RESOLUTION NO. 2022-76
RESOLUTION NO. PFA-02
ORDINANCE NO. 2022-02

AGENDA

OUR MISSION

Protect, enhance, and develop Calaveras County's water resources and watersheds to provide safe, reliable, and cost-effective services to our communities.

Regular Board Meeting
Wednesday, July 27, 2022
1:00 p.m.

Calaveras County Water District
120 Toma Court
San Andreas, California 95249

Board Chambers are open to the public and the following alternative is available to members of the public who wish to participate in the meeting virtually:

Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 323-647-8603,,605388082#

Phone Conference ID: 605 388 082#

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Administration Office at 209-754-3028. Notification in advance of the meeting will enable CCWD to make reasonable arrangements to ensure accessibility to this meeting. Any documents that are made available to the Board before or at the meeting, not privileged or otherwise protected from disclosure, and related to agenda items, will be made available at CCWD for review by the public.

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL

2. PUBLIC COMMENT

At this time, members of the public may address the Board on any non-agendized item. The public is encouraged to work through staff to place items on the agenda for Board consideration. No action can be taken on matters not listed on the agenda. Comments are limited to three minutes per person.

3. CONSENT AGENDA

The following items are expected to be routine / non-controversial. Items will be acted upon by the Board at one time without discussion. Any Board member may request that any item be removed for later discussion.

3a Approval of Minutes for the Board Meeting of June 22, 2022
(Rebecca Hitchcock, Clerk to the Board)

3b Report on the Monthly Investment Transactions for June 2022
(Michael Minkler, General Manager)

3c Approval of Second Amendment to Cell Tower Leases between CCWD and Pinnacles Cellular, Inc. dba Verizon Wireless
(Michael Minkler, General Manager) **RES 2022-_____**

3d Acceptance of Revised Easement for Sewer Force Main Relocation Gold Creek Estates
(Charles Palmer, District Engineer) **RES 2022-_____**

3e Authorized Signatures on Banking and Investment Accounts
(Michael Minkler, General Manager)

- Umpqua Bank **RES 2022-_____**
- Local Agency Investment Fund **RES 2022-_____**
- Chandler Asset Management **RES 2022-_____**

4. NEW BUSINESS

4a Proposed Award of Construction Contract for the Copper Cove Lift Station 6, 8, 15 & 18 and Lift Station 12 & 13 Force Main Bypass Project
(Charles Palmer, District Engineer) **RES 2022-_____**

4b Discussion/Action regarding Side Letter Agreements with the SEIU and MCU Bargaining Units
(Stacey Lollar, Human Resources Manager) **RES 2022-_____**

5. OLD BUSINESS

5a Approval of Variance Request from the Owner of 49 Cosmic Court, Copperopolis
(Jessica Self, External Affairs Manager) **RES 2022-_____**

6. PUBLIC HEARING

6a Discussion/Action regarding Amendments to Eastside GSA Memorandum of Understanding and Groundwater Sustainability Plan
(Brad Arnold, Manager of Water Resources)

- Executing the First Amendment to the First Amended and Restated MOU for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency **RES 2022-_____**

- Accepting the Amendment to the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan **RES 2022-_____**

7. REPORTS

7a* General Manager's Report
(Michael Minkler)

8.* BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

9. NEXT BOARD MEETINGS

- Wednesday, August 10, 2022, 1:00 p.m., Regular Board Meeting
- Wednesday, August 24, 2022, 1:00 p.m., Regular Board Meeting

10. CLOSED SESSION

10a Conference with Real Property Negotiators Gov. Code § 54956.8
Property: APN 012-011-011, West Point
Agency negotiators: M. Minkler
Negotiating parties: Calaveras Healthy Impact Prod Solutions (CHIPS)
Under negotiation: Price and/or terms of payment

11. REPORTABLE ACTION FROM CLOSED SESSION

12. ADJOURNMENT

CALAVERAS COUNTY WATER DISTRICT

Board of Directors

District 1	Scott Ratterman
District 2	Cindy Secada
District 3	Bertha Underhill
District 4	Russ Thomas
District 5	Jeff Davidson

Legal Counsel

Matthew Weber, Esq.
Downey Brand, LLP

Financial Services
Umpqua Bank
US Bank
Wells Fargo Bank

Auditor
Richardson & Company, LLP

CCWD Committees	**Membership****
*Engineering Committee	Thomas / Davidson (alt. Secada)
*Finance Committee	Underhill / Secada (alt. Thomas)
*Legal Affairs Committee	Davidson / Ratterman (alt. Thomas)

Joint Power Authorities

ACWA / JPIA	Ratterman (alt. Michael Minkler)
CCWD Public Financing Authority	All Board Members
Calaveras-Amador Mokelumne River Authority (CAMRA)	Ratterman / Underhill (alt. Secada)
Calaveras Public Power Agency (CPPA)	Michael Minkler (Alt. Brad Arnold)
Eastern San Joaquin Groundwater Authority	Thomas
Tuolumne-Stanislaus Integrated Regional Water Management Joint Powers Authority (T-Stan JPA)	Secada (alt. Thomas)
Upper Mokelumne River Watershed Authority (UMRWA)	Davidson (alt. Ratterman)

Other Regional Organizations of Note

Calaveras County Parks and Recreation Committee	Thomas (alt. Ratterman)
Highway 4 Corridor Working Group	Thomas / Underhill
Mountain Counties Water Resources Association (MCWRA)	All Board Members
Mokelumne River Association (MRA)	All Board Members
Tuolumne-Stanislaus Integrated Regional Water Mgt. JPA Watershed Advisory Committee (WAC)	Brad Arnold
Eastern San Joaquin Groundwater Authority-Technical Advisory Committee	Brad Arnold

* Standing committees, meetings of which require agendas & public notice 72 hours in advance of meeting.
** The 1st name listed is the committee chairperson.

MINUTES

CALAVERAS COUNTY WATER DISTRICT
REGULAR BOARD MEETING

JUNE 22, 2022

Directors Present:	Cindy Secada, President Scott Ratterman, Vice-President Bertha Underhill, Director Russ Thomas, Director
Directors Absent:	Jeff Davidson, Director
Staff Present:	Michael Minkler, General Manager Matt Weber Esq, General Counsel Rebecca Hitchcock, Clerk to the Board Damon Wyckoff, Director of Operations Brad Arnold, Water Resources Manager Jessica Self, External Affairs Manager John Griffin, Senior Civil Engineer Kate Jesus, Engineering Coordinator Catherine Eastburn, Accountant II Jesse Hampton, Plant Operations Manager Pat Burkhardt, Construction and Maintenance Manager Charles Palmer, District Engineer Kevin Williams, Senior Civil Engineer Deja Howarth, Human Resources Technician Tiffany Burke, Administrative Technician, Sr. Corrine Skrbina, Customer Service Senior Carol Bowen, Customer Service Representative Jared Gravette, Construction Inspector Senior Supervisor
Others Present:	Jeffrey Meyer, Hilltop Securities Travis Small, CPUD Ralph Copeland

ORDER OF BUSINESS

CALL TO ORDER / PLEDGE OF ALLEGIANCE

1. ROLL CALL

President Secada called the Regular Board Meeting to order at 1:02 p.m. and led the Pledge of Allegiance. Director Davidson was absent.

2. PUBLIC COMMENT

There was no public comment.

3. CONSENT AGENDA

MOTION: Directors Ratterman/Thomas-Approved Consent Agenda Items: 3a, 3b, 3c and 3d as presented

3a Approval of Minutes for the Board Meeting of June 8, 2022
(Rebecca Hitchcock, Clerk to the Board)

3b Report on the Monthly Investment Transactions for May 2022
(Michael Minkler, General Manager)

3c Consideration of Renewal of Contract for Federal Advocacy Services with Mia O'Connell of O'Connell & Dempsey, LLC for Fiscal Years 2022/23-2027/28
(Michael Minkler, General Manager) **RES 2022-61**

3d Re-Authorizing Remote Teleconference Meetings of the Board of Directors of The Calaveras County Water District for the Period of June 22 through July 21, 2022, Pursuant to AB 361
(Rebecca Hitchcock, Clerk to the Board) **RES 2022-62**

AYES: Directors Underhill, Ratterman, Thomas, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

4. NEW BUSINESS

4a Discussion/Action regarding the Adoption of Transaction Fees for Utility Payments
(Jessica Self, External Affairs Manager) **RES 2022-63**

MOTION: Directors–Ratterman/Underhill-Approved RES 2022-63 - Adopting Transaction Fees for Utility Payments

DISCUSSION: Jessica Self gave the history of transaction fees for credit card payments. In 2004, the Board adopted transaction fees for credit card payments. In 2008, the Board rescinded that when customers were faced with financial hardships during the recession. Now that there are so many customers paying with credit and debit, staff feel that the cost of those transactions should be paid by the customer. Ms. Self discussed the outreach planned to notify customers of the change. She also explained customers can mail a check if they wish to avoid the fee. Director Ratterman asked about the difference between credit and debit. There was discussion regarding the various payment options and the costs associated with them.

PUBLIC COMMENT: There was no public comment.

AYES: Directors Ratterman, Underhill, Thomas, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

5. PUBLIC HEARING

President Secada opened the Public Hearing at 1:19 p.m.

5a Discussion/Action regarding the Adoption of the Fiscal Year 2022-23 Operating and Capital Improvement Plan Budget
(Michael Minkler, General Manager) **RES 2022-64**

MOTION: Directors Ratterman/Secada- Adopted Resolution No. 2022-64 - Adopting the Fiscal Year 2022-23 Operating and Capital Improvement Plan Budget

DISCUSSION: Jeffrey Meyer presented the changes since the budget workshop on June 8. He described the differences as the credit card transaction fees and the cost of the Hazard Mitigation update. Mr. Meyer also reviewed Revenues, Investments, and Transfers In. Mr. Minkler reported the District is closely monitoring the fuel costs and are researching a document management system. Both items could require a mid-year budget adjustment. There was discussion regarding the process of adoption of a document management system. Director Thomas asked about his request for a report out on Red Diesel. President Secada requested additional details on the budget items on the water sampling stations and the interior office builds in the warehouse building. Director Underhill requested additional information on the loan for the Corporate Building and the work O'Connell & Dempsey has been doing. Director Thomas asked for further clarification on the offices in the warehouse building.

PUBLIC COMMENT: Ralph Copeland inquired on the Copper Cove Cross Country Gravity Sewer Force Main project on the CIP Budget.

President Secada closed the Public Hearing at 2:06 p.m.

AYES: Directors Ratterman, Secada, Underhill, and Thomas
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

Discussion/Action regarding the Adoption of the Fiscal Year 2022-23 Personnel Allocation Budget
(Michael Minkler, General Manager) **RES 2022-65**

MOTION: Directors Underhill/Ratterman adopted Resolution No. 2022-65- Adopting the Fiscal Year 2022-23 Personnel Allocation Budget

DISCUSSION: President Secada clarified that the proposed FY 2022-23 does not include two new positions.

PUBLIC COMMENT: There was no public comment.

AYES: Directors Underhill, Ratterman, Thomas, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

6. NEW BUSINESS

6a Discussion/Action regarding Second Amended and Restated Agreement between Calaveras Public Utility District and Calaveras County Water District for the Sale of Surface Water
(Brad Arnold, Water Resources Manager) **RES 2022-66**

MOTION: **Directors Underhill/Ratterman–Approved Resolution No. 2022-66- Approving the Second Amended and Restated Agreement between Calaveras Public Utility District and Calaveras County Water District for the Sale of Surface Water**

DISCUSSION: Brad Arnold presented the agreement with the Calaveras Public Utility District (CPUD) facilitating the Sale of Surface Water. He explained it is the sale of up to two hundred acre-feet per year of water from CPUD's Middle Fork Mokelumne River, made available via Schaads Reservoir for use in CCWD's West Point Service Area. Mr. Arnold detailed the terms of the agreement which are 1) a minimum of forty acre-feet up to two hundred acre-feet; 2) a cost of $150.00 per acre-foot; 3) the annual rate would escalate annually based on the Consumer Price Index; and 4) a term length of 5 years from the date of execution. Mr. Minkler added that the CPUD Board of Directors had approved the agreement at their recent Board meeting with one word change in the agreement, page 1 section 1a. change the word take to purchase. The Board concurred with that change.

PUBLIC COMMENT: There was no public comment.

AYES: **Directors Underhill, Ratterman, Thomas, and Secada**
NOES: **None**
ABSTAIN: **None**
ABSENT: **Director Davidson**

6b Discussion/Action regarding the Award of Construction Contract for the West Point and Wilseyville Wastewater Treatment Plant Consolidation Project, CWSRF Project No. C-06-7850-210
(Charles Palmer, P.E., District Engineer) **RES 2022-67**

MOTION: **Directors Thomas/Underhill-Adopted Resolution No. 2022-67- Awarding a Construction Contract for the West Point and Wilseyville Wastewater Treatment Plant Consolidation Project, CWSRF Project No. C-06-7850-210 and authorizing the General Manager to execute a construction contract with K.W. Emerson, Inc. in the amount of $8,573,362.00**

DISCUSSION: Charles Palmer stated the bid opening for this project was March 31, 2022, and K.W. Emerson was the lowest responsive bidder with the bid of $8,573,362. This was $4 million higher than cost estimate and the grant funding which is $4.75 million. The Engineering department began working on value engineering the project and requested additional funding with the State's Clean Water State Revolving Fund (CWSRF). Preliminary concurrence from the State was received stating the grant funding could be increased up to as much as $10 million. The District is waiting for Final Budget Approval (FBA) from CWSRF so that it can proceed with bid award to K.W. Emerson with assurance of 100% grant funds to cover the full construction costs. He stated the District must weigh the risk of waiting to receive Final Budget Approval from CWSRF and running out of time to bring it before the Full Board for award vs. waiting too long for that confirmation and the bids expire. Staff's recommendation is to proceed with award to K.W. Emerson without the formality of first receiving

the FBA from CWSRF. Given the fact that the project meets all the requirements for increased project funding and positive feedback from CWSRF, staff recommends moving forward with the Award of the Construction Contract rather than throwing out the responsive bids. There was significant discussion between the Board, Mr., Palmer, Mr. Wyckoff, Mr. Meyer, and Mr. Minkler. Mr. Minkler assured the Board that the District can cancel the contract with K.W. Emerson at any time if the grant funds are not approved.

PUBLIC COMMENT: There was no public comment.

AYES: Directors Thomas, Underhill, Ratterman, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

6c Discussion/Action regarding Credit Adjustment for APN 008-022-009
(Jessica Self, External Affairs Manager) **RES 2022-68**

MOTION: Directors Underhill/Ratterman-Adopted Resolution No. 2022-68-Approving Credit Adjustment for APN 008-022-009

DISCUSSION: Jessica Self described the credit requested by Douglas Colfax for APN 008-022-009. She stated the customer had a leak that has been repaired and he has not received a credit in the past five years.

PUBLIC COMMENT: There was no public comment.

AYES: Directors Underhill, Ratterman, Thomas, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

6d Approval of FY 2023 Service Area Water Supply & Demand Assessments
(Brad Arnold, Water Resources Manager)

MOTION: Directors Ratterman/Underhill-By Minute Entry-Approved the FY 2023 Service Area Water Supply Assessments

DISCUSSION: Brad Arnold advised the Board that approval of each fiscal year Service Area Water Supply & Demand Assessment is a new requirement from the Department of Water Resources. He reviewed the service area tables and the water supply projection report. There was additional discussion with Mr. Minkler, Mr. Arnold, and the Board of Directors regarding water rights.

PUBLIC COMMENT: There was no public comment.

AYES: Directors Ratterman, Underhill, Thomas, and Secada
NOES: None
ABSTAIN: None
ABSENT: Director Davidson

6. REPORTS

6a General Manager's Report
(Michael Minkler)

DISCUSSION: Mr. Minkler reported on the following activities: 1) the Engineering Committee Meeting held on June 16; 2) the District has hired Jeffrey Meyer to fill the Director Of Administrative Services position; 3) his attendance to the CSDA GM Leadership Summit; 4) Mountain Counties discussion to oppose AB1717 Public Works; and 5) his upcoming vacation.

7. BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

Director Thomas reported on the temperature in Arizona, and that he is pleased that he can attend the meetings virtually when needed.

Director Underhill asked about the status of the HWY 4 Corridor Committee, the Statewide Save Our Water Campaign, and the Draft Legislative Policy.

Director Ratterman would like a policy created that keeps personnel changes separate from the budget process. He also discussed the O'Connell & Dempsey Contract renewal, the JPIA Property Committee 20% increase in premiums, the MCWRA Tour and Conference begins tonight, and his attendance at the ACWA DC Conference on July 12-14.

Director Secada Murphys Sanitary District is participating in state wastewater biosolids COVID Testing program. She would like to attend the employee appreciation party on July 14. She requested future agenda items: Red Diesel, Commercial Meters, and a New Melones report out.

8. NEXT BOARD MEETINGS

- Wednesday, July13, 2022, 1:00 p.m., Regular Board Meeting
- Wednesday, July 27, 2022, 1:00 p.m., Regular Board Meeting

9. ADJOURNMENT

With no further business, the meeting adjourned at 3:32 p.m.

Respectfully Submitted:

Michael Minkler
General Manager

ATTEST:

Rebecca Hitchcock
Clerk to the Board

Agenda Item

DATE: July 27, 2022

TO: Calaveras County Water District Board of Directors

FROM: Jeffrey Meyer, Director of Administrative Services

SUBJECT: Report on the Monthly Investment Transactions for June 30, 2022

RECOMMENDED ACTION:

For information only.

SUMMARY:

Per the District's Investment Policy, Staff will report the monthly investment activity for the preceding month. During June 2022 the following investment transactions occurred:

Chandler Asset Management Activity:	
Book Value at 05/31/2022	**20,044,465.06**
Security Purchases	200,088.00
Money Market Fund Purchases	255,982.69
Money Market Contributions	-
Money Market Fund Sales	(201,176.88)
Maturities	(250,000.00)
Money Market Fund Withdrawals	(1,751.13)
Amortization/Accretion	(4,592.63)
Book Value at 06/30/2022	**20,043,015.11**
Local Agency Investment Fund Activity:	
Balance at 05/31/2022	**12,917,483.82**
Deposit, Water Loan	19,741,000.00
Deposit, Sewer Loan	10,997,000.00
Deposit, excess Funds	1,500,000.00
Interest April - June (accrual)	37,620.35
Balance at 06/30/2022	**45,193,104.17**

LAIF (Local Agency Investment Fund) daily interest rates are 0.99% as of 06/30/2022. The LAIF rate has remained relatively low, and the majority of available funds are being invested through Chandler Asset Management.

