

A REGULAR MEETING OF THE BOARD OF DIRECTORS UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT 248 E. FOOTHILL BLVD. ROOM #103, MONROVIA, CA 91016 4:00 P.M. – June 26, 2024

AGENDA

- PLEDGE OF ALLEGIANCE
- 2. ROLL CALL OF BOARD OF DIRECTORS
- 3. ADOPTION OF AGENDA [1]
- 4. PUBLIC COMMENT

Anyone wishing to discuss items should do so now. The Board of Directors may allow additional input during the meeting. A three-minute time limit on remarks is requested.

- 5. COMMITTEE REPORTS [2] None.
- 6. CONSENT CALENDAR [1]
 - (a) Minutes of a regular meeting of the Board of Directors held on June 12, 2024 at 4:00 p.m.
- 7. ACTION/DISCUSSION ITEMS [1]
 - (a) California Special Districts Association Board Election for the Southern Network, Seat A

Recommendation

Staff requests the Board of Directors to provide direction to the General Manager on the Board's desired candidate for election to the California Special Districts Association Board of Directors for the Southern Network, Seat A, and cast the agency's vote via the online ballot.

(b) Amendment of Professional Services Agreement with EcoTech Services, Inc.

Recommendation

Staff recommends that the Board of Directors authorize the General Manager to amend the professional services agreement with EcoTech Services, Inc., for the administration of Upper District's WaterSmart Home program and technical consulting services by extending the term to June 30, 2025, and increasing the contract amount by \$150,000 with a not-to-exceed total contract amount of \$370,000.

(c) Water Quality Authority Update (Randy Schoellerman, P.E., Water Quality Authority's Executive Director, will provide a presentation.)

Recommendation

This item is for information only. No action is anticipated.

Branding Concepts Update (A representative from 789, Inc. will provide a presentation.)

Recommendation

This item is for information only. No action is anticipated.

- INFORMATION ITEMS [2]
 - Press Releases and News Articles
- ATTORNEY'S REPORT [2]
- 10. ENGINEER'S REPORT [2]
- 11. GENERAL MANAGER'S REPORT [2]
- 12. DIRECTOR'S COMMENTS [2]
- 13. FUTURE AGENDA ITEMS [1]
- 14. ADJOURN TO CLOSED SESSION None.
- 15. ADJOURNMENT To a regular meeting of the Board of Directors to be held on August 14, 2024 at 4:00 p.m. at 248 E. Foothill Blvd. Room #103, Monrovia, CA 91016.

LEGEND: [1] INDICATES ACTION ANTICIPATED BY BOARD OF DIRECTORS ON THIS ITEM [2] INDICATES INFORMATION ITEM - NO BOARD ACTION NECESSARY

PRESIDENT JENNIFER SANTANA, PRESIDING



American Disabilities Act Compliance (Government Code Section 54954.2(a)) To request special assistance to participate in this meeting, please contact the Upper District office at (626) 443-2297 or venessa@usgvmwd.org at least 24 hours prior to meeting.



A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT 248 E. FOOTHILL BLVD. ROOM 103, MONROVIA, CALIFORNIA 91016 4:00 P.M. – JUNE 12, 2024

A regular meeting of the Board of Directors was held in the office of the District, 248 E. Foothill Blvd, Rm. 103, City of Monrovia, County of Los Angeles, State of California, within said Water District, on June 12, 2024 at the hour of 4:00 p.m.

ROLL CALL

DIRECTORS

Chavez, Garcia, Fellow, and Santana

PRESENT:

DIRECTORS

Treviño

ABSENT:

STAFF PRESENT:

Tom Love, General Manager; Patty Cortez, Assistant General Manager, External Affairs; Steve O'Neill, District Counsel; Tuan Nguyen, Consulting Engineer; Evelyn Rodriguez, Chief Financial Officer/Chief Administrative Officer; Venessa Navarrette, Executive Assistant; Jennifer Aguilar, Water Use

Efficiency Analyst.

OTHERS PRESENT

Lynda Noriega, Dave Michalko, David Muse, Che Venegas and Lenet Pacheco.

ADOPTION OF AGENDA

On motion by Vice President Fellow, seconded by Treasurer Garcia, the agenda was adopted as presented by the following vote:

AYES:

SANTANA, FELLOW, GARCIA AND CHAVEZ

NOES: NUITE NONE

ABSENT;

TREVIÑO

PRESENTATION OF "BEING WATER WISE IS..." ART CONTEST WINNERS

The Assistant General Manager, External Affairs, introduced the "Being Water Wise is..." Art Contest winners while the Board presented the awards to those present.

Director Treviño arrived at 4:09 p.m.

Director Trevino commented that our water future is good and that he is proud of the winners.

Secretary Chavez commended the drawings.

Treasurer Garcia congratulated the winners and their parents.

Vice President Fellow stated he hopes one of the winning artworks will be included in Metropolitan's art contest calendar distributed to millions of people in Southern California.

President Santana stated that being water wise has an impact on our water resources. She then congratulated the winners for their talent.

PUBLIC COMMENT

None.

COMMITTEE REPORTS

Next scheduled committee meeting dates are as follows:

- (a) Government Affairs and Community Outreach July 01, 2024, at 4:00 p.m.
- (b) Administration and Finance July 02, 2024, at 4:00 p.m.
- (c) Water Resources and Facility Management July 03, 2024, at 4:30 p.m.

President Santana commended the General Manager's Integrated Resource Plan (IRP) presentation at the last Water Resources and Facility Management Committee meeting stating she is looking forward to future engagement on the IRP.

CONSENT CALENDAR

On motion by Director Treviño, seconded by Treasurer Garcia, the consent calendar was approved by the following vote:

AYES: SANTANA, FELLOW, GARCIA, CHAVEZ AND TREVIÑO

NOES: NONE ABSTAIN: NONE ABSENT: NONE

(a) Minutes of a public hearing and regular meeting of the Board of Directors held on May 22, 2024 at 4:00 p.m.

(b) List of Demands

(c) Financial Reports – April 2024

2. Director's Public Outreach

(d) Federal bill positions for S. 3127, S. 4172, S. 4220, S. 4242, H.R. 4385, H.R. 6053, H.R. 7922, and H.R. 7944.

(e) Amendment of professional service agreement with G3LA, LLC (DBA G3, Green Gardens Group) for the administration of Upper District's landscape workshop programs to extend the term to June 30, 2026 and increase the contract amount by \$40,000 with a not to exceed total contract amount of \$140,000.

(f) Amendment of professional service agreement with 789 Inc. for public relations services to extend the term to June 30, 2025 and increase the contract amount by \$66,900 with a rot to exceed total contract amount of \$133,800.

The Assistant General Manager, External Affairs, provided an overview of the Plant Voucher Program currently funded through Metropolitan's Member Agency Administered Program. She stated that Upper District has applied for additional program funding through USBR's WaterSMART: Small Scale Water Efficiency Projects Grant and that the application requires adoption of a resolution.

On motion by Vice President Fellow, seconded by Secretary Chavez, the Board of Directors adopted Resolution 06-24-662, Endorsing the WaterSMART: Small-Scale Water Efficiency Projects for Fiscal Year 2024 by the following vote:

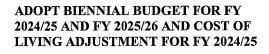
AYES: SANTANA, FELLOW, GARCIA, CHAVEZ AND TREVIÑO

NOES: NONE ABSTAIN: NONE ABSENT: NONE

The General Manager reported that the budget was presented and discussed at the Administration and Finance Committee prior to bringing the item to the Board for approval. He highlighted the significant expense related to the three seats that are up for election in 2024 and the increasing MWD readiness-to-serve charge (RTS). He stated that for the past three years, the net RTS charge was fully recovered through the minimum purchase agreement with Watermaster but that this may no longer be possible for the coming fiscal years. He added that staff is working with Watermaster and the producers to come up with a way to pass through the increasing net RTS. He reminded the Board that for budget purposes, staff assumed keeping the surcharge at \$103 per acre foot which would then require selling a minimum of 44,000 acre feet of untreated water for fiscal year 2024/25.

The Chief Financial Officer/Chief Administration Officer provided a brief presentation of the biennial budget for FY 2024/25 and FY 2025/26. She stated

RESOLUTION NO. 06-24-662, ENDORSING WATERSMART: SMALL-SCALE WATER EFFICIENCY PROJECTS FOR FISCAL YEAR 2024



that most of the administrative and program budget categories remained relatively flat except for conservation which went down 11% in FY 2024/25 and water purchases and operating revenue which significantly increased. She explained that the significant increases in water purchases and operating revenue were due to the higher minimum untreated water sales needed to meet the debt service coverage ratio. She then summarized the cost reduction measures undertaken by Upper District that will continue to benefit the FY 2024/25 and FY 2025/26 budgets.

Director Treviño commended the General Manager and the Chief Financial Officer/Chief Administration Officer for their work on the budget.

On motion by Director Treviño, seconded by Treasurer Garcia, the Board of Directors approved the biennial budget for fiscal year 2024/25 and fiscal year 2025/26 as presented and a cost-of-living adjustment for District wages equivalent to 3.90% effective July 1, 2024 by the following vote:

AYES: SANTANA, FELLOW, GARCIA, CHAVEZ AND TREVIÑO

NOES: NONE ABSTAIN: NONE ABSENT: NONE

APPROVE ADDITIONAL
DISCRETIONARY PAYMENT FOR
UPPER DISTRICT'S UNFUNDED
ACCRUED LIABILITY WITH CALPERS
AND CONTRIBUTION TO THE
CALIFORNIA EMPLOYERS' PENSION
PREFUNDING TRUST FUND

The Chief Financial Officer Chief Administration Officer stated that the proposed \$1 million discretionary payment for Upper District's unfunded accrued liability with CalPERS would save the District more than \$0.76 million in interest payments over 20 years based on CalPERS's discount rate of 6.8%. She then presented the benefits of making an additional contribution of \$1 million to the California Employers Pension Prefunding Trust Fund including using the fund as a budgeting tool in the future.

On motion by Director Treviño, seconded by Treasurer Garcia, the Board of Directors authorized the additional discretionary payment of \$1 million to reduce Upper District's unfunded accrued liability related to pension and the additional \$1 million contribution to the California Employers' Pension Prefunding Trust Fund by the following vote:

AYES: SANTANA, FELLOW, GARCIA, CHAVEZ AND TREVIÑO

NOES: NONE ABSTAIN: NONE ABSENT: NONE

The following items listed on the agenda for the information of the Board were read and ordered received and filed:

(a) Press Releases and Newspaper Articles.

