Bighorn-Desert View Water Agency

Board of Directors
Terry Burkhart, President
Michael McBride, Vice President
David Larson Director

David Larson, Director Judy Corl-Lorono, Director Nell Casey Garcia, Director DESERTIFIEW.

Agency Office 622 S. Jemez Trail Yucca Valley, CA 92284-1440

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Marina D West, P.G., General Manager Lyni Tompkins, Board/Exec. Secretary

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PLANNING/LEGISLATIVE/ENGINEERING GRANT & SECURITY COMMITTEE REGULAR MEETING AGENDA

BOARD MEETING OFFICE 1720 N. Cherokee Trail, Landers, CA 92285 Thursday, October 20, 2011 - 8:45 a.m.

The BDVWA Planning / Legislative / Engineering / Grant & Security Committee meeting is noticed as a joint meeting with the Board of Directors for the purpose of strict compliance with the Brown Act. Members of the Board not assigned to this Committee who attend may participate only as observers at the meeting.

- 1. CALL TO ORDER
- 2. PLEDGE OF ALLEGIANCE
- 3. ROLL CALL
- 4. APPROVAL OF AGENDA

DISCUSSION AND ACTION ITEMS - The Committee and Staff will discuss the following items and provide direction to staff, if so inclined.

The Public is invited to comment on any item on the agenda during discussion of that item.

When giving your public comment, please have your information prepared, if you wish to be identified for the record then please state your name. Due to time constraints, a three-minute time limit may be imposed.

- 5. KRIEGER & STEWART (CHIEF ENGINEER) TO PRESENT AN EVALUATION ON PRODUCTION (FROM WELLS) AND CONSUMPTION (FROM METERED AND NON-BILLABLE WATER USAGE) ACCOUNTING.
- 6. JOHNSON VALLEY PRESSURIZED WATER SYSTEM PROGRAM UPDATE BY KRIEGER & STEWART (CHIEF ENGINEER)
- 7. DISCUSS SUGGESTED ENGINEERING PROJECTS FOR 2012
- 8. CONSENT ITEMS The following is expected to be routine and non-controversial and will be acted on by the Committee members at one time without discussion, unless a member of the Public or a Committee member requests that an item be held for discussion or further action.
 - a. Regular PLEGS Committee Meeting Report, August 18, 2011

9. PUBLIC PARTICIPATION

Any person may address the Committee on any matter within the Agency's jurisdiction on items not appearing on this agenda.

10. VERBAL REPORTS

- a. COMMITTEE MEMBERS' COMMENTS/REPORT
- b. GENERAL MANAGER'S REPORT

11. ITEMS FOR NEXT AGENDA

12. ADJOURNMENT

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the Bighorn-Desert View Water Agency, 622 S. Jemez Trail, Yucca Valley, CA not less than 72 hours if prior to a Regular meeting, date and time above; or in accordance with California Government Code Section 54956 this agenda has been posted not less than 24 hours if prior to a Special meeting, date and time above.

As a general rule, agenda reports or other written documentation has been prepared or organized with respect to each item of business listed on the agenda.

Copies of these materials and other discloseable public records in connection with an open session agenda item, are also on file with and available for inspection at the Office of the Agency Secretary, 622 S. Jemez Trail, Yucca Valley, California, during regular business hours, 8:00 A.M. to 4:30 P.M., Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Bighorn-Desert View Water Agency.

Internet: Once uploaded, agenda materials can also be viewed at www.bdvwa.org.

Public Comments: You may wish to submit your comments in writing to assure that you are able to express yourself adequately.

Per Government Code Section 54954.2, any person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in the meeting, should contact the Board's Secretary at 760-364-2315 during Agency business hours.



MEMORANDUM

TO:

MARINA WEST

FILE: 997-1.4.3

BIGHORN-DESERT VIEW WATER AGENCY

FROM:

SABRINA A. NIES SAN

DATE: 10/13/2011

CHARLES A. KRIEGER CALC

KRIEGER & STEWART, INCORPORATED

SUBJECT:

EVALUATION OF AGENCY PRODUCTION/CONSUMPTION ACCOUNTING

The purpose of this memorandum is to summarize the results of Krieger & Stewart's evaluation of the Agency's production and consumption accounting. The purpose of this evaluation is to establish the difference between the Agency's total production (from wells) and the Agency's total demand (from metered and non-billable water usage) and to identify and evaluate causes for differences thereto. Supply into and out of the reservoirs is not evaluated herein since reservoir storage is negligible compared to the total production from wells over the one-year evaluation period. In addition, our water loss evaluation excludes the Johnson Valley area, which is served by a separate, independent system. The following sections set forth our process, findings, and recommendations.