Attachment: Investment Activity Report for June 2022

CALAVERAS COUNTY WATER DISTRICT
INVESTMENT ACTIVITY
FOR THE MONTH ENDING June 30, 2022

INVESTMENT TRUSTEE/TYPE	MARKET VALUE	INVESTMENT COST				CM INTEREST AND DIVIDEND RECVD
		COST	PAR (PRINC)	CPN RATE	DATE INVST	
Local Agency Investment Fund	45,193,104.17	45,193,104.17	45,193,104.17	0.690%	ongoing	**37,620.35**
Chandler Asset Management	19,003,749.59	20,043,015.11	19,969,859.49	0.670%	ongoing	**5,982.69**
Totals	**64,196,853.76**	**65,236,119.28**	**65,162,963.66**			**43,603.04**

Chandler Asset Management Activity:	
Book Value at 05/31/2022	**20,044,465.06**
Security Purchases	200,088.00
Money Market Fund Purchases	255,982.69
Money Market Contributions	-
Money Market Fund Sales	(201,176.88)
Maturities	(250,000.00)
Money Market Fund Withdrawals	(1,751.13)
Amortization/Accretion	(4,592.63)
Book Value at 06/30/2022	**20,043,015.11**
Local Agency Investment Fund Activity:	
Balance at 05/31/2022	**12,917,483.82**
Deposit, Water Loan	19,741,000.00
Deposit, Sewer Loan	10,997,000.00
Deposit, excess Funds	1,500,000.00
Interest April - June (accrual)	37,620.35
Balance at 06/30/2022	**45,193,104.17**

CALAVERAS COUNTY WATER DISTRICT
CHANDLER ASSET MANAGEMENT
FOR THE MONTH ENDED June 30, 2022

INVESTMENT TRUSTEE/TYPE	MARKET VALUE	INVESTMENT COST			Dividends Earned	Interest Earned	Net Income
		BOOK	PAR Value/Units	CPN RATE			
Asset Backed Security	922,038.53	959,938.82	960,000.00	0.55%		434.09	434.09
Agency Securities	2,287,527.60	2,409,118.77	2,400,000.00	0.36%		1,445.00	1,445.00
CMO	196,532.20	209,100.54	200,000.00	0.62%		-	-
Corporate Securities	4,032,907.43	4,244,364.51	4,190,000.00	1.15%		2,837.50	2,837.50
Money Market Fund (Cash)	99,859.49	99,859.49	99,859.49	0.97%	9.16		9.16
Negotiable CD	1,396,447.00	1,399,999.99	1,400,000.00	0.21%		506.94	506.94
Supernational Securities	1,046,296.54	1,121,157.84	1,120,000.00	0.65%		-	-
US Treasury	9,022,140.80	9,599,475.15	9,600,000.00	0.63%		750.00	750.00
Totals	**19,003,749.59**	**20,043,015.11**	**19,969,859.49**	**0.67%**	**9.16**	**5,973.53**	**5,982.69**

Agenda Item

DATE: July 27, 2022

TO: Michael Minkler, General Manager

FROM: Rebecca Hitchcock, Clerk to the Board

SUBJECT: Second Amendment to Cell Tower Leases between CCWD and Pinnacles Cellular, Inc. dba Verizon Wireless

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RECOMMENDED ACTION:

Motion:_____/_____ adopt Resolution No. 2022-____ approving Second Amendment to Cell Tower Leases between Calaveras County Water District (CCWD) and Pinnacles Cellular, Inc dba Verizon Wireless at West Point Water Treatment Plant Site.

SUMMARY:

In 2016 CCWD renewed the lease agreement with Pinnacles Cellular, Inc dba Verizon Wireless for a cell tower located at (APN 008-025-027) West Point Water Treatment Plant Site that has been in place since 2009.

Pinnacles Cellular wishes to extend the lease agreement that is currently set to expire in March of 2024. The extension automatically extends the term for four additional terms of 5 years each. Staff and counsel have vetted the contract and determined there are no conflicts with CCWD's plant site operations.

FINANCIAL CONSIDERATIONS:

The proposed Second Lease Amendment will include a base rental fee of $2,135.35 per month with a 3 percent annual increase.

Attachments: Resolution No. 2022-__ Approving Second Amendment to Site Lease Agreement with Pinnacles Cellular, dba Verizon Wireless
Second Amendment to Site Lease Agreement at West Point Water Treatment Plant Site

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING SECOND AMENDMENT TO CELL TOWER LEASES BETWEEN CALAVERAS COUNTY WATER DISTRICT AND PINNACLES CELLULAR, INC. D/B/A VERIZON WIRELESS

WHEREAS, the Calaveras County Water District (CCWD) owns (APN 008-025-027) known as West Point Water Treatment Plant Site, and

WHEREAS, CCWD entered into leases with California RSA No. 3 Limited Partnership (aka Golden State Cellular) in 2010 and 2009, respectively, to erect and maintain communication structures on the CCWD property cited above; and

WHEREAS, the Board of Directors adopted Resolution No. 2016-51 extending the lease terms with the first amendment to the lease agreement on August 17, 2016; and

WHEREAS, California RSA No. 3 Limited Partnership sold its holdings Pinnacles Cellular d/b/a Verizon Wireless (Verizon) and requests to extend the site lease agreement that expires in 2024.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors OF CALAVERAS COUNTY WATER DISTRICT, authorizes the General Manager to execute the Second Amended Lease Agreement with Pinnacles Cellular, d/b/a Verizon Wireless with regard to maintenance of said telecommunication structures on said CCWD properties per the terms and conditions set forth in the Second Lease Agreement, attached hereto and made a part hereof.

PASSED AND ADOPTED this 27th day of July 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock,
Clerk of the Board

Site Name: WEST POINT WATER TANK

SECOND AMENDMENT TO SITE LEASE AGREEMENT

This SECOND AMENDMENT TO SITE LEASE AGREEMENT ("**Amendment**") is made this ____ day of July, 2022 ("**Effective Date**") by and between Calaveras County Water District ("**Landlord**") and Pinnacles Cellular, Inc. d/b/a Verizon Wireless ("**Tenant**").

RECITALS

A. This Amendment pertains to that certain Site Lease Agreement dated March 1, 2009, as amended by the First Amendment to Site Lease Agreement dated November 1, 2016 (collectively, the "**Lease**" unless otherwise stated) for the Leased Premises located at 481 Smitty Lane, West Point, County of Calaveras, State of California 95255 (the "**Property**"), and as set forth on Exhibit "1" to the Lease and attached hereto as Exhibit "1" and made a part hereof.

B. The current Extended Term is due to expire on February 29, 2024.

C. The parties desire to amend the Lease to further extend the term.

NOW, THEREFORE, in consideration of the foregoing and mutual covenants herein contained, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed as follows:

AGREEMENT

1. Recitals. The foregoing recitals are incorporated herewith as if fully set forth herein.

2. Additional Extended Terms. Section 2.2 of the Lease and Section 3 of the First Amendment are hereby amended to provide that following the expiration of the current Extended Term on February 29, 2024, the term of the Lease shall be automatically extended for four (4) additional terms of five (5) years each (each, an "**Additional Extended Term**"), unless Tenant elects to terminate the Lease at the end of the then-current term by giving Landlord written notice of its intent to terminate at least ninety (90) days prior to the end of the then-current term ("**Termination Notice**"); provided, however, that nothing in this provision for Additional Extended Terms shall limit or otherwise modify the Landlord's termination rights under Sections 2.3 and 2.4 of the Lease. The commencement and expiration of the Additional Extended Terms, if applicable, are as set forth below:

Term	Commencement of Applicable Term	Expiration of Applicable Term
First Additional Extended Term	3/1/2024	2/28/2029
Second Additional Extended Term	3/1/2029	2/28/2034
Third Additional Extended Term	3/1/2034	2/28/2039
Fourth Additional Extended Term	3/1/2039	2/29/2044

3. Rental. Notwithstanding anything in the Lease to the contrary, commencing upon the first day of the First Additional Extended Term (the "**Rental Increase Date**") the Rental due under the Lease shall increase to the sum of Two Thousand One Hundred Thirty-Five and 35/100 Dollars ($2,135.35) per month (the "**Rental Increase**"). This rental increase is subject to the annual escalator in the Lease.

4. Rent Increases. Section 3.2 of the Lease is hereby revised in its entirety to read as follows:

"3.2 Rent Increases. The monthly rent during the Term shall increase annually on each anniversary of the Commencement Date (the "**Adjustment Date**") by an amount equal to three percent (3%) of the previous year's monthly rent."

5. Full Force and Effect. Except as expressly amended herein, the Lease is unmodified and remains in full force and effect. In the event of a conflict between the terms of the Lease and this Amendment, the terms of this Amendment shall be controlling. In addition, except as otherwise stated in this Amendment, all initially capitalized terms will have the same respective defined meaning stated in the Lease. All captions are for reference purposes only and shall not be used in the construction or interpretation of this Amendment.

LANDLORD: Calaveras County Water District

By: _____
Name: _____
Title: _____
Date: _____

TENANT: Pinnacles Cellular, Inc. d/b/a Verizon Wireless

By: _____
Name:
Title:
Date: _____

EXHIBIT "1"
Legal Description of the Property

The Property is legally described as:

APN 008-025-27
West Point Water Treatment Plant
481 Smitty Lane
West Point CA 95255
Portion of Lot 12 of 2, Township 6, Range 13

Agenda Item

DATE: July 27, 2022

TO: Michael Minkler, General Manager

FROM: Charles Palmer, P.E., District Engineer

RE: Discussion / Action Accepting Grant of Easement Relating to Gold Creek Estates Unit 3 Subdivision and Relocation of a Sewer Force Main Serving the La Contenta Sewer System

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RECOMMENDED ACTION

Motion: ____/_____ to adopt Resolution No.2022-_____ accepting an easement from Old Golden Oaks, LLC (Grantor) to CCWD relating to Gold Creek Estates relocation of portions of a 12-inch sewer force main as described in the attached Grant of Easement and Exhibits.

SUMMARY

During development of Gold Creek Estates Unit 3 subdivision, CCWD required the developer to relocate a portion of an existing 12-inch sewer force main easement in conflict with grading of various new lots. The pre-existing utility easement crossed through the back of lots 314 thru 322 in the Gold Creek Estates Unit 3 subdivision. The grading added new backfill over the top of the existing force main burying it to an unacceptable depth for CCWD staff to readily access it and carry out normal operations and maintenance work in the event of a line break. The developer relocated the sewer force main to a new easement area on the adjacent parcel (APN 073-042-028 or Parcel 8 per PM 2-146) under the ownership of Old Golden Oaks, LLC. that is now providing the corresponding Grant of Easement. All relevant documents and exhibits for the Grant of Easement are attached herein. Where the pipeline has been abandoned, the developer requests that CCWD agree to vacate those portions of the prior force main easement no longer in use.

FINANCIAL CONSIDERATIONS

None

Attachments: *Resolution No. 2022-__ Accepting Revised Easement*
Grant of Easement
Exhibit 'A' – Legal Description for New 15' Sewer Line Easement
Exhibit Map – New 15' Sewer Line Easement

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

ACCEPTING GRANT OF EASEMENT RELATING TO GOLD CREEK ESTATES UNIT 3 SUBDIVISION AND RELOCATION OF A SEWER FORCE MAIN SERVING THE LA CONTENTA SEWER SYSTEM

WHEREAS, as directed by CCWD the developer of the Gold Creek Estates Unit 3 subdivision relocated portions of a 12-inch sewer force main in conflict with grading of lots 314 thru 322 in said development, and

WHEREAS, the developer relocated the force main to an new easement area on the adjacent parcel APN 073-042-028 (Parcel 8 Per PM 2-146) owned by Old Golden Oaks, LLC; and

WHEREAS, for the portion of the relocated force main, Old Golden Oaks, LLC (Grantor) is now providing to CCWD a Grant of Easement as described in Exhibit 'A', Legal Description and Exhibit Map attached herein; and

BE IT RESOLVED, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby accepts said Grant of Easement as presented and directs that it be recorded with the County.

BE IT FURTHER RESOLVED, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby agrees that CCWD can vacate those portions of the prior force main easement no longer in use (thru lots 314 – 322) within Gold Creek Estates Unit 3 subdivision.

PASSED AND ADOPTED this 27th day of July, 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

RECORDED AT REQUEST OF
AND RETURN TO:
CALAVERAS COUNTY WATER DISTRICT
120 TOMA COURT
SAN ANDREAS, CA 95249

APN 073-042-028

Documentary Transfer Tax $ Nil
CALAVERAS COUNTY WATER DISTRICT

_____
Signature of Agent

GRANT OF EASEMENT

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Old Golden Oaks, LLC
a California limited liability company

(GRANTOR)

hereby GRANTS TO

CALAVERAS COUNTY WATER DISTRICT
a California special district (CCWD)

the real property in the State of California, County of Calaveras, as follows:

A perpetual exclusive utility easement for a sewer force main and access road with a right-of-entry for ingress/egress and to construct, install, lay, operate, maintain, use, inspect and repair, and from time to time reconstruct, modify, alter, enlarge, add to, remove or replace, said force main for the conveyance of sewage, together with manholes, isolation valves, air valves and other devices and/or appurtenances used or useful in connection therewith, over, under, through and across a strip of land situated on Parcel 8 as shown and designated in that certain official map filed with the Recorder of Calaveras County in Book 2 of Parcel Maps at Page 146, et seq. Easement metes and bounds are provided by Exhibit 'A' Legal Description and as illustrated by the corresponding Exhibit Map attached hereto and made a part hereof by reference.

DATED: 7/7, 2022

(Name/Signature)

SIGNATURES MUST BE NOTARIZED

EXHIBIT A

LEGAL DESCRIPTION

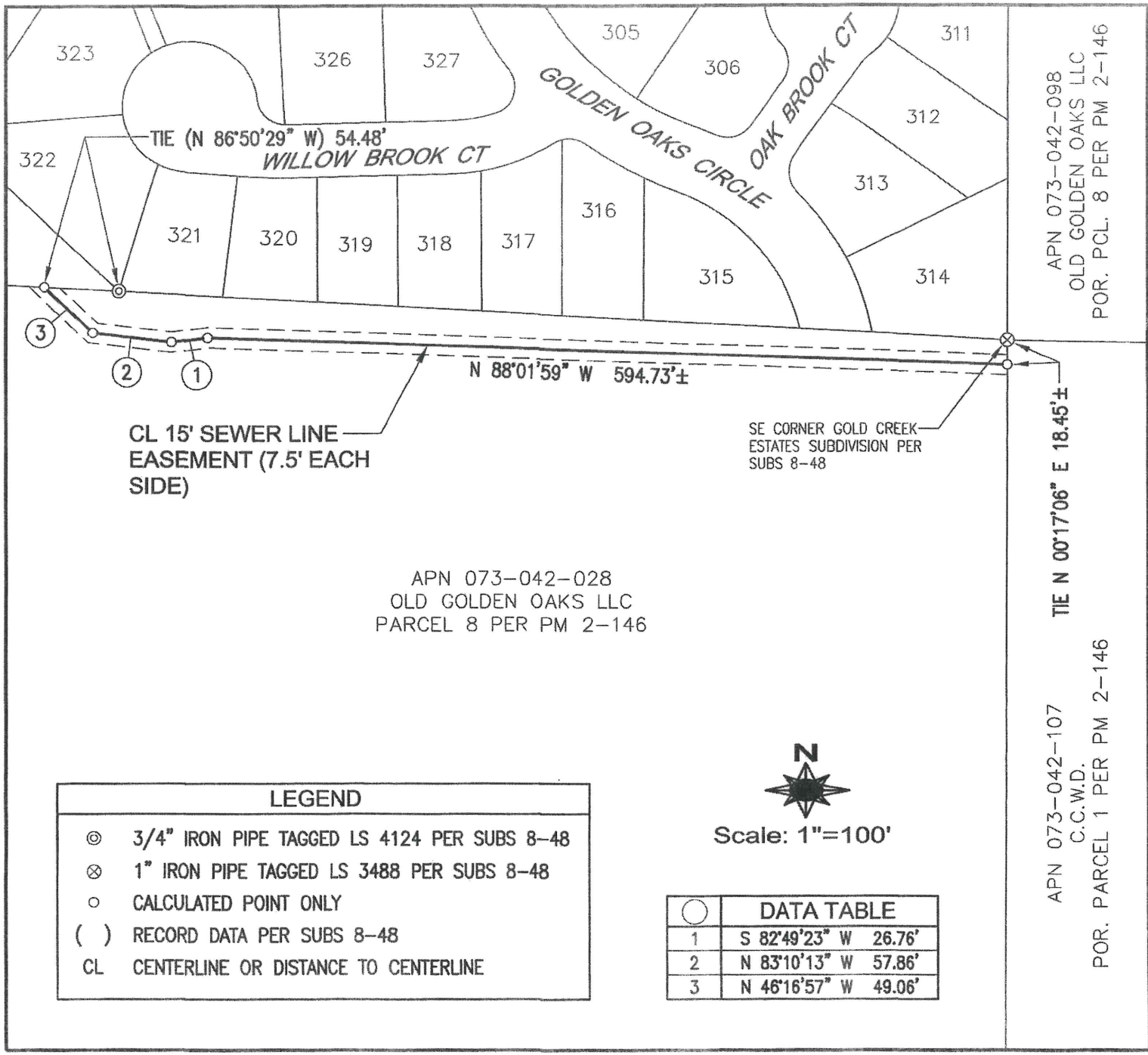
15' Sewer Line Easement over Old Golden Oaks LLC.

An easement for a sewer line and appurtenances, lying within the County of Calaveras, State of California, and also within "PARCEL 8 46.4 +- AC.", as shown and so designated upon that certain official map filed for record in the office of the Recorder of Calaveras County in Book 2 of Parcel Maps at Page 146, et seq; and said easement being on, over, under and through a strip of land the unform width of Fifteen (15.00) feet, the centerline of which is more particularly described as follows:

Beginning at a point on the East line of the hereinabove referred to Parcel 8, from which point the Southeast corner of Lot "314 9,892 S.F.", as shown and so designated upon that certain official map entitled "GOLD CREEK ESTATES SUBDIVISION TRACT NO. 417 UNIT 3", and filed for record in Book 8 of Subdivision Maps at Page 48, et seq, Calaveras County Records; bears North 00° 17' 06" East 18.45 feet distant; thence , from said point of beginning, North 88° 01' 59" West 594.73 feet; thence South 82° 49' 23" West 26.76 feet; thence North 83° 10' 13" West 57.86 feet; thence North 46° 16' 57" West 49.06 feet to the North line of the hereinabove referred to Parcel 8, being also the South line of said Gold Creek Estates Subdivision.