District Counsel reported on transactional matters including working with staff on the Turnkey Turf agreement, finalizing the standby charge ordinance, and reviewing the election and the WaterSMART resolutions. He also provided an update on PFAS developments. He reported that the Upper District has opted out of the two preliminary settlements that have been approved and that a third company, Tyco, has received preliminary approval for a settlement of \$750 million. He reported that there is a deadline of September 23rd to opt out. He then reported that the American Water Works Association and the Association of Metropolitan Water Districts have filed a challenge to the USCPA setting of the MCL levels for PFAS. He explained that their arguments are that the EPA estimate of treatment cost are underestimated by 3 or 4 times which, ultimately, can result in higher water cost for all communities across the country in terms of PFAS cleanup. He stated that the associations are alleging there are better science

INFORMATION ITEMS

ATTORNEY'S REPORT

research that EPA could have relied on and that EPA did not give the public sufficient notice. He stated that he will be tracking the PFAS developments.

President Santana and the Assistant General Manager, External Affairs, briefly discussed the Turnkey Turf agreement.

ENGINEER'S REPORT

The District Engineer reported that as of June 7th, the Baldwin Park Key Well was at 239.8 ft., an increase of 0.5 ft from May. He also reported that as of June 11th, the total combined storage for the reservoir is 19,991 AF or about 24% of capacity. He then added that the San Gabriel reservoir inflow was about 180 CFS and the release was 180 CFS as of June 11th. He also stated that Morris inflow was 158 CFS and the release was at 550 CFS as of June 11th. He added that from a recent correspondence with the County, most of the releases from Morris Dam are going to Central Basin to spread at the coastal spreading grounds and approximately 60 CFS is going to the Santa Fe spreading grounds. He reported that there has not been any USG-03 deliveries for the months of April and May. He stated that there was a delivery by San Gabriel Valley Municipal Water District of approximately 29 AF in the month of May. He then reported on the rainfall levels at Pudding Stone Dam and San Gabriel Dam as of May 31, 2024. He reported that during the month of May, 69 wells were sampled under title 22 and that during the month of April, 58 wells were sampled under title 22. He added that no public notices were received for wells shut down due to contamination.

A written report was also provided in the Board's agenda packet.

GENERAL MANAGER'S REPORT

The General Manager shared that he will be having another discussion on the Integrated Resources Plan with the Water Resources and Facility Management Committee and also at the next Upper District water producer meeting before sharing a presentation to the Board of Directors. He shared the fact sheet on the Delta Conveyance economic value analysis highlighting that the Delta Conveyance will not increase exports from the Delta and will only maintain some of what is expected to lose. He reported that the estimated cost over an estimated life of 100 years is approximately \$1,325 per AF which is lower than the cost estimate for the Pure Water project. He then reported that deliveries through USG-03 are anticipated to start in July at 250 CFS which can increase to 280 to 300 CFS in September. He stated that it is anticipated to get between 85,000 to 89,000 AF stored into the Basin.

The Assistant General Manager, External Affairs, stated that Upper District will be hosting a CAMP4Water briefing with Metropolitan on July 11th.

President Santana asked about the MWD cyclic storage. The General Manager stated that the deliveries this summer will be going into the MWD cyclic storage account.

The District Attorney added that the Sites Reservoir was challenged by agencies up north on CEQA grounds. He added that the proponents of the Sites Reservoir prevailed, a significant step towards moving the project forward.

A written report was also provided in the Board's agenda packet.

METROPOLITAN REPORT

Vice President Fellow stated that Sites Reservoir will be built. He reported that Governor Newsom will leave his one tunnel plans for the next Governor to continue the project. He stated that the farmers believe that Governor Brown was on the right track with a two-tunnel project. He also reported that at the ACWA Board meeting, the farmers provided a presentation. He then reported that MWD has two new board directors, California Water Service Company District Manager, James Crawford representing Central Basin and Jay Lewitt, representing Las

Virgenes Municipal Water District. He shared that Judy Abdo, longest serving female board director at MWD will be retiring and that a wildflower trail at Diamond Valley Lake will be named after her. He also reported that the MWD Board approved a \$10.5 million contract for media conservation messaging. He then reported that MWD will hold an emergency meeting the following day.

WATER QUALITY AUTHORITY REPORT

Secretary Chavez reported that WQA has approved a contract with Civic Publications for public outreach messaging.

Secretary Chavez and the General Manager briefly discussed Randy Schoellerman presenting to the Board of Directors.

A summary report was provided in the Board's agenda packet.

WATERMASTER REPORT

President Santana shared that the County water plan was discussed at Watermaster. She reported that the Basin Water Management Committee will be on June 19th which will have continued discussion about the County water plan.

AB 1234 COMPLIANCE REPORT

A summary report was provided in the Board's agenda packet.

DIRECTOR'S COMMENTS

None.

FUTURE AGENDA ITEMS

None

ADJOURN TO CLOSED SESSION

None.

ADJOURNMENT

President Santana asked if there were other business to come before the Board. There being none, the meeting was adjourned to a regular meeting of the Board of Directors to be held on June 26, 2024, at 4:00 p.m. at 248 E. Foothill Blvd. Room 103, Monrovia, CA 91016.

ATTEST

PRESIDENT

SECRETARY

SEAL

MEMORANDUM



7. (a) ACTION

DATE:

June 26, 2024

TO:

Board of Directors

FROM:

General Manager

SUBJECT:

CSDA Board Election for the Southern Network, Seat A

Recommendation

Staff requests the Board of Directors provide direction to the General Manager on the Board's desired candidate for election to the California Special Districts Association Board Directors for the Southern Network, Seat A, and cast the agency's vote via the online ballot.

Background

The California Special District Association (CSDA) is a 501c(6), not-for-profit association that promotes good governance and improved core local services through professional development, advocacy, and other services for all types of independent special districts. CSDA provides education and training, insurance programs, legal advice, public relations support, legislative advocacy, and current information that supports the management and operational effectiveness of special districts.

The CSDA Board of Directors is the governing body responsible for policy decisions related to CSDA's member services, legislative advocacy, education, and resources. The CSDA Board is comprised of members elected from its six geographical networks. Each of the six networks have three seats on the board serving staggered three-year terms. CSDA Board candidates must be affiliated with an independent special district that is a CSDA member in good standing, located within the geographic network they seek to represent.

The Southern Network is currently represented by the following: Seat A – Director Jo MacKenzie of Vista Irrigation District, representing Imperial/San Diego; Seat B – Don Bartz, General Manager of Phelan Pinon Hills Community Services District, representing the Inland Empire; Seat C – Director Arlene Schafer of Costa Mesa Sanitary District.

There are three candidates vying for Seat A: Director Jo MacKenzie, Vista Irrigation District (incumbent), Jason Dafforn, General Manager, Valley Sanitary District and Ross Leja, Director, Jurupa Area Recreation & Park District.

Staff has received recommendation letters and endorsements for Director Jo MacKenzie and has compiled the candidate statements for all nominees. Electronic voting will be open from June 10th to July 26th and ballots will be counted and verified on July 29, 2024.

Attachment



2024 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information MUST accompany your nomination form and Resolution/minute order:

Name: JO MacKENZIE

District/Company: Vista Irrigation District, CSDA District of Distinction, Platinum Level

Title: Director, Certificate in Special District Governance

Elected/Appointed/Staff: Elected

Length of Service with District: 32 years

- 1. Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.):
 - CSDA Board of Directors, President 2011, Vice President 2010, Treasurer 2008-2009
 - Less CSDA Finance Corporation Board of Directors, 2007-present; President 2012, 2013, 2015-present
 - ♣ Special District Leadership Foundation Board of Director, Treasurer, currently Vice President
 - Fiscal and Audit Committees, rewrote 'Treasurer Job Description'; Membership Committee 2011-present; Chair 2020-2021, 2022 and 2024
 - Legislative Committee 2004-present; Chair, 2006-2010 and 2012
 - CSDA San Diego Chapter, Board of Directors, 1993-present; President 1998-2000; presently serve on the Chapter Executive Board
 - Attend all Annual Conferences and Legislative Days
- 2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):
 - ♣ ACWA: Past Board Director; Local Government, Chair 2014-2015 and Membership Committee
 - ACWA Region 10 Board of Directors, Vice Chair, Alternate Chair, Director 1997-2010
 - ♣ The California Association of Local Agency Formation Commissions (CALAFCO), Board Member and Legislative Committee member, 2017–2023
- 3. List local government involvement (such as LAFCO, Association of Governments, etc.):
 - San Diego LAFCO, 1994-present: Commission Chair 2018 & 2019; Alternate 5 years; Special District Advisory Committee 14 years, Chair 2005-2009
 - Lity of San Marcos Planning and Traffic Commissions
 - Personally initiated the City of San Marcos Budget Review Committee in 1980, Chair 1996-2006
 - Resource Conservation District of Greater San Diego County, Association Director, 2016 to present
- 4. List civic organization involvement and recognitions
 - Special District Official of the Year by PublicCEO
 - Legislative Advocate of the Year, 2011
 - Graduate of CSDA's Special District Leadership Academy
 - ♣ San Marcos Chamber of Commerce, Lifetime Ambassador
 - ♣ Graduate of Leadership 2000, Cal State San Marcos
 - Vista Community Development Associates, Treasurer
 - Soroptimist International



RE-ELECT JO MACKENZIE

PROVEN EXPERIENCE LEADING SPECIAL DISTRICTS

- DEDICATED
 - FISCALLY RESPONSIBLE
 - COMMITTED TO SPECIAL DISTRICTS

It has been a privilege and honor to serve on the CSDA Board of Directors (Board) representing the Southern Network. Serving on the Board requires a commitment of time; I am in Sacramento at least twice a month for CSDA meetings. I have served as President, Vice President and Treasurer, and served as a Chair and/or member of the various committees. In 2010 and 2011, respectively, I was recognized as CSDA's Legislative Advocate of the Year and by PublicCEO as Special District Official of the Year.

During my tenure on the CSDA Board, I have formed working relationships throughout the Network and State that have given me an insight regarding the needs of special districts. Based on these insights and input from other CSDA directors, CSDA has worked to provide webinars at no cost to its members, begun offering the leadership academy three times a year and on-line, and the SDLF Board eliminated budget limits for scholarships. I serve on the CSDA and SDLF Boards, and I am proud of the collaboration that allows all special districts to take advantage of CSDA's programs.

During my term, I have been committed to continue building on the present foundation of CSDA's educational programs, state and federal legislative advocacy, and public outreach. CSDA is now the "voice of Special Districts", "the third leg of local government", and the 'go-to' association for legislative issues.

My proven leadership and public service experience, commitment to fiscal responsibility, and comprehensive LAFCO and special district knowledge make me the most qualified candidate to represent the Southern Network.

