	-						
154	11,900						
155	10,000						
156		10,935	18,146				
157	<u>679,468</u>	<u>25,055</u>	<u>200,182</u>	<u>70,000</u>	<u>52,000</u>	<u>43,000</u>	<u>85,141</u>
158							
159							
160	779,356	690,638	557,164	639,982	532,603	530,193	461,728
161	642,987	37,831	197,170	10,155	(410)	(25,465)	142,006
162	(679,468)	(25,055)	(200,182)	(70,000)	(52,000)	(43,000)	(85,141)
163	0						
164	742,874	557,164	639,982	532,603	530,193	461,728	560,514
165							
166							
167							
168							
169							
170							
171							
172							
173							
174							
175							
176							
177							
178							
179							
180							
181							
182							
183							
184							
185							
186							
187							
188							

# BWD CASH FLOW

**2011-2012**

	T	U	W	X	Y	Z	AA	AB
4								
5	PROJECTED	PROJECTED		PROJECTED	PROJECTED	PROJECTED	PROJECTED	PROJECTED
6	MAY	JUNE	PROJECTED	JULY	AUGUST	SEPT	OCT	NOV
7	2012	2012	2012-2013	2012	2012	2012	2012	2012
124								
125			-					
126			-					
127								
128	0	0	0	0	0	0	0	0
129								
130	<u>178,649</u>	<u>186,083</u>	<u>2,587,659</u>	<u>379,163</u>	<u>174,480</u>	<u>222,969</u>	<u>249,826</u>	<u>179,976</u>
131								
132								
133								
134	<u>51,089</u>	<u>79,547</u>	<u>1,175,598</u>	<u>(77,955)</u>	<u>150,736</u>	<u>110,859</u>	<u>58,898</u>	<u>289,845</u>
135								
136								
137								
138			-					
139			-					
140			-					
141			-					
142			-					
143			57,000			14,250		
144			-					
145			-					
146			-					
147			10,000	10,000				
148			15,000	15,000				
149			-					
150			-					
151			20,000	20,000				
152			25,000		25,000			
153			108,000	58,000		50,000		
154			-					
155			-					
156								
157	<u>0</u>	<u>0</u>	<u>235,000</u>	<u>103,000</u>	<u>25,000</u>	<u>64,250</u>	<u>0</u>	<u>0</u>
158								
159								
160	560,514	611,603	691,150	691,150	510,195	635,806	682,290	738,772
161	51,089	79,547	1,175,598	(77,955)	150,736	110,859	58,898	289,845
162	0	0	<u>(235,000)</u>	<u>(103,000)</u>	<u>(25,000)</u>	<u>(64,250)</u>	0	0
163								
164	<u>611,603</u>	<u>691,150</u>	<u>1,631,567</u>	<u>510,195</u>	<u>635,806</u>	<u>682,290</u>	<u>738,772</u>	<u>1,030,603</u>
165								
166								
167								
168								
169								
170								
171								
172								
173								
174								
175								
176								
177								
178								
179								
180								
181								
182								
183								
184								
185								
186								
187								
188								



# BORREGO WATER DISTRICT

	<b>BALANCE SHEET</b> <b>October 31, 2011</b> <b>(unaudited)</b>	<b>BALANCE SHEET</b> <b>September 30, 2011</b> <b>(unaudited)</b>	<b>MONTHLY</b> <b>CHANGE</b> <b>(unaudited)</b>
<b>ASSETS:</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	\$ 690,637.57	\$ 685,361.26	\$ 5,276.31
Accounts receivable from water sales and sewer charges	\$ 328,488.15	\$ 318,722.09	\$ 9,766.06
Interest receivable	\$ -	\$ -	\$ -
Inventory	\$ 122,253.84	\$ 125,527.90	\$ (3,274.06)
Availability charges receivable	\$ 335,659.21	\$ 335,659.21	\$ -
Grant Receivable	\$ 39,278.97	\$ 39,278.97	\$ -
Prepaid expenses	\$ 47,678.52	\$ 47,678.52	\$ -
Other Receivables	\$ 323,604.02	\$ 323,604.02	\$ -
<b>TOTAL CURRENT ASSETS</b>	<b>\$ 1,887,600.28</b>	<b>\$ 1,875,831.97</b>	<b>\$ 11,768.31</b>
<b>RESTRICTED ASSETS</b>			
Debt Service:			
Deferred amount of COP Refunding	\$ 162,566.97	\$ 162,566.97	\$ -
Unamortized bond issue costs	\$ 111,917.95	\$ 111,917.95	\$ -
Total Debt service	\$ 274,484.92	\$ 274,484.92	\$ -
Trust fund:			
Investments with fiscal agent -CFD 2007-1	\$ 175,462.70	\$ 175,462.70	\$ -
Total Trust fund	\$ 175,462.70	\$ 175,462.70	\$ -
<b>TOTAL RESTRICTED ASSETS</b>	<b>\$ 449,947.62</b>	<b>\$ 449,947.62</b>	
<b>UTILITY PLANT IN SERVICE</b>			
Land	\$ 2,027,868.94	\$ 2,027,868.94	\$ -
Flood Control Facilities	\$ 4,319,603.58	\$ 4,319,603.58	\$ -
Capital Improvement Projects	\$ -	\$ 1,556,930.96	\$ (1,556,930.96)
Sewer Facilities	\$ 5,514,571.59	\$ 5,514,571.59	\$ -
Water facilities	\$ 10,339,941.84	\$ 10,339,941.84	\$ -
Pipelines,wells and tanks	\$ 700,300.53	\$ 700,300.53	\$ -
General facilities	\$ 1,009,059.92	\$ 1,009,059.92	\$ -
Equipment and furniture	\$ 376,263.30	\$ 376,263.30	\$ -
Vehicles	\$ 471,545.28	\$ 471,545.28	\$ -
Accumulated depreciation	\$ (9,937,381.05)	\$ (9,937,381.05)	\$ -
<b>NET UTILITY PLANT IN SERVICE</b>	<b>\$ 14,821,773.93</b>	<b>\$ 16,378,704.89</b>	<b>\$ (1,556,930.96)</b>
<b>OTHER ASSETS</b>			
Water rights -ID4	\$ 185,000.00	\$ 185,000.00	\$ -
<b>TOTAL OTHER ASSETS</b>	<b>\$ 185,000.00</b>	<b>\$ 185,000.00</b>	
<b>TOTAL ASSETS</b>	<b>\$ 17,344,321.83</b>	<b>\$ 18,889,484.48</b>	<b>\$ (1,545,162.65)</b>

<b>LIABILITIES:</b>	<b>BALANCE SHEET</b> <b>October 31, 2011</b> <b>(unaudited)</b>	<b>BALANCE SHEET</b> <b>September 30, 2011</b> <b>(unaudited)</b>	<b>MONTHLY</b> <b>CHANGE</b> <b>(unaudited)</b>
<b><i>CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS</i></b>			
Accounts Payable	\$ 61,387.71	\$ 98,458.97	\$ (37,071.26)
Accrued expenses	\$ 172,261.50	\$ 172,261.50	\$ -
Deferred Revenue	\$ -	\$ -	\$ -
Deposits	\$ 27,571.25	\$ 27,571.25	\$ -
<b>TOTAL CURRENT LIABILITIES PAYABLE FROM CURRENT ASSETS</b>	<b>\$ 261,220.46</b>	<b>\$ 298,291.72</b>	<b>\$ (37,071.26)</b>
<b><i>CURRENT LIABILITIES PAYABLE FOM RESTRICTED ASSETS</i></b>			
Debt Service:			
Accounts Payable to CFD 2007-1	\$ 175,462.70	\$ 175,462.70	\$ -
<b>TOTAL CURRENT LIABILITIES PAYABLE FROM RESTRICTED ASSETS</b>	<b>\$ 175,462.70</b>	<b>\$ 175,462.70</b>	<b>\$ -</b>
<b><i>LONG TERM LIABILITIES</i></b>			
2008 Certificates of participation(payable from restricted assets	\$ 2,775,000.00	\$ 2,775,000.00	\$ -
Montesoro Note Payable	\$ 644,557.51	\$ 644,557.51	\$ -
<b>TOTAL LONG TERM LIABILITIES</b>	<b>\$ 3,419,557.51</b>	<b>\$ 3,419,557.51</b>	<b>\$ -</b>
<b>TOTAL LIABILITIES</b>	<b>\$ 3,856,240.67</b>	<b>\$ 3,893,311.93</b>	<b>\$ (37,071.26)</b>
<b><i>FUND EQUITY</i></b>			
Contributed equity	\$ 9,649,544.17	\$ 9,649,544.17	\$ -
Retained Earnings:			
Unrestricted Reserves/Retained Earnings	\$ 3,838,536.99	\$ 5,346,628.38	\$ (1,508,091.39)
Total retained earnings	\$ 3,838,536.99	\$ 5,346,628.38	\$ (1,508,091.39)
<b>TOTAL FUND EQUITY</b>	<b>\$ 13,488,081.16</b>	<b>\$ 14,996,172.55</b>	<b>\$ (1,508,091.39)</b>
<b>TOTAL LIABILITIES AND FUND EQUITY</b>	<b>\$ 17,344,321.83</b>	<b>\$ 18,889,484.48</b>	<b>\$ (1,545,162.65)</b>



# BORREGO WATER DISTRICT

## Treasurer's Report October, 2011

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

### Cash and Cash Equivalents:

Demand Accounts at Wells Fargo Bank/BSB

General Account/Petty Cash	\$ 429,403	\$ 395,753	\$ 395,753	57.30%	n/a	0.00%	n/a	WFB/BSB
Payroll Account	\$ 25,304	\$ 23,870	\$ 23,870	3.46%	n/a	0.05%	n/a	WFB
LAIF	\$ 20,756	\$ 20,756	\$ 20,756	3.01%	n/a	0.38%	n/a	LAIF
MMA	\$ 250,258	\$ 250,258	\$ 250,258	36.24%	n/a	0.05%	n/a	WFB
<b>Total Cash and Cash Equivalents</b>	<b>\$ 725,722</b>	<b>\$ 690,638</b>	<b>\$ 690,638</b>	<b>100.00%</b>				

### Facilities District No. 2007-1

First American Treas Obligation -US BANK	175,463	175,463	175,463
<b>Total Cash, Cash Equivalents &amp; Investments</b>	<b>\$ 901,184</b>	<b>\$ 866,100</b>	<b>\$ 866,100</b>

Cash and investments conform to the District's Investment Policy statement filed with the Board of Directors on July 27, 2011. Cash, investments and future cash flows are sufficient to meet the needs of the District for the next six months. Sources of valuations are Borrego Springs Bank (BSB), 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 October, 2011

<b>A. Vendor disbursements paid during this period:</b>	<b>\$</b>	<b>122,642.78</b>
<u>Significant items:</u>		
1 Utilities	\$	30,028.00
2 CalPERS Payments	\$	16,867.68
3 Employee Health Benefits	\$	19,344.44
4 ACWA dues - 2012	\$	10,285.00
<b>B. Capital Projects Outlays:</b>		
<i>(included in vendor disbursements paid above)</i>		
<b>C. Total Professional Services for this Period:</b>		
<i>(included in vendor disbursements paid above)</i>		
McDougal, Love, Eckis                      Legal	\$	532.50
<b>Total Invoice:</b>	<b>\$</b>	<b>532.50</b>
RMC Water & Environment-IRWM Planning Grant	\$	9,120.29
<b>Total Invoice:</b>	<b>\$</b>	<b>9,120.29</b>
William Mills & Associates - Stag Grant	\$	5,687.50
<b>Total Invoice:</b>	<b>\$</b>	<b>5,687.50</b>
<b>D. Payroll for this Period:</b>		
Gross Payroll	\$	70,643.24
Employer Payroll Taxes and ADP Fee	\$	1,145.95
<b>Total</b>	<b>\$</b>	<b>71,789.19</b>

