



PALMDALE WATER DISTRICT

A CENTURY OF SERVICE

January 19, 2022

BOARD OF DIRECTORS

AMBERROSE MERINO

Division 1

DON WILSON

Division 2

GLORIA DIZMANG

Division 3

KATHY MAC LAREN-GOMEZ

Division 4

VINCENT DINO

Division 5

AGENDA FOR REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT TO BE HELD AT 2029 EAST AVENUE Q, PALMDALE OR VIA TELECONFERENCE

FOR THE PUBLIC: VIA TELECONFERENCE ONLY

DIAL-IN NUMBER: 571-748-4021 ATTENDEE PIN: 732-953-578#

Submit Public Comments at: <https://www.gomeet.com/732-953-578>

MONDAY, JANUARY 24, 2022

6:00 p.m.

DENNIS D. LaMOREAUX

General Manager

ALESHIRE & WYNDR LLP

Attorneys

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 Board Meeting held January 10, 2022.
 - 6.2) Payment of bills for January 24, 2022.
 - 6.3) Approval of Resolution No. 22-1 being a Resolution of the Board of Directors of the Palmdale Water District Proclaiming a Local Emergency Persists, Ratifying the Proclamation of a State of Emergency by the Governor Issued March 4, 2020, and Re-Authorizing Remote Teleconference Meetings of the Legislative Bodies of the Palmdale Water District for the Period Beginning February 1, 2022 and Ending February 28, 2022 Pursuant to Brown Act Provisions. (No Budget Impact – Assistant General Manager Ly)
- 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) Presentation and discussion of 2021 Accomplishments. (Assistant General Manager Ly)
 - 7.2) 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 2021 Budget:
 - a) Water Education Foundation Lower Colorado River Tour 2022 to be held March 16 – 18, 2022.
 - b) American Society of Civil Engineers 11th International Symposium on Managed Aquifer Recharge to be held April 11 – 15, 2022 in Long Beach.
- 8) Information Items:
 - 8.1) Reports of Directors:
 - a) Standing Committees; Organization Appointments; Agency Liaisons:
 - 1) Antelope Valley East Kern Water Agency (AVEK) – January 11. (Director Dino/Director Mac Laren-Gomez, Alt.)
 - 2) Personnel Committee – January 11. (Director Mac Laren-Gomez, Chair/Director Merino)
 - 3) Palmdale Recycled Water Authority (PRWA) – January 18. (Director Dino/Director Wilson/Director Mac Laren-Gomez, Alternate)

- 4) Outreach Committee – January 19. (Director Mac Laren-Gomez, Chair/Director Wilson)
- b) General Meetings Reports of Directors.
- 8.2) Report of General Manager.
 - a) January 2022 written report of activities through December 2021.
- 8.3) Report of General Counsel.
- 9) Board members' requests for future agenda items.
- 10) Adjournment.



DENNIS D. LaMOREAUX,
General Manager

DDL/dd

**PALMDALE WATER DISTRICT
BOARD MEMORANDUM**

DATE: January 18, 2022 **January 24, 2022**
TO: BOARD OF DIRECTORS **Board Meeting**
FROM: Mr. Adam Ly, Assistant General Manager
VIA: Mr. Dennis D. LaMoreaux, General Manager
RE: ***AGENDA ITEM NO. 6.3 – CONSIDERATION AND POSSIBLE ACTION ON RESOLUTION NO. 22-1 BEING A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT PROCLAIMING A LOCAL EMERGENCY PERSISTS, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY THE GOVERNOR ISSUED MARCH 4, 2020, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE PALMDALE WATER DISTRICT FOR THE PERIOD BEGINNING FEBRUARY 1, 2022 AND ENDING FEBRUARY 28, 2022 PURSUANT TO BROWN ACT PROVISIONS. (NO BUDGET IMPACT – ASSISTANT GENERAL MANAGER LY)***

Recommendation:

Staff recommends the Board approve Resolution No. 22-1 being a Resolution of the Board of Directors of the Palmdale Water District Proclaiming a Local Emergency Persists, Ratifying the Proclamation of a State of Emergency by the Governor Issued March 4, 2020, and Re-Authorizing Remote Teleconference Meetings of the Legislative Bodies of the Palmdale Water District for the Period Beginning February 1, 2022 and Ending February 28, 2022 Pursuant to Brown Act Provisions.

Alternative Options:

The Board can choose not to approve Resolution No. 22-1.

Impact of Taking No Action:

Teleconference options for the District's publicly noticed meetings will end.

Background:

With the issuance of the Governor's State of Emergency Executive Order due to the COVID-19 pandemic, the Brown Act was modified regarding agenda postings, Board member attendance from remote locations via teleconference, public attendance and participation at publicly noticed meetings via teleconference. These modifications were rescinded by the Governor effective September 30, 2021; however, agencies and special districts have the option to continue remote teleconferencing options under the provisions of newly enacted AB 361. AB 361 provides agencies the ability to meet remotely during proclaimed state emergencies under modified Brown Act requirements beyond September 30, 2021.

BOARD OF DIRECTORS
PALMDALE WATER DISTRICT

VIA: Mr. Dennis D. LaMoreaux, General Manager

January 18, 2022

The criteria to rely on the provisions of AB 361 are as follows:

- 1) The local agency is holding a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing; or
- 2) The local agency is holding a meeting during a proclaimed state of emergency for the purpose of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees; or
- 3) The local agency is holding a meeting during a proclaimed state of emergency and has determined, by majority vote, that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

Resolution No. 22-1 addresses these criteria and will remain in effect for a period of 30 days. If the District wishes to continue meeting under modified Brown Act requirements under AB 361 after 30 days, Resolution No. 22-1 must be renewed.

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:

There is no budget impact.

Supporting Documents:

- Resolution No. 22-1 being a Resolution of the Board of Directors of the Palmdale Water District Proclaiming a Local Emergency Persists, Ratifying the Proclamation of a State of Emergency by the Governor Issued March 4, 2020, and Re-Authorizing Remote Teleconference Meetings of the Legislative Bodies of the Palmdale Water District for the Period Beginning February 1, 2022 and Ending February 28, 2022 Pursuant to Brown Act Provisions

RESOLUTION NO. 22-1

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT PROCLAIMING A LOCAL EMERGENCY PERSISTS, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY THE GOVERNOR ISSUED MARCH 4, 2020, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE LEGISLATIVE BODIES OF THE PALMDALE WATER DISTRICT FOR THE PERIOD BEGINNING FEBRUARY 1, 2022 AND ENDING FEBRUARY 28, 2022 PURSUANT TO BROWN ACT PROVISIONS.

WHEREAS, the Palmdale Water District is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of Palmdale Water District's ("District") legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the District's legislative bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the District's boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, such conditions now exist in the District, specifically, a State of Emergency has been proclaimed by the Governor of the State of California on March 4, 2020 in response to the global outbreak of the novel Coronavirus disease ("COVID-19"); and

WHEREAS, meeting in person would present an imminent risk to the health and safety of attendees due to the continued impact of the COVID-19 pandemic; and

WHEREAS, the Board of Directors does hereby find that a State of Emergency has been proclaimed as a result of the threat of COVID-19 and the contagious nature of COVID-19 have caused, and will continue to cause, conditions of peril to the safety of persons within the District that are likely to be beyond the control of services, personnel, equipment, and facilities of the District, and desires to proclaim a local emergency and ratify the proclamation of state of emergency by the Governor of the State of California; and

WHEREAS, as a consequence of the local emergency, the Board of Directors does hereby find that the legislative bodies of the Palmdale Water District shall conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, the Palmdale Water District offers the option of teleconferencing to ensure access for the public to attend meetings.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE PALMDALE WATER DISTRICT DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Local Emergency. The Board hereby proclaims that a local emergency now exists throughout the District, and meeting in person would present imminent risks to the health and safety of attendees due to the serious and contagious nature of COVID-19.

Section 3. Ratification of Governor's Proclamation of a State of Emergency. The Board hereby ratifies the Governor of the State of California's Proclamation of a State of Emergency, effective as of its issuance date of March 4, 2020.

Section 4. Remote Teleconference Meetings. The staff, General Manager, and legislative bodies of the Palmdale Water District are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect on February 1, 2022 and shall be effective until the earlier of (i) February 28, 2022, which is 28 days from the adoption of this Resolution, or (ii) such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of the Palmdale Water District may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the Board of Directors of the Palmdale Water District this 24th day of January, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

President, Board of Directors

ATTEST:

Secretary, Board of Directors

APPROVED AS TO FORM:

Aleshire & Wynder, LLP, General Counsel



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

District 2021 Accomplishments

January 2022



2021 Budget

- Operations & Maintenances - \$26.2 million
- Capital Improvement Projects - \$6.92 million
 - \$3.11 million carry-overs
 - \$2.65 million new CIP
 - \$600,000 Littlerock Dam & Reservoir sediment removal
 - \$565,860 plant expenditures
- Bond Funding - \$12.2 million



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Finance

- Ended year with cash balance of \$11.745 million
- Completed issuing 2021A Bond - \$9.39 million
- Completed 2 re-funding of old bonds saving \$719,501
- Applied & received about \$400,000 arrearages payment



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Water Resources & Analytics

- Acquired 7,000 acre-feet of supplemental surface water
- Completed 2020 Urban Water Mgmt. Plan
- Started working on long term transfer with Littlerock Creek Irrigation District
- Coordinate District & AV Drought Management Team



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Water Conservation

- Rebates - \$79,894

- Toilet (146)



- Washers (35)



- Weather Controller (40)



- Landscape Conversion - \$54,212

- 30 customers totaling 58,086 Sq. Ft.

- Investigated 50 water waste complaints

- Outreach - 1,221 students

- Added commercial/municipal rebates to the WUE program



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Public Affairs

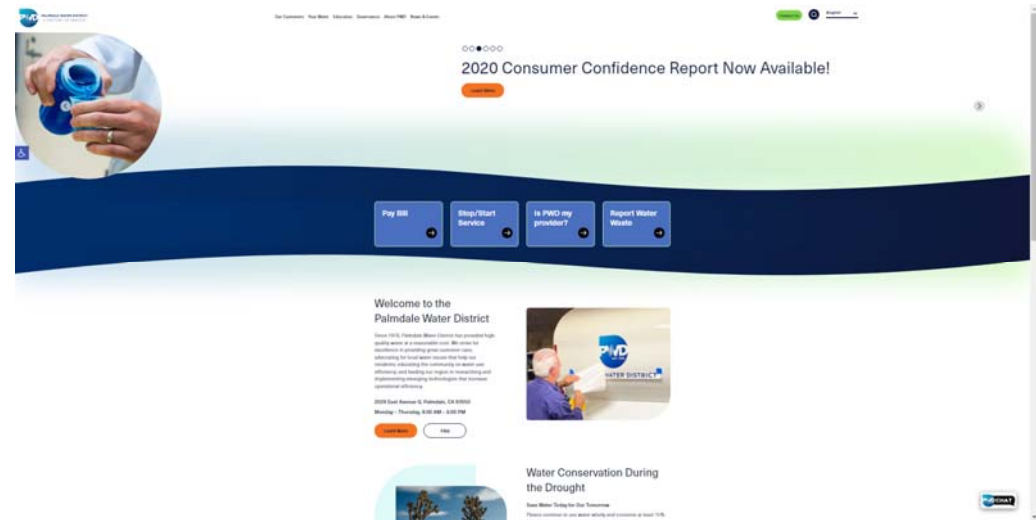
- Led CSDA North LA County formation
- Organized PWD Team for 1st Annual Hometown Heroes Softball Tournament
- Received Recognition for Let's Talk H2O
- Developed video and message to promote water conservation
- Arranged meeting with Assemblyman Lackey, Senator Wilk and LA County Board Supervisor Barger



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Information System

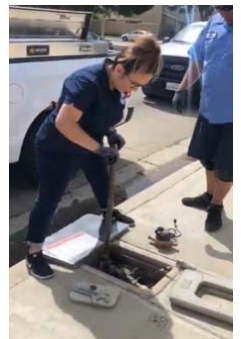
- Complete transition to New Website
- 2nd of 5-years GIS updates
- SCADA site updates
- IT Infrastructures upgrades
- New PC & Tablet change-out for employee



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Customer Care

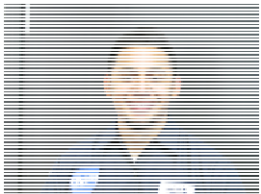
- Established COVID-19 Payment Plan
- Advised customer of relief fund
- Processed 211 leak adjustment applications, ~ \$38,669
- Handled 34,852 calls and 1062 lobby visits
- Helped 1374 new customers
- Processed 25,000+ Service Orders



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Human Resources

- Completed 10 recruitments - 10 new hires & 4 promotions
- Implemented Hazard Mitigation Plan
- Managed COVID-19 plan and communications
- Revised employee handbook



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Engineering

- Advertised and Awarded 9 projects, value ~ \$2.9 million
- Completed the Design of Well 36 and 3M Booster, Feasibility Studies for Water Augmentation & Ditch Conversion
- Updated Standard Specification & Developer Guidelines
- Awarded \$425,000 in grants
- Collected \$3.4M in fees for development projects
- Completed Sierra Hwy and Avenue P & 20th Street pipelines



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Operations

- Started PFAS monitoring to comply with regulation
- Completed all regulatory monitoring requirements
- Submitted Consumer Confidence Report
- Begin updating lab certification process
- Completion of 3 GAC Change-out



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Construction Crew

- Well 7 tie-in at P-8 & 20th Street
- Ave. S bridge approach repair
- Placed 14,000 square feet of Geosynthetic Clay Liner on Palmdale Ditch
- Replaced 12 large meters & vaults
- New Valve installation at T-8 Booster, Well 22 and Well 5



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Construction Crew

- Connected backup power to N.O.B.
- Exercised 2,000 valves
- Exercised 497 hydrants
- Maintained 171 Air Vacs



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Operations Tech

- Well 7 Rehab
- Installed 2 brine tanks
- 4 Boosters Rehab
- Installed new pump and check valves at WTP



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Fleet

- Completed purchase new water truck
- Completed purchase of flatbed
- Installed 55 new digital radios
- Renew 6 new leased vehicles



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

District-Wide

- Grant applications
 - Bureau of Reclamation for SmartWater - \$2.0 million
 - CA Drought Relief Grant - \$6.25 million
- Tesla battery backup
 - Completed 2 projects valued at \$1.5 million
 - 2 projects valued at \$3.0 million waiting for sign-off



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

2021 Year-End Summary

- Capital Improvement Project completed - \$2.549 million
- Started & Need to complete in 2022 - \$2.896 million
- Additional carry-over - \$2.7 million
- 2022 focus (\$9.348 million)
 - Pipelines
 - Hypo generators
 - Well Rehabs



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

Thank you!





