PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

BOARD OF DIRECTORS

ROBERT E. ALVARADO
Division 1

DON WILSON
Division 2

MARCO HENRIQUEZ
Division 3

KATHY MAC LAREN
Division 4

VINCENT DINO
Division 5

DENNIS D. LaMOREAUX
General Manager

ALESHIRE & WYNDER LLP
Attorneys

ACWA PROUD MEMBER

February 6, 2019

AGENDA FOR REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT to be held at the District's office at 2029 East Avenue Q, Palmdale

MONDAY, February 11, 2019

6:00 p.m.

NOTES: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x1003 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Additionally, an interpreter will be made available to assist the public in making **comments** under Agenda Item No. 4 and any action items where public input is offered during the meeting if requested at least 48 hours before the meeting. Please call Dawn Deans at 661-947-4111 x1003 with your request. (PWD Rules and Regulations Section 4.03.1 (c))

Adicionalmente, un intérprete estará disponible para ayudar al público a hacer **comentarios** bajo la sección No. 4 en la agenda y cualquier elemento de acción donde se ofrece comentarios al público durante la reunión, siempre y cuando se solicite con 48 horas de anticipación de la junta directiva. Por favor de llamar Dawn Deans al 661-947-4111 x1003 con su solicitud. (PWD reglas y reglamentos sección 4.03.1 (c))

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale (Government Code Section 54957.5). Please call Dawn Deans at 661-947-4111 x1003 for public review of materials.

PUBLIC COMMENT GUIDELINES: **The prescribed time limit per speaker is three-minutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted, and offenders will be requested to leave the meeting. (PWD Rules and Regulations, Appendix DD, Sec. IV.A.)**

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

1) Pledge of Allegiance/Moment of Silence.
2) Roll Call.
3) Adoption of Agenda.

4) Public comments for non-agenda items.

5) Presentations:

5.1) None at this time.

6) Action Items - Consent Calendar (The public shall have an opportunity to comment on any action item on the Consent Calendar as the Consent Calendar is considered collectively by the Board of Directors prior to action being taken.)

6.1) Approval of minutes of regular meeting held January 28, 2019.

6.2) Approval of minutes of special meeting workshop held January 30, 2019.

6.3) Payment of bills for February 11, 2019.

6.4) Approval of Resolution No. 19-3 being a Resolution of the Board of Directors of the Palmdale Water District Authorizing Specified Individuals to Transact Business With Citizens Business Bank. (No Budget Impact – Finance Manager Williams)

6.5) Approval of Resolution No. 19-4 being a Resolution of the Board of Directors of the Palmdale Water District Authorizing Specified Individuals to Transact Business With UBS Financial Services, Inc. (No Budget Impact – Finance Manager Williams)

6.6) Receive and file semi-annual Employee Reimbursement Report for the period covering July 1, 2018 through December 31, 2018. (Finance Manager Williams)

7) Action Items - Action Calendar (The public shall have an opportunity to comment on any action item as each item is considered by the Board of Directors prior to action being taken.)

7.1) Consideration and possible action on Change Order No. 3 to the contract with ASI Construction LLC for construction of the Littlerock Reservoir Sediment Removal Project – Phase 1: Grade Control Structure under Specification No. 1802. (Addition of 15-days to contract duration – Project Manager Thompson)

7.2) Consideration and possible action to sponsor the 2019 SMART Water Expo in conjunction with the March 22 – 24, 2019 Home Show through the Antelope Valley State Water Contractors Association. ($2,300.00 based on Table A allocations – Total Sponsorship Cost $10,000.00) – Non-Budgeted – Deputy Water and Energy Resources Director/AVSWCA Assistant General Manager Thompson II)

7.3) Discussion on Spanish language outreach. (No Budget Impact – Director Mac Laren/Public Affairs Director Shay/Public Affairs Specialist Gallegos)

7.4) Consideration and possible action on authorization of the following conferences, seminars, and training sessions for Board and staff attendance within budget amounts previously approved in the 2019 Budget:

a) American Water Works Association (AWWA) Spring Conference “Where Policy Operations and Management Converge” to be held March 25 – 28, 2019 in Sacramento.

b) Antelope Valley Hispanic Chamber of Commerce 22nd Gala Installation to be held March 29, 2019 in Palmdale.

c) AWWA ACE 19 Conference "Innovating the Future of Water" to be held June 9 – 12, 2019 in Denver, Colorado.

d) 2019 California HR Conference to be held August 25 – 28, 2019 in Long Beach.

8) Information Items:

8.1) Reports of Directors:

a) Meetings/General Report.

b) Standing Committee/Assignment Reports (Chair):

1) None.

8.2) Report of General Manager.

8.3) Report of General Counsel.

9) Public comments on closed session agenda matters.

10) Break prior to closed session.

11) Closed session under:

11.1) Conference with Legal Counsel – Existing Litigation: A closed session will be held, pursuant to Government Code §54956.9 (d)(1), to confer with Special Litigation Counsel regarding existing litigation to which the District is a party. The title of such litigation is as follows: *Antelope Valley Ground Water Cases.*

12) Public report of any action taken in closed session.

13) Board members' requests for future agenda items.

14) Adjournment.



DENNIS D. LaMOREAUX,
General Manager

DDL/dd

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 5, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Mr. Michael Williams, Finance Manager

VIA: Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 6.4 – APPROVAL OF RESOLUTION NO. 19-3 BEING A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT AUTHORIZING SPECIFIED INDIVIDUALS TO TRANSACT BUSINESS WITH CITIZENS BUSINESS BANK. (NO BUDGET IMPACT – FINANCE MANAGER WILLIAMS)***

Recommendation:

Staff recommends approval of Resolution No. 19-3 Authorizing Specified Individuals to Transact Business with Citizens Business Bank.

Alternative Options:

There are no alternative options.

Background:

New officers for the Board of Directors were approved at the January 14, 2019 Board meeting. As a result, an updated resolution and updated signature cards are required by Citizens Business Bank.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 4 – Financial Health and Stability.
This item directly relates to the District's Mission Statement.

Budget:

There is no financial impact from the approval of Resolution No. 19-3.

Supporting Documents:

- Resolution No. 19-3

RESOLUTION NO. 19-3

**A RESOLUTION OF THE
PALMDALE WATER DISTRICT
AUTHORIZING SPECIFIED INDIVIDUALS TO
TRANSACT BUSINESS WITH CITIZENS BUSINESS BANK**

WHEREAS, the Board of Directors of the Palmdale Water District (the "District") has authorized certain public funds to be deposited with Citizens Business Bank for the purpose of protecting public funds; and

WHEREAS, from time to time the Palmdale Water District has cause to withdraw, deposit, reinvest, or otherwise change the disposition of those invested assets to fulfill the mission of the District; and

WHEREAS, the Board of Directors of the District, at their regular meeting of February 11, 2019, did authorize the President and/or Secretary to execute agreements with respect to accounts of the District held by Citizens Business Bank; and

WHEREAS, the Board of Directors of the District, at their meeting of February 11, 2019, did hereby approve the above described agreements authorizing certain individuals to act on the District's behalf with respect to the certain specified accounts of the District with Citizens Business Bank; and

WHEREAS, the Board of Directors of the district intends and requires two Directors acting together or at least one Director acting with another director or designated staff member to execute authority over designated Treasury Management Agreement.

NOW, THEREFORE, BE IT RESOLVED, that Vincent Dino and Marco Henriquez, acting together, are hereby authorized and directed to open an account with Citizens Business Bank in the District's name and on its behalf, for the purpose of securing services, and that Citizens Business Bank is hereby authorized to act upon any orders and instructions with respect to such accounts listed below and/or the delivery of securities or money therefrom when received from any of the two said individuals, acting together, who are each likewise hereby authorized to sign and deliver in the District's name and in its behalf, receipts for securities and/or funds so delivered or paid.

BE IT FURTHER RESOLVED, that any two of Don Wilson, Marco Henriquez, Kathy Mac Laren, Robert Alvarado, or Vincent Dino acting together are hereby authorized to withdraw funds or to act on behalf of the District with respect to the General Account No. 047031559; Merchant Account No. 047031567; Customer Refund Account No. 047031575.

ADOPTED THIS 11TH DAY OF FEBRUARY, 2019.

_____
President, Board of Directors

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 5, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Mr. Michael Williams, Finance Manager

VIA: Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 6.5 – APPROVAL OF RESOLUTION NO. 19-4 BEING A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT AUTHORIZING SPECIFIED INDIVIDUALS TO TRANSACT BUSINESS WITH UBS FINANCIAL SERVICES, INC. (NO BUDGET IMPACT – FINANCE MANAGER WILLIAMS)***

Recommendation:

Staff recommends approval of Resolution No. 19-4 Authorizing Specified Individuals to Transact Business with UBS Financial Services, Inc.

Alternative Options:

There are no alternative options.

Background:

New officers for the Board of Directors were approved at the January 14, 2019 Board meeting. As a result, an updated resolution and updated signature cards are required by UBS Financial Services, Inc.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 4 – Financial Health and Stability.
This item directly relates to the District's Mission Statement.

Budget:

There is no financial impact from the approval of Resolution No. 19-4.

Supporting Documents:

- Resolution No. 19-4

RESOLUTION NO. 19-4

**A RESOLUTION OF THE
PALMDALE WATER DISTRICT
AUTHORIZING SPECIFIED INDIVIDUALS TO
TRANSACT BUSINESS WITH UBS FINANCIAL SERVICES, INC.**

WHEREAS, the Board of Directors of the Palmdale Water District (the "District") has authorized certain public investments to be deposited with UBS Financial Services, Inc., for the purpose of protecting public assets and earning a safe rate of return on those invested assets being long-term Account No. SS-11475 and short-term Account No.'s SS-11432 and SS-11469 and rate stabilization fund Account SS-24016; and

WHEREAS, from time to time the Palmdale Water District has cause to withdraw, deposit, reinvest, or otherwise change the disposition of those invested assets to fulfill the mission of the District; and

WHEREAS, the Board of Directors of the District, at their regular meeting of February 11, 2019, did authorize the Secretary to execute resolutions with respect to accounts of the District held by UBS Financial Services, Inc.; and

WHEREAS, the Board of Directors of the District, at their meeting of February 11, 2019, did hereby approve the above described resolutions authorizing certain individuals to act on the District's behalf with respect to the certain specified investments of the District with UBS Financial Services, Inc.; and

WHEREAS, the Board of Directors of the District intends and requires at least one Director acting with another Director or designated staff member or two designated staff members acting together to exercise authority over investment accounts.

NOW THEREFORE, BE IT RESOLVED, that Don Wilson, Marco Henriquez, Vincent Dino, and Robert Alvarado, with any two of them acting together, are hereby authorized and directed to open an account with UBS Financial Services, Inc. in the District's name and on its behalf, for the purpose of purchasing and selling securities, and that UBS Financial Services, Inc. is hereby authorized to act upon any orders and instructions with respect to such accounts listed below and/or the delivery of securities or money therefrom when received from any of the two said individuals, acting together, who are each likewise hereby authorized to sign and deliver in the District's name and in its behalf, receipts for securities and/or funds so delivered or paid.

BE IT FURTHER RESOLVED, that any two of the following, Don Wilson, Marco Henriquez, Vincent Dino, or Robert Alvarado acting together or any one of them together with Dennis D. LaMoreaux, Robert M. Egan or Michael A. Williams or Dennis D. LaMoreaux and Michael A. Williams acting together are hereby authorized to act on behalf of the District with respect to long-term Account No. SS-11475, the short-term Account No.'s SS-11432 and SS-11469, and rate stabilization fund Account No. SS-24016.

ADOPTED THIS 11TH DAY OF FEBRUARY, 2019.

_____

President, Board of Directors

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 5, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Mr. Michael Williams, Finance Manager

VIA: Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 6.6 – RECEIVE AND FILE SEMI-ANNUAL EMPLOYEE REIMBURSEMENT REPORT FOR THE PERIOD COVERING JULY 1, 2018 THROUGH DECEMBER 31, 2018. (FINANCE MANAGER WILLIAMS)***

Recommendation:

Staff recommends the Board receive and file the Semi-Annual Employee Reimbursement Report for the period covering July 1, 2018 through December 31, 2018.

Background:

Staff reimbursements are based on the approved budget. It is required that the District report to the governing body Employee Reimbursements in excess of $100.00 on a semi-annual basis.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 4 – Financial Health and Stability.
This item directly relates to the District's Mission Statement.

Budget:

Receiving and filing the Employee Reimbursement Report will not affect the budget.

Supporting Documents:

- Semi-Annual Employee Reimbursement Report for the period covering July 1, 2018 through December 31, 2018.

PALMDALE WATER DISTRICT

Semi-Annual Employee Reimbursement Report

Period Covering July 1, 2018 through December 31, 2018

Employee ID	Employee Name	Pay Date	Item Description	Amount
1570	OTHON V. ESPINOZA	07/25/18	Riembursement for Work Boots	175.00
1650	CLAY GIBBONS	07/25/18	Riembursement for Work Boots	131.40
1720	RICHARD HEINONEN	07/25/18	Travel Expenses	524.24
2600	JON PERNULA	08/08/18	Travel Expenses	141.05
2600	JON PERNULA	08/22/18	Travel Expenses	153.34
2955	PETER THOMPSON JR	08/22/18	Travel Expenses	394.58
2235	JOHN MENDENHALL	10/03/18	Travel Expenses	164.00
4018	JENNIFER EMERY	10/03/18	Educational Reimbursement	3,000.00
4016	MYNOR MASAYA	10/17/18	Travel Expenses	261.36
1040	AMANDA THOMPSON	10/17/18	Travel Expenses	281.34
2730	ROBERT ROSATI	10/17/18	Travel Expenses	110.09
4022	JAMES HATFIELD	10/17/18	Travel Expenses	256.15
1720	RICHARD HEINONEN	10/31/18	Travel Expenses	323.62
4029	LAURA GALLEGOS	10/31/18	Benefit Reimbursement from leave	105.00
2955	PETER THOMPSON JR	10/31/18	Travel Expenses	394.58
2955	PETER THOMPSON JR	10/31/18	Travel Expenses	394.58
2600	JON PERNULA	11/14/18	Travel Expenses	105.05
1780	DENNIS HOFFMEYER	11/28/18	Educational Reimbursement	3,000.00
2600	JON PERNULA	11/28/18	Travel Expenses	115.05
4047	CLAUDIA BOLANOS	11/28/18	Travel Expenses	146.88
3211	MICHAEL WILLIAMS	12/12/18	Travel Expenses	186.39
2100	DENNIS LAMOREAUX	12/12/18	Travel Expenses	197.29
4007	DAN MENKO	12/12/18	Riembursement for Work Boots	131.39
4005	MARIA AVELAR	12/12/18	Educational Reimbursement	550.00
1720	RICHARD HEINONEN	12/12/18	Educational Reimbursement	612.00
1653	FRANK GONZALES	12/21/18	Riembursement for Work Boots	120.23
2520	BORIS PASPALOF	12/21/18	Riembursement for Work Boots	160.99
4050	SHANEECE LOPEZ	12/21/18	Educational Reimbursement	182.43
				12,318.03

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 5, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Mr. Peter Thompson, Project Manager

VIA: Mr. Dennis D. LaMoreaux, General Manager
Mr. Adam Ly, Assistant General Manager
Mr. Jim Riley, Engineering/Grant Manager

RE: ***AGENDA ITEM NO. 7.1 – CONSIDERATION AND POSSIBLE ACTION ON CHANGE ORDER NO. 3 TO THE CONTRACT WITH ASI CONSTRUCTION LLC FOR CONSTRUCTION OF THE LITTLEROCK RESERVOIR SEDIMENT REMOVAL PROJECT – PHASE 1: GRADE CONTROL STRUCTURE UNDER SPECIFICATION NO. 1802. (ADDITION OF 15-DAYS TO CONTRACT DURATION – PROJECT MANAGER THOMPSON)***

Recommendation:
Staff recommends that the Board approve Change Order No. 3.

Alternative Options:
There is no alternative option.

Impact of Taking No Action:
The 15 additional days are required for ASI Construction LLC to complete the contract.

Background:
Change Order No 3 is comprised of adding fifteen (15) days to the contract duration to offset days lost due to PAL fire levels and adverse weather.

Strategic Plan Initiative/Mission Statement:
This item is under Strategic Initiative No. 1- Water Resource Reliability.
This item directly relates to the District's Mission Statement.

Budget:
Water Revenue Bonds, Series 2018A.

Supporting Documents:

- Change Order No. 3
- ASI January 25, 2019 letter regarding "Request for Suspension of Time Due to Weather Impacts"
- PWD January 28, 2019 response letter to ASI

CHANGE ORDER

No. 3

PROJECT Construction of the Littlerock Reservoir Sediment Removal Project – Phase 1: Grade Control Structure

DATE OF ISSUANCE January 28, 2019 EFFECTIVE DATE February 11, 2019

OWNER Palmdale Water District

OWNER's Contract No. Specification No. 1802

CONTRACTOR ASI Construction LLC ENGINEER P.W.D.

You are directed to make the following changes in the Contract Documents.

Description: Additional Contract Days (15)

Reason for Change Order: *Days Lost Due to PAL, Fire Levels, and Adverse Weather*

Attachments: *ASI Letter RE: Request for Suspension of Time Due to Weather Impacts*

CHANGE IN CONTRACT PRICE:	**CHANGE IN CONTRACT TIMES:**
Original Contract Price $ 10,675,808.00	Original Contract Times Completion: 170 Days – March 19, 2019
Net Changes from Previous Change Orders No. 0 to No. 2 $ -1,175,000.00	Net Changes from Previous Change Orders No. 0 to No. 2 8 – Day Extension Days
Contract Price Prior to this Change Order $ 9,500,808.00	Contract Times Prior to this Change Order Completion: 178 Days – March 27, 2019 Days
Net Increase (Decrease of this Change Order) $ 0.00	Net Increase (Decrease of this Change Order) 15 – Day Extension Days
Contract Price with all Approved Change Orders $ **9,500,808.00**	Contract Times with all Approved Change Orders Completion: 193 Days – April 11, 2019

RECOMMENDED:

By:_____
PWD, Engineering Manager

Date: _____

APPROVED:

By: _____
PWD, General Manager

Date: _____

ACCEPTED:

By:_____
Contractor (Authorized Signature)

Date: _____

ASI Construction LLC
1880 Office Club Pointe, Suite 2000, Colorado Springs, Colorado 80920 T: +1 (719) 647-2821 F: +1 (719) 647-2890
"A Shaft Drillers International Company"

VIA EMAIL and CERTIFIED MAIL

January 25, 2019

Palmdale Water District
2029 East Avenue Q
Palmdale, CA 93550

Attn: Pete Thompson, Project Manager
Direct 661-456-1020

RE: Littlerock Reservoir Sediment Removal Project Phase 1: Grade Control Structure
Request for Suspension of Time due to Weather Impacts

Mr. Thompson:

As you are aware, on January 17th 2019, the above referenced project experienced an inflow of water as the result of a series of rain and snow events that exceeded the capacity of the water control diversion and flooded the project work area. ASI Construction LLC (ASI) has been precluded from performing contract work since that date. The flood waters have since receded to the point that emergency repairs can commence to stabilize the project site and to evaluate the damage caused to the project work and on-site equipment by the flood. By way of this letter, ASI is providing Palmdale Water District (PWD) formal notice of the flood event and requesting the contract time be suspended until such time as ASI is able to restore the project work to pre-flood conditions and PWD authorizes ASI to recommence contract work.

In addition to this suspension of time, ASI is requesting that ASI and PWD use this opportunity to formalize the contract day extensions previously discussed as the result of fire hazards and rain events that precluded ASI from performing work on the project. As of January 17th, ASI is requesting a contract extension of a minimum of 15 days due to PAL fire levels and adverse weather. ASI respectfully request a change order be issued capturing these days and indefinitely suspending the contract time starting on January 17, 2019 until such time as contract work can recommence. ASI respectfully reserves all other rights it may have as the result of the recent flood event.

As we have throughout the project, ASI will continue to communicate openly with PWD on the status of site conditions and ASI's ideas for moving forward with this project following restoration of the project work to pre-flood conditions. If you have any question, please feel free to contact me to your convenience.

Respectfully Submitted,
ASI Construction LLC

Dean Dibert, PE
Vice President of Engineering

PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

EST. 1918

January 28, 2019

BOARD OF DIRECTORS

ROBERT E. ALVARADO
Division 1

DON WILSON
Division 2

MARCO HENRIQUEZ
Division 3

KATHY MAC LAREN
Division 4

VINCENT DINO
Division 5

DENNIS D. LaMOREAUX
General Manager

ALESHIRE & WYNDER LLP
Attorneys

ACWA
PROUD MEMBER

ASI Construction LLC
ATTN: Mr. Dean Dibert
1880 Office Club Pointe, Suite 2000
Colorado Springs, Colorado 80920

RE: LITTLEROCK RESERVOIR SEDIMENT REMOVAL PROJECT PHASE I: GRADE CONTROL STRUCTURE– REQUEST FOR CONTRACT TIME SUSPENSION DUE TO WEATHER EVENT

Dear Mr. Dibert:

Construction activity on the above-mentioned project was interrupted by a series of rain events culminating in a breech of the by-pass structure on January 17, 2019, which flooded the site. The District has instructed the contractor to perform all work necessary to make the site safe and secure and to restore the natural stream course and by-pass structure. The District will then consider delaying the remainder of the work until the rainy season and endangered bird nesting season have elapsed. All days which will have elapsed from January 17, 2019 until a decision is made as to how and when the contract work will recommence will be added to the calendar day duration of the contract as part of a future change order.

Additionally, the District will prepare Change Order No. 3 to add fifteen (15) days to the contract duration due to previously discussed PAL, fire levels and inclement weather through January 17, 2019. This will be presented to the Board of Directors for consideration at the February 11, 2019 regular meeting.

Please feel free to contact me at (661) 947-4111 Ext. 1040 if you have any questions.

Very truly yours,

PETER THOMPSON, Project Manager

PT/dd

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 5, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Mr. Peter Thompson II, Deputy Water and Energy Res. Dir.

VIA: Mr. Jon Pernula, Water and Energy Res. Dir.
Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 7.2 – CONSIDERATION AND POSSIBLE ACTION ON CONTRIBUTION TO SPONSOR THE 2019 SMART WATER EXPO IN CONJUNCTION WITH THE MARCH 22 – 24, 2019 HOME SHOW THROUGH THE ANTELOPE VALLEY STATE WATER CONTRACTORS ASSOCIATION. ($2,300.00 BASED ON TABLE A ALLOCATIONS – TOTAL SPONSORSHIP COST $10,000.00 – NON-BUDGETED – DEPUTY WATER AND ENERGY RESOURCES DIRECTOR AND AVSWCA ASSISTANT GENERAL MANAGER THOMPSON II)***

Recommendation:

Staff recommends that the Board authorize the contribution of $2,300.00 to the Antelope Valley State Water Contractors Association (AVSWCA) for the sponsorship of the 2019 SMART Water Expo in conjunction with the March 22 – 24, 2019 Home Show.