BORREGO WATER DISTRICT  
 FOR BOARD CONSIDERATION AND APPROVAL  
 OCTOBER 31, 2011

GENERAL ACCOUNT

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
17385	11/09/11	U.S.BANK CORPORATE PAYMENT SYS SEE INVOICES FOR DETAILS	
17386	11/09/11	FOR DETAILS ABILITY ANSWERING/PAGING SER	3,428.16
17387	11/09/11	ANSWERING & PAGING SERVICE FOR NOVEMBER	183.86
17358	10/27/11	ACWA HEALTH BENEFITS AUTHORITY EMPLOYEE BENEFITS 12/1/11-01/01/12	19,344.44
17359	10/27/11	ADT QTRLY BILLING; 11/1/11-1/31/12	169.27
17388	11/09/11	AFLAC EMPLOYEE PAID SUPPLEMENTAL INSURANCE	587.84
17389	11/09/11	ALLIED WASTE SERVICES #467 467-0701728	
17390	11/09/11	4861 BORREGO SPRINGS RD BASIC SERVICE 467-0007554	
17391	11/09/11	3155 HONOR COURT BASIC SERVICE 467-0017715	
17392	11/09/11	2990 BORREGO VALLEY BASIC SERVICE AMERICAN LINEN INC. UNIFORMS FOR CREW	2,786.82
17393	11/09/11	ANTHONY J. ROMANO RESPONSE TO AUDIT LETTER	386.49
17394	11/09/11	ASSOCIATION OF CALIF 2012 AGENCY DUES DELTA SUSTAINABILITY ASSESS	300.00
17395	11/09/11	AT CONFERENCE IRWM CONFERENCE CALL	10,285.00
17396	11/09/11	AT&T MOBILITY CELL PHONES	35.11
17397	11/09/11	AT&T-CALNET 2 760-767-4230 WWTP OFFICE 760-767-5806 MAIN OFFICE 760-767-5559 MAINT SHOP	627.34
			292.04

BORREGO WATER DISTRICT  
 FOR BOARD CONSIDERATION AND APPROVAL  
 OCTOBER 31, 2011

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
17395	11/09/11	BORREGO SPRINGS BOTTLED WATER BOTTLED WATER FOR YARD & WTWP OFFICES	34.02
17360	10/27/11	BORREGO SUN 1 YEAR SUBSCRIPTION	32.50
17361	10/27/11	06/01/10-09/22/11 CDPH-OCF CERTIFICATE RENEWAL JERRY ROLWING: GRADE 3 OP# 15149	90.00
17362	10/27/11	SUNSET ELECTRIC POWER CLUB CIRCLE REGULATING VALVE PARTS	1,500.00
17363	10/27/11	CONTRON TELEMETRY COMPUTOR SERVICE	1,488.41
17364	10/27/11	CREATIVE PRINTING BUSINESS CARDS 500 COUNT	139.81
17365	10/27/11	DATASTREAM BUSINESS SOLUTIONS, COMPUTER PROGRAMMING WATER BILLING REVIEW	902.50
17396	11/09/11	JAMES G HORMUTH/DBA TRUE VALUE SEE INVOICES FOR DETAILS	193.44
17366	10/27/11	DEBBIE MORETTI PEST CONTROL DISTRICT OFFICES	113.00
17367	10/27/11	CDPH-OCF CEERTIFICATE RENEWAL BENITO ARTEAGA	80.00
17397	11/09/11	GRADE D2,OP#35932 CDPH-OCF CERTIFICATION	60.00
17368	10/27/11	REQUEST-BUD PEREZ DESERT TIRE CENTER FORD F150 LIC#1252048 CA	49.70
17398	11/09/11	BASIC SERVICE DESERT TIRE CENTER FORD F-550 WINDSHIELD WIPERS REPLACED FORD F150 LICENSE#1129877	71.14
17399	11/09/11	BASIC SERVICE DICKSON SOFTWARE UPGRADE	73.00
17399	10/27/11	DIEHL, EVANS & COMPANY, LLP PROFESSIONAL FEES: FOURTH INTERIM BILLING	

BORREGO WATER DISTRICT  
FOR BOARD CONSIDERATION AND APPROVAL  
OCTOBER 31, 2011

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
17370	10/27/11	YE: JUNE 30, 2011 AUDIT DOWNSTREAM SERVICES, INC. SCHEDULED MAINTENANCE CLEAN LINES AS DIRECTED E.S. BABCOCK & SONS, INC. WATER SAMPLES ON ALL WELLS ECOLAYERS, INC. MONTHLY HOSTING JULY-OCT 2011 GWM	2,400.00
17400	11/09/11	EMPIRE SOUTHWEST BACKHOE REPAIR FASTENAL COMPANY WWTP PARTS FASTSIGNS ESCONDIDO NEW SIGN FOR FRONT DOOR HOURS OF OPS FP MAILING SOLUTIONS QTRLY INSTALLMENT ON POSTAGE METER 10/01/11-12/31/11 HIDDEN VALLEY PUMP SYSTEMS INC AIR LOCK REPAIR SCUM WELL KENNY STRICKLAND, INC. FUEL FOR CREW TRUCKS KENNY STRICKLAND, INC. FUEL FOR CREW TRUCKS McDOUGAL LOVE BCKIS PROFESSIONAL FEES: THROUGH SEPT. 30, 2011 VARIOUS ISSUES NAPA AUTO PARTS INC SEE INVOICES FOR DETAILS PACIFIC PIPELINE SUPPLY INC CLUB CIRCLE GOLF BACKFLOW INSTALL WO#6011 INVENTORY CONTROL CASH TO REPLENISH PETTY CASH PROCOPIO, CORY, HARGREAVES ATTORNEY FEES: RENDERED THROUGH SEPT. 30, 2011 AUDIT LETTER PUBLIC EMP'S RETIREMENT SYSTEM EMPLOYEE BENEFITS:	1,735.00
17371	10/27/11		1,445.00
17401	11/09/11		1,600.00
17402	11/09/11		1,183.61
17403	11/09/11		36.88
17372	10/27/11		64.65
17373	10/27/11		119.44
17374	10/27/11		100.00
17404	11/09/11		1,156.22
17375	10/27/11		1,199.37
17405	11/09/11		532.50
17406	11/09/11		420.75
17407	11/09/11		3,580.60
17376	10/27/11		300.00
17377	10/27/11		180.00

BORREGO WATER DISTRICT  
 FOR BOARD CONSIDERATION AND APPROVAL  
 OCTOBER 31, 2011

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
17378	10/27/11	10/01/11-10/15/11 EMPLOYEE BENEFITS: 10/16/11-10/31/11 QUILL CORPORATION OFFICE SUPPLIES SEE INVOICE FOR DETAILS OFFICE SUPPLIES SEE INVOICE FOR DETAILS QUILL CORPORATION OFFICE SUPPLIES SEE INVOICE	16,867.68
17408	11/09/11	RECORDER/COUNTY CLERK'S OFFICE LIEN RELEASE: 01-0307-0 MONICA 01-0038-0 BILL G RECORDER/COUNTY CLERK'S OFFICE LIEN RELEASE: 03-0008-3 LIEN RELEASE: L ENFIELD 05-1870-0 RMC WATER & ENVIRONMENT IRWM PLANNING GRANT-ROUND 2 SAN DIEGO GAS & ELECTRIC 6160 624 622 96 951 RANGO WAY ID1-16 1614 548 936 7 W CLUB CIRCLE S CLUB CIRCLE GOLF 3607 425 233 9 2990 BORREGO VALLEY RD TC LIFT STATION-ID5 4785 979 020 3 3003 LOFTER DR ID5-5	631.68
17379	10/27/11	SEE INVOICE	88.36
17409	11/09/11	RECORDER/COUNTY CLERK'S OFFICE LIEN RELEASE: 03-0008-3 LIEN RELEASE: L ENFIELD 05-1870-0 RMC WATER & ENVIRONMENT IRWM PLANNING GRANT-ROUND 2 SAN DIEGO GAS & ELECTRIC 6160 624 622 96 951 RANGO WAY ID1-16 1614 548 936 7 W CLUB CIRCLE S CLUB CIRCLE GOLF 3607 425 233 9 2990 BORREGO VALLEY RD TC LIFT STATION-ID5 4785 979 020 3 3003 LOFTER DR ID5-5	26.00
17410	11/09/11	SEE INVOICE	26.00
17380	10/27/11	3352 BORREGO VALLEY RD ID1-12 6114 527 629 9 TILTING T DR CLUB CIRCLE GOLF 9525 627 944 5 2989 BORREGO VSALLEY RD PACKAGE PLANT 4240 011 405 2 301 SLASH M RD COUNTRY CLUB TANK 5035 410 733 7 3528 COUNTRY CLUB RD ID4-10 8364 482 055 9	9,120.29

BORREGO WATER DISTRICT  
 FOR BOARD CONSIDERATION AND APPROVAL  
 OCTOBER 31, 2011

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
		5073 BORREGO SPRINGS RD ID1-1	
		9489 482 054 6	
		5065 BORREGO SPRINGS RD ID1-2	
		1614 489 405 4	
		5037 BORREGO SPRINGS RD ID1-8	
		2739 492 349 3	
		4861 BORREGO SPRINGS RD TREATMENT PLANT	
		3864 202 758 1	
		2510 RAMS HIL DR BOOSTER STATION 1	
		6160 427 632 7	
		COUNTRY CLUB RD W ID4-2	
		7285 625 351 8	
		4201 BOREGO SPRINGS RD ID1-10	
		2700 523 335 7	
		806 PALM CANYON DR OFFICE/MAINT SHOP	
		6954 509 423 8	
		STIRRUP RD E OLD SHOP	
		2881 512 118 8	
		1111 INDIAN HEAD RANCH ID4-18	
		3909 503 745 7	
		1775 BORREGO SPRINGS RD ID4-4	
		6159 441 279 1	
		2473 STIRRUP RD LUGO BLDG	
17411	11/09/11	SAN DIEGO GAS & ELECTRIC 9534 569 937 1	24,621.00
		2201 DIEGUENO RD ID4-11	
17412	11/09/11	STRADLING, YOCCA, CARLSON, RAUTH PROFESSIONAL FEES	5,407.10
17381	10/27/11	GENERAL SERVICE SWRCB	198.24
		CERTIFICATE RENEWAL: CASEY RODRIGUEZ	
		GRADE II WASTE WATER TREATMENT PLANT	
17423	11/09/11	UNDERGROUND SERVICE ALERT DIG ALERT	130.00
		NOTICES	
17322	10/27/11	WAXIE SANITARY SUPPLY OFFICE SUPPLIES	6.00
17444	11/09/11	HAND TOWELS WENDY QUINN	104.09

BORREGO WATER DISTRICT  
 FOR BOARD CONSIDERATION AND APPROVAL  
 OCTOBER 31, 2011

CHECK#	DATE	PAYEE & DESCRIPTION	AMOUNT
17383	10/27/11	RECORDING SERVICE FOR OCTOBER 2011 WILLIAM R. MILLS & ASSOC PROFESSIONAL FEES: STAG GRANT-THROUGH SEPT. 30, 2011	210.00
17384	10/27/11	ZEP MANUFACTURING COMPANY LUBRICANTS FOR PARTS	5,687.50
TOTAL			210.93
			122,642.78
			=====



## **Borrego Water District Management Report – November 2011**

*By: Jerry Rolwing*

### **BOARD REQUEST**

This report only reflects activities for the past two weeks due to the short period from the last meeting.

There was a request that I contact the Dept. of Water Resources on the 25% matching for the Integrated Regional Water Management. Anna Alajbiry responded (attachment A).