I. PROCESS

We compared the Agency's total production to the Agency's total demand for a one-year period between January 25, 2010 and January 25, 2011. The Agency's production was determined using well production records for Wells 2, 3, 6, 7, 8, and 9, and the Agency's demand was determined using meter reading records for all billable accounts (excluding the Johnson Valley area) and using records for non-billable water usage (e.g. fire hydrant flushing, fire flow testing, etc.).

We then compared the Agency's total production and total demand to calculate the accounting discrepancy. Our calculations are summarized in Attachment A. Non-billable water usage is set forth in Attachment B.



MARINA WEST 10/13/2011 PAGE 2

II. FINDINGS

As summarized in Attachment A, the Agency's accounting discrepancy between January 25, 2010 and January 25, 2011 was approximately 3,600,000 cubic feet, or approximately 20% (as a percentage of production). Potential factors contributing to the accounting discrepancy include:

- A. Inaccuracy or failure of customer meters. Although the Agency recently replaced all of the customer meters, we understand that some of the meters are now reading at a lesser accuracy than when they were initially installed. If the meters are reading less than the actual water being used, then it would contribute to the accounting discrepancy.
- B. Inaccuracy of well production meters. If sufficient lengths of unobstructed straight piping do not exist upstream and downstream of the flow meter (as required by the manufacturer to ensure meter accuracy), then turbulence may occur and result in inaccurate meter readings.
- C. Unauthorized consumption, such as theft.
- D. Physical loss of water from the distribution system through leaks.

III. RECOMMENDATIONS

We recommend that the Agency take the following actions to identify and correct factors contributing to the accounting discrepancy:

A. Spot test customer meters throughout the system to ensure that the meters are reading accurately. In addition, we recommend that the Agency track the locations of inaccurate

KRIEGER
STEWART INCORPORATED

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meters and perform additional meter testing in areas where multiple inaccurate meters are located.

- C. Verify the lay lengths of the discharge piping at each well (i.e. confirm that sufficient pipe lengths exist upstream and downstream of the flow meter). We also recommend that the Agency test the flow meters at the wells to verify the accuracy of each.
- D. Continue to read all customer meters on or around January 25, 2012 so that multiple years of data may be evaluated and compared.

SAN/blt 997-1P4P3-MW-M1.DOC

Attachments: Attachment A - Production and Demand Comparison

Attachment B - Non-Billable Water Usage

BIGHORN-DESERT VIEW WATER AGENCY PRODUCTION AND DEMAND COMPARISON

EVALUATION FOR 1/25/2010 TO 1/25/2011 (1 YEAR)

ACCOUNTS BEGINNING WITH "01-" TO "11-" AND "30-" THROUGH "32-" ATTACHMENT A

A. Production (1)

Well	Meter Reading on 1/25/2010	Meter Reading on 1/25/2011	Production (Cubic Feet)
Well 2 (2)	6,606,430	6,608,630 ⁽⁴⁾	2,200
Well 3 ⁽³⁾	7,562,860	7,642,690 ⁽⁴⁾	79,830
Well 6	4,765,570	9,894,780	5,129,210
Well 7	875,750	3,561,690	2,685,940
Well 8	11,448,000	19,689,500	8,241,500
Well 9	1,091,400	2,549,900	1,458,500
		Total Supply	17.597.180

B. Demand

Description	(Cubic Feet)
Metered Usage (5)	13,847,519
Non-Billable Water Usage (6)	160,365
Well 2 Pump-to-Waste (April 2010 to May 2010) (7)	2,200
Well 3 Pump-to-Waste (April 2010 to May 2010) ⁽⁷⁾	2,710
Total Demand	14,007,884

C. Accounting Discrepancy (Production Less Demand)

	Quantity
Description	(Cubic Feet)
Production	17,597,180
Demand	14,007,884
Total Accounting Discrepancy (Cubic Feet):	3,589,296
Total Accounting Discrepancy (As a Percentage of Production):	20.4%

Notes:

- (1) Supply into and out of reservoirs is not evaluated herein since reservoir storage is negligible compared to the total production from wells over the one year evaluation period.
- (2) Production records provided by the Agency show 240 CF of pump-to-waste from Well 2 in February 2010, but the related meter reading was not carried over to subsequent production records. Therefore, the 240 CF of pump-to-waste is not included herein.
- (3) Production records provided by the Agency show 3,720 CF of pump-to-waste from Well 3 in February 2010, but the related meter reading was not carried over to subsequent production records. Therefore, the 3,720 CF of pump-to-waste is not included herein.
- (4) No production records available for December 2010 or January 2011. Therefore, meter reading is from November 2010 production record.
- (5) "Metered Usage" is based on meter data provided by Agency staff for accounts beginning with "01-" through "06-" and "30-" through "31-", normalized to a one year period between January 25, 2010 and January 25, 2011. "Metered Usage" excludes Johnson Valley customers (with account numbers beginning with "33-"), which are served by a separate, independent system.
- (6) "Non-Billable Water Usage" is based on data provided by Agency staff via email on November 10, 2010 and March 3, 2011 and includes usage associated with the Cherokee office, BDVWA office, fire department, ongoing production (fixed), ongoing sampling (fixed), fire hydrant flushing, and fire flow testing.
- (7) Pump-to-waste is assumed based on the difference between the last meter reading on the April 2010 production record and the first meter reading on the May 2010 production record.



January 2010				
<u>Date</u>	<u>Location/Parcel</u>	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
1/5/2010 *	629-271-15	Flush Hydrant		267
1/19/2010 *	635-081-64	Service Line Leak		241
1/25/2010	Cherokee Office			2,416
•			Total	3,137

^{*} Outside of read date range of 1/25/2010 and 1/25/2011, but included in water loss calculations since quantity is negligible compared to total demand.

February 2	:0	1	o
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<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
2/4/2010	629-171-67	Flush Hydrant		67
2/9/2010	629-021-44	Fireflow Test		381
2/22/2010	BDVWA Office			7,094
2/25/2010	629-241-42	Fire Dept. Used		27
			Total	7 782

March 2	2010	
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<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
3/5/2010	635-081-06	Service Line Leak		963
3/6/2010	Landers School	Fire Dept Used		736
3/9/2010	Well 4	Flush Meter		50
3/22/2010	Charles Rd	Service Line Leak		385
3/25/2010	Cherokee Office			2,531
3/27/2010	Landers School	Fire Dept Used		334
			Total	5.212

April	201	0
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<u>Date</u>	Location/Parcel	Description		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
4/2/2010	Clean and Show	630-032-32		20
4/19/2010	Clean and Show	629-123-04		2
4/23/2010	Clean and Show	630-032-32		222
4/22/2010	BDVWA Office	629-062-21		7,538
4/5/2010	Service Line Leak	2128 Sage		385
4/11/2010	Service Line Leak	58124 Mitch		193
4/27/2010	Service Line Leak	55465 Lilac		161
4/30/2010	Service Line Leak	575 Artesia		100
			Total	8,834

May 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
5/5/2010	Clean and Show	630-032-32		279
5/3/2010	Service Line Leak	575 Artestia		100
5/6/2010	Fire Hydrant Use	Ows/Sespe		3,745
5/10/2010	Fire Hydrant Use	Mariquita Trail		3,745
5/ 12/20 10	Service Line Leak	1435 Yellowknife		193
5/12/2010	Service Line Leak	1860 Wamego		97
5/14/2010	Test Hydrant	Mariquita Trail		372
5/17/2010	Service Line Leak	867 Jemes		193
5/17/2010	Hydrant Flush	Ows/Reche		301
5/17/2010	Hydrant Flush	Cambria/Sunterrace		335
5/18/2010	Service Line Leak	2475 Yetters		97
5/20/2010	Service Line Leak	123 Hopi		97
5/27/2010	Service Line Leak	829 Cambria		722
5/28/2010	Hydrant Vandal	Gerie/Botkin		32,086
5/29/2010	D Tank Overflow			1,805
	Dead-End Flush			10,655
	Blowoff			7,207
5/10/2010	Lost Due to Misread	629-291-27		32
5/26/2010	BDVWA Office	629-292-44		2,687
			Total	64,961

June 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
6/1/2010		57074 Marquita		1,205
6/2/2010		59088 Ira		97
6/3/2010		629-281-41		129
6/4/2010		1021 Goldenslipper		129
6/8/2010		737 Ave		580
6/15/2010		55920 Shannon		145
6/21/2010		58474 Reche Rd		129
6/25/2010		1825 Wamego		129
6/25/2010		922 Gibralter		2,005
6/28/2010		629-411-12		145
6/23/2010	BDVWA Office			8,829
6/4/2010	Clean and Show	629-261-18		6
6/4/2010	Clean and Show	630-082-23		1,085
6/21/2010	Clean and Show	629-123-04		0
			Total	14,826