07/05/22

Ciro L. Toma PLS 3570 License expires 06/30/24



LEGEND	
◎	3/4" IRON PIPE TAGGED LS 4124 PER SUBS 8-48
⊗	1" IRON PIPE TAGGED LS 3488 PER SUBS 8-48
○	CALCULATED POINT ONLY
( )	RECORD DATA PER SUBS 8-48
CL	CENTERLINE OR DISTANCE TO CENTERLINE

◯	DATA TABLE	
1	S 82°49'23" W	26.76'
2	N 83°10'13" W	57.86'
3	N 46°16'57" W	49.06'

TOMA & ASSOCIATES INC.
ENGINEERING - SURVEYING
PLANNING
41 Summit Street, Jackson CA 95642
(209) 223-0156

EXHIBIT MAP
15' SEWER EASEMENT
GOLD CREEK ESTATES SUBDIVISION SUBS 8-48
CALAVERAS COUNTY, CALIFORNIA

DATE:	5.10.2022
SCALE:	1" = 100'
DRAWN BY:	GMW
JOB NO.:	1905-09
SHEET	1 OF 1 SHEET

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California Texas
County of Parker)

On July 7th 2022 before me, Brooke Elms a Notary Public
(insert name and title of the officer)

personally appeared C. Ryan Voorhees,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Brooke Elms (Seal)

BROOKE C. ELMS
Notary Public, State of Texas
Comm. Expires 10-27-2025
Notary ID 133416025

Agenda Item

DATE: July 27, 2022

TO: Board of Directors

FROM: Michael Minkler, General Manager

SUBJECT: Authorized Signers on Banking and Investment Accounts

RECOMMENDED ACTION:

Motion: _____/_____ adopting the following Resolutions for authorizing signers on Banking and Investment accounts:

- Umpqua Bank — Resolution No. 2022-_____
- Local Agency Investment Fund — Resolution No. 2022-_____
- Chandler Asset Management — Resolution No. 2022-_____

SUMMARY:

With the recent hiring of Jeffrey Meyer as the Director of Administrative Services, it has become necessary for the District to update its authorized signers list for Umpqua Bank, Local Agency Investment Fund (LAIF), and Chandler Asset Management. Resolutions to update the bank forms are attached for your review.

Established CCWD financial transaction protocol requires the General Manager and Director of Administrative Services authorization prior to initiating an investment transaction. All financial transactions will be handled per Board policy.

FINANCIAL CONSIDERATIONS:

None

Attachments: Resolution No. 2022-___ Authorizing Signatures for Umpqua Bank
Resolution No. 2022-___ Authorizing Signatures for Local Agency Investment Fund
Resolution No. 2022-___ Authorizing Signatures for Chandler Asset Management

RESOLUTION 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AUTHORIZING SIGNATURES FOR UMPQUA BANK CHECKING AND MONEY MARKET ACCOUNTS

WHEREAS, the Board of Directors of CALAVERAS COUNTY WATER DISTRICT adopted Resolution 2022-26 on March 9, 2022 authorizing the signatories for investment and check signing; and

WHEREAS, the District needs to update the authorization list due to the recent opening of the4 Director of Administrative Services.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT does hereby rescind in its entirety Resolution 2022-02, and any and all prior signature authorizations for investment and check signing thereto.

BE IT FURTHER RESOLVED, that two of the following District employees shall be authorized to sign checks and other instruments:

Executive Group	**Finance**
Michael Minkler	Catherine Eastburn
Stacey Lollar	Jeffrey Meyer

BE IT FURTHER RESOLVED, that this District authorizes and directs you, Umpqua Bank, and your correspondent banks, to honor and pay all checks and other instruments, including those payable to persons whose names appear on them as signers, which are drawn on its Checking Account number 60203627, described as Calaveras County Water District Secretarial Fund, when it bears or purports to bear the facsimile signatures of two (2) of the employees listed above. One signature must be from the Executive Group.

BE IT FURTHER RESOLVED, that you and your correspondent banks may honor and charge this District for all checks and other instruments for the payment of money as long as the facsimile signatures resemble the specimens which an officer of the District files with you now or in the future. This applies regardless of whom the checks or other instruments are payable to or of the manner in which the actual or purported facsimile signatures were made on the documents.

BE IT FURTHER RESOLVED, that this District authorizes and directs you, Umpqua Bank, and your correspondent banks, to honor all funds transfers between the Calaveras County Water District Secretarial Fund account (account number 60203627); and the Calaveras County Water District Business Money Market savings account

(account number 990755837). Funds transfers and transactions require two parties; one to initiate the transfer and another to verify it.

PASSED AND ADOPTED this 27h day of July, 2022 by the following vote:
AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

RESOLUTION 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AUTHORIZING SIGNATURES IN THE LOCAL AGENCY INVESTMENT FUND

WHEREAS, Pursuant to Chapter 730 of the Statutes of 1976, Section 16429.1 was added to the California Government Code to create a Local Agency Investment Fund in the State Treasury for the deposit of money of a local agency for purposes of investment by the State Treasurer; and

WHEREAS, the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT adopted Financial Management Policy 5.01 authorizing the deposit and withdrawal of money in the Local Agency Investment Fund in accordance with the provisions of Section 16429.1 of the Government Code for the purpose of investment as stated therein is in the best interests of the Calaveras County Water District.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of CALAVERAS COUNTY WATER DISTRICT does hereby rescind in its entirety Resolution 2022-27, and any and all prior signature authorizations for investment of monies in the Local Agency Investment Fund thereto.

BE IT FURTHER RESOLVED, that the following CALAVERAS COUNTY WATER DISTRICT Officers shall be authorized to order the deposit or withdrawal of monies in the Local Agency Investment Fund:

Executive Group	**Finance**
Michael Minkler General Manager	Catherine Eastburn Accountant II
Stacey Lollar Human Resources Manager	Jeffrey Meyer Director of Administrative Services

PASSED AND ADOPTED this 27th day of July, 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____

Cindy Secada, President
Board of Directors

ATTEST:

_____

Rebecca Hitchcock
Clerk to the Board

RESOLUTION 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AUTHORIZING SIGNATURES FOR CHANDLER ASSET MANAGEMENT

WHEREAS, On February 12, 2020, the Board of Director approved direction to engage with Chandler Asset Management for Investment Management Services; and

WHEREAS, the District needs to update the authorization list due to staff changes.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of CALAVERAS COUNTY WATER DISTRICT does hereby establish the same signature authority for Chandler Asset Management Authorized Representatives as those on file for LAIF.

BE IT FURTHER RESOLVED, that the following Calaveras County Water District Officers shall be authorized to give instruction to and receive information from Chandler Asset Management concerning the Chandler Asset Management Account:

Executive Group	**Finance**
Michael Minkler General Manager	Catherine Eastburn Accountant II
Stacey Lollar Human Resources Manager	Jeffrey Meyer Director of Administrative Services

PASSED AND ADOPTED this 27th day of July 2022 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

Agenda Item

DATE: July 27, 2022

TO: Michael Minkler, General Manager

FROM: Charles Palmer, P.E., District Engineer

RE: Discussion/Action Approving Construction Contract and CEQA Notice of Exemption for the Copper Cove Lift Station 6, 8, 15 & 18 Renovations and Lift Station 12 & 13 Force Main Bypass Project, CIP 15076 & 15080

RECOMMENDED ACTION

Motion: ____/_____ to adopt Resolution No.2022-_____ as follows:

a) Accepting bid submitted by Mozingo Construction, Inc. as the lowest responsive and responsible bidder and authorizing the General Manager to execute a contract with Mozingo Construction, Inc. in the amount of $7,658,400 for construction of said project.
b) Approving exemption for the California Environmental Quality Act (CEQA) for the project and filing of a Notice of Exemption with the State Clearinghouse.

SUMMARY

Project Description: The project consists of construction of a new 6-inch, one-mile force main and renovation of four (4) dry pit, steel "can" style lift stations in the Copper Cove and Poker Flat subdivisions at Lake Tulloch near Copperopolis, CA. The project has several objectives including eliminating a section of existing force main crossing underwater through a cove within Lake Tulloch, reducing the risk of sewer spills by bypassing sewer flows away from existing lift stations situated along the edge of the lake, and eliminating potential hazards (confined space, atmospheric, arc flash) to employees associated with the operation and maintenance of the existing lift stations. The existing "dry pit" lift stations will be converted to a wet pit configuration with submersible pumps and above ground electrical systems.

The project has challenges in terms of right-of-way, easements and encroachments. Some of these are very limited and restrictive. Access is going to be tight for the contractor for the duration of the project. Also, the project must be designed to allow construction to proceed according to a sequence that keeps existing pumping, motor controls and electrical facilities in service and operational alongside new construction and so that the startup of the new infrastructure permits the eventual demolition, removal and abandonment of obsolete facilities.

Bid Results: CCWD prepared project plans, advertised, and publicly bid the project for construction. A bid opening was held on June 30, 2022, at which time, a total of six bids were received as summarized below. Sierra Mountain Construction, Inc. (SMCI) being the 1st apparent low bidder followed by Mozingo Construction, Inc. being the next, 2nd apparent low bidder. The Engineer's Estimate was $7,200,000.

BID TABULATION

BIDDER	TOTAL BID
Sierra Mountain Construction, Inc.	$6,076,899.00
Mozingo Construction, Inc.	$7,658,400.00
Ranger Pipelines, Inc.	$7,973,700.00
Mountain Cascade, Inc.	$8,366,100.00
Moyle Excavation, Inc.	$9,539,964.52
Steve P. Rados, Inc.	$9,580,800.00

Bid Irregularities and Recommendations for Award: SMCI withdrew their bid after discovering mistakes that made their bid amount materially different than SMCI had intended it to be. Public Contract Code Section 5100 et seq. allows a bidder to withdraw their bid within five (5) working days after the bid opening without penalty, e.g. forfeiture of their bid security/bond. Upon withdraw of SMCI's bid, Mozingo Construction, Inc. became the next lowest bidder. Reviewing their bid and finding no irregularities, staff recommends awarding the contract to Mozingo Construction, Inc.

Other Requirements: Along with project approval/award, CCWD as lead agency must comply with the California Environmental Quality Act (CEQA). CCWD has retained professionals to conducted biological, historic properties, cultural resources reviews of the project area. Staff recommends approving the project exemption and filing the attached Notice of Exemption with the State Clearinghouse.

FINANCIAL CONSIDERATIONS

The project is identified in the current FY22-23 budget including $3,000,000 for CIP 15076 for the Lift Station 6 & 8 replacement and force main bypass construction and $2.500,000 for CIP 15080 for the CC Lift Station 15 & 18 replacement. i. The funding for this project has been secured by the R&R Capital 135 Sewer Fund and the recent issuance of tax-exempt bonds for wastewater capital projects.

Attachments: *Bid Documents submitted by Mozingo*
Resolution No. 2022-__Awarding the Construction Contract
CEQA Notice of Exemption

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

SECTION 00410
BID FORM

CALAVERAS COUNTY WATER DISTRICT
COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS
AND LIFT STATION 12 & 13
FORCE MAIN BYPASS PROJECT

TABLE OF ARTICLES

ARTICLE 1- BID RECIPIENT

1.01 This Bid is submitted to: Calaveras County Water District at the main office at 120 Toma Court, San Andreas, California 95249, no later than **2:00 PM local time on June 30, 2022.**

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2- BIDDERS ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

2.02 Bidder accepts two separate bid schedules attached in the bid documents. They are listed as (A) Lift Station 12 & 13 Force Main Bypass, Lift Station 6 and 8 Renovations and (B) Lift Station 15 and 18 Renovations. Bidders are required to submit on all two bid schedules. The successful bidder will be selected by adding the total of all the two bid schedules and selecting the lowest overall bid. The intent is to have one general contractor be responsible for the entire project. General contractor must complete at least 50% of work in its own

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

name. CCWD reserves the right to cancel one or more of the bid schedules and its associated scope of work from the project.

ARTICLE 3- BIDDER'S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

Addendum No.	Addendum Date
1	02-09-2022
2	03-18-2022
3	05-25-2022
4	06-17-2022
5	06-24-2022

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all Federal, State and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site.

E. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.

F. Based on the information and observations referred to in Paragraph 3.01.E above, Bidder does not consider that any further examinations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

G. Bidder is aware of the general nature of the Work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.

H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

J. Bidder will submit written evidence of its authority to do business in the State or other jurisdiction where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4- BIDDER'S CERTIFICATION

4.01 Bidder further represents that:

A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;

B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;

C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and

D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:

1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.

2. "fraudulent practice" means an intentional misrepresentation of facts made to (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and

4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5- BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the price(s) provided in the attached bid schedule (at the end of this section).

5.02 Unit Prices have been computed in accordance with Paragraph 11.04.B of the General Conditions

5.03 Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

5.04 Bid Prices are for work that has been furnished and installed by the Contractor and is fully completed. The bid items as described and provided are for bidding and payment purposes and do not in any way limit the Contractor's responsibility to perform all work that may be reasonably inferred from the plans, specifications and other bid documents to produce the intended result.

5.05 All specified cash allowances are included in the price(s) set forth above and have been computed in accordance with Paragraph 13.02 of the General Conditions.

5.06 If "additive" or "deductive" Bid Items are included in the Bid- clearly identify the method for applying the alternates and the basis for award of the contract.

ARTICLE 6- TIME OF COMPLETION

6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7- ATTACHMENTS TO THIS BID

7.01 The following documents are attached to and made a condition of this Bid (Section 00410):

(ATTACH EACH DOCUMENT BELOW TO THE BID)

A. Non-Collusion Affidavit (Section 00420);

B. Required Bid security in the form of a Bid Bond or Certified Check (Section 00430); and

C. List of Subcontractors (Section 00470);

ARTICLE 8 - DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders (Section 00200), General Conditions (Section 00700), and Supplementary Conditions (Section 00800).

ARTICLE 9 - BID SUBMITTAL

9.01 This Bid is submitted by: Mozingo Construction, Inc.

Bidder's Business address: 751 Wakefield Court

Oakdale, CA 95361

Phone: (209)848-0160 Facsimile: (209)848-0161

Submitted on June 30, 2022.

State Contractor License No. 702625

Employer's Tax ID No. 77-0529846

DIR Registration No. 1000002424

If Bidder is:

An Individual N/A

Name: _____

By: _____
(Individual's signature)

Doing business as: _____

A Partnership N?A

Partnership Name: _____

_____ *(SEAL)*

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name: _____

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

A Corporation

Corporation Name: Mozingo Construction, Inc. , A California Corporation

_____ *(SEAL)*

State of Incorporation: CA

Type *(General Business, Professional, Service, Limited Liability)*: General

By: _____
(Signature – attach evidence of authority to sign)

Name: Philip Gianfortone

Title: Executive Vice President

Attest: see attached resolution
(Signature of Corporate Secretary)

Date of Qualification to do business is 1 / 3 / 2000.

A Joint Venture N/A

Name of Joint Venturer: _____

First Joint Venturer Name: _____

_____ *(SEAL)*

By: _____
(Signature of first joint venture partner – attach evidence of authority to sign)

Name: _____

Title: _____

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

Second Joint Venturer Name: N/A

_____

_____ *(SEAL)*

By: _____
(Signature of second joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Mozingo Construction, Inc
Statement of Authorized Officers

RESOLUTION

RESOLVED, that any one of the following officers, with titles as designated, are authorized and directed to execute on behalf of and as the act of this corporation the written proposals and/or contracts together with any/all associated documents, to and with any entity for which we shall be commissioned to engage into contract, for each and every contract, agreement, change order, purchase order, or any/all associated documents, until hereby nullified.

RESOLVED, that any one of the following officers, with titles as designated, are further authorized and directed to execute on behalf of and as the act of this corporation the application of any banking checking or savings accounts, certificates of deposit, credit cards, or vendor accounts, as may be necessary in order to conduct normal business processes.

DONI MOZINGO	SECRETARY
KURTIS MOZINGO	PRESIDENT / CEO
PHILIP GIANFORTONE	EXECUTIVE VP / CFO
MICHAEL FREEMAN	VP

CERTIFICATE OF SECRETARY

I, Doni Mozingo, am duly qualified and acting Secretary of Mozingo Construction, Inc., a California Corporation.

The foregoing is a true copy of a resolution duly adopted by the Board of Directors of the corporation at a regular/special meeting duly held on December 18, 2017.

The resolution is in conformity with the articles of incorporation and bylaws of the corporation, has never been modified or repealed, and is now in full force and effect.

Dated, this 18th day of Dec, 2017. Doni Mozingo

Doni Mozingo, Secretary

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

BID SCHEDULE A

CALAVERAS COUNTY WATER DISTRICT
COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS
AND LIFT STATION 12 & 13 FORCE MAIN BYPASS PROJECT

BID SCHEDULE A - LIFT STATION 12 & 13 FORCE MAIN BYPASS, LIFT STATION 6 AND 8 RENOVATIONS

NO.	ITEM DESCRIPTION	UNIT	QTY.	UNIT PRICE	BID AMOUNT
1A	Mobilization / Demobilization	LS	1	$ 225,000.-	$ 225,000.-
2A	Storm Water Pollution Prevent Plan/BMP's	LS	1	$ 60,000.-	$ 60,000.-
3A	LS-6 & LS-8 Sewer Bypass with Sound Dampening System	LS	1	$ 80,000.-	$ 80,000.-
4A	LS-15 & LS-16 Interconnection	-	-	Move To Schedule B	Move To Schedule B
5A	LS-6 Demolition, Site Clearing & Temporary Power	LS	1	$ 70,000.-	$ 70,000.-
6A	LS-6 Civil/Mechanical Improvements	LS	1	$ 620,000.-	$ 620,000.-
7A	LS-6 Electrical - Control Panel, MCC, ATS, Antenna, Electrical, Connections	LS	1	$ 500,000.-	$ 500,000.-
8A	LS-6 New Generator	LS	1	$ 80,000.-	$ 80,000.-
9A	LS-8 Demolition, Site Clearing & Temporary Power	LS	1	$ 60,000.-	$ 60,000.-
10A	LS-8 Civil/Mechanical Improvements	LS	1	$ 475,000.-	$ 475,000.-

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

CALAVERAS COUNTY WATER DISTRICT
COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS
AND LIFT STATION 12 & 13 FORCE MAIN BYPASS PROJECT

BID SCHEDULE A - LIFT STATION 12 & 13 FORCE MAIN BYPASS, LIFT STATION 6 AND 8 RENOVATIONS

11A	LS-8 Electrical - Control Panel, MCC, ATS, Antenna, Electrical, Connections	LS	1	$ 400,000.-	$ 400,000.-
12A	New 6" Force Main	LF	5,500	$ 250.-	$ 1,375,000.-
13A	New 4" Force Main	LF	920	$ 295.-	$ 271,400.-
14A	Existing Pipeline Cellular Concrete Fill	LF	1,000	$ 24.-	$ 24,000.-
15A	Hot Mix Asphalt Concrete Paving	TON	750	$ 380.-	$ 285,000.-
16A	Sewer Cleanout Standard Detail S03A	EA	9	$ 10,000.-	$ 90,000.-
TOTAL COST OF SCHEDULE A / BID ITEMS 1A THRU 16A: *(Note: Excluding Bid Item 4A)*					$ 4,615,400.-

four million six hundred fifteen thousand four hundred dollars and no cents.