Don McKelvey, one of our original commercial/irrigation subcommittee members of the conservation committee is assisting me with the development of a set of BMP's (best management practices) for those two customer classes. Once developed, the item will return to the agenda.

### **FEDERAL LEVEL**

U.S. Geological Survey: The USGS Community Advisory Group had its first meeting on October 27th and attached are the minutes (attachment B). We are presently arranging for a meeting with the Group and the Strategic Advisory Committee and plan to have several model run scenarios for the USGS by January 2012.

U.S. Department of Reclamation: We received the \$12,000 invoice as part of the MOA and it is being paid.

State and Tribal Assistance Grant (STAG): Still collecting more data for the final report scheduled for December 2011.

U.S. Department of Agriculture: I am working with District consulting Engineer David Dale to evaluate preparing a pre-application for one of our future capital improvement projects. The proposed 10" water main for Borrego Springs Road has been set up in segments for future construction over the next ten years. This possible funding opportunity could be in the form of a low interest loan, grant or combination of the two. This project is still in progress.

### **STATE LEVEL**

The Integrated Regional Water Management (IRWM) held two conference calls on the Work Plan and monthly stakeholders meeting was held Tuesday November 9th. The consultant, RMC Water and Environment, has been a great asset to our program.

I have been working with DWR staff in designing the District's CASGEM (California Statewide Groundwater Elevation Monitoring) program. The proposed plan is an agenda item.

I spoke with Whitnie Henderson, legislative analyst for ACWA on the idea of going to the legislature for groundwater management agency powers. She suggested we start with our State Assemblyman Brian Jones and our State Senator Joel Anderson, possibly a joint-introduced bill. They should both be in their districts until the first of the year. She also suggested we hire a lobbyist. ACWA could assist on some

issues including a support letter, but they do not have the manpower to perform the entire duties of a lobbyist or be the bill sponsor.

**COUNTY LEVEL**

No action.

**LOCAL LEVEL**

No action.

**DISTRICT LEVEL**

District staff continues to investigate and implement cost saving measures in every aspect of our operations.

District engineering consultant David Dale is assisting the operations manager in the permitting of our backup diesel motors and generators. Last year the San Diego County Air Pollution Control District cited us for not having a permit for the Wilcox installation. Since that time we have been working with the County to bring the District into compliance but some of the detailed information required the input for our engineers. The paperwork has been completed and the initial fees due the Air Pollution Control District will run about \$6,000.

We experienced a communication problem with the District SCADA (supervisor control and data acquisition) system. Work continues to replace the failing equipment over the next few months.

**GENERAL**

No action.

Hi Jerry,

I hope you also had a weather shift from warm to pleasant.

For the IRWM Planning Round 2, yes, you can back up your cost share (local match) up to 09/30/2008, which is the same date we had for Round 1.

And yes, federal funds can be used as a match for the IRWM program, but State funds cannot be used as matching funds.

NOTES:

1. The same amount of matching funds (assuming it is not of a state government source) cannot be used twice for two different purposes.
2. The federal funds you mentioned should have been used for the purpose of the IRWM activities.
3. You can request a waiver for the DAC local match (in the implementation ONLY) and you don't need to look for matching sources. But if you are talking about planning, then yes, you have to come up with local match (in this case the federal fund.)

# MINUTES

## USGS Community Advisory Group

### October 27, 2011 1:00 pm

**Attendees:** John Peterson  
Jim Rickard  
Jack Laughlin  
Jim Engelke  
Mark Jorgensen  
Peter Martin, USGS - via telephone  
Claudia Faunt, USGS - via telephone  
Jerry Rolwing - BWD Staff

The group reviewed powerpoint presentation material provided by USGS on the existing model runs presented at the 2011 Town Hall Meeting. Peter Martin gave a brief description of the task for the group to consider: Task # 1) determine the parameters of the different model runs and Task #2) determine the amount of imported water to incorporate into the model runs. The USGS would like to see the results of this group by January 2012. John Peterson provided material from the 1984 California Department of Water Resources report which showed the possible scenarios of future municipal, agricultural and golf course projections at that time. Those scenarios reflected agriculture would decline to zero and population would grow. Jim Engelke provided a 50 year alternative scenario broken down by the same categories. Jerry Rolwing provided his estimates of 2011 Valley Water Usage.

Two scenarios were discussed that need to be included, do nothing and best case of reducing pumpage from 2011 estimates of 19,501 to USGS estimated natural replenishment of 4,010 acre feet per year in 25 years. The group decided not to include any estimates of supplemental imported water as per task #2. The group discussed the option of the Borrego Water District going to the State Legislature to acquire powers of a Groundwater Management District and the impacts of the District being able to assess, and collect, groundwater extraction fees.

The group was invited to submit their ideas of the different scenarios by e-mail for review before the next meeting. Future meetings will include featured speakers from the local agricultural industry, the local golf course industry and an informed person on becoming a Groundwater Management District. No meeting date was set until times for the invited speakers are confirmed.

**BLANK PAGE**

**RESOLUTION NO. 2011-11-1**

**RESOLUTION OF THE BOARD OF DIRECTORS OF  
THE BORREGO WATER DISTRICT AUTHORIZING  
INVESTMENT OF MONIES IN THE LOCAL AGENCY  
INVESTMENT FUND**

**WHEREAS**, Pursuant to Chapter 730 of the statues of 1976 Section 16429.1 was added to the California Government Code to create a Local Agency Investment Fund in the State Treasury for deposit of money of a local agency for purposes of investment by the State Treasurer; and

**WHEREAS**, the Board of Directors does hereby find that the deposit and withdrawal of money in the Local Agency Investment Fund in accordance with the provisions of Section 16429.1 of the Government Code for the purpose of investment as stated therein as in the best interests of the Borrego Water District;

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the Borrego Water District does hereby authorize the deposit and withdrawal of Borrego Water District monies in the Local Agency Investment Fund in the State Treasury in accordance with the provisions of Section 16429.1 of the Government Code for the purpose of investment as stated therein, and verification by the State Treasurer's Office of all banking information provided in that regard:

**BE IT FURTHER RESOLVED**, that the following Borrego Water District officers or their successors in office shall be authorized to order the deposit or withdrawal of monies in the Local Agency Investment Fund:

Jerry Rolwing  
General Manager

Kim Pitman  
Administration Manager

Marshal Brecht  
Secretary/Treasurer  
Board of Directors

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)



# **BORREGO WATER DISTRICT**

## **CASGEM PROGRAM GROUNDWATER MONITORING PLAN**

**OCTOBER 2011**

**BORREGO WATER DISTRICT  
806 Palm Canyon Drive  
Borrego Springs, CA 92004-3101  
(760) 767-5806**

## Table of Contents

Borrego Water District .....	3
History of Groundwater Monitoring.....	3
Groundwater Basin Hydrogeology.....	3
Monitoring Wells and Measurement Frequency .....	4
Discussion of Data Gaps.....	5
Water Level Data Measurement Methods .....	5
Before making a measurement.....	5
Making a measurement .....	6
After making a measurement .....	6
References .....	6
Appendix A.....	7
Well Data Sheet, DWR Form 429 .....	7
Appendix B.....	8
Groundwater Level Data Form.....	8

## Figures

Figure 1. Borrego Water District CASGEM Program Monitoring Area Location Map

Figure 2. Borrego Water District CASGEM Program Monitoring Area, Borrego Valley  
Groundwater Basin (DWR Basin 7-24)

## Appendices

Appendix A. Well Data Sheet, DWR Form 429

Appendix B. Groundwater Level Data Form

### **Borrego Water District**

The Borrego Water District (BWD) was established in 1962 as a California water district under Water Code Section 35565. The District provides water and other services to the community of Borrego Springs. Borrego Springs is an unincorporated community located in the northeastern portion of the County of San Diego and is surrounded by the Anza-Borrego Desert State Park. The community of Borrego Springs is located approximately 58 miles northeast of the city of San Diego and about 32 miles south of the city of Palm Desert (Figure 1).

The BWD service area (shown in Figure 2) covers approximately 71.5 square miles, with approximately 67.3 square miles of the service area overlying the Borrego Valley Groundwater Basin (DWR Basin 7-24). The BWD service area also overlies a portion of the Ocotillo-Clark Valley Groundwater Basin (DWR Basin 7-25), however, no groundwater is currently extracted by the BWD in that basin. Water supplied to the BWD customers is from groundwater extracted from the Borrego Valley Aquifer, the area's sole source of water. Currently, the BWD operates 12 production wells (2 non-potable wells used for irrigation) and collects water level data from 10 monitoring wells.

### **History of Groundwater Monitoring**

The Borrego Valley Groundwater Basin has a long history of groundwater level monitoring by the United States Geological Survey (USGS), the California Department of Water Resources (DWR), the County of San Diego, and the Borrego Water District. Groundwater elevations at selected wells have been monitored and reported by the USGS from 1945 to 1982 (Moyle 1982), by the DWR in the 1950s through 1960s and from 2003 to present, by the County of San Diego from about 1982 to present, and by BWD from 1980 to present. Moyle (1982) indicated that groundwater levels had been declining in the Borrego Valley since about 1945. More recent water level measurements by the USGS, DWR, the County of San Diego, and BWD indicate that groundwater levels continue to decline locally on the order of one to three feet per year.

### **Groundwater Basin Hydrogeology**

Borrego Valley is filled with up to 2,400 feet of poorly consolidated to unconsolidated alluvial sediments (Mills, 2009). The alluvial sediments rest upon Pliocene to Pleistocene continental rocks and late Miocene to early Pliocene marine rocks. Cretaceous granitic and pre-Tertiary metamorphic rocks of the Southern California Batholith underlie the sedimentary units of the Borrego Valley. The alluvial sediments in Borrego Valley were generated by weathering of rocks in the mountains surrounding the valley; the sediments were then transported into the valley through stream flow processes with the coarser materials deposited near the source areas surrounding the valley and the finer sediments being transported greater distances from the source areas. The granitic and metamorphic rocks that form the base of the aquifer system are exposed in the mountains surrounding the BWD CASGEM monitoring area to the northeast, west, and south. The Coyote Creek Fault separates the Borrego Valley Groundwater Basin from the adjacent Ocotillo-Clark Valley Groundwater Basin.

Moyle (1982) identified an upper, middle and lower aquifer within the Borrego Valley Groundwater Basin based upon specific capacities and specific yields of wells. In general, the upper aquifer produces the greatest amount of water and the lower aquifer produces the least

amount of water. The upper aquifer was interpreted to be composed of various Quaternary alluvial and windblown deposits. The middle aquifer was interpreted to consist of the upper portions of the continental deposits. The lower aquifer is interpreted to consist of the lower portions of the continental deposits as well as the marine rocks. The granitic and metamorphic rocks are not considered to be a part of the Borrego Valley Aquifer.

The upper aquifer has been interpreted to be the thickest in the northern portion of the BWD service area and most wells in that area are believed to extract groundwater from the upper aquifer there. The middle aquifer is thought to be thickest in the northeast portion of the BWD service area, which is generally north and east of the Borrego Valley Airport; few wells exist in that area, but are thought to be completed within the upper and middle aquifers. The lower aquifer is not thought to be present in the northern portion of the BWD service area. The lower aquifer is thickest in the southern portion of the service area and is notably thickest in the area surrounding the Borrego Sink.

