



JOSHUA BASIN WATER DISTRICT
REGULAR MEETING OF THE BOARD OF DIRECTORS
WEDNESDAY, FEBRUARY 7, 2018, at 6:30 PM
61750 CHOLLITA ROAD, JOSHUA TREE, CA 92252

AGENDA

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **DETERMINATION OF A QUORUM**
4. **APPROVAL OF AGENDA**
5. **PUBLIC COMMENT**
This is the time set aside for public comment on any District-related matter not appearing on the agenda. Government Code prohibits the Board from taking action on these items, but they may be referred for future consideration. Please state your name and limit your comments to 3 minutes.
6. **CONSENT CALENDAR**
Matters on the Consent Calendar are considered routine in nature and will be enacted in a single motion without discussion. Any Board member or member of the public may request that an item be removed from the Consent Calendar and acted on separately.
 - A. Approve the Draft Minutes of January 17, 2018
7. **MR. ADAN ORTEGA, ORTEGA STRATEGIES GROUP, TO PRESENT UPDATES ON CURRENT LEGISLATIVE CONSIDERATIONS THAT MAY AFFECT JOSHUA BASIN WATER DISTRICT, TO INCLUDE BILLS AB 401 AND AB 623 –**
Recommend that the Board receive for information only.
8. **SCADA CONTRACT –** Recommend that the Board authorize the District to enter into an agreement with Forshock at a cost not to exceed \$86,000.
9. **DISTRICT GENERAL COUNSEL REPORT –**
10. **GENERAL MANAGER REPORT –**
11. **DIRECTOR REPORTS ON MEETINGS ATTENDED, COMMENTS AND FUTURE AGENDA ITEMS –**
 - Citizens Advisory Committee (CAC)-January 9, 2018 – Chairperson Karen Tracy
 - ASBCSD-Cucamonga Valley Water District-January 22, 2018 – President Luckman
 - Mojave Water Agency Board Meeting-January 25, 2018 – Director Floen
 - Mojave Water Agency Technical Advisory Committee (TAC)- February 1, 2018 – President Luckman

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- Public Outreach Consultant – Kathleen Radnich

12. **FUTURE DIRECTOR MEETINGS AND TRAINING OPPORTUNITIES**

- Mojave Water Agency Board of Directors Meeting – February 8, 2018, at 9:30 a.m. – Director Unger
- Finance Committee – February 14, 2018, at 9:00 a.m. – Vice President Johnson and Director Floen
- Water Resources & Operations – February 14, 2018, at 10:30 a.m.- President Luckman and Director Hund

(Please note that the Finance and Water Resources & Operations Committee meetings have been moved to the 2nd Wednesday of each month. Water Resources & Operations Committee now meets at 10:30 a.m. and the Legislative and Public Information Committee will now meet quarterly).

13. **ADJOURNMENT**

INFORMATION

The public is invited to comment on any item on the agenda during a discussion of that item. Any person with a disability who requires accommodation in order to participate in this meeting should telephone Joshua Basin Water District at (760) 366-8438, at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation.

Materials related to an item on this Agenda submitted to the Board of Directors after distribution of the agenda packet, are available for public inspection in the District's office located at 61750 Chollita Road, Joshua Tree, California 92252 during normal business hours.

JOSHUA BASIN WATER DISTRICT
Minutes of January 17, 2018
REGULAR MEETING OF THE BOARD OF DIRECTORS

1. CALL TO ORDER: 6:30 PM

2. PLEDGE OF ALLEGIANCE

3. DETERMINATION OF QUORUM: Mickey Luckman Present
Bob Johnson Present
Geary Hund Present
Rebecca Unger Present
Tom Floen Present

STAFF PRESENT: Curt Sauer, General Manager
Susan Greer, Assistant General Manager
Keith Faul, GIS Coordinator
Beverly Waszak, Executive Assistant

CONSULTANTS PRESENT: Gil Granito, Redwine & Sherrill
Kathleen Radnich, Public Outreach

GUESTS 9

4. APPROVAL OF AGENDA –

MSC/Hund/Johnson 5/0/0 to approve the Agenda of the Regular Meeting of the Board of Directors of January 17, 2018.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

5. PUBLIC COMMENT

Gayle Austin, Joshua Tree asked the Board to commit political suicide and approve the rate hike for the greater good of the community. This Board did not cause the issues that now require a steep rate hike, but this Board does have the opportunity to approve the rate hike and address the issues.