DOLLARS TOTAL BID AMOUNT (SCHEDULE A) *(WRITTEN)*

Mazingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

BID SCHEDULE B

CALAVERAS COUNTY WATER DISTRICT
COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS
AND LIFT STATION 12 & 13
FORCE MAIN BYPASS PROJECT

BID SCHEDULE B - LIFT STATION 15 AND 18 RENOVATIONS

NO.	ITEM DESCRIPTION	UNIT	QTY.	UNIT PRICE	BID AMOUNT
1B	Mobilization / Demobilization	LS	1	$ 125,000.-	$ 125,000.-
2B	Storm Water Pollution Prevent Plan/BMP's	LS	1	$ 20,000.-	$ 20,000.-
3B	LS-15 Demolition, Site Clearing & Temporary Power	LS	1	$ 65,000.-	$ 65,000.-
4A	LS-15 and LS-16 Interconnect	LS	1	$ 175,000.-	$ 175,000.-
4B	LS-15 Civil/Mechanical Improvements	LS	1	$ 600,000.-	$ 600,000.-
5B	LS-15 Electrical - Control Panel, MCC, ATS, Antenna, Electrical, Connections	LS	1	$ 530,000.-	$ 530,000.-
6B	LS-15 New Generator	EA	1	$ 75,000.-	$ 75,000.-
7B	LS-18 Demolition, Site Clearing & Temporary Power	LS	1	$ 65,000.-	$ 65,000.-

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

CALAVERAS COUNTY WATER DISTRICT
COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS
AND LIFT STATION 12 & 13
FORCE MAIN BYPASS PROJECT

BID SCHEDULE B - LIFT STATION 15 AND 18 RENOVATIONS

NO.	ITEM DESCRIPTION	UNIT	QTY.	UNIT PRICE	BID AMOUNT
8B	LS-18 Civil/Mechanical Improvements	LS	1	$ 675,000.-	$ 675,000.-
9B	LS-18 Electrical - Control Panel, MCC, ATS, Antenna, Electrical, Connections	LS	1	$ 566,000.-	$ 566,000.-
10B	LS-18 New Generator	EA	1	$ 90,000.-	$ 90,000.-
11B	Hot Mix Asphalt Concrete Paving	TON	150	$ 380.-	$ 57,000.-
TOTAL COST OF BID ITEMS 1B THRU 11B: *(Note: Including Bid Item 4A)*					$ 3,043,000.-

three million forty three thousand dollars and no cents

DOLLARS TOTAL BID AMOUNT (SCHEDULE B) *(WRITTEN)*

Grand total Schedule A+B = $7,658,400.-

Seven million six hundred fifty eight thousand four hundred dollars, no cents

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

DESCRIPTIONS OF BID ITEMS – SCHEDULE A

Note: Bid items listed herein for bidding and payment purposes do not limit CONTRACTOR's responsibility to perform all work required under this contract, on drawings, in specifications, or reasonably inferred or interpreted to be necessary to complete the work. Progress payments will be pro-rated based on the percentage of work completed unless otherwise approved by the District. Unit price work will be measured and paid based on actual quantities measured in the field.

Bid Item No. 1A – Mobilization / Demobilization

This item for LS-6 and LS-8 improvements and bypass force main includes all labor, materials, equipment for preparing, furnishing, installing and maintaining a project specific bonding, insurance, meetings, submittals, scheduling, staging, equipment mobilization and demobilization, permits, and clean-up, and other general conditions of the contract. Payment will be made as Lump Sum.

Bid Item No. 2A – Stormwater Pollution Prevention Plan and BMP's

This item includes all labor, materials, equipment for preparing, furnishing, installing and maintaining a project specific Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMP's) to comply with the Construction General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ and 2012-0006-DWQ). SWPPP shall be filed electronically with State's Storm Water Monitoring and Report Tracking System (SMARTS), prepared by a Qualified SWPPP Developer (QSD) and implemented under direction of a Qualified SWPPP Practitioner (QSP) licensed by the California Stormwater Quality Association (CASQA). All work shall be according to the latest version of the CASQA Construction BMP Online Handbook, which is available on their website www.casqa.org. BMP's shall be provided for run-on control, soil stabilization, erosion control, sediment control, tracking control, wind erosion, material pollution prevention and waste management, and stockpile management. Each day if trenching, excavating and/or tracking dirt onto roads/highways, all trench spoils and excess waste excavated materials shall be removed and area mechanically swept and/or vacuumed to thoroughly clean all pavement surfaces. Contractor's operations shall preserve existing vegetation not in the immediate construction zone and shall not be conducted in a method/manner that allows trench spoil or backfill materials to directly enter into any creeks, stream, drainage or roadside ditches. All existing drainages shall be protected during construction and cleaned of all trench spoil, debris and returned to free flowing, functional condition upon project closeout. All disturbed soil areas shall be stabilized by appropriate permanent BMP's as soon as possible so each completed area can be closed out and removed from the SWPPP permit with the goal of limiting further monitoring and reporting in completed areas. After demobilization, Contractor's responsibility shall continue during guarantee period until a Notice of Termination (NOT) is filed and accepted by the Regional Board. Payment will be made as Lump Sum.

Bid Item No. 3A – LS-6 & LS-8 Sewage Bypass with Sound Dampening System

Reference drawing C-01A2 and C-02A2. This item includes the set up and operation of the sewer bypass system for LS-6 and LS-8. The CONTRACTOR shall provide all equipment, labor, power, connection, operation of sewer bypass system. Sewer bypass to be either self powered or electrically powered system. CONTRACTOR shall be responsible for bypass equipment power and safe operation of bypass. In case of emergency, the CONTRACTOR will be responsible to respond within one half hour of alarm. CONTRACTOR shall be responsible for sound dampening system design, installation, and requirements of noise ordinance. Payment will be made as Lump Sum.

Bid Item No. 5A – LS-6 Demolition, Site Clearing and Temporary Power

Reference drawing C-01A1. This item shall include, but not limited to, demolition of LS-6, clearing work areas and setting up temporary power with PG&E or generator with sound damping system. Demolition of existing lift station shall not commence until sewage bypass system is set up, tested and operational. CONTRACTOR shall coordinate with PG&E. The CONTRACTOR shall provide all equipment, labor, power, connection, operation of generator system, if necessary. Generator to be sound dampened. See specification section 02960 for noise limits. CONTRACTOR shall be responsible for fueling, operation and maintenance of generator. In case of emergency, the CONTRACTOR will be responsible to respond within 30 minutes of alarm. Includes the salvage of exiting generator to the Copper Cover WTP. Payment will be made as Lump Sum.

Bid Item No. 6A – LS-6 Civil/Mechanical Improvements

Reference drawings C-01B-C-01C, S-03. This item shall include, but not limited to, all vaults, manholes, piping, valves, pumps, wetwell and all other mechanical and site work as shown on Sheets C-01B-C01C, S-03 including preparing concrete foundations (for motor controls and generator). Note that the MCC, electrical, and generator are to be furnished under separate bid items below. Payment will be made as Lump Sum.

Bid Item No.7A – LS-6 Electrical/Control Panel, MCC, ATS, Antenna, Electrical, Connections

Reference drawings C-01B-C-01C, E-061-E-064, I-061. This item includes the furnishing and installing of new power upgrades, new wiring, electrical service, MCC, ATS, new panels, antenna systems, and other associated work. Contractor is responsible for coordinating electrical service upgrades with PG&E. Payment will be made as Lump Sum.

Bid Item No. 8A – LS-6 New Generator

Reference drawings C-01B, E-061, E-064, I-061 and specification section 16210. This item includes the furnishing and installation of new generator. Installation shall include placement of generator on concrete pad, anchorage, and all connections. Generator shall be same manufacturer as District's existing generator systems either Cat or Kohler. Payment shall be made for generator furnished, installed, tested, placed in service and accepted by the District.

Bid Item No. 9A – LS-8 Demolition, Site Clearing and Temporary Power

Reference drawing C-02A1. This item shall include, but not limited to, demolition of LS-8, clearing work areas and setting up temporary power with PG&E or generator with sound damping system. Demolition of existing lift station shall not commence until sewage bypass system is set up, tested and operational. Contractor shall coordinate with PG&E. The Contractor shall provide all equipment, labor, power, connection, operation of generator system, if necessary. Generator to be sound dampened. See specification section 02960 for noise limits. Contractor shall be responsible for fueling, operation and maintenance of generator. In case of emergency, the Contractor will be responsible to respond within one half hour of alarm. Payment will be made as Lump Sum.

Bid Item No. 10A – LS-8 Civil/Mechanical Improvements

Reference drawings C-02B-C-02C, S-04. This item shall include, but not limited to, all vaults, manholes, piping, valves, pumps, wetwell and all other mechanical and site work as shown on Sheets C-02B-C02C, S-04 including preparing concrete foundations (for motor controls). Note that the

MCC and electrical are to be furnished under separate bid items below. Payment will be made as Lump Sum.

Bid Item No. 11A – LS-6 Electrical – Control Panel, MCC, Antenna, Electrical, Connections
Reference drawings C-02B-C-02C, E-081-E-083, I-081. This item includes furnishing and installing of new power upgrades, new wiring, electrical service, MCC, new panels, antenna systems and other associated work. Contractor is responsible for coordinating electrical service upgrades with PG&E. Payment will be made as Lump Sum.

Bid Item No. 12A – New 6" Force Main
Reference drawings C-06-C-012, C-15. Furnish and install all materials, equipment necessary, labor; and doing all work for construction of 6-inch PVC-C900 DR18 (5,050 LF) sanitary sewer force main including but not limited to: clearing; trenching; imported backfill; compaction; 6-inch PVC DR18 pipe (green); ductile iron mechanical restrained fittings with secondary thrust blocking or fully mechanically restrained fittings and pipe joints (concrete thrust blocking only is not acceptable); blow-off and combination air valve assemblies; over-excavation and installation of rock subgrade; pressure testing; in-line clean out; site restoration; and all appurtenant work as shown on the Contract Documents, complete and in place. Payment shall be made for per lineal feet of new PVC force main installed according to the project drawings and specification, tested and placed into service, approved and accepted by the District.

Bid Item No. 13A – New 4" Force Main
Reference drawings C-13-C-014. Furnish and install all materials, equipment necessary, labor; and doing all work for construction of 4-inch PVC-C900 DR18 (920 LF) sanitary sewer force main including but not limited to: clearing; trenching; imported backfill; compaction; 4-inch PVC DR18 pipe (green); ductile iron mechanical restrained fittings with secondary thrust blocking or fully mechanically restrained fittings and pipe joints (concrete thrust blocking only is not acceptable); blow-off and combination air valve assemblies; over-excavation and installation of rock subgrade; pressure testing; in-line clean out; site restoration; and all appurtenant work as shown on the Contract Documents, complete and in place. Payment shall be made for per lineal feet of new PVC force main installed according to the project drawings and specification, tested and placed into service, approved and accepted by the District.

Bid Item No. 14A – Existing Pipeline Cellular Concrete Fill
Reference drawings C-02D-C-02E. This item includes all labor, materials, equipment for preparing, furnishing, and installing all Cellular Concrete work identified in the Contract Documents. The existing force main from LS-8 will be abandoned in place to Manhole 107. Size of force main is 6-in and material of pipe are asbestos cement, and ductile iron. The entire annual space of the inside of the 6-in force main is to be pressure grouted with a cellular concrete per specifications. The total length of 6-in force main to be abandoned in place with cellular concrete fill is approximately 1,000 linear feet with an estimated annular volume of 7 cubic yards. This work shall be performed by a qualified subcontractor normally engaged in pipeline abandonments using cellular concrete. Payment will be made per lineal foot of filled abandoned force main.

Bid Item No. 15A – Hot Mix Asphaltic Concrete Paving

Paving shall consist of plug paving of trenches and excavations and pavement then subsequent grinding and pavement overlay. Paving materials, equipment, spreading and compacting procedures shall conform to Section 39, Caltrans Standard Specifications. The Contractor shall provide all labor, equipment and materials for saw-cutting, grinding, removal, disposal of existing pavement and replacement with new hot mix asphaltic concrete paving within highways, streets, driveways, parking lots, and other paved areas. Work shall include all necessary and associate traffic controls, signage and flaggers. In paved areas, work shall be as directed and approved by the County Public Works and Caltrans inspectors, accordingly. A clean, straight saw cut shall be made along all edges between new and existing pavement and grind out transitions and overlays. All water and slurry generated during saw cutting work shall be immediately vacuumed and removed to prevent migration off the pavement and stop it from entering storm drains, drainages, etc. Joints and overlay areas shall be treated/primed/sprayed with a tack coat of asphalt emulsion prior to placement of adjacent hot mix asphalt. Final pavement shall be placed with a paver machine and compacted to the compaction level intended by the mix design. Contractor shall repaint fog, limit, center lines and all other traffic/pavement makings. Final paving thickness shall be determined in the field by CCWD and Calaveras County; minimum thickness of placed and compacted AC paving shall be 3-inches on driveways and thickness shall match existing in County public roads and Caltrans highway pavement unless otherwise directed by CCWD. Payment shall be for weight of hot mix AC paving delivered (submit daily truck tags) and placed and meeting quality standards; finished surface shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. (Note: For any load, District may deduct if a significant amount of hot mix is wasted/unusable and not incorporated into work).

Bid Item No. 16A – Sewer Force Main Cleanouts

The contractor shall furnish and install nominal 48-inch diameter precast concrete manholes with cleanout tee and isolation valves as shown in Standard Detail S03A, Appendix 'A' of the Project Manual. On Sheets 29 thru 35, the cleanout manholes shall be tentatively located at the following approximate stations/locations along the force main alignment: STA 12+50, 18+50, 29+75, 35+00, 47+60, 52+00, 54+70, 61+00 and 63+70. Prior to installation CCWD and Contractor will investigate and determine exact locations for field placement of cleanouts contingent upon the USA utility markings, avoidance of utility conflicts in congested areas, and required separation from water lines. Contractor to provide the total quantity of cleanout manholes listed in the Bid Form. This scope of work shall include all labor, materials, equipment and incidentals necessary to furnish and install each cleanout. Frames and covers are to be brought to finish grade and flush to top of pavement. Excavations are to be backfilled with Class 2 A.B. compacted to 95% relative density. Payment shall be for each cleanout manhole furnish and installed per Detail S03A and passed and accepted by the District.

Mozingo Construction, Inc.
751 Wakefield Ct.
Oakdale, CA 95361

DESCRIPTIONS OF BID ITEMS – SCHEDULE B

Note: Bid items listed herein for bidding and payment purposes do not limit CONTRACTOR's responsibility to perform all work required under this contract, on drawings, in specifications, or reasonably inferred or interpreted to be necessary to complete the work. Progress payments will be pro-rated based on the percentage of work completed unless otherwise approved by the District. Unit price work will be measured and paid based on actual quantities measured in the field.

Bid Item No. 1B – Mobilization / Demobilization

This item for LS-15 and LS-18 improvements includes all labor, materials, equipment for preparing, furnishing, installing and maintaining a project specific bonding, insurance, meetings, submittals, scheduling, staging, equipment mobilization and demobilization, permits, clean-up, and other general conditions of the contract. Payment will be made as Lump Sum.

Bid Item No. 2B – Stormwater Pollution Prevention Plan and BMP's

This item for LS-15 and LS-18 improvements includes all labor, materials, equipment for preparing, furnishing, installing and maintaining a project specific Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMP's) to comply with the Construction General Permit 2009-0009-DWQ (amended by 2010-0014-DWQ and 2012-0006-DWQ). SWPPP shall be filed electronically with State's Storm Water Monitoring and Report Tracking System (SMARTS), prepared by a Qualified SWPPP Developer (QSD) and implemented under direction of a Qualified SWPPP Practitioner (QSP) licensed by the California Stormwater Quality Association (CASQA). All work shall be according to the latest version of the CASQA Construction BMP Online Handbook, which is available on their website www.casqa.org. BMP's shall be provided for run-on control, soil stabilization, erosion control, sediment control, tracking control, wind erosion, material pollution prevention and waste management, and stockpile management. Each day if trenching, excavating and/or tracking dirt onto roads/highways, all trench spoils and excess waste excavated materials shall be removed and area mechanically swept and/or vacuumed to thoroughly clean all pavement surfaces. Contractor's operations shall preserve existing vegetation not in the immediate construction zone and shall not be conducted in a method/manner that allows trench spoil or backfill materials to directly enter into any creeks, stream, drainage or roadside ditches. All existing drainages shall be protected during construction and cleaned of all trench spoil, debris and returned to free flowing, functional condition upon project closeout. All disturbed soil areas shall be stabilized by appropriate permanent BMP's as soon as possible so each completed area can be closed out and removed from the SWPPP permit with the goal of limiting further monitoring and reporting in completed areas. After demobilization, Contractor's responsibility shall continue during guarantee period until a Notice of Termination (NOT) is filed and accepted by the Regional Board. Payment will be made as Lump Sum.

Bid Item No. 3B – LS-15 Demolition, Site Clearing & Temporary Power

Reference drawing C-03A. This item shall include, but not limited to, demolition of LS-15, clearing work areas and setting up temporary power with sound damping system. Demolition of existing lift station shall not commence until new lift station is tested and operational. Power to remain on LS-15 as long as practical. CONTRACTOR shall coordinate with PG&E. The CONTRACTOR shall provide all equipment, labor, power, connection, operation of generator system. Generator to run

new lift station during power switchover to be sound dampened. See specification section 02960 for noise limits. Generator system at LS-15 will have to be relocated so that construction of the site can begin. CONTRACTOR shall be responsible for fueling, operation and maintenance of generator. In case of emergency, the CONTRACTOR will be responsible to respond within one 30 minutes of alarm. Includes the salvage of existing generator to the Copper Cover WTP. Payment will be made as Lump Sum.