Hotel and Travel Accommodations

Event Name/Date:

Water Education Foundation Lower Colorado River Tour 2022/March 16 - 18, 2022

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 closest 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



March 16, 2022 - 7:30am - March 18, 2022 - 6:30pm

LOWER COLORADO RIVER TOUR 2022

FIELD TRIP - MARCH 16-18

Explore the lower Colorado River, where virtually every drop of the river is allocated, yet demand is growing from myriad sources — increasing population, declining habitat, drought and climate change.

The 1,450-mile river is a lifeline to 40 million people in the Southwest across seven states, 30 tribal nations and Mexico. How the Lower Basin states – Arizona, California and Nevada – use and manage this water to meet agricultural, urban, environmental and industrial needs is the focus of this tour.

Registration coming soon!

This year's tour comes while the river is undergoing extraordinary and historic turmoil, and during the centennial of the 1922 Colorado River Compact. The compact divided the river's watershed into two basins, established the water allotment for each basin and provided a framework for management of the river.

Already plagued by more than 20 years of drought, officials and water users are experiencing unprecedented conditions fueled by climate change. A poor snowpack and extreme dryness have sent Lake Powell and Lake Mead plunging to record low elevations, prompting the first-ever shortage to occur in 2022. Despite Drought Contingency Plans enacted just a few years ago, experts agree urgent actions will be required before the current set of operating guidelines expire in 2026.

This 3-day, 2-night tour journeys along the Lower Colorado River from Hoover Dam and Lake Mead to the Salton Sea and the Coachella Valley, including a boat trip through scenic Topock Gorge. Along the way, experts will discuss challenges related to what is the most contested, beloved for recreation and meticulously managed river in the United States.

What attendees say about this tour:

"This tour was so well put together. You guys did a spectacular job. The topics were relevant, the speakers good, the other participants fun and knowledgeable. You could offer consulting services on how to do tours!"

"I highly recommend this tour to others. I feel this coming-together is very important to the future of water cooperation in California and the West. The tour helped me meet water users that I knew vaguely, and turned them into real people with real issues and real lives."



Tour attendees gather at a farm in the Coachella Valley.

“Great range of speakers. Great to meet fellow tour participants. Interesting locations to visit. Intensive (in a good way).”

Planned Stops Include:

- Hoover Dam
- Lake Mead
- Central Arizona Project's Mark Wilmer Pumping Plant
- Havasu National Wildlife Refuge
- Whitsett Intake Pumping Plant on the Colorado River Aqueduct
- Farms in the Palo Verde, Imperial & Coachella valleys
- Imperial Dam and the All-American Canal
- The Salton Sea

Topics Include:

- Law of the River
- Drought conditions & contingency planning in the Colorado River Basin
- Lower Basin state perspectives – Arizona, California & Nevada
- The Quantification Settlement Agreement (QSA)
- Warren H. Brock Storage Reservoir & lining the All-American Canal
- Binational water management
- Agricultural water use, drainage issues & salinity
- Urban use, history & development
- The Colorado River Basin Study
- Endangered species & the Multi-Species Conservation Program (MSCP)
- Salton Sea restoration
- Climate change

Tour Start and End Point:

The tour starts at 7:30 a.m. on March 16 in Las Vegas and ends at the Ontario International Airport in California at 6:30 p.m. on March 18.

There is a ticket option called the “**California Option**,” which is an inclusive ticket that starts and ends the tour in California. It is designed for state agency employees, but is open to any participant who wants transportation the day before the tour from Ontario Airport in Southern California to Las Vegas on March 15 and a hotel room that same night in Las Vegas. The additional cost of transit and your hotel on the night of March 15 are included in this ticket. Contact [Nick Gray](#) with any questions.

Pricing Details:

~Coming Soon~

Fee includes all meals, transportation, materials, snacks and hotel accommodations once the tour begins. Participants are responsible for their own transportation to and from the tour's beginning and end point.

COVID-19 Protocols:

Appropriate COVID-19 protocols will be followed during the tour. Details will be made available when registration opens.

Cancellation and Refund Policy:

Deadline to cancel and receive a refund is three weeks prior to the first day of the tour due to hotel, meal and transportation commitments. Substitutions are allowed up to five business days before the tour. Eventbrite fees are nonrefundable and the remaining amount may be subject to an additional 10% processing fee.

We recognize that unexpected conflicts with our tours can occur from time to time. The Water Education Foundation recommends you consider arranging travel insurance from a provider of your choice soon after tour registration to protect against such unfortunate events.

Continuing Education Credits:

Continuing education credits are available for California attorneys for an additional fee, and may be available for water plant/wastewater plant operators and other vocations/professions.

TOUR SPONSORS

Bureau of Reclamation – Lower Colorado Basin

Major Sponsor

One of five Reclamation regions, the Lower Colorado Region serves as the watermaster for the last 688 miles of the Colorado River, as well as Hoover, Davis and Parker dams.

California Department of Water Resources

Major Sponsor

The Department of Water Resources (DWR) is responsible for managing and protecting California's water. DWR works with other agencies to benefit the state's people, and to protect, restore and enhance the natural and human environments.

Stantec

Trailblazer Sponsor

At Stantec, our business objective is to maintain our position as a top tier global design and delivery firm. Our local strength, knowledge, and relationships, coupled with our world-class expertise, have allowed us to go anywhere to meet our clients' needs in more creative and personalized ways. With a long-term commitment to the people and places we serve, Stantec has the unique ability to connect to projects on a personal level and advance the quality of life in communities across the globe.



Hotel and Travel Accommodations

Event Name/Date:

American Society of Civil Engineers 11th International Symposium/April 11 - 15, 2022

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 closest 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

THE 11TH INTERNATIONAL SYMPOSIUM ON MANAGED AQUIFER RECHARGE

APRIL 11-15, 2022 | LONG BEACH, CALIFORNIA



ASCE AMERICAN SOCIETY
OF CIVIL ENGINEERS

About

ISMAR11 includes 3 pre-conference workshops, keynote speakers, two days of multi-track technical sessions, the Herman Bouwer Awards luncheon, post-conference field trips, post conference geophysics workshop, networking, socializing, and networking opportunities.

- Orange County Water District
Managed Aquifer Recharge System
and Groundwater Replenishment
System

Location

VENUE

Hilton Long Beach

701 West Ocean Boulevard
Long Beach, CA 90831, USA

Google Maps (<https://www.google.com/maps/place/Hilton+Long+Beach/@33.7680318,-118.2012556,15z/data=!4m8!3m7!1s0x0:0xde7b4bb1702a1074!5m2!4m1!1i2!8m2!3d33.7680318!4d-118.2012556>)



Reservation Details Coming Soon.

PROXIMITY

Off the I-710, this upscale hotel is a 16-minute walk from the Aquarium of the Pacific and 8 miles from Long Beach Airport.

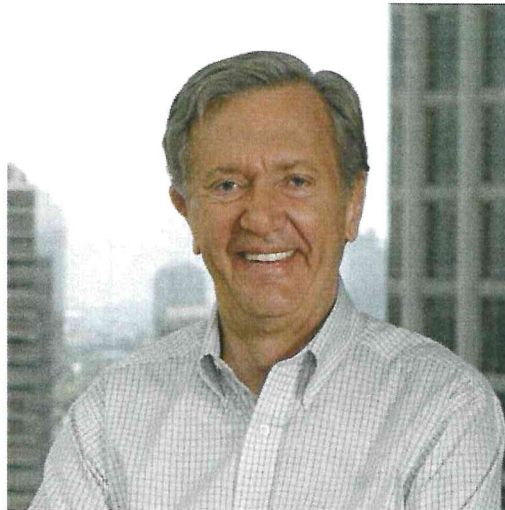
Agenda & Registration

ISMAR 11 includes 3 pre-conference workshops, keynote speakers, two days of multi-track technical sessions, the Herman Bouwer Awards luncheon, post-conference field trips, post conference geophysics workshop, networking, socializing, and networking opportunities.

[Register Now! \(https://www.grac.org/events/272/\)](https://www.grac.org/events/272/)

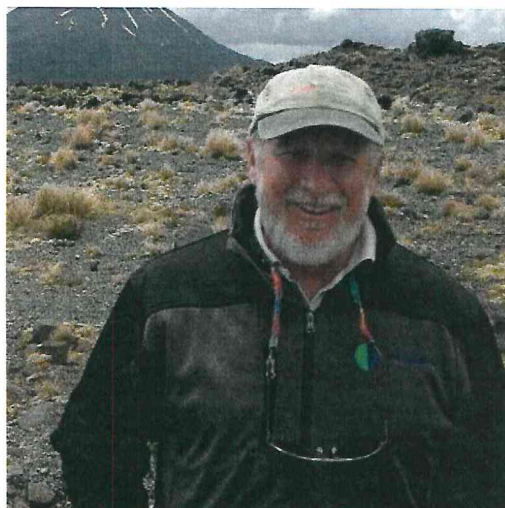
Super Early Bird Registration closes on January 15, 2021. Register today for the lowest rates available!

Keynote Highlights



Leadership: A Key Ingredient for Addressing Water Management Challenges

Bruce Babbitt served as the 16th governor of Arizona from 1978 to 1987, and as President Bill Clinton's Secretary of the Interior from 1993 to 2001.



David Kreamer, Ph.D. is a Professor of Geoscience, and past Director of the interdisciplinary Water Resources Management Graduate Program at the University of Nevada, Las Vegas. Dave serves as President of the International Association of Hydrogeologists (IAH), and is past IAH Vice President for North America. David also served as Division Director of the National Groundwater Association and is a past President of the Universities Council on Water Resources. Dave's research includes work on water and international security, maintaining good water quality supply for people and ecosystems particularly in economically developing regions, combating environmental contamination, and water quality and quantity analysis and improvement. His current research includes groundwater contamination studies, groundwater dependent ecosystem sustainability in U.S. National Parks and public lands, and water supply in Africa. He has authored over 65 professional publications, recently co-authoring the 3rd Edition of the textbook "Contaminant Hydrogeology" (Waveland Press). He has given over 150 invited lectures. David has served as a professional consultant/expert witness, has testified before the United States Congress, and addressed the United Nations General Assembly. He also has given presentations at over 40 universities, and has been an invited speaker in Europe, Asia, the Caribbean, Pacific island nations, South America, Africa and the Middle East.

Preliminary Agenda | April 11-15, 2022

April 11

Subsurface Injection and Recovery Recharge Workshop

David Pyne

Russell Martin

Surface Spreading Recharge Workshop

Mike Milczarek

Adam Hutchinson

Meeting Water Management Objectives with Managed Aquifer Recharge: The Role of MAR Governance and Policy

Sharon B. Megdal

Workshop Details - Click Here

(<https://www.grac.org/ismar-11-workshops/>)

April 12

General Sessions

Keynote 1

Bruce Babbitt, Former AZ Governor, and Sec. of Interior

Keynote 2

David Kreamer, UNLV, President of IAH

Panel 1: MAR in California

Moderator: Felicia Marcus

Panel 2 MAR in Action

Moderator: Sharon B. Megdal

Herman Bouwer Awards Luncheon

IAH Plenary Session

ISMARx Workshop

A series of short presentations by graduates and young professionals to showcase their research.

April 13

4 Concurrent Tracks

Session Topics Include:

- ASR
- MAR-Geophysics
- MAR-Emerging Contaminants
- FLOOD-MAR
- International MAR
- MAR-Integrated Water Management
- MAR-Environment
- MAR Engineering & Design
- MAR-Water Markets

Reception

Networking

Gala

April 14

4 Concurrent Tracks

Session Topics Include:

- ASR
- MAR-Geophysics
- MAR-Emerging Contaminants
- FLOOD-MAR
- International MAR
- MAR-Integrated Water Management
- MAR-Environment
- MAR Engineering & Design
- MAR-Water Markets

Reception

Poster Session

Networking

April 15

**Water Replenishment District of Southern California
Albert Robles Learning Center**

**Orange County Water District Surface Recharge
System and Groundwater Replenishment System**

Field Trips Details - Click Here
(<https://www.grac.org/ismar-11-field-trips/>)

Post-Conference - Geophysics Workshop
Ahmad-Ali Behroozmand
Max Halkjaer
John Jansen
Timothy K. Parker

Workshop Details - Click Here
(<https://www.grac.org/ismar-11-workshops/>)



(<https://www.ismar11.net/>)

**VISIT THE ISMAR 11 WEBSITE FOR MORE INFORMATION!
([HTTPS://WWW.ISMAR11.NET/](https://www.ismar11.net/))**

This event will be hosted by GRA and Co-Hosted by AHS and OCWD

**WORKSHOP DETAILS
([HTTPS://WWW.GRAC.ORG/ISMAR-11-
WORKSHOPS/](https://www.grac.org/ismar-11-workshops/))**

**FIELD TRIP DETAILS
([HTTPS://WWW.GRAC.ORG/ISMAR-11-
FIELD-TRIP/](https://www.grac.org/ismar-11-field-trip/))**

FIELD-TRIPS/)



ISMAR11 2020

from **GRA**

04:56

CANCELLATION

In the event that you are unable to attend, you may cancel your registration and receive a refund minus a \$50 processing fee if written notice of your cancellation is received by the GRA office (<mailto:office@grac.org>) at least 14 days prior to the event date. No refunds will be given for cancellations received after that date.