July 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
7/1/2010	635-042 - 24	Service Line Leak		2,166
7/2/2010	56221 Reche			97
7/5/2010	630-021-21	Service Line Leak		145
7/5/2010	630-021-70	Service Line Leak		145
7/6/2010	629-411-02	Service Line Leak		121
7/6/2010	629-231-04	Air Vac		130
7/7/2010	2159 Wamego	Service Line Leak		145
7/7/2010	629-021-37	Blow Off Leaks		770
7/8/2010	629-411-02	Service Line Leak		145
7/9/2010	PRV #2			502
7/9/2010	629-123-04	Clean and Show		77
7/10/2010	629-032-58	Clean and Show		20
7/12/2010	629-232-23	Service Line Leak		65
7/15/2010	629-111-13	Service Line Leak		337
7/20/2010	629-231-58	Service Line Leak		193
7/20/2010	130 Delgada	Service Line Leak		129
7/20/2010	55576 Valley View	Service Line Leak		193
7/20/2010	1860 Wamego	Service Line Leak		145
7/20/2010	55828 Tracy	Flush Hydrant		201
7/20/2010	629-102-03	Service Line Leak		129
7/21/2010	629-123-04	Clean and Show		4
7/26/2010	BDVWA Cherokee	Water Use		3,032
7/29/2010	2620 Shawnee	Service Line Leak		145
7/29/2010	1910 Artesia	Service Line Leak		193
7/30/2010	630-062-36	Service Line Leak		97
7/30/2010	1624 Jemez	Service Line Leak		193
			Total	9,732

August 2010				
Date	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
8/1/2010	635-071-33			193
8/3/2010	629-232-52			97
8/4/2010	630-081-16			97
8/5/2010	635-071-33			257
8/11/2010	629-431-06			97
8/11/2010	1910 Fortuna			257
8/12/2010	58122 Reche			128
8/20/2010	629-062-04			20
8/23/2010	BDVWA Office			1,137
8/24/2010	2025 Ows Rs			97
8/24/2010	56685 Reche			193
8/26/2010	629-122-03			50
8/29/2010	1474 Jemez			160
8/31/2010	Well Drillers			1,200
			Total	4.196

September 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
9/3/2010	728 Inca Tr	Service Line Leak		128
9/9/2010	Dusty Mile/Sunset	Hydrant Flush		201
9/9/2010	57892 Rocky Acres	Service Line Leak		321
9/14/2010	629-282-09	Service Line Leak		225
9/14/2010	Bighorn Office	Boart Long Year		130
9/20/2010	56225 Sunset	Service Line Leak		187
9/27/2010	648 Deshon Ln	Service Line Leak		128
9/27/2010	58055 Burke Rd	Service Line Leak		128
9/28/2010	Cambria/Starlight	Repair		181
9/9/2010	629-292-49	Clean and Show		2,411
9/10/2010	630-032-26	Clean and Show		24
9/24/2010	Cherokee Office	Consumption		3,116
			Total	7,393

October 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
10/5/2010	Tanager	Flushing		88
10/12/2010	808 Delgada	Service Line Leak		193
10/14/2010	1218 Ows Rd	Service Line Leak		193
10/14/2010	Dead End	Flushing		10,750
10/27/2010	630-062-18	Service Line Leak		193
10/28/2010	Blow Off			5,685
10/29/2010	2280 Geronimo Rd	Service Line Leak		675
10/22/2010	BDVWA Office	Consumption		1,744
			Total	19,734

November 2010				
<u>Date</u>	Location/Parcel	<u>Description</u>		Cubic Feet
Ongoing	Production Fixed			183
Ongoing	Sampling Fixed			30
11/1/2010	1388 Golden Slipper	Service Line Leak		241
11/12/2010	56011 Mira	Service Line Leak		97
11/14/2010	1065 Singletree	Service Line Leak		385
11/15/2010	Sec 34 A Zone	Hydrant Testing		264
11/15/2010	Mesa Vista/Deer	Hydrant		201
11/17/2010	N Inco Trl	CS1 & CS2		42
11/19/2010	1825 Wamego	Hydrant Flush		501
11/19/2010	1825 Wamego	Air Vac SSL Flush		80
11/26/2010	Ash/Gibrator	Sampling Station Leak		802
			Total	2,826