Bid Item No. 4A – LS-15 & LS-16 Interconnection Civil/Mechanical Improvements
(Note: This item has been moved to Schedule B). Reference drawings C-05. This item shall include, but not limited to, traffic control, excavation, backfill, subgrade preparation, asphalt removal and replacement, vault, hatch, piping, valves, and all other mechanical and site work as shown on Sheet C-05. Payment will be made as Lump Sum.

Bid Item No. 4B – LS-15 Civil/Mechanical Improvements
Reference drawings C-03B1-C-03B3, C-03C, S-05. This item shall include, but not limited to, all vaults, manholes, piping, valves, pumps, wet well and all other mechanical and site work as shown on Sheets C-03B1-C03-B3, C-03C including preparing concrete foundations (for motor controls and generator). Note that the MCC, electrical, and generator are to be furnished under separate bid items below. Payment will be made as Lump Sum.

Bid Item No.5B – LS-15 Electrical – Control Panel, MCC, ATS, Antenna, Electrical, Connections
Reference drawings C-03B1-C-03B3, C-03C, E-151-E-154, I-151. This item includes the furnishing and installing of new power upgrades, new wiring, electrical service, MCC, ATS, new panels, antenna systems and other associated work. Contractor is responsible for coordinating electrical upgrades with PG&E. Payment will be made as Lump Sum.

Bid Item No. 6B – LS-15 New Generator
Reference drawings C-03B1-C-03B3, E-151, E-154, I-151 and specification section 16210. This item includes furnishing and installation of new generator. Installation shall include placement of generator on concrete pad, anchorage, and all connections. Generator shall be same manufacturer as District's existing generator systems either Cat or Kohler. Payment shall be made for generator furnished, installed, tested, placed in service and accepted by the District.

Bid Item No. 7B – LS-18 Demolition, Site Clearing & Temporary Power
Reference drawing C-04A. This item shall include, but not limited to, demolition of LS-18, clearing work areas and setting up temporary power with sound damping system. Demolition of existing lift station shall not commence until new lift station is tested and operational. Power to remain on LS-18 as long as practical. CONTRACTOR shall coordinate electrical service with PG&E. The CONTRACTOR shall provide all equipment, labor, power, connection, operation of generator system. Generator to run new lift station during power switchover to be sound dampened. See specification section 02960 for noise limits. CONTRACTOR shall be responsible for fueling, operation and maintenance of generator. In case of emergency, the CONTRACTOR will be responsible to respond within 30 minutes of alarm. Includes the salvage of existing generator to the Copper Cover WTP. Payment will be made as Lump Sum.

Bid Item No. 8B – LS-18 Civil/Mechanical Improvements

Reference drawings C-04B1, C-04B2, C-04C, S-06. This item shall include, but not limited to, all vaults, manholes, piping, valves, pumps, wetwell and all other mechanical and site work as shown on Sheets C-04B1, C-04B2, C-04C, S-06 including preparing concrete foundations (for motor controls and generator). Note that the MCC, electrical, and generator are to be furnished under separate bid items below. Payment will be made as Lump Sum.

Bid Item No. 9B – LS-18 Electrical – Control Panel, MCC, ATS, Antenna, Electrical, Connections

Reference drawings C-04B1, C-04B2, C-04C, E-181-E-184, I-181. This item includes furnishing and installing new power upgrades, new wiring, electrical service, MCC, ATS, new panels, antenna systems, and all other associated work. Contractor is responsible for coordinating electrical upgrades with PG&E. Payment to be Lump Sum.

Bid Item No. 10B – New Generator

Reference drawings C-04B1, C04B2, E-181, E-184, I-181 and specification section 16210. This item includes furnishing and the installation of new generator. Installation shall include placement of generator on concrete pad, anchorage, and all connections. Generator shall be same manufacturer as District's existing generator systems either Cat or Kohler. Payment shall be made for generator furnished, installed, tested, placed in service and accepted by the District.

Bid Item No. 11B – Hot Mix Asphaltic Concrete Paving

Paving shall consist of plug paving of trenches and excavations and pavement then subsequent grinding and pavement overlay. Paving materials, equipment, spreading and compacting procedures shall conform to Section 39, Caltrans Standard Specifications. The Contractor shall provide all labor, equipment and materials for saw-cutting, grinding, removal, disposal of existing pavement and replacement with new hot mix asphaltic concrete paving within highways, streets, driveways, parking lots, and other paved areas. Work shall include all necessary and associate traffic controls, signage and flaggers. In paved areas, work shall be as directed and approved by the County Public Works and Caltrans inspectors, accordingly. A clean, straight saw cut shall be made along all edges between new and existing pavement and grind out transitions and overlays. All water and slurry generated during saw cutting work shall be immediately vacuumed and removed to prevent migration off the pavement and stop it from entering storm drains, drainages, etc. Joints and overlay areas shall be treated/primed/sprayed with a tack coat of asphalt emulsion prior to placement of adjacent hot mix asphalt. Final pavement shall be placed with a paver machine and compacted to the compaction level intended by the mix design. Contractor shall repaint fog, limit, center lines and all other traffic/pavement makings. Final paving thickness shall be determined in the field by CCWD and Calaveras County; minimum thickness of placed and compacted AC paving shall be 3-inches on driveways and thickness shall match existing in County public roads and Caltrans highway pavement unless otherwise directed by CCWD. Payment shall be for weight of hot mix AC paving delivered (submit daily truck tags) and placed and meeting quality standards; finished surface shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. (Note: For any load, District may deduct if a significant amount of hot mix is wasted/unusable and not incorporated into work).

END

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

AWARDING A CONSTRUCTION CONTRACT FOR THE COPPER COVE LIFT STATION 6, 8, 15 & 18 RENOVATIONS AND LIFT STATION 12 & 13 FORCE MAIN BYPASS PROJECT CIP 15076 / 15080

WHEREAS, CCWD prepared project plans, advertised and publicly bid the project for construction and held a bid opening on June 30, 2022, at which time, at total of six bids were received with Sierra Mountain Construction being the first apparent low bidder followed by Mozingo Construction being the next, second apparent low bidder, and

WHEREAS, Sierra Mountain Construction withdrew their bid after discovering mistakes that substantially effected their bid amounts and finding that CCWD could not waive these mistakes as being informalities in their bid; and

WHEREAS, after the withdrawal of the first apparent low bidder, Mozingo Construction, Inc. thereafter became the next apparent low bidder and after confirming no irregularities in their bid is recommended by staff for award of this construction contract; and

WHEREAS, biological, historic properties and cultural resources evaluations have been made and, along with the project award, staff recommends lead agency approval of an exemption to the California Environmental Quality Act (CEQA).

BE IT RESOLVED, the Calaveras County Water District Board of Directors hereby accepts the bid submitted by Mozingo Construction, Inc. as being the lowest responsive and responsible bidder and authorizes the General Manager to enter into a contract with Mozingo Construction, Inc. in the amount of $7,658,400 for construction of the Lift Station 6, 8, 15 & 18 Renovations and Lift Station 12 & 3 Force Main Bypass Project, and

BE IT FURTHER RESOLVED, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby approves, as lead agency, an exemption to the California Environmental Quality Act (CEQA) and approves filing of a Notice of Exemption with the State Clearinghouse; and

PASSED AND ADOPTED this 27th day of July, 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____

Cindy Secada, President
Board of Directors

ATTEST:

_____

Rebecca Hitchcock
Clerk to the Board

Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Calaveras
891 MOUNTAIN RANCH ROAD
San Andreas, CA 95249

From: (Public Agency): Calaveras County Water District
120 Toma Court
San Andreas, CA 95249
(Address)

Project Title: Lift Stations 6, 8, 15 & 18 Renovations and Lift Stations 12 & 13 Force Main Bypass

Project Applicant: Calaveras County Water District

Project Location - Specific:

Near Lake Tulloch, Kiva Dr., Lakeshore Dr., O'Byrnes Ferry Rd., Conner Estates Dr.,

Project Location - City: Copperopolis, CA Project Location - County: Calaveras

Description of Nature, Purpose and Beneficiaries of Project:

Replacement and reconstruciton of four (4) existing lift stations and construction of a one mile 6-inch diameter sewer force main. By re-routing the force main along O'Byrnes Ferry Road and Conner Estates Drive, an existing sewer pipeline beneath Lake Tulloch is eliminated reducing the risk of sewer spills into the lake. Also, the project improves worker safety by eliminating dry-pits that are confined spaces and replacing old electrical systems. Replacing old generators will reduce exhaust emissions. (See detailed description attached)

Name of Public Agency Approving Project: Calaveras County Water District

Name of Person or Agency Carrying Out Project: Calaveras County Water District

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Class 1 (§15301) and Class 2 (§15302)
- ☐ Statutory Exemptions. State code number: §21080.21

Reasons why project is exempt:

The lift station improvements are for the replacement and reconstruction of existing facilities which are exempt under §15301 and §15301. There are no cumulative impacts, significant effects on the environment, impacts to historic resources, hazardous waste sites, nor any other exceptions. A statutory exemption (§21080.21) also applies for replacement or relocation of pipelines one mile in length constructed within public streets, highways, or any other public right-of-way. (See attached Supporting Documentation)

Lead Agency Contact Person: Michael J. Minkler Area Code/Telephone/Extension: 209-754-3001

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☒ Yes ☐ No

Signature: _____ Date: July 27, 2022 Title: General Manager

☒ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

NOTICE OF EXEMPTION

SUPPORTING DOCUMENTATION

Calaveras County Water District
Lift Station 12 & 13 Force Main Bypass and Lift Station 6, 8, 15 & 18 Renovations
(CIP #15076 / #15080)

Exemption:
This project as described and incorporated features presented herein has been determined by the lead agency to qualify for categorical and statutory exemptions in conformance with California Environmental Quality Act (CEQA). There are no cumulative impacts, significant effects on the environment, impacts to historic resources, work occurring within hazardous waste sites, nor any other exceptions noted.

The following Categorical Exemptions are identified:

- Existing Facilities (§15301/Class 1). This exemption consists of the operation, repair, maintenance, permitting, leasing, licensing or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. It specifically includes existing facilities for publicly-owned utilities used to provide electric power, sewerage, or other public utility services; existing highways, streets, gutters, and similar facilities.

- Replacement or Reconstruction (§15302/Class 2). This exemption consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. It specifically includes replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

The following Statutory Exemption is identified:

- Other Statutory Exemptions (§15302). Any project of less than one mile in length within a public street or highway or any other public right-of-way for the installation of a new pipeline or the maintenance, repair, restoration, reconditioning, relocation, replacement, removal, or demolition of an existing pipeline. For purposes of this section, "pipeline" includes subsurface facilities but does not include any surface facility related to the operation of the underground facility.

Project Description:
The goal of the of the project is to upgrade the existing lift stations (LS) and reduce risk by routing sewer flows away from lift stations located near Lake Tulloch (Figure 1) by:

1. Eliminating the existing 6-inch force main used to convey wastewater beneath Lake Tulloch between LS-8 and LS-12.
2. Reducing the risk of potential sewer spills by conveying wastewater flows away from stations located adjacent to and/or near Lake Tulloch, and

3. Reducing operations and maintenance requirements and potential hazards associated with existing lift station dry pits and electrical systems.

Specific project elements including replacing Lift Station 6, 8, 15 and 18 and installing two force mains. The longer force main will be 6-Inch PVC and used to pump wastewater from LS-6 to L-40 (including along a portion of O'Byrnes Ferry Road). The shorter force main will be 4-inch PVC and used to pump wastewater from LS-8 to LS-6.

Location:
Easements along portions of those roadways illustrated in **Figures 1-5** in Copper Cove, Connor Estates and Poker Flat subdivisions and along O'Byrnes Ferry Road. The project encompasses areas within Copper Cove Association, Lake Tulloch Shores at Poker Flat Property Owners Association, Connor Estates Master Association, Calypso Bay Property Owners Association and utility companies including the Central Valley Independent Network (CVIN) and Calaveras Telephone Company (Cal-Tel).

Portions of Section 25, T1N, R12E and Portions of Section 30, 31 T1N, E13E, and a portion of the Rancheria Del Rio Estanislao Land Grant - Melones Dam USGS 7.5 minutes Quadrangle.

Incorporation by Reference:
Consistent with the compliance requirements of Section 21080.23(b)(4), a biological survey, cultural resources survey and geotechnical analysis were undertaken for the proposed project and are hereby incorporated by reference as follows. All recommendations of those reports are incorporated into the conditions of project approval (**Attachment A**):

Augustine, Amy. February 22, 2020. *Technical Memorandum: Biological Analysis of the Lift Station 12 & 13 Force Main Bypass and Lift Station 6, 8, 15 & 18 Renovations (District CIP #151076 / #15080).* Augustine Planning Associates, Inc.

Condor Earth. September 5, 2019. *Geotechnical Investigation Calaveras County Water District Copper Cove Force Main and Lift Stations Project*.

Lee & Ro, Inc. November 2019. *Final Preliminary Design Report: Lift Station 12 & 13 Force Main Bypass and Lift Station 6, 8, 15 & 18 Renovations (District CIP #151076 / #15080)*

Patrick, Ian. July 2, 2019. *Technical Memorandum Cultural Resources Investigation: Lift Station 12 & 13 Force Main Bypass and Lift Station 6, 8, 15 & 18 Renovations (District CIP #151076 / #15080).* Patrick GIS Group, Inc.

Cultural Resources:
The Area of Potential Effects (APE) studied for the project are included in **Figures 4-5**. The study scope of work included a Central California Information Center of the California Historical Resources Information System records search, archival research, pedestrian survey and a letter report. Archival and records searches identified 8 cultural resources within 1/3 miles of the APE with none identified within the APE.

The California Native American Heritage Commission was notified and responded on to a request for a Sacred Lands File search. Results were negative. E-mails describing the proposed project were sent to individuals on the NAHC Native American Contacts list. Sara Dutschke Setchwaelo (Ione Band Miwok) notified Patrick that the Cultural Committee would be reviewing the project map and details were forwarded. She requested a copy of the letter

report generated by the study. Debra Grimes, Calaveras Band of Mi-Wuk Indians, responded that she would share information directly with CCWD. Darrel Cruz (Washoe Tribe of Nevada and California) responded that the tribe had no concerns. Lawrence Wilson (Sheep Ranch California Valley Miwok) informed the surveyors as an interested party, but that he would not be consulting in an official capacity.

Surveys encompassed an area of 50 feet surrounding the identified pipelines and lift stations. All areas were surveyed expect that portion of the sewer line running beneath Tulloch Reservoir. All visible ground was inspected with emphasis on areas exposed by animal activity, human activity and environmental processes. No archaeological sites were identified and no further archaeological work is recommended at this time.

Despite efforts to identify cultural resources, there remains a possibility that resources may be uncovered during earth disturbing activities; therefore, the project consultants have recommended a preconstruction/tailgate training for construction personnel and the protocol for responding in the event of an inadvertent discovery of cultural resources or human remains. These conditions have been incorporated into the conditions of project approval.

Geotechnical Resources: Recommendations of the geotechnical report are summarized in Attachment B included in the conditions of project approval.

Biological Resources: Natural resources were identified through a review of databases and species lists from the United States Fish and Wildlife Service (USFWS), California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) and CalFlora databases. Site surveys were conducted by foot on the following dates: 5/15/19 and 5/27/19, Surveys were conducted using q Canon Image Stabilizer 10 X 30 binoculars, Nikon D3300 digital camera (18-55mm and 70-300mm lens), and standard field and collection supplies.

The Project site, access areas and staging areas were surveyed for nests, whitewash, and droppings. All accessible tree cavities and burrows were investigated for signs of use. Trees were surveyed for nests (whether currently active or with potential to become active). Surveys were conducted on foot. Photos of representative vegetation were taken throughout the surveys. Where species were not readily identified in the field, plant specimens were inspected with a hand lens, sketched and, if necessary, collected and preserved then keyed in-house using a dissecting microscope and Jepson Manual.

Based on an analysis of the site and species lists, it was determined that the potential exists for nesting birds to occupy the site prior to construction, common and special status species could become trapped in stored materials and open trenches and measures to avoid such incidents should be taken, root zones of native oak trees are located within the proposed excavation areas and minimization measures to minimize destruction are proposed. Due to the proximity of the lake, measures also are included to protect water quality.