COVID POLICY

If you've been exposed to someone with COVID-19 or are experiencing symptoms of the disease, please contact the GRA office (<mailto:office@grac.org>) to transfer or cancel your registration with no penalty.

TRANSFERABILITY

Your registration may be transferred to another individual at any time, at no additional cost to you. Please contact the GRA office (<mailto:office@grac.org>) to transfer your registration.

If the original registrant paid the discounted member fee but the new registrant is a non-member, the non-member will be invoiced for the difference in fee amounts at the time that the original registration was made.

ADDONS

POST-CONFERENCE WORKSHOP

Price \$20.00

Options Geophysics Workshop (all fees go to student scholarship fund)

POST-CONFERENCE FIELD TRIP

Price \$100.00

Options OCWD, WRD's ARC Facility

TWO PRE-CONFERENCE WORKSHOPS

Price \$250.00

Options ASR + MAR Governance, ASR + Surface Recharge

SINGLE PRE-CONFERENCE WORKSHOP

Price \$150.00

Options MAR Governance, ASR, Surface Recharge

DATE AND TIME

Mon, Apr. 11 - Fri, Apr. 15, 2022

8 a.m. - 5 p.m.

(GMT-0800) America/Los_Angeles

LOCATION

Hilton Long Beach

701 West Ocean Boulevard
Long Beach, CA 90831-3102
United States of America

Stay at the Hilton Long Beach hotel and take advantage of its superb location near the vibrant downtown and business district. Take a walk along the beautiful beach situated one mile away. Unwind in the spacious pool, or book a sightseeing tour to discover the hidden treasures of Long Beach.



RMap data ©2022

PRICING

IAH/AHS/GRA Member (Conference Only): Super Early Bird

\$550.00

(ends 01/15/2022)

Non-Member (Conference Only): Super Early Bird

\$675.00

(ends 01/15/2022)

Accredited Developing Country (Conference Only): Super Early Bird

\$400.00

(ends 01/15/2022)

Retired/Student IAH/AHS/GRA Member (Conference Only): Super Early Bird

\$225.00

(ends 01/15/2022)

Speaker (Conference Only): Super Early Bird

\$370.00

(ends 01/15/2022)

Member (Single Day Conference): Super Early Bird

\$330.00

(ends 01/15/2022)

Retired/Student IAH/AHS/GRA Member (Single Day Conference): Super Early Bird

\$100.00

(ends 01/15/2022)

Speaker (Single Day Conference)

\$0.00

(ends 01/15/2022)

REGISTER Become a member (/memberships/referer-url/?
next=/memberships/applications/)

(https://www.facebook.com/sharer/sharer.php?
app_id=&u=http://www.grac.org/events/272/) (https://twitter.com/intent/tweet?
url=http://www.grac.org/events/272/&text=&via=) () (mailto:?subject=&body=Good day!
Check out our event: http://www.grac.org/events/272/) (/events/print-view/272/)
Group(s): GRA (/groups/your-site-name-here/)

808 R Street Suite 209, Sacramento, CA 95811 - 916-446-3626

Contact Us (/contact/) | Site Map (/sitemap.xml) | Photos (/photos/) | Log In to This Site
(/login/) | Search This Site (/search/) | Home (/)

© 2021 | Tendenci - The Open Source AMS (https://www.tendenci.com) | Privacy (/policy/)



(<https://www.facebook.com/pages/Groundwater-Resources-Association-of-California/294327849613>)



(<https://www.linkedin.com/company/gracalifornia>)



(<https://twitter.com/GRAofCalifornia>)



(</join-email-list/>)

[Contact Us \(/contact-us/\)](/contact-us/)

[Member Login \(/accounts/login/\)](/accounts/login/)

[Join GRA \(/join-gra/\)](/join-gra/)

Search Our Site

search

ISMAR 11 WORKSHOPS

MONDAY, APRIL 11, 2022

8:00 AM - 12:00 PM

ACHIEVING SUCCESSFUL GROUNDWATER RECHARGE AND RECOVERY THROUGH WELLS

Course Description

The aim of this workshop is to provide attendees with an appreciation and practical understanding of the technical, scientific, engineering design, and other issues that need to be addressed when developing managed aquifer recharge (MAR) systems that utilise wells, whether aquifer recharge (AR) wells, aquifer storage recovery (ASR) wells or aquifer storage transfer recovery (ASTR) wells.

Successful and sustainable recharge via wells requires a collaborative effort by scientists and engineers from across multiple disciplines. Failure of some MAR systems can be attributed directly to the poor design of the wells; inadequate characterization of the source and receiving water, poor engineering design or miscommunication concerning the primary objectives of the MAR system. ASR wells are quite different from standard water supply wells or injection wells.

This workshop will guide participants through the pre-requisites for, and technical feasibility of ASR systems for a variety of water sources, aquifer types, and end uses. The primary focus of the workshop will be on the key technical issues associated with planning, feasibility assessment, design, construction, operation and performance evaluation of recharge and recovery systems via wells. Economic and regulatory issues that impact well performance will also be addressed. Case studies will be used to illustrate the key considerations that need to be employed to deliver successful, integrated and sustainable ASR operations.

The workshop is aimed at MAR practitioners across all experience levels (Basic, Intermediate or Advanced). Some prior knowledge of MAR techniques and terminology is useful but not essential.

Course Instructors

David Pyne (ASR Systems, USA) has over 40 years of experience with well recharge throughout the United States and in many other countries. He coined the term “aquifer storage recovery” and has pioneered the development of that

technology. He has a Bachelor's degree in Civil Engineering from Duke University and a Master's degree in Environmental Sciences from the University of Florida, specializing in Water Resources Engineering. He has a Professional Engineer license in several states. He has taught numerous ASR workshops since 1994.

MONDAY, APRIL 11, 2022
1:00 PM - 5:00 PM

MEETING WATER MANAGEMENT OBJECTIVES WITH MANAGED AQUIFER RECHARGE: THE ROLE OF MAR GOVERNANCE AND POLICY

Workshop Description

This first-ever ISMAR workshop on governance and policy aspects of MAR is designed to inform participants on how sound MAR governance and regulatory frameworks can facilitate meeting jurisdictional water management goals. The stresses on both surface water and groundwater systems are leading many to consider MAR implementation. Understanding the elements of successful frameworks will enable policy makers and water managers to shape MAR frameworks for their jurisdictions.

The workshop has three parts. It will open with a presentation on the "Principles on Water Governance" developed by the Water Governance Initiative of the Organisation for Co-operation and Development (OECD).^{*} The principles, which are available in 18 languages here (<https://www.oecd.org/governance/oecd-principles-on-water-governance.htm>), provide the elements of a strong governance framework for water management. The second portion will focus in on examples of good governance frameworks for MAR, including Israel and Arizona in the United States. The final part will offer presentations about how, based on a sound governance-regulatory framework, MAR has been implemented to further water management and policy goals. With ample opportunity for discussion and questions built into the program, the workshop will provide a great foundation for the conference plenary sessions.

Intended Audience

The workshop is designed for anyone, regardless of background, interested in learning about MAR governance and regulatory frameworks and innovative deployment of MAR projects to meet water policy goals.

Workshop Moderator

Sharon B. Megdal, Ph.D. is Director of the University of Arizona Water Resources Research Center (WRRC) and Professor in the Department of Environmental Science. Her professional experience includes serving as a state utility regulatory, heading a regional water augmentation district, and consulting on water recharge matters. For about 20 years, she has been at the WRRC, where she bridges the academic, practitioner, and civil society communities through water policy and management research, education, and engagement programs. She has worked with farmers and government agencies to implement recharge projects. Her extensive writings on water management include articles on Arizona water banking and the guest edited (with Peter Dillon) volume, *Policy and economics of managed aquifer recharge and water banking*. Sharon Megdal has been a member of OECD's Water Governance Initiative since its 2013 inception. For 12 years Sharon Megdal served on the board of the Central Arizona Project, where she chaired the committee overseeing CAP's recharge program for five of those years. Sharon holds a Ph.D. in economics from Princeton University.

MONDAY, APRIL 11, 2022
1:00 PM - 5:00 PM

STATE OF THE ART TECHNIQUES IN IDENTIFYING AND CHARACTERIZING OPTIMUM SURFACE SPREADING GROUNDWATER RECHARGE PROJECTS

Workshop Description

Successful site selection, design and operations of surface spreading groundwater recharge operations are highly dependent on subsurface geologic conditions, source water quality, land availability and nearby land use. This course is designed to present, discuss and evaluate the best tools for site evaluation and the application of these tools for feasibility studies and recharge system design, to include a review of best management practices for operations. A spectrum of case studies will be presented to illustrate the application of these tools and interpretation of data to include:

- Defining recharge site goals and criteria for selecting an optimum recharge site
- Phased approaches to site characterization and site selection
- Near-surface field methods for hydraulic characterization
- Deep sub-surface field methods for hydraulic characterization and monitoring
- Integration of characterization, monitoring and modeling
- Considerations and methods for maintaining optimum operations

Intended Audience

The course is designed for consulting and government scientists, engineers and managers who are or will be involved in groundwater recharge studies and operations. A background in the physical sciences or engineering is desirable.

Instructors

- Mike Milczarek, President, GeoSystems Analysis, Inc.

Mike Milczarek has over 25 years of experience in developing, implementing, and managing vadose zone, hydrogeologic and geochemical studies. Groundwater recharge experience ranges from managing or participating in over 45 managed aquifer recharge and stormwater capture and recharge feasibility studies. Mike earned Bachelors' degrees in Chemistry and Environmental Science from Northern Arizona University and a Master's degree in Soil and Water Science from the University of Arizona.

- Adam Hutchinson, Recharge Planning Manager, Orange County Water District

Adam has over 30 years water resources experience. In his 20 years at the District, he has worked as Director of Recharge Operations and as Senior Hydrogeologist. He has an undergraduate degree in Geology, a master's degree in Hydrology from the University of Arizona. He is a Professional Geologist (PG) and Certified Hydrogeologist (CHG) in the state of California.

FRIDAY, APRIL 15, 2022
9:00 AM - 12:00 PM

APPLICATION OF GEOPHYSICS FOR MANAGED AQUIFER RECHARGE

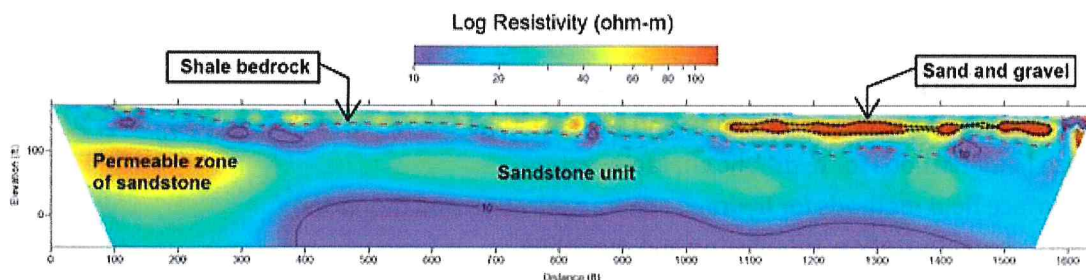
Brought to you by:



Workshop Description

To assess the viability of a site for MAR, detailed three-dimensional (3D) information about the subsurface materials and their hydraulic properties is required. Among a wide variety of applications, surface geophysical methods have been used

in MAR projects for improved understanding of the subsurface lithology. Different geophysical methods are sensitive to different physical parameters of the subsurface materials and have their own limitations with respect to the area of coverage, penetration depth, and spatial resolution. To be used effectively, the manager of a MAR project needs a basic understanding of the geophysical methods available and how they can be used to site and improve the efficiency of MAR systems, reduce risk, and reduce costs.



Various methods have been used for various objectives in MAR studies. These methods are described in the workshop and include surface nuclear magnetic resonance (NMR), electrical resistivity, frequency domain electromagnetics (FDEM), time domain electromagnetics (TEM), borehole geophysics and seismic reflection. The objective of this workshop is to provide attendees information on a broad array geophysical imaging methods and practical application through examples and lessons learned. The intent is to provide the project manager with the working knowledge needed to specify and evaluate geophysical surveys that provide the coverage and resolution that are optimal for the assessment of MAR sites for projects targeted at recharging shallow to deeper parts of the groundwater system. The workshop will provide ample opportunity for group discussions, and input on specific projects and site settings.