Ed Vallerand, Joshua Tree referred to the mailer that had been sent out and that the opposing letters had to be 50% of the voters per the guidelines of LAFCO. He also questioned the 2.5 million to replace meters and again referenced 29 Palms electronic meter replacement at 1.2 million.

John Stang – Joshua Tree opposes the \$60k that is budgeted each year for USGS and does not think the information we receive from them is beneficial, and it is a waste of time.

PUBLIC COMMENT CLOSED

6. CONSENT CALENDAR –

MSC Johnson/Hund 5/0/0 to approve the Draft Minutes of 12/202017 and December 2017 check register.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

7. WELL 14 REHABILITATION – GM Sauer stated that Well 14 has been offline for approximately 2 years, with rehabilitation efforts started in February 2016. The GM considers this an emergent situation, as the inability to bring this well back online would create an untenable position for the District. We have developed a plan for the next steps with staff, Water Systems Engineering of Kansas City and Dudek Engineering. Bids were requested from four (4) companies, with the known capability to meet additional standards for pumping down to 740 feet below ground surface. Bids received will be opened the afternoon of January 17, 2018, and a more accurate cost to conduct this 4th effort will be known at the time of the next Board meeting. A brief Q&A period followed with the Board.

PUBLIC COMMENT

Ed Vallerand, Joshua Tree asked Mike Metts, Dudek Engineering, when they pump out the water in 20-foot increments are they sampling each batch.

Mike Metts, Dudek Engineering, replied yes.

Al Marquez, Joshua Tree stated that we have already spent over 550K for Well 14 and now another 185K on top of that. If we have to spend another 800K-900K for Well 10 that takes away from fixing the pipes in the ground.

PUBLIC COMMENT CLOSED

MSC/Floen/Hund 5/0/0 to approve the General Manager to take such actions as needed, to further treat Well 14, at a cost not to exceed \$225,000.00 with a 10 percent contingency of \$22,500.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

8. PRESENTATION BY MIKE METTS, DUDEK ENGINEERING ON VARIOUS PROJECTS IN THE PLANNING PROCESS – Mike Metts gave a brief overview on projects such as tank rehabilitation, water flow modeling, Tilford’s Way’s pipeline replacement engineering and potential complexities of replacing booster pumps, such as at the G booster station (which is located at the E-1 tank). A brief Q&A period with the Board followed.

PUBLIC COMMENT

Ed Vallerand, Joshua Tree, asked Mike Metts of Dudek Engineering when you have a disparity of 50% do you and make sure they understand what the contract entails. Mike Metts, Dudek Engineering, replied yes.

John Stang, Joshua Tree inquired about the Fire Department regulations and stated that when a house sells, it should automatically be upgraded with an irrigation system.

PUBLIC COMMENT CLOSED

9. RECRUITMENT OF THE DIRECTOR WATER RESOURCES AND OPERATIONS (DWRO) POSITION - After a brief discussion with the Board, GM Sauer recommended that the DWRO position be revised as Assistant General Manager of Operations, which is in alignment with the high priority recommendation from Doug Spiers, Westin, Inc. (organizational assessment).

MSC/Unger/Hund 5/0/0 to approve the revised job description of the DWRO to Assistant General Manager of Operations.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

10. FINAL WATER STORAGE AGREEMENT WITH MOJAVE WATER AGENCY – After a brief discussion the Board accepted the MWA Water Storage Agreement and directed the GM to sign said Agreement.

PUBLIC COMMENT

Ed Vallerand, Joshua Tree asked if we had to pay MWA back would JBWD be able to deduct 15% for shrinkage.

GM Sauer replied yes that if MWA stored 10,000-acre-feet, then JBWD would pay MWA for 8,500-acre-feet.

Al Marquez, Joshua Tree referred to what he thought was a USGS report from 2010 where the water levels of Well 14 rose from 2004-2006 and 2008 to 2010. Mr. Marquez also stated that for people to say that we don't have a natural recharge; is not a true statement because of recharge from septic tanks.

PUBLIC COMMENT CLOSED

MSC Unger/Floen 5/0/0 to approve the MWA Water Storage Agreement.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

11. AGREEMENT WITH MOJAVE WATER AGENCY FOR WATER SUPPLY CONNECTION AND TRANSFER OF FACILITIES AT THE RECHARGE TURNOUT – After a brief discussion the Board accepted MWA Water Supply Connection Agreement and directed the GM to sign said Agreement.