The main sources for groundwater recharge in the northern portion of the Borrego Valley Groundwater Basin are considered to be Coyote Creek north of the BWD service area and the San Felipe Creek located to the southeast of the BWD service area (Figure 2). Moyle (1982) and DWR<sup>1</sup> have produced groundwater level contour maps showing groundwater flow patterns in the Borrego Valley since 1945. Before widespread development of the Borrego Valley, groundwater was interpreted to generally flow from all areas in the northern Borrego Valley toward the Borrego Sink and discharge from the basin through the Borrego Sink Wash (Figure 2). Recent groundwater level contour maps show that groundwater is being discharged in the northern and southwestern portions of the BWD service area as evidenced by groundwater pumping depressions in addition to discharge through the Borrego Sink Wash. The primary sources of discharge within the vicinity of the BWD service area include agricultural wells, municipal supply wells, private residential wells and to a lesser degree, the Borrego Sink and Borrego Sink Wash.

### **Monitoring Wells and Measurement Frequency**

Static groundwater levels are measured in BWD production wells on a bi-annual frequency and water levels are also measured in monitoring wells on a bi-annual frequency. Based upon historical and recent static groundwater level data collected in BWD's CASGEM monitoring area, the seasonal groundwater level high and low occur, respectively, during the months of **March** and **November**. All wells in the BWD CASGEM monitoring well network will be monitored on a bi-annual frequency and the data will be uploaded to the CASGEM system.

The following table identifies the wells to be monitored and the frequency with which they will be monitored and reported to the CASGEM Program.

---

<sup>1</sup>DWR Southern Region website showing interpretations of water level contours for Borrego Valley.  
[http://www.dpla.water.ca.gov/sd/groundwater/basin\\_assessment/basin\\_assessment.html](http://www.dpla.water.ca.gov/sd/groundwater/basin_assessment/basin_assessment.html)

<u>Monitoring Well Name</u>	<u>Monitoring Frequency</u>
MW-1	bi-annual in March and November
MW-3	bi-annual in March and November
MW-4	bi-annual in March and November
MW-5	bi-annual in March and November
ID4-1	bi-annual in March and November
ID4-2	bi-annual in March and November
ID4-5	bi-annual in March and November
Airport 2	bi-annual in March and November
Paddock	bi-annual in March and November
Dr. Nel's Well	bi-annual in March and November

### Discussion of Data Gaps

A data gap refers to an area that lacks a density of monitoring wells that would allow seasonal and long-term trends in groundwater elevations to be adequately evaluated over the monitoring area. The BWD has production wells in the northern portion of the service area, however, there is currently only one monitoring well in the northern portion of the BWD groundwater level monitoring area (MW-1, Figure 2). There are data gaps in the northwestern and northeastern portions of the monitoring area that exists due to a lack of suitable monitoring wells in those areas.

There are currently no plans or funding to install dedicated monitoring wells in Borrego Valley Groundwater Basin within the District boundary where the data gap exists. The Water District would be interested in discussing the installation of dedicated monitoring wells in the data gap area should outside funding become available.

### Water Level Data Measurement Methods

The Borrego Water District uses standard procedures for the collection and documentation of groundwater elevation data. The following description of field methods indicates how BWD will maintain quality, consistency and reliability of monitoring data for internal use and for the users of the CASGEM database.

The reference point (RP) for all monitoring wells are marked at each site. A description of each RP is documented in field files along with pictures and other information on the well data sheet (see Appendix A). Water level measurements will be completed using a Powers Electric Well Sounder. This well sounder is marked with graduations with accuracy to hundredths of a foot.

#### Before making a measurement

1. The person collecting ground water level measurements will identify the RP on site and compare it to the description contained on the well data sheet.
2. Well sounder will be inspected before each use checking for wear, kinks, frayed electrical connections and possible stretch.

3. Check the distance from the electrode's probe sensor to the nearest foot marker on the tape to confirm that it puts the sensor at the zero foot point for the tape.
4. Confirm electrical circuitry of sounder by placing electrode into tap water and confirming that the electrical circuit is complete by observing the indicator needle and beeper.
5. Wipe off electrode probe and the lower 5 to 10 feet with a disinfectant and rinse with de-ionized or tap water.
6. Dry the tape before lowering into the well.
7. Prepare field forms.

#### **Making a measurement**

1. Use previous measurement data on Groundwater Level Data Form (Appendix B) to estimate the length of tape that will need to be lowered into the well to reach the water surface.
2. Lower the tape slowly into the well until the indicator shows that the circuit is closed and contact with the water surface has been made. Note the time, date and the measurement of the water surface to the RP to the nearest 0.01 foot and record this value as "Tape at RP" on the Groundwater Level Data Form.
3. Lift the electrode up slowly a few feet and make a second measurement by repeating step 2 and record the information below the first measurement. If the second measurement does not coincide with the first measurement within 0.02 of a foot, make a third measurement and record the information below the second measurement. If more than two readings are taken, record the average depth to water measurement of all reasonable readings.

#### **After making a measurement**

1. Wipe down the electrode probe and the section of tape that was submerged in well water using disinfectant and rinse thoroughly with de-ionized or tap water.
2. Dry the tape and probe and rewind the cable onto the reel. Do not store a dirty or wet cable.

#### **References**

California Department of Water Resources, 1968, Water wells and springs in the Borrego, Carrizo, and San Felipe Valley areas, San Diego and Imperial Counties, California: Bulletin 91-15, 16 p.

Mills, R.M., 2009, Borrego Water District, Final Report: Integrated Water Resources Management Plan, 74 p.

Moyle, W. R., Jr., 1982, Water resources of Borrego Valley and vicinity, California; Phase 1 – definition of geologic and hydrologic characteristics of basin: U.S. Geological Survey Open File Report 82-855, 39 p.

## **Appendix A**

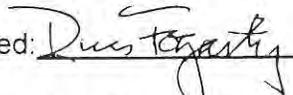
### **Well Data Sheet, DWR Form 429**

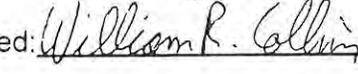
## **Appendix B**

### **Groundwater Level Data Form**

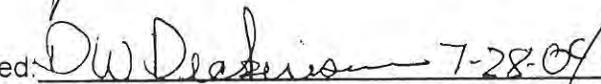
Memorandum of Understanding  
Regarding Augmenting Existing Hydrologic Data  
on the  
Borrego Valley Aquifer  
(Revised)  
7 July 2004

1. The signatories to this Memorandum of Understanding acknowledge the importance of a long-term reliable water supply sufficient to satisfy the needs of all water users in the Borrego Valley and agree that cooperatively addressing the issues surrounding the Borrego Aquifer overdraft is in the best interest of all parties.
2. The signatories further agree that additional information and data about the physical characteristics of the aquifer, water quality, and the nature and costs of various overdraft mitigating projects may be valuable in garnering support for effective, long-term solutions to the overdraft.
3. The interest groups in the Valley represented by the undersigned support additional research that will augment existing knowledge of the aquifer and expedite mitigation of the overdraft.
4. The purpose of this agreement is to demonstrate community solidarity on moving forward expeditiously to mitigate the existing overdraft.
5. By entering into this agreement, none of the members of the undersigned parties waive their respective water rights.

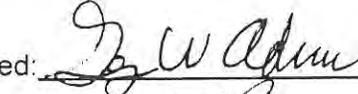
Signed:  7-13-04 Borrego Water District  
Date

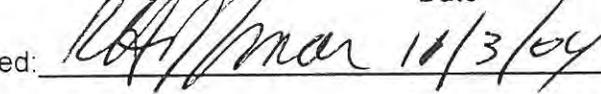
Signed:  7-7-04 Borrego Springs Community  
Date Sponsor Group

Signed:  9-10-04 Borrego Springs Chamber of  
Date Commerce

Signed:  7-28-04 Save Our Aquifer Coalition  
Date

Signed:  7/19/04 For Agricultural Alliance for Water  
Date and Resource Education

Signed:  8-17-04 For Borrego Fire District  
Date

Signed:  10/3/04 For Borrego Springs Unified School  
Date District

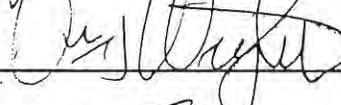
Memorandum of Understanding

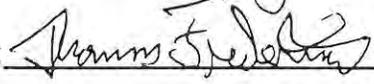
7 July 2004

Page 2 of 2

Signed:  <sup>7-20-04</sup>  
Date For Borrego Springs Country Club  
and Resort

Signed:  <sup>11/29/04</sup>  
Date De Anza Desert Country Club

Signed:  <sup>7-22-04</sup>  
Date Road Runner Club Golf Course

Signed:  <sup>7-19-04</sup>  
Date The Springs

Signed:  <sup>7-29-04</sup>  
Date Christmas Circle Park Association

Signed: Mark C. Jorgensen <sup>11/23/04</sup>  
Date Anza-Borrego Desert State Park

Signed: Sylvana Meeks <sup>9/8/04</sup>  
Date Rotary Club of Borrego Springs

Signed: Betsy Knaak, <sup>11/22/04</sup>  
Date Anza-Borrego Natural History  
Foundation association

Signed Mouli S. Saji <sup>9/7/04</sup> Civic Foundation of  
Borrego Springs

## DUE DILIGENCE COMMITTEE REPORT FOR NOVEMBER

### Power Pass through Charges:

- Power pass through charges are typically charges on the water bill separate from water rates that pay the actual cost of electricity borne by the water utility during the year. The ability of a water utility to add power pass through charges to the water bill has been governed by the 218 process since 2005;
- For example, the District imposed a power pass through charge of \$0.42/unit in 2000, but rescinded this charge in 2001;
- In 2009, Rich Williamson apparently broke out the electricity portion of the O&M budget and called it a “power fee.” Technically it was not a separate charge but more an accounting notation. Since this amount was not separate from the water rates, it did not require a 218 process to note this amount on the water bill;
- In May 2011, this Board published a rate increase notice as part of a 218 process that included its intent to establish a power pass through charge. However, the resolution passed by the Board in June 2011, for whatever reason, did not include the establishment of a power pass through charge. As the August water bill had a “power fee” on it, the question arose as to where this charge came from and where was the authority of the District to impose it?
- In fact, the current bill’s “power fee” is not a separate charge from the FY 2012 water rates established by the 218 process, but merely Rich Williamson’s 2009 electricity cost accounting notation increased by 30%;
- Recommendation: the next time the District goes through a 218 process, consider the establishment of a power pass through charge that is separate from the water rates.

# Anza Borrego Desert Planning Region Integrated Regional Water Management (IRWM) Plan

Tuesday October 11, 2011  
2:00 – 4:30 p.m.

Borrego Water District (BWD)  
806 Palm Canyon Drive, Borrego Springs, CA 92004

## DRAFT NOTES

*Action items are shown in italics*

### Attendees:

Jerry Rolwing, BWD  
Lyle Brecht, BWD  
Marshal Brecht, BWD  
Abby King, Borrego Springs  
Community Sponsor Group  
Linda Haddock, Borrego  
Springs Chamber of  
Commerce  
Kathy Dice, Anza-Borrego  
Desert State Park  
Ray Schindler, Consultant

Mike Spieckerman,  
Roadrunner Tree Farm  
Jim Wermers, De Anza  
Country Club  
Jim Engelke, Resident  
Don McKelvey, Resident  
Dale Schafer, Center for  
Collaborative Policy  
Tish Berge, RMC  
Crystal Mohr, RMC

**Attending by Phone:**  
Anna Aljabiry, DWR  
Jennifer Wong, DWR  
Vicki Long, Elsinore-  
Murrieta-Anza Resource  
Conservation District  
(EMARCD)  
Pam Nelson, EMARCD  
Anthony Barry, San Diego  
County Flood Control  
Ali Taghavi, RMC-WRIME

### Agenda:

#### Welcome and Introductions

- The group made self introductions, and Jerry Rolwing welcomed the group.
- Tish Berge provided an overview of the agenda, noting that there were a few changes to the meeting agenda. Such changes include the following:
  - Addition of a stakeholder exercise;
  - Brainstorming on regional issues; and
  - Discussing the Regional Alternatives Development Projects.