Alternative Options:

The Board can choose not to authorize a contribution.

Impact of Taking No Action:

The District will not participate in the 2019 SMART Water Expo through the Antelope Valley State Water Contractors Association.

Background:

The 2019 SMART Water Expo is intended to highlight water conservation rebate programs from the participating agencies, provide a forum to publicly share information on the agencies and their projects, will included water-related vendors, and may include presentations from specific speakers on water-related topics.

At the AVSWCA's July 19, 2018 meeting, the Commissioners discussed sponsorship of a Conservation Garden at the Antelope Valley Fair in lieu of funding future Smart Water Expos. The Board of Directors for the Palmdale Water District approved sponsorship of the Conservation Garden on August 27, 2018.

At the AVSWCA's September 13, 2018 meeting, the Commissioners approved participation in the 2019 SMART Water Expo in conjunction with the 2019 Home Show for a sponsorship amount of $10,000.00 to be divided among the Association's member agencies according to State Water Project Table A allocations.

At the AVSWCA's January 24, 2019 meeting, the Commissioners recommended participation in the 2019 SMART Water Expo in conjunction with the 2019 Home Show for a sponsorship amount of $10,000.00 be presented to each of the member agencies for consideration as this sponsorship amount was not included in the AVSWCA's approved budget. The $10,000.00 sponsorship amount will be divided among the Association's member agencies according to State Water Project Table A allocations with the District's portion of this amount being $2,300.00.

Additional costs for participation include staff time and a potential minimal amount for equipment rental costs.

Strategic Plan Initiative/Mission Statement:

This item is under Strategic Initiative No. 5 – Regional Leadership.
This item directly relates to the District's Mission Statement.

Budget:

This project is not budgeted.

Supporting Documents:

There are no supporting documents.

P A L M D A L E W A T E R D I S T R I C T

B O A R D M E M O R A N D U M

DATE: February 6, 2019 **February 11, 2019**

TO: BOARD OF DIRECTORS **Board Meeting**

FROM: Ms. Laura Gallegos, Public Affairs Specialist

VIA: Mrs. Judy Shay, Public Affairs Director
Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 7.3 – DISCUSSION ON SPANISH LANGUAGE OUTREACH***

Recommendation:
No recommendation, for informational purposes only.

Alternative Options:
None

Impact of Taking No Action:
There is no impact from no action.

Background:
The District has been active in reaching out to the Spanish-speaking community via radio programs, advertisements in print media, and District newsletters. For the past few years, the District has been a regular on paid radio show Café con Leche, one of four local Spanish-language shows. Last year, the District was also a guest on a new, free radio program called Salva, which is currently on hiatus. The radio station is unable to provide us with numbers of listeners for each show. As for print media, the District will occasionally buy advertisements in the Spanish-language newspaper, La Prensa. One good way to reach our Spanish-speaking customers is with our quarterly newsletter, The Pipeline. The Spanish version is available on the District's website.

Strategic Plan Initiative/Mission Statement:
This item is under Strategic Initiative No. 6 – Customer Care, Advocacy and Outreach.
This item directly relates to the District's Mission Statement.

Budget:
No budget impact.

Supporting Documents:
- Past *Cafe Con Leche* Speaking Points
- Spanish version of The Pipeline (available on PWD website)

PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Palmdale Water District
SPEAKING POINTS –

Café con Leche Interview - Radio 1470AM
570 E. Avenue Q-9
8:30-9:00 a.m., Monday, December 10, 2018
w/ host Lilia Galindo

Adam Ly, Assistant General Manager/COO

- What is your role at the District?
- What are your goals for the District?

- Water Ambassadors Academy to return Spring 2019! We are now recruiting for ambassadors. We had a few Café con Leche listeners at the first Academy a few months ago. To sign up, please call Laura Gallegos at 661-441-5944 or visit our website at palmdalewater.org/waterambassadors

- Our office will be closed for the holidays from Dec. 21- Jan 1. Our emergency number is 661-947-4114.

- The Leslie O. Carter Water Treatment Plant is scheduled to be temporarily shut down for maintenance Jan. 1 – Jan 31. Your water may appear milky.

It is due to water bubbles from pumping the water from underground wells. It is very safe to drink.

- Customer's can view the Winter edition of the Pipeline, our quarterly customer newsletter, online in Spanish and English.
- Remind everyone that you don't have to pay your bill in person. You can pay it online, by phone, or at 7-Eleven, Family Dollar and ACE Cash Express stores. You can also use the secured drop box at the entrance of the District office.

- Rate Assistance Applications are now being accepted through June. Funds are limited.

- Water-Wise Landscape Conversion Program replaced Cash for Grass program. Applications are now available in the office in the Water Conservation Dept. Applications must be filled out or it won't be accepted.
-

Junta Directiva

Robert E. Alvarado, *División 1*

Joe Estes, *División 2*

Marco Henriquez, *División3*

Kathy Mac Laren, *División 4*

Vincent Dino, *División 5*

Equipo Ejecutivo

Dennis D. LaMoreaux
Gerente General, CEO

Adam Ly
Asistente de Gerente General/COO

Michael Williams
Gerente de Finanzas, CFO

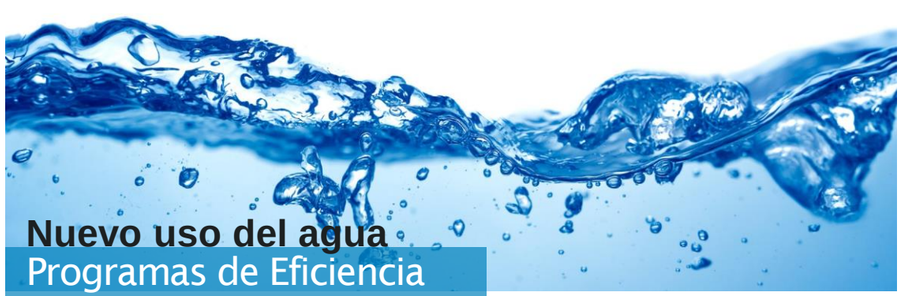
The Pipeline es publicado por Departamento de Asuntos Públicos del Distrito de Agua de Palmdale.

EDITORA / ESCRITORA
Judy Shay, *Public Affairs Director*

DISEÑADOR
Michael Suorsa, *Suorsa Design*

Estado de la misión

Desde 1918, el Distrito de Agua de Palmdale ha proporcionado agua de alta calidad a un costo razonable. Nos enorgullecemos de un excelente servicio al cliente; abogando por problemas locales de agua que ayudan a nuestros residentes; educar a la comunidad sobre la conservación del agua; y liderando nuestra región en la investigación e implementación de tecnologías emergentes que aumentan la eficiencia operativa



Nuevo uso del agua
Programas de Eficiencia

PWD tiene tres programas nuevos para ayudar a los clientes reducir la cantidad de agua que usan afuera de sus propiedades. Estos son:

- **Micro-irrigation Conversion Rebate** – ofrece a los solicitantes que califican un descuento de 25 centavos por pie lineal de sistema de micro-riego instalado hasta un máximo de $ 15,000. Este programa se dirige a clientes comerciales, residencias multifamiliares y HOA con conversiones a mayor escala que desean cambiar de rociadores tradicionales a microirrigación altamente eficiente.
- **Residential Water Survey** – Este programa gratuito está disponible para propietarios e inquilinos de PWD que desean ayuda para identificar fugas y problemas de irrigación en sus residencias. Un tecnico de atención al cliente visitará el hogar para revisar las opciones para reducir el uso del agua y para detectar posibles problemas con los grifos, duchas, inodoros y calentadores de agua.
- **Water-wise Sprinkler Upgrade Rebate Program** – Los clientes puden recibir un credito de cuenta de $4 por cada aspersor equipado con una boquilla HE/MP Rotador.

Para mas infornacion de cada programa, Favor de llamar a Water Conservation Aid con Linda Trevino al 661-456-1001.

PWD APOYA PROP 3 en la boleta de Noviembre

La Junta Directiva de Palmdale Water District unánimemente voto a favor de la Proposición 3 tambien conocida como la Ley de Sumistro de Agua y Calidad del Agua de 2018, que aparecerá en la boleta del 6 de Noviembre.

Si los votantes lo aprueban, la Prop 3 pondría a disposición $8.9 mil millones para financiar proyectos de abastecimiento de agua y calidad, restauración de cuencas hidrográficas, protección de peces y vida silvestre, gestión sostenible de aguas subterráneas, reparación de infraestructura y reparación de presas y canales actuales. En adición, $500 millones se destinarán a ayudar a las comunidades desfavorecidas con agua potable mientras $640 millones se destinarán a la gestión sostenible del agua subterránea.

Los proponentes de la Prop. 3 afirman que el vínculo beneficiará a todos los usuarios del agua, el medioambiente y la agricultura. Mejorará los suministros de agua para todo el estado y proporcionará una inversión muy necesaria en el futuro del agua sostenible del estado.

"Our First **100 Years**" Book

Obtenga su libro de la historia de PWD hoy! Para conmemorar nuestro centenio, publicamos "Nuestros primeros 100 años" para documentar nuestra vasta e impresionante historia en Antelope Valley. El libro cubre el período desde finales de 1800 hasta el presente. El costo es de $18, impuestos y envío incluidos. Para comprar el libro, contáctese con la asistente ejecutiva Dawn Deans al 661-456-1003 o aldeans@palmdalewater.org.





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Palmdale Water District

the PIPELINE

Otoño 2018

Volumen 4 Número 3



Encuesta Sanitaria Muestra Cumplimiento de PWD

Palmdale Water District (PWD) ha cumplido con el requisito estatal conocido como "La Encuesta Sanitaria" que ordena a los distritos de agua monitorear sus fuentes de agua superficiales para asegurar que se conozca cualquier contaminación potencial y se implementen medidas para proteger la calidad del agua.

Las encuestas, requieren que cada cinco años, Community Water Systems analize los lagos, acueductos, presas, embalses y otra infraestructura relacionada con las aguas superficiales del entorno para ver qué impactos negativos han tenido y cómo pueden haber afectado la calidad del agua. Para PWD, la encuesta del 2017 se centró en California Aqueduct, Lake Palmdale y Littlerock Dam. También fue preocupante la Zanja de Palmdale de ocho millas que corre desde la presa hasta el Lago Palmdale.

El agua del acueducto y la presa fluyen hacia el lago para ser tratadas en Leslie O. Carter Water Treatment Plant donde se procesa y filtra antes de distribuirse a aproximadamente 27,000 conexiones de negocios y residenciales dentro del área de servicio de PWD. Es fundamental que cada una de estas fuentes de agua superficial no se contamine a propósito o por accidente.

"Tenemos que ser muy diligentes y proteger nuestras fuentes de agua superficiales ", dijo el gerente general de PWD, Dennis D. La- Moreaux. "Es importante que todos entiendan que los contaminantes que entran en estas fuentes pueden afectar el agua que producimos. Necesitamos mantener nuestra presa, lago y acueducto limpios".

En el lago de Palmdale, PWD trabaja con el Palmdale Fin y Feather Club para garantizar que esté protegido contra especies invasoras y solo barcos inspeccionados son utilizados para recreación. The Fin y Feather, que arrienda el lago de PWD, patrulla el área por la noche. Las regulaciones estatales prohíben el contacto corporal o la natación en el lago.

"Es importante que todos entiendan que los contaminantes que entran en estas fuentes pueden afectar el agua que producimos. Necesitamos mantener nuestra presa, lago y acueducto limpios."
-GM Dennis D. LaMoreaux

"Las preocupaciones más comunes son los contaminantes microbiológicos relacionados con la actividad humana", dijo PWD Gerente de Operaciones, Mynor Masaya, quien supervisa la planta de tratamiento.

Más difícil de patrullar que el Lago de Palmdale son el acueducto, la presa y la zanja. Palmdale Ditch, que transporta agua desde Littlerock Dam por gravedad hasta el Lago de Palmdale, está abierta y expuesta a elementos. Los equipos de PWD monitorean la zanja a diario cuando está en uso para verificar si hay basura. También inspeccionan cercas, puertas y otras medidas de seguridad.

(Continua en la pagina 2)

PRÓXIMOS EVENTOS:

Talleres de Jardin GRATIS:

Plantas autóctonas
Sabado, 15 de Septiembre
9-11 a.m. en Antelope Valley College
3041 West Avenue K, Lancaster (Room TE3)

Preparándo para el invierno; No olvides los vegetales
Sabado, 20 de Octubre
9-11 a.m. en Antelope Valley College
3041 West Avenue K, Lancaster (Room TE3)

PWD Water-wise Landscape Programa de Conversion
Sabado, 27 de Octubre
9 a.m.-12 p.m.
Antelope Valley Resource Conservation District
10148 West Avenue I, Lancaster
Asientos limitados. Reserve llamando a 661-456-1001.

Juntas Directivas:

Lunes alas 6 p.m.
PWD Board Room
2029 E. Avenue Q, Palmdale
10 y 24 de Septiembre
8 y 22 de Octubre
26 de Noviembre
(La primera junta de Nov. sera reprogramada a causa del dia de Veteranos.) 10 de Diciembre

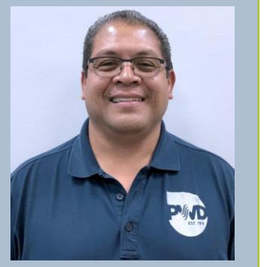
Informe Anual de Confianza del Consumidor de PWD 2017 ahora disponible en línea

Cada año, Palmdale Water District brinda el Consumer Confidence Report en línea para informar a nuestros clientes sobre la calidad de nuestra agua. Si desea que le enviemos por correo una copia en papel del Informe, llame a PWD al 661-947-4111 ext. 1001.

Attention: This publication is available in Spanish on our website at palmdalewater.org.
Atención: Esta publicación está disponible en español en nuestro sitio web en palmdalewater.org.

Empleado destacado:

Mynor Masaya, Gerente de Operaciones



Mynor Masaya

El Gerente de Operaciones de PWD Mynor Masaya "Cayó" en el negocio del agua hace 33 años y todavía disfruta su profesión accidental. En 1985, un conocido le consiguió un trabajo en Santa Clarita Water Company, donde comenzó a reparar fugas e instalar medidores de agua y tuberías residenciales. Hoy, Mynor es responsable de un equipo de 10 personas que se aseguran de que el agua sea tratada adecuadamente en la planta de tratamiento de agua Leslie O. Carter.

Mynor supervisa la planta de tratamiento que cuenta con personal de operadores de planta, un supervisor de laboratorio y analistas de laboratorio. Ellos prueban muestras de agua en las tres fuentes de agua de PWD: pozos de agua subterránea, el acueducto de California y la presa de Littlerock. El agua del acueducto y la presa fluyen hacia el lago Palmdale donde el personal prueba y trata antes de que pase por procesos de tratamiento adicionales en la planta y se distribuya a más de 115,000 personas en los límites de servicio de PWD.

Fue hace cinco años cuando Mynor se unió a PWD como Supervisor de Planta de Tratamiento. Fue promovido a su puesto actual en el 2015. Antes de PWD, trabajó durante dos años para la ciudad de Coalinga en la planta de tratamiento de agua y después trabajo 17 años como operador de una planta de tratamiento para la Agencia de Aguas del Lago Castaic. Tiene certificaciones de nivel de tratamiento de agua nivel 5 y de distribución de agua nivel 5, la más alta disponible.

Mynor da crédito a sus años de trabajo tanto en la fontaniera como en el lado del operador para comprender completamente las dinámicas de cómo administrar una planta de tratamiento. Él disfruta de su trabajo debido a su interés en el tratamiento del agua.

"El tratamiento del agua es fascinante para mí", dijo Mynor. "Es un campo emocionante con tecnologías en constante cambio para los procesos de tratamiento de agua para cumplir constantemente con las regulaciones actuales y futuras de la calidad del agua del estado. Disfruto el desafío de garantizar que proporcionamos agua de la mejor calidad y al mejor costo".

Como una de las pocas agencias de agua que utiliza la filtración de carbón activado granular (GAC) de vanguardia para la remoción Total de Carbono Orgánico para prevenir la formación de subproductos de desinfección al agregar cloro, PWD brinda a sus clientes agua de la más alta calidad que está desinfectada y libre de bacterias, parásitos, virus y toxinas orgánicas producidas por las floraciones de algas.

"Las personas necesitan saber que nuestra agua es segura para beber porque la administración de PWD proporciona todos los recursos necesarios para mantener la planta de tratamiento funcionando a su rendimiento óptimo ", dijo Mynor.

Mynor y su esposa, que tienen cuatro hijos adultos, han vivido en Palmdale durante 20 años. Le gusta pasar tiempo con su familia, viajar y caminar a su perro, Max.

Encuesta Sanitaria

(Continued from page 1)

Mynor urge a las personas a pensar en las repercusiones de arrojar basura y el vertido ilegal. Muchas veces, esto puede conducir a la contaminación del agua. El dice que cosas como ropa, muebles y animales muertos se han eliminado de la zanja.



El Dique de Palmdale corre ocho millas desde Littlerock Dam hasta el lago de Palmdale.

Las fuentes de agua superficial también pueden verse negativamente afectadas por eventos tales como incendios forestales, derrames de petróleo, construcción, tormentas y accidentes de vehículos.
Los impactos de cualquiera de estas ocurrencias se estudian como parte de la Encuesta Sanitaria. PWD brinda información y datos a Black & Veatch, una ingeniería de Kansas, empresa de adquisiciones y construcción, para realizar la encuesta. El consultor investiga y hace evaluaciones.

Según Mynor, nada ha cambiado en los últimos 10 años como para afectar directamente las fuentes de agua superficiales de PWD. El último derrame de petróleo fue en el 2012, y el último incendio forestal en el área fue hace dos años. Ninguno era una amenaza para la calidad del agua del Distrito.

Otro segmento de la Encuesta Sanitaria es el monitoreo de la calidad del agua y los requisitos de cumplimiento normativo. Explica la necesidad de monitorear el agua cruda en las fuentes y el agua tratada en la planta de tratamiento de agua. Para PWD, la encuesta indica que se están cumpliendo todas las regulaciones.

"Estamos bien", dijo Amanda Thompson, Supervisora de Calidad del Agua y Asuntos Regulatorios de PWD. "Cumplimos con todos nuestros requisitos regulatorios y esperamos cumplir con todas las regulaciones futuras".



Littlerock Dam es una de las tres fuentes de agua de PWD.

Comienza la construcción en la presa de Littlerock

Los trabajadores y los equipos comenzarán a llegar en Septiembre a la presa de Littlerock para la construcción de la estructura de control de pendientes en Rocky Point. ASI Construction, fundado en Colorado, quien recibió el contrato de $9.275 millones, instalará y operará pozos de desagüe durante el primer mes del proyecto. Será seguido por la excavación del suelo. El cemento se verterá a fin de año. Esta fase inicial terminará a principios del 2019 después de que el sedimento se devuelva al área excavada. La estructura de control dependiente es necesaria para la protección del sapo de arroyo en peligro de extinción durante la remoción de sedimentos de PWD con el objetivo de restaurar la capacidad total de agua de la presa a 3.500 acres-pie.

RESIDENTE EMBELLECE PATIO DELANTERO, AHORRA AGUA



Este era el jardin delantero de Francisco antes de la renovación.

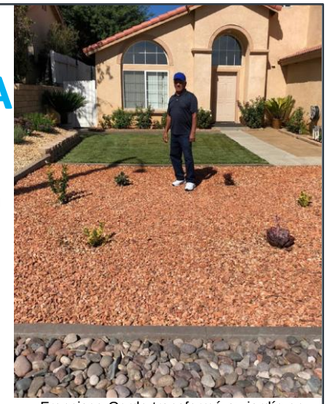
El jardin de Francisco Cerda es ahora la envidia de los vecinos. Atrás quedaron las hierbas muertas, el árbol cubierto y dos toneladas de tierra. Su nuevo jardín cuenta con plantas tolerantes a la sequía, una área pequeña de césped, rocas de colores y pasillos de hormigón estampado.

Es un excelente ejemplo de xeriscape o paisaje que requiere poca irrigación y mantenimiento.

Francisco es uno de los clientes del Distrito de Agua de Palmdale que ha aprovechado el Programa de Conversión de Paisaje de Agua 2018, que les da dinero a los propietarios para eliminar cualquier pasto y / o convertir su patio delantero en un paisaje amigable con el agua y la sequía. El programa se conocía anteriormente como Cash for Grass, que comenzó a principios de la década de 2010.

"Nos encanta", dijo Francisco, un electricista retirado. "Mis vecinos vienen y me preguntan si pueden contratarme. Mi familia que me visita desde México me dice que es hermoso ".

La renovación del jardin delantero les costó a Francisco y su esposa, Isabel, $5,000. Recibieron $ 2,000, el máximo disponible por calificación por cada residente calificado, de PWD. El reembolso estándar del programa ofrece $1.50 por pie cuadrado hasta $1,500 por hogar-bodega. Se pueden otorgar 50 centavos adicionales por pie cuadrado hasta $500 por hogar para proyectos que se completen dentro de los 45 días. Además de lo bien que se ve, los Cerda están satisfechos con lo que están ahorrando en su factura de agua. Están pagando $30- $40 menos por mes, en comparación a cuando regaban su jardin en el area de 33rd Street East y Pearblossom Highway.



Francisco Cerda transformó su jardín en xeriscape para ahorrar agua.

PWD Water Conservation Aid Linda Trevino dice que 20 de los 28 solicitantes este año han completado las renovaciones de su jardín.

"Siempre es emocionante ver los jardines terminados", dijo Linda. "Me encantan las ideas creativas y los diseños de los propietarios. Nuestros residentes están entendiendo que xeriscape no significa solo cactus. Estamos viendo más textura con varios tipos y colores de rocas, similar a lo que usaron los Cerda.

El 27 de Octubre habrá un taller sobre el Programa de Conversión de paisajes hídricos. (Consulte la lista de próximos eventos en la página 1.) Para obtener más información, visite el sitio web de PWD en palmdaewater.org o comuníquese con Linda al 661-456-1001.

El Agua en las Escuelas del Área de Servicio de PWD es Segura



Estudiantes en las escuelas públicas dentro de los límites del servicio del Distrito de Agua de Palmdale pueden estar seguros de que el agua que beben es segura.

Las 88 muestras tomadas de 29 escuelas públicas muestran números de plomo de menos de 15 partes por billón (ppb) que desencadena la acción requerida del distrito escolar. Solo una escuela, la Escuela Primaria Tumbleweed en el Distrito Escolar de Palmdale, tenía 13 ppb detectables en su fuente de agua para usos múltiples. Dado que está por debajo de las 15 ppb, el agua se considera segura para beber y no es necesario realizar ningún cambio en la fuente de agua. El resto de los planteles escolares tenían niveles de plomo no- detectables en sus muestras de agua potable.

"Estamos muy contentos con los resultados de las pruebas", dijo la Supervisora de Calidad del Agua / Asuntos Regulatorios de PWD, Amanda Thompson. "Estamos lidiando con algunas escuelas más antiguas, por lo que tener una sola fuente con un nivel superior definitivamente es mejor de lo que esperábamos".