I have a true passion for and proven experience in leading Special Districts. I would be honored to continue serving on the CSDA Board as your Southern Network Director.

I am asking for your Vote.

ELECTRONIC VOTING ENDS JULY 26 AT 5:00 P.M.

50+ CSDA EDUCATIONAL OPPORTUNITIES ARE LISTED ON CSDA'S HOME PAGE

Board of Directors



1391 Engineer Street • Vista, California 92081-8840 Phone (760) 597-3100 • Fax: (760) 598-8757 www.vidwater.org

June 5, 2024

Richard L. Vásquez, President, Division 2

Marty Miller, Division 1

Peter Kuchinsky II., Division 3

Patrick H. Sanchez, Division 4

Jo MacKenzie, Division 5

Administrative Staff

Brett L. Hodgkiss General Manager Ramae A. Ogilvie Board Secretary Elizabeth A. Mitchell General Counsel

Re: Jo MacKenzie for CSDA Board of Directors, Southern Network, Seat A

Dear Board President:

On February 20, 2024, the Vista Irrigation District (VID) Board nominated Jo MacKenzie to the California Special Districts Association (CSDA) Board of Directors for the Southern Network, Seat A. As President of the Board, I'm requesting that your Board cast its vote for Jo MacKenzie, CSDA Board of Directors. Electronic ballot voting begins on June 10, 2024.

Jo's enthusiasm, commitment, and comprehensive knowledge of special districts have brought a high level of experience to the CSDA Board of Directors. Jo believes it is important that CSDA continue to be the voice of all special districts and build on the present foundation of legislative advocacy, educational programs, and public outreach.

Currently serving on the CSDA Board of Directors (Past President, 2011), Jo serves on the CSDA Legislative Committee; she served as the Committee Chair from 2006-2010 and in 2012 and was named Legislative Advocate of the Year in 2010. Jo currently serves as President of the CSDA Finance Corporation, and Vice President of the Special District Leadership Foundation. She also serves on the CSDA Member Services Committee and is very active with the San Diego Chapter of CSDA, serving as its President 1998-2000.

Jo was elected to the VID Board of Directors in 1992 and has since served as President nine times. She is currently a Commissioner on the San Diego Local Agencies Formation Commission (LAFCO) and served as Chair in 2019-2020; Jo has continuously served in various capacities on LAFCO since 1994. She has also served on the California Association LAFCO Board of Directors. Jo is a past Board Director for the Association of California Water Agencies and currently serves on its Membership and Local Government committees.

Jo is active in her local community, having served on the City of San Marcos Planning Commission, Traffic/Safety Commission, Budget Review Committee and Affordable Housing Task Force. She has also been active in the San Marcos Chamber of Commerce for over 30 years, serving as a Board Member and a Life Member Ambassador.

Jo is extremely active and engaged in all aspects of California special districts and her wealth of experience makes her the obvious choice for Southern Network, Seat A. I urge your Board to vote for Jo MacKenzie to continue her service as Seat A Director for the Southern Network. Thank you for your support!

Very truly yours,

Richard L. Vásquez

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President, Board of Directors



2024 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information MUST accompany your nomination form and Resolution/minute order:

Nan	ne: Jason Dafforn
	trict/Company: Valley Sanitary District
	General Manager
	cted/Appointed/Staff: Staff
	gth of Service with District: 1 year
7	Do you have current involvement with CSDA (such as committees, events, workshops, conferences, Governance Academy, etc.): tend CSDA Conference and Leadership Academy
	Have you ever been associated with any other state-wide associations (CSAC, ACWA,
1	League, etc.):
A	CWA, CASA
	List local government involvement (such as LAFCo, Association of Governments, etc.):
N	T/A
	Sample of the state of the stat
4.	List civic organization involvement:
D	esert Recreation Foundation Board of Directors

**Candidate Statement – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. Any statements received in the CSDA office after the nomination deadlines will not be included with the ballot.

My name is Jason Dafforn. I am a Licensed Civil Engineer in the State of California with over 30 years of experience in the water and wastewater industry. I have 17 years of experience as a utility manager working for California local governments, including over eight years working for a special district.

California's special districts play a crucial role in the daily lives of millions, providing essential services ranging from water and sanitation to fire protection, healthcare, and many others. The California Special District Association (CSDA) provides resources, training, state and federal advocacy, and professional development to help special districts across the State flourish.

Today, special districts are confronted with unprecedented challenges. As a special district manager, I have gained a comprehensive understanding of these challenges, which positions me to provide valuable guidance and develop effective resolutions. My fresh ideas and unique perspective will enable the Board of Directors to proactively address current issues and future challenges, keeping CSDA ahead of the curve.

Together, we hold the power to shape the future and provide exceptional resources for special districts in California. By ensuring they remain at the forefront of delivering essential services and improving the quality of life for all residents, we can make a significant impact.

Let us build a stronger, more resilient future for California's special districts and the communities they serve.



2024 CSDA BOARD CANDIDATE INFORMATION SHEET

The following information MUST accompany your nomination form and Resolution/minute order:

Name: Ross A. LEJA						
District/Company: JURUPA AREA RECREATION & PARK DISTRICT						
Title: DIRECTOR DIVISION 5						
Elected/Appointed/Staff:ELECTED						
No						
2. Have you ever been associated with any other state-wide associations (CSAC, ACWA, League, etc.):						
3. List local government involvement (such as LAFCo, Association of Governments, etc.):						
NONE						
4. List civic organization involvement:						
JURUPA CHILDRENS CHRISTMAS PARTY						
JURUPA DISTRICT LIONS CLUB						

**Candidate Statement – Although it is not required, each candidate is requested to submit a candidate statement of no more than 300 words in length. Any statements received in the CSDA office after the nomination deadlines will not be included with the ballot.

I am running for the open board position to bring representation for the Inland Empire to CSDA and grow CSDA in the Inland Empire. San Bernardino and Riverside Counties, together known as the Inland Empire, is one of the fastest growing regions of California and home to over 80 special districts. However, the Inland Empire currently has no representation on the Southern District Board.

I currently serve on the Board of Directors for the Jurupa Area Recreation and Parks District (JARPD). Our district serves the city of Jurupa Valley and a portion of the city of Eastvale. I have been in this position for six years. During this time we have grown our district by fourteen facilities. I have made it a mission to develop relationships with the other special districts in our area to help JARPD better serve its residents. I look forward to expanding this mission to the other special districts in the Inland Empire if I am elected to the Board representing the Southern District

I am an eight year Air Force Veteran, husband, father and grandfather. My wife of 49 years and I have made our home in Jurupa Valley for over three decades. I have served on the City of Jurupa Valley Traffic Safety Committee, acting as its first chair for three years. I also served on the Jurupa Unified School District Citizen Oversight Committee for a \$144 million bond measure as both Vice Chair and Chair. A cause close to my heart is my work with the Jurupa Children's Christmas Party, an organization that has distributed presents to underprivileged in Jurupa Valley for over 40 years.

I have always considered service to my country and community a privilege and would like to continue by serving on the board of the California Special Districts Association.

MEMORANDUM



DATE:

June 26, 2024

TO:

Board of Directors

FROM:

General Manager

ACTION

7. (b)

SUBJECT: Professional Service Agreement with EcoTech Services, Inc.

Recommendation

Authorize the General Manager to amend the professional services agreement with EcoTech Services, Inc., for the administration of Upper District's WaterSmart Home program and technical consulting services by extending the term to June 30, 2025, and increasing the contract amount by \$150,000 with a not-to-exceed total contract amount of \$370,000.

Background

EcoTech Services, Inc. specializes in creating water use efficient programs, landscape design and retrofit programs utilizing a team of expert designers and technicians that offer the newest water use efficient technologies and practices. For the past nine years, EcoTech has provided project management and consulting services for many of Upper District's indoor and outdoor water conservation projects.

EcoTech has assisted staff in the implementation of Upper District's Water Smart Home Program, the Plant Voucher Program and the Water Fill Station Program. Additionally, EcoTech has provided technical assistance in support of Upper District's Conservation Outreach Plan and landscape maintenance to building headquarters.

For the past two years, EcoTech has managed the administration of the Water Smart Home Kit Program. These kits replaced the Water Smart Home Program as a distribution event rather than a direct installation. Additional items were included in the kit to provide residents with the tools needed to make their home water efficient and encourage them to install the devices on their own. Each kit includes toilet leak tablets, a toilet flapper, sink aerator, showerhead, shower start, couplings, two sprinkler bodies, an assortment of sprinkler heads, the tools required to make these changes, and educational materials to guide residents through the process. These kits have allowed residents to look for leaks, make repairs, and replace high water using devices with lower water using devices on their own.

In the Fall of 2023, Upper District was awarded a grant through the U.S. Bureau of Reclamation's WaterSmart Water and Energy Efficiency funding to expand the program beyond Upper District's Disadvantaged Communities. For the past eight months, the program has been available to all residents within the Upper District service area and kit distributions have more than doubled in quantity. The grant is expected to fund the program through 2026.

Summary

The proposed amendment to the professional services agreement with EcoTech Services Inc., will be for the program administration of the Water Smart Home Kit Program, landscape maintenance and consulting services provided on an as-needed basis.



Upper San Gabriel Valley Municipal Water District -Water Smart Home Kits 2024-2025

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT
248 E FOOTHILL BLVD
MONROVIA, CALIFORNIA 91016

Sales: Omar Rivera

Upper San Gabriel Valley Municipal Water District-2024-2025 Kits

Est ID: EST4441860 **Date:** May-30-2024

Email: jennifer@usgvmwd.org

Phone: 626-443-2297

Water Smart Home Kit \$150.00

Water Smart Home Kits

EcoTech will be responsible for all product procurement and kit assembly. Kit amounts are to be determined by Upper District. Upper District will provide EcoTech a minimum 2-week notice on the amount of kits requested. EcoTech will be responsible for the delivery of kits to Upper District's office.

An invoice of delivered kits for each month will be sent out before the last Wednesday of the month.