#### Review Outcomes of Last Meeting, September 20, 2011

- Jerry Rolwing provided an overview of the Anza Borrego Desert (ABD) IRWM process, which was started about a year ago. He noted that the Region applied for a Planning Grant in 2010, but was not awarded. Since that time, the Borrego Water District (BWD) has had a change in the Board of Directors, has a new General Manager, and has hired RMC Water and Environment to write another Planning Grant application.
- Mr. Rolwing noted that the Region would like to provide a more robust and complete Planning Grant application this round, and he is very appreciative to all those who are participating in this meeting today in person and via conference call.

- Mr. Rolwing explained that representatives from the Elsinore-Murrieta-Anza Resource Conservation District (EMARCD) will be attending the meeting by conference call. He explained that a portion of the Anza-Terwilliger Valley in EMARCD's jurisdiction lies within the northern area of the ABD IRWM Region, within the upper watershed area of Coyote Canyon. When the Anza-Terwilliger area has flooding issues, silt comes down into the ABD Region through Coyote Canyon and potentially creates water-related impacts. Mr. Rolwing noted that due to these circumstances, the Region could potentially work together with EMARCD on a regional project to address these issues.
  - Some clarification was requested regarding EMARCD and the Anza-Terwilliger area, the following are those clarifying statements:
    - The Anza-Terwilliger Valley itself is not located within the ABD Region, but rather within the Upper Santa Margarita Watershed IRWM Region;
    - Projects that would be required to address flooding and siltation would likely be implementation projects rather than planning projects, and would therefore likely not be suitable to include within the Planning Grant application. However, the Region will be sure to address flooding and siltation issues within Coyote Canyon within the background section of the Planning Grant application.
- Mr. Rolwing also noted that at the previous meeting, the group decided on tentative times to meet in the future. It was decided that the second Tuesday of the month would work, and that is what is proposed for future meetings.
- There was a comment that in order to increase participation and have more people attend meetings, the Region will need to do more than send out reminders via email. There was a suggestion to follow-up email notices with personal phone calls to folks considered to be key stakeholders.

## **DWR Report**

- Anna Aljabiry noted that DWR has more clear dates and preliminary award amounts for upcoming grant cycles as follows:
  - Planning Grant (Round 2) applications are anticipated to be due in February of 2012. DWR anticipates making \$9 million available in this round of funding.
    - The Project Solicitation Package (PSP), which constitutes the guidelines for the application process, will be available for public review. DWR will hold five meetings to discuss the PSP, of which Chino would be the closest to Borrego Springs.
  - The PSP for the Local Groundwater Assistance (LGA) Program will be open for public review in January of 2012 and finalized in March of 2012. DWR anticipates that applications will be due in May 2012.
    - For this program, a total of \$4.7 million will be available this round, with a cap of \$250,000 per application.
  - Implementation Grant (Round 2) applications are anticipated to be due in Fall of 2012. DWR anticipates making \$131 million available in this round.

- Proposition 1E Grant (Round 2) applications will likely be due in Summer of 2012. DWR anticipates making between \$50 million and \$107 million available.
- Anna Aljabiry then asked the group if they had any questions on these items:
  - Who can apply for Proposition 1E funding? What are the restrictions?
    - Anna Aljabiry noted that individual project sponsors can submit applications as long as projects lie within designated IRWM regions and are included within an IRWM Plan.
  - Do LGA projects have to be included within an IRWM Plan?
    - Anna Aljabiry responded that no, they do not.

### **Meeting Goals and Objectives**

- Tish Berge presented the proposed goals and objectives for the meeting at hand, and inquired if anybody in the group had additions. The group did not have additions.

### **Planning Grant and IRWM Schedule**

- Tish Berge presented this item, noting that at the previous meeting a question was asked regarding what the overall schedule for the planning grant application and IRWM Plan Update would look like. A draft of what the overall schedule may look like was provided as a meeting handout. Tish Berge also noted that a more detailed schedule of the IRWM Plan Update will be included within the Planning Grant application.
- A question was asked if the schedule will be updated to include the more precise grant dates provided by Anna Aljabiry.
  - *RMC to update overall schedule with revised DWR grant dates.*

### **Governance**

- Dale Schafer provided an overview of governance, noting that the Region is currently working on a Planning Grant application that will assist in development of an IRWM Plan to guide water management within the Region, and particularly within the Borrego groundwater basin. The fact is that these planning processes are anticipated to occur over multiple years, and establishing a governance system and structure for the Region's IRWM program will not happen overnight.
- Ms. Schafer noted that the first thing the group must decide is: who are going to be the stakeholders that drive this process, starting with establishing what a stakeholder is. She noted that the process must be driven by and inclusive of stakeholders. The general idea is to get a representative group of people that are willing to put time in to come to meetings and participate in the IRWM process.
- Ms. Schafer explained that as far as formal decision-making goes, the Region does not have to include all stakeholders within official voting, but that they should have a lot of input in the process. Ms. Schafer then solicited input from the group regarding what a stakeholder is, the following is the discussion on this topic:
  - It was noted that a stakeholder is somebody that has "skin in the game," meaning somebody who has a deep and abiding interest in regional water

- issues. For example, folks that would be economically impacted by water supply issues, such as homeowners and homeowners associations.
- The question was brought about if there are limitations from DWR's perspective with regards to defining stakeholders as those that have economic interests in water-related issues.
    - Anna Aljabiry of DWR noted that from DWR's perspective anybody can be a stakeholder, and it is not their desire to interfere with any region's definition of a stakeholder. She noted that the main thing for the region to consider is who they would like to be a part of their decision-making body.
  - The group then had a discussion regarding the definition of a stakeholder, the following is the discussion on this topic:
    - Somebody who has skin in the game, meaning they are going to be impacted directly by the outcome of the IRWM Plan. In other words, somebody who has a stake in the outcome of the Plan.
    - Those whose actions may impact water-related resources in the Region.
    - Somebody who is willing to participate in the process; specifically somebody who is willing to commit to attending meetings and being involved.
    - Potentially the stakeholders do not have to be individual people, but rather a group. Within each stakeholder group there can be a designated person that is selected to represent the group.
    - There should be a limitation regarding the number of people with the same interests who are allowed to participate and vote. Too many people from one group could skew the outcome.
    - At the same time, the group would like to hear divergent view points and increase participation as much as possible.
  - Next, the group went through an exercise of defining stakeholder categories that should be included within the process (note that **bold** stakeholder groups indicate that this group was not represented at the meeting):
    - **Anza-Borrogo Foundation**
      - This group could be combined with others such as Resource Conservation Districts (as an environmental stakeholder group), or with the State Park as an interest dedicated to issues specific to the Anza-Borrogo Desert State Park.
    - **Homeowners Associations**
    - **School District**
    - **Commercial Development**
      - It was noted that this is not a cohesive or organized group at this time.
    - **Residential Development**
      - It was noted that this is not a cohesive or organized group at this time.

- **Resource Conservation District of Greater San Diego County**
  - It was noted that the role of this group may be similar to the County in that they are more of an advisor than a stakeholder group.
- **Outlying communities within the Region: Canebrake, Ocotillo Wells, Jacumba, Boulevard.**
- **Ocotillo Wells State Vehicular Recreation Area (HOV Park)**
- **Majestic Pines CSD**
- **Jacumba CSD**
- **Canebrake CWD**
- **Salton CSD**
  - Note, this jurisdiction is not located within the Region.
- **Tribal Representatives:**
  - **Ramona Band of Cahuilla Indians;**
  - **Campo/Manzanita band of Indians.**
- **Lodging Interests**
- **RV Park Interests**
- Anza-Borrego Desert State Park
- Borrego Water District
- Developer Interests
- Agricultural Interests
  - It was noted that the Agricultural Alliance for Water and Resource Education (AAWARE) may be re-forming.
- Golf Course Interests
- Community Sponsor Group
- Chamber of Commerce
  - It was noted that while the Chamber of Commerce does not at this time speak for all business interests, they can be responsible for communicating information to the business community.
- County of San Diego
  - Anthony Barry of San Diego County Flood Control noted that the County sees themselves as an advisor rather than a stakeholder within this process.
- Elsinore-Murrieta-Anza Resource Conservation District
  - Note: this RCD does not have jurisdiction within the Region.
- The group reviewed the stakeholder list, noting that it is very large and unlikely to form before the Planning Grant application is due in February 2012. However, this can be a good stakeholder list moving forward, as the Region will try to get the most people from this list (and others) together as possible to commit to being involved in developing the IRWM Plan.
- Dale Schafer then led a conversation regarding next steps to address the Region's governance structure.
  - Ms. Schafer recommended convening a Governance Workgroup to start investigating various governance plans, and find the best plan for the

Region. The desired deliverable from this workgroup would be to develop a proposal that could be taken to the larger stakeholder group (when formed), and this would be signed or otherwise formalized.

- The group then reviewed two governance proposals that were made available at the meeting, including a charter for the Imperial IRWM as well as Governance Principles that were modified from the Mokelumne-Amador-Calaveras (MAC) IRWM Region. The group decided that a formal Governance Workgroup should be formed to discuss governance issues, but that the workgroup should be given direction with regards to what is expected from them.
  - *The next e-mail sent out for IRWM-related activities will include a request to form a Governance Workgroup, and will include guidelines for what the committee is expected to achieve.*
- The group then discussed what the goals of the Governance Workgroup should be, the following provides an overview of that discussion:
  - Perhaps they should establish a draft charger, which will be a road map for how the IRWM stakeholders will work together.
  - The workgroup's deliverable should be a draft governance document that is proposed to the larger stakeholder group.
  - Should the workgroup be in charge of recruiting people to serve as representatives for the various stakeholder groups?
  - Perhaps the charter could identify desired stakeholder groups, potential representatives, and their alternates.
  - *Dale Schafer will find out if she can help out with this effort through her contract with DWR.*

### **Regional "Big" Issues**

- Tish Berge provided an overview of the goal of this process, which is to hold a brainstorming exercise to identify water-related issues within the Region.
- Dale Schafer added that the consultant team is looking to the group to identify the big issues and goals of the Region, which will be identified and addressed through the IRWM Plan.
- Through brainstorming, the group decided there are four big issues:
  - Water Supply
  - Water Quality
  - Flood Control
  - Environmental Integrity
- The next step in this exercise involved prioritizing the four regional issues. The group was divided into three subgroups. Each subgroup spent some time to talk about the issues and determine how the four big issues rank in terms of importance. The group then shared their results, which are as follows:
  - Water Supply: chosen by all four groups as the main (highest priority issue);
  - There was no agreement among the subgroups regarding what would be the second-most important issue (one vote water quality, one vote flood control, and one vote environmental integrity);

- There was some agreement for the third-most important issue (two votes for flood control, one vote for water quality);
- There was also some agreement for the fourth-most important issue (two votes for environmental integrity, one vote for water quality).
- Ali Taghavi then joined the meeting via conference call to discuss if there is agreement within the group on what work he can provide to the Region through the technical assistance contract he has with DWR. The following is an overview of his presentation to the group:
  - At this point Mr. Taghavi has interviewed and spoken with many people within the Region. His conclusion is that there is little consensus, and in some cases no consensus with regards to the issues (particularly groundwater) that the Region is grappling with.
  - Ali surmises that he needs to go back to the science and the fundamental technical basis of the issue before the Region can move forward with solving their groundwater issues.
  - In order for Ali to move forward with scoping out what DWR can assist the group with the following needs to be done: need to collect all of the data and information available, go through it in a stakeholder process to agree on the basis of the issue, go through with formulation of the problem to defining the problem and the scope (depth of the problem).
    - Will rely on USGS and past studies to the extent that data and information is available.
    - Need to not just focus on the Valley floor, but groundwater throughout the Region.
    - Part of this work would be to complete technical work as necessary for the Planning Grant application. Following the submittal (of the application), it would be beneficial to go forward with the information gathered in a stakeholder process (open process) before work can be done on the formal IRWM Plan or the groundwater-related alternatives development being proposed within the Planning Grant application.
    - Mr. Taghavi proposes the following work product would come out of his technical assistance work (through the existing DWR contract): A State of the Basin report, which gets the Region to agree on what the current state of the basin is. In particular, this work product will address: the scale of overdraft, and how the Region can move forward in managing the basin in a sustainable manner.
- Mr. Taghavi then solicited questions from the group. The following is an overview of the discussion:
  - How would you address this issue in a more regional fashion (not just analyzing the Valley floor)?
    - Mr. Taghavi noted that while most of the data is available for the Valley floor, given that the Region is involved with a regional process (IRWM), they need to start addressing groundwater in the rest of the region as well to see what the most effective areas are