CELEBRANDO EL PRIMER CENTENARIO



Mas de 600 miembros de la comunidad y funcionarios electos asistieron a la Gran Celebración del Distrito de Agua de Palmdale el 22 de Julio para así marcar su importante logro al llegar al centenario y dar inicio al segundo siglo de servicio. Se cortó una cinta ceremonial y los funcionarios cortaron el pastel del aniversario.

PWD también reintrodujo a su mascota, Aquadog, quien se sometió a un cambio de imagen y ahora es un perro marrón de orejas caídas. Los asistentes disfrutaron de tacos y helados gratis. Vieron exhibiciones históricas, el nuevo libro de PWD y videos que resaltan los proyectos, la historia, la infraestructura y el personal de la agencia.

Como parte del aniversario, PWD recopiló recuerdos para una cápsula del tiempo que se mantendrá sellada hasta su 200 aniversario en el año 2118.

"Hemos logrado mucho en nuestros primeros 100 años, a pesar de las sequías, la depresión y las recesiones", dijo el gerente general Dennis D. LaMoreaux. "Somos optimistas de que nuestro segundo siglo será igual de exitoso".

AGENDA ITEM NO. 7.4

Hotel and Travel Accommodations

Event Name/Date:

AWWA Spring Conference Policy Operations and Management Converge/March 25-28, 2019

CONTACT INFORMATION

First Name | Last Name | Date

ACCOMMODATION INFORMATION

Rooms and rates are subject to availability. Complete and submit this form as soon as possible to guarantee a room at the host hotel. In the event that the host hotel is booked, every effort will be made to secure a room at the closet hotel within comparable rates to the event discounted rate.

Arrival Date | Departure Date | No. of guests | Room Type

Do you require a smoking room?

○ Yes ○ No

Do you need transportation from the airport to the hotel?

○ Yes ○ No

Flight Number | Time

ADDITIONAL INFORMATION/REQUESTS

Staff Representative

Sign In Create Account Cart Keyword Search

ABOUT THE SECTION EVENTS & CLASSES MEMBERSHIP CERTIFICATION ADVOCACY COMMUNICATIONS WATER LO

California-Nevada Section

#CANVSC2019
SPRING CONFERENCE
CONFLUENCE 2019
Where Policy, Operations and Management Converge



March 25-28, 2019 • Sheraton Grand & Convention Center • Sacramento, CA

M.E. Simpson Co., Inc. — *Exhibit Hall Meet & Greet Reception Sponsor*

MeterSYS Advanced Metering Solutions — *Welcome Reception Sponsor*

PumpMan — *Opening Session Sponsor*

West Yost Associates — *Keynote Session Sponsor*

murraysmith — *Section Leadership Meeting Sponsor*

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REGISTRATION

Early Registration Price ends January 24, 2019.
To register online click **HERE**.
To download a registration form click **HERE.**
Bulk Registration is also available!

VENUE & ACCOMODATIONS

SC2019 will take place at the **Sheraton Grand** and **Sacramento Convention Center**.
Book your room today! Hotel discount rate deadline is **February 20, 2019**.

EXHIBITORS

Interested in becoming an exhibitor? Only a few booths left! Download the **Exhibitor Pre-Registration form**.
For more information click *HERE* .

SPONSORS

Sponsor prospectus is now available! Click **HERE** to downloa
Please allow a couple of seconds f the document to load as it is a b file.

SCHEDULE

View the preliminary schedule & committee schedule

MOBILE APP

Learn more about our NEW

SPEAKERS

Download the **speaker registration form** and get all

COMPETITIONS

Sign up to be a part of the competitions . The winners

American Water Works Association
California-Nevada Section

SPRING CONFERENCE 2019
March 25-28, 2019
Sacramento, CA

Attendee Registration Form

__I am a speaker at this conference. Date _____ Time _____

Attendee Name _____

Title _____ Company _____

Address _____ City _____ State _____ Zip _____

Phone _____ Cell _____ Fax _____

Attendee Email _____ AWWA Member # _____

Type of Membership (check one) __Individual __Organization __Operator/Admin. __Utility

Complimentary Spouse/Guest (If attending) *Household members only. Does not include Water Industry Personnel _____

Member Registration	Early On or Before 1/24/19	PRE On or Before 3/14/19	Onsite After 3/14/19	Subtotals
☐ FULL REGISTRATION: Includes All Technical sessions, Keynote Lunch & Exhibitor Hosted Lunch & Exhibit Hall Entrance	$445	$495	$545	
☐ Tuesday One-Day: Includes Keynote Lunch & Exhibit Hall Entrance	$225	$275	$315	$ _____
☐ Wednesday One-Day: Includes Exhibitor Hosted Lunch & Exhibit Hall Entrance	$225	$275	$315	$ _____
☐ EDUCATION PACKAGE Wednesday/Thursday Includes Technical Sessions & Exhibit Hall Entrance	$225 NO MEALS	$275 NO MEALS	$315 NO MEALS	$ _____
☐ Thursday One-Day Includes Technical Sessions	$149	$149	$149	$ _____
☐ STUDENT - Must be full time Student/AWWA Student Member ☐ RETIREE REGISTRATION - Must be: 1) Retired from all gainful employment. 2) A member of AWWA for at least 15 years. 3) At least 60 years of age.	FREE NO MEALS	FREE NO MEALS	FREE NO MEALS	$ FREE

Non Member Registration	Early On or Before 1/24/19	PRE On or Before 3/14/19	Onsite After 3/14/19	Subtotals
☐ FULL REGISTRATION: Includes all technical sessions, Keynote Lunch & Exhibitor Hosted Lunch & Exhibit Hall Entrance	$495	$545	$595	$ _____
☐ Tuesday One-Day: Includes Keynote Lunch & Exhibit Hall Entrance	$275	$325	$375	$ _____
☐ Wednesday One-Day: Includes Exhibitor Hosted Lunch & Exhibit Hall Entrance	$275	$325	$375	$ _____
☐ EDUCATION PACKAGE Wednesday/Thursday Includes Technical Sessions & Exhibit Hall Entrance	$275 NO MEALS	$325 NO MEALS	$375 NO MEALS	$ _____
☐ Thursday One-Day Includes Technical Sessions	$149	$149	$149	$ _____

Lunches

If not included with registration fee

☐ Keynote Lunch $50

☐ Exhibitor Hosted Lunch $50

Subtotal $_____

SPECIAL EVENTS

☐ Tues. Technical Tour $55.00

☐ Tues. Water for People $35

☐ Wed. Technical Tour $55.00

Subtotal $ _____

*Around the globe, girls spend 6 hours each day collecting water.

CONTACT HOURS

☐ FREE
(I am an individual, operator or administrative AWWA member)

☐ $20.00
(My utility/organization is an AWWA member or I am not an AWWA member)

PAYMENT METHOD

Check # _____
Payable to CA-NV AWWA (U.S. funds)

PO# _____
Must be accompanied by a physical copy of the PO

Credit Card: ☐ Visa ☐ MC ☐ AMEX

Card No.: _____

Exp. Date: _____

Name on Card: _____

Authorized Signature: _____

Billing Zip Code: _____
Must be Zip Code in which your credit card statement is mailed
For copy of receipt, please write email address:

PAYMENT INFORMATION

Registration Total: _____ Special Events Total: _____

Meal Total: _____ Contact Hours: _____

Total Amount Due: _____

Refund requests must be submitted in writing to the Section office by March 1, 2019. A $50 administrative fee will be deducted from all refunds. **No Refunds Granted after March 1, 2019.** By submitting this form, you are consenting to having your photo/video taken at the event which may be used for future Section promotions. To opt-out email info@ca-nv-awwa.org.

CA-NV AWWA: 10435 Ashford Street, 2nd Floor
Rancho Cucamonga, CA 91730
Phone: (909) 481-7200
Fax: (909) 291-2107
www.ca-nv-awwa.org

Return this completed form with your payment or purchase order to CA-NV AWWA • 10435 Ashford Street • Rancho Cucamonga, CA 91730
or submit by fax to (909) 291-2107 or by email to schickarmane@ca-nv-awwa.org

VENUE & ACCOMODATIONS

Accommodations

Attendees may reserve a room at the **Sheraton Grand Sacramento Hotel** at a discounted rate. The discount room rate is **$211/night** + taxes and fees and is only valid from **Friday March 22, 2019 to Monday, April 1, 2019**. Spring Conference will be held March 25 - 28, 2019.

The discount rate deadline is **February 20, 2019.**

To book your room, click on the button below.

RESERVE A ROOM

Sacramento Convention Center

The Spring Conference will take place at the Sheraton Grand Sacramento Hotel and the Sacramento Convention Center.

Convention Center Address
1400 J Street, Sacramento, CA 95814

Phone
916.808.5291

Visit the Sacramento Convention Center website.

Directions

FROM SAN FRANCISCO I-80 (DAVIS, VALLEJO, OAKLAND, SAN JOSE)

Take I-80 East to Sacramento
Continue on US -50 East Toward Sacramento/South Lake Tahoe
Take I-5 Freeway (Redding turn-off)
Take "J" Street Exit (one-way street, East)
Take "J" Street to 14th Street
Convention Center on right hand side

FROM RENO I-80 (ROSEVILLE, AUBURN)

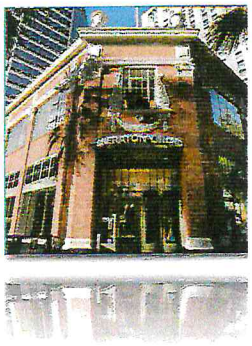
Take I-80 West toward Sacramento
Take I-5 South to Los Angeles
Take "J" Street Exit (one-way street, East)
Take "J" Street to 14th Street
Convention Center on right hand side
Or
Take I-80 West to Sacramento
Take Capitol City Freeway turn-off Business 80
Take the "J" Street exit
Bear left on 29th Street
Take a right on "L" Street
Take a right on 13th Street, Convention Center ½ a block on right hand side

Sheraton Grand Ho

Add
1230 J Street, Sacramento, CA 95

Ph
916.447.1

Visit Sheraton's web



Monday, March 25, 2019

UTILITY MANAGEMENT DIVISION	FROM	TO	ROOM
Communications & Customer Relations Committee	10:00 AM	10:30 AM	312
Environmental Health & Safety Committee	10:30 AM	11:00 AM	312
Financial Management Committee	11:00 AM	12:30 PM	312
Leadership Development Committee	1:00 PM	2:00 PM	312
New Technology Committee	2:00 PM	3:00 PM	312
Security Emergency Planning Committee	3:00 PM	4:00 PM	312
Utility Management Division	4:00 PM	5:00 PM	312
ENGINEERING DIVISION			
Asset Management Committee	10:00 AM	11:00 AM	310
Engineering & Construction Committee	11:00 AM	12:00 PM	310
Materials Performance Committee	1:00 PM	2:00 PM	310
Pipeline Rehabilitation Committee	2:00 PM	3:00 PM	310
Systems Control Technology	3:00 PM	4:00 PM	310
Tanks, Reservoirs, and Structure Committee	4:00 PM	5:00 PM	310
Engineering Division Meeting	5:00 PM	6:00 PM	310
OPERATORS DIVISION			
Operators Committee	10:00 AM	11:00 AM	309
Backflow Program Committee	11:00 AM	12:00 PM	309
Competitions Committee	12:00 PM	1:00 PM	309
Top Ops Challenge Committee	1:00 PM	2:00 PM	309
Smaller Utilities Committee	2:00 PM	2:30 PM	309
Meter Committee	2:30 PM	4:00 PM	309
Operators Division	4:00 PM	5:00 PM	309
WATER QUALITY DIVISION			
Water Quality Division Kickoff	10:00 AM	10:30 AM	311
Safe Drinking Water Act Committee	10:30 AM	12:00 PM	311
Research Committee	12:00 PM	1:00 PM	311
Source Water Quality Committee	1:00 PM	2:00 PM	311
Distribution System Water Quality	2:15 PM	3:00 PM	311
Water Treatment	3:00 PM	4:00 PM	311
Water Quality Analysis	4:00 PM	4:30 PM	311
Water Quality Division Wrap-up	4:30 PM	5:00 PM	311

Monday, March 25, 2019

WATER RESOURCES DIVISION	FROM	TO	ROOM
Recycled Water & Desalination Committee	10:00 AM	11:00 AM	301
Energy & Sustainability Committee	12:00 PM	1:00 PM	301
Water Management & Efficiency Committee	1:00 PM	2:00 PM	301
Water Well Technology Committee	2:00 PM	3:30 PM	301
Water Resources Division	3:30 PM	4:30 PM	301
CERTIFICATION COMMITTEES			
Water Quality Laboratory Analyst Cert. Committee	10:00 AM	11:00 AM	303
Advanced Water Treatment Operator Cert. Committee	11:00 AM	12:00 PM	303
Backflow Cross Connection Cert. Committee	12:00 PM	2:00 PM	303
Water Use Efficiency Certification Committee	2:00 PM	3:00 PM	303
Certification Board	3:00 PM	5:00 PM	303
PHILANTHROPY COUNCIL			
Water For People	10:00 AM	11:00 AM	305
Scholarship Committee	11:00 AM	12:00 PM	305
Community Engineering Corps Committee	1:00 PM	2:00 PM	305
Philanthropy Council Meeting	2:00 PM	3:00 PM	305
MEMBERSHIP ENGAGEMENT & DEVELOPMENT COUNCIL			
Awards Committee	10:00 AM	11:30 AM	302
Student Chapter Committee	2:00 PM	3:00 PM	302
Woman's Leadership Committee	3:00 PM	4:00 PM	302
Membership Engagement & Development Council	4:00 PM	5:00 PM	302
Ad Hoc Committee on Section Technology	5:00 PM	6:00 PM	302
ADDITIONAL COMMITTEES			
Past Chairs Committee	10:00 AM	11:00 AM	304
Water Loss Control Committee	11:00 AM	12:00 PM	304
Advanced Water Treatment Committee	1:00 PM	2:00 PM	304
Government Affairs Committee	2:00 PM	3:00 PM	304
Education Committee	3:00 PM	4:00 PM	304
EH&S BMP Special Meeting	4:00 PM	6:00 PM	304
Technical Programs Committee	6:00 PM	6:30 PM	304

Tuesday, March 26, 2019

Mfg. Associates Council - MAC	1:30 PM	2:30 PM	303
Young Professionals Committee	2:30 PM	3:30 PM	303

Top-Op's Challenge

The 2019 Top-Op's challenge will take place on **Tuesday, March 26, 2019** at the Sacramento Convention Center during our Spring Conference. The Top-Op's challenge is in a fun, fast-paced game show format. Questions are based on water treatment and distribution knowledge. Team preparation for the challenge is easier than you think! If you have been studying for certification exams, then you are ready to compete. Space is limited so make sure you register soon.

The first place team will have the opportunity to represent the CA-NV Section at AWWA's ACE in Denver, Colorado in June 2019.

Hydrant Hysteria Competition

Hydrant Hysteria is a fast-paced competition where two-member teams assemble a specified hydrant as quickly as they can. The Hydrant Hysteria competition will take place on **Tuesday, March 26, 2019.**

Pipe Tapping Competition

The Pipe Tapping Competition is a competition of skill in which water operators work against the clock to open a cement-lined, ductile iron pipe and install a tap. There is both a men and a women's division. The Pipe Tapping competition will take place on **Wednesday, March 27, 2019.**

Meter Madness Competition

Meter Madness is a fast-paced competition where contestants assemble a specified water meter from a bucket of parts. The Meter Madness competition will take place on **Tuesday, March 26, 2019.**

Hot Flare Competition

The Hot Flare competition will take place on **Wednesday, March 27, 2019.**



Please note, this is NOT the final schedule. Sessions may/will change.

Tuesday, March 26

Water Treatment

1:30 PM - 2 PM

A Tale of Two WTPs: GAC vs PAC for DBP Reduction

Participants in this session will learn about two plants treating the same source water and operated by the same staff use different treatment approaches to reduce disinfection byproducts (DBPs): one uses roughing filters, Granular Activated Carbon (GAC), and membranes, and the other uses Powered Activated Carbon (PAC), ballasted clarification and media filtration. You will learn about the operational differences, advantages and disadvantages of GAC and PAC from full scale operational data and Operator interviews.

2 PM - 2:30 PM

Heavy Hitters: Comparing Where DBPs Were Knocked Down in Two Ozone/BAF Pilot Trains

Participants will learn about DBP formation and reduction pathways evaluated using two parallel pilot treatment trains, one with pre-ozone, one with post-ozone. This work was completed to evaluate process improvement options for two of the City of Nashville's 80 mgd WTPs.

2:30 PM - 3 PM

Improving San Pablo Reservior Water Quality with Hypolimnetic Oxygenation System to Reduce T&O and DBPs

The participants of this presentation will learn about the water quality study that led EBMUD to select the HOS, the system's layout, design criteria, design challenges, and HOS's performance monitoring plan.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Denniston WTP - A Rags to Riches Story

Participants in this session will learn how CCWD overcame short CT, high THMs and unreliable productivity by making some innovative changes to Denniston WTP and the distribution system.

4:30 PM - 5 PM

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SDWA Committee

1:30 PM - 2:15 PM

State and Federal Regulatory Update

Participants will hear the latest updates from state and federal regulators.

2:15 PM - 3 PM

State and Federal Regulatory Update

Participants will hear the latest updates from state and federal regulators (NV focused).

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Evaluating Risks to the Water Supply

Participants in this session will learn about the identification and management of risks and how it is fundamental to ensuring a safe and reliable drinking water supply. Attendees will hear from a water utility about their process for assessing water supply/quality risks in the distribution system and how they address evolving issues such as microplastics and PFOS/PFOA.

4:30 PM - 5 PM

Federal Perspective on Risk Assessment and Management

In this session, participants will hear about USEPA's approach to risk assessment and management and the implications for California and Nevada water agencies.

5 PM - 5:30 PM

Communicating Risks to your Customers

As the public becomes more aware of potential hazards in our society, the more important it is to effectively communicate to your customers about those risks. This is especially the case when it is related to public health and the water supply. In this session, participants will learn strategies for connecting with customers and explaining the how, what, why, when and where they may be affected, both in an emergency situation and an ongoing basis.

Materials Performance

1:30 PM - 2 PM

Poly-What? Designing with Thermoplastics.

Participants in this session will learn about thermoplastic options. Starting with foundation knowledge the attendee will learn the basic differences of thermoplastics and installation methods. This presentation is geared toward maintenance personnel or in-house engineering staff.



Please note, this is NOT the final schedule. Sessions may/will change.

2 PM - 2:30 PM

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2:30 PM - 3 PM

AWWA D102-Inside Coating System 3: Better Corrosion Protection of Welded Steel Tanks

Participants in this session will learn about 100% volume solids coatings for welded steel potable water storage tanks including installation and total expected service life.

3 PM - 4 PM

BREAK

Backflow Programs

4 PM - 4:30 PM

Cross Connection Testing in San Francisco

Participants in this session will learn about Cross Connection Testing in San Francisco and methods and procedures for performing cross connection shutdown tests in dual plumbed buildings in San Francisco.

4:30 PM - 5 PM

Recycled Water Cross-Connection Test Procedures

Participants in this session will learn about various methods and procedures for performing recycled water cross-connection testing and the positive and negative aspects of each method.

5 PM - 5:30 PM

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Pipeline Rehabilitation

1:30 PM - 2 PM

Pipe Bursting Water Mains - Trenchless Replacement and Rehabilitation

Participants in this session will learn about Pipe Bursting of Water Mains - Trenchless Replacement - Process & Case Studies.

2 PM - 2:30 PM

Earthquake Resistant Ductile Iron Pipe (ERDIP) as a Countermeasure Against Tsunamis

Participants in this session will learn about another aspect of Earthquake Resistant Ductile Iron Pipe (ERDIP) that was developed in Japan back in 1974. ERDIP is not only highly effective



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against large earthquakes, but it is also effective against tsunamis.

2:30 PM - 3 PM

Corrosion and its Control for Ductile Iron Pipelines

Participants in this session will learn about the criteria to identify corrosive soil environments and how to protect ductile iron pipe from corrosion in these environments with polyethylene and V-Bio Enhanced Polyethylene Encasement.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

ICE PIGGING – CLEANING MAINS WITH ICE

Participants in this session will learn about the science behind Ice Pigging – how ice has been proven to clean more effectively than water and more easily than traditional pigging.

4:30 PM - 5 PM

Panel Discussion: Pipeline Rehabilitation vs. Replacement, a Panel Discussion focusing on installation methods, emerging technologies, and lessons learned.

Participants will hear and learn from several pipeline design and construction experts on the advantages, challenges, and opportunities of pipeline rehabilitation and replacement technologies, suitable conditions for different approaches, and lessons learned; Participants will also have the opportunities to discuss their questions and concerns about rehab vs. replacement

5 PM - 5:30 PM

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Energy and Sustainability

1:30 PM - 2 PM

A New Normal: The Confluence of New Electric Utility Requirements and Water Agency Impacts (Panel discussion)

Electric utilities are facing a multitude of new goals and requirements to develop renewable energy projects, enhance energy efficiency and even deenergize power lines in time of increased



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fire danger, all of which can impact water agency operations. This panel will explore the new mandates and how water agencies can optimize their systems to address them.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Leveraging Energy Efficiency Programs and Processes in Water Sourcing and Distribution Systems to Achieve Optimized Operational Performance

High utility costs remain a stubbornly high operating cost for the water sourcing and distribution sector. When considering energy efficiency projects, many water sourcing and distribution utilities can access no-cost support services for identifying, funding, and installing energy efficient retrofits of pumping equipment. In particular, implementing highly efficient operational strategies by utilizing two-way SCADA controls and automated water quality monitoring can yield significant energy and cost savings. The United Water Conservation District's (UWCD) partnership with the Southern California Regional Energy Network (SoCalREN) serves as a case study for simplified energy efficiency project delivery and the cost savings opportunity provided by developing a customized operational strategy based on live metering and sensor data. UWCD, located in Ventura County, CA, maintains the water resources of the Santa Clara River, its tributaries and associated aquifers. UWCD operates the Oxnard-Hueneme System (OH System), which supplies drinking water to cities and urban areas on the Oxnard Plain. The District supplies about 15,000 acre-feet per year of water and treats water on behalf of public water systems for the purpose of rendering it safe for human consumption. In 2015, United Water enrolled in services with the SoCalREN Public Agency Program, a utility ratepayer-funded program offered to public agency customers of SCE and SCG, and a 3rd party SCE program. The program conducted benchmarking of the District's energy usage, completed energy audits to identify opportunities to improve well pump performance, and captured $72,937 in utility incentives to help fund overhauls of 5 of the District's well pumps. These projects produced an annual energy savings of 704,793 kWh, or roughly $70,000 in operating costs. After improving individual pump efficiency, the SoCalREN program considered the District's operational strategy. By implementing advanced SCADA controls that monitored both the energy intensity and water quality for each pump, the District, with the help of SoCalREN, was able to create an innovative pump sequencing approach that maximized run hours on more efficient shallow well pumps while also maintaining MCL limits for nitrate in the system. All of this was achieved with minimal disruption to operations. This project achieved an estimated annual energy savings of over 1.85 million kWh, and the SoCalREN was able to capture $72,850 to help fund the project. The combined effect of the



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pump improvements and the advanced controls strategy has reduced the total annual energy consumption for United Water by an estimated 12% with further potential cost savings resulting from a peak demand reduction of 277 kW. Water utilities should utilize energy efficiency project support services and power utility incentive programs to implement advanced control and monitoring systems that can create projects with substantial impacts on operating costs, service quality, and permit compliance.