1 ea	Kraft Literature Mailers - 12x10x4	Box to store kit item contents.	
2 ea	RainBird 1800 SAM PRS - 4"		
10 ea	RainBird HEVAN Nozzle		
1 ea.	3/4 PRO SPAN COUPLING - 3/4		gueda winn zije trik 131 Star de jeks hong (Mat Pa (Sodre) (Met Pa (Set Annayer (Sons))) etne (Met Pa (Sodre)
1 ea.	1/2 PRO SPAN COUPLING - 1/2	es i dual had de storre, at litte i se man de suprementad, action en la disputation e channel par anticipation de control to the suprementation of the sup	
1 ea	SCH 40 PVC Coupling - 3/4"		an saung rangkor pyron san ing kolonium kalmung ang propositing anni saythan nan Gypuri (apan ji) i Gagar I
1 ea	SCH 40 PVC Coupling - 1/2"		normalismos reminimos de rimanos a uma en hima de actividad financia activida per a comen e
1 ea	Christies Red Hot Glue - 1/4 Pint		and all and a construction of the construction
2 packet	Toilet Leak Detection Tablets		
1 ea	Replacement Toilet Flapper Universal - 2)T	
1 ea	Toilet Supply Line 16" - LF 3/8 C X 7/8	Toilet Supply Line	
1 Roll	1/2 Teflon Tape - 1	1 Roll of 1/2 wide teflon tape	
1 ea	Sink Aerator	Sink Aerator that is dual threaded and pressure compensating	The state of the s
1 ea	Evolve Standard Shower Head		
1 ea	Kit Information Card - 5x7	EcoTech designed kit card detailing use of contents in a leak repair kit, price includes design and printing of the card.	
1 ea	Evolve Shower Start		
1 ea	1-1/4 in. Ratcheting PVC Cutter		Courts paragraphy and a sequences sedences and have produce at 15 court of the Purpose and a soul
		Subtotal	\$150.00
		Taxes	\$0.00
		Estimate Total	\$150.00

Acceptance of Work

The client has inspected the landscape project. The client has delivered to the contractor a written list of all items the buyer believes have not been properly constructed or are not in proper condition. Except as noted on this list, the client accepts the landscape as is, and acknowledges that he or she has no further claim against the contractor for any item that was not listed that could reasonably have been ascertained or observed during the client's inspection. The client has no objections as to color, appearance, type or brand of materials, dimension or size, location, or any other conditions that could reasonably have been discovered by the client during the inspection.

The client understands that no warranties are being made by the contractor except those appearing in the contract documents. The client is not relying on any representations, promises, or warranties except for the written limited warranty that appears in the contract documents.

The client acknowledges receipt from the contractor of all documents to which the client is entitled.

Each provision of this certificate is separate and severable from every other provision. If any single provision is declared invalid or unenforceable, the client and the contractor understand that all the other provisions will be valid and enforceable.

Change Orders

Extra Work Orders and Change Orders become part of this Agreement once the Order is prepared in writing and signed by the Parties prior to the commencement of any work covered by the new Change Order. In order to be enforceable, the Order must describe the scope of the extra work or change, the cost to be added or subtracted from the Agreement, and the effect the Order will have on the schedule of work, completion date and progress payments. The Contracting Party may not require the Contractor to perform extra work or changes without providing written authorization prior to the commencement of any work covered by the Order.

If the building department or public entity requires a Change Order or extra work for the project and Contracting
Party fails or refuses to provide written authorization of the required Change Order, such failure or refusal shall be
deemed a material breach of contract, entitling Contractor to stop work on the project and seek legal remedies.
Alternatively, the Contractor may perform the extra work required by the building department or public entity and the
Contracting Party shall pay for such extra work at the Contractor's customary rates, including customary materials
price markups.

Payment Terms and Conditions

If Contracting Party has any objection or problem with any billing or payment or if Contracting Party disputes any payment that Contractor contends is due, Contracting Party shall raise the issue immediately in writing with Contractor. If Contractor receives no such written notice within five (5) business days that a charge or billing or payment request is disputed or objected to, Contracting Party shall be deemed to have waived any objection to or dispute with the charge, billing or payment request. Interest at a rate of 5% per month shall be imposed and paid by Contracting Party for any payment not received within 20 days after billing date.

For payment, checks must be made payable to EcoTech Services, Inc. Any payment or billing questions should be directed to:

Veronica Quezada

Director of Accounting

vquezada@ecotechservices.net

Schedule of Payments

The schedule of progress payments must specifically describe each phase of work, including the type and amount of work or services scheduled to be supplied in each phase, along with the amount of each proposed progress payment. IT IS AGAINST THE LAW FOR A CONTRACTOR TO COLLECT PAYMENT FOR WORK NOT YET COMPLETED, OR FOR MATERIALS NOT YET DELIVERED. HOWEVER, A CONTRACTOR MAY REQUIRE A DOWNPAYMENT.

Warranty

- Payments Received: The Warranty for the contract is only valid if payment is received in full on acceptance of the work.
- Diligence: the Contractor agrees to carry out its Work diligently and to provide sufficient supervision and inspection
 of its staff and subcontractors and that it's work will be of proper and professional quality, and in full conformity with
 the requirements of the contract.
- Competence: the Contractor warrants that it is competent to perform the Work and that it has the necessary qualifications including knowledge and skill with the ability to use them effectively.
- Site Unknowns: It is the responsibility of the Client or the Client's Representative to fully inform the Contractor of all the information regarding site unknowns that may include difficult buried materials, cables, and pipes, tree stumps, drainage or water table issues, rock and shale sub-surfaces and/or other impediments, issues or factors that could otherwise impact the quality, cost and timeliness of project completion. Failure to notify the Contractor may lead to additional costs to the Client (at the Contractor's discretion) and schedule time not included in the Quotation in Schedule 1, and may require changes in design and construction to overcome such problems all for which the Client will be responsible. Client can avoid such risks by permitting the Contractor to do appropriate soil and ground tests, review the site, and to secure additional required site information from appropriate government and other authorities. The cost(s) of such additional work is not included in the Quotation in Schedule 1 attachment.
- Damaged Utilities: Should damage occur to utilities during construction, the Contractor is only liable for the cost of the repair, the Contractor is not liable in any way for inconvenience to the Client caused by damage to the utilities.
- Damage to neighbors buried utilities, on the Client's property, are the responsibility of the Client.
- Building/Window/Vehicle Washing: Buildings, windows, or vehicles of the Client, including neighbors, are not
 intended to be kept clean due to dust during Construction or Work performed by the Contractor. Any necessary
 cleaning due to Construction or Work by the Contractor will be the responsibility of the Client.

Material Price Increases

From the day contract is signed or during the course of the project if material prices increase exceed 5% EcoTech will submit a change order to the representing party for the difference in total expected cost of that material for the project. Before EcoTech moves forward on that part of work the change order will need be signed.

Contractor:	R	Client:	
	Omar Rivera		
Signature Date: —	05/30/2024	Signature Date:	

8. (a)
Press Releases and News Article



News for Immediate Release_

Metropolitan board chair issues statement on decision to place general manager on administrative leave

June 15, 2024

Metropolitan Water District board chair Adán Ortega, Jr. issues the following statement on the board's decision to place General Manager Adel Hagekhalil on administrative leave:

"The board's decision to place General Manager Hagekhalil on paid administrative leave was made to allow time to investigate various personnel matters. To be clear, the matters under investigation are not exclusively based on the issues raised by one individual.

"A false narrative has emerged, and been reported in media coverage and online, suggesting the decision to place Mr. Hagekhalil on leave is based on an attempt to reverse, change course or subvert Metropolitan's policy work to ensure a reliable water supply for Southern California. This narrative is not only untrue, it's unhelpful and undermines the due process protections of all involved, including Mr. Hagekhalil. It is an overt external attempt to leverage personnel matters to influence district policy. The district's goal during this interim period is to continue making progress on our Climate Adaptation Master Plan for Water and all our work to sustainably bring water to the communities we serve.

"This is a personnel issue involving multiple matters, and the investigation into these matters is confidential. It is essential to protect the rights of all parties. Conspiracy theories and speculation about allegations are harmful to the investigative process and any individuals involved."

← Back to Newsroom



MWD | Metropolitan board chair issues statement on decision to place general manager on administrative leave

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News for Immediate Release_

Contacts:

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Metropolitan places general manager on administrative leave

June 13, 2024

The board of directors of the Metropolitan Water District of Southern California today immediately placed General Manager Adel Hagekhalil on paid administrative leave for up to 90 days to investigate various allegations.

Board Chair Adán Ortega, Jr. announced the action after the board met for more than five hours.

The board also named Deven Upadhyay, Metropolitan's assistant general manager and executive officer, as interim general manager.

"I want to reassure Metropolitan's staff and the public that our board is determined to act with strong unity and swiftness to protect everybody," Ortega said. "We've made some very difficult decisions, but we maintain our commitment to the policies and direction of this organization as we continue our important work to deliver water reliability to the 19 million people we serve."

###



The Metropolitan Water District of Southern California is a state-established cooperative that, along with its 26 cities and retail suppliers, provide water for 19 million people in six counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs.

CAL MATTERS: These California dams need repairs. But Newsom plans to cut grants in half

mavensnotebook.com/2024/06/13/cal-matters-these-california-dams-need-repairs-but-newsom-plans-to-cut-grants-in-half/

Cal Matters News June 13, 2024 0 111

June 13, 2024

Aiming to store more water and protect the public, legislators are negotiating with the governor to restore \$50 million to help repair 42 aging dams throughout the state.

By Rachel Becker, Cal Matters

Stay up-to-date with free briefings on topics that matter to all Californians. Subscribe to CalMatters today for nonprofit news in your inbox.

Several dozen dams throughout California could store up to 107 billion more gallons of water if they underwent repairs to fix safety problems. But facing a staggering state deficit, Gov. Gavin Newsom has proposed cutting funding for a dam repair grant program in half this year, while state legislators want the \$50 million restored.

California has an aging network of nearly 1,540 dams — large and small, earthen and concrete — that help store vital water supplies. For 42 of these dams, state officials have restricted the amount of water that can be stored behind them because safety deficiencies would raise the risk to people downstream from earthquakes, storms or other problems.

Owned by cities, counties, utilities, water districts and others, these dams have lost nearly 330,000 acre-feet of storage capacity because of the state's safety restrictions. That water — equivalent to the amount used by 3.6 million people for a year — could be used to supply communities, farms or hydropower.

Two years ago, in the depths of the most recent drought, Newsom touted dam repairs as a key approach to shore up water supplies squeezed by climate change. In his 2022 Water Supply Strategy, he referenced plans by his administration and the Legislature to create a grant program to "help local water districts regain lost storage capacity and improve public safety" of dams.

The program, created in 2023 and allocated an initial \$100 million, is still getting up and running.

But now, reeling from the massive deficit, Newsom has proposed cutting \$50 million this year. The Legislature as of Wednesday has kept that money in its proposed budget; negotiations are continuing.

"This investment is the trifecta: It gives you public safety, because you don't want dams breaking. It gives you climate resilience, because we could have flooding," said Assemblymember Diane Papan, a Democrat from San Mateo. And, she added, "It will impact our water supply."

Newsom spokesperson Alex Stack declined to address CalMatters' questions about dam safety funding, citing the negotiations, "We'll have more to share soon," Stack said.