- and where the most “bang for the buck” is with regards to addressing groundwater.
  - Despite the regional focus, because the majority of the region’s population lives in the Valley floor, the focus of the State of the Basin would be this area.
- Will this study be looking at interregional issues, such as those in the Anza-Terwilliger area north of the Anza Borrego Desert IRWM Region?
  - Mr. Taghavi noted that the Region needs to focus on its own challenges before they can start looking at interregional issues. While these interregional issues may be important, they are not the priority at this time.
- There are still obviously things we do not know about the basin, and therefore these things cannot be resolved by looking at past studies. Such unknowns include:
  - Comprehensive understanding of groundwater quality;
  - Economic impact(s) as they relate to water quality and/or groundwater overdraft;
- Given that there are unknown pieces of information, would those unknowns be addressed and called out for future studies as part of the IRWM process?
  - Mr. Taghavi noted that as we see where there are data gaps and missing pieces of information, we will definitely make recommendations for future actions to address such shortfalls.
- It is a common question that people ask: why now? Why is groundwater such a large issue now? The economic impacts will likely answer the why now question, because it is likely that they will show that if something is not done soon, it will become prohibitively expensive to resolve the Region’s groundwater issues.
  - Mr. Taghavi noted that in addition, there are many economic and financial incentives to looking for solutions and options. The IRWM program is such an incentive, and going through this process will potentially bring money into the Region.
- Is it necessary to get consensus on these issues now?
  - Ms. Dale Schafer noted that most people agree that there is an overdraft issue, but there is a serious discrepancy regarding the details resulting from this conclusion such as how much water is left, how long the Region has before water is inaccessible, and what the basin’s future is. The purpose of this work is to begin resolving groundwater issues, which must start with agreeing on the current state of the groundwater basin.
- Mr. Taghavi noted that he will not be starting from scratch or going through a detailed analysis of the geology/water data. The point will be to present work that has been done to date to set the issue within the right

- policy context. He added that rather than providing the group with a conclusion and next steps, he would like to work with stakeholders to develop a conclusion to ensure that everybody is on the same level and will not be fighting over the science. The goal at the end of this process will be an agreement on the current conditions of the basin.
- How much information do we need to have regarding the other basins within the Region?
    - Mr. Taghavi noted that ultimately the IRWM Plan needs to at least demonstrate that work will be done in other regions, and therefore will show where data gaps are throughout the Region. The IRWM Plan needs to address the entire Region, even if there is not robust information available.
  - What about the regions and places in the region that do not want to be involved? During the last round of planning grant funding we were led to believe that while we cannot force them to be involved, we have to make a good faith effort to get regional stakeholders involved.
    - Ms. Tish Berge noted that RMC will be sure to provide information within the work plan that demonstrates outreach to groups outside of Borrego Springs. The group could also decide to include further outreach to other areas as a task within the Work Plan for the Planning Grant.
  - Ms. Dale Schafer inquired if the group was in agreement with Mr. Taghavi's proposed "State of the Basin" plan.
    - It was added that if the USGS study is released during this process (anticipated December 2011), the State of the Basin should be sure to include this information.
    - Nobody present was opposed to Mr. Taghavi's proposed scope of work (State of Basin Plan). Mr. Taghavi will move forward with formalizing a scope and getting it into DWR.
  - The group continued a discussion on outreach and involving others within the region. A suggestion was made to include a more personal touch in outreach efforts, such as following up email invitations with phone calls.
  - Mr. Rolwing noted that there is a substantial amount of mistrust for the Borrego Water District and DWR from other areas (particularly Canebrake CWD), which will need to be overcome.

### **Regional Alternatives Development Projects**

- Tish Berge provided an overview of this item. The Alternatives Development Projects (planning studies according to DWR) will be components of the Planning Grant application. These projects will need to have individual work plans, budgets, and schedules similar to a regular scope of work. In addition, each project must be supported with background information that describes the need for each project. Due to the amount of work that needs to be done to formalize these projects, it is proposed that a Work Plan Committee is formed.

- The group then discussed the potential Work Plan Committee. The following is a summary of that discussion:
  - What kinds of minds are you looking for? Highly technical?
    - Ms. Berge noted that while these items are technical, there is also a substantial amount of content and background needed to develop the work plan.
    - Ms. Berge added that there is not a formal governance structure, so the group will need to facilitate as much stakeholder input as possible, but will need to also get something completed by DWR's timeline. There will always be more chances to refine and develop further planning studies in the future as IRWM planning is an iterative process.
  - How far can we go with this? What is the scope of these projects?
    - Ms. Berge replied that this is very broad. The Planning Grant application essentially sets a "plan to plan" in that it proposes future planning-related work that will be done when developing the IRWM Plan.
  - Ultimately these projects will be seen as "hole-closers" in that they will be soliciting answers to very practical questions and issues within the Region. These projects will be answering the "so what" of issues raised within the background section of the work plan.
  - Who will be willing to participate in development of the Work Plan? This will involve holding two conference calls before November 8<sup>th</sup> (next full Anza Borrego Desert IRWM Meeting).
    - Lyle Brecht of BWD volunteered;
    - Vicki Long of EMARCD volunteered;
    - Linda Haddock of the Chamber of Commerce volunteered;
    - *Kathy Dice will ask John Peterson of the Anza-Borrego Desert State Park if he would like to participate.*

## Next Steps

- Tish Berge noted that the next meeting is scheduled for November 8<sup>th</sup>, 2011.
- *Jerry Rolwing to send future meeting dates to the stakeholder group and include information about the Governance Workgroup.*
- A question was raised about the Governance Workgroup, how will these meetings be conducted?
  - *Jerry Rolwing will ask Beth Hart of BWD if she would like to be involved.*
  - *Dale Schafer will contact Kathy Dice (and other participants) regarding this committee.*
- Tish Berge wrapped up the meeting by inquiring if folks got what they wanted out of the meeting.
  - Participants responded that this has provided a solid road map of where this process is headed.

# Anza Borrego Desert Planning Region Integrated Regional Water Management (IRWM) Plan

Tuesday November 8, 2011  
1:30 – 3:30 p.m.

Borrego Water District (BWD)  
806 Palm Canyon Drive, Borrego Springs, CA 92004

## **DRAFT NOTES**

*Action items are shown in italics*

### **Attendees:**

Jerry Rolwing, BWD

Lyle Brecht, BWD

Beth Hart, BWD

Linda Haddock, Borrego  
Springs Chamber of  
Commerce

Clark Shimeall, Resident

John Peterson, Anza-  
Borrego Foundation

Ray Schindler, Resident

Mike Spieckerman,  
Roadrunner Tree Farm

Tish Berge, RMC

Crystal Mohr, RMC

### ***Attending by Phone:***

Anna Aljabiry, DWR

Anthony Barry, San Diego  
County Flood Control

Rosa Reagles, Salton CSD

Tulvio Durand, Anza Grant  
Writing Committee

Dale Schafer, Center for  
Collaborative Policy

Ali Taghavi, RMC-WRIME

### **Agenda:**

#### **Welcome and Introductions**

- The group made self introductions, and Jerry Rolwing welcomed the group.

#### **Review Outcomes of Last Meeting, October 11, 2011**

- Jerry Rolwing provided an overview of the previous Anza Borrego Desert (ABD) stakeholders meeting, which took place on October 11, 2011. He noted that during this meeting, stakeholders decided to form two separate committees to complete work necessary for the IRWM process. One committee, the Work Plan Workgroup, convened to provide input necessary to develop an outline of the work plan that will be included within the ABD Planning Grant Round 2 application. The second committee, the Governance Committee, convened to discuss the list of stakeholders developed at the previous meeting and provide outreach to targeted stakeholders.
- Tish Berge added that stakeholders also participated in several exercises at the previous meeting. One exercise involved identifying all potential stakeholders within the ABD Region. The second exercise involved identifying and ranking the ABD Region's key issues.

#### **DWR Report**

- Anna Aljabiry provided an overview of DWR updates. Ms. Aljabiry noted that DWR has released the Draft Project Solicitation Package (PSP), which includes guidelines for development of IRWM Planning Grant applications. Ms. Aljabiry

also noted that there will be \$9 million available for Round 2 Planning Grants. Ms. Aljabiry noted that while DWR has not released an official due date for the planning grant applications, however it is anticipated that they will be due in late February, 2012.

- Ms. Aljabiry noted that DWR is in the process of conducting Process Improvement Workshops to solicit feedback on how to improve the Proposition 84 IRWM process. The closest workshop pertaining to the ABD Region will be held in Chino on December 6, 2011. Information is available here: <http://www.water.ca.gov/irwm/processimprovement.cfm>
- Ms. Aljabiry noted that information regarding workshops and other updates are available to stakeholders through DWR's mailing list. Stakeholders can join the mailing list by sending an email to the following email address: [DWR\\_IRWM@water.ca.gov](mailto:DWR_IRWM@water.ca.gov)
  - *Tish Berge will send a link to DWR's mailing list sign-up to stakeholders.*
- Tish Berge inquired if DWR has an opinion regarding whether IRWM Regions should seek the full possible Planning Grant request (\$1 million), or if DWR sees it as more appropriate for smaller regions such as the ABD Region to seek less funding.
  - Ms. Aljabiry responded that DWR does not have a preference, and does not take the size of regions into consideration when allocating Planning Grant funds. She noted that there are more than nine regions that could request planning grant funding; therefore it is possible that not every region that applies will be awarded full funding. On this note, Ms. Aljabiry noted that DWR could choose to either partially fund all applications, or could prioritize them such that some regions are fully funded (\$1 million), and some are not. These outcomes depend on many factors such as the amount of applications received, and the quality of each application. As such, it is too early at this time for DWR to make such decisions.
  - Ms. Aljabiry's recommendation to the ABD Region is to do the best they can to make the Planning Grant Application strong such that it scores highly per DWR's scoring criteria (listed within the PSP).

### **Meeting Goals and Objectives**

- Tish Berge presented the proposed goals and objectives for the meeting at hand, and inquired if anybody in the group had additions or questions.
- Tulvio Durand noted that in September he submitted a planning grant proposal to the Borrego Water District, which addresses some of the ABD Region's primary concerns (water supply). He inquired if this proposal is still being considered.
  - Tish Berge noted that at this time the group has moved forward with development of the general work plan tasks through the Work Plan Workgroup, and is not looking to add more studies at this time.
  - *Jerry Rolwing will have a conversation with Tulvio Durand at a later date to discuss his proposal.*

### **Planning Grant and IRWM Schedule**

- Tish Berge presented this item, noting that in the Work Plan Outline and other materials it has been assumed to date that the ABD Region will move forward with development of an IRWM Plan from 2012 to 2014, and therefore will not

have an adopted Plan until 2014. IRWM regions must have an adopted IRWM Plan to apply for IRWM-related implementation grant funding. Therefore, this assumption would render the ABD Region ineligible for Proposition 1E (stormwater and flood management) funds, because the last round of funding for Proposition 1E is anticipated to occur in the summer of 2012. In addition, the ABD Region would not be eligible for Round 2 Proposition 84 Implementation Grant money, because this grant cycle is anticipated to occur in late 2012.