4:30 PM - 5 PM

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5 PM - 5:30 PM

Water/Energy Bank "Proof-of-Concept" (EPC-16-029)

Participants in this session will learn about the potential to shift the operation of State Water Project water delivery, from summer high energy-demand periods into spring/fall lower energy-demand periods. If the imported water delivers can be shifted seasonally, it enables a reduction in the state's peak hour electric load.

Water Well Technology

1:30 PM - 2 PM

TBD: DWR Update on SGMA Implementation

TBD

2 PM - 2:30 PM

TBD: DWR Technical Support for SGMA Implementation

TBD

2:30 PM - 3 PM

State Water Board Update on SGMA Implementation

TBD

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Streamflow depletion requirements in California's Sustainable Groundwater Management Act: A proposed approach for compliance

Participants in this session will learn about the complex groundwater management challenges associated with addressing depletions of interconnected surface water. While avoiding depletions of interconnected surface water is necessary under California's Sustainable Groundwater Management Act, there is currently a lack of established mechanisms for meeting this requirement. We present a proposed management approach for addressing this objective and limiting impairments to groundwater dependent streams and rivers.



Please note, this is NOT the final schedule. Sessions may/will change.

4:30 PM - 5 PM

Guidance and tools for mapping groundwater dependent ecosystems for SGMA

Participants in this session will learn a suite of tools and resources available to map, monitor, and manage groundwater dependent ecosystems when developing sustainable groundwater management plans. This presentation will introduce California's GDE mapping database, provide an overview of a five-step process for considering groundwater impacts to GDEs when preparing groundwater sustainability plans, and provide case study examples on how these tools are currently being used in California.

5 PM - 5:30 PM

The groundwater manager's dilemma: How to comply with new California law without changing water rights

Participants in this session will learn about the role of groundwater pumping allocations under California's Sustainable Groundwater Management Act (SGMA). Under SGMA, local agencies are tasked with managing groundwater with the goal of bringing groundwater conditions into balance and stopping further depletions and other undesirable impacts, yet they do not have the authority to change or modify groundwater rights. This presentation will focus on considerations for local agencies as they work to devise groundwater allocation schemes, including a discussion of potential methods for establishing baseline groundwater pumping allocations.

Operator

1:30 PM - 2 PM

Program Updates for Drinking Water Operator Certification

Participants in this session will learn about important program changes and updates regarding Drinking Water Distribution and Treatment Certification.

2 PM - 2:30 PM

Program Updates for Drinking Water Operator Certification

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2:30 PM - 3 PM

Dewatering Facility Placement and Equipment Selection

Participants in this session will learn about the approach and challenges faced by the City of Napa's Water Division in selecting the appropriate technology and on-site location for a new dewatering facility at the EIB Jamieson Canyon Water Treatment Plant.

3 PM - 4 PM

BREAK



Please note, this is NOT the final schedule. Sessions may/will change.

4 PM - 4:30 PM

Alternatives to Conventional and UDF Hydrant Flushing

Participants in this session will learn about the alternative solutions available to the industry for flushing water main pipelines without discharging water to waste.

4:30 PM - 5 PM

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Communications and Customer Relations

1:30 PM - 2 PM

Engaging Customers on Leaks: Beyond Customer Engagement Portals

Participants in this session will learn about the efficacy of current customer leaks solutions, utility customer behaviors and preferences, and how utilities can change their approach to leak management to more effectively resolve leaks and improve customer satisfaction.

2 PM - 2:30 PM

Tea Time With the Raftelis Ladies - Can Civility Be Returned to the Water Rates Discussion?

Participants in this session will learn about how other local agencies have tried different approaches to communicating and enlisting community accepatance and support of water rate increases. What has and has not worked and why and what are some suggestions for better communication with rate payers?

2:30 PM - 3 PM

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3 PM - 4 PM

BREAK

Leadership Development Committee

4 PM - 4:30 PM

Flash Mentoring Session

Flash Mentoring Session. Participants will have an opportunity to learn and seek guidance from several highly experienced water Industry



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professionals during this interactive mentoring session aimed at helping Young Professionals become more valuable employees and find greater success in their careers.

4:30 PM - 5 PM

Flash Mentoring Session

Flash Mentoring Session. Participants will have an opportunity to learn and seek guidance from several highly experienced water Industry professionals during this interactive mentoring session aimed at helping Young Professionals become more valuable employees and find greater success in their careers.

Environmental, Health & Safety

1:30 PM - 2 PM

Health & Environmental Impacts caused by Catastrophic Events: The Side-Effects of Wildfires

Participants in this session will learn about proactive ways to attempt to reduce impact during a fire event, what to do during a fire event to reduce impact, and what to do after a fire event to reduce impact.

2 PM - 2:30 PM

Utility Operations, Safety & Health, Emergency Prepardeness

This course provides an overview of the essentials necessary to be an effective Essential Responder in the time of Disaster and assisting from a health and safety standpoint.

2:30 PM - 3 PM

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3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Complying with the Statewide General NPDES Permit for Drinking Water Systems Discharges – Lessons Learned and Best Management Practices.

Participants in this sessionwill learn about practices that have been developed since the issuance of the Statewide Permit for Drinking Water Discharges. Participants will also be provided with an update on the effort to revise the CA-NV BMP Manual.

4:30 PM - 5 PM

Statewide General NPDES Permit- A State Water Resources Control Board Perspective

Participants in this session will be provided an update on the implementation of the CA Statewide General NPDES permit including issues ranging from enrollment status to enforcement.



Please note, this is NOT the final schedule. Sessions may/will change.

5 PM - 5:30 PM

Everything you wanted to know about the Statewide General NPDES Permit--but were afraid to ask: A Panel Discussion

Participants in this session will gain insight on the CA Statewide General NPDES permit during an interactive discussion between the regulated community and the regulator. Participants will also have the opportunity to have their water discharge questions answered by the experts in the field.

Security and Emergency Planning

2 PM - 2:30 PM

America's Water Infrastructure Act – What does S. 3021 mean for water utilities?

Recently passed legislation has new Risk and Resilience requirements for utilities that must be met as soon as March 2020. Other provisions of the legislation will also impact reporting requirements for utilities. This session will review the highlights, deadlines, and requirements for utilities associated with S. 3021, including an all-hazards approach to risk and resilience management and enhancing source water protections.

2:30 PM - 3 PM

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3 PM - 4 PM

BREAK

4 PM - 4:30 PM

California and Nevada Water/Wastewater Agency Response Network Meeting

Meeting of California and Nevada Water/Wastewater Agency Response Network.

4:30 PM - 5 PM

California and Nevada Water/Wastewater Agency Response Network Meeting

Meeting of California and Nevada Water/Wastewater Agency Response Network.



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5 PM - 5:30 PM

California and Nevada Water/Wastewater Agency Response Network Meeting

Meeting of California and Nevada Water/Wastewater Agency Response Network.

Wednesday, March 27

Water Treatment

7:30 AM - 8 AM

Back to the Basics: Challenges and Solutions for Small Systems/Groundwater Treatment - Introduction

This presentation will provide an overview of public water systems that rely solely on groundwater sources, water system sizes, population served and water quality challenges faced by these systems.

8 AM - 8:30 AM

Back to the Basics: Challenges and Solutions for Small Systems/Groundwater Treatment - Arsenic

Participants in this session will learn about challenges and solutions for treating Arsenic in small systems/groundwater.

8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

Back to the Basics: Challenges and Solutions for Small Systems/Groundwater Treatment - 1,2,3-TCP

Participants in this session will learn about the challenges and solutions for treating 1,2,3-TCP in small systems/groundwater.

10:30 AM - 11 AM

Back to the Basics: Challenges and Solutions for Small Systems/Groundwater Treatment - Chrome 6

Participants in this session will learn about the challenges and solutions for treating Chrome 6 in small systems/groundwater.

11 AM - 11:30 AM

Back to the BASICS: Challenges and Solutions for Small Systems/Groundwater Treatment - Multicontaminants/DBPs and Organics

Participants in this session will learn about the challenges and solutions for treating organics and DBPs in small systems/groundwater.



Please note, this is NOT the final schedule. Sessions may/will change.

11:30 AM - 12 PM

Back to the Basics: Challenges and Solutions for Small Systems/Groundwater Treatment - Questions & Answer Panel Discussion

Question and answer panel discussion on the challenges and solutions for small systems/groundwater treatment.

12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

Low Tech TTHM Removal

Participants in this session will learn how to remove THMs after they form using low-tech solutions.

2 PM - 2:30 PM

Designing and implementing sustainable water treatment solutions with small, low-income communities in the US: Field trial of ElectroChemical Arsenic Remediation (ECAR) on a farm in Allensworth, CA

Participants in this session will learn about water quality and capacity issues facing small, low-income communities in the US, the design process of a field trial of a novel arsenic treatment technology, ElectroChemical Arsenic Remediation (ECAR), in Allensworth, CA, and results from field.

2:30 PM - 3 PM

Fostering Community-Driven Solutions: Policy Tools and Implementation Strategies for the Human Right to Water in California

Participants in this session will learn to address the California water crisis, the Community Water Center acts as a catalyst for community-driven water solutions through organizing, education, and advocacy in California's San Joaquin Valley and Central Coast. We will share current policy tools.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Economic Feasibility, Affordability & MCL Setting

Participants in this session will learn what the CA SDWA requires in MCL setting with respect to economic feasibility, and how the May 2017 Court ruling on the Cr(6) MCL signifies how the SWQCB reconsiders its approach economic feasibility analyses. Define "affordability" in the context

4:30 AM - 5 PM

Nitrate Treatment Affordability in California, Three Case Studies

Participants in this session will learn about water affordability in small systems with nitrate contamination.



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5 PM - 5:30 PM

Nitrate Treatment: It's Never Easy

Participants in this session will learn about the challenges and solutions that water utilities may encounter when their supplies are impacted by nitrate. The presentation will address capital and operational considerations that can have significant impacts.

Research

7:30 AM - 8 AM

Case Study in Non-Regulated Bacterial Testing

Participants in this study will learn the benefits from evaluating the ENTIRE bacterial environment affecting their systems. When to go beyond regulated coliform and e. coli testing. New information about the contribution of non-regulated bacteria to exis

8 AM - 8:30 AM

Extraction of Disinfection Byproducts in Potable Reuse and Conventional Drinking Waters for Bioassays

Participants in this session will learn about our novel approach to capturing and concentrating disinfection byproducts in real waters and the relative toxicities of different disinfection byproducts

8:30 AM - 10 AM

BREAK

Water Treatment

10 AM - 10:30 AM

Tracer Studies & Delivered Dose (CT) - Drinking Water

Participants in this session will learn about tracer studies and methods for determining the disinfection exposure time (t10) for pathogen inactivation and how to use those results to calculate the pathogen delivered dose for CT compliance.

10:30 AM - 11 AM

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11 AM - 11:30 AM

Circular Raceway Contactors Can Improve Disinfection Credit and Reduce Cost

Participants in this session will learn how a circular disinfection “raceway” contactor can be integrated into a tank design to provide a higher T10 to hydraulic detention time ratio than serpentine baffled contactors typically achieve, thereby resulting in a more efficient disinfection contact



Please note, this is NOT the final schedule. Sessions may/will change.

11:30 AM - 12 PM

Tracer Studies: the Good, the Bad, and the Ugly.

Participants in this session will learn about the issues that should be considered when planning and conducting a tracer study, and how a tracer test can accurately simulate or fail to determine a contactor's T10 to HDT ratio.

12 PM - 1 PM

LUNCH

Research

1:30 PM - 2 PM

Microplastics: Overview & California Legislation

Participants in this session will receive an overview and details of the legislative process that took place to develop two senate bills (SBs 1422 and 1263) to establish a statewide microplastics strategy and to regulate microplastics in drinking water.

2 PM - 2:30 PM

Occurrence and Removal of Micro-Plastics During Drinking Water Treatment on the Great Lakes

Recent news reports have indicated that municipally treated drinking water may contain microplastics. These materials have been observed in untreated water supplies around the world, including North America, however their removal during drinking water treatment.

2:30 PM - 3 PM

Microplastics: Exposure and Health Effects

Participants in this session will learn how humans are exposed to microplastics and the effects on health. This research summary will also identify a framework for understanding, describing, and communicating microplastics health effects that would be useful for drinking water agencie

3 PM - 4 PM

BREAK

Research

4 PM - 4:30 PM

Planning Considerations in the face of Change

Climate change is increasingly affecting water agency operations, from water supply concerns to water quality challenges. Participants in this session will learn about the importance of planning activities and programs in light of the “new normal.”

4:30 PM - 5 PM

California's Fourth Climate Change Assessment

California’s Climate Change Assessments contribute to the scientific foundation for understanding climate-related vulnerability at the local scale and informing resilience actions, while also directly informing State policies, plans, programs, and guidanc



Please note, this is NOT the final schedule. Sessions may/will change.

5 PM - 5:30 PM

Local Climate Change in Pasadena, CA

Participants will learn how local climate change impact a surface water source for a California public water system

Distribution System Water Quality

7:30 AM - 8 AM

Lead Testing in California School

Community Water Systems (CWSs) serving K-12 schools in California under different bills and permits. CWS were required to work with school to develop a sampling plan, identify up to five sample locations, collect samples according to a guidance document,

8 AM - 8:30 AM

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8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

Chloramine Disinfectant Residual Optimization and Management in Distribution Networks

Participants in this session will learn how Chloramination is a successful disinfectant strategy in potable water systems provides benefits such as a lower potential for disinfection byproduct formation (THMs) and improved disinfectant persistence in distribution systems.

10:30 AM - 11 AM

Hydraulic Modeling and Unidirectional Flushing (UDF): A Case Study in Burlingame, CA Demonstrates how UDF Modeling Tools Can Help Reduce Flushing Volumes and Simplify Flushing Operations

Participants in this session will learn how effective planning for a unidirectional flushing program can be achieved by combining hydraulic modeling analysis with operational strategies. The end results are significant saving in flushing water volumes and simplified operations.

11 AM - 11:30 AM

The Devil is in the Details – Development and Rollout of an Interactive Water Quality Data Portal

City of Sacramento Department of Utilities (DOU), in partnership with our consultant team, designed and rolled out an interactive Water Quality Data Portal. Our goal in developing the data portal was to move beyond a static, list-form water quality webpag



Please note, this is NOT the final schedule. Sessions may/will change.

11:30 AM - 12 PM

Active Control of THM Levels in Drinking Water Distribution Systems

With the promulgation of the EPA's Stage 1 and Stage 2 Disinfection Byproduct Rules, water treatment operators and utilities scrambled to ensure their plants were in compliance with THM limits and more carefully monitored chlorine dosing – or switched to

12 PM - 1 PM

LUNCH

Water Loss Control

1:30 PM - 2 PM

Customer Meter Testing: Matching a Testing Program to Your Goals

This session will discuss the goals that can guide customer meter testing program and the testing programs that can meet those goals. This session will also discuss the challenges or shortcomings of customer meter testing so that you can embark on custome

2 PM - 2:30 PM

California Energy Commission Funded Case Study in Leakage Reduction Technologies – Acoustic Monitoring, Satellite Imagery, and Smart PRVs

Participants in this session will learn from a California Energy Commission research project implemented in California American Water systems about the deployment and evaluation of three (3) leakage control technologies: acoustic monitoring by Echologics, satellite imagery leak detection.

2:30 PM - 3 PM

Two Years and Counting: A Review of the Water Loss Audit Reports in California

Participants in this session will learn further about the use of Water Loss Audits as a tool for bettering water management practices related to audit methodology

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

The process of performing and validating an AWWA Water Audit

Participants in this session will learn about the data collection process, the process of filling out the water audit, and the validation process as required by SB555

4:30 PM - 5 PM

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5 PM - 5:30 PM

Understanding Non-Revenue Water Loss with Powerful Analytics

Participants in this session will learn about new analytical tools and methods to better understand water loss, discover patterns and trends in historical data, and make better decisions when it comes to water main repair and replacement.

Systems Controls

7:30 AM - 8 AM

Getting the most out of your SCADA system

Participants in this session will learn how to optimize their SCADA system to get the most out of it. The talk will be looking at continuous SCADA improvements, SCADA screen optimization, operator training, and knowledge transfer to technical staff to mak

8 AM - 8:30 AM

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10 AM - 10:30 AM

SCADA in the New World: The Changing Landscape of IIoT and Mobility

Participants in this session will learn about necessary steps and best practices for navigating the changing landscape of IIoT and Mobility. This session will discuss practical tools you can leverage today.

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11 AM - 11:30 AM

"What's in a Name?"

Participants in this session will learn how device tag names, software variable names, and tagging schemes can impact a treatment and distribution system.

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12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

Implementation of Automation Projects Using a SCADA Master Plan

Participants in this session will learn about SCADA Master Planning and how to mitigate inconsistencies in automation design and utilization

2 PM - 2:30 PM

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Recycled/Desalination Committee

2:30 PM - 3 PM

SCADA Panel Discission

Participants in this session will share lessons learned and problem solving related to today's SCADA industry.

4 PM - 4:30 PM

The Future of Automation in the Water Industry

Participants in this session will learn how to tackle the challenges facing the industry today with modern control solutions. Discuss considerations when choosing or upgrading a control system, technological advancements in the industry, and methods of ensuring security (cyber & physical).

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5 PM - 5:30 PM

MOD Bust: Capturing Real Time Production Meter Reads with Your PLC

Participants in this session will learn the benefits of by-passing pulse reads from a production meter and reading staight from the meter head with a PLC

Tanks Reservoirs Structures

7:30 AM - 8 AM

Water Storage Tank Coating Systems: Revisions to the AWWA D102

Participants will learn what updates and changes have been made to the AWWA D102 standards.



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8 AM - 8:30 AM

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8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

What Owners and Engineers should know to eliminate corrosion inside steel tanks

Participants in this session will learn about various options available to him to lower corrosion opportunities and make their coatings last much longer.

10:30 AM - 11 AM

How to address Infrastructure Replacement Quicker In 2019

Participants in this session will learn about financing options and how to evaluate how justify the cost for implementing solutions

11 AM - 11:30 AM

Conserving Water by Making Data Actionable

Participants in this session will learn how data that is already available to them can be used to better manage the way they run their system for increased optimization

11:30 AM - 12 PM

System Wide Storage Tank Replacement in Remote California

Participants in this session will learn about the project, hydraulic considerations made and timing of the tank replacement to continue service to Shelter Cove, as well as the challenges of completing the project in such a remote part of the state, the condition of the orig

12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

Economic Analysis of Water Quality Management Alternatives for Palo Alto's Foothills Emergency Storage System

Participants in this session will learn the Pros and cons of various water tank mixers and chlorine residual control systems; how economic analysis can help to inform decision-making

2 PM - 2:30 PM

A Systems Approach for Improving Water Quality

Participants in this session will learn that by utilizing the latest advances in potable water tank mixing, Trihalomethane (THM) removal and residual monitoring and boosting an operator can have improved water quality at less cost today that what was previously attainable.



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3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Evolution of GIS – The Journey from Map Books to Tough Books

Attendees will have the opportunity to share and learn from the City's experience. Learning outcomes will include, but not be limited to the following: • How development of the Water Division's computerized maintenance management system helped/hurt the

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Asset Management

7:30 AM - 8 AM

WATER NETWORK FAILURE PREDICTION: APPLYING STATISTICS AND MACHINE LEARNING TO OPEN DATA AND CONTINUOUS DATA ACQUISITION

Participants in this session will learn how to use software to perform real time failure prediction analysis on entire water or wastewater networks using the utility's own data and have this capability available real-time as new data is continually acquired

8 AM - 8:30 AM

Selecting the right CMMS- Case Studies

Participants in this session will learn the steps towards identifying and procuring a new CMMS that can meet the diverse business needs of their agency such as staff, budget, and most importantly their assets.

8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

An Innovative Optimization Model for Repair/Replacing of Water Meters

Like all mechanical devices, water meters always degrade in accuracy over time, resulting in an increasing amount of lost revenue. Unlike the conventional approaches to determine the time



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of replacing meters, this presentation provides information.

10:30 AM - 11 AM

Detecting Potable Water Leaks using Remote Satellite Sensing

This session will provide details on the Utilis satellite radar technology and how the data collected can be analyzed to accurately and cost effectively detect leaks. Value proposition and performance metrics of multiple case studies will be discussed.

11 AM - 11:30 AM

20-Year Anniversary of Tucson Water's Pipeline Protection Program (PPP)

Participants in this session will learn how one water utility recovered from a critical water pipeline catastrophic failure

11:30 AM - 12 PM

Apply EPA's AM Framework to Optimize Your O&M - Case Studies

Participants in this session will learn from recent case studies on how application of the EPA's AM Framework puts to the test the principles/practices of asset management. The right approach to managing assets is critical when you want to optimize O&M wo

12 PM - 1 PM

LUNCH

Security and Emergency Planning

1:30 PM - 2 PM

Lessons Learned from the California Wildfires

A series of wildfires in California in 2018 blazed through the state, directly affecting hundreds of thousands of people. Participants in this session will learn about the effects the fires had on local utilities and lessons learned from wildfire respons

2 PM - 2:30 PM

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4 PM - 4:30 PM

Black Sky – what a catastrophic emergency means for utilities

In this session, a series of speakers will introduce the concept of a "Black Sky" event – a widespread catastrophe that disrupts essential infrastructure for extended periods of time. They will review utility reliance on power and communication systems,

4:30 PM - 5 PM

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Water Well Technology

7:30 AM - 8 AM

Well Screen Performance and Efficiency Optimization

This presentation will highlight the evolotion of manufactured ground water production well screens combined with improvements in gravel envelope design and well development techniques which have lead to higher expectations in well performance. Laboratory

8 AM - 8:30 AM

RISD a New Well Rehabilitation Approach

Participants in this session will learn how injection development methods adoped for the ASR industry have been sucesfully applied to potable production wells to restore and even improve performance.

8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

How Groundwater Models Can Help Plan Future Well Projects to Meet Water Needs A Case Study in Using Groundwater Modeling to Help Design and Locate Wells

Participants in this session will learn how groundwater modeling allows managers to identify potential project locations and detect key areas where additional information may be required. Field investigations can then be



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planned to maximize hydrogeologic understanding and minimize data costs.

10:30 AM - 11 AM

Gravel Pack Design to Maximize Well Capacity and Minimize Sand Production

This talk is structured to compare gravel pack design alternatives and installation methods. The goal of this talk is to illustrate how to improve well efficiency and reduce sand production.