Instructors

- Ahmad-Ali Behroozmand, Ramboll, Emeryville, California, USA

Ahmad-Ali Behroozmand is a Senior Geophysicist with the Water Resources Group at Ramboll US Consulting, Inc. He holds a Ph.D. degree in geophysics and has more 12 years of experience in conducting groundwater-related projects. Ahmad has been involved in numerous groundwater projects worldwide. In California, he has focused on numerous groundwater projects in compliance with the Sustainable Groundwater Management Act (SGMA), and is the lead field geophysicist on the CA statewide AEM surveys.

- Max Halkjaer, Ramboll, Aarhus, Denmark

Max Halkjaer has a Master's degree in geology and geophysics from the University of Aarhus. He has 26 years of experience in groundwater management and application of geophysical methods to solving complex hydrogeologic problems. Since 2013 he has been a Senior Hydrogeologist and Geophysicist for Ramboll Water with a focus on California, and is the lead geophysicist on the CA statewide AEM surveys.

- John Jansen, Collier Geophysics, West Bend, Wisconsin, USA

John has a B.S. in Geology and a M.S. and Ph.D. in Geological Sciences with an emphasis in hydrogeology and geophysics. John works on a wide variety of groundwater and energy storage projects. He received the NGWA Keith A Anderson Award in 2012 and was the NGWA McEllhiney Distinguished Lecturer in Water Well Technology in 2013. John was an invited lecturer on managed aquifer recharge and groundwater geophysics for the Geoscience University of China in Beijing in June of 2018.

- Timothy K. Parker, Ramboll, Emeryville, California, USA

Tim Parker is Professional Geologist, Certified Engineering Geologist, and Certified Hydrogeologist with more than 35 years of experience focused on the development and management of groundwater resources. He is currently involved with GSP development and implementation in northern and southern California SGMA high and medium priority

basins, and is the licensed professional responsible for the CA statewide AEM surveys. Tim is a member of the ACWA Groundwater Committee, Director on the National Ground Water Association and Chairs the International Association of Hydrogeologists US National Chapter.

 [Print \(/pages/print-view/ismar-11-workshops/\)](/pages/print-view/ismar-11-workshops/)

[http://lp.us.grundfos.com/2019-waterpro-championship.html?](http://lp.us.grundfos.com/2019-waterpro-championship.html?utm_medium=digitalad&utm_source=GRACWebsite&utm_campaign=waterprochampionship&utm_content=find_an_event)

[utm_medium=digitalad&utm_source=GRACWebsite&utm_campaign=waterprochampionship&utm_content=find_an_event\)](http://lp.us.grundfos.com/2019-waterpro-championship.html?utm_medium=digitalad&utm_source=GRACWebsite&utm_campaign=waterprochampionship&utm_content=find_an_event)



[https://us.grundfos.com/industries/groundwater-irrigation.html?](https://us.grundfos.com/industries/groundwater-irrigation.html?utm_source=GRAC&utm_medium=banner&utm_campaign=technical_hotline&utm_content=340x170)

[utm_source=GRAC&utm_medium=banner&utm_campaign=technical_hotline&utm_content=340x170\)](https://us.grundfos.com/industries/groundwater-irrigation.html?utm_source=GRAC&utm_medium=banner&utm_campaign=technical_hotline&utm_content=340x170)

UPCOMING EVENTS

San Francisco Bay Area Branch January ... [\(/events/421/\)](/events/421/)

Wednesday, January 19, 2022

ISMAR11 (Sponsor and Exhibitor Opportunities) [\(/events/345/\)](/events/345/)

Monday, April 11, 2022

ISMAR11 [\(/events/272/\)](/events/272/)

Monday, April 11, 2022

[VIEW MORE EVENTS » \(/EVENTS/MONTH/\)](#)

LATEST NEWS

GRA Hydroflash | National Assessment of the Economic Benefits of Geological Mapping [\(/news/naydroflash-national-assessment-of-the-economic-benefits-of-geological-mapping/\)](/news/naydroflash-national-assessment-of-the-economic-benefits-of-geological-mapping/)

The Association of American State Geologists (AASG) and the Kansas ...

[Read More !\[\]\(1f56542a42e2413e44a2b2023033aa2e_img.jpg\) \(/news/naydroflash-national-assessment-of-the-economic-benefits-of-geological-mapping/\)](/news/naydroflash-national-assessment-of-the-economic-benefits-of-geological-mapping/)

GRA Hydroflash: State Launches Listening Sessions as Part of Drought Executive Proclamation to Develop Drinking Water Well Principles and Strategies [\(/news/gra-hydroflash-state-launches-listening-sessions/\)](/news/gra-hydroflash-state-launches-listening-sessions/)

As part of the April 21, 2021 Executive Drought Proclamation, ...

[Read More !\[\]\(bff896c19919791b89ab521f039b410a_img.jpg\) \(/news/gra-hydroflash-state-launches-listening-sessions/\)](/news/gra-hydroflash-state-launches-listening-sessions/)

DWR Releases First GSP Reviews [\(/news/drw-assessment-2021/\)](/news/drw-assessment-2021/)

The California Department of Water Resources (DWR) on June 3, 2021 ...

[Read More !\[\]\(4186b6ce3a1c83eabb297c1bfd00309c_img.jpg\) \(/news/drw-assessment-2021/\)](/news/drw-assessment-2021/)

[VIEW ALL NEWS » \(/NEWS/\)](#)

OUR PHOTOS



[\(/photos/20/in/3/\)](/photos/20/in/3/)



[\(/photos/21/in/4/\)](/photos/21/in/4/)



[\(/photos/38/in/4/\)](/photos/38/in/4/)



[\(/photos/13/in/2/\)](/photos/13/in/2/)



[VIEW MORE PHOTOS » \(/PHOTOS/\)](/PHOTOS/)

808 R Street Suite 209, Sacramento, CA 95811 - 916-446-3626

[Contact Us \(/contact/\)](/contact/) | [Site Map \(/sitemap.xml\)](/sitemap.xml) | [Photos \(/photos/\)](/photos/) | [Log In to This Site \(/login/\)](/login/) | [Search This Site \(/search/\)](#) | [Home \(/\)](/)

© 2021 | [Tendenci - The Open Source AMS \(https://www.tendenci.com\)](https://www.tendenci.com) | [Privacy \(/policy/\)](/policy/)



 (<https://www.facebook.com/pages/Groundwater-Resources-Association-of-California/294327849613>) 

(<https://www.linkedin.com/company/gracalifornia>)  (<https://twitter.com/GRAofCalifornia>)  (</join-email-list/>)

[Contact Us \(/contact-us/\)](/contact-us/)

[Member Login \(/accounts/login/\)](/accounts/login/)

[Join GRA \(/join-gra/\)](/join-gra/)

Search Our Site

search

ISMAR 11 FIELD TRIPS

FRIDAY, APRIL 15, 2022
8:30 AM - 2:00 PM

GROUNDWATER ADVENTURE TOURS!



TOUR ITINERARY (<https://www.grac.org/files/2543/>)

MINUTES OF MEETING OF THE PERSONNEL COMMITTEE OF THE PALMDALE WATER DISTRICT, AUGUST 18, 2021:

A meeting of the Personnel Committee of the Palmdale Water District was held Wednesday, August 18, 2021, at 2029 East Avenue Q, Palmdale, CA 93550 and via teleconference. Chair Mac Laren-Gomez called the meeting to order at 10:30 a.m.

1) Roll Call.

Attendance:

Committee:

Kathy Mac Laren-Gomez, Chair
Amberrose Merino,
Committee Member

Others Present:

Dennis LaMoreaux, General Manager
Adam Ly, Assistant General Manager
Jennifer Emery, Human Resources Director
Judy Shay, Public Affairs Director
Scott Rogers, Engineering/Grant Manager
Jim Stanton, Information Technology Manager
Dawn Deans, Executive Assistant
0 members of the public

2) Adoption of Agenda.

It was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting to adopt the agenda, as written.

3) Public Comments for Non-Agenda Items.

There were no public comments for non-agenda items.

4) Action Items: (The Public Shall Have an Opportunity to Comment on Any Action Item as Each Item is Considered by the Committee Prior to Action Being Taken.)

4.1) Consideration and Possible Action on Approval of Minutes of Meeting Held July 15, 2021.

It was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting to approve the minutes of the Personnel Committee meeting held July 15, 2021, as written.

4.2) Consideration and Possible Action on a Recommendation on a Job Description and Salary Range for a Construction Inspector Trainee Position. (No Budget Impact – Human Resources Director Emery)

Human Resources Director Emery provided an overview of the Construction Inspector Trainee position, and after a brief discussion, it was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to approve the job description and salary range for a Construction Inspector Trainee position and that this item be presented to the full Board for consideration at the August 23, 2021 Regular Board Meeting.

4.3) Consideration and Possible Action on a Recommendation on Establishing a Salary Range for a Network Administrator Position. (\$7,735.00 – Budgeted – Budget Item No. 1-09-4000-000 – Human Resources Director Emery)

Human Resources Director Emery provided an overview of the Network Administrator position, and after a brief discussion of this position, it was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to approve the salary range for the Network Administrator position in the not-to-exceed amount of \$7,735.00 for the remainder of 2021 and that this item be presented to the full Board for consideration at the August 23, 2021 Regular Board Meeting.

4.4) Consideration and Possible Action on a Recommendation on a Work-From-Home Policy and Agreement. (No Budget Impact – Human Resources Director Emery)

Human Resources Director Emery provided an overview of the need for a Work-From-Home Policy and Agreement, and after a brief discussion of working from home due to pandemics, longer term work-from-home situations, equipment needs, and manager discretion for working from home, it was moved by Committee Member Merino, seconded by Chair Mac Laren-Gomez, and unanimously carried by all members of the Committee present at the meeting that the Committee concurs with staff's recommendation to approve the Work-From-Home Policy and Agreement and that this item be presented to the full Board for consideration at the August 23, 2021 Regular Board Meeting.

4.5) Discussion of Succession Planning and Programs. (No Budget Impact – Human Resources Director Emery)

Human Resources Director Emery provided an overview of the District's efforts regarding Succession Planning, including updated job descriptions, employees identifying career paths and recognizing job duties, manager identification for their successors, cross-training, tuition reimbursement for training and college courses, formalized in-house training, and lunch-and-learn educational opportunities, followed by discussion of working with other water agencies and local community colleges for the development of water-related programs and the requirements to meet their curriculum.

4.6) Discussion of the District's Policy Regarding Medical Benefits. (No Budget Impact – Human Resources Director Emery/General Manager LaMoreaux)

Human Resources Director Emery stated that it is District policy to pay the full premium for the lowest cost medical plan; that this amount automatically adjusts annually based on the cost of the medical benefit plans; that the cost for the District's medical plans for 2022 are lower than 2021; and that staff recommends this policy be further discussed in 2022 to determine if a cap on costs is needed followed by discussion of an insurance-for-all concept and the benefit of the District's range of medical plan options.

5) Reports:

5.1) Human Resources Director Emery:

a) Personnel Policy Effects of COVID-19 Event.

Human Resources Director Emery stated that there has been an increase in the number of COVID-19 outbreaks including with District staff; that the District's COVID-19 Prevention Program policy remains in effect; and that more stringent staffing restrictions can be implemented, if needed, to continue to be able to provide water followed by discussion of the hospitalization rate of those vaccinated versus those unvaccinated.

6) **Board Members' Requests for Future Agenda Items.**

There were no requests for future agenda items.

7) **Date of Next Committee Meeting.**

It was stated that the next Personnel Committee meeting will be held September 16, 2021 at 8:00 a.m.

8) **Adjournment.**

There being no further business to come before the Personnel Committee, the meeting was adjourned at 11:28 a.m.


Chair

PALMDALE RECYCLED WATER AUTHORITY (PRWA)

**MINUTES OCTOBER 18, 2021
PALMDALE RECYCLED WATER AUTHORITY (PRWA)
HELD AT CITY OF PALMDALE
CITY HALL COUNCIL CHAMBER
38300 SIERRA HIGHWAY, SUITE B
PALMDALE, CALIFORNIA
6:00 P.M.**

1. CALL TO ORDER

Chair Dino called the meeting to order at 6:00 p.m.

2. PLEDGE OF ALLEGIANCE

**3. ROLL CALL CHAIR VINCENT DINO, DIRECTORS AUSTIN BISHOP,
DON WILSON, JUAN CARRILLO, AND ZAKEYA ANSON**

PRESENT: Directors Dino, Carrillo, Wilson, Anson, and Alternate Director Bettencourt

Alternate Director Bettencourt attended the meeting for Austin Bishop.

All Directors attended in person or telephonically and were able to participate in all matters.

4. PUBLIC COMMENTS

Public Comments: None.

5. CONSENT CALENDAR:

- 5.1 Approve Minutes from the previous meeting held on June 21, 2021. (Staff Reference: Acting Authority Secretary Faber)
- 5.2 Approve receipt and filing of the Treasurer's Report for the nine months ending September 30, 2021. (Staff Reference: Treasurer-Auditor Hoffmeyer)
- 5.3 Approve receipt and filing of the Investment Report for the quarter ending September 30, 2021. (Staff Reference: Treasurer-Auditor Hoffmeyer)

- 5.4 Adopt Resolution No. PRWA 2021-003, a Resolution of the Board of Directors of the Palmdale Recycled Water Authority designating by title and name those officials who are authorized to sign checks and warrants. (Staff Reference: Treasurer-Auditor Hoffmeyer)

Alternate Director Bettencourt pulled this item for discussion. She wanted to know why Director Bishop was being replaced. She wanted to advocate for him since she was attending the meeting in his stead. Acting Authority Secretary Faber stated that the Resolution was to change out former Chair and Vice Chair and replace them with the current Chair and Vice Chair.