December 2010			
<u>Date</u>	Location/Parcel	<u>Description</u>	Cubic Feet
Ongoing	Production Fixed		183
Ongoing	Sampling Fixed		30
12/2/2010	Shawnee Tr	Service Line Leak	161
12/2/2010	Tanager	Dead-End Flushing for Cody	88
12/10/2010	Section 27 & 26	Hydrant Testing	415
12/15/2010	Ows/Starlight Mesa	Hydrant Repair	401
12/17/2010	630-032-27	Service Line Leak	64
12/17/2010	430 Cherokee	Service Line Leak	193
12/23/2010	BDVWA Jemez Office		1,999
		Total	3,534

January 2011			
Date	Location/Parcel	<u>Description</u>	Cubic Feet
Ongoing	Production Fixed		183
Ongoing	Sampling Fixed		30
1/5/2011	630-601-07	Service Line Leak	225
1/6/2011	Napa/Artesia	Fire Hydrant Repair	335
1/13/2011	629-071-68	Service Line Leak	161
1/18/2011	Honda	Hydrant Flushing	2,407
1/20/2011	Cambria/Reche	Airvac Replacement	129
1/24/2011	BDVWA Cherokee	Office	3,173
1/25/2011	629-441-31	Service Line Leak	97
1/25/2011	Ows/North Mira	Mainline Leak	160
1/25/2011	Ows/North Mira	Flushing after Repair	803
Feb	Section 14, 15, 18, 19	Fire Hydrant Maintenance	1,003
		Total	8,706

Total Non-Billable Usage from Jan. 2010 to Jan. 2011: 160,365

Bighorn-Desert View Water Agency

Board of Directors

Terry Burkhart, President Michael McBride, Vice President David Larson, Director Judy Corl-Lorono, Director Nell Casey Garcia, Director



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PLANNING/LEGISLATIVE/ENGINEERING GRANT & SECURITY COMMITTEE REGULAR MEETING REPORT

BOARD MEETING OFFICE 1720 N. Cherokee Trail, Landers, CA 92285 Thursday, August 18, 2011 8:45 a.m.

CALL TO ORDER

President Burkhart called the meeting to order at 8:45 a.m.

PLEDGE OF ALLEGIANCE

Led by John Burkhart.

ROLL CALL

Directors' Present: David Larson

Terry Burkhart

Staff Present: 🦼 🧳

Marina)West Lyni Tompkins

APPROVAL OF THE AGENDA

Director Larson made a motion to approve the agenda as presented. President Burkhart seconded the motion.

Adjourned for a break at 8:47 a.m. - Reconvened from break at 8:59 a.m.

CONFERENCE CALL WITH MOJAVE WATER AGENCY'S LEGAL/LEGISLATIVE AND PUBLIC INFORMATION COMMITTEE -

Bighorn-Desert View Water Agency Committee participated via teleconference to Mojave Water Agency's agendized meeting to receive an update by their State Advocate, Pilar Onate-Quintana, KP Public Affairs. She reported on the current state of affairs at the State Level of Government. Heather Hennessey, Innovative Federal Strategies, reported on the current state of affairs at the Federal Level of Government.

Public comment:

John Burkhart, of Johnson Valley, questioned if the bills that were discussed include financing for exploration (trying to find new water).

CONSENT ITEMS -

a. Regular PLEGS Committee Meeting Report, June 16, 2011

No public comment.

Director Larson made a motion to approve as presented item 'a'. President Burkhart seconded the motion.

PUBLIC PARTICIPATION

No public comment.

VERBAL REPORTS

COMMITTEE MEMBERS' COMMENTS/REPORTS None

GENERAL MANAGER'S REPORT

General Manager West reported she received an alert August 17, 2011 on SB-931. She has been requested to support the other entities by sending a letter apposing the prohibition of using outside General Counsel to advise Agencies on matters concerning their organized labor (unions). The PLEGS committee was in support of General Manager West sending this letter of support.

She reported on the Johnson Valley Hydrogeologic Investigation Request for Proposal and the Johnson Valley property acquisition.

ITEMS FOR THE NEXT AGENDA

Ames/Reche Report.

Johnson Valley Hydrogeologic Investigation

ADJOURNMENT - President Burkhart adjourned the meeting at 10:02 a.m.