11 AM - 11:30 AM

Water Well Applications for Double Spline Lock Fittings

Attendees in this session will learn about different end fittings used for water well casing and pump column. Specifically this track will introduce the Double Spline Lock fitting as another option for well designers and contractors to consider when const

11:30 AM - 12 PM

Development of a GIS-Based Methodology for Identifying and Ranking Prospective Sites for Public Supply Wells within a Large Urbanized Area

Participants in this session will learn about the application of industry-standard GIS-based techniques that facilitate the site screening process to identify the most viable public supply well sites for further evaluation.

12 PM - 1 PM

LUNCH

Recycled Water and Desal

1:30 PM - 2 PM

Ozone/Biofiltration Application in Potable Reuse

This presentation will discuss optimization of O3/BAF system used in potable water reuse. To help assess the system performance and rapidly identify performance anomalies, a performance tracking tool (i.e., Proformance) was used, which allowed timely.

2 PM - 2:30 PM

Maximizing Groundwater Use in the Central and West Coast Basins through Recycled Water from Hyperion

Participants in this session will learn: The efforts currently underway by the City of Los Angeles to maximize reuse of recycled water and create a sustainable local water supply. These efforts include a Nitrification-Denitrification Membrane Bioreactor P

Recycled Water and Desal

2:30 PM - 3 PM

Addressing Potable Reuse Operator Certification Needs - The AWTO Certification Program - A Joint Effort Between CA/NV-AWWA and CWEA

CA-NV Section AWWA and CWEA have developed a program to address the absence of significant testing on advanced water treatment topics in



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the existing Operator Certification Program for water and wastewater operators. This presentation will give an overview.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Lessons from a pilot study: strategies for managing tradeoffs between pathogens and disinfection byproducts in wastewater recycling for potable reuse

Participants in this session will learn the outcomes of a pilot study on tradeoffs between pathogen inactivation and disinfection byproduct formation during sequential chlorine and chloramine disinfection for wastewater reuse, and a promising new strategy for minimizing NDMA formation during ch

4:30 PM - 5 PM

Tracer Studies & Delivered Dose (CT) – Disinfected Tertiary Recycled Water

Participants in this session will learn about tracer studies for determining the modal contact time for disinfected tertiary recycled waters and to use those results to calculate the pathogen delivered dose for CT compliance.

5 PM - 5:30 PM

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Leadership Development Committee

10 AM - 10:30 AM

SDCWA's Approach to Attracting New Talent

Participants will learn about the SDCWA efforts to use their innovation and education programs to attract and hire new staff. This includes using social media, industry and community events to showcase innovative technologies and programs, and the divers

10:30 AM - 11 AM

Zone 7's Efforts to Retain Staff in Operations

The Operator's job market in California is very aggressive. As a water utility manager you not only have to think about wages and shift differentials, but also commutes, the cost of living and the fact that the majority of the operator staff is on the ve



Please note, this is NOT the final schedule. Sessions may/will change.

11 AM - 11:30 AM

Expert Panel focused on Enhancing Water Industry Recruitment and Retention

Participants will be able to ask the expert panel specific questions about outreach and marketing strategies in order to develop effective recruitment and retention programs for their own agencies.

11:30 AM - 12 PM

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12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

BAYWORK—the opportunities and challenges of collaborative approaches to candidate development and outreach in the water and wastewater industry

In this session, participants will learn about the successes and challenges that San Francisco Bay Area water and wastewater utilities have encountered in their efforts over the past decade to coordinate regional approaches to candidate development.

2 PM - 2:30 PM

Workforce Development and Succession Planning at SFPUC

In this session, participants will learn about the current workforce development and succession planning initiatives and strategies underway at SFPUC.

2:30 PM - 3 PM

Effective Leadership Development for LADWP's Water Distribution Division

Participants in this session will learn how the LADWP structures and runs an effective management and leadership development program for its large and diverse water distribution workforce. The multiple avenues the Water Distribution Division uses.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Preparing for 2025: MWD's Succession Plan for Engineering

Participants will learn about specific succession planning strategies that can guide organizations undergoing large amounts of employee turnover. The presentation will cover Engineering Services' current orientation programs that help bring new employees



Please note, this is NOT the final schedule. Sessions may/will change.

4:30 PM - 5 PM

Expert Panel Focused on Developing Effective Sucession Planning Strategies

Participants will be able to ask the expert panel specific questions about succession planning and mentoring strategies in order to develop effective programs for their own agencies.

5 PM - 5:30 PM

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Meter

7:30 AM - 8 AM

The Evolution of Meter Management Practices: Testing, Replacement and Revenue Protection

Participants in this session will learn about apparent water loss and why it matters to utilities, Find out about current and future water loss regulations, Identify eight forms of apparent loss and unbilled water, Apply learned concepts to a specific utility.

8 AM - 8:30 AM

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10 AM - 10:30 AM

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Like all mechanical devices, water meters always degrade in accuracy over time, resulting in an increasing amount of lost revenue. Unlike the conventional approaches to determine the time of replacing meters, this presentation provides information.

10:30 AM - 11 AM

C715 Test Bench Compatibility to Support Ultrasonic & Electromagnetic Meter Testing

Participants in this session will learn the value of periodically checking meter and AMR/AMI scrap pile.



Please note, this is NOT the final schedule. Sessions may/will change.

11 AM - 11:30 AM

How to Use Portable Meter Testers

Participants in this presentation will learn the importance of large meter testing and hands-on, how to use a portable large meter tester.

Meter

11:30 AM - 12 PM

Factors Affecting Meter Accuracy

Participants in this presentation will learn what factors affect meter accuracy in order to make smart meter choices and to help determine meter testing program parameters.

12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

AMI Customer Service Panel

The meter committee panel is sponsoring this panel of utilities who have deployed fixed network meter reading systems with customer portals and smart phone applications. Participants will have the opportunity to ask the utilities questions regarding how .

2 PM - 2:30 PM

Got Meter & AMR Transmitter Scrap? Trash or Treasure? What is it telling you?

Participants in this session will learn the value of periodically checking meter and AMR/AMI scrap pile.

2:30 PM - 3 PM

AMI Compatible Meter Pit Lids

Participants in this presentation will learn which types of meter pit lids provide the best radio frequency propagation and why; sizes and load ratings available for retrofits in various applications/conditions; and features that should be considered when

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Lessons Learned in Sacramento on DMA Implementation

Participants in this session will learn how Sacramento designed and implemented pilot District Metered Areas (DMAs) and is evaluating the feasibility of DMA management for its Water Loss Control program. Participants will learn about the tools that support real-time data-viewing and reporting.

4:30 PM - 5 PM

AMI Panel – Everything that you ever wanted to ask a utility about Advanced Metering Infrastructure

The meter committee panel is sponsoring this panel of utilities who have deployed fixed network meter reading systems. Participants will have the opportunity to ask the utilities questions regarding how the technology has been implemented, changed managem



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Operator

7:30 AM - 8 AM

Jar Testing Made Easy

Participants in this session will learn about practical jar testing procedures in obtaining meaningful results.

8 AM - 8:30 AM

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8:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

Optimizing Polymer Efficiency for Improved Solids Separation

Despite the wide-spread use of polymers in water and wastewater treatment and their high recurring expense, there are very limited technical resources readily available to the many interested engineers and operators. With many equipment options available

10:30 AM - 11 AM

Optimizing Polymer Efficiency for Improved Solids Separation

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11 AM - 11:30 AM

Forgotten Assets – A City's look at Air-Release Valves on the Distribution System

Participants in this session will learn the perspectives of air-release valve installations within a flood way, resizing undersized facilities, finding hidden assets, actual cost of maintaining non-standard locations, working with customers on visual impacts, things to consider during design, commo

12 PM - 1 PM

LUNCH

1:30 PM - 2 PM

Operators Round Table

Water treatment professionals share experience with each others successes and failures. Come with your industry problems and solutions.



Please note, this is NOT the final schedule. Sessions may/will change.

2 PM - 2:30 PM

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Water treatment professionals share experience with each others successes and failures. Come with your industry problems and solutions.

2:30 PM - 3 PM

Operators Round Table

Water treatment professionals share experience with each others successes and failures. Come with your industry problems and solutions.

3 PM - 4 PM

BREAK

4 PM - 4:30 PM

Keep it Out! Operator Tools and Resources for Watershed Spills

Since watershed spills/discharges have the potential to impact source water quality and water treatment plant operations, notification is the first line of defense. This presentation will provide information on a local water utilities voluntary notification.

4:30 PM - 5 PM

Keep it Out! Operator Tools and Resources for Watershed Spills

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Thursday, March 28

Water Treatment

8 AM - 8:30 AM

What's up with PFAS?: Introduction to the Challenges and Solutions for Perfluorinated Compounds

Participants at the session will learn about new developments in PFAS and PFOA toxicological evaluations and subsequent current and potential future regulatory activities with respect to perfluorinated compound treatment requirements.

8:30 AM - 9 AM

Determination of the Effectiveness of Granular Activated Carbon for the Removal of PFAS Precursor Compounds

Participants in this session will learn about the effectiveness of activated carbon for removing PFAS precursor compounds.

9 AM - 9:30 AM

Resin Treatment Technology for PFAS - How it Worked in Southern Colorado

PFAS is an emerging contaminant affecting many water districts. This presentation will show ion exchange can be a viable treatment method for the removal of PFAS.

9:30 AM - 10 AM

BREAK



Please note, this is NOT the final schedule. Sessions may/will change.

Research

10 AM - 10:30 AM

Wildfire Impacts on Water Quality & Treatment

Participants in this session will learn about changes in source water quality that might occur following a wildfire, and the consequences for treatment process performance. Results from several Water Research Foundation projects will be discussed, including recommendations and guidance for utilities to plan and prepare for a wildfire.

Water Treatment

10:30 AM - 11 AM

Multicontaminant Removal - Simultaneous Removal of Nitrate and Arsenic

Participants in this session will learn about simultaneous removal of nitrate and arsenic in a biological system that combines biological and physical-chemical contaminant removal mechanisms.

11 AM - 11:30 AM

Biological Selenium Removal: Total System Optimization

The San Luis Demonstration Plant was constructed in 2014 to determine the best 'in-valley' solution to agricultural drainage management, implementing biological treatment for selenium removal. The demonstration facility operation commenced in early 2016.

The selenium removal process biologically reduces oxidized selenium into insoluble elemental selenium under anaerobic conditions. The first stage of ABMet removes oxygen and nitrate, and selenium reduction occurs primarily in the second stage. An external carbon source is added due to lack of an electron donor in the feed water. Elemental selenium is filtered by biomass and bioreactor media, and removed with excess biomass by during a backwash, although a net rate of accumulation in the process has been determined through mass balances.

Process controls implemented chemical oxygen demand (COD) monitoring across the bioreactor and maintaining a between a -250 to -300 mV oxidation-reduction potential (ORP) in the effluent from the second stage. It was determined that optimal operation required the maintenance of a carbon dosing scheme using a constant COD:N ratio with additional carbon to account for dissolved oxygen demand based on daily nitrate monitoring coupled with periodic dissolved oxygen measurements. Differences in bioreactor feed and effluent dissolved organic matter (DOM) concentrations were analyzed, demonstrating a net reduction of 4 mg-C/L, indicating biomass consumption of DOM. Fluorescence and size exclusion chromatography were used to characterize changes in DOM across the bioreactor. Effluent selenium concentrations were between 1 and 3 □g/L during typical bioreactor operation (98-99% removal), although higher effluent concentrations were measured following

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backwash events. In addition to grab laboratory samples, online selenium analysis was implemented to determine bioreactor performance, which was demonstrated to be a viable monitoring technique that responded to changes or operational problems more rapidly than ORP measurements.

During winter 2017, excess biomass and a filamentous fungus infestation limited treated water production. A headloss inducing granular form of biomass was identified on top of the bioreactor. Shock and feed water chlorination coupled with air scouring the bioreactor was implemented to address biomass and fungal growth, while maintaining effluent selenium removal. Analyses on changes in seasonal biomass are being DNA sequenced to determine temperature impacts on biology. This paper presents detailed analysis of carbon dosing optimization, macronutrient balancing, bioreactor selenium removal performance, optimal monitoring techniques, biological DNA sequencing and measures taken to address seasonal operational issues.

11:30 AM - 12 PM

Optimizing Polymer Efficiency for Improved Solids Separation

Participants in this session will learn about factors such as charge site exposure, uncoiling of polymer molecules, application of mixing energy and the effects of dilution water as they influence proper polymer activation

Source Water Quality

7:30 AM - 8 AM

Monitoring tools to help save time & money while managing changing water sources

Drinking water systems and water treatment plants all face unique water quality challenges that affect treatment decisions, operational costs, and regulation compliance. In addition, water quality can change seasonally, with storms, with industrial effluents, and with location. For example, two plants nearby one another both sourcing from the same river could have different water quality challenges. Two water systems were analyzed in this study for their management of two separate plants with different source waters and how they use monitoring tools to stay in regulation compliance for disinfection byproducts (DBPs) rules and optimize treatment processes to save costs.

The first water system manages a conventional plant sourcing from mountain runoff and a membrane plant from a lake system. This water system also has a changing population throughout the year due to tourism in conjunction with seasonal water quality changes. These water quality challenges differ depending on the source: the mountain runoff has high organics in the springtime and the lake system has high levels of taste, odor, and organic compounds in the summer. As it is a relatively small system, the plant tries to optimize water production to capture the best water quality throughout the year and to meet production demands, via Total Organic Carbon (TOC)

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analysis. To do so, they have implemented preventative monitoring of organics, a main contamination contributor to the system. This monitoring is applied to optimize pre-treatment to the membrane plant to prevent membrane fouling, control chemical dosing to the conventional plant, indicate when to switch or adjust which plant(s) is online, and to ensure regulation compliance as their lab is certified for reporting TOC to meet DBP rules.

The second water system provides most water from a plant fed by mountain runoff with a second peaking plant sourced from a river. The first plant has seasonally high organics in the springtime like the former system and that is coupled with low alkalinity, placing them in a high TOC % removal bucket to meet DBP rules. Collaboration with local regulators led the plant to implement onsite TOC analysis to monitor changes in raw water and determine the best treatment to remove TOC. Knowing TOC allowed them to achieve compliance throughout the year with more consistent quality effluent. The river plant has no issues meeting TOC % removal due to a higher alkalinity, but seasonal taste & odor issues have led them to investigate different treatment options. The river plant is also a zero discharge facility where backwash water from their filters is returned to be re-treated at the front of the plant. Monitoring TOC throughout the process has helped them minimize taste & odor issues and manage retreatment of backwash water.

While having two plants within a small water system can help during peaking conditions or when upgrades are required, it can be difficult to manage separate sources with different water quality challenges. This study describes these two water systems and what changes they have made via onsite TOC monitoring to save time and money. Onsite monitoring of organics, a simple, reliable, and robust method indicating organic loading, helps operators make data driven decisions to optimize treatment processes and better comply with DBP regulations.

8 AM - 8:30 AM

Maximizing Resource Efficiency via Controlled Raw Water Withdrawal

Traditionally, lakes and impounded surface waters have provided distinct challenges for drinking water treatment facilities. Episodes of taste and odor, or iron and manganese can create negative PR outcomes. Turbidity spikes can result in increased chemical usage. Effectively dealing with these types of surface water challenges places increased stress on operators and raises operating costs. We hypothesize that these undesirable outcomes can be avoided entirely by proactive selection of optimal source water.

Reservoirs were invented circa 3000 BC, yet 5000 years later many aspects of the technology leave room for improvement. Water quality parameters vary widely throughout a reservoir, but most have limited options, if any, when it comes to choosing the point of withdrawal. This presentation explores our solution to that problem: allowing water treatment plants to

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identify and select that ideal albeit dynamic layer of better source water in real time.

The presentation details an ongoing full-scale trial at a Georgia surface water treatment facility, which is evaluating the importance of understanding reservoir depth profile data set and demonstrating the value proposition associated with applying whole profile raw water selection capabilities.

Trial generated data using selected profile influent conditions under varying water quality conditions along with downstream treatment observations and measurements are being compared with historical knowns from decades of water treatment plant operations.

The trial is currently at the end of its first year and has provided data collection and performance evaluation opportunities associated with seasonal reservoir turnover, cyclical cooling and warming trends and transients due to rain events. Real water treatment plant operational cost savings have been demonstrated via chemical reductions, i.e. 30-50% lower powdered activated carbon dosing as part of addressing T&O in the distribution system.

There may be significant value in having source water management and raw water pretreatment tools designed to allow, in real time, operator understanding and control of the water quality drawn into the treatment plant influent. The subject ongoing study is providing important reservoir characteristics, cost of treatment, and risk management information for surface water users and treatment plant operators.

8:30 AM - 9 AM

Water Planning for the Capital City - The Fastest Growing Big City in California

In 2018 the State Department of Finance determined that the City of Sacramento (City) is the fastest growing large City in California. The City Department of Utilities (DOU) completed a water supply master plan (WSMP) that identified the need for 410 million gallons per day (mgd) of surface water by 2050 as part of a conjunctive use program.

The City currently operates two surface water treatment plants. The E.A. Fairbairn Water Treatment Plant (EAFWTP) is located on the American River and rated at a hydraulic capacity of 200 mgd, and currently permitted capacity of 160 mgd. However, EAFWTP is unable to operate reliably at capacity due to environmental agreements that frequently limit diversion to 100 mgd during summer months, and other reduced rates during various times of the year. The Sacramento River Water Treatment Plant (SRWTP) has a reliable capacity of 160 mgd. Together, the two plants provide 260 mgd of reliable surface water during peak demand season. To meet the projected demand of 410 mgd, the City will need to develop 150 mgd of additional capacity.

DOU performed an alternatives analysis to develop and evaluate surface water supply alternatives as part of their overall water supply

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program. The Project consisted of two phases of work: Phase I (completed in 2017) evaluated water supply options and recommended an alternative to meet projected future water demands; Phase II consists of implementation of the recommended alternative. Alternatives included various combinations of a new surface water intake on either the American River or Sacramento River, raw water conveyance to either the EAFWTP or SRWTP, surface water treatment expansion or improvements, and transmission system improvements to convey the additional potable water.

In this presentation, attendees will learn about the alternatives that were developed to meet the forecasted 2050 water demands, the challenges and costs associated with each, the decision criteria used to select a direction forward, the planned phasing, and the status of the Phase II Project implementation.

9 AM - 9:30 AM

Are We Ready for Cyanotoxins? Evaluating reservoir and treatment plant options to manage cyanotoxins and related water quality challenges

The Southeast Morris County Municipal Utilities Authority (SMCMUA) in New Jersey recently evaluated its use and treatment of water from the Clyde Potts Reservoir (Reservoir) to address challenges with algal growth, taste and odor compounds, cyanotoxins, and apparent increases in total organic carbon, iron and manganese. The Reservoir is one of several water sources used for SMCMUA's potable water production, and SMCMUA needed an operational support tool to manage water quality and balance use of the Reservoir with other blended sources to meet seasonal demands. The water quality management project included an in-depth limnological study and evaluation of the current diffused aeration system in the Reservoir as well as a review of unit process performance and historic finished water quality from the Clyde Potts water treatment plant (CPWTP). The existing diffused aeration system was put in place to oxidize iron and manganese and manage dissolved oxygen levels throughout the Reservoir water column, and the CPWTP has advanced treatment processes including membrane ultrafiltration, post filter granular activated carbon contactors, and free chlorine disinfection. This presentation will highlight SMCMUA's efforts to develop operational decision support tools for the Reservoir and the CPWTP, review short- and long-term recommendations, and balance the use of multiple sources.

Given the increasing occurrence of cyanotoxins in surface water supplies, and USEPA's release of health advisories for two cyanotoxins, surface water utilities are actively pursuing management strategies for mitigation of harmful algal blooms (HABs) and cyanotoxins in their water supplies. This presentation will be instructive for both large and small water system operators, engineers, and managers that are currently engaged in evaluation, selection, and



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implementation of HAB mitigation strategies in their source waters and treatment plants.

9:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

#ReddingStrong - City of Redding Water Utility's outstanding response to the 2018 Carr Fire

Participants in this session will learn how the city of Redding Public Works Department – Water Utility worked tirelessly to keep the water system operational and pressurized to deliver the water necessary for life safety and fire suppression. Through power outages and a 30% increase in peak daily demand, the water system never failed.

10:30 AM - 11 AM

Aquifer Storage and Recovery (ASR) in Sonoma County, California

Participants in this session will learn how Sonoma Water (SW) has managed a significant portion of water resources in the county since 1949, including the Russian River, groundwater, and other resources. The Sustainable Groundwater Management Act (SGMA) of 2014 established a specific process for the long-term management of groundwater basins:

• Creation of groundwater sustainability agencies (GSAs) for medium- and high-priority basins by June 30, 2016

• Submittal of groundwater sustainability plans (GSPs) for each basin by January 30, 2022

• Implementation of each GSP during a 20-year period

• Sustainable groundwater conditions by 2042.

Three basins in Sonoma County were originally prioritized as medium priority and are working on complying with SGMA.

Sonoma Water recognized the potential limits on water resources prior to SGMA and initiated a feasibility study in 2010 for a groundwater banking program where Russian River water would be diverted through Sonoma Water's riverbank filtration/treatment system during the wet season and conveyed to depleted aquifers in neighboring groundwater basins for storage and use in the dry season. Groundwater banking projects will likely play a key role for sustaining groundwater resources and complying with SGMA in many basins. Several water purveyors participated in the feasibility study, which identified various methods and favorable locations within the county. The City of Sonoma initiated further work on an ASR pilot test at an inactive well site.

GEI Consultants and Pueblo Water Resources, in coordination with the City and Sonoma Water, installed a test well at the well site to a depth of 230 feet and prepared technical documents in support of a permit application to operate the pilot test. The design of the test well was similar to the design of the nearby supply well. A permit was issued by the California Regional Water Quality Control Board – San Francisco Region and the pilot test began during March 2018.



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The City of Sonoma contributed to the success of the pilot test by installing piping, valves, and flow meters from the potable water distribution main to the test well and from the test well to a drainage channel. The City operated the flows of water, treated the recovered water for disinfection byproducts during discharges to the channel, and measured groundwater levels.

Sonoma Water provided much of the financial support for the project and the potable water for the test. Sonoma Water also contributed technical expertise to the permit process and pilot test, including instrumentation of the well for water levels and temperature monitoring with a downhole fiber-optic cable, which enabled high resolution monitoring of water movement within the volcanic aquifer during injection and recovery.

The pilot test was completed during September 2018 and used over four million gallons of water during three cycles of injection, storage, and recovery. Injection and recovery pumping varied between 50 and 80 gallons per minute. Test well water depths varied from approximately 70 feet below ground surface before the test and during the storage phases, 20 feet during the injection phases, and 120 feet during the recovery phases. GEI collected numerous water samples from the water main, test well, and nearby supply well for laboratory analysis of general minerals, nutrients, trace metals, and disinfection byproducts (DBPs). The test well did not experience significant clogging due to the high quality of the Russian River drinking water. The native groundwater and the injection water could be distinguished by differences in temperature, pH, chloride and sulfate concentrations, and the presence/absence of DBP.