Moved by Director Carrillo, seconded by Director Bettencourt.

Vote: (5-0)

Yes: Directors Dino, Carrillo, Wilson, Anson, and Bettencourt

- 5.5 Adopt Resolution No. PRWA 2021-004, a Resolution of the Board of Directors of the Palmdale Recycled Water Authority updating its investment policy. (Staff Reference: Treasurer-Auditor Hoffmeyer)

- 5.6 Ratify Director Anson's attendance at the WateReuse Conference held September 19-21, 2021. (Staff Reference: Executive Director LaMoreaux)

Acting Authority Secretary made a correction to the date of the meeting minutes to be approved.

Move to approve the recommendations and findings on all items listed under this Consent Calendar with the exception of Item 5.4.

Moved by Director Carrillo, seconded by Director Wilson.

Vote: (5-0)

Yes: Directors Dino, Carrillo, Wilson, Anson, and Bettencourt

6. ACTION ITEM:

- 6.1 Consideration and possible action on Resolution No. PRWA 2021-002, a Resolution of the Board of Directors of the Palmdale Recycled Water Authority authorizing the adoption of the Palmdale Recycled Water Authority 2022 Annual Budget. (Staff Reference: Treasurer-Auditor Hoffmeyer)

Treasurer-Auditor Hoffmeyer presented the proposed 2022 Annual Budget. Mr. Hoffmeyer stated that the major changes for this year will be the suspension of the contributions from City of Palmdale and Palmdale Water

District, that water sales were higher than normal, due to the drought conditions and potable water being shifted over to recycled water for construction purposes. Treasurer-Auditor Hoffmeyer stated that \$50,000 has been budgeted for updating the Master Plan and another \$10,000 for the website when and if we decide to move forward.

Director Carrillo asked if the PRWA Conference budget would allow for any member on the Board to attend conferences. Executive Director LaMoreaux stated that during the formation of the Authority it was agreed that each entity would carry the cost of their respective members as it pertained to training. Director Carrillo asked if that provision could be provided to all the members of the Board. Executive Director LaMoreaux stated that he would provide that section of the Joint Powers Agreement to all Board Members.

Public Comments: None.

Move to Adopt Resolution No. PRWA 2021-002.

Moved by Director Carrillo, seconded by Director Wilson.

Vote: (5-0)

Yes: Directors Dino, Carrillo, Wilson, Anson, and Bettencourt.

7. PRESENTATIONS:

7.1 Presentation on the Monterey 1 Water Tour (Staff Reference: Scott Rogers, PWD Engineering Manager)

PWD Engineering Manager Rogers gave a brief overview of the tour that Chair Dino and PWD President Dizmang took while in Monterey attending the California Special Districts Association Annual Conference. Mr. Rogers set up a tour of the Monterey 1 Water to tour their advanced treatment facility in Salinas, CA. Monterey staff gave an overview of the project itself. This \$140 million project is similar to what we would like to do in Palmdale. Toured the learning center where they had a pilot where they showed the MF Filter RO filter advanced oxidation system and UV system. We had a great discussion with District Staff and General Manager regarding the project, lessons learned, and anything that they would recommend as part of our project.

7.2 Status updated on the advanced water treatment project. (Staff Reference: Scott Rogers, PWD Engineering Manager)

PWD Engineering Manager Rogers provided the Board with an update on the Advanced Water Treatment plant. Currently he is working on an RFP for Palmdale Water District to hire a Program Manager for the project. The

Program Manager will handle the initial work for the design, groundwater modeling, testing, and coming up with the requirements for the pilot as well as the demonstration facility. After that they will work on the initial design up to 30% and then they will hand off to a design build team. The Program Manager is also going to look at alternative delivery methods.

Director Carrillo asked if we are still waiting to get the plans for the booster stations and if the advanced water treatment project is tied to us getting those plans from LA County or is it a separate project. Executive Director LaMoreaux stated that there is no connection with those plans and the advanced water treatment.

7.3 Discussion of status of the 2015 PRWA Recycled Water Master Facilities Plan and potentially performing an update of the Plan. (Staff Reference: Executive Director LaMoreaux)

Executive Director LaMoreaux spoke regarding this item. There was a discussion earlier in the year regarding the Phase 2 project. Staff's recommendation was to suspend work on the project due to funding concerns. We had grants secured in the amount of \$900,000 and it didn't seem logical to proceed with the project. This project will require the booster station plans from the County. Another reason we suspended the project was the change in the direction from blended recharge project to advanced water treatment. One of the advantages is if the City of Palmdale were to participate in the cost of the project, we would be able to drought proof city facilities within PWD boundaries without the need for purple pipe.

Executive Director LaMoreaux requested the Board's permission to work on a draft Request for Proposal to have the Master Plan updated. Director Carrillo asked about the cost difference and how much staff time/cost would be involved. Executive Director LaMoreaux stated that Advanced Water Treatment would cost \$87M-\$100M and provide us with 5,000 ac-ft as compared to the 2,000 ac-ft using purple pipe. Assistant Executive Director Heffernan stated that the draft RFP would take about 6 hours or so of his time.

Executive Director LaMoreaux explained the water treatment process and its uses. Mr. Heffernan stated that the city would be able to bank water in the aquifer and that water would be outside of the State's jurisdiction should restrictions be issued.

Director Carrillo asked if the city would be charged for the water. Mr. LaMoreaux stated that it would depend on the city's financial participation in the project.

Director Wilson asked about the separate systems required for schools/parks. Executive Director LaMoreaux stated that the facilities would have to be replumbed in order to use the recycled water, and that the cost would be beyond the scope of the Master Plan.

Director Anson asked what the plans were for public buy-in. PWD Engineering Manager Rogers stated that part of the RFP would include a learning center similar to the one in Monterey. The pilot would be turned into a learning center to engage the community and get them onboard.

Authority Counsel Beck stated that the item was listed on the agenda as a presentation. This is a representation of how staff would like to proceed. The Board had no objections.

8. DIRECTOR REQUESTS FOR NEW AGENDA ITEMS:

Director Carrillo asked if they could bring back an update on the Littlerock Dam. Executive Director LaMoreaux stated that the dam was closed until April 2022. In the meantime, PWD is working with regulatory agencies to obtain the necessary permits. He also stated that 19,000 cubic yards of sediment was taken to a local quarry.

9. INFORMATIONAL REPORT OF THE BOARD OF DIRECTORS, EXECUTIVE DIRECTOR, AND ASSISTANT EXECUTIVE DIRECTOR.

Director Anson spoke about the WateReuse conference she attended in September.

10. ADJOURNMENT.

Director Dino adjourned the meeting to Tuesday, January 18, 2022, at 6:00 p.m. at the City of Palmdale City Hall Council Chambers located at 38300 Sierra Highway, Suite B, Palmdale, California.

Chair

ATTEST:

Roxanne Faber
Acting Authority Secretary

PALMDALE WATER DISTRICT BOARD MEMORANDUM

DATE: January 19, 2022

January 24, 2022

TO: BOARD OF DIRECTORS

Board Meeting

FROM: Mr. Dennis D. LaMoreaux, General Manager

RE: ***AGENDA ITEM NO. 8.2.a – JANUARY 2022 GENERAL MANAGER REPORT***

The following is the January 2022 report to the Board of activities through December 2021. It is organized to follow the District's 2020 Strategic Plan approved in August 2020 and composed of six strategic initiatives. The initiatives follow for reference. It is intended to provide a general update on the month's activities.

PWD 2020 STRATEGIC PLAN SUMMARY



Water Resource Reliability: *Resilience, Development, Partnership*

Support and participate with local agencies in the development of projects and policies that improve water reliability

Expand the recycled water distribution system for both public access and construction water

Continue the Palmdale Regional Groundwater Recharge and Recovery Project to maximize state and federal funding opportunities

Support projects and initiatives that increase the resilience of the State Water Project

Expand access to available water supplies to increase drought resiliency, develop water storage projects, and improve the ability to capture groundwater, local surface water, and recycled water

Update the 2010 Strategic Water Resources Plan and Water Supply Fee to ensure funding for needed projects

Strengthen stakeholder relationships and implement Littlerock Dam and Reservoir sediment removal



Organizational Excellence: *Train, Perform, Reward*

Offer competitive compensation and benefits package for employee recruitment and retention

Focus Succession Planning Program on ensuring an overlap of training for key positions

Continue providing transparency to our ratepayers

Promote and support leadership training and professional development programs to enhance the District's customers' experience

Ensure employees are trained on the Strategic Plan and the District's Values of Diversity, Integrity, Teamwork, and Passion

Improve safety for Directors, employees, and customers

Develop career paths at the District for interns and pursue state and federal funding for intern programs

Involve employees in community engagement and professional platforms



Systems Efficiency: *Independence, Technology, Research*

Explore energy independence and evaluate the feasibility of energy options, including wind and solar

Incorporate more energy efficient technologies into the District's infrastructure

Advance new technologies to increase treatment efficiencies, including the use of Granular Activated Carbon (GAC)

Research state-of-the-art treatment techniques to help with systems efficiency and flexibility in using recycled water and surface water

Enhance technologies to increase efficiencies

Re-evaluate Lake Palmdale by-pass pipeline and pursue funding options

Improve Palmdale Ditch to reduce water loss



Financial Health and Stability: *Strength, Consistency, Balance*

Pursue grant funding for District projects and operations

Maintain the five-year financial plan adopted as part of the 2019 Water Rate Study, including the five-year Capital Improvement Plan

Build adequate reserve levels and achieve high-level bond rating

Seek potential revenue sources from vacant District properties

Monitor finances, operations, and projects affected by emergencies

Digitize and document departmental workflows



Regional Leadership: *Engage, Lead, Progress*

Increase involvement with water, business, and community partnerships

Provide opportunities for local businesses to contract with the District

Expand the Greater Antelope Valley Water Emergency Coalition by continuing to collaborate with neighboring water agencies and moving to include more agencies outside of the Antelope Valley

Develop working relationships and mutually beneficial projects with other water agencies in the District's state and federal representatives' districts

Develop events or activities with lessees of District properties

Host a 100th anniversary celebration for a fully re-opened Littlerock Dam and Reservoir recreation area in 2024



Customer Care, Advocacy and Outreach: *Promote, Educate, Support*

Enhance customers' experience through communication and feedback

Evaluate, develop, and market additional payment options

Develop the District's Public Outreach Plan and increase public awareness of current programs and services

Develop partnerships with various agencies to distribute information about resources available to the public

Engage elected officials and the public on the importance of local, state, federal, and global water reliability issues

Expand the District's social media platforms and find new avenues to share information and news

Plan and convert to an Advanced Metering Infrastructure (AMI) to increase customers' knowledge of water use

Continue to promote and expand school water education programs

Overview

This report also includes charts that show the effects of the District's efforts in several areas. They are organized within each strategic initiative and include status of the State Water Resources Control Board's (SWRCB) former long-term conservation orders (20 x 2020), the District's total per capita water use trends, 2021 actual water production and customer use graph, mainline leaks, and the water loss trends for both 12- and 24-month running averages.



Water Resource Reliability *Resilience, Development, Partnership*

This initiative includes conservation efforts, water supply projects, and water planning.

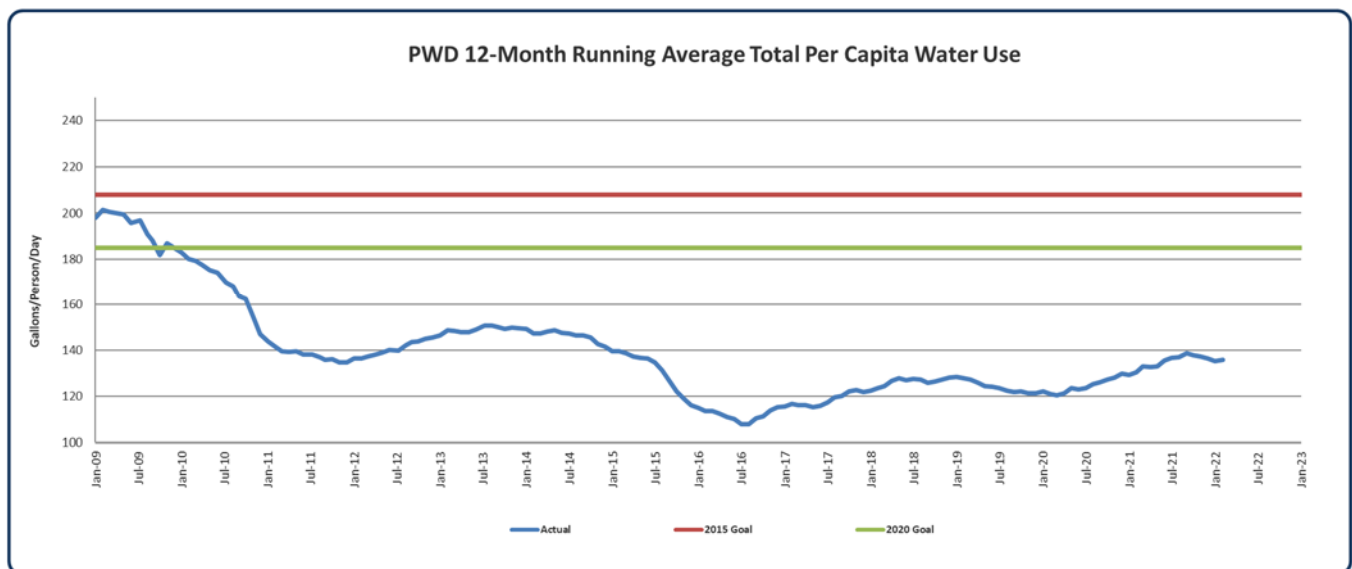
Recent highlights are as follows:

Overall Water Use Goals and Compliance

The 20 x 2020 per capita reduction goals passed by the legislature in 2009 with new long-term water budgeting requirements have now been replaced with new requirements and water agency water budgets. These follow through on the “Making Water Conservation a California Way of Life” plan. The District expects to easily comply with the new requirements as they are based on the same philosophy as the District’s water budget rate structure.