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Figure 1: Project Setting: **Subject Projects - Near-Term Force Main Improvements**

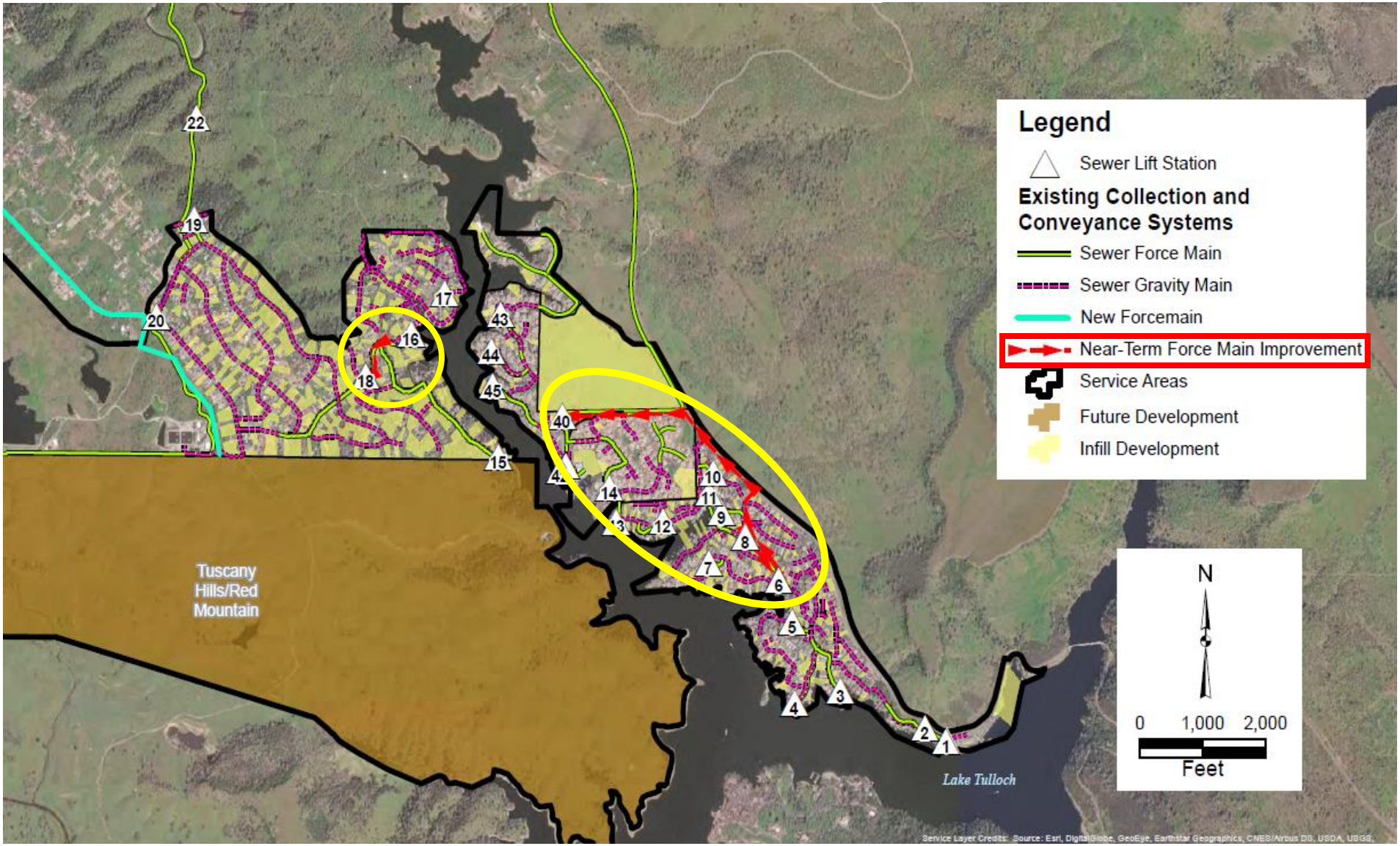

Figure 2: Close-Up Lift Stations 16, 18 - Copper Cove

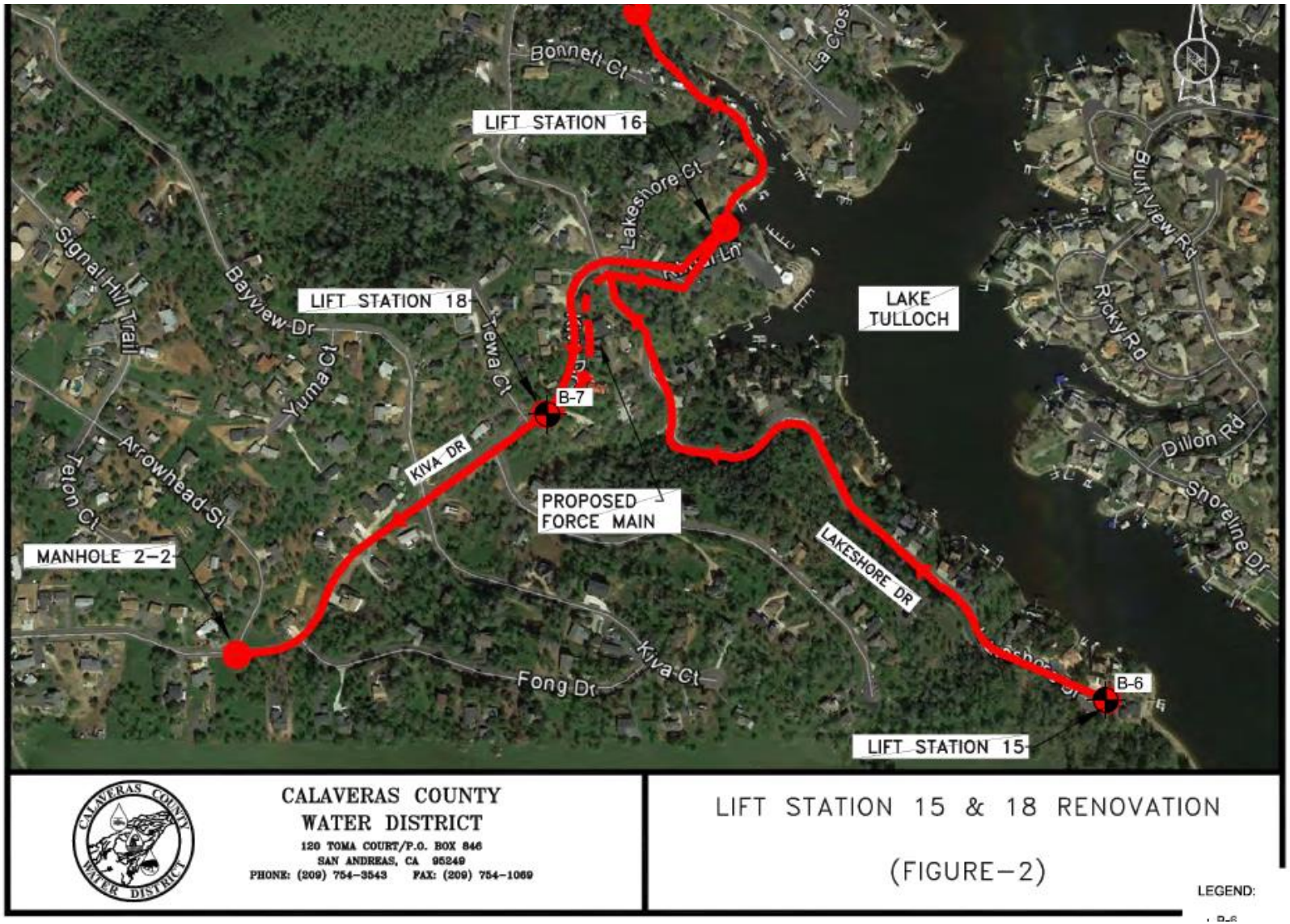

Figure 3: Lift Stations 6, 8, 12, 13 & 40 and Force Mains, O'Byrnes Ferry : Connor Estates, Calypso Bay, Poker Flat

Solid Line = Existing Mains Dotted Line = Proposed Relocated Force Main

Figure 4: Project Close-Up -Copper Cove – Lift Stations 16, 18

Figure 5: Project Close-Up – Connor Estates, Calypso Bay, Poker Flat Lift Stations 6, 8, 12, 13, 40; Force Mains and O'Byrnes Ferry Road

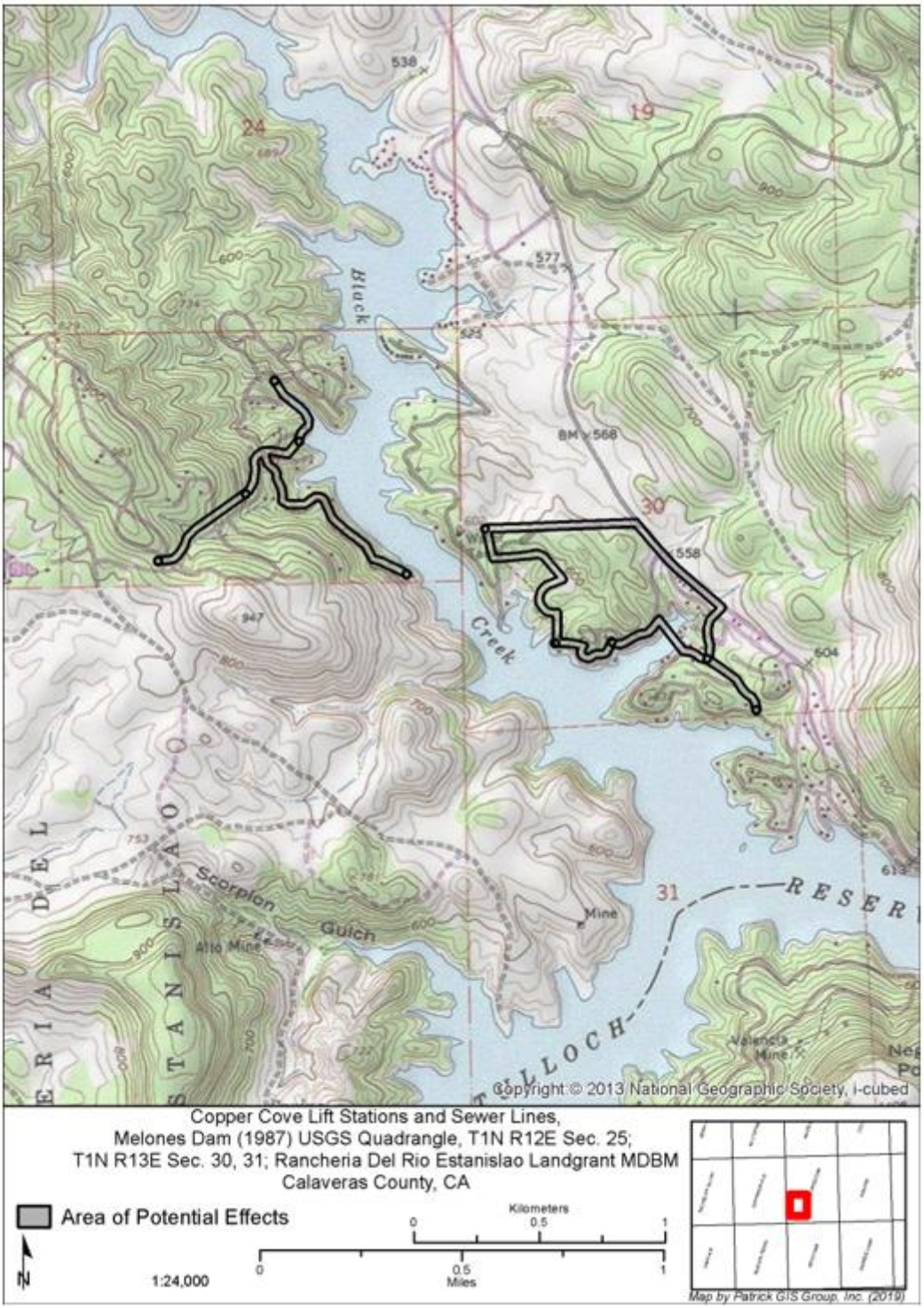

Figure 6: Area of Potential Effects Map - Cultural Resources

Attachment A

Conditions of Project Approval

Calaveras County Water District
Lift Station 12 & 13 Force Main Bypass and Lift Station 6, 8, 15 & 18 Renovations
(CIP #15076 / #15080)

The following features are hereby incorporated into the project description and conditions of the project approval

1. The project shall comply substantially with the Project Description. Substantial deviations may trigger additional environmental review.

2. Actual construction and excavation activities undertaken in conjunction with the project shall not be undertaken over a length of more than ½ miles at any time (PRC 21080.23)

3. Contractors undertaking excavations shall immediately inform CCWD of the discovery of contaminated soils.

4. Prior to commencing work within the public roadways, the Contractor shall prepare a Traffic Access Management Plan to the Calaveras County Department of Public Works and the District's satisfaction and will, throughout project construction, implement a traffic access management plan to maintain emergency ingress, egress, and daily traffic flows throughout the Project boundaries. The access management plan should address public notification of upcoming construction, anticipated road closures, and detours (e.g., publication in local newspaper, electronic message boards, coordination with schools, fire houses). The District will coordinate road closures with affected Fire Departments and schools to ensure that emergency ingress and egress is addressed prior to and during land closures.

5. Rights-of-way shall be restored to pre-project conditions upon project completion.

6. CCWD agrees to comply with all conditions otherwise authorized by law imposed by the County Encroachment Permit as part of any applicable permitting process and required to mitigate potential impacts of the proposed project.

7. **Geotechnical.** All provisions of the geotechnical report prepared for this project (Condor. September 5, 2019. *Geotechnical Investigation Calaveras County Water District Copper Cove Force Main and Lift Stations Project)*, as summarized in **Attachment B**, shall be implemented in accordance with the study.

8. **Environmental Awareness/Pre-Construction Training**
Construction bid packages and contractual requirements shall include a requirement for tail-gate training by the project's designated qualified biologist and cultural resource professionals. All contractors involved in site development and environmental specialists will attend a mandatory Environmental Awareness Training prior to any site disturbances. The program will address proper implementation of minimization and avoidance measures contained herein including, but not limited to:

- Nesting birds
- Avoiding inadvertent animal trapping
- Site maintenance
- Controlling invasive species
- Handling leaks and spills
- Fencing environmentally sensitive areas
- Native Oak Tree Protection measures (avoiding driplines, no equipment or materials storage in driplines, avoid cutting oak roots, avoid equipment damage to limbs, trunks, and roots of oaks trees; do not attach signs, ropes, cables or other items to trees)
- Cultural resources training to inform construction personnel of the types of cultural resources they may encounter, the laws protecting those resources, and the standard protocols to be implemented.
- Hazardous materials response

9. **Unanticipated Cultural Resource Discoveries**
   If a cultural resource is discovered during construction activities, the construction contractor shall comply with the following provisions:

   A. The person discovering the cultural resource shall notify the District or the project's designated qualified cultural resource professional by telephone within 4 hours of the discovery or the next working day if the department is closed.

   B. When the cultural resource is located outside the area of disturbance, the project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource and construction activities may continue during this process. On parcels of two or more gross acres, the area of disturbance includes building pads, driveways or utility lines, grading and vegetation removal areas, plus 100 feet.

   C. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by site's designated qualified cultural resource professional may continue. The project's designated qualified cultural resource professional shall be allowed to conduct an evaluative survey to evaluate the significance of the cultural resource.

   D. When the cultural resource is determined to be not significant, the project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the project's designated qualified professional.

   E. When a resource is determined to be significant, the resource shall be avoided with said resource having boundaries established around its perimeter by the project's designated qualified cultural resource professional or a cultural resource management plan shall be prepared by the project's designated qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the

California Environmental Quality Act (CEQA) to address the effects of construction on the resource. The project's designated qualified cultural resource professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the project's designated qualified cultural resource professional. All further activity authorized by this permit shall comply with the cultural resources management plan.

For the purposes of implementing this measure, a "qualified cultural resource professional" is an individual (e.g., historian or archaeologist) meeting the Secretary of the Interior's Qualification Standards.

A "cultural resource" is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Tuolumne County, the State of California, or the nation which is 50 years of age or older or has been listed on or is eligible for listing on the National Register of Historic Places, the California Register of Cultural Resources, or any local register. Examples of prehistoric resources may include stone tools and manufacturing debris; milling equipment such as bedrock mortars, portable mortars, and pestles; darkened or stained soils (midden) that may contain dietary remains such as shell and bone; as well as human remains. Historic resources may include burial plots; structural foundations; mining spoils piles and prospecting pits; cabin pads; and trash scatters consisting of cans with soldered seams or tops, bottles, cut (square) nails, and ceramics

10. **Human Remains**

If human remains, burial, cremation of other mortuary features are uncovered during construction activities; upon discovery, secure the location, do not touch or remove remains and associated artifacts; do not remove associated spoils or go through them; document the location and keep notes of activity and correspondence. All work within 100 feet of the discovery shall stop until the County Coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the California Native American Heritage Commission to obtain the Most Likely Descendent (MLD) and follow state law (PRC 5097.9 et seq. and Health and Safety Code 7050.5(c)-7054.1 and 8100 et seq.). No further work or disturbance shall occur within 100 feet until all of the preceding actions, as applicable to the discovery, are implemented and completed. Preserve associated spoils without further disturbance, do not touch or remove remains or associated artifacts, document the location and maintain notes of activity and correspondence. Preservation *in situ* is the preferred treatment of human remains and associated burial artifacts. [Public Resources Code Sections 5097.94, 5097.98 and Health and Safety Code Section 7050.5(c) and Section 15064.5 of the California Code of Regulations implementing the California Public Resources Code, Sections 21000-21177

11. **Avoid Inadvertent Animal Trapping During Construction**

To avoid inadvertently trapping special status or common animal species during construction, all excavated steep-walled holes or trenches more than two feet deep shall be covered at the end of each working day with plywood or similar material, or provided with one or more escape ramps constructed of earth fill or wooden planks, or equivalent, at each end of the trench. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a tapped animal is discovered, the contractor shall place an escape ramp or other appropriate structure to allow the animal to escape. Alternatively, the contractor shall contact the project biologist or California Department of

Fish and Wildlife for assistance. Similarly, stored pipes or other materials providing potential cover for animals will be inspected prior to installation or use to ensure that they are unoccupied.

12. **Food and Trash Disposal**
    All food and food-related trash will be enclosed in sealed trash containers at the end of each workday and removed completely from the construction site every day to avoid attracting wildlife.

13. **Construction Hours**
    Project construction shall be limited to 7:00 a.m. to 7:00 p.m. unless an emergency exists

14. **Pre-Construction Bird/Raptor Survey**
    Prior to construction occurring between February 1st and August 30th (e.g., excavation, ground disturbance, or vegetation removal) a preconstruction survey for nesting birds will be conducted in accordance with the CDFW guidelines and a no-disturbance buffer will be established, if necessary.

    If equipment staging, site preparation, vegetation removal, grading, excavation or other project-related construction activities are scheduled during the avian nesting season (generally February 1 through August 30), a focused survey for active nests would be conducted by a qualified biologist within 15 days prior to the beginning of project-related activities.

    Surveys shall be conducted in all suitable habitat in the Biological Study Area.

    If an active nest is found, the bird shall be identified to species and the approximate distance from the closest work site to the nest estimated. No additional measures need be implemented if active nests are more than the following distances from the nearest work site: (a) 300± feet for raptors; or (b) 75± feet for other non-special-status bird species. Disturbance of active nests shall be avoided to the extent possible until it is determined that nesting is complete and the young have fledged. For species protected under the California Fish and Game Code (CFGC), if active nests are closer than those distances to the nearest work site and there is the potential for bird disturbance, CDFW will be contacted for approval to work within 300± feet of raptors, or 75± feet of other non-special-status bird species.

15. **Native Oak Protection**
    Throughout project construction, for native oak trees greater than 5” diameter at breast height (DBH), to be retained, to the maximum extent feasible:

    - Limit ground-disturbing activities to outside the dripline of native oaks and preferably outside 1-1/2 times the dripline;

    - No storage equipment, supplies, vehicles, debris, construction wastewater, paint, stucco, concrete or any other clean-up waste, and temporary or permanent structures shall be placed within the driplines;

    - Use boring, rather than trenching, within driplines

- Avoid equipment damage to limbs, trunks, and roots of oaks trees

- Do not attach signs, ropes, cables or other items to trees

17. **Best Management Practices (BMPs) to Protect Water Quality (Including NOI/NPDES/SWPPP)**

- The Contractor shall prepare an Erosion Control Plan for implementation for any construction to take place between October 15 and May 15 of any year. In the absence of such an approved plan, all construction shall cease on or before October 15, except that necessary to implement erosion control measures. If necessary, the plan shall be submitted to the County Public Works Department (or District) for review and approval.