11 AM - 11:30 AM

Responding to an Extreme Source Water Quality Event – Challenges and Lessons Learned in Clear Lake

The objective of this presentation will be to describe Golden State Water Company's experience with treating surface water in Clear Lake in 2017 where environmental conditions created a two-week extreme event with severely decreased dissolved oxygen and elevated ammonia, iron, and manganese. Lake conditions were so poor for short periods that treating the water was not feasible. This presentation will also describe Golden State Water's staff effort to collect water quality data that confirmed lake conditions, aided in treatment adjustments, and supported procurement of additional capital equipment. The presentation will also describe Golden State Water's experience with working in collaboration with regulators, consultants, the community, and neighboring utilities, during and after the event, as well as long-term efforts with multiple stakeholders to improve the source water quality in Clear Lake.

11:30 AM - 12 PM

Characterizing Groundwater Quality for SGMA Planning

The Sustainable Groundwater Management Act (SGMA) is largely viewed as a water rights issue however, one of the 6 undesirable results is



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"significant and unreasonable degraded water quality." DWR's sustainable management criteria gives generic guidance for identifying undesirable results but does not provide insight towards characterizing water quality of the basin or which constituents should be evaluated. Current guidance largely focuses on plume contaminants which gives the impression that migrating a contaminant plume is the greatest concern in degrading water quality.

This presentation will give insight towards using publicly available data to characterize groundwater and the approach used in the Kern and Kaweah Subbasins. Through the process of drafting Groundwater Sustainability Plans (GSPs) for this region, we found that non-point source contaminants (arsenic, nitrate, and legacy pesticides) are the predominant contaminants of concern in these Subbasins. Specific water quality trends will be presented to demonstrate the correlation between constituent concentrations and water levels, to show how water levels directly influence changing trends. In contrast, some trends show that lowering water levels reduces contaminant concentrations. Trending differences will be discussed with context to well construction, depth of the groundwater basin and aquifer materials (hydrogeology).

Following the groundwater characterization, we'll discuss how the Groundwater Sustainability Agencies (GSAs) used this data to establish minimum thresholds for degraded water quality; how the contaminants were identified; data that was most valuable in characterizing water quality; and trends that correlate to water levels. There will also be a few examples of how this data is used to establish minimum thresholds and measurable objectives, and what the Kern and Kaweah GSAs constitute as undesirable conditions in their respective Subbasins.

Water Quality Analysis

8 AM - 8:30 AM

"History and Evolution of Turbidity Measurement"

Turbidity is a principal physical characteristic of water and is an expression of the optical property that causes light to be scattered and absorbed by particles and molecules rather than transmitted in straight lines through a water sample. It is caused by suspended matter or impurities that interfere with the clarity of the water.

One of the early parameters tested was turbidity. The normal procedure in 1912 used the turbidity standard adopted by the U. S. Geological Survey. A rod with a platinum wire on the end was calibrated by placing graduation marks on the rod, at various distances from the end, and this was lowered into the water as far as the wire could be seen. By 1933 the Jackson candle turbidimeter became the standard. Expressed as JTU (Jackson Turbidity Units). The nephelometric turbidimeter was developed in the 1970's.



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Turbidity is measured by directing light of an appropriate wavelength through the sample and detect the intensity at 90o from the incident beam (scattered light). A 90o detection angle is considered to be the least sensitive to variations in particle size.

Turbidimeter design can be categorized into one of two categories, contact or non-contact. In the contact design the sample contacts the optics of the measurement system. In the non-contact design the sample does not contact the optics of the measurement system.

Calibration is required due to the following:

1. Use of tungsten lamp for light source (intensity deteriorates rapidly)

2. The most significant drift results from contaminants fouling the optical elements.

3. Electronic drift

As technology improves the accuracy and reliability have greatly improved and calibration frequency has decreased. Use of laser and LED light sources have improve accuracy and reliability thereby eliminating the first cause for frequent calibration. Turbidimeters employing the non-contact design eliminate the most significant cause for frequent calibration. Thirdly, improvement in electronics has greatly reduced electronic drift, particularly if the incorporates “electronic drift stabilization” in their design.

EPA Method 180.1 states to maintain and calibrate on-line turbidimeters in accordance with the manufacturers recommendation, and to ensure proper operation they require quarterly verification with a primary standard. If the instrument reading is within ± 10% of the value of the standard calibration is not required.

The readings indicated by turbidimeters are not scaled in light intensity but in the concentration of a reference suspension. Since the accuracy of the calibration solution determines the accuracy of the turbidity measurements, it is of crucial importance! The international turbidity standard is “formazine” which can be made using Standard Methods.

Zero calibration is essential for low level measurements. The slope of the calibration is pre-defined and stored in the instrument. Calibration is recommended quarterly for accurate measurement by most manufacturers.

New turbidity analyzer focus is on a low maintenance non-contact design where the optics do not contact the sample eliminating fouling and employs a long-life LED light source. This paper discusses contact and non-contact design along with design features eliminating the need to calibrate quarterly.

8:30 AM - 9 AM

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9 AM - 9:30 AM

Total Microcystin Analysis by ELISA

The analysis of Total Microcystin by ELISA is very challenging as there are times that the calibration step fails even if the Lab Analyst is very careful in following the SOP. There are several factors that affect the calibration using the kit's supplied standards. These kit's standards have to be checked using primary standard solutions prepared in the laboratory from an independent source. If the standard calibration curve passes, several check standards are included in the batch and the results should also meet the QC criteria. I will discuss several sources of errors in the ELISA analysis and will also discuss how to prepare independent standard solutions.

10 AM - 10:30 AM

Slow Progress With Quicksilver: Methylmercury Reduction in Reservoirs Contaminated by Large-Scale Mercury Mining

Participants in this session will learn about the mercury transformations occurring in aquatic ecosystems that regulate the metal's toxicity and bioavailability. He will then detail results of the Santa Clara Valley Water District's 10-year studies aimed to reduce methylmercury concentrations in mining-contaminated reservoirs and fish.

10:30 AM - 11 AM

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11 AM - 11:30 AM

Sample Integrity - A Guide to Sample Bottles, Preservatives, Hold Times and Collections

During the presentation attendees will learn what does a preservative do? Why do I need specific bottles? What happens if I don't preserve my sample? We'll discuss hold times, what they mean, why they matter and what happens if analysis is performed passed the EPA prescribed hold time. Finally, we'll examine sample collection and help attendees set themselves up for success by following the correct collections protocols and using the correct containers.

What does a preservation do? - As Defined by the EPA: Methods of preservation are relatively limited and are intended generally to (1) retard



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biological action, (2) retard hydrolysis of chemical compounds and complexes, (3) reduce volatility of constituents, and (4) reduce absorption effects.

In other words, the purpose of a preservative is to "freeze" the sample chemistry at the point of sampling so that the volume analyzed at the lab is as similar to the source as possible, despite the unavoidable delay between the sampling and analysis.

Why are sample containers different - Sample containers, just like preservatives, are designed to inhibit the natural chemical changes which will occur in a sample as time passes. In addition to that, sample containers also serve a few other purposes:

- To ensure proper volume is provided to a lab (all tests have a minimum required volume)
- To ensure the lab has enough volume to perform the proper quality control
- Some containers limit a samples exposure to UV rays
- Some containers are designed to prevent sample contact with air
- Some are sterilized and sealed to prevent bacteria contamination
- Some containers are designed to limit sample absorption (plastic vs. glass)
- Some are specifically designed to be loaded directly into an instrument (or even an autosampler for composite samples)

What is an analytical holding time, and why does it affect me? - A "holding time" is the elapsed amount of time from the point of collection to the moment of preparation or analysis. If samples are analyzed beyond an analytical holding time, the data will be qualified on the analytical report.

Sample Collection is the first, and perhaps the most important step in the analytical process. Poor sampling inhibits the labs ability to produce representative data of a sampling source. Sampling is comprised of 5 main steps:

1. Create a Field Sampling Plan
2. Contact lab to order bottle kit and iron out any scheduling complications
3. Conduct sampling following instructions from Field Sampling Plan and the lab
4. Releasing Custody of Samples to the lab, or a third party shipper
5. Review Sample Receipt to ensure you're on the same page as your laboratory

The full presentation is available upon request.

Engineering & Construction

8 AM - 8:30 AM

How Can Hydraulic Models Solve Operational and Design Challenges in Water Distribution Systems?

Participants in this session will learn of several case studies where a water distribution system hydraulic model was successfully used to



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address various operational and design challenges.

8:30 AM - 9 AM

Canal Replacement Project - Innovate Approaches to Unique Challenges

Participants in this session will learn about the challenges and innovate design approaches applied to the Canal Replacement Project to install a 10-foot diameter concrete pipe with the presence of high salinity groundwater and multiple creek/drainage crossings, the use of soil cement to reduce imported bedding and other design approaches will also be described.

9 AM - 9:30 AM

Fastest Ever Aquifer Storage and Recovery Project - City of Woodland ASR Project

Participants in this session will learn about a creative water supply approach that can provide a solution to many common challenges utilities in California and Nevada are currently dealing with.

9:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

Stopping "Hammer Time" – A Unique Hydraulic Model Calibration Story to Evaluate Hydraulic Transient Events

Participants in this session will learn about a detailed and operationally focused hydraulic model calibration and data collection effort to refine model use for operations and transient evaluations.

10:30 AM - 11 AM

An integrated approach toward groundwater banking in the southern Central Valley, California

Participants in this session will learn how regional Ag-MAR projects can influence stream flows and surface diversions using an integrated - management model

11 AM - 11:30 AM

Start With the End in Mind - Designing Ductile Iron Pipe for Seismic Survivability

Participants in this session will learn what design parameters that should be considered when designing for seismic pipelines.

11:30 AM - 12 PM

What keeps you up at night?

Participants in this session will learn about a strategic approach to evaluating risk from inaccessible piping networks within your distribution system.



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Asset Management Committee, Water Management & Efficiency Committee, Water Transmission Systems

8 AM - 8:30 AM

California's New Water Efficiency Laws: Keep Calm and Comply (with our help!)

Participants in this session will learn what California's new water efficiency laws will mean for water providers along with the latest updates on the new regulations straight from the source. Participants will also explore tools and resources available to help them implement these new regulations and comply.

Water Management & Efficiency

8:30 AM - 9 AM

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9:30 AM - 10 AM

BREAK

10 AM - 10:30 AM

Looking to the Past to Guide the Future: Strategic Planning for Water Use Efficiency

Participants in this session will learn how West Basin, a southern California wholesale water agency, is approaching strategic planning to transition its Water Use Efficiency program into the Making Water Conservation a California Way of Life era.

10:30 AM - 11 AM

We're in the Money: Scaling up Investments in Distributed Water Innovations

Participants in this session will learn how water efficiency tech, reuse systems, green infrastructure, and other "distributed infrastructure" are helping cities across the West address water supply, quality and stormwater management challenges. Attendees will gain understanding of an innovative new opportunity for financing distributed systems at scale in their own communities.



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11 AM - 11:30 AM

Self-Service Solutions – Improving Satisfaction and Saving Staff Time with AMI Data

The attendees in this session will be informed on how they can get their customers to engage with the utility for a working relationship in understanding their water bills.

Hotel and Travel
Accommodations

Event Name/Date:

Antelope Valley Hispanic Chamber of Commerce 22nd Gala Installation/March 29, 2019

CONTACT INFORMATION

First Name | Last Name | Date

ACCOMMODATION INFORMATION

Rooms and rates are subject to availability. Complete and submit this form as soon as possible to guarantee a room at the host hotel. In the event that the host hotel is booked, every effort will be made to secure a room at the closet hotel within comparable rates to the event discounted rate.

Arrival Date | Departure Date | No. of guests | Room Type

Do you require a smoking room?

◯ Yes ◯ No

Do you need transportation from the airport to the hotel?

◯ Yes ◯ No

Flight Number | Time

ADDITIONAL INFORMATION/REQUESTS

Staff Representative

SAVE THE DATE!

NOCHE DE CARNAVAL!



MARCH 29, 2019

22nd Gala INSTALLATION

- Sonora Mayor De Colombia!
- Brazilian Food!
- Brazilian Dancers!
- Dee Jay
- Fun Fun Fun!!

Antelope Valley Hispanic Chamber of Commerce

This will be a sold out event, so RSVP NOW!

Sponsorship Opportunities Available **661.538.0607** Get Your Tickets Today! $60.00

Hotel and Travel
Accommodations

Event Name/Date:

AWWA ACE 19 Conference Innovating the Future of Water/June 9 - 12, 2019

CONTACT INFORMATION

First Name | Last Name | Date

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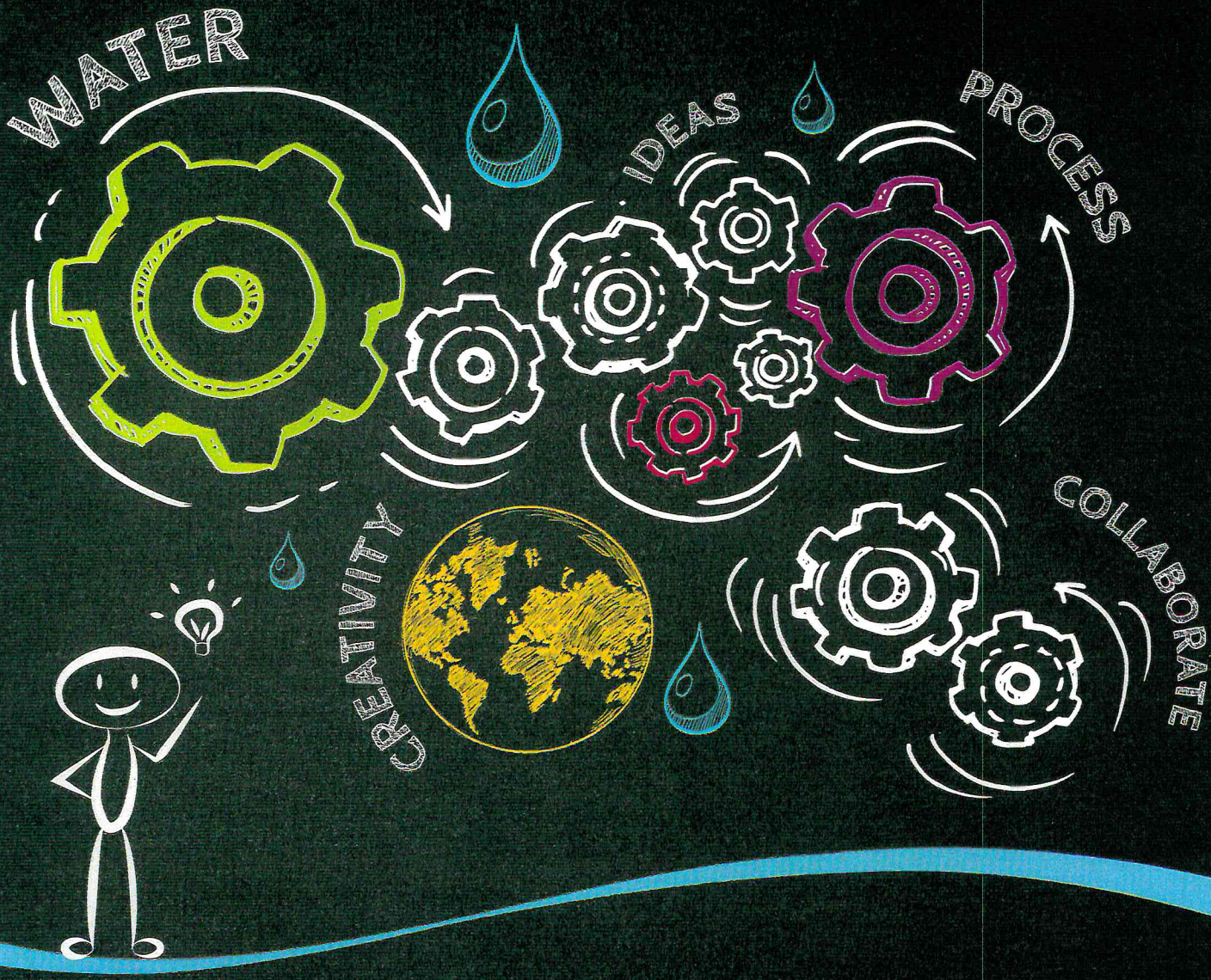
American Water Works Association

ACE19

Innovating the FUTURE of WATER

june 9–12~denver, co

awwaace.org



Conference Preview

THE WORLD'S PREMIER WATER CONFERENCE

American Water Works Association
Rocky Mountain Section
Local Host

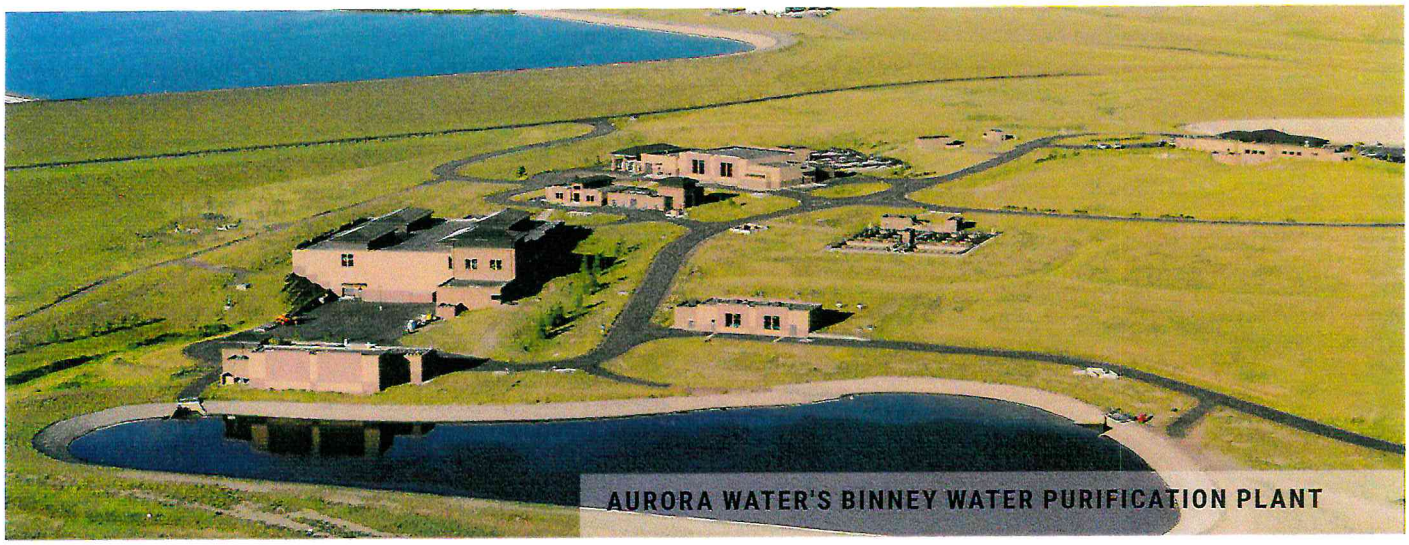
ACE19 in Denver, Colorado will be the place to learn, connect and be inspired to solve today's global water challenges. "Innovating the Future of Water" returns as this year's conference theme, with new technologies and water sector innovations highlighted throughout the conference.

Explore this year's program and select sessions focused on asset management, utility risk and resilience and water quality challenges – along with the new smart water utility and potable reuse tracks. Be sure to take advantage of dedicated Exhibit Hall time to see cutting-edge products and services and meet new contacts.

760+	16	473	12,300	7	1,000
PRESENTERS	PROFESSIONAL TRACKS	EXHIBITING COMPANIES	ATTENDEES	EXCITING COMPETITIONS	UTILITIES

DENVER WATER

ACE19 OFFICIAL TAP WATER PROVIDER



AURORA WATER'S BINNEY WATER PURIFICATION PLANT

American Water Works Association

Dedicated to the world's most important resource, AWWA sets the standard for water knowledge, management, and informed public policy. AWWA members provide solutions to improve public health, protect the environment, strengthen the economy and enhance our quality of life.

LOCATION, REGISTRATION & HOTELS

Super-saver registration ends April 24.

FULL-CONFERENCE REGISTRATION

Access to all professional sessions and Exhibit Hall, two Expo Café lunch tickets, networking events, ACE Wrap Party and the ACE Online event.

BRING YOUR ENTIRE TEAM TO THE ACE EXHIBIT HALL

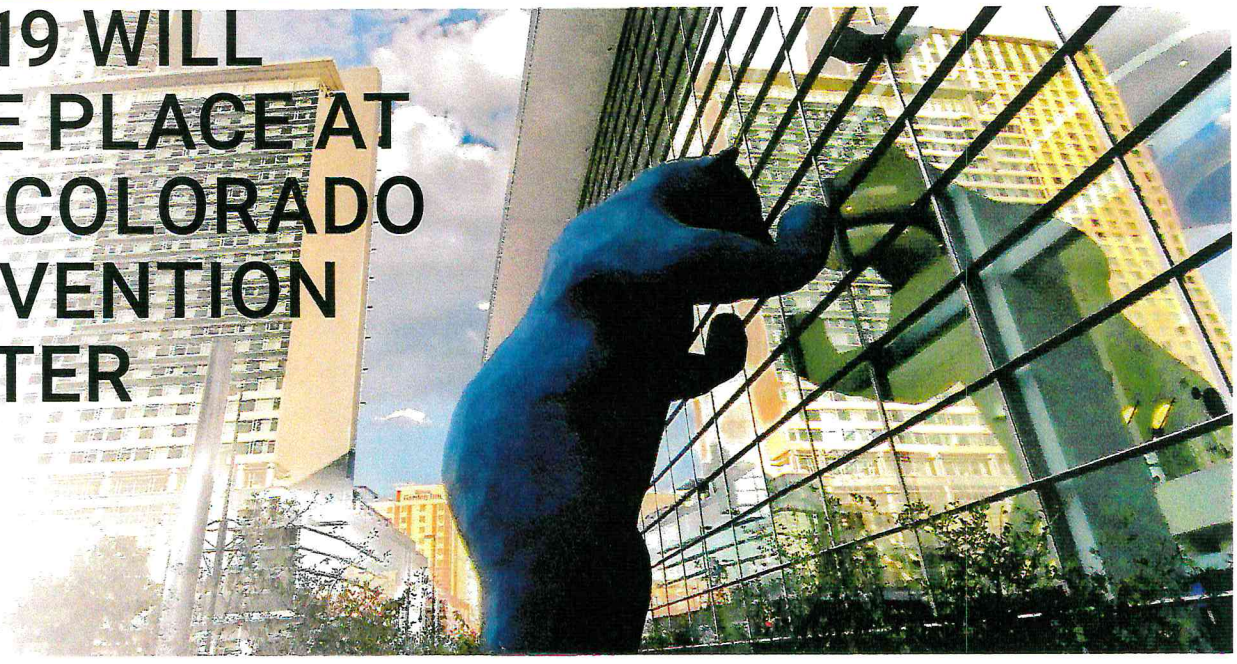
Complimentary Exhibits-Only registration for Water and Wastewater Utilities & Municipalities. Registration includes access to the ACE Exhibit Hall, poster sessions, competitions and education on the show floor. Subject to verification. Offer expires April 24, 2019.