The 2020 Urban Water Management Plan was adopted by the District in June 2021. It does not relate the District’s water use to the upcoming agency water budget. Until these criteria are finalized, the customers’ performance is shown in this report using the 20 x 2020 requirements.

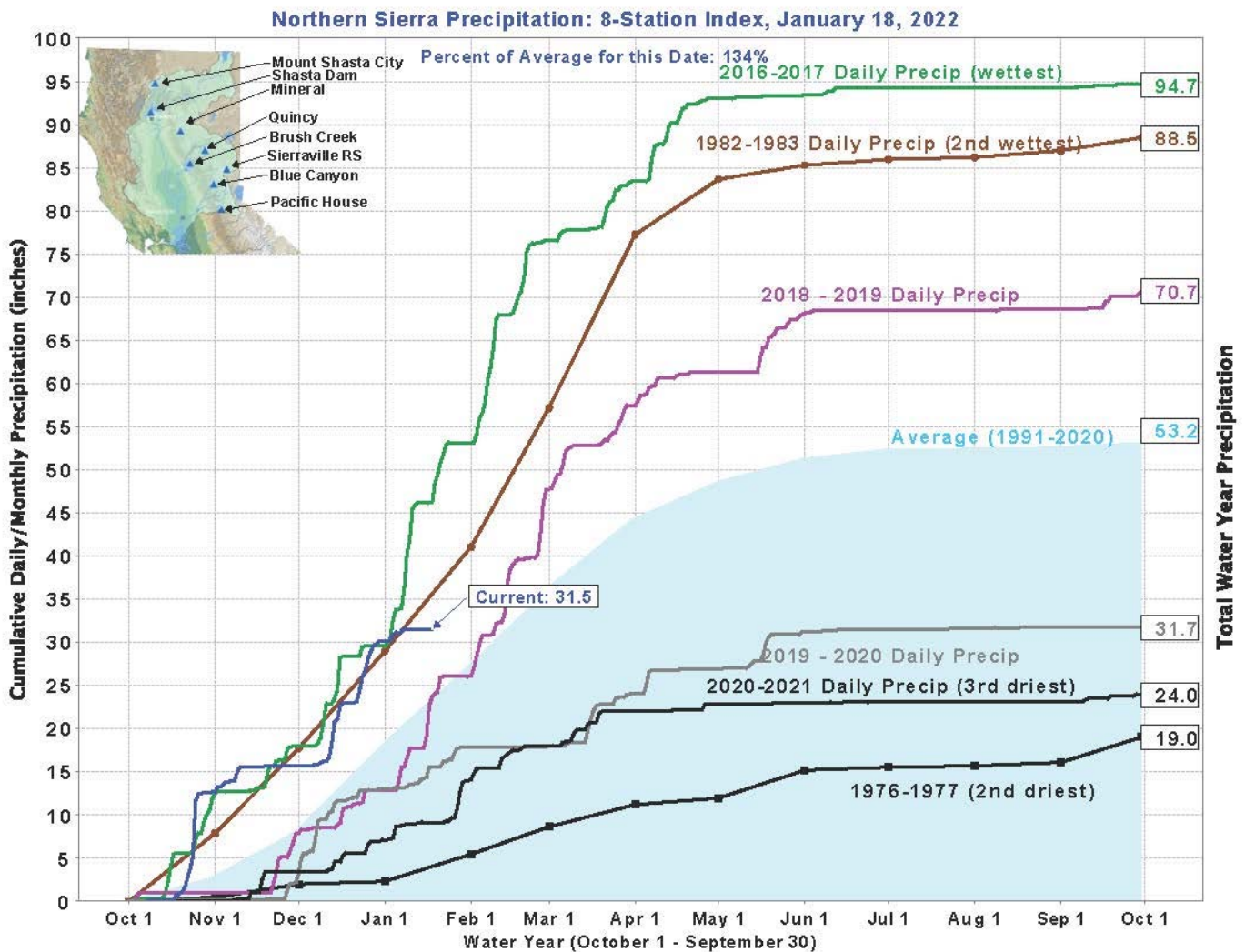
The District’s compliance with the former 20 x 2020 law is evident from the chart titled “PWD 12-Month Running Average Total Per Capita Water Use:”



The District’s customers have cut their water use by **41.1%** from the baseline number of 231 re-established in the 2020 Urban Water Management Plan and met the 2020 Goal in early 2010. The current Metered-GPCD is 136 showing our customers’ reduced usage.

2021 Water Supply Information – Extremely Dry Year

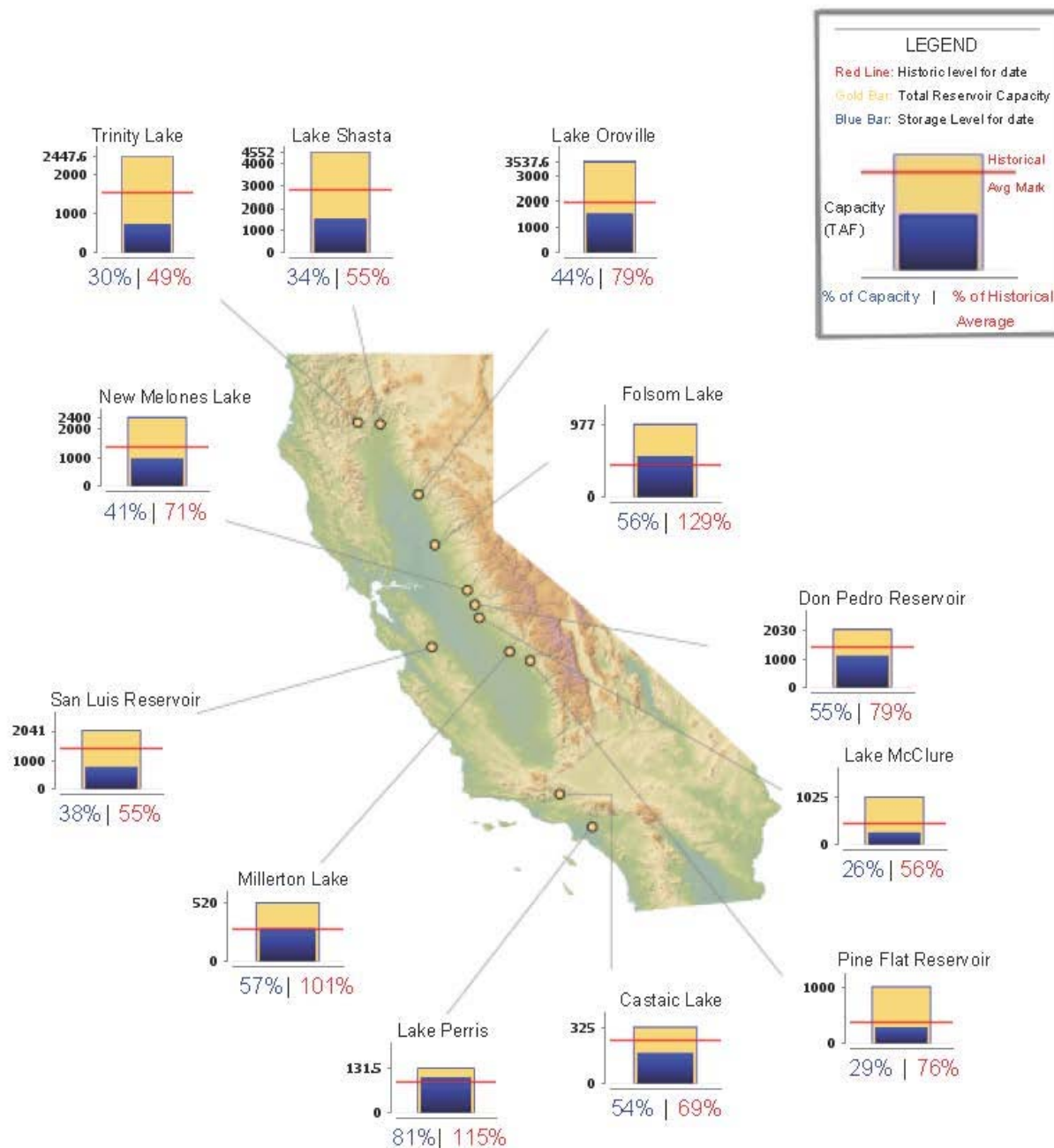
- The AV Adjudication is now entering its seventh year, and the reduction to the native safe yield is in its fifth year. The District's native groundwater right is 2,769.63 AF. The District's 2021 groundwater rights totaled 8,359 AF without the prior year's Carryover Rights. The District's 2022 groundwater rights will be approximately 8,000 AF with 9,000 AF of Carryover production rights from prior years for a total of 17,000 AF. This is more than the District's existing wellfield can pump.
- The 2022 water resources plan is not set at this point. While precipitation in the area that contributes to the State Water Project is at 134% of average for the 2021-2022 Water Year (October through September), the SWP allocation is expected to remain at 0% through March 2022. The District will explore water sources including the SWC Dry Year Program, Yuba Accord Water, Littlerock Reservoir water, and carryover SWP from 2021. The current precipitation and state reservoir storage as of Tuesday, January 18, 2021, are as follows:





SELECTED WATER SUPPLY RESERVOIRS

Midnight: January 17, 2022



Updated 01/18/2022 12:48 PM

- The dry conditions last year led to the District's implementation of its Stage 1 of the 2015 Water Shortage Contingency Plan (WSCP) in April 2021 and the 2020 WSCP in June. This stage is a request to our customers to voluntarily reduce their water use by 15%. The focus is on additional outreach, education, and coordination with the largest water users. The following map of California shows the levels of drought in the state as of January 11, 2021. The Antelope Valley is now in "Moderate Drought." Most of Kern County, the eastern Sierras, and now Ventura County are in "Severe Drought." This map is updated on a weekly basis and provides information that can help the District take needed steps to address the drought in the months ahead.

U.S. Drought Monitor California

January 11, 2022

(Released Thursday, Jan. 13, 2022)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	99.25	66.39	1.39	0.00
Last Week 01-04-2022	0.00	100.00	99.30	67.62	16.60	0.84
3 Months Ago 10-12-2021	0.00	100.00	100.00	93.93	87.18	45.66
Start of Calendar Year 01-04-2022	0.00	100.00	99.30	67.62	16.60	0.84
Start of Water Year 09-28-2021	0.00	100.00	100.00	93.93	87.88	45.66
One Year Ago 01-12-2021	0.00	100.00	95.20	79.10	39.50	1.19

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

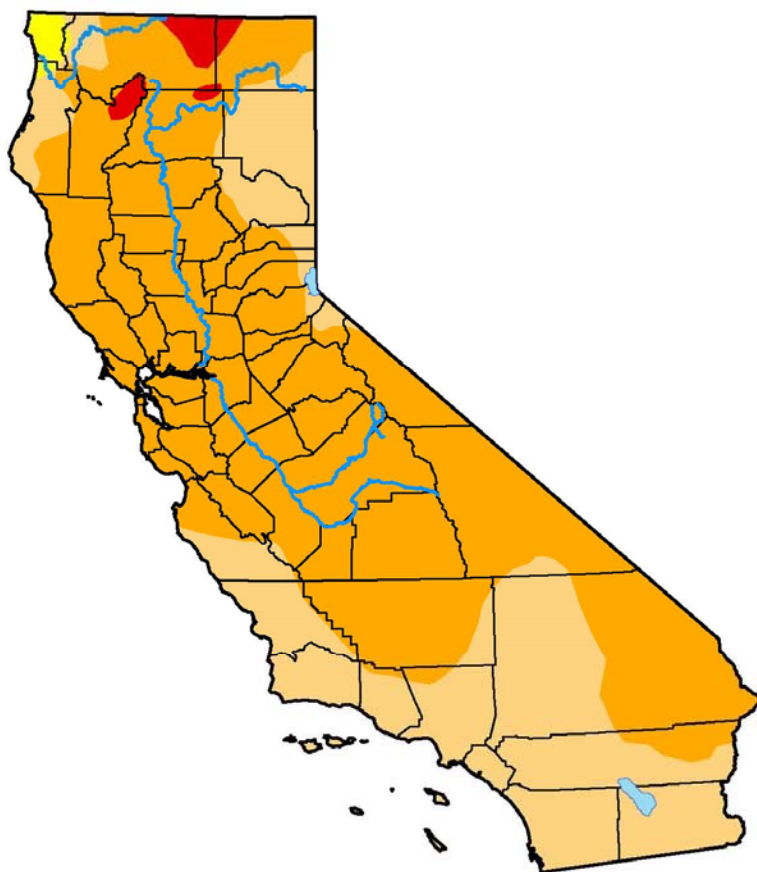
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Tinker
CPC/NOAA/NWS/NCEP