Dam owners facing hundreds of millions to billions of dollars in repairs are urging lawmakers to add more funding for projects in a multi-billion dollar climate bond, which also is being negotiated.

"It's so important that we have the storage capacity to be able to collect water in wet times, so that we have it during times of drought," said Cindy Tuck, a deputy executive director of the Association of California Water Agencies, which represents more than 450 public agencies.

Hundreds of dams are at least a century old

Statewide, dams help corral floods, generate power and store water for cities and farms. But California dams on average are more than a decade older than the national average, with 328, roughly a fifth, that are at least 100 years old.

Despite their age, dam disasters are extraordinarily rare. In March 1928, the nearly brand-new St. Francis dam northwest of Los Angeles collapsed — killing more than 450 people in the second-deadliest disaster of California's history. In 1963, the Baldwin Hills dam in southwest Los Angeles breached, killing 5 people and damaging \$15 million in property.

A major earthquake severely damaged the Lower San Fernando Dam in the 1970s — leaving only "a thin dirt wall... between 80,000 people in the San Fernando Valley of southern California and 15 million tons of water." the U.S. Geological Survey reported. And the Oroville dam's compromised spillways forced the evacuation of nearly 190,000 people during the storms of 2017. Each major dam failure or near-miss has spurred greater oversight.

Papan said as the chair of the Assembly's water, parks and wildlife committee, the threat of deteriorating dams keeps her awake at night. "I don't want somebody to look back and say 'They knew this was going to be an issue, but they didn't put any money towards it."

'We are finding deficiencies faster than the dam owners can address the deficiencies."

Shawn Jones, california's Division of Safety of Dams

The American Society of Civil Engineers gave California's dams a C- on its most recent infrastructure report card in 2019. And in 2021 the state's auditor said "the condition of some of the State's potentially most hazardous dams remained a concern." Dam safety inspectors have rated conditions at 133 of them as less than "satisfactory."

According to the grant program's guidelines, "in many cases, these dams pose a significant threat to communities downstream." The state restrictions aim to reduce that threat by limiting the amount of water they can store.

Shawn Jones, assistant manager of the state's Division of Safety of Dams, said California has the largest dam safety program in the nation, overseeing roughly 1,230 dams with more funding and staffing than any other state.

Jones said that he wouldn't characterize the 42 dams that have storage restrictions, which average around 100 years old, as "unsafe." "All dams provide some sort of risk downstream," he said. "These dams have an additional risk, and we're driving it down in the interim" with the storage restrictions.

But repairs are often slow-moving because of lengthy environmental permitting processes and massive costs.

"We are finding deficiencies faster than the dam owners can address the deficiencies," Jones said.

Water providers say federal dollars are insufficient, and even \$100 million for the state grant program — though welcome — is just a drop in the bucket. They anticipate mounting costs to shore up aging dams against earthquakes and climate change. Some also are grappling with federal restrictions and local factors, such as sedimentation, that reduce storage.

"This is really a systemic issue, a water issue that is affecting the state of California," said Drew Kleis, assistant director for San Diego's water delivery branch.

Nine dams that store raw water for San Diego are especially geriatric, averaging 92 years old. The state has imposed restrictions on four of them, cutting into the city's capacity to store water by 20%. Repairs, maintenance, and additional assessments expected to total around \$1 billion.

At Lake Hodges, near Escondido, a dam's concrete structure, more than a century old, is deteriorating, raising concerns about its ability to withstand a major earthquake. State restrictions have cut its original storage capacity of roughly 38,000 acre-feet — already substantially reduced by sedimentation — by nearly 30,000 acre-feet. The dam is expected to be replaced by 2034.

Kleis said the dams, as the city operates them, are safe. Reducing how much water is stored behind them "minimizes the amount of water that would be released downstream" in the unlikely event of a breach, he said.

Three other San Diego dams are also operating at reduced capacity under state safety restrictions, including at El Capitan Reservoir, one of the largest serving the city. The state has cut the reservoir's storage capacity by more than half for nearly a decade while the city investigates how the earthen dam would fare during a large earthquake.

The last several years, with extreme drought followed by the deluges of 2023, have highlighted the importance of storing more water in California.

"With the potential for more varied weather, for more extreme drought and more extreme wet years, we want to be able to capture that runoff," Kleis said.

Storage capacity for Valley Water, a Silicon Valley wholesaler for 2 million people in Santa Clara County, has dropped 25% because of the state restrictions and another 37% from a federal limit on their largest reservoir, said Ryan McCarter, Valley Water's deputy operating officer for dam safety. The restrictions were largely imposed to reduce the risk to people downstream of dams if a major earthquake causes damage.

"That's a major hit to our water supply," McCarter said. "Moving into these years of climate change, if we have longer extended droughts, we're going to really want these reservoirs at full capacity."

The price tag to restore capacity to Anderson Reservoir, which has been drained because of state and federal safety restrictions, is expected to reach \$2.3 billion. Repairs to other dams could add at least another \$325 million. The water provider also paid roughly \$50 million for emergency water supplies during the last drought.

The costs eventually will hit ratepayers, said Valley Water Vice Chair Richard Santos.

"We have large, diverse disadvantaged communities where water affordability is a serious issue," he said.

PRESS RELEASE: New Report: SoCal water experts identify wastewater recycling as essential to resilient water future for LA region

mavensnotebook.com/2024/06/13/press-release-new-report-socal-water-experts-identify-wastewater-recycling-as-essential-to-resilient-water-future-for-la-region/

Press Release/Notice Press Release/Other June 13, 2024 0 29

June 13, 2024

Report includes wide-ranging recommendations to increase the amount and reliability of LA County's recycled water supplies

Press release from LA Waterkeeper

A new report was released jointly today by the UCLA Luskin Center for Innovation and the UC Division of Agriculture and Natural Resources on the existing and potential opportunities related to wastewater recycling in Los Angeles. The report, *Making the Most of Landmark Recycled Water Investments in Los Angeles: Technical Advisory Recommendations for the Region*, was commissioned by Los Angeles Waterkeeper. The goal of the report is to support ongoing efforts to improve local water security and rely less on expensive, energy-intensive and increasingly unreliable water imports from faraway places, like the Sacramento-San Joaquin Delta and the Colorado River.

Experts involved in developing the report agree that expanding the use of recycled wastewater has emerged as a key, scalable water supply strategy that can offer certainty and reliability in the region in light of our new climate reality.

"Both the Metropolitan Water District of Southern California and the City of LA's Department of Water and Power have made significant investments in wastewater recycling, and they plan to do more," said Bruce Reznik, executive director of LA Waterkeeper. "But there are a lot of moving parts and some critical decisions to be made in the short term if we're going to make significant progress toward reliable local water supplies. The purpose of this report is to help decisionmakers see the full picture so they can prioritize and develop informed strategies for expanding and integrating the disparate wastewater recycling projects into a more cohesive wastewater system – all while taking community voices and environmental impacts into account."

Local leaders recognize the region must further invest in equitable, climate-smart, affordable local water strategies. LA County's Water Plan, released in late 2023, calls for 80% of water to come from local sources by 2045 (compared with approximately 40% currently). Four major centralized wastewater recycling projects, including two that are landmark in size and scope, have either broken ground or are in the active planning stages throughout LA county. Collectively, this regional effort may represent the most important water supply investment in the American West in the last half century.

"In many ways our region has taken great strides toward embracing wastewater recycling," said report coauthor Dr. Edith B. de Guzman, Water Equity and Adaptation Policy Cooperative Extension Specialist. "But we need a clearer pathway for how these projects can be built and possibly integrated into a more cohesive system. This report provides a blueprint for water agencies on the project design, community engagement and governance steps that must be made to ensure progress toward rapidly increasing our local water independence."

Upwards of \$20 billion in investment in wastewater recycling projects is planned for the coming years. But as local water and wastewater agencies make these investments, it's essential that they design systems to both maximize benefits and minimize impacts that could be damaging to people and the environment, all while

ensuring water remains affordable. Just as importantly, the report flagged the need to effectively engage the public in key decisions to foster public trust in these emerging water technologies and facilitate coordination between agencies to create a resilient regional water supply system.

Specific action items identified in the report are organized under eight principal recommendations, listed here.

- 1. Take actionable steps on current key decision points pertaining to major recycling facilities. The report encourages agencies to make several decisions that will impact the design of the overall wastewater recycling systems imminently. These include resolving differences between the City of LA's Hyperion 2035 and Operation NEXT efforts, deciding whether to upgrade existing wastewater recycling infrastructure like the Edward C. Little Water Recycling Facility, and making key pipeline and routing decisions.
- 2. Conduct a more nuanced regional analysis of system facilities, with an emphasis on evaluating distributed alternatives. While some assessment of a more distributed system has been undertaken, additional analysis is still needed on the issues of energy demand, the cost of distributing water under different alternatives, and impacts on aquatic and marine ecosystems.
- 3. Identify and establish a structure for collaborative governance that enables agencies to work together to realize a regional advanced wastewater recycling network.
- 4. Adopt a coordinated monitoring plan to ensure water quality is safeguarded for public and ecological health.
- 5. Balance the adoption of Indirect Potable Reuse (IPR) and Direct Potable Reuse (DPR) with a near-term focus on IPR to the extent feasible and using DPR to fill in service gaps.
- 6. Perform robust regional forecast and impact analyses to improve future-proofing of facility and network designs, maximize benefits, minimize harm, and avoid stranded assets.
- 7. Design and execute a collaborative communication and community engagement strategy that offers a clear narrative, emphasizes the benefits of a secure water supply, meets the needs of water customers, and is delivered by trusted messengers.
- 8. Coordinate across agencies on strategies to attract project financing while taking household affordability into account.

"This report is by no means the final word," said co-author Dr. Gregory Pierce, Research and Co-Executive Director, UCLA Luskin Center for Innovation. "The point of this study is to provide guidance and spur discussion, and we hope and expect to see ongoing research and coordination on all of these issues."



to Main Content



DWR's Roadmap to Reaching Carbon Neutrality by 2035

Published: June 12, 2024

California's changing climate is one of the biggest challenges facing the state, resulting in intense weather extremes that negatively affect public safety and our critical water supply. To rise to this challenge, the Department of Water Resources (DWR) has updated its Climate Action Plan to take accelerated steps to reach carbon neutrality by 2035.

Recognizing that greenhouse gas (GHG) emissions caused by human activities are one of the main drivers of global climate change, DWR has updated <u>Phase 1</u> of its <u>Climate Action Plan</u> to incorporate more renewable energy and other measures to eliminate its own carbon footprint.

DWR has a solid track record of setting and achieving its GHG reduction goals. In fact, as part of the plan's previous update, DWR set a goal to reduce its GHG emissions to 60 percent below 1990 emission levels by 2030, which DWR accomplished nine years early. Similarly, DWR met its first GHG reduction goal – to reduce emissions to 50 percent below 1990 levels by 2020 – five years early in 2015.