- Submit to the State Water Resources Control Board Storm Water Permitting Unit, a Notice of Intent (NOI) to obtain coverage under the General Construction Activity Storm Water Permit - California's National Pollution Discharge Elimination System (NPDES) general permit for construction related storm water discharges for the disturbance of one acre or more. Disturbances of less than one acre may also require an NOI for coverage under the NPDES General Permit for construction-related storm water discharge and the State Water Resources Control Board Permitting Unit shall be contacted for determination of permit requirements. Commercial and Industrial developments may require an NOI even if less than one acre is to be disturbed. Obtain coverage or an exemption from these requirements. [Federal Water Pollution Control Act, Section 401, California Clean Water Act]. The permit may include preparation of a Stormwater Pollution Prevention Plan (SWPPP).

- Prior to implementing staging, construction, or ground disturbing activities: Install temporary silt fencing, fiber rolls, or equivalent erosion and sediment control devices as necessary to protect water quality. Silt fencing or other materials, as required, will be installed consistent with the applicable water quality requirements specified in the Project's Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP). Fencing or other erosion control materials or devices shall be shown on the final construction documents. These areas will be monitored by the project manager throughout construction.

- No construction-related materials, equipment, trash or other related debris shall be allowed, stored or staged within 50 feet of the lake. Only equipment and materials actively in use shall be allowed within 50 feet of the lake unless otherwise approved by the District.

18. **Minimize the Spread of Invasive Plant Species**
Throughout project construction:

- All hay, straw, hay bales, straw bales, seed, mulch or other material used for erosion control on the project site shall be free of noxious weed[1] seeds and propagules (Food and Agriculture Code Sections 6305, 6341 and 6461).

- All equipment brought to the project site shall be thoroughly cleaned of all dirt and vegetation prior to entering the site to prevent importing noxious weeds and shall be cleaned of all dirt and vegetation prior to exiting the site to prevent exporting noxious weeds. (Food and Agriculture Code Section 5401).

All material brought to the site, including rock, gravel, road base, sand, and topsoil, shall be free of noxious weeds[2] and propagules. (Food and Agriculture Code Sections 6305, 6341 and 6461).

19. **Access to private property.** In the case of private rights-of-way over private property, receive from underlying property owner(s) permission for access to the property. *CCWD will obtain permission to access all private rights-of-way over private property prior to accessing the property*

[1] Noxious weeds are as defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of Regulations and the California Quarantine Policy – Weeds (Food and Agriculture Code, Sections 6305, 6341, and 6461).

[2] Ibid.

Attachment B

Geotechnical Report Conclusions and Recommendations

GEOTECHNICAL INVESTIGATION
CALAVERAS COUNTY WATER DISTRICT
COPPER COVE FORCE MAIN AND
LIFT STATIONS PROJECT

Prepared for
Calaveras County Water District
c/o Mr. James Pollock
LEE & RO, Inc.
8950 Cal Center Drive, Suite 120
Sacramento, CA 95826
916.631.0111

Prepared by
Condor Earth
188 Frank West Circle, Suite I
Stockton, California 95206
209.234.0518

September 5, 2019
Condor Project No. 7596

7.0 CONCLUSIONS AND RECOMMENDATIONS

Condor concludes that the improvements described in Section 3.0 may be constructed as proposed when the general intent of the recommendations that follow are implemented for design and during construction.

7.1 SEISMIC AND GEOLOGIC HAZARDS

Condor concludes that there are no significant seismic and geologic hazards for this project that require remediation.

The site is not located in an Alquist-Priolo Earthquake Fault Zone (Bryant and Hart, 2007). Therefore, ground displacement from surface rupture and the associated potential for structural damage and unsafe conditions is not considered a significant hazard for the project, and no mitigation is warranted.

The potential for significant ground shaking from earthquakes is low. We used the internet based Probabilistic Seismic Hazards Assessment (USGS 2012/2015 IBC) to evaluate the Site Class C, Very Dense Soil and Soft Rock, which best represents the site conditions. A copy of the seismic evaluation output for two (2) locations near the project is provided in Appendix C for design of above-ground structures.

Because the peak ground acceleration (PGA) is less than 0.3g, Condor concludes that no seismic increment in addition to active (or at-rest) pressures is required to design retaining walls or buried structures.

Based on our site investigation and evaluation, Condor concludes that the potential for liquefaction occurring at the site is negligible.

Based on our observations and evaluation, Condor concludes that there is low expansive soil at the site, and that the potential for movements to the proposed foundations and pipe systems from shrink and swell of expansive soil is negligible, and does not warrant specific remedial actions.

7.2 EARTHWORK

7.2.1 Site Preparation

Site preparation should be performed for all areas to be excavated, areas to receive fill, and areas to receive improvements. Site preparation includes stripping the ground surface of vegetation or waste debris and demolition/removal of existing surface and subsurface improvements. Site preparation operations should extend at least 5 feet beyond the limits of new fill or improvements (where possible). Any vegetation and organic topsoil with more than 2 percent organic material by dry weight should be removed. The exposed ends of pipes removed (if encountered) should be capped. Condor anticipates that stripping vegetation to a depth of 3 inches should be adequate in native areas, plus additional depth where roots over 1/2-inch in diameter are encountered. Site preparation may also include mechanical or manual separation of tree roots from material to be used as backfill or engineered fill.

The Geotechnical Engineer or qualified inspector should observe and approve the prepared site prior to any excavation, subgrade preparation, and placement of fill or improvements.

7.2.2 Excavations

The Contractor shall be responsible for the stability of all temporary excavations and should comply with applicable CalOSHA regulations (California Construction Safety Orders). A competent person shall determine the soil type and requirements for temporary cutslope inclinations during excavation. All open cuts should be regularly monitored for evidence of incipient stability failures.

A detailed excavation plan should be developed by the contractor based on the data provided in this report.

7.2.3 Subgrade Preparation

Soil loosened during site preparation and excavation, or any other soft or loose soil remaining after excavation and beneath proposed fills and improvements, should be removed and replaced with properly compacted engineered fill. Soft ground conditions are not anticipated, but may occur along the proposed improvements where there is a natural depression in the ground surface. Subgrade preparation in these areas should include over-excavation and recompaction of at least the top 1 foot of existing soil. Subgrades should be approved by the Geotechnical Engineer prior to compacting and covering them.

Following approval by the Geotechnical Engineer, subgrades or excavated surfaces beneath fill or improvements should be scarified to a depth of 6 inches, and compacted to at least 90 percent compaction (based on ASTM Test Method D-1557). Subgrades beneath vehicular pavement areas should be compacted to at least 95 percent compaction. Scarification is not required in the bottom of pipe trenches.

Scarification, moisture conditioning, and recompaction of subgrades that become dry and/or disturbed should be performed. The Geotechnical Engineer should approve all subgrades before they are covered by fill or improvements.

Subgrades that expose weathered, competent, bedrock that is firm and stable does not require scarification and compaction. However, where excavation has loosened the surface or left loose materials, the materials should be removed, or where loose material does not exceed 6 inches in thickness, compacted in-place.

7.2.4 Engineered Fill

Engineered fill should have less than 2 percent by dry weight of vegetation and deleterious material and should meet the gradation requirements presented in the following table:

Sieve Designation	Minimum Percent Passing by Dry Weight
6-inch square	100
4-inch square	90
0.75-inch square	70
US No. 4	60

The existing material excavated from the project site may be used as engineered fill and trench backfill. See Section 8.0, Construction Considerations for recommendations on re-use of excavated materials. The Geotechnical Engineer should approve all fill material for use prior to placement.

Engineered fill meeting the requirements given in the preceding paragraphs should be uniformly moisture conditioned and compacted to at least 90 percent compaction (ASTM Test Method D-1557). All permanent fill slopes should have a maximum inclination of 2H:1V if they are no higher than 10 feet. The Geotechnical Engineer should be contacted for recommendations if fill slopes higher than 10 feet are required.

Engineered fill is suitable to construct the access driveway slope on a slope of 4:1 from LS-18 to Tewa Court. An all-weather surface should be considered if year round access is desirable.

7.3 SURFACE DRAINAGE AND EROSION CONTROL

Surface drainage should be provided to reduce ponding and drain surface water away from buried structures, foundations, slabs-on-grade, and edges of pavements. Surface runoff should be directed toward suitable collection or discharge facilities. We recommend surface gradients of at least 2 to 4 percent be used for paved and unpaved surfaces, respectively. Gradients of 1.5 percent may be used for paved surfaces where horizontal drainage distances are less than 20 feet.

We recommend that approved temporary and permanent erosion control measures be implemented to reduce erosion and comply with applicable State, County and/or agency requirements. Soil on graded or cut slopes should be fertilized, mulched, and planted as soon as possible after grading with erosion-resistant vegetation. These plants should be watered lightly at appropriate intervals until growth is established.

7.4 FOOTINGS AND THRUST BLOCKS

Conventional shallow spread footings should be embedded at least 18 inches below the lowest adjacent soil subgrade. We define soil subgrade as the prepared subgrade beneath floor slabs, pavement, aggregate layers, and landscape soil. Footings supporting proposed near-surface and at-grade improvement may be designed using a net allowable vertical bearing capacity of 3,000 pounds per square foot (psf) for dead plus normal duration live load for footings that lie a minimum of 3 feet below existing grade. Shallower footings may be designed for 2,000 psf. Matt foundations (including structural slab-on-grade) with a minimum embedment depth of 18 inches may be designed for 1,500 psf for a maximum length dimension of 15 feet. The allowable bearing values may be increased by 1/3 for total conditions, including wind and seismic.

We assume that buried lift station structures would be buried at least five feet below grade or deeper, and founded in weathered bedrock. If so, net allowable vertical bearing pressure may be increased to 4,000 psf. We would also expect that such structures may have flat, slab-on-grade footprints, which is acceptable.

Concrete for foundations, including mat foundations and buried lift station structures, may be poured directly on native ground or engineered fill prepared in accordance with Section 7.2. A leveling course of sand or aggregate base rock may be used for construction convenience without any reduction to the provided vertical bearing capacities. The above allowable bearing capacities have a factor of safety of 2, and ultimate values may be calculated using the factor of 2.

Thrust blocks may be designed for a lateral bearing capacity of 1,000 psf when the top of block is a minimum of 3 feet below existing or final grade. The above allowable bearing capacities have a factor of safety of 2, and ultimate values may be calculated using the factor of 2.

For resistance to lateral loads, base friction resistance may be calculated using a friction coefficient of 0.35 for footings and thrust blocks. Passive resistance may be calculated using an equivalent fluid unit weight of 300 pounds per cubic foot for shallow footings founded a minimum of 18 inches below existing or final grade. This friction coefficient and equivalent fluid unit weight may be used together without reduction. Gaps between the footing thrust blocks, or keyway and the adjacent ground, should be completely backfilled using engineered fill, concrete or lean cement slurry. Passive resistance contributed by the top 12 inches of soil should be neglected unless a concrete slab-on-grade or pavement covers the ground. The passive equivalent fluid weight values assume a 1/2 inch maximum deflection at the top of the retaining walls and buried thrust blocks. The above allowable bearing capacities have a factor of safety of 2, and ultimate values may be calculated using the factor of 2.

The Geotechnical Engineer or qualified inspector should check all footing excavations prior to placing steel and casting concrete. Any unsuitable, loose, or soft soil encountered at footing bottoms, as determined by the Geotechnical Engineer during construction, should be removed and replaced by concrete or lean cement slurry.

7.5 RETAINING WALLS, BURIED VAULTS, AND LIFT STATIONS

We understand retaining walls are currently not planned. The following section may be used if they are included at a later date.

Vertical walls should be designed to resist static, lateral earth pressures, and surcharge pressures. Active earth pressures may be used for design of unrestrained retaining walls where the top of the wall is free to translate or rotate. Rigid walls should be designed for restrained conditions. We recommend using the table that follows to calculate static lateral earth pressures for various back slope inclinations.

Maximum Backslope Inclination	Unrestricted Equivalent Fluid Unit Weight (pounds per cubic foot)		Restrained Equivalent Fluid Unit Weight (pounds per cubic foot)	
	Drained Conditions	Undrained Conditions	Drained Conditions	Undrained Conditions
Level	35	80	50	90
3:1	45	85	60	95
2:1	55	90	70	100

The equivalent fluid unit weights should extend from the ground surface down to the bottom of the footing to calculate pressures. Subsurface drainage systems should be provided behind walls where walls are designed for drained conditions. Subsurface drainage may consist of permeable granular materials, including 3/8-inch "chip" rock, or manufactured drainage system.

Surcharge loads imposed by stockpiles or other sources within a distance of H of the back of the wall, or from heavy compaction equipment operating within a distance of one-third the backfill height should be considered on a case-by-case basis. The above values do not include loading from temporary earthwork or compaction equipment.

7.6 UNDERGROUND UTILITY TRENCHES

Unless concrete bedding is required around utilities, pipe bedding should consist of sand with a sand equivalent of at least 30 or the pipe manufacturer's requirements, or permitting agency standards, whichever is more restrictive. The pipe bedding should extend from 6 inches below the invert of the pipe to 1 foot above the crown of the pipe. The pipe bedding material should be compacted to a minimum of 90 percent relative compaction or the manufacturer's recommendations if more stringent.

Trench backfill above the pipe bedding zone should be placed in the same manner as required in Section 7.2.4, Engineered Fill Placement. On-site fill soils and "non-organic" native soils may be used as backfill in trenches above the pipe bedding. Utility trench backfill should be placed in layers not exceeding a loose lift thickness of 8 inches, uniformly moisture conditioned, and compacted to a minimum of 90 percent relative compaction.

Compaction criteria for trench backfill above the bedding zone may be decreased to 85 percent relative compaction in landscape areas that are at least 5 feet beyond structural improvements, except in areas overlain by pavements, sidewalks, or other hardscapes. In landscape areas overlain by pavements, sidewalks, or other hardscapes, we recommend that the trench backfill be compacted to a minimum of 90 percent relative compaction.

8.0 CONSTRUCTION CONSIDERATIONS

Condor concludes that the proposed improvements described in Section 2.0, Project Description, may be constructed as proposed with the following considerations:

- The excavatability of the ground should be correlated with the conditions described in Sections 5.0 and 6.0.
- Hard bedrock that is difficult to excavate with a backhoe, and that may require a hydraulic hammer for excavation, may be encountered. While hard rock is generally not anticipated within the anticipated excavation depths for pipelines, it remains a potential condition. If footings require a keyway where hard bedrock is encountered, the Geotechnical Engineer may provide recommendations for doweling of footings into bedrock as an alternative design. In these cases, minimum footing embedment may be reduced per the Engineer.
- Excavated material in cut ground (not previously engineered fill) may need to be processed in order to meet the engineered fill requirements described in Section 7.2.4, Engineered Fill. Rock fragments, and moderately weathered bedrock that is strong, hard, and difficult to crush may be encountered. Therefore, it is not uncommon for materials that are excavatable to require processing to comply with Engineered Fill criteria. The contractor should be prepared to remove hard rock particles larger than 4 to 6 inches. The amount of the material that will exceed the 4 to 6 inches is undeterminable. Additional information regarding our opinions is provided in Section 6.1.

9.0 ADDITIONAL SERVICES

The geotechnical recommendations and design criteria given in this report are sensitive to the location, design details, and any special requirements of the new construction. Condor should review the geotechnical elements of project grading, plans, and specifications prior to construction bidding to check that the intent of our recommendations has been incorporated into these project documents. If Condor does not review the geotechnical elements of the plans and specifications, the reviewing geotechnical engineer should thoroughly review this report and concur with its conclusions and recommendations or provide alternative recommendations.

Because surface conditions vary across the site, geotechnical recommendations used as a basis for construction contracting are sensitive to the possible need for adjustment in the field. The adjustments are dependent upon conditions revealed during construction that could previously only be assumed based upon limited site exploration. Since the intent of the recommendations given in this report are best understood by a Condor representative, we recommend that field observations and testing during earthwork and construction be performed by Condor. If Condor does not provide the field observations and testing, the geotechnical engineer of record should thoroughly review this report and concur with its conclusions and recommendations or provide alternative recommendations.

The geotechnical engineer or qualified representative should be on-site to observe and advise during site preparation, grading and earthwork, paving, and construction of foundations and slabs-on-grade. These observations should be supplemented with periodic density and compaction testing of subgrade and engineered fills to evaluate conformance with the recommendations contained in this report. It is important that foundation excavations be checked after cleaning and immediately prior to concrete placement to verify their suitability.

10.0 LIMITATIONS

The geotechnical conclusions and recommendations presented in this report are intended for planning, design, and construction of the planned CCWD Copper Cove Force Main and Lift Stations Project as described in this report. These conclusions and recommendations may be invalid if:

- the design assumptions change;
- the report is used for another site or project;
- the encountered soil or groundwater conditions are different than those anticipated in this report;
- the recommendations contained in this report are not followed; or
- any other change is implemented that materially alters the project.

This report was prepared in accordance with the generally accepted standards of geotechnical engineering practice existing in Calaveras County at the time it was written. No other warranty, express or implied, is made. It is the owner's responsibility to see that all parties to the project, including the designer, contractors, subcontractors, etc., are made aware of this report in its entirety.

The analyses and recommendations submitted herein are based upon subsurface and surface soil data provided in this report, and on general field observations made during site visits and geologic mapping. Subsurface exploration of any site is necessarily confined to selected locations and conditions may, and often do, vary between and around these locations. Should varied conditions come to light during construction on the project site, additional exploration, testing, or analysis may be required. Any person concerned with this project who observes conditions or features of the site or its surrounding areas that are different from those described in this report, should report them immediately to Condor for evaluation.

It should be noted that changes in the standards of practice in the field of geotechnical engineering, changes in site conditions (such as new excavations or fills), new agency regulations, or modifications to the proposed project are grounds for this report to be professionally reviewed. In light of this, there is a practical limit to the usefulness of this report without critical professional review. It is suggested that two years be considered a reasonable time for the usefulness of this report.

We trust this report provides the information required at this time. Please call with any questions.