UTILITY GROUP DISCOUNT– BUY 5 GET 1 FREE!

Submit five paid registrations and receive the sixth registration free! This offer is good for full-conference registrations. Fill out the special offer form at **awwaace.org**. Register by April 24, 2019.

HOTELS ARE GOING FAST! RESERVE YOUR HOTEL ROOM THROUGH THE OFFICIAL AWWA HOUSING BUREAU, PAR AVION. VIEW THE HOTEL BLOCK AND REGISTER TODAY AT AWWAACE.ORG. HOTEL RESERVATION DEADLINE IS MAY 15, 2019.

ACE19 WILL TAKE PLACE AT THE COLORADO CONVENTION CENTER



WORKSHOPS

WORKSHOPS OFFER ADDITONAL OPPORTUNITIES FOR IN-DEPTH, HANDS-ON LEARNING. REGISTRATION AND ADDITIONAL FEE ARE REQUIRED. FULL-DAY WORKSHOPS INCLUDE LUNCH.

PCW01 | Treatment Process Piloting: Planning: Design, and Hands-on Operations

8:00 a.m. – 4:30 p.m.

This workshop will be held at Aurora Water's state-of-the-art Binney Water Purification Facility. Pilot treatability testing is an important tool in the design and optimization of water treatment facilities. Owners, operators and engineers can all benefit from pilot testing. Pilot testing offers unparalleled insights into how treatment trains will perform in changing water quality. This workshop will focus on the design, management, and operations of a pilot study.

PCW02 | Optimizing Filter Performance—Surveillance, Data Analysis and Maintenance

8:00 a.m. – 4:30 p.m.

This workshop will be held at the Denver Water Marston Water Treatment Plant. Granular media filters are the final physical barrier to pathogens in water treatment. Filters must perform optimally under all flow and source water conditions to ensure public safety. Attendees will be introduced to the background and practical experience to understand the filtration process, design, and operational considerations. This workshop will focus on how to conduct a filter surveillance program to determine filter performance over time and on analyzing ways to optimize treatment.

PCW03 | Applying the Concept of Design Thinking to Solve Asset Management Implementation Challenges

9:00 a.m. – 4:00 p.m.

This workshop will introduce proven concepts of a design methodology, Design Thinking, that provides a solution-based approach to solving problems. This workshop will explore how to apply the methodology, address challenging problems faced by asset management programs and explore creative and analytical thinking for innovative solutions. How can we better utilize asset data? How can we effectively engage our resources? What are the optimal processes required to maintain the program? Outcomes will be applicable solutions crafted through an interactive learning experience.

PCW04 | Aging Infrastructure Management—Hydraulic Analysis of Water Distribution System Criticality and Resiliency

9:00 a.m. – 4:00 p.m.

This workshop will show how hydraulic models can be used to determine the pipe criticality by evaluating the impacts of a pipe failure and how hydraulic criticality can be integrated with pipe likelihood of failure data to prioritize aging main replacement. It will also discuss how the same tools used for the pipe criticality analysis can be used for system resiliency assessment.

PCW05 | AWWA Manual M5, Water Utility Management—What You Don't Know That You Probably Should!

9:00 a.m. – 4:00 p.m.

Utility leaders of today are faced with increasing demands and must optimize operations and manage activities of their utility to effectively serve customers and other stakeholders.

The new AWWA Manual *M5—Water Utility Management*—delivers deep experience, strength and context for each of these concerns. Designed for both new and seasoned utility managers, M5 will address multiple utility issues and will build upon prior knowledge and help broaden managers' perspectives.

The presentations are from public and private utility executives, senior water and wastewater engineers, and principal management and financial consultants who have captured the water industry's best practices, methods, approaches and overall strategies to help participating utility managers remain heroes in today's complex and ever-changing world.

PCW07 | ISO55000X Asset Management Systems: What It Is and How to Use It

9:00 a.m. – 4:00 p.m.

This workshop will provide an understanding of the ISO 55000 standard and how it applies to asset management practice. All sized organizations, including those new to asset management or those looking to revise their asset management documentation to international practice, will learn scalable, robust principles that will serve as a foundation for improving performance with asset management. Hear from experts on applying ISO 55000 principles to asset management policy, strategic asset management planning and individual asset management planning efforts.

PCW08 | Beyond the Spec Book: Learn What, How & When to Use Various Equipment in the Water Treatment Process

1:00 – 4:00 p.m.

Eight manufacturers will set up their equipment at a station in the room. In groups of 3-5, attendees will visit each station and become familiar with the piece(s) of equipment, touch it, learn how to operate it, understand when to use it, and learn what each part of the equipment specification means in simple terms.



TOURS

MUST BE REGISTERED FOR THE FULL-CONFERENCE OR EXHIBITS-ONLY. PRE-REGISTRATION IS REQUIRED. CAPACITY IS LIMITED. NAME CHANGES ARE NOT PERMITTED AFTER THE CUTOFF DATE. PHOTO ID IS REQUIRED TO BOARD THE BUS, AND A WAIVER MUST BE COMPLETED DURING THE BUS RIDE.

T1 | Aurora's Prairie Waters Project

Tuesday 8:00 a.m. – 1:00 p.m.

Note: Closed shoes and long pants required.

This system illustrates an innovative use of natural and technical treatment methods to recapture water from the South Platte River to enhance a supply through indirect potable reuse. Tour attendees will gain an understanding of the system's processes, such as biological filtration, ultraviolet advanced oxidation, adsorption and finished water blending to make this urban source water indistinguishable from the mountain supply. This tour will begin at the alluvial wells (riverbank filtration) along the South Platte, will visit a pump station along the 34-mile pipeline and end at the 80-acre Binney Water Purification Facility.

T2 | Denver Water's Transformation: Processes, Facilities and Culture

Tuesday 8:30 a.m.–12:30 p.m.

*Note: Signed advance waiver due by **May 18, 2019**. Closed shoes and long pants required.*

Take a behind-the-scenes tour of Denver Water's newly redeveloped main campus! The Chief of Operations & Maintenance and other employees will discuss how using lean tools and continuous improvement methodologies have advanced processes and efficiencies, helped reshape facilities and have transformed Denver Water's culture. We'll guide you through several new facilities, such as the Trades Building, Fleet Building, Warehouse and Meter Shop, and the brand-new Administration Building. Additionally, you'll learn about the "ecosystem machine", which will treat gray and black water generated in the Administration Building to eventually be used throughout the redeveloped campus.

T3 | Parker WSD's Reuter-Hess and Reuse system

Tuesday 9:00 a.m. – 12:30 p.m.

Note: Closed shoes required.

Reuter-Hess Water Purification Facility (RHWPF) is a state-of-the-art facility with three primary treatment technologies involving a high-rate clarification system, a powder activated carbon treatment system and ceramic membrane filtration technology. RHWPF is fed from the Reuter-Hess Reservoir, which is filled using Cherry Creek surface water and treated reclaimed flows from the District's two reclamation facilities. Please note that this tour includes several stair climbs/descents, with no elevator access.

T4 | Great Divide Brewery

Tuesday 2:00 p.m. – 5:00 p.m.

Water consumption and conservation is a big topic in the beer industry. Visit Denver's Great Divide Brewery's brand-new production facility and see how they tackle obstacles in water conservation and sustainability. Ages 21 and over.

T5 | Denver Zoo: You, Water and Water's Future at the Zoo

Wednesday 8:30 a.m. –12:30 p.m.

Attendees will tour the Denver Zoo to learn about recycled water use inside the exhibit areas and participate in think-tank discussions concerning water-focused challenges. On this tour, you'll hear from zoo employees about how they've incorporated recycled water into The Edge—their new tiger exhibit—and their Toyota Elephant Passage exhibit. Additionally, through your direct feedback and ideas, you'll help the Denver Zoo enhance its water usage design and plans for the sea lion exhibit and help them with what a water resiliency plan for the zoo could look like. Ages 18 and over.

T6 | AWWA Headquarters and Denver Water's Marston Water Treatment Plant

Wednesday 8:30 a.m. –12:30 p.m.

*Note: Signed advance waiver due by **May 18, 2019**. Closed shoes and long pants required. A few areas of Marston WTP tour are accessed via stairs without elevator.*

Come to south Denver to see the offices of AWWA and meet some of the people that bring you training, tours and more! Attendees will head next door to the Marston Water Treatment Plant, and the Marston reservoir. In operation since the early 1900s, Marston is integral to maintaining the reliability of Denver Water's system and can treat up to 240 million gallons of water per day. While visiting the plant, you can talk with operators about the onsite reservoir, wildlife that call the area home—including a pair of nesting bald eagles—and learn more about Denver Water.

T7 | Metro Wastewater's Northern Water Treatment Plant

Wednesday 8:30 a.m. – Noon

Note: Closed shoes and long pants required.

The Metro Wastewater Reclamation District's Northern Treatment Plant (NTP) is a new infrastructure that began operating in Brighton, Colorado, in late 2016. As one of the most advanced systems in the country, the NTP's phased design provides flexibility to expand as the region grows and currently has the capacity to treat 24 million gallons of wastewater per day. Attendees will learn about the advanced requirements for discharge to the South Platte River—the biological treatment process at the NTP is followed by flocculation/sedimentation and filtration treatment steps.

T8 | No Water, No Beer! Miller/Coors Reuse and Brewery Tour

Wednesday Noon – 5:00 p.m.

Note: Participants will be provided steel toe boot covers and additional PPE that must be worn on this tour. Closed shoes and long pants strictly required.

Tour the water treatment and wastewater treatment facilities at Coors Brewery in Golden, Colorado, the largest single brewery in the world! See the inner workings of how water is treated in the beer-brewing process and how wastewater comes out of the process. Participants will also be able to see how the beer is made and try a sample fresh off the distribution line. Ages 21 and over.



PROFESSIONAL TRACKS

SEARCH THE ONLINE PROFESSIONAL PROGRAM BY TRACK, SPEAKER AND DAY AT AWWAACE.ORG.

Advances in Water Treatment

15 Sessions

Take a fresh look at the latest in water treatment challenges and solutions. Experts in these sessions will discuss the best practices for conventional/biological filtration, inorganic contaminant control, treatment system performance optimization, and much more. Case studies are included to provide real-life examples of successful solutions in action.

Asset Management

5 Sessions

Water infrastructure represents major capital investments for a community and managing the value of that investment is vital. Adopting an asset management approach offers utilities a way to make better decisions about budgets and these investments while maintaining levels of service. Attendees will explore the value of asset management programs taking a deeper look at risk, O&M, and asset management planning tools and strategies.

Distribution System Management and Operations

10 Sessions

Aging pipe infrastructure is deteriorating to dangerous levels. Efficient design, management & operation of your distribution system is vital to your utility's performance. This track discusses the latest innovations, approaches and technologies for assessing, designing, and managing the rehabilitation or replacement of distribution systems. Topics explored include tank and pump station management techniques, hydraulic modeling for system performance, the integration of water quality and monitoring, and advances in leak-detection and water loss control techniques.

Financing, Rates and Affordability

7 Sessions

Survey after survey of the water sector confirms that our top concerns are aging infrastructure and how to fund our capital needs. Experts will cover topics including an examination of current financial trends, providing a perspective from the credit agencies, exploring public–private partnerships, tackling affordability issues within water utilities, and demonstrating how to successfully navigate funding for infrastructure projects.

Infrastructure Design and Project Delivery

8 Sessions

Discover the latest best practices for maintaining and managing your utility's infrastructure in this track. Learn from the experts in project delivery and management as they discuss the business side of operating a successful utility. Compare diverse approaches to asset management such as the role of business case evaluations in making capital investment decisions, as well as operational solutions like nondestructive examination assessment. Experts will present case studies, share the latest research, and discuss practical applications for implementation.

Managing Lead in Distribution Systems

4 Sessions

As communities develop a lead reduction strategy, conversations arise around identifying and removing all lead service lines over time and maintaining optimal corrosion control. Water utilities and stakeholders are working to develop collaborative community-based approaches, expand outreach efforts, and ensure all people have access to safe and reliable water. These sessions will explore topics such as current regulations addressing lead in distribution systems, the need for continued corrosion control processes, and the how to successfully develop lead service line replacement programs.

Potable Reuse

4 Sessions

To meet growing and stressed water supply demands, water utilities are increasingly looking to diversify their portfolio. Potable reuse is becoming a realistic option for many water utilities. Evaluate the challenges and identify proven strategies to implement potable reuse as a new source of supply in this track.

Small Systems Management and Operations

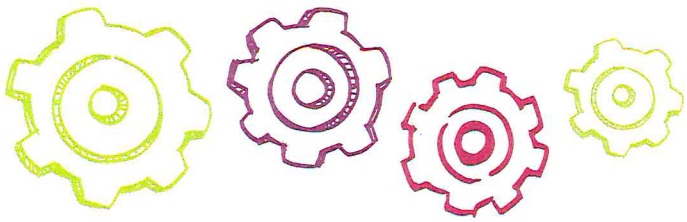
5 Sessions

Water systems serving a small number of customers make up the majority of water systems in North America. This track is tailored to the small system manager, to help ensure that water quality and service in smaller communities remain on par with larger systems. These sessions address funding sources, treatment, storage, distribution, operations, and management needs.

Smart Water Utility

9 Sessions

Water goes digital. The water sector continues to promote and embrace innovation and smart water networks have emerged as a popular way to use technology to optimize system operations. Smart water networks have a range of applications, from detecting system leaks to managing energy. This track explores the backbone of data collection, the Supervisory Control and Data Acquisition (SCADA) control systems including the networks on which they depend, how to handle the vast amounts of data collected, and leveraging that data for better operation, maintenance and utility management.



PROFESSIONAL TRACKS

CONTINUED

Stakeholder Engagement and Communications

4 Sessions

In the information age, engaging and communicating with stakeholders about important water issues has become more efficient but also more complex. The best practices used by water professionals to share critical messages about water with their communities are analyzed in this track.

Utility Risk and Resilience

5 Sessions

The frequency of billion-dollar extreme weather events—from hurricanes, flooding, and rising sea levels to droughts, heat waves, and wildfires—has increased dramatically in recent years. Resiliency efforts of water and wastewater utilities not only save lives and taxpayer dollars, but also play a key role in preparing cities for the challenges they face from these events. Join experts as they discuss provisions in the newly promulgated America's Water Infrastructure Act of 2018 legislation for assessing risk and becoming more resilient from not only Mother Nature but also cyber hazards.

Water Policy and Regulatory Actions

5 Sessions

With constantly evolving regulation, compliance and policy issues, there's always something new to address on the regulatory front. Uncover the latest developments on current issues and capture valuable tips for managing federal, state, provincial, and local issues that affect utility operations, management, and ultimately, the bottom line in this track.

Water Resources and Conservation Management

17 Sessions

Protecting and managing water resource portfolios requires an integrated approach that includes existing water resources, water conservation programs, potable reuse projects, watershed protection, groundwater management, and resiliency considerations. Join experts to discuss source water protection, long-range resource planning, and implementing conservation programs that encourage wise water and energy use, all with the goal of developing a robust water supply portfolio.

Water Quality Challenges

6 Sessions

Come discover the latest cutting-edge information related to contaminants in drinking water. These sessions focus on the latest results and approaches to address drinking water issues and provide case studies and lessons learned. Topics include the latest advances in treatment methods for PFOA and PFOS, algae, manganese and inorganics, nonpoint source pollutants, microbials and emerging contaminants, DBPs, and premise plumbing. Sessions also explore the relationship between drinking water, wastewater, reuse, and storm water from a water quality analysis and treatment perspective.

Water Utility Management and Leadership

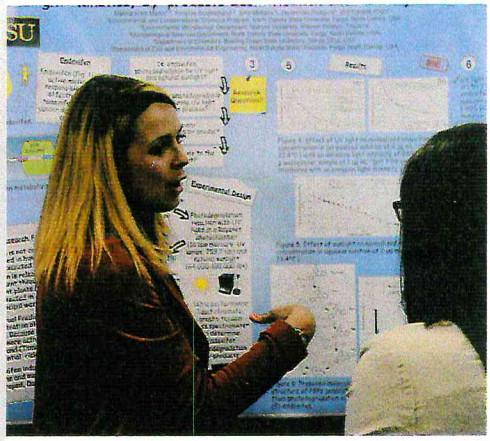
11 Sessions

Effective leadership is critical to overcoming utility and workforce management obstacles. This track explores many issues facing water utility general managers and presents innovative solutions for performance management. This track also discusses the latest techniques and tools utilities are using to recruit and retain high-quality employees, improve diversity, and protect their organizational knowledge continuum.

Poster Sessions

5 Sessions

Take advantage of this great opportunity to interact directly with presenters at four poster sessions in the Exhibit hall and one MON03 Special Topic Poster Session. Poster presentations will be held in a dedicated session room and sorted by topic. The poster authors will be present for the full duration of each poster session to provide attendees with the opportunity for in-depth discussion about their topic.





INVITED WATER THOUGHT-LEADERS

CHECK THE ONLINE PROFESSIONAL PROGRAM TO SEE THESE SPEAKERS AT ACE19.



GEORGE HAWKINS

Founder and President at Moonshot LLC, Previously CEO and General Manager of DC Water.



KELLY DEARING-SMITH

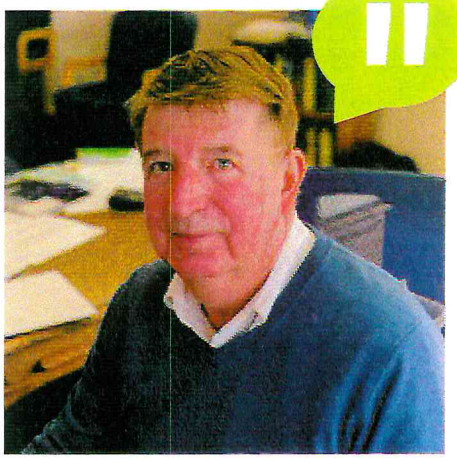
Kelley is Louisville Water Company's Vice President of Communications, Marketing.

"There must be good reasons for me to have attended over 40 ACE events in a row and presented at most. The world has changed a lot since I first attended an AWWA conference, and there are many different opportunities to learn now-- but, I always come back to ACE. The technical sessions are inspiring but sharing ideas with my peers is the biggest draw for me. Every ACE, I am surrounded by some of the best practitioners in our profession who are willing to engage in technical discussions about WATER. I always leave ACE with new ideas. I have met many lifetime friends at ACE. Keep it up AWWA, I I have a few more left in me! ."

- David Cornwell, PhD
AP Black Reserach Award Winner
AWWA Honoray Member

"ACE provides a platform to engage with water leaders from across the globe. The professional program, exhibit hall and networking sessions provide attendees with current industry information and real-world examples."

- Kelley Dearing Smith,
Louisville Water Company



DAVID CORNWELL

Dr. David Cornwell received his doctoral degree from the University of Florida where he is currently an Adjunct Professor.



BRENT ALSPACH

Brent Alspach holds both BS and MS degrees in Civil and Environmental Engineering from Cornell University and is the Director of Applied Research for Arcadis.

HIGHLIGHTED SESSIONS

INTERESTING AND RELEVANT ACE19 SESSIONS THAT YOU CAN'T MISS!

MON03 | Beyond the Meter Towards Plumbing Innovation and Water Quality
Utilities, health and policy professionals, and regulators nationwide are seeking ways to improve drinking water quality at the tap, methods to safely and quickly remove microbial and inorganic contaminants from building plumbing, and opportunities that identify new approaches and technological innovations. There is also a desire to understand the relationships between utility distribution systems and building plumbing. This poster session is designed to not only showcase key projects and research from universities, consulting firms, utilities, government agencies and others, but will also provide a forum for cross-collaboration, as well as insightful analysis and innovations about plumbing technology and safety.

MON14 | Implementing Community Water System Risk & Resilience
America's Water Infrastructure Act (AWIA) of 2018 includes several provisions designed to support an all-hazards approach to risk and resilience management in the water sector. This is based on modifications to the requirements placed on community water systems serving more than 3,300 tap lines under the Bioterrorism Act of 2002. In addition, AWIA includes several provisions to enhance source water protection. Learn more about more about key elements of AWIA's risk and resilience provisions, including approaches to support compliance and associated deadlines though a panel discussion and lighting round style presentation associated with core provisions.

TUE06 | Disinfection Practices and the Effects on Water Quality in the Distribution System
Do you use chlorine in your distribution system? Do you have chloramines in your system? Come hear how others have managed the water quality in their systems using a variety of oxidants.

TUE45 | ITRC PFAs Short Course: Communicating PFAs Risk and Taking Treatment Actions
This session will provide an overview of PFAS in the environment with a focus on introducing risk communication tools developed by ITRC PFAS team and their applications on communicating with the public about PFAS in drinking water. Attendees will learn about the state of the practice on using filtration technologies to mitigate PFAS contamination in drinking water, additionally, newer technologies that are currently under development to destroy PFAS will be discussed.

TUE48 | Colorado Water Law and Water Challenges
Attendees will have a front-row seat to the complicated issues and challenges of water in the West and Colorado as a headwaters state. From population grow, supply variability and increasing demand, presenters will discuss challenges that are not easily solved by conservation and offer solutions to these complex obstacles. Hear from the experts on policy, water law and sustainable solutions for water throughout the region.

TUE52 | Spotlight on PFAS
Per- and polyfluoroalkyl substances (PFAS) are among the most significant and potentially toxic emerging contaminants in a generation, with not only widespread occurrence, but also strong persistence in both the environment and in the human body. The challenge of PFAS is compounded in water supplies, as these contaminants are highly soluble and not easily removed by traditional treatment processes. With new reports of source water detections expanding across the nation, PFAS is one of the hottest topics in the industry today.

WED04 | Community Water Fluoridation: Additives, Standards, and Implementation
This must-see session includes a facilitated round-table discussion with the US EPA leaders and their thoughts on encouraging innovation. The second presentation will review the progress and deliverables with the implementation of the Innovation Initiative's strategic plan. The final presentation will have three parts; first an update from the Water Research Foundation on their efforts around innovation, followed by a review of the WEF Lift Program, and will conclude with a case study around a utility's experiences and approaches to implementing innovation.

WED14 | All-Hazards Water Sector Resilience
The frequency of billion-dollar extreme weather events – from hurricanes, flooding, and rising sea levels to droughts, heat waves, and wildfires – has increased dramatically in recent years. Resiliency efforts of water and wastewater utilities not only save lives and taxpayer dollars but also play a key role in preparing cities for the challenges they face from these events. Attendees will learn about utility preparation from potential threats to their systems.

WED15 | Colorado Regulatory Landscape
Hear from the Colorado Department of Public Health and Environment (CDPHE) on POU implementation, disinfectant residual, total coliform rule, DBP compliance, state review and corrosion control and sample site requirements of the Lead and Copper Rule. Working with EPA Division 8 and utilities, CDPHE will present on what is working and lessons learned.

WED27 | Treatment Plant Start Up and Operation Challenges
Whether expanding an existing facility, converting processes or starting from scratch, challenges will arise. Hydraulics, coagulants and filtration will be highlighted in these treatment plant "lessons learned" discussions.