droughtmonitor.unl.edu



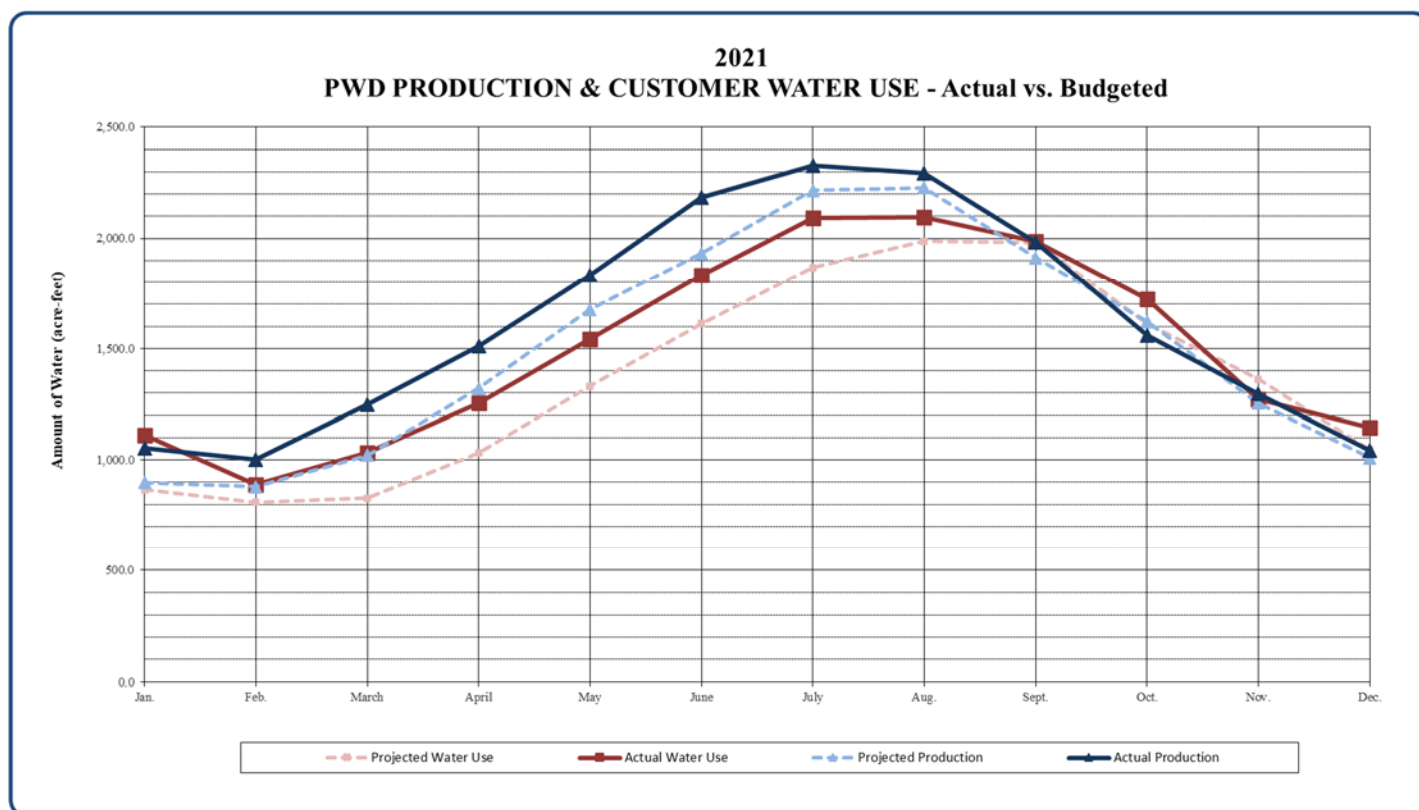
The following table summarizes the District's water production, billed customer water usage, unaccounted for water, and per capita usage differences between 2020 and 2021 through December 31st. While total water production is up 0.8%, the billed usage is up

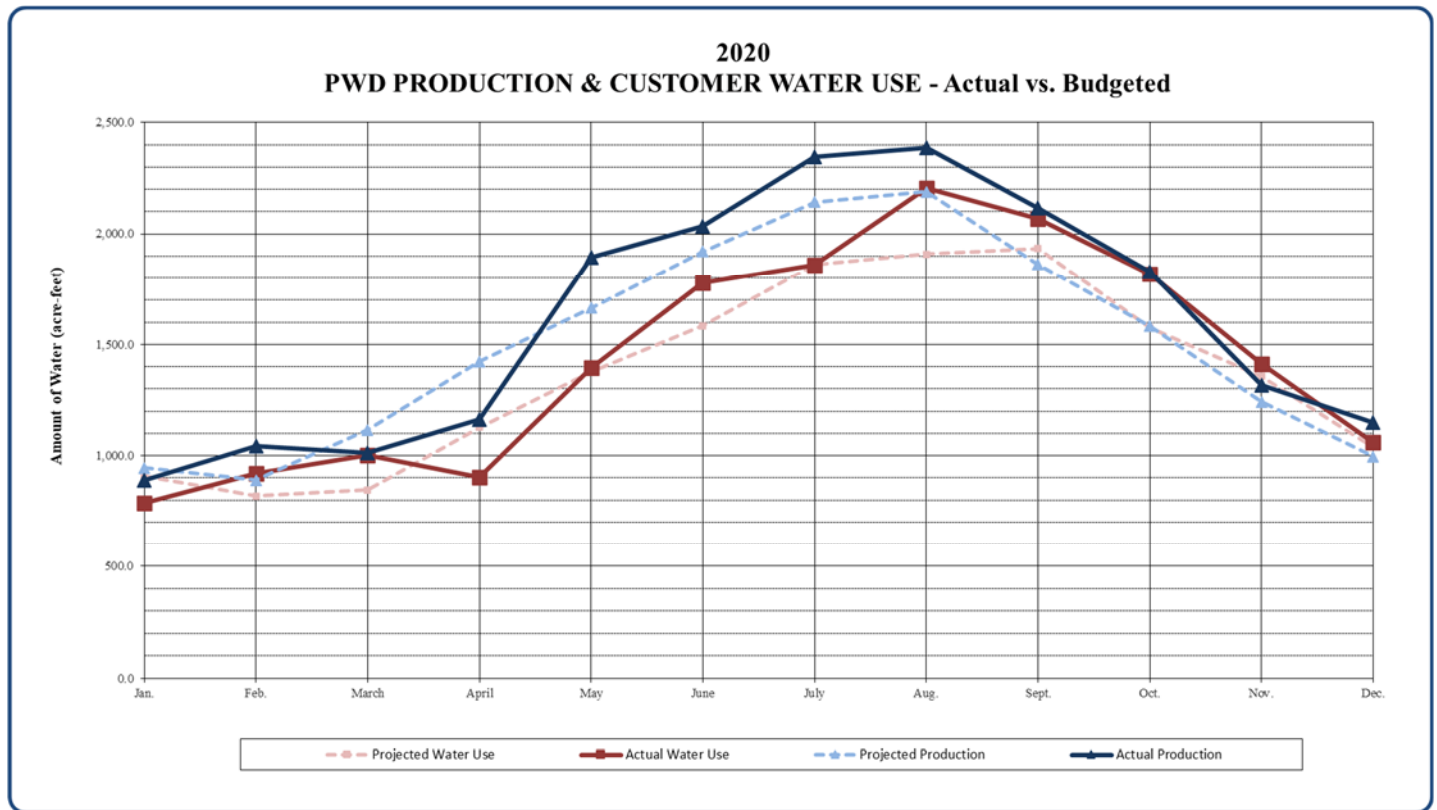
4.5%. This shows the progress made to reduce unaccounted (lost) water. It also shows the customers' actions to reduce their usage in response to the 15% voluntary reduction issued by the State.

Year to Date Through:	Total Prod. (ac.-ft.)	Total Billed (ac.-ft.)	Water Loss			Aver. Active Connections	Aver. Gallons per Conn./month	Aver. Per Cap. Use (gal/day/per.)
			(ac.-ft.)	(year %)	(12 mo %)			
December 31, '20	19,180.5	17,213.0	1,967.5	10.3	7.6	26,792	17,442	130.5
December 31, '21	19,343.3	17,983.6	1,359.7	7.0	10.0	26,912	18,144	135.9
Increase	162.8	770.6	-607.8	-3.2	2.5	120	702	5.4
% Increase	0.8	4.5	-30.9	-31.5	32.4	0.4	4.0	4.2
5 yr. Average ('17-'21)	16,104.9	14,369.1	1,735.8	10.8	8.9	26,740	17,505	131

- The following graph is the projected monthly water consumption and production for 2021 based on the prior five years of actual monthly information. The projected total consumption is based on the 2021 Budget amount of 16,341 AF. Actual amounts are shown through December with solid lines. The 2020 graph shows the projected and actual water use last year.

Customer water use in 2020 was 17,213 AF and 17,983.6 AF in 2021. This is the most water used by customers since 18,127 AF in 2014, before the 2015-2017 drought. Customers used 770.6 AF more water, a 4.5% increase over 2020, also shown above. This percentage lowered over the last six months of 2021 due to our customers' efforts to reduce their usage.





Other Items

- The Littlerock Reservoir Sediment Removal Project (Project) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was fully approved in 2017. The Project consists of three phases. The Grade Control Structure is Phase 1 and was completed in January 2020.

Phase II is the removal of 1.2 million cubic yards (CY) of sediment from the reservoir. The District received a good, competitive response to the emergency 19,000 CY sediment removal project last year that included the disposal of the removed sediment. The interest is promising for starting Phase II of the Project later this year in the amount of about 120,000 CY. The Board approved moving forward with Aspen Environmental for the next five years as the environmental permitting and monitoring firm. Staff is working with Aspen Environmental to secure all the necessary permits. However, the regulatory agencies have made it difficult, and the sediment removal season from Labor Day through December was missed for 2021.

- The public review of the Draft California Environmental Quality Act (CEQA) EIR for the Palmdale Regional Groundwater Recharge and Recovery Project (PRGRRP) was completed in 2016. A test well was drilled at a different location on the proposed project site. The information learned about the aquifer show it is not adequate for the proposed project.

Stantec is contracted with the District to look at the feasibility of advanced treatment of the tertiary recycled water. If feasible, the highly treated recycled water can potentially be used in surface water or groundwater augmentation to meet the goal of adding recycled water as an additional potable water source for our customers. PRWA has also suspended work on additional purple pipe while advanced treatment is being evaluated. Staff has invited several engineering firms to make presentations about various advanced treatment projects to better understand the process that will be involved with this type of project.

A request for proposals was issued for a program management firm to assist the District with the Palmdale Regional Water Augmentation Project (PRWAP) late last year. The proposals are due January 26, 2022. They will be evaluated by staff, interviews will be held, and a recommendation will be made to the Board in late February to award a contract for the work.

- The Upper Amargosa Creek Recharge Project is complete. One contract is for the California Aqueduct turnout and transmission water main. The other is for the recharge basins. The project partners, City of Palmdale, LA County Waterworks, and AVEK, are now finalizing the operation and maintenance agreement.

The City of Palmdale recently notified the project partners about the mitigation requirements and costs. The two stages, 11.28 acres and 38.72 acres, of mitigation are being finalized with the regulatory agencies. The estimated construction costs are \$1,305,472 and \$3,100,000, respectively, and will be built several years apart. The City is planning meetings to discuss these costs and the responsibilities of the project partners.

- Delta Conveyance Design and Construction Authority (DCA): This joint power authority is responsible for the environmental, design, and engineering of the project and works with the Department of Water Resources (DWR) on the project. The Board is now reorganized with more representation from smaller agencies. This includes adding two seats for the East Branch, Class 8, of the California Aqueduct. The agencies are AVEK, PWD, Littlerock Creek Irrigation District (LCID), Mojave Water Agency (MWA), Crestline-Lake Arrowhead Water Agency, San Gabriel Valley Municipal Water District, San Bernardino Valley Municipal Water District (SBVMWD), San Geronio Pass Water Agency, Desert Water Agency, and Coachella Valley Water District (CVWD).
- A set of amendments to the State Water Project Contract was finalized in 2020. These changes provide for increased flexibility for SWP contractors to develop long-term exchanges of water within the SWP. This is beneficial for all the contractors and will help the District maintain the SWP's current level of reliability for our customers. Enough State Water Project Contractors have approved the amendment for it to be effective.

The District will work within these amendments with Littlerock Creek Irrigation District and other State Water Contractors for our customers' benefit.



Organizational Excellence *Train, Perform, Reward*

This initiative includes efforts to restructure staff duties and activities to more efficiently provide service to our customers. Recent highlights are as follows:

- Nearly 80 percent of the District staff is required to have certifications or licenses issued by the State of California. Many of these have continuing education requirements which must be met by technical training. The District provides for this in several ways including hosting classes given by the California Rural Water Association, having a training budget for staff to attend conferences, and providing an education tuition allowance for each employee.
- COVID-19 Pandemic Response: District staff initiated a draft Pandemic Response Plan on March 4, 2020 as the State of California and County of Los Angeles issued declarations of emergency. Over the next two weeks, many District events were canceled. These included the Water Ambassadors Academy third session and facility tour, Strategic Plan Workshop, director in person coffees, and all-staff lunch and meeting. The District also reduced the lobby's capacity and eventually closed it to the public due to Los Angeles County health orders.

The other options to conduct business with the District, including using the website, calling Customer Care, using the automated phone system, and using remote payment sites, were promoted on social media, the website, and radio spots. The District has continued to comply with social distancing regulations by updating the Pandemic Response Plan, rotating staff to work from home, staggering work hours, and providing non-medical face coverings for staff.

The District is largely back to normal operations as the state and county regulations allow. The lobby has been open since Monday, July 12, 2021. Customer Care representatives are now available in the office and from home. Small meetings are being held in person.

The District is complying with all current regulations related to the latest variant surge.