- Tish Berge noted that the Round 3 Proposition 84 Implementation Grant funding is anticipated to be the largest funding round, so the ABD Region would still have the opportunity to apply for substantial grant funding even if they do not have an adopted IRWM Plan until 2014.
- Tish Berge then asked the stakeholders for their input on this matter. The following is the discussion regarding scheduling:
  - It was inquired if the ABD IRWM Region would receive preferential treatment in the Round 3 Proposition 84 Implementation Grant funding, since other regions that are farther along in the planning process would be eligible to apply for all three implementation funding rounds.
    - Anna Aljabiry noted that at this time DWR has not given such preferential treatment. She noted that it is too early to say at this time how DWR will choose to score Round 3 Implementation Grant applications.
  - It was inquired if the County of San Diego Flood Control is anticipating to have any implementation projects for the ABD Region prepared such that the Region could apply for Proposition 1E funding.
    - Anthony Barry noted that at this time the County does not have funding to apply for this grant, nor do they have money to provide requisite matching funds.
  - It was asked if it is possible to update just part of the IRWM Plan, which would be possible by the end of 2012 to make the Region eligible for funding.
    - Anna Aljabiry noted that many regions put forth “preliminary” IRWM plans to be eligible for funding rounds, and then later update their plans to meet DWR requirements.
  - Along the discussion of flood control, it was inquired what the County would require in order to lift existing development restrictions.
    - Anthony Barry noted that the County is currently working on a geomorphic analysis to remap the existing floodplain. This analysis is anticipated to be in the ballpark of \$200,000. The County has learned from FEMA that some of the conclusions reached in the prior Boyle Report are in conflict with existing FEMA and California Building Code (CBC) regulations. Therefore, the new geomorphic analysis is being completed to re-delineate the floodplain boundary and depths and achieve compliance with State and Federal regulations.
    - *From now on, a standing item on the agenda for ABD IRWM meetings will include an update on the County’s current floodplain analysis effort.*

## Technical “State of the Basin” Update

- Mr. Ali Taghavi provided an update on the *State of the Basin* report that RMC-Wrime is conducting through their technical services contract with DWR. He noted that there was a meeting held with DWR on November 8<sup>th</sup>, during which DWR provided comments regarding the proposed work plan. Mr. Taghavi will now incorporate changes, finalize, and re-submit to the Southern California DWR office. Once the work plan is approved by DWR, Mr. Taghavi will send the work plan to stakeholders. Work is anticipated to be authorized in late 2011 and to begin in early 2012.
  - It was inquired what the approximate cost for this study will be.
    - Mr. Taghavi noted that the cost has not been finalized, but he anticipates that it will be between \$80,000 and \$100,000.

## Stakeholder Participation

- Dale Schafer provided an overview of stakeholder outreach that she is conducting in conjunction with the ABD Region stakeholders through a contract with DWR. She noted that the current scope of work is being vetted, and will likely be available to stakeholders in December 2011. Ms. Schafer is working with DWR, and has explained to them that the ABD Region is currently undertaking a legitimate stakeholder process, and will continue to do so. She also noted that DWR has requested that she conduct her work in conjunction with work done in Hemet, California in order to reduce travel costs.
- Ms. Schafer then noted that the stakeholder outreach that has recently been conducted was a follow-up to the previous ABD Region meeting, where stakeholders identified a robust list of potential stakeholders. Following that meeting, Beth Hart volunteered to help Ms. Schafer in the next steps.
- Ms. Hart provided an overview of the stakeholder outreach process following the previous ABD Region meeting. She noted that she worked with Ms. Schafer to identify stakeholders within the entire stakeholder list, which would likely be viable stakeholders that would attend meetings and get involved. She noted that those not on a payroll to attend meetings or those without a vested interest in the process will likely not be viable stakeholders.
- Ms. Hart noted that she worked to contact multiple stakeholders, including Harry Jones from the School District. She noted that Mr. Jones would likely have to receive approval from his Board of Directors before agreeing to officially participate in IRWM efforts. Lyle Brecht contacted David Schaack, President of the Montesorro Home Owners Association (HOA) to determine if the HOA would attend. Mr. Rolwing noted that he was in contact with a representative from the HOA, who was planning to attend the current day’s meeting, but could not due to a scheduling conflict.
- Ms. Schafer noted that she has also been in contact with Kathy Dice of the Anza-Borrego Desert State Park. Ms. Schafer noted that she reached out to a representative from Shelter Valley, who was not interested in being a stakeholder. In addition, Ms. Schafer is working at gaining attendance from Canebrake, Majestic Pines, and Jacumba (all water-related authorities within the Region). Mr. Rolwing noted that he has been in contact with the General Manager of Jacumba, who responded positively to being involved. Mr. Rolwing was also in contact with representatives of the Los Coyotes tribal organization.

He noted that stakeholder interest with this group is low, because while tribal lands lie within the Region, no tribal members live within the Region.

- Ms. Schafer noted that all of these efforts are substantial, and demonstrate that the Region is putting forward a good-faith effort to increase stakeholder involvement.
- *Ms. Schafer will send an overview (summary) of the stakeholder work completed to date for inclusion within the Planning Grant application.*

### **Work Plan Workgroup Report**

- Tish Berge provided an overview of this item. Ms. Berge provided attendees with handout slides for the discussion.
- Ms. Berge noted that the Work Plan Workgroup consisted of Lyle Brecht, Linda Haddock, John Peterson, and Jerry Rolwing. Members met twice via conference call to determine work plan tasks, discuss approximate levels of effort, review an annotated outline, and provide feedback on the outline. The annotated outline was also made available to stakeholders, and provided to stakeholders via email prior to the meeting.
- Ms. Berge described that the way the Work Plan is written is that stakeholder outreach and the regional water resources plans feed into and will be incorporated into the 2014 ABD IRWM Plan.
- Ms. Berge also provided an overview of DWR's scoring criteria for work plans, noting that emphasis is placed on demonstration that the work plan will lead to development of an IRWM Plan that is compliant with DWR standards. As such, Ms. Berge noted that in RMC's experience with winning planning grant applications, approximately 1/3 of the budget is spent on outreach, planning studies (regional water resources plans), and the IRWM Plan. This recommendation is not in accordance with the original input of the Work Plan Workgroup, and so should be discussed by stakeholders.
- Crystal Mohr then provided an overview of the proposed work plan tasks and deliverables. She noted that Task 1, Outreach and Program Administration and Task 2, Regional Water Resources Plans Development lead into Task 3, Updating the ABD IRWM Plan. Ms. Mohr also noted that Task 2 is based on input from the previous stakeholders meeting, and therefore incorporates and addresses each of the four regional priorities determined by stakeholders.
- The following is an overview of the discussion regarding the draft work plan and approximate levels of effort:
  - Concern that if the Region only commits 40% to the regional water resources plans, there will not be enough effort to get done what is required.
  - Ultimately the Region is interested in winning a planning grant to support the region in managing their water supply, and wants to put forward the necessary effort to win.
  - There is room in the future to add in additional money, and complete additional studies. For now the Region is restricted by DWR standards for planning grants, and so should do what it takes to meet DWR standards.

- Question regarding the meetings. Is the work plan doubling up on meetings? What is the difference between meetings listed in Task 1 and meetings listed in Task 3?
  - The meetings in Task 1 include general meetings that the Region will use in their overall stakeholder outreach. This includes public meetings that will be used to discuss the IRWM Plan. Meetings in Task 3 should be edited to show that these are directed workgroups, which will be used to produce deliverables for the IRWM Plan.
- With regards to the climate change task (Task 2-3), what data will be used? Climate change is very speculative, is there any region-specific work available?
  - Task 2-3 work will be conducted in compliance with stringent DWR standards relating to climate change. This task will include using existing modeling software and data to determine region-specific climate change vulnerabilities, rank vulnerabilities, and provide potential strategies to address the vulnerabilities.
  - In addition, DWR specifies that regions may look at “no-regret” strategies, meaning climate change strategies that make sense for the region to complete regardless of potential climate change impacts. Task 2-3 will be sure to include no-regret climate change adaptation strategies.
  - The United States Bureau of Reclamation Study includes information regarding climate change, which will be used in development of Task 2-3.
- Looking back to the issue of the schedule, is there any chance that the Round 3 Implementation Grant funding will not be available? Is the Region risking putting all of its eggs in one basket?
  - Anna Aljabiry noted that the funding for IRWM is obligated as part of the water bond. For now DWR anticipates that between \$360 and \$390 million will be available in Round 3.
  - DWR anticipates allowing regions to complete a two-phased process for Round 2 Implementation Funding. The first phase will occur in late 2012, and the second will be six months after. Therefore, the Region may potentially have until approximately the late spring/early summer of 2013 to develop an IRWM Plan.
  - The Region could carry on without a consultant until DWR announces planning grant application awards. This would allow the Region to move forward with monthly meetings and stakeholder outreach such that they could be eligible for Round 2 Implementation Grant funding.
  - *RMC to alter schedule to show that the Region will carry on development of the IRWM Plan so that it may have the option to participate in Round 2 of Implementation Grant funding.*

## Next Steps

- Jerry noted that the next meeting is scheduled for December 13<sup>th</sup>, 2011 and will take place from 1-3 p.m.

- Tish Berge wrapped up the meeting by providing an overview of action items:
  - *Add Tulvio Durand to stakeholder e-mail list.*
  - *Anthony Barry to send Jerry Rolwing scope for County flood study once it is ready. County flood control efforts within the ABD Region will remain a standing item on the agenda.*
  - *Anthony Barry and Jerry Rolwing to talk at a separate time regarding the flood study.*
  - *Tish Berge to send a copy of the PowerPoint presentation for this meeting to Dale Schafer.*
  - *Dale Schafer to send an overview of stakeholder outreach efforts to RMC.*
  - *Jerry Rolwing to provide Anna Aljabiry's email address to Rosa Reagles.*
  - *Tish Berge to provide stakeholders with DWR email address so that they can sign-up for the stakeholder email list.*
  - *Work Plan Workgroup to receive budget, schedule, and work plan prior to next meeting. The group will provide comments via email, and will reconvene another conference call if necessary.*



# BORREGO WATER DISTRICT

October 2011

## WATER OPERATIONS REPORT

<u>WELL</u>	<u>TYPE</u>	<u>FLOW RATE</u>	<u>STATUS</u>	<u>COMMENT</u>
ID1-1	Irrigation	150	Standby	Backup well for Rams Hill Golf Course
ID1-2	Irrigation	150	Standby	Backup well for Rams Hill Golf Course
ID1-8	Production	350	In Use	
ID1-10	Production	300	In Use	
ID1-12	Production	950	In Use	
ID1-16	Production	950	In Use	
Wilcox	Production	150	In Use	Diesel backup well for ID-4
ID4-4	Production	350	In Use	
ID4-10	Production	80	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	Diesel engine drive exercised monthly

**System Problems:** SCADA radio problems

## 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:** 62,502 (gallons per day)

**Peak flow:** 76,087 gpd Saturday October 29th

All restaurant grease traps were clean.