To ensure that this progress continues, DWR's Climate Action Plan Phase 1, also known as the Greenhouse Gas Emissions Reduction Plan, was updated this past year to align with legislative changes that were introduced since the plan's previous update in 2020. The update commits DWR to:

- Supplying 100 percent of its electricity load with zero-carbon resources and to achieve net carbon neutrality by 2035
- Increasing efficiency of State Water Project pumps and generators through refurbishment or replacement
- Developing renewable energy projects on DWR property

"DWR is currently ahead of the curve with its emissions level goals," said John Andrew, DWR Deputy Director for Climate Resilience. "The Climate Action Plan Phase 1 update solidifies our commitment to supplying electricity while staying carbon neutral."

DWR first developed the Greenhouse Gas Emissions Reduction Plan in 2012 as the first phase of the Climate Action Plan. Since then, the plan has received two updates, one in 2020 and now 2023. <u>Phase 2</u> of the plan is the framework for analyzing climate change impacts and <u>Phase 3</u> evaluates DWR's vulnerabilities to climate change-associated risks such as wildfire, extreme heat, and sea-level rise.

DWR has received <u>numerous national leadership awards</u> for setting and achieving GHG emissions reduction goals and in 2022 was one of two public agencies to be inducted into the first-ever <u>Climate Leadership Awards Hall of Fame</u>.

For more information regarding the 2023 update to the Climate Action Plan, please visit these resources from DWR:

- Climate Action Plan
- Clean Energy
- Climate Change Program

JEFFREY KIGHTLINGER: Southern California water challenges, explained

mavensnotebook.com/2024/06/06/jeffrey-kightlinger-southern-california-water-challenges-explained/

Mayen Notebook Features June 6, 2024 0 250

June 6, 2024

Jeffrey Kightlinger spent 15 years as Chief Executive Officer of the Metropolitan Water District, the largest municipal water provider in the nation. In this presentation for Sustainable Silicon Valley, he gives the background and history of the Metropolitan Water District and the current water policy issues facing Metropolitan, California, and the West.

Here's what Mr. Kightlinger had to say, in his own words, lightly edited for clarity.

SoCal's water past: The history of Metropolitan Water District

Metropolitan Water District is a Los Angeles-based organization that came from Los Angeles' growth at the turn of the century. William Mulholland, the head of the Los Angeles Department of Water and Power at the time, famously built the Los Angeles Aqueduct up to the Owens Valley. It was similar to and in the same timeframe as the Hetch Hetchy system in San Francisco; both tap into waters east and are gravity flow systems, the type of systems they could build in the 1900s. The Owens Valley supply brings water about 200 miles from the Owens Valley to the city of Los Angeles; it came online in 1913.

At that time, William Mulholland thought they'd supplied 50 years of water to Los Angeles and were well ahead of all the growth. But, a huge growth boom started in Los Angeles around the mid-1900s based on oil and later the beginning of the film industry. As early as the 1920s, it became clear to Mulholland that more water would be needed other than just the Owens Valley supply. He began looking around, and with the technology they had at the time, the closest, most significant supply of water they could find was the Colorado River, roughly about 250 miles east of Southern California.

The Colorado River Aqueduct

Mulholland went into his city attorney's office and said, 'I'm going to need about \$200-220 million to build an aqueduct to the Colorado River.' The attorney looked at the bonding capacity of the city of LA at the time and determined that even though it was the largest city in southern California, they couldn't bond it; there wasn't enough capacity in property value to issue bonds to build it.

So the city attorney came up with an idea: Why don't we bring in the suburbs and cities? If we bring them in and form a coalition, we can afford it. And it makes more sense because Los Angeles had its Owens Valley supply, and Mulholland was looking 20 years ahead and didn't need Colorado River water at that time in the 1920s.

So it took a few years, but the Legislature created the Metropolitan Water District of Southern California It was a coalition of 13 cities in Southern California: Los Angeles, Long Beach, Santa Monica, Beverly Hills, Glendale, Burbank, Pasadena, and a couple of cities in Orange County. They bonded together to pool their costs to build the Colorado River Aqueduct.

Quite a bit of logistical governmental work had to take place. First, the California legislature had to create Metropolitan Water District. Next, they had to go to the other states and divide the Colorado River waters; that took almost a decade of wrangling and negotiating the divide between them that was overseen by Herbert Hoover. Then they had to go to Congress and get permission to build a dam on the Colorado River; now we know it as Hoover Dam, but at the time, it was the Boulder Canyon Dam. They also had to go to Congress and build another dam, Parker Dam, and return to Congress to get the permits to build the Colorado River Aqueduct. All of that took about ten years of working in the state and

the federal Legislature, obtaining the land, and putting it all together. Then, when they were finally ready to finance it in the early 1930s, it was the middle of the Great Depression, and Southern California had about a 40% unemployment rate.

It would take about ten years to build this project. It would be the most expensive project ever built in the United States or the world at the time. And it would be financed entirely by debt issuance in Southern California because the state and federal government said, 'We're broke; it's the depression.' So basically, they were asking people to put a property tax lien on themselves for ten years before there was a drop of water to sell in the middle of the Great Depression with 40% unemployment. It would be 17% of the entire value of Southern California pledged to a single project.

They saw it as a tough lift, so they put out a lot of propaganda about thirst, growth, and living in a desert. And it passed overwhelmingly; it was about a twelve to one margin that people voted for it, which I always think was quite remarkable. It shows you the spirit of people; they knew things would get better and were confident they and the state would come through the Great Depression and thrive.

By 1940, the Colorado River Project was built and was delivering water. Shortly after it came online, there was a huge post-World War II boom, and Southern California started growing remarkably. The Colorado River water was fully subscribed. The Colorado River Aqueduct was delivering water to Southern California. With all the growth, other parts of southern California started to join Metropolitan and annex to it.

So slowly but surely, Metropolitan grew to be the entirety of Southern California, what we call the urban coastal plain. It's all of Los Angeles, Orange County, San Diego County, the southern part of Ventura County, and then the eastern parts of Riverside and San Bernardino, where the population centers are in those counties.

In terms of landmass, it's about 1/20 of the state of California, but in terms of population, one in every two Californians lives in the area that Metropolitan serves. Another way is one in every 16 Americans lives in Southern California and is served water by Metropolitan.

So, as Southern California grew in the 1940s with the postwar boom, we were confident that we had taken care of the next 50 years with Colorado River water. But by the early 1950s, we had started ripping out all the citrus trees in Orange County and replacing them with homes, and it became clear that another source of water was going to be needed.

State Water Project

The Orange County-San Diego-Inland Empire area was predominantly agricultural but was growing into homes and suburbs. Los Angeles represented the old guard, and Los Angeles said, 'We don't want to grow more; we're satisfied with where our water supply' because they were reaching close to being built out. And they already had paid for much of the Colorado River and their own Owens Valley Aqueduct.

However, the growing areas in the southern part of Southern California, Orange, and San Diego County pushed and clamored for a new water supply. After much debate and wrangling with the state of California and then-governor Pat Brown, Metropolitan over Los Angeles protests eventually decided to bankroll the State Water Project.

The State Water Project was Governor Pat Brown's plan to move water from the northern Sierra to the Central Valley for farming and to Southern California. And to make it work, he knew he needed Metropolitan's support. So Pat Brown did a lot of twisting arms in Los Angeles, and eventually, after four failed votes, Metropolitan voted to go ahead and finance the State Water Project.

It was a remarkable commitment. At the time, many of the civic leaders were skeptical. It was, again, going to be the most expensive civil works project ever built in the world. It was massive – it would be some 300 miles of aqueducts and canals, dams in Northern California, and the largest pump station ever

built to lift the water over the Tehachapi Mountains into Southern California. It was really going to stress all our technical and engineering capacities at the time; it was going to be incredibly cutting-edge and very expensive, so it was a rather breathtaking commitment.

What the contract called for was that Metropolitan would pay half the cost of the State Water Project as a fixed-cost debt for 75 years. The contract was signed in 1960 and runs through 2035. In our industry, it's what we call a 'take or pay contract' (which I never quite understood the "or" because you pay regardless), which is really you pay, and you get whatever the project serves. In some years, the project serves up a lot of water because there's a lot of rain and snow, and you get a lot of water for your money. In drought years, the project serves up hardly any water, and it doesn't matter; you still pay the cost.

What costs are for water – we don't pay for water; we pay for infrastructure and the cost of moving water, which is the electricity to move it, which is fairly small. So, the cost of the State Water Project is pretty static. It costs about the same in a drought year, minus the electricity, as it costs in a wet year. So, regardless of how much water you get, your bill is pretty much the same. To give you a sense of the size of the bill, Metropolitan will be paying about \$550-\$560 million this year. Over half a billion dollars a year as a single check to the state of California to finance half the cost of the State Water Project, and for that, Metropolitan gets half the water the project delivers.

The State Water Project was originally designed to deliver 4 million acre-feet per year on average, though it was originally intended to have several more dams. The State Water Project dams up the water on the Feather River at Lake Oroville. Then the water that's captured there gets released down the Feather River to the Sacramento River, makes its way through the San Francisco Bay-Delta, and at the southern end of the Delta, the pumping plant lifts the water into the California Aqueduct that parallels I-5 and brings water to Central Valley farms and then to Southern California.

The project was supposed to include dams on the Eel River and elsewhere to provide more water, but those were never built as they ran out of money. The project was also supposed to include a bypass canal system that went around the Delta, which was never built because the project ran out of money. Still, when you look at its sheer scope and size, it's pretty amazing.

One of the remarkable things is in California, we can take a drop of water from the very northern part of the state, even north of Lake Oroville up in Lake Shasta, where there's a federal project dam that delivers water primarily to the San Joaquin Valley and Sacramento Valleys, and we can deliver it to Chula Vista on the Mexico border through our plumbing system. There are a lot of environmental impacts and a lot of energy associated with that. Still, it is a marvel of the world, and most people in most parts of the world who run a water system are pretty jealous that we have managed to build a system that can support this. Absent this kind of plumbing and hardware system, you don't have a Southern California of 38 million people and the fifth largest economy in the world. That would simply not be possible absent the kind of infrastructure that we built to support it.

The State Water Project went to the voters for statewide bonds in 1968, and it barely passed. Then-Governor Pat Brown made a barnstorming effort, and Southern California's votes were enough. There is opposition in Northern California, but it's not incredibly strident. It barely passes, 51-49 statewide. The State Water Project was built and began delivering water a decade later, in 1971. That became the last major water system built in the state of California.