COME TO THE ACE19 EXHIBIT HALL

SUPPORT OUR EXHIBITORS WHO HELP BRING US ALL SAFE WATER!

EXHIBIT HALL HOURS

Monday, June 10 | 10:00 A.M.–5:00 P.M.

Tuesday, June 11 | 10:00 A.M.–6:00 P.M.

Wednesday, June 12 | 10:00 A.M.–2:00 P.M.

See Who's Exhibiting. Visit bit.ly/ace19exhibithall

- Research new products and services
- Share what you find with your supervisor
- Meet new colleagues in the water industry and make lasting connections
- Discover the best and the brightest water professionals to work at your utility or organization
- Reconnect with manufacturers and suppliers and learn more about their current product portfolio



Innovation Lounge

Recognizing the impact that unconventional thinking has on the water sector, AWWA has brought Innovation back as the theme for ACE19. Returning for 2019 is the Isle Tech Pitch Competition, where providers of emerging technologies compete in a "Shark Tank" style competition with expert judges determining the most relevant, unique and promising solutions.

Visit the Innovation Lounge to engage with innovation thought leaders, progressive water utilities, and solutions providers as they share their perspectives about "Innovating the Future of Water". Powered by Isle, the ACE19 Innovation Lounge will tie in global trends, and also address regional water challenges that demand creative approaches.

Events





MONDAY | JUNE 10

First-time Attendee Program
7:30–8:15 a.m. | FREE
First-timers stop by to learn how to maximize your conference experiences and develop lasting connections. Registration is required.

Motown at the Clocktower, A Water Equation Benefit Concert
7:00–10:00 p.m.
Join Water Equation at the iconic downtown Denver Clocktower Cabaret for a night you won't want to miss! WE will be hosting a night filled with your favorite Motown songs to support Water Equation's programs. Tickets available through ACE19 registration.

TUESDAY | JUNE 11

Water Industry Luncheon
Noon–1:15 p.m.
Attend this popular luncheon to get motivated and inspired by Sarah Sladek, Speaker, Author, and CEO, XYZ University and Josh Miller, Director of Gen Z Studies, XYZ University. Individual tickets and table reservations can be ordered online.

Tuesday Networking Happy Hour
4:30–6:00 p.m.
Explore exciting technologies and services showcased inside the ACE19 Exhibit Hall. Select registration types receive one complimentary beverage coupon attached to their badge.

Career Center Job & Education Fair
2:00–5:30 p.m.
Network with top companies at Booth #3651. The Fair will include educational booths offering information about advancing your career in the water industry. Also, professional headshots will be available from the Water Equation with a recommended $5 donation. Don't forget your résumé!

WEDNESDAY | JUNE 12

Expo Networking Event
12:30–2:00 p.m.
Last chance to visit the exhibitors during this dedicated networking time. Share a snack and explore a new corner of the Exhibit Hall before heading back to an afternoon of sessions!

ACE Wrap Party
5:00–6:30 p.m.
Free and open to all ACE19 attendees. Come to celebrate and toast to the new AWWA President, Jim R. Williams. The Wrap Party is the perfect place to kick back, unwind and celebrate another successful year at ACE!



Sponsors

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American Water Works Association

ACE19

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Event Name/Date:

2019 California HR Conference/August 25 - 28, 2019

CONTACT INFORMATION

First Name | Last Name | Date

ACCOMMODATION INFORMATION

Rooms and rates are subject to availability. Complete and submit this form as soon as possible to guarantee a room at the host hotel. In the event that the host hotel is booked, every effort will be made to secure a room at the closet hotel within comparable rates to the event discounted rate.

Arrival Date | Departure Date | No. of guests | Room Type

Do you require a smoking room?

○ Yes ○ No

Do you need transportation from the airport to the hotel?

○ Yes ○ No

Flight Number | Time

ADDITIONAL INFORMATION/REQUESTS

Staff Representative

CAHR19 Expo

With over 170 exhibiting companies at CAHR19, compare products and services in one convenient place and get a thorough overview of all the options available. From live demonstrations to interactive exhibits to one-on-one meetings, you'll return to your office armed with the information you need to take your organization to the next level.

Long Beach CALIFORNIA

AUGUST 25-28, 2019

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Created and curated by the Professionals In Human Resources Association (PIHRA,) the California HR Conference (CAHR) is a hub of human resource content for professionals who either practice or are responsible for HR management in California.

We offer a unique experience committed to your understanding of the trends and laws affecting the future of your business, to opportunities for purposeful networking, and to connecting HR communities.

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70+ **Speakers**

16.75 **Credits**

Why Attend?

Education

Maintain and sharpen your professional edge by keeping up with changing laws, regulations and cutting edge HR strategies presented by industry leaders.

Networking

Catch up with old friends and make new career-changing connections while learning, celebrating and enjoying everything HR.

Solutions

The Expo gathers over 170 exhibitors offering helpful products and services designed specifically for HR professionals.

On The Agenda

- Sunday, August 25

12:00pm - 6:00pm
Attendee Registration
1:00pm – 2:15pm
New Pre-Conference Session (California)
2:15pm - 3:45pm
Pre-Conference Concurrent Sessions (California & Business)
4:00pm - 5:00pm
PIHRA Annual Meeting
5:00pm - 6:00pm
PIHRA New Member Reception
7:00pm - 8:00pm
PIHRA Partners Reception (Invitation Only)
8:00pm - 9:00pm
New Comedy Show

- Monday, August 26

7:30am – 8:45am
First Time Attendee Orientation
7:30am - 8:45am
Concurrent Sessions
9:00am – 10:30am
Opening General Session
10:30am – 4:00pm
Exposition Open
11:15am – 12:30pm
Mega Session
11:15am – 12:30pm
Concurrent Sessions
12:30pm – 2:00pm
Lunch in the Exposition
2:00pm – 3:15pm
Concurrent Sessions
2:00pm – 4:00pm
Masters Series
4:00pm – 5:15pm
Concurrent Sessions
5:30pm – 7:00pm
Young Professionals Reception
5:30pm
Open Evening with Exhibitors & Sponsors
6:00pm – 7:30pm
Meet to Eat

- Tuesday, August 27

7:30am – 8:45am
First Time Attendee Orientation
7:30am - 8:45am
Concurrent Sessions
9:00am – 10:30am
Opening General Session
10:30am – 4:00pm
Exposition Open
11:15am – 12:30pm
Mega Session
11:15am – 12:30pm
Concurrent Sessions
12:30pm – 2:00pm
Lunch in the Exposition
2:00pm – 3:15pm
Concurrent Sessions
2:00pm – 4:00pm
Masters Series
4:00pm – 5:15pm
Concurrent Sessions
6:00pm – 7:30pm
Meet to Eat
7:00pm – 8:00pm
HR Executives Reception (Invitation Only)
8:00pm - 9:00pm
Music Show

- Wednesday, August 28

7:30am – 8:45am
Concurrent Sessions
9:00am – 10:15am
Mega Session
9:00am – 10:15am
Concurrent Sessions
10:30am – 12:00pm
Closing General Session

Sessions to Invest in.

Join more than 2,800 practitioners, providers and presenters at the California HR Conference by Professionals In Human Resources Association. Attendees are able to earn SHRM professional development credits (PDCs) and HR Certification Institute (HRCI) Business, California, Global and HR (General) recertification credits. The concurrent sessions are presented by skilled and experienced speakers in HR Compliance, California Employment Law, Business & HR Strategy, Talent Management, Global HR, Total Rewards, Professional Development, Nonprofit HR, and the Executive HR function.

Attendee Registration



Save up to 50% off from comparable conferences!

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Conference Registration

General sessions, concurrent sessions, refreshments breaks, lunch, Expo entry (Monday and Tuesday Only), one ticket to the Sunday Comedy Show if your registration is 3 day and one ticket to the Tuesday Music Show if your registration includes Tuesday.

	PREVIEW by 2/28/19	EARLY by 5/31/19	STANDARD by 7/31/19	ON-SITE after 7/31/19
PIHRA MEMBER				
☐ 3 days	$749	$799	$849	$899
☐ 1 day ○ Mon ○ Tue ○ Wed	$375	$399	$425	$449
CA SHRM CHAPTER MEMBERS				
☐ 3 days	$849	$899	$949	$999
☐ 1 day ○ Mon ○ Tue ○ Wed	$425	$449	$475	$499
SHRM AT-LARGE MEMBERS Join PIHRA (included with registration)				
☐ 3 days	$899	$949	$999	$1,049
☐ 1 day ○ Mon ○ Tue ○ Wed	$449	$475	$499	$525
NONMEMBER Join PIHRA (included with registration)				
☐ 3 days	$949	$999	$1,049	$1,099
☐ 1 day ○ Mon ○ Tue ○ Wed	$575	$599	$625	$649

PROMO/DISCOUNT CODE

Total Due (see page 3 for Optional Add-Ons)

Payment Information

Payment is due at time of registration (Tax ID# 95-2222999)

☐ VISA
☐ Mastercard
☐ AMEX
☐ Discover

☐ Pay by Check
Make checks payable to PIHRA

Card #

Valid Thru (MMYY)

Name (as it appears on credit card bill)

Cardholder Signature

Personal Information

Print clearly. Use one form for each registrant.

PIHRA Member ID (if applicable) | CA SHRM Chapter # (if applicable) | SHRM Chapter # (if applicable) | PIHRA Chapter (if applicable)

Full Name* | Job Title* | Company Name

Phone Number + ext.* | Cellphone Number* | Email* | Alternate Email

Address* | City* | State* | Zip* | Country*

Emergency Contact Name* | Emergency Contact Number*

DIETARY RESTRICTIONS: ☐ Dairy Free ☐ Vegetarian ☐ Vegan ☐ Gluten Free

☐ I wish to opt out of email communications from Conference Sponsors and Exhibitors including event invitations, conference-related contests, and special announcements. I understand I will be able to unsubscribe from email lists at any time.

CANCELLATIONS Cancellations must be received in writing and faxed to (310) 416-9055 or emailed to info@cahrconference.org. Fifty percent (50%) of the registration fee will be refunded for cancellations received by 05/31/19. Twenty-five percent (25%) of the registration fee will be refunded for cancellations received by 07/31/19. Refunds will not be granted after 07/31/19 nor will they be given for no-shows. Credits will not be issued towards future PIHRA events.
SUBSTITUTIONS All substitutions must be submitted in writing and faxed to (310) 416-9055 or emailed to info@cahrconference.org by 08/15/19. All other substitutions will be processed onsite at the registration booth. If a PIHRA member transfers his/her registration to a Nonmember, the Nonmember must do one of two things; pay the difference of the member and Nonmember price at the time of the transfer or become a PIHRA member at the time of the transfer. Only one substitution allowed per registrant. No split registrations.
ADDITIONAL INFORMATION Registration and attendance at, or participation in, PIHRA programs and other activities constitutes an agreement by the registrant to our use and distribution (both now and in the future) of the attendee's image or voice in photographs, videotapes, electronic reproductions and audiotapes of such programs and activities. SHRM At-Large and Nonmember registrations include a PIHRA membership based on the purchase date.

Sessions & Add-Ons (Optional)

[redacted]

CONFERENCE ON DEMAND

- ○ **Conference On Demand** [redacted] — $29
- ○ **Conference On Demand** [redacted] — $149

NON-PROFIT SUMMIT

- ☐ **Monday Non-Profit Summit** — $0

HRCI CERTIFICATION

- ☐ **HR Certification: aPHR Preparation Class** — $299
- ☐ **HR Certification: PHRca Preparation Class** — $449
- ☐ **HR Certification: PHR & SPHR Preparation Classs** — $640

SHRM CERTIFICATION

- ☐ **HR Certification: SHRM-CP & SHRM-SCP** — $1,050

HRO SUMMIT

Must be Head of HR or report directly to Head of HR.

- ☐ **Monday: CHRO Summit Social** [redacted] — $0
- ☐ **Tuesday: CHRO Summit** [redacted] — $0

INCLUDED SOCIAL TICKETS

Select the social events you wish to attend.

- ☐ **Sunday Comedy Show** [redacted] — $0
- ☐ **Monday Lunch** [redacted] — $0
- ☐ **Tuesday Lunch** [redacted] — $0
- ☐ **Tuesday Music Show** [redacted] — $0

SOCIAL ADD-ONS

[redacted]

- ☐ **VIP Upgrade** [redacted] — $1,000
- ☐ **Sunday: Member Social** — $0
- ☐ **Sunday: PIHRA Annual Meeting** — $0
- ☐ **Sunday: Long Beach Experience** — $50
- ☐ **Monday: Young Professionals Event** [redacted] — $20

RENEW PIHRA MEMBERSHIP

Must be current member.

- ☐ **Renew your PIHRA Membership** — $125

Total Add-Ons ($)

REGISTRATION METHODS

Register online or complete this form.

Online cahrconference.org/register

Fax [redacted]310 [redacted]416 [redacted]9055

Mail
PIHRA
ATTN: California HR Conference
1515 W 190th St, Ste 530
Gardena, CA 90248

QUESTIONS?

cahrconference.org | info@cahrconference.org | [redacted]310 [redacted]6 [redacted]210

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MINUTES OF REGULAR MEETING OF THE COMMISSIONERS OF THE ANTELOPE VALLEY STATE WATER CONTRACTORS ASSOCIATION, NOVEMBER 15, 2018.

A regular meeting of the Commissioners of the Antelope Valley State Water Contractors Association was held Thursday, November 15, 2018, at the Palmdale Water District at 2029 East Avenue Q, Palmdale. Chair Parris called the meeting to order at 6:02 p.m.

1) Pledge of Allegiance.

At the request of Chair Parris, Commissioner Thibault led the pledge of allegiance.

2) Roll Call.

Attendance:	**Others Present:**
Robert Parris, Chair	Matt Knudson, General Manager
Barbara Hogan, Vice Chair	Peter Thompson II, Asst. General Manager
Leo Thibault, Treasurer-Auditor	Tom Barnes, Resources Manager
Kathy Mac Laren, Secretary	James Chaisson, LCID General Manager
Keith Dyas, Commissioner	Dwayne Chisam, AVEK General Manager
Marco Henriquez, Commissioner	Vincent Dino, PWD Director (Alt. Cmsnr.)
	Danielle Henry, Management Analyst
	6 members of the public

3) Adoption of Agenda.

Chair Parris requested to move Agenda Item No. 11 after Agenda Item No. 6 after which it was moved by Commissioner Hogan, seconded by Commissioner Henriquez, and unanimously carried by all members of the Board of Commissioners present at the meeting to adopt the agenda, as amended, moving Agenda Item No. 11 after Agenda Item No. 6.

4) Public Comments for Non-Agenda Items.

There were no public comments.

5) Consideration and Possible Action on Minutes of Regular Meeting Held October 18, 2018.

It was moved by Commissioner Dyas, seconded by Commissioner Thibault, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve the minutes of the regular meeting held October 18, 2018, as written.

Commissioner Mac Laren arrived at 6:06 p.m.

6) Payment of Bills.

Commissioner Thibault reviewed the bills received for payment and then moved to pay the bills received from PWD in the amount of $494.14 for staff services, from AVEK in the amount of $1,612.99 for staff services, from Interactive Educational Services (IES) in the amount of $1,450.00 for the final payment of the AVSWCA.org website design and development, from Raftelis in the amount of $2,122.50 for professional services associated with the Financial Analysis for the Replacement Water Assessment for the period of October 1, 2018 through October 31, 2018, and ratification of payment made to the Antelope Valley Fair Association in the amount of $25,000.00 for the 2018 Sponsorship of the conservation garden at the Antelope Valley Fairgrounds. The motion was seconded by Commissioner Hogan and unanimously carried by all members of the Board of Commissioners present at the meeting.

11) Discussion and Possible Action on AVIRWMP Application Process for Inclusion of Proposed East Side Recycled Water Line Project with the AVIRWMP Project List. (General Manager Knudson/Assistant General Manager Thompson II)

Assistant General Manager Thompson II provided a presentation on the potential East Side Recycled Water Line Project, including the existing and proposed Antelope Valley recycled water line locations, the benefits of the proposed Project, and the next steps of moving the Project forward including the potential stakeholders and the appropriate Project sponsor, followed by a brief discussion of the participants that would benefit from the Project and the AVIRWMP application process for grant opportunities.

Mr. Ray Tremblay, Los Angeles County Sanitation Districts Head of Facilities Planning, stated that the goal and priority of the Sanitation Districts Boards is to provide recycled water to public agencies to meet the supply and demand gap and that this Project is a very good use of reclaimed water.

Chair Parris then outlined the next steps of this Project through the AVSWCA Strategic Water Plan Ad Hoc Committee and Mr. Chuck Heffernan, City of Palmdale Director of Public Works, and Mr. John Calandri, Antelope Valley agricultural farm owner, commended the Project after which it was moved by Commissioner Mac Laren, seconded by Commissioner Henriquez, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve completion of the application process for inclusion of the proposed East Side Recycled Water Line Project with the AVIRWMP Project List.

7) Consideration and Possible Action on Amendment No. 1 to the Association's Agreement for Administrative Services. (General Manager Knudson)

General Manager Knudson reviewed recommended revisions to the Association's Agreement for Administrative Services after which it was moved by Commissioner Henriquez, seconded by Commissioner Hogan, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve Amendment No. 1 to the Association's Agreement for Administrative Services.

8) Consideration and Possible Action on Approval of the 2018 Amended and Restated Memorandum of Understanding (MOU) for the Antelope Valley Regional Water Management Group IRWMP. (General Manager Knudson)

General Manager Knudson reviewed the 2018 Amended and Restated Memorandum of Understanding for the Antelope Valley Regional Water Management Group IRWMP, including the roles and responsibilities and the financial contributions from the member agencies, and after a brief discussion of the Association's contribution of managing the IRWMP funds, it was moved by Commissioner Dyas, seconded by Commissioner Mac Laren, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve the 2018 Amended and Restated Memorandum of Understanding for the Antelope Valley Regional Water Management Group IRWMP.

9) Consideration and Possible Action on Joint Funding Agreement with the USGS to Continue Monitoring Groundwater Levels and Water Quality During the Period of November 1, 2018 to October 31, 2019. (General Manager Knudson)

General Manager Knudson reviewed the proposed 2018/2019 Joint Funding Agreement with the United States Geological Survey (USGS) for continuation of

groundwater levels and water quality monitoring, and after a brief discussion of the Agreement's benefits and of scheduling a future website demonstration by USGS, it was moved by Commissioner Henriquez, seconded by Commissioner Mac Laren, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve the Joint Funding Agreement with the USGS to continue monitoring groundwater levels and water quality during the period of November 1, 2018 to October 31, 2019.

10) Consideration and Possible Action on Amendment No. 2 to the Bylaws of the Association Adopting a Mutual Aid Agreement. (Assistant General Manager Thompson II)

Assistant General Manager Thompson II reviewed the proposed amendment to the Bylaws of the Association establishing the framework for providing mutual aid to one another in times of need and emergency situations after which it was moved by Commissioner Thibault, seconded by Commissioner Henriquez, and unanimously carried by all members of the Board of Commissioners present at the meeting to approve Amendment No. 2 to the Bylaws of the Association Adopting a Mutual Aid Agreement.

12) Status Update on the Big Rock Creek Joint Groundwater Recharge Project. (General Manager Knudson/Assistant General Manager Thompson II)

General Manager Knudson provided a brief presentation on the Big Rock Creek Joint Groundwater Recharge Pilot Project, including the turn out extension design, the temporary piping, and the well locations, and stated that the Department of Water Resources (DWR) provided verbal approval to use an existing blow-off valve for the Project; that staff is expecting to receive written approval from DWR; and that LCID is securing the water source for the Project.

After a brief discussion of the water costs for the Project and of Watermaster groundwater banking credits, it was determined that the Association will provide LCID with financial support for the water source, if needed.

13) Status Update on the Financial Analysis Study for Providing Replacement Water to the Antelope Valley. (General Manager Knudson/Assistant General Manager Thompson II)

General Manager Knudson stated the draft Financial Analysis for providing replacement water to the Antelope Valley is expected to be completed by the end of November.

14) Report of General Manager.

a) Update on Antelope Valley Watermaster Meetings.

General Manager Knudson stated that the next Watermaster meeting will be held on December 5, 2018 at 10 a.m. at AVEK and that discussions will include the 2019 Budget, the 2019 Assessment rates, and the contract amendment with Todd Groundwater.

b) Update on Antelope Valley IRWMP Stakeholder Meetings.

General Manager Knudson stated that the Antelope Valley Integrated Regional Water Management Plan (IRWMP) Memorandum of Understanding (MOU) was approved this evening and that the remaining IRWMP member agencies are expected to approve the MOU before the next meeting in December.

c) Update on Fremont Basin IRWMP Stakeholder Meetings.

General Manager Knudson stated that the Fremont Basin Integrated Regional Water Management Plan (IRWMP) Stakeholders have completed the public review period for the Groundwater Management Plan, the Salt & Nutrient Plan, and the draft IRWMP; that public comments are being compiled; and that approval of the three final Plans is expected in early 2019.

15) Report of Resources Manager.

a) Update on AVSavesWater.com and AVSWCA.org website merge.

Resources Manager Barnes reported that October 31, 2018 was the last day of the AVSavesWater.com website; that the content from that site has been added to the new Association website; and that the new website will be live by the next Association meeting followed by a brief presentation of the new AVSWCA.org website and discussion of a new Commissioner photo and promotions of events through the new website.

16) Report of Controller.

a) Update on Revenue, Expenses and Change in Net Position.

General Manager Knudson provided a brief update on the Association's revenue, expenses, and change in net position for year ending October 31, 2018 and stated that the payment approved this evening for Interactive Educational Services (IES) was not budgeted but that adjustments will be made to accommodate for the payment.

17) Reports of Commissioners.

a) Status Update on AVSWCA Strategic Water Plan Ad Hoc Committee Meetings.

Chair Parris requested that Management Analyst Henry send an e-mail invitation to the potential stakeholders of the proposed East Side Recycled Water Line Project to attend the AVSWCA Strategic Water Plan Ad Hoc Committee meeting on December 5, 2018 at 11:30 a.m. at AVEK.

There were no further reports.

18) Report of Attorney.

There was no report.

19) Commission Members' Requests for Future Agenda Items.

It was determined that "Status Update on the Big Rock Creek Joint Groundwater Recharge Project" and "Status Update on the Financial Analysis Study for the Cost of Providing Replacement Water to the Antelope Valley" will remain on the next meeting agenda and "Status Update on the AVIRWMP Application Process for Inclusion of Proposed East Side Recycled Water Line Project with the AVIRWMP Project List" and "Presentation and Demonstration of USGS website" will be added to the next meeting agenda.

There were no further requests for future agenda items.

20) Consideration and Possible Action on Scheduling the Next Association Meeting January 10, 2019.

It was determined that the next regular meeting of the Association will be held on January 10, 2019 at 6:00 p.m. at Palmdale Water District.

20) Adjournment.

There being no further business to come before the Commissioners, the regular meeting of the Commissioners of the Antelope Valley State Water Contractors Association was adjourned at 7:16 p.m.

~~Secretary~~
Chair