**System Problems:** None.

**WATER PRODUCTION SUMMARY  
October 2011**

<b>DATE</b>	<b>ID-1</b>	<b>ID-3</b>	<b>ID-4</b>	<b>ID-5</b>	<b>DISTRICT-WIDE TOTALS</b>
Oct '10	65.95	13.47	146.34	9.03	234.79
-----	-----	-----	-----	-----	-----
Nov '10	138.01	11.14	100.44	16.60	266.19
Dec '10	103.41	11.68	130.03	10.98	256.10
Jan '11	39.57	8.20	73.97	5.16	126.90
Feb '11	74.16	9.36	109.79	8.68	201.99
Mar '11	58.56	7.87	93.55	8.57	168.55
Apr '11	109.04	11.86	111.39	16.08	248.37
May '11	107.04	13.94	137.00	21.15	279.13
Jun '11	70.10	14.25	123.58	17.21	225.14
Jul '11	70.51	15.94	136.64	17.81	240.90
Aug '11	56.10	16.67	165.82	22.17	260.76
Sep '11	39.01	15.88	131.35	14.81	201.05
Oct '11	34.11	13.61	143.26	20.58	211.56
<b>12 Mo. TOTAL</b>	<b>899.62</b>	<b>150.40</b>	<b>1456.82</b>	<b>179.80</b>	<b>2686.64</b>

*Totals reflect individual improvement district usage. Interties from ID-3 and ID-5 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 (%)**

<b>DATE</b>	<b>ID-1</b>	<b>ID-3</b>	<b>ID-4</b>	<b>ID-5</b>	<b>DISTRICT-WIDE AVERAGE</b>
Oct '11	1.17	1.32	10.03	N/A	4.17
<b>12 Mo. Average</b>	<b>2.08</b>	<b>1.02</b>	<b>10.84</b>	<b>N/A</b>	<b>4.65</b>

BORREGO WATER DISTRICT  
 Water Production / Use Records  
 ID # 4  
 Month of October 2011

----- 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
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
OCT'10	0.00	0.00	56.41	17.80	10.82	65.75	4.50	0.09	0.00	155.37	146.34
NOV'10	0.00	0.00	53.64	23.36	0.00	36.08	3.56	0.40	0.00	117.04	100.44
DEC'10	0.00	0.00	63.71	13.91	23.03	29.06	4.59	0.06	0.00	134.36	123.38
JAN'11	0.00	0.00	4.11	5.74	10.47	56.25	2.56	0.00	0.00	79.13	73.97
FEB'11	0.00	0.00	59.61	13.52	12.22	25.75	7.37	0.00	0.00	118.47	109.79
MAR'11	0.00	0.00	52.95	12.56	9.76	23.31	3.54	0.00	0.00	102.12	93.55
APR'11	0.00	0.00	55.03	17.90	10.56	39.41	4.44	0.13	0.00	127.47	111.39
MAY'11	0.00	0.00	61.63	26.75	12.22	49.97	7.46	0.12	0.00	158.15	137.00
JUN'11	0.00	0.00	52.61	23.50	10.02	49.34	5.10	0.22	0.00	140.79	123.58
JUL'11	0.00	0.00	44.98	23.97	10.17	69.69	5.05	0.59	0.00	154.45	136.64
AUG'11	0.00	0.00	57.82	31.32	11.85	79.87	6.34	0.79	0.00	187.99	165.82
SEP'11	0.00	0.00	50.27	23.27	9.38	58.06	4.92	0.26	0.00	146.16	131.35
OCT'11	0.00	0.00	55.29	25.88	10.53	67.11	5.03	0.00	0.00	163.84	143.26
TOTALS	0.00	0.00	611.65	241.68	130.21	583.90	59.96	2.57	0.00	1629.97	1450.17
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Date	Water Produced Acre Feet	Water Use Acre Feet	Wtr Loss	% Loss	ID 5 Acre Feet
=====	=====	=====	=====	=====	=====
OCT'10	155.37	137.26	18.11	11.66%	9.03
NOV'10	117.04	112.10	4.94	4.22%	16.60
DEC'10	134.36	105.42	28.94	21.54%	10.98
JAN'11	79.13	78.23	0.90	1.14%	5.16
FEB'11	118.47	97.28	21.19	17.89%	8.68
MAR'11	102.12	87.19	14.93	14.62%	8.57
APR'11	127.47	117.51	9.96	7.81%	16.08
MAY'11	158.15	142.96	15.19	9.60%	21.15
JUN'11	140.79	127.47	13.32	9.46%	17.21
JUL'11	154.45	136.19	18.26	11.82%	17.81
AUG'11	187.99	169.17	18.82	10.01%	22.17
SEP'11	146.16	132.34	13.82	9.46%	14.81
OCT'11	163.84	147.41	16.43	10.03%	20.58
TOTALS	1629.97	1453.27	176.70	10.84%	179.80
=====	=====	=====	=====	=====	=====

BORREGO WATER DISTRICT  
 Water Production / Use Records  
 ID # 1  
 Month of October 2011

----- Water Production (Acre Feet) -----								
Date	Well 1	Well 2	Well 8	Well 10	Well 12	Well 16	Total	LessID3&4
=====	=====	=====	=====	=====	=====	=====	=====	=====
OCT'10	0.00	0.00	17.06	10.48	16.20	35.68	79.42	66.32
NOV'10	10.53	12.70	16.83	14.81	43.96	50.32	149.15	138.45
DEC'10	0.00	0.00	0.00	21.85	33.05	60.19	115.09	103.47
JAN'11	0.93	1.18	0.00	21.04	22.62	2.00	47.77	39.61
FEB'11	0.00	0.00	0.00	14.73	39.51	29.28	83.52	74.20
MAR'11	0.00	0.00	0.16	10.67	26.97	28.63	66.43	58.59
APR'11	0.00	0.00	0.00	37.56	32.95	50.39	120.90	109.04
MAY'11	0.00	0.00	0.18	20.87	52.92	47.01	120.98	107.04
JUN'11	0.00	0.00	0.19	8.14	41.35	34.67	84.35	70.10
JUL'11	0.00	0.00	0.07	11.42	35.99	38.97	86.45	70.47
AUG'11	0.00	0.00	1.59	3.85	41.01	26.32	72.77	56.10
SEP'11	0.00	0.00	0.00	0.00	38.01	16.88	54.89	39.01
OCT'11	0.00	0.00	0.00	4.52	33.18	10.02	47.72	34.11
TOTALS	11.46	13.88	19.02	169.46	441.52	394.68	1050.02	900.19
=====	=====	=====	=====	=====	=====	=====	=====	=====

----- Water Use (Acre Feet) -----									
Date	Domestic	Irrigat'n	Constrt'n	Golf Course	ID 3	ID 4	Total	Water Loss	% Loss
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
OCT'10	12.08	19.42	0.00	37.57	13.10	0.00	82.17	-2.75	-3.46%
NOV'10	12.11	14.23	0.00	108.88	10.70	0.00	145.92	3.23	2.17%
DEC'10	11.79	14.14	0.00	76.70	11.62	0.00	114.25	0.84	0.74%
JAN'11	6.89	6.46	0.00	24.30	8.16	0.00	45.81	1.96	4.11%
FEB'11	8.99	12.35	0.00	51.33	9.32	0.00	81.99	1.53	1.82%
MAR'11	7.66	7.49	0.00	42.24	7.84	0.00	65.23	1.20	1.79%
APR'11	11.42	12.69	0.00	84.16	11.86	0.00	120.13	0.77	0.64%
MAY'11	12.25	15.56	0.00	78.08	13.94	0.00	119.83	1.15	0.95%
JUN'11	11.78	14.75	0.00	41.15	14.25	0.00	81.93	2.42	2.88%
JUL'11	14.71	16.18	0.00	39.19	15.98	0.00	86.06	0.39	0.46%
AUG'11	13.40	21.35	0.00	16.10	16.67	0.00	67.52	5.25	7.21%
SEP'11	12.93	23.54	0.00	0.00	15.88	0.00	52.35	2.54	4.61%
OCT'11	10.56	22.98	0.00	0.00	13.61	0.00	47.15	0.57	1.17%
TOTALS	134.49	181.72	0.00	562.13	149.83	0.00	1028.17	21.85	2.08%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

BORREGO WATER DISTRICT  
 Water Production / Use Records  
 ID # 3  
 Month of October 2011

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			
OCT'10	0.00	0.67	1.18	11.19	12.37	1.18	11.86	13.04
NOV'10	0.00	0.69	1.02	8.91	9.93	1.02	9.60	10.62
DEC'10	0.00	0.71	1.93	8.82	10.75	1.93	9.53	11.46
JAN'11	0.00	0.67	0.66	6.70	7.36	0.66	7.37	8.03
FEB'11	0.00	0.65	0.57	8.03	8.60	0.57	8.68	9.25
MAR'11	0.00	0.61	0.45	6.79	7.24	0.45	7.40	7.85
APR'11	0.00	0.69	0.66	10.40	11.06	0.66	11.09	11.75
MAY'11	0.00	0.72	1.29	11.96	13.25	1.29	12.68	13.97
JUN'11	0.00	0.68	1.66	11.66	13.32	1.66	12.34	14.00
JUL'11	0.00	0.65	1.60	13.63	15.23	1.60	14.28	15.88
AUG'11	0.00	0.69	2.45	13.31	15.76	2.45	14.00	16.45
SEP'11	0.00	0.69	1.44	13.48	14.92	1.44	14.17	15.61
OCT'11	0.00	0.72	1.35	11.36	12.71	1.35	12.08	13.43
TOTALS	0.00	8.17	15.08	125.05	140.13	15.08	133.22	148.30

Date	Water Produced Acre Feet	Water Delivered Acre Feet	Wtr Loss	% Loss
OCT'10	13.10	13.04	0.06	0.46%
NOV'10	10.70	10.62	0.08	0.75%
DEC'10	11.62	11.46	0.16	1.38%
JAN'11	8.16	8.03	0.13	1.59%
FEB'11	9.32	9.25	0.07	0.75%
MAR'11	7.84	7.85	-.01	-.13%
APR'11	11.86	11.75	0.11	0.93%
MAY'11	13.94	13.97	-.03	-.22%
JUN'11	14.25	14.00	0.25	1.75%
JUL'11	15.98	15.88	0.10	0.63%
AUG'11	16.67	16.45	0.22	1.32%
SEP'11	15.88	15.61	0.27	1.70%
OCT'11	13.61	13.43	0.18	1.32%
TOTALS	149.83	148.30	1.53	1.02%

**BLANK PAGE**

October 24, 2011

Marlene Engebretson  
PO Box 719  
Borrego Springs, CA 92004

Borrego Water District Board of Directors  
806 Palm Canyon Drive  
PO Box 1870  
Borrego Springs, CA 92004

Dear Directors,

I would like to be considered for an appointment to the vacant seat, on the Board of Directors of the Borrego Water District.

I began visiting Borrego in 1984. I loved the desert, so quiet, no cars and dark skies. In 1985 I bought a mobile home so I would have a place to stay on the weekends. In 1991 I was fortunate to be hired by the Borrego Medical Center as Office Manager. My commute ended and I became a full-time resident of Borrego Springs.

In 1997 I was hired by Lin Burzell, District Engineer, GM of Borrego Water District. During the 13+ years of my employment with BWD I have dealt with acquisitions, 4 "different" General Managers, numerous board member changes and the growth of the District from 3 staff members to 18 staff, and much, much more in between.

I am very committed to water conservation, preserving our aquifer and educating the public, so my Great Grand Children may enjoy the same beautiful desert I was drawn to in 1985.

Thank you for your service to the community as BWD Board members and your consideration of my request to fill the vacant seat on the BWD Board of Directors.

Respectfully,



Marlene Engebretson

Raymond D. Delahay  
PO Box1347  
Borrego Springs , CA 92004

October27 , 2011

Board of Directors  
General Manager  
Borrego Water District  
806Palm Canyon Drive  
Borrego Springs , CA 92004

To the Directors,

I would like to apply for the vacant position on the Board. I am a resident voter here in Borrego. I am a retired Heavy Equipment Operator from the Metropolitan Water District. I have 20 years experience in water Operations and Maintenance , I am willing to help the Borrego Water District in any way that I can.

Sincerely,

Ray Delahay