1990 drought

In 1990, Metropolitan suffered its first severe drought. For the first time, Metropolitan had to ration water. We have had severe droughts in the state before; in the late 70s, when Governor Jerry Brown was governor for the first time, we had a terrible drought. In fact, it was hydrologically considered one of the worst droughts ever in about 2000 years of tree ring history. That drought was incredibly severe.

People might recall Marin County ran out of water, and they had to strap a pipe across the Richmond Bridge and bring water into Marin County. The source of the water that went to Marin was from Metropolitan. What Metropolitan did was ramp up pumping on the Colorado River at the request of Jerry Brown; they forsook their State Water Project water, gave it back to the state, the state supplied it to

Marin County, and bailed them out of the drought. Metropolitan could do that because it had this diverse mix of supplies: groundwater basins, local supplies, and the Colorado River Aqueduct. So Metropolitan pumped heavily and ran the Colorado River Aqueduct at about 110% of capacity to get through the 70s drought with no real impact on Metropolitan and an ability to help other parts of the state.

But by 1990, that didn't happen. Northern California went into another drought, and Metropolitan, for the first time, had to ration water. With hindsight, you can see what happened. In 1900, Southern California ran out of water and built the Owens Valley Aqueduct. In 1930, Metropolitan ran out of water and built the Colorado River aqueduct. In 1960, Metropolitan started to run out of water and built the State Water Project. And then, in 1990, Metropolitan ran out of water and had to ration.

The answer had always been to just tap into another supply. The difference was that it was a very different world in 1990 than in 1960, 1930, and 1900. Those engineering solutions were harder and more expensive, but politically, the world had changed. We passed a slew of environmental laws in the 1970s. We passed the California Environmental Quality Act, the National Environmental Policy Act at the federal level, and the Endangered Species Act.

SoCal's water present: Metropolitan as the regional water planning agency

Those massive infrastructure replumbing of the West projects have become more or less a thing of the past, but in the 1990s, that didn't mean our engineers didn't have ideas. We have looked at how to reroute the Klamath River. We've looked at rerouting the Columbia River and moving it down the Rockies with the help of several nuclear power pumping plants. We'd have looked at relocating water from the Mississippi, the Missouri, and the Great Lakes, but the era of massive infrastructure rerouting and replumbing more or less had ended.

So, Metropolitan had to rethink how to continue to grow and supply enough water. Metropolitan did some things in the 1990s that were unique, but they're now pretty much universal in managing water. In the beginning, Metropolitan was the supplemental water provider to the cities of Southern California. But now, what we said was, 'We're going to be the water planning agency for all of Southern California; we're not just going to pick up water from far away and sell it to you and be done with our job; we're actually going to look at how we plan as a region.'

At the time, there was a fair amount of discussion about whether that really was an appropriate governmental role for Metropolitan. Were cities giving up power to Metropolitan to do that? It took about four years of debate before it was decided this was the path we would take.

Metropolitan developed its first Integrated Resource Plan in the mid-1990s, and we've been updating it every five years since then. We look 25 years ahead, consider demand and growth projections, and then at water conditions and supply. We also consider what each city has, not just what Metropolitan will get from the Colorado River or Northern California. What is the local supply? What do the groundwater conditions look like? What is rainfall in Southern California? How can we best utilize the recycled water opportunities there?

Metropolitan also would collect money. For the first time, we started assessing a water stewardship fee. The idea was that it was really a public benefit charge. So, on every acre-foot of water Metropolitan would sell, we'd add a fee. And that fee would be used to fund conservation, water recycling, and other types of local projects.

Metropolitan also standardized conservation efforts. Prior to that, of course, we had conservation efforts throughout Southern California, but every city did it themselves. So Los Angeles might give you a rebate on a low-flush toilet, Orange County might not, and San Diego might offer the same or a different rebate. It was all scattered and ad hoc throughout Southern California. In the Metropolitan service area, there are almost 300 cities, ranging from large ones like Los Angeles and San Diego to small ones – Chula Vista or La Canada, some down to about 20,000 residents, and every single one would set its own water conservation program.

Metropolitan set out to make that uniform throughout Southern California, collect the money in one place, and then redistribute it as a rebate. So if you walked into a Home Depot or Lowe's, and it didn't matter what city in Southern California, they would offer the same rebate on toilets, for example. It made conservation more effective, uniform, and stronger throughout Southern California.

That effort took a lot of planning and work to institutionalize the role of shifting from just being an imported water provider to the whole water manager for Southern California. And that's led us to the present day.

It's been remarkably effective in its own way. In 1990, Southern California had 14 million people, and Metropolitan sold 2.4 million acre-feet. ... We estimate an acre-foot now serves about three average households for a year for their water supply. So we would sell 2.4 million acre-feet in 1990 to satisfy the demands of 12 million people. Today, Metropolitan serves 90 million people and sells about 1.6 million acre-feet. So we've cut the amount of water by a third, and at the same time, we've grown in population by 25-30%. So we've been able to add a lot of people and actually reduce the amount of water.

That's been critical to getting through this. Otherwise, we would have had to build that fourth aqueduct to some faraway place to get that water. Instead, we've been able to do that with demand management, conservation, and the funding of recycled water projects throughout Southern California.

SoCal's water present: Building up storage capabilities

That gets me to the last topic: The model we have in Southern California of a regional water provider and what its stresses are now. We've managed to do well in terms of managing growth and population. But right now, we're trying to manage through what climate change is happening and doing to our system.

The good news for Metropolitan has always been that it has always been very strong in dealing with droughts because of the diversity of supply. Metropolitan gets about half its water locally, which is rainfall that feeds the Los Angeles River. That local rainfall – 12-14" of rain in the LA area, 6-7" in San Diego – feeds some pretty big groundwater basins in Orange County, the San Gabriel Valley, and the San Fernando Valley. These groundwater basins can provide a significant amount of water; almost 35-40% of Southern California's water comes from groundwater.

The other main sources are the Colorado River from the Rockies and the State Water Project from the Sierra Mountains. So, three hydrologically distinct watersheds provide the Metropolitan's water supply. So when the Colorado River and the Rockies would go in drought, or the Sierra would go into drought, you'd still have water in usually two of the three. So, that diversity of supply really helped protect Metropolitan against drought. But by the 1990s, we found that wasn't enough with our population.

So, Metropolitan began doing two big things in the 1990s. First was the conservation effort.

The second was building storage. One of the lessons we learned was that our hydrology was becoming even more volatile; that was one of the impacts we started tracking of climate change in the early 2000s.

People may not realize this, but California has, by far and away, the most variable hydrology in the United States. In the southwest, it's mostly dry. It's more or less wet in the north and northeast, but their hydrology falls within a fairly narrow range. Our hydrology ranges from extremely wet to extremely dry in California, and our range is far greater than anywhere in the nation.

That's good in many respects. Because of that high variability, we have the most diverse biodiversity in our natural systems in California. But as a utility manager, we're trying to deliver water 24/7, 365, and we like nice and steady. That makes it easy to plan. But we don't have that. Climate change has exacerbated that even more. So we started looking at how to manage with that high variability, and one of the things you do in the water business is build storage.

In the 1990s, Metropolitan could only store about a quarter million acre-feet, or 1/10 of our whole demand, in reservoirs at any time. By the time I left in 2021, Metropolitan could store up to 5 million acre-feet or two full years of demand all the time in reservoirs and groundwater basins. About half of that storage is above ground in reservoirs and about half in groundwater basins.

It was a massive, expensive effort by Metropolitan beginning in 1990. We spent over \$2 billion building Diamond Valley Lake Reservoir, the largest reservoir in Southern California. We spent another billion dollars on groundwater basins, wells, and spreading basins in the system and another billion dollars for our inland feeder pipeline to feed them all. Building a vast storage network across Southern California was roughly a \$4 billion effort over 25 years from the mid-1990s to 2020. And that has helped harden and make our area a lot more resilient to drought.

While I was General Manager from 2005 to 2020, we had two of the driest stretches of weather in California's recorded history. You have to go back 1800 years, based on tree rings, to find anything comparable to the drought we had. In the 2012-2015 period, we had another extreme drought. In the last 15 years, three governors have declared statewide drought emergencies. Eight of the last 15 years have been drought emergency years. And we haven't had real dramatic rationing; we haven't had the shock effects like Australia had when they had similar conditions. Part of that is that we've been preparing for this.

When we have these wet years, Metropolitan has built the system to rapidly capture all that water and move it into reservoirs and groundwater basins. So even having gone through this last 15-year period with about half of those years being drought, we still move into the next decade with more water in storage in Metropolitan history than we've ever had before. When we have these occasional wet years, we can move all that water, and that has worked well in preparing us to deal with the climate-changed world.

SoCal's water future: Growing challenges for imported water

But still, there are significant challenges we see coming. By most projections, the Colorado River has lost about 30% of its historic supply to climate change. Shrinking snowpack, early spring, hotter weather – all those things have resulted in less and less water reaching the Colorado River to the point where the states are now using more water than is coming in. And we've been living off our stored water in Lake Mead and Lake Powell for the last 15 years. Obviously, that's not sustainable.

We have the guidelines governing the river, and we negotiate and adapt those every couple of decades. The last time we did that was in 2007. The current guidelines expire in 2026. Most experts agree that to be sustainable, we will have to reduce the consumption on the Colorado River by 1.5 million acre-feet every year. That will have to be shared with the Lower Basin states of Arizona, Nevada, California, and the country of Mexico. That is a considerable reduction.

When we talk about a million and a half acre-feet, that's almost all of Southern California's water supply for 19 million people. That's the amount we'll have to somehow find a way to reduce the usage in Arizona, California, Nevada, and Mexico. So you can imagine that's an incredible, politically tough, fraught negotiation. But we also know it has to happen because the current situation cannot be sustained. And the federal government has said, 'You have to get this done by 2026, or the Secretary of Interior will do it for you.' The last thing we want is to have a dictate of how to share it.

So we want to try to solve this ourselves. We've been in state-to-state negotiations; we're talking with the tribes, environmental groups, and the sovereign country of Mexico. So you can imagine this is a tough, long, protracted geopolitical negotiation taking place. But we have to be successful at it. We're on a good path and have a good track record of negotiating these issues amongst the states. Legal historians are well aware of the Supreme Court challenges and battles between Arizona and California in the 1960s. We don't want to go back before the US Supreme Court and state-to-state battles.

Our goal as water managers is to solve this, but it will be the toughest negotiation we've ever had. And we are right in the middle of it. Our goal is to come up with at least a framework agreement between Arizona, California, and Nevada by March. We've been working on it for a couple of years. We still have a long way to go. But I am optimistic we're going to get there.