MSC Hund/Johnson 5/0/0 to approve the Water Supply Agreement with MWA.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

12. DISTRICT GENERAL COUNSEL REPORT – Mr. Granito indicated that he had no report. However, as a point of clarity, he indicated that voter registration is not the basis upon which one may lodge a protest to proposed water rate increases. Generally speaking, that pursuant to Prop. 218, is provided to those who are impacted by the proposed increases such as parcel owners and customers.

Ed Vallerand, Joshua Tree interrupted the Board meeting to ask Mr. Granito, General Counsel, for clarification on the voting process.

Mr. Granito responded that per Article 13 of the Constitution the standing for voting is parcel owners or customers, with only one (1) vote per parcel.

13. GENERAL MANAGER REPORT - GM Sauer gave a brief report on the following:

- Chrome 6
- USDA Grant Money
- Solar AdHoc,
- Reorganization
- C-1 Tank
- Time of Source

14. DIRECTOR REPORTS ON MEETINGS ATTENDED, COMMENTS AND FUTURE AGENDA ITEMS-

Director Unger reported on the Solar AdHoc meeting.

Director Hund regrettably was unable to attend the MWA Board meeting due to a traffic accident. He also reported on the Solar AdHoc meeting he is chairing.

Director Floen reported on the Finance Committee meeting.

President Luckman reported on the Water Resources and Operations Committee meeting.

15. FUTURE DIRECTOR MEETINGS AND TRAINING OPPORTUNITIES – President Luckman read the list of upcoming meetings.

16. ADJOURNMENT-

MSC/Unger/Johnson 5/0/0 to adjourn the Regular Meeting of the Board of Directors of January 17, 2018, at 8:10 p.m.

Floen	Aye
Hund	Aye
Luckman	Aye
Johnson	Aye
Unger	Aye

Respectfully submitted:

Curt Sauer, General Manager

JOSHUA BASIN WATER DISTRICT
STAFF REPORT

Meeting of the Board of Directors

February 7, 2018

Report to: President and Members of the Board

Prepared by: Curt Sauer

TOPIC: RECEIVE INFORMATION ON CURRENT LEGISLATIVE CONSIDERATIONS THAT MAY AFFECT JOSHUA BASIN WATER DISTRICT, TO INCLUDE BILLS AB 401 AND AB 623.

RECOMMENDATION: RECOMMEND THAT THE BOARD RECEIVE FOR INFORMATION ONLY

ANALYSIS:

Mr. Adan Ortega, of Ortega Strategies Group, has been involved with legislation that affects small water districts throughout the State. He was very involved with the State's decision not to appeal the Chromium 6 ruling of last year, which resulted in the State revisiting MCL levels, especially for small water districts.

Mr. Ortega is working with several water districts to propose legislation, which would require the State to allow water districts time to implement new laws pertaining to water quality. Two of these are 29 Palms and Phelan Pinyon Hills.

Mr. Ortega will provide the Board an overview of proposed legislation, implementation update on AB 401 and advise the Board about how JBWD may be more proactive in legislation that affects our customers and our operations.

JOSHUA BASIN WATER DISTRICT
MEETING AGENDA REPORT

Meeting of the Board of Directors

February 7, 2018

Report to: President and Members of the Board

Prepared by: Randy Mayes, Interim Director of Water Resources & Operations

TOPIC: That the Board authorize the District to enter into an agreement with Forshock for a cost not to exceed \$86,000.

RECOMMENDATION: That the Board authorize the District to enter into an agreement with Forshock for a cost not to exceed \$86,000.

ANALYSIS:

Supervisor Control & Data Acquisition (SCADA) provides water production operators off-site control and monitoring at Joshua Basin Water District's (District) well, reservoir, and booster sites. SCADA enables the system to maintain reservoir and tank levels, sustain system pressure without constant operator interaction. SCADA enables the District to maintain security on sensitive production facilities through motion, hatch, and intrusion alarms. SCADA enables the District to reduce energy consumption at production facilities. The District is able to set start and stop times for each of the 12 booster stations and 5 well sites. A real-time clock monitors the current time and shuts down the facilities at predetermined times. SCADA is an effective communications device informing technicians of potential system problems as well as ensuring the safety and reliability of the potable water system.