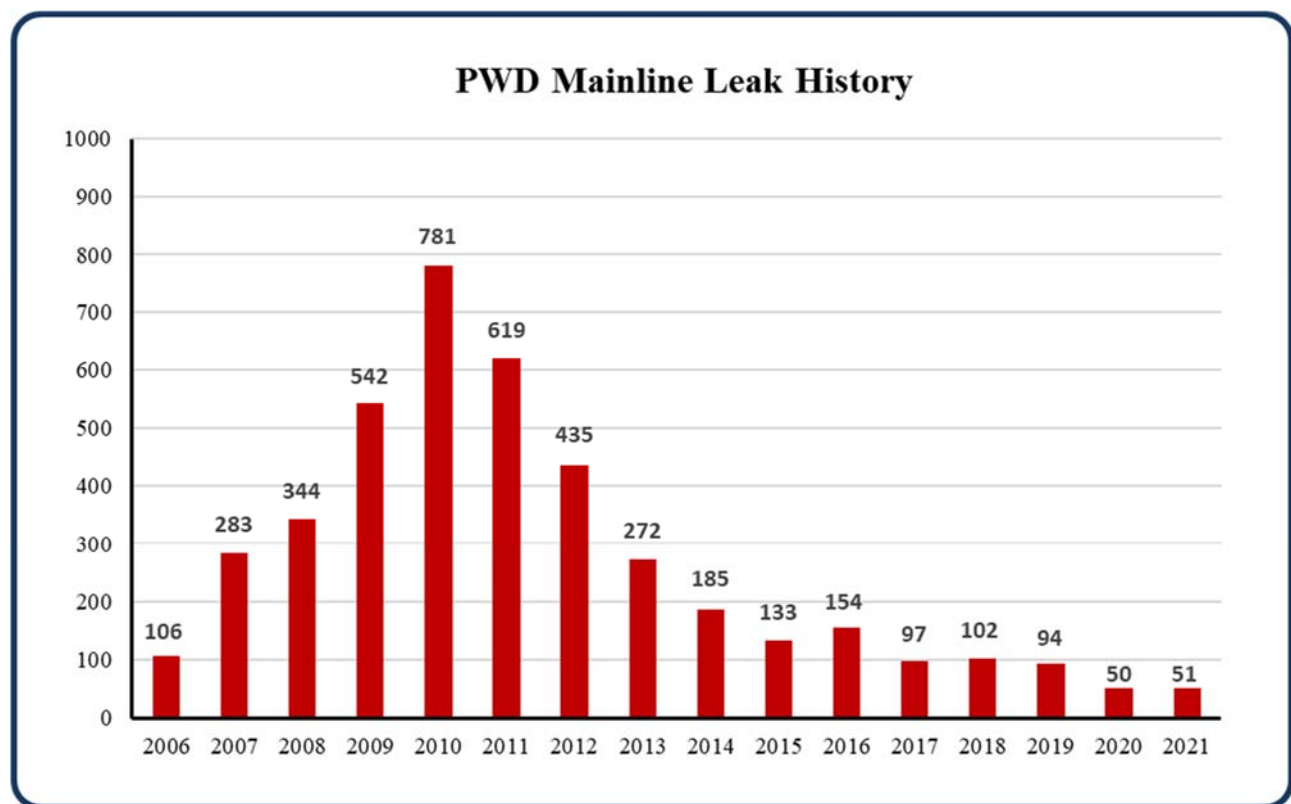
- Despite the pandemic, the District has continued to find ways for internships and training opportunities for college and high school students who are interested in the water industry.
- The update of job descriptions for the District's positions is now complete. The updated job descriptions will be used as the basis of this year's salary survey with comparable water agencies.
- The Employee Handbook update is being reviewed by the District's general counsel. It will then be presented to the Ad-Hoc Committee to review and make a recommendation to the Board on its adoption.



Systems Efficiency *Independence, Technology, Research*

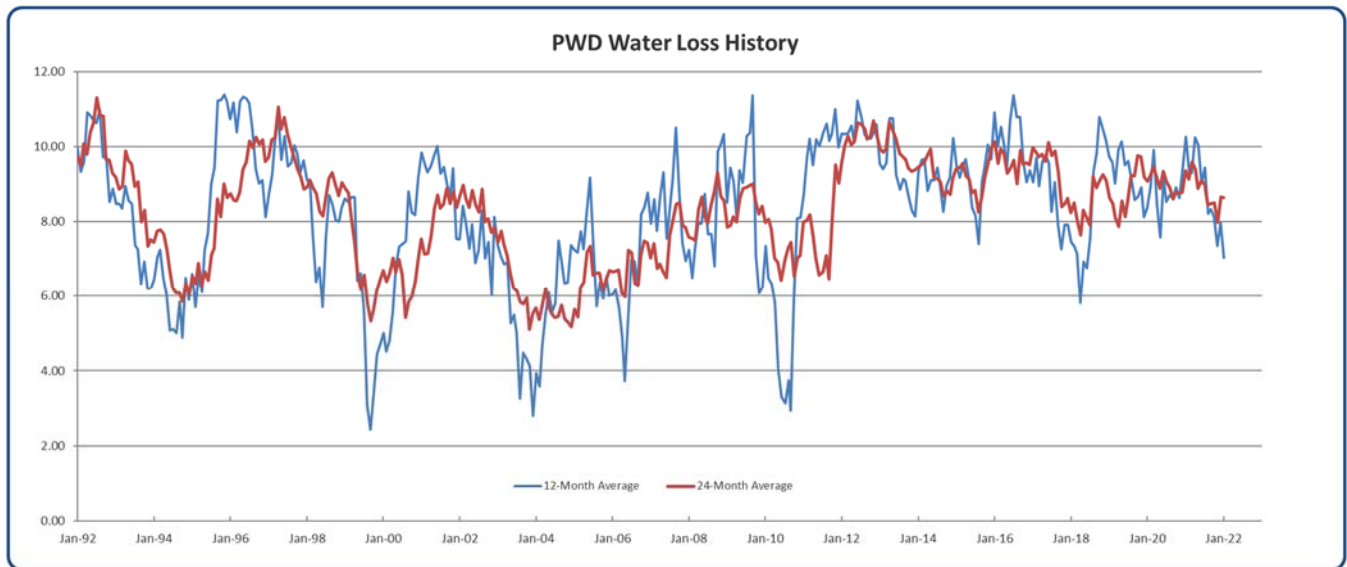
This initiative largely focuses on the state of the District’s infrastructure. Recent highlights are as follows:

- The effects of the District’s past efforts in replacing failing water mains and meters can be seen in the reduced number of mainline leaks. This is illustrated in the chart titled “Mainline Leak History.” The mainline leaks through December 2021 total 51 and there were 95 service line leaks. 2021 was the third year in a row with less than 100 mainline water leaks. The last five years averaged 79 leaks per year. This translates into one leak for every 5.2 miles of pipe. This is something the District can be proud of due to the commitment to replace aged infrastructure.



- Additional water main replacement projects are being designed for construction as planned in the 2019 Water Rate Plan. The District completed water main replacements in 2021. The first project that will be constructed in 2022 is the neighborhood replacement project bounded by Desert Sands Park, Avenue Q, Division Street, and 3rd Street East and in 10th Street East north of Avenue P. Work will begin in mid-January.

- The positive effect of both water main and water meter replacement programs is shown on the chart titled “PWD Water Loss History.” The running average for water losses is lowering and running near 8%.



- District staff is working on two energy technologies that will benefit our customers. One is the use of batteries for backup power at four booster facilities. The other is a demonstration project for the generation and storage of hydrogen from wind energy.

These programs are grant funded and managed by the California Public Utilities Commission and California Energy Commission, respectfully. The grant funds go directly to the technology providers, Tesla and DasH2Energy. Both projects involve the installation of pre-designed and assembled equipment at District facilities with minimal construction work at the sites. The approved sites are Well 5 Booster, Underground Booster, 45th Street East Booster, and the new 3M Booster Station. The battery systems are completed and active at Well 5 and the Underground Booster.

- The wind turbine has been inoperable for several months due to a bad anemometer and the maintenance firm’s unwillingness to comply with prevailing wage requirements. Staff is working on a couple fronts to resolve this. A maintenance contract has been completed with a new firm and the needed part received. The new firm is working to replace the part. Staff is looking at the longer-term project of replacing the wind turbine. It has been in operation for seventeen years as of August 2021, and parts are difficult to find. The main considerations moving forward are maximizing the generation, the availability of repair parts, and adequate competition for maintenance contracts.

The replacement hoist is expected to arrive in mid-January. Once received, the maintenance company will replace the hoist and then the parts needed to make the turbine operational again.



Financial Health and Stability *Strength, Consistency, Balance*

- PWD and City of Palmdale staffs have worked together to obtain funding for the Palmdale Recycled Water Authority (PRWA) Phase II Project. However, PRWA will consider a change in direction to using advanced treatment for recycled water. Work on Phase II is now suspended while the advanced treatment project is studied.
- The Littlerock Sediment Removal Project was awarded nearly \$900,000 through the AVIRWMP Grant Program in the current round of funding. The approved grant for Phase II will be redistributed to other projects in the Antelope Valley. This will change the Littlerock grant to over \$1M.
- The 2019 Water Rate Study and Proposition 218 was completed when the Board unanimously approved Resolution No. 19-15. This set the water rate structure and water rates for 2020-2024 and includes criteria to evaluate the District's financial condition each year. It gives the Board the ability to reduce the water rates if the District's financial position meets four (4) of the criteria in an annual review while preparing the following year's budget.
- Fitch Ratings reviewed the District's bond rating in December 2021. The review affirmed the District's rating with them of "A+" with a stable outlook. This is a good result considering the uncertainty of operating in the COVID-19 pandemic.
- The District is seeking State and/or Federal assistance to provide water service to the Alpine Springs Mobile Home Park on Sierra Highway. It has poor water quality from its well and several health violations. Maria Kennedy, Kennedy Communications, is experienced with these programs and is contracted with the District to accomplish it.
The first step will be the State issuing a check to fund water hauling until the connection to the District is designed, constructed, and operational.
- The Finance Department is continuing to monitor the effect of the State's moratorium on shutoffs due to nonpayment on cash flow. The effect is fluctuating somewhat but is remaining 5% or less below what is usually expected. Customers with large outstanding balances are being contacted to see what assistance the District can provide. Staff is also placing property liens as appropriate to help secure payment of large, outstanding bills.
- The 2019 Rate Plan called for a \$20M bond issue this year. However, the current plan is to split the \$20M into two separate bond issues with the second one in 2023. The 2021A Series \$10M bond issue was priced on June 30 with the very good result of a combined

interest rate of 2.75%. It closed on July 20, 2021, and the funds were transferred to the trustee for the District's use on projects.

- NHA Advisors informally presented a potential refunding opportunity to the Finance Committee in July 2021. It would refinance a portion of the 2013A Series Issue with a private bank with a projected savings of \$98,000 per year. It was presented to the Finance Committee and full Board and approved in August 2021.



Regional Leadership

Engage, Lead, Progress

This initiative includes efforts to involve the community, be involved in regional activities, and be a resource for other agencies in the area. Recent highlights are as follows:

- Activities of the Palmdale Recycled Water Authority (PRWA), AV Integrated Regional Water Management Plan (IRWMP), and Antelope Valley State Water Contractors Association have continued. The District has leadership positions in these organizations.
- The PWRA Board consists of two Palmdale City Councilmembers, two PWD Board members, and a public director. A new public member, Zakeya Anson, took the Oath of Office at the April meeting and attended the California WaterReuse Conference in September.
- The District staff continues to share the administration of the Antelope Valley Watermaster Board (AVWB) with AVEK and related meetings.
- District staff is active in the local chambers, the transition of the AV Board of Trade and Greater Antelope Valley Economic Alliance into AV EDGE, regional human resources, and public information organizations.
- 2021 "PWD Water Ambassador Academy" (WAA) and Junior WAA are now scheduled for the first half of 2022 due to the continuing pandemic.
- The District and other members of the Public Water Agencies Group (PWAG) have hired and share the services of an Emergency Preparedness Coordinator. This approach also helped the District successfully comply with the America's Water Infrastructure Act (AWIA) of 2018 and respond to the current COVID-19 event.
- Staff has taken a lead role in developing and implementing a valley-wide mutual aid agreement.

- Ad-Hoc committees of the District and the United Water Conservation District are scheduled to meet on September 21, 2021 to discuss potential cooperative projects. Initially, these might include combined recreational funding for Piru and Littlerock Reservoir recreational improvements and advanced treatment of recycled or brackish water for potable use. A memorandum of understanding will be presented to both Boards in January 2022 for approval.



Customer Care, Advocacy, and Outreach

Promote, Educate, Support

This initiative includes efforts to better serve our customers. Recent highlights are as follows:

- The Board approved moving forward with a new supplier, meter brand, and reading system at the first meeting in September 2020. This change moves the District toward being able to offer customers more information about their water use. The first large order of the new Neptune meters has been placed. Staff is now beginning to install the new meters as part of the overall water meter replacement project.
A grant from the US Bureau of Reclamation is being sought to assist with implementing the Automated Meter Infrastructure (AMI).
- The ability to make payments at 7-Eleven and Family Dollar Store as well as all electronic forms of payment are continuing to grow due to the COVID-19 event.
- Staff successfully conducted virtual coffee meetings with Directors and their constituents, online “Let’s Talk H2O” meetings, issued regular internal and public newsletters, coordinated drive-through giveaways for customers, an in-person customer appreciation day, and monitored and maintained the District’s social media.
- Staff is continuing to work with the consultant to update the public website and ensure it is fully compliant with all relevant regulations.