In Northern California, we haven't seen the same reduction in water supply year in and year out that we've seen on the Colorado River. But what we have seen in the Sierras is a much more diminished snowpack and much more volatility, which puts a lot of stress on our infrastructure. We get these wet years, and our levee system in the Bay Delta is stressed by these big atmospheric rivers coming through.

We're seeing a diminished snowpack, and we still get a lot of water, but it's coming as rain more often than snow. We have 130-140 years of recorded history in California, and of the top of the ten worst snowpacks we've ever seen, seven have been in the last 15 years. So climate change is shrinking our snowpack.

The reason that's important is that we built our system to rely on slow-melting snow that takes four or five months to melt from the Sierras that we can capture and move around the state. Now, if that same precipitation is coming in, but instead of having four or five months to manage it, we only have 14-15 days to manage it in storms. Our systems weren't designed for that.

We've been talking about building more robust systems to capture and move water when it's coming in as rain, and the most recent idea of the last decade has been building some tunnels under the Delta and moving water into the state system. That has been incredibly contentious in Northern California; there's a lot of opposition to it.

Governor Schwarzenegger started the concept, Governor Brown had a two-tunnel proposal, and Governor Newsom shrunk it to a one-tunnel proposal. It's still in the proposal stage. The environmental review documents have recently been completed on a single tunnel, but there still is incredible political opposition. There are many financing challenges to it; it won't be a cheap project – \$15-20 billion, maybe more. So we're going to have to figure out how to pay for it and how to get enough political support to do it.

Water has always been a political challenge; there's always been a north-south divide about how to manage water. However, as a state, if we're going to be reliable and deal with 38 40 million people, we have to find some way to resolve these issues and move forward. Even when we did it in 1960 with the State Water Project, that was by a 1% vote. It hasn't gotten any easier over the last 50-60 years.

A real hopeful sign is Metropolitan is also looking at building Pure Water SoCal. It would be the largest water recycling facility in Southern California and the nation at 150 million gallons per day. The idea of building it would be to take all the water replenishment for all the major groundwater basins in Southern California, move it into recycled water, and save our imported water for drought, management, and climate change issues. That will be an incredibly expensive project, a multi-billion dollar facility. It will supply a lot of water that we don't necessarily need at this point in time, but perhaps 30-40 years from now. But if we don't start it now, it's hard to finish it 30-40 years from now.

One of our far-reaching ideas was to cost-share this with Nevada and Arizona; they would pay up to 25% or so of the project, and 25% of the water would be returned to them by exchange for Metropolitan's Colorado River supplies. It's a way of artificially augmenting the flow of the Colorado River to make up for some of that lost water. And it's a way of partnering among the big urban centers of Las Vegas, Los Angeles, and Phoenix and finding a way in which those urban entities can find ways to cost share, grow recycled water, and collectively lessen our demand on a stressed resource, the Colorado River.

There are so many far-reaching ideas there, and there is a lot of interstate cooperation amongst red and blue states. I find that to be politically and technologically a very promising path. So I see a lot of opportunity there for the future and how we can think through these issues collectively as a state, but even broader as the entire Southwest region.

QUESTIONS & ANSWERS

QUESTIONS: Regarding Pure Water SoCal, Host Dennis Murphy noted that 150 MGD is a very large number, especially compared to Bay Area recycled water projects, which would produce 8 to 12 million gallons per day. He noted that for every 8 million gallons of recycled water that Valley Water produces, 1 million gallons of brine is created, and no one has quite figured out the best ways to deal with the brine.

JEFF KIGHTLINGER: There are no free rides. Recycled water is deemed a more environmentally friendly project than imported water, but it has impacts. The big impacts are that it is energy intensive and disposing of the brine byproduct. Once you've recycled water, the solution has mostly been to use what we call brine outfalls that put the concentrated brine in the ocean. It's cleaned up; contaminants are removed, so it's just purely salted compound. But we use the ocean for the disposal of that brine. And absent that, it's really hard to recycle water, so typically, where you see the recycled water is on the coast, where you can access the ocean. You don't see a lot of recycled water in the Phoenix, Denver, or Las Vegas area because they don't really have an easy spot to deal with brine. When you put it on land, you end up with these brine sumps that eventually become more and more toxic over time. So we've used the ocean in Southern California, but it does have that trade-off and no doubt impacts.

QUESTION: You mentioned the half billion dollar payments for the State Water Project each year. Are the costs primarily related to electricity/energy costs?

JEFF KIGHTLINGER: No, about 85% of that cost is fixed. That's the cost of Oroville Dam, the maintenance, the aqueduct systems, and the pumping plants. It's for infrastructure. Of the overall \$1 billion to maintain the State Water Project, 80-85% is just for the fixed costs of building, maintaining, and paying off the infrastructure and hardware. About 15% is what we call the marginal cost to move the water; most of that's electricity, labor, and other costs, but that's 10-12% of the overall cost. The bulk of the cost is the infrastructure. People always say, 'I'm paying for water, but it rains, so it should be free.' And I say, 'Yeah, you just have to move it, and that's the expensive part.'

QUESTION: Host Dennis Murphy notes that water can have different qualities, depending on where it was sourced from. In the Bay Area, water sourced from Hetch Hetchy is very clean, while groundwater can have higher pH and total dissolved solids. How does the water in Metropolitan's system vary in different areas?

JEFF KIGHTLINGER: Metropolitan tests its water incredibly rigorously. Metropolitan has one of the largest labs in the world. And we test roughly 1000 different samples daily. About 350,000 samples a year are taken from water at various locations and measured. They are different, so Metropolitan has developed very careful blending policies and policies for managing water.

Metropolitan's Colorado River water is very salty compared to Northern California's water. The Colorado River water comes in at roughly 500 parts per million total dissolved solids – the salts. A lot of that is because of upstream farming. San Francisco is fortunate with its Hetch Hetchy supply. There is no use of the water upstream; it's captured at the source and then moved straight into the system, and almost nothing needs to be done, just a little filtering. And it's perfect for drinking.

Colorado River water has been farmed and returned to the river multiple times over its journey down the Colorado River and eventually to Metropolitan. That results in a heavy dose of salt. What Metropolitan has historically done is blend that water with State Water Project supplies coming off the Sierra and have much less impact – it's coming in at less than half the amount of salts of the Colorado River at less than 200 parts per million. So, blending those two helps quite a bit in managing salts and total dissolved solids.

We also look at not just the water's salt, dissolved solids, and mineral compounds but also manmade contaminants. Luckily, we see those less in the surface water. But, large parts of our area rely on their groundwater basins. We have had a lot of industrial development from the 1950s, 60s, and 70s throughout Southern California that resulted in Superfund sites and contaminants such as perchlorate,

MTBE, and all sorts of contamination throughout groundwater basins. Those basins then must be treated at great expense as we have to add wellhead treatment to remove those contaminants. So we've lost a lot of that supply as well, just because we can't treat it up to drinking water standards. So we look at the contamination levels and the salt issues, and we balance and try to blend our water and manage that so it's all good drinking water.

Metropolitan made a decision around 2000 to shift our treatment process to ozone treatment instead of chlorination. It's much safer and better health-wise as there are some known carcinogen precursors in using all the chlorination and disinfection byproducts, and ozonation results in a much better-tasting product. We have a panel of experts that taste the water from our treatment plants. It's a real source of pride that we take in that our tap water will not only be perfectly healthy and safe but also tastes good.

The shift to ozonation was very expensive. Metropolitan operates five of the largest treatment plants in the world to deliver treated water throughout Southern California. Shifting them from chlorination to ozonation as the primary source of treatment cost about a billion dollars and took about 20 years to do but it's resulted in a much healthier and safer product for the public.

CLIMATEWIRE

California lawmaker, water agencies reach deal on water-theft fines

The bill would increase fines for those who illegally take water, but stop short of expanding the State Water Resources Control Board's powers over decisions on water rights.

BY: **CAMILLE VON KAENEL** | 06/06/2024 06:29 AM EDT

CLIMATEWIRE | SACRAMENTO, California — California Assemblymember Rebecca Bauer-Kahan this week removed the most controversial parts of her bill to expand the state's ability to fine illegal water diverters, resolving a yearslong fight with public water agencies and farmers.

What happened: After Monday's amendments, Bauer-Kahan's AB 460 (23R) would still increase the penalties for those who steal water or exceed their allotted share during times of drought. But it no longer expands the Water Resources Control Board's overall power to investigate and punish what it sees as violations of water rights, which business and water groups said last year would have robbed them of due process.

Water users have already begun dropping their opposition. The East Bay Municipal Water District; the Valley Ag Water Coalition, which represents irrigation districts in the Central Valley; and a half-dozen smaller water utilities and irrigation districts from across the state said the amendments addressed their concerns in letters to Bauer-Kahan on Tuesday that her office provided to POLITICO.

More groups are likely to confirm they are removing their opposition by the end of the week, according to their representatives. POLITICO agreed not to name the groups because they hadn't yet formally told Bauer-Kahan.

Why this matters: AB 460 attracted the most resistance out of a <u>package of legislative proposals</u> seeking to change how California grants and enforces rights to surface water that emerged last year after three years of historic drought exposed the state's limits in overseeing water use.

In the <u>now-infamous case</u> that inspired the bill, agricultural users in rural Northern California in 2022 intentionally flouted a state order limiting use of river water knowing they would receive only minimal fines.

Advocates of reform, including environmental groups, argue that the water rights system is out of date, privileging agricultural users with century-old rights over growing cities. But a broad coalition of farmers, business groups and water utilities have pushed back on attempted fixes they say would impinge on their rights and make it harder to deliver water.

More details: Bauer-Kahan <u>parked the bill last summer</u> after it squeaked through the Assembly but hit a roadblock in the Senate.

Under the latest version of the bill, water users would see fines of \$500, \$1,000 or \$10,000 per day they violate the Water Resources Control Board's limits, depending on whether the limits are set during flood or drought, and up to \$2,500 per acre-foot of water they take. That's significantly more than the \$500 per day the Water Resources Control Board levied against the Shasta River Water Association last year.

"We're happy there's some level of agreement from opposition that when folks are stealing water, that impacts everybody; it's not just fish, it impacts downstream users and other good actors," said Analise Rivero, the associate director of policy for the bill's co-sponsor, California Trout.

But she also acknowledged broader water rights reform would remain an "uphill battle."

"Clearly as demonstrated by the fate of this bill, it's not going to be easy," Rivero said.

What's next: The Senate Natural Resources and Water Committee is scheduled to vote on AB 460 next Tuesday. Another controversial water rights bill, Assemblymember Buffy Wicks' (D) <u>AB 1337 (23R)</u> to give the state more power over the most senior water rights users, has yet to be scheduled for a hearing.