The District's original telemetry system was deployed in the late 1980s with subsequent updates to the system most recently in 2015 when all sites were updated to programmable logic controllers (PLC). At the center of this system are the SCADA servers running software that provides this reporting, control, and visualization in an easy to understand and customizable format. The servers must be highly reliable for long-term operation of typically 3-5 years, sometimes longer. At present, the servers were originally deployed in 2010 and received minor software updates in 2014. This means that the original base hardware is now in its eighth year, with even the newest components approaching four years.

Forshock's proposal includes bolstering the District's radio infrastructure for increased reliability, data access, and maintenance. Moving from phone notifications and often-delayed email alerts to the cellular based notification system. Include network & security enhancements to reduce cyber attacks. Deploying a new control software to mitigate what appears to be planned obsolescence from our existing software package. Generate a comprehensive disaster recovery plan in the event of a natural disaster. This is the first year out of a five-year plan for a total of \$250,000.

FISCAL IMPACT: \$86,000

Joshua Basin Water District – SCADA Improvements

Overview

The Joshua Basin Water District SCADA (Supervisory Control and Data Acquisition) system provides data collection, control and security for all the districts tanks, wells, boosters, water treatment plant and other services. This system provides accurate and timely information to the operators to facilitate a reliable water supply and prevent any quality or safety incidents. This functionality allows the operators to attend to other important tasks while being sure to receive alerts 24-hours per day. The original telemetry system was deployed in the late 1980s with subsequent updates to the system most recently in 2015, when all sites were updated to more modern controllers.

At the center of this system are the SCADA servers running software that provides this reporting, control and visualization in an easy to understand and customizable format. The servers must be highly reliable for long term operation of typically 3-5 years, sometimes longer. At present the servers were originally deployed in 2010 and received a minor refresh of some components and software in 2014. This means that the original base hardware is now in its eighth year, with even the newest components approaching four years.

With enhancements to software and new reporting requirements for safety and security, the wireless communications system for much of the district is still using licensed, low speed radios. This system is similar in operation to as it was designed in the 1980s. Some parts of the system have been updated to more modern, high speed radios that allow for near-real time data collection. As the years have gone on some sites have become problematic due to interference, lack of remote troubleshooting abilities and simply outdated equipment.

Suggestions

- **Wireless Communications**
Improvements should be made to the radio infrastructure to improve reliability, data access and maintenance. This should reduce downtime and allow operators to focus on more important tasks. The focus will be targeted towards building from the core to more problematic sites. In the future, additional sites will be added to help with more advanced data collection, control and safety functions. Existing communications equipment would remain in place allowing for redundant communications to reduce downtime.
- **Operator Notifications**
Moving from phone notifications and often-delayed email alerts to a cellular based notification system, operators can be alerted faster and with more detail. This would be used in addition to the existing internet notifications and serve as a redundant means of notification.
- **Network & Security Enhancements**
A new, modern firewall and backup cellular connection should be implemented. This additional layer of security helps reduce cyberattack surface and provides an additional encrypted layer on the existing secure remote access features for the operators. A cellular based backup connection would allow for operator notification and remote access should the primary office internet go offline.
Additional monitoring services would be added to the system for intrusion detection, virus prevention, software exploit mitigation and operator notification of non-control system related events such as server and software failures.
- **SCADA Software & Servers**
The existing software package has entered a “maintenance mode” status with the vendor, meaning that there is no new development on the software for future operating system (Windows) or hardware changes. The district should prepare to deploy a new, vendor supported and actively developed control software. At the same time, the server machines should be updated to new, modern hardware of industrial grade to support many years of continued operation and modern operating systems. These systems would run in tandem with the current systems while the SCADA software is transitioned to the new control software.
- **Disaster Recovery & Backups**
The district should expand on any existing disaster recovery plans to ensure that they include the control system. A location should be decided that is safe from many common natural disasters, intrusion/vandalism and can serve as a temporary operations center for the control system. Replacement hardware for radios, antennas, controllers, measurement devices and servers. A remote backup device should be deployed to allow the control system to maintain up-to-date control software and configuration information. This backup approach will include the ability to have a new server running the system in the shortest time possible to maintain safe operation of the system, including the ability to be deployed from remote locations; including cloud-based servers.