Respectfully submitted,

CONDOR EARTH

Marc R. Crum
Certified Engineering Geologist (CA #2254)

Ronald L. Skaggs
Geotechnical Engineer (CA #2295)
Vice President, Engineering Services

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Agenda Item

DATE: July 27, 2022

TO: Michael Minkler, General Manager

FROM: Stacey Lollar, Human Resources Manager

SUBJECT: Discussion/Action regarding Side Letter Agreements with the SEIU and MCU Bargaining Units

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RECOMMENDED ACTION:

Motion: _____/_____ adopting Resolution No. 2022 - ___ Approving Side Letter to the MOU between CCWD and SEIU Local 1021 Effective July 1, 2021-June 30, 2026

Motion: _____/_____ adopting Resolution No. 2022 - ___ Approving Side Letter to the MOU between CCWD and MCU Effective July 1, 2021-June 30, 2026

SUMMARY:

During the previous Calaveras County Water District Board meeting, the Board of Directors approved the addition of two (2) classifications to the FY 22/2023 personnel allocation. As a result, the District must now add the classifications to the wage schedules for each respective bargaining unit. Additionally, the District and the bargaining units are also taking this opportunity to clarify and/or correct a few items in each contract as follows:

SEIU Bargaining Unit

- Removal of the Information Systems Administrator classification
- Addition of the Information Systems Technician I/II classification
- Addition of the Water Resources Specialist classification
- Formula correction for the Customer Service Supervisor classification

MCU Bargaining Unit

- Addition of Limited Eligibility Exception for Reinstated Retirees section in Article 8 – Medical and Related Benefits
- Addition of the Information Systems Administrator classification

- Increase to the District Engineer classification to match the Director of Operations classification.

All other contract language remains the same. The District has successfully met and conferred with both units.

FINANCIAL CONSIDERATIONS:

The two (2) additional classification were included in the approved FY 22/2023 budget. The Customer Service Supervisor classification formula correction has zero budgetary impact due to the salary and benefit budget process. Lastly, the increase in the District Engineer classification range has zero impact since the current vacancy in the Engineering department remains open.

Attachments: *SEIU Side Letter with proposed pay scale*
Resolution No. 2022-___Approving Side Letter Agreement with SEIU
MCU Side Letter and proposed pay scale
Resolution No. 2022-___ Approving Side Letter Agreement with MCU

MEMORANDUM OF UNDERSTANDING BETWEEN
CALAVERAS COUNTY WATER DISTRICT
and
SEIU LOCAL 1021
Term: July 1, 2021 through June 30, 2026

Side Letter of Agreement
Amendment to Appendix B, C, D, and E

Effective July 1, 2022, the Calaveras County Water District (the District) and The Service Employees International Union Local 1021 (SEIU) agree to the following side letter amending the Memorandum of Understanding (MOU) for the term July 1, 2021 through June 30, 2026:

Appendix B, C, D, and E

An updated Wage schedule effective July 1, 2022 and all wage schedules remaining for the term of the MOU will:

1) Remove the Information Systems Administrator Classification
2) Add an Information Systems Technician I / II Classification
3) Correct formula errors on the Customer Service Supervisor

All MOU language not included in this amendment remains the same and continues to be valid.

Signed and agreed:

For the District:

_____
Michael Minkler
General Manager

Date: _____

For the Union:

_____
Dennis Mallory
SEIU Local 1021 Field Representative

Date: _____

_____
Ryan Sullivan
SEIU Local 1021 Chapter President

Date: _____

APPENDIX B - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2022 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Accountant I	Hourly	$36.98	$38.83	$40.78	$42.81	$44.95
	Bi-Monthly	$3,205.00	$3,365.50	$3,534.00	$3,710.50	$3,896.00
	Monthly	$6,410	$6,731	$7,068	$7,421	$7,792
	Yearly	$76,920	$80,772	$84,816	$89,052	$93,504
Accountant II	Hourly	$40.77	$42.81	$44.96	$47.20	$49.56
	Bi-Monthly	$3,533.50	$3,710.50	$3,896.50	$4,091.00	$4,295.50
	Monthly	$7,067	$7,421	$7,793	$8,182	$8,591
	Yearly	$84,804	$89,052	$93,516	$98,184	$103,092
Accounting Technician I	Hourly	$30.42	$31.94	$33.54	$35.22	$36.98
	Bi-Monthly	$2,636.50	$2,768.50	$2,907.00	$3,052.50	$3,205.00
	Monthly	$5,273	$5,537	$5,814	$6,105	$6,410
	Yearly	$63,276	$66,444	$69,768	$73,260	$76,920
Accounting Technician II	Hourly	$33.54	$35.22	$36.98	$38.83	$40.77
	Bi-Monthly	$2,906.50	$3,052.00	$3,205.00	$3,365.00	$3,533.50
	Monthly	$5,813	$6,104	$6,410	$6,730	$7,067
	Yearly	$69,756	$73,248	$76,920	$80,760	$84,804
Administrative Technician I	Hourly	$23.83	$25.03	$26.28	$27.59	$28.97
	Bi-Monthly	$2,065.50	$2,169.00	$2,277.50	$2,391.50	$2,511.00
	Monthly	$4,131	$4,338	$4,555	$4,783	$5,022
	Yearly	$49,572	$52,056	$54,660	$57,396	$60,264
Administrative Technician II	Hourly	$27.59	$28.98	$30.43	$31.95	$33.55
	Bi-Monthly	$2,391.50	$2,511.50	$2,637.50	$2,769.00	$2,907.50
	Monthly	$4,783	$5,023	$5,275	$5,538	$5,815
	Yearly	$57,396	$60,276	$63,300	$66,456	$69,780
Administrative Technician, Senior	Hourly	$30.42	$31.94	$33.54	$35.22	$36.98
	Bi-Monthly	$2,636.50	$2,768.50	$2,907.00	$3,052.50	$3,205.00
	Monthly	$5,273	$5,537	$5,814	$6,105	$6,410
	Yearly	$63,276	$66,444	$69,768	$73,260	$76,920
Collection System Worker Trainee	Hourly	$23.15	$24.31	$25.53	$26.80	$28.15
	Bi-Monthly	$2,006.50	$2,107.00	$2,212.50	$2,323.00	$2,439.50
	Monthly	$4,013	$4,214	$4,425	$4,646	$4,879
	Yearly	$48,156	$50,568	$53,100	$55,752	$58,548
Collection System Worker I	Hourly	$25.52	$26.80	$28.15	$29.56	$31.03
	Bi-Monthly	$2,212.00	$2,323.00	$2,439.50	$2,561.50	$2,689.50
	Monthly	$4,424	$4,646	$4,879	$5,123	$5,379
	Yearly	$53,088	$55,752	$58,548	$61,476	$64,548
Collection System Worker II	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Collection System Worker III	Hourly	$31.03	$32.58	$34.22	$35.93	$37.73
	Bi-Monthly	$2,689.50	$2,824.00	$2,965.50	$3,113.50	$3,269.50
	Monthly	$5,379	$5,648	$5,931	$6,227	$6,539
	Yearly	$64,548	$67,776	$71,172	$74,724	$78,468
Collection System Worker IV	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Collection System Worker, Senior	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376
Construction Inspector I	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Construction Inspector II	Hourly	$31.03	$32.58	$34.22	$35.93	$37.73
	Bi-Monthly	$2,689.50	$2,824.00	$2,965.50	$3,113.50	$3,269.50
	Monthly	$5,379	$5,648	$5,931	$6,227	$6,539
	Yearly	$64,548	$67,776	$71,172	$74,724	$78,468
Construction Inspector III	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Construction Inspector, Senior	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376

APPENDIX B - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2022 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Construction Worker I	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Construction Worker II	Hourly	$31.03	$32.58	$34.22	$35.93	$37.73
	Bi-Monthly	$2,689.50	$2,824.00	$2,965.50	$3,113.50	$3,269.50
	Monthly	$5,379	$5,648	$5,931	$6,227	$6,539
	Yearly	$64,548	$67,776	$71,172	$74,724	$78,468
Construction Worker III	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Construction Worker, Senior	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376
Customer Service Representative I	Hourly	$23.83	$25.03	$26.28	$27.59	$28.97
	Bi-Monthly	$2,065.50	$2,169.00	$2,277.50	$2,391.50	$2,511.00
	Monthly	$4,131	$4,338	$4,555	$4,783	$5,022
	Yearly	$49,572	$52,056	$54,660	$57,396	$60,264
Customer Service Representative II	Hourly	$27.59	$28.98	$30.43	$31.95	$33.55
	Bi-Monthly	$2,391.50	$2,511.50	$2,637.50	$2,769.00	$2,907.50
	Monthly	$4,783	$5,023	$5,275	$5,538	$5,815
	Yearly	$57,396	$60,276	$63,300	$66,456	$69,780
Customer Service Representative III	Hourly	$30.42	$31.94	$33.54	$35.22	$36.98
	Bi-Monthly	$2,636.50	$2,768.50	$2,907.00	$3,052.50	$3,205.00
	Monthly	$5,273	$5,537	$5,814	$6,105	$6,410
	Yearly	$63,276	$66,444	$69,768	$73,260	$76,920
Customer Service Representative, Senior	Hourly	$33.54	$35.22	$36.98	$38.83	$40.77
	Bi-Monthly	$2,906.50	$3,052.00	$3,205.00	$3,365.00	$3,533.50
	Monthly	$5,813	$6,104	$6,410	$6,730	$7,067
	Yearly	$69,756	$73,248	$76,920	$80,760	$84,804
Customer Service Supervisor [1,6]	Hourly	$36.98	$38.83	$40.78	$42.81	$44.95
	Bi-Monthly	$3,205.00	$3,365.50	$3,534.00	$3,710.50	$3,896.00
	Monthly	$6,410	$6,731	$7,068	$7,421	$7,792
	Yearly	$76,920	$80,772	$84,816	$89,052	$93,504
Distribution Worker Trainee	Hourly	$23.15	$24.31	$25.53	$26.80	$28.15
	Bi-Monthly	$2,006.50	$2,107.00	$2,212.50	$2,323.00	$2,439.50
	Monthly	$4,013	$4,214	$4,425	$4,646	$4,879
	Yearly	$48,156	$50,568	$53,100	$55,752	$58,548
Distribution Worker I	Hourly	$25.52	$26.80	$28.15	$29.56	$31.03
	Bi-Monthly	$2,212.00	$2,323.00	$2,439.50	$2,561.50	$2,689.50
	Monthly	$4,424	$4,646	$4,879	$5,123	$5,379
	Yearly	$53,088	$55,752	$58,548	$61,476	$64,548
Distribution Worker II	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Distribution Worker III	Hourly	$31.03	$32.58	$34.22	$35.93	$37.73
	Bi-Monthly	$2,689.50	$2,824.00	$2,965.50	$3,113.50	$3,269.50
	Monthly	$5,379	$5,648	$5,931	$6,227	$6,539
	Yearly	$64,548	$67,776	$71,172	$74,724	$78,468
Distribution Worker IV	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Distribution Worker, Senior	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376
Electrician/Instrumentation Tech I	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Electrician/Instrumentation Tech II	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376

APPENDIX B - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2022 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Electrician/Instrumentation Tech, Senior	Hourly	$41.59	$43.67	$45.86	$48.15	$50.56
	Bi-Monthly	$3,604.50	$3,785.00	$3,974.50	$4,173.00	$4,382.00
	Monthly	$7,209	$7,570	$7,949	$8,346	$8,764
	Yearly	$86,508	$90,840	$95,388	$100,152	$105,168
Engineer - Associate	Hourly	$44.95	$47.20	$49.57	$52.04	$54.65
	Bi-Monthly	$3,896.00	$4,091.00	$4,296.00	$4,510.50	$4,736.00
	Monthly	$7,792	$8,182	$8,592	$9,021	$9,472
	Yearly	$93,504	$98,184	$103,104	$108,252	$113,664
Engineer - Civil	Hourly	$49.56	$52.04	$54.64	$57.38	$60.24
	Bi-Monthly	$4,295.00	$4,510.00	$4,735.50	$4,972.50	$5,221.00
	Monthly	$8,590	$9,020	$9,471	$9,945	$10,442
	Yearly	$103,080	$108,240	$113,652	$119,340	$125,304
Engineer - Civil Senior	Hourly	$54.63	$57.37	$60.24	$63.25	$66.42
	Bi-Monthly	$4,735.00	$4,972.00	$5,221.00	$5,482.00	$5,756.00
	Monthly	$9,470	$9,944	$10,442	$10,964	$11,512
	Yearly	$113,640	$119,328	$125,304	$131,568	$138,144
Engineering Analyst	Hourly	$47.20	$49.56	$52.04	$54.65	$57.38
	Bi-Monthly	$4,090.50	$4,295.50	$4,510.50	$4,736.00	$4,973.00
	Monthly	$8,181	$8,591	$9,021	$9,472	$9,946
	Yearly	$98,172	$103,092	$108,252	$113,664	$119,352
Engineering Coordinator	Hourly	$33.54	$35.22	$36.98	$38.83	$40.77
	Bi-Monthly	$2,906.50	$3,052.00	$3,205.00	$3,365.00	$3,533.50
	Monthly	$5,813	$6,104	$6,410	$6,730	$7,067
	Yearly	$69,756	$73,248	$76,920	$80,760	$84,804
Engineering Technician I	Hourly	$31.94	$33.54	$35.22	$36.98	$38.83
	Bi-Monthly	$2,768.50	$2,907.00	$3,052.50	$3,205.00	$3,365.50
	Monthly	$5,537	$5,814	$6,105	$6,410	$6,731
	Yearly	$66,444	$69,768	$73,260	$76,920	$80,772
Engineering Technician II	Hourly	$36.98	$38.83	$40.78	$42.81	$44.95
	Bi-Monthly	$3,205.00	$3,365.50	$3,534.00	$3,710.50	$3,896.00
	Monthly	$6,410	$6,731	$7,068	$7,421	$7,792
	Yearly	$76,920	$80,772	$84,816	$89,052	$93,504
Engineering Technician, Senior	Hourly	$42.81	$44.95	$47.20	$49.56	$52.04
	Bi-Monthly	$3,710.00	$3,895.50	$4,090.50	$4,295.00	$4,510.00
	Monthly	$7,420	$7,791	$8,181	$8,590	$9,020
	Yearly	$89,040	$93,492	$98,172	$103,080	$108,240
Facilities Maintenance Technician	Hourly	$26.28	$27.59	$28.98	$30.43	$31.94
	Bi-Monthly	$2,277.50	$2,391.50	$2,511.50	$2,637.00	$2,768.50
	Monthly	$4,555	$4,783	$5,023	$5,274	$5,537
	Yearly	$54,660	$57,396	$60,276	$63,288	$66,444
~~Information Systems Administrator~~***	~~Hourly~~	~~$47.20~~	~~$49.56~~	~~$52.04~~	~~$54.65~~	~~$57.38~~
	~~Bi-Monthly~~	~~$4,090.50~~	~~$4,295.50~~	~~$4,510.50~~	~~$4,736.00~~	~~$4,973.00~~
	~~Monthly~~	~~$8,181~~	~~$8,591~~	~~$9,021~~	~~$9,472~~	~~$9,946~~
	~~Yearly~~	~~$98,172~~	~~$103,092~~	~~$108,252~~	~~$113,664~~	~~$119,352~~
Information Systems Technician I****	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,438.99	$2,560.94	$2,688.98	$2,823.43	$2,964.60
	Monthly	$4,878	$5,122	$5,378	$5,647	$5,929
	Yearly	$58,536	$61,462	$64,536	$67,762	$71,151
Information Systems Technician II****	Hourly	$31.03	$32.58	$34.21	$35.92	$37.71
	Bi-Monthly	$2,689.09	$2,823.54	$2,964.72	$3,112.95	$3,268.60
	Monthly	$5,378	$5,647	$5,929	$6,226	$6,537
	Yearly	$64,538	$67,765	$71,153	$74,711	$78,446
Information Systems Analyst	Hourly	$33.54	$35.22	$36.98	$38.83	$40.77
	Bi-Monthly	$2,906.50	$3,052.00	$3,205.00	$3,365.00	$3,533.50
	Monthly	$5,813	$6,104	$6,410	$6,730	$7,067
	Yearly	$69,756	$73,248	$76,920	$80,760	$84,804
Mechanic I	Hourly	$31.64	$33.23	$34.89	$36.63	$38.46
	Bi-Monthly	$2,742.00	$2,879.50	$3,023.50	$3,175.00	$3,333.50
	Monthly	$5,484	$5,759	$6,047	$6,350	$6,667
	Yearly	$65,808	$69,108	$72,564	$76,200	$80,004
Mechanic II	Hourly	$34.88	$36.63	$38.46	$40.38	$42.40
	Bi-Monthly	$3,023.00	$3,174.50	$3,333.50	$3,500.00	$3,675.00
	Monthly	$6,046	$6,349	$6,667	$7,000	$7,350
	Yearly	$72,552	$76,188	$80,004	$84,000	$88,200
Mechanic, Senior	Hourly	$38.46	$40.38	$42.40	$44.53	$46.75
	Bi-Monthly	$3,333.00	$3,500.00	$3,675.00	$3,859.00	$4,052.00
	Monthly	$6,666	$7,000	$7,350	$7,718	$8,104
	Yearly	$79,992	$84,000	$88,200	$92,616	$97,248

APPENDIX B - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2022 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Meter Reader Trainee	Hourly	$23.15	$24.31	$25.53	$26.80	$28.15
	Bi-Monthly	$2,006.50	$2,107.00	$2,212.50	$2,323.00	$2,439.50
	Monthly	$4,013	$4,214	$4,425	$4,646	$4,879
	Yearly	$48,156	$50,568	$53,100	$55,752	$58,548
Meter Reader I	Hourly	$25.52	$26.80	$28.15	$29.56	$31.03
	Bi-Monthly	$2,212.00	$2,323.00	$2,439.50	$2,561.50	$2,689.50
	Monthly	$4,424	$4,646	$4,879	$5,123	$5,379
	Yearly	$53,088	$55,752	$58,548	$61,476	$64,548
Meter Reader II	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Purchasing Agent	Hourly	$36.98	$38.83	$40.78	$42.81	$44.95
	Bi-Monthly	$3,205.00	$3,365.50	$3,534.00	$3,710.50	$3,896.00
	Monthly	$6,410	$6,731	$7,068	$7,421	$7,792
	Yearly	$76,920	$80,772	$84,816	$89,052	$93,504
SCADA Technician I	Hourly	$41.59	$43.67	$45.86	$48.15	$50.56
	Bi-Monthly	$3,604.50	$3,785.00	$3,974.50	$4,173.00	$4,382.00
	Monthly	$7,209	$7,570	$7,949	$8,346	$8,764
	Yearly	$86,508	$90,840	$95,388	$100,152	$105,168
SCADA Technician, Senior	Hourly	$45.85	$48.14	$50.56	$53.08	$55.74
	Bi-Monthly	$3,973.50	$4,172.50	$4,381.50	$4,600.50	$4,830.50
	Monthly	$7,947	$8,345	$8,763	$9,201	$9,661
	Yearly	$95,364	$100,140	$105,156	$110,412	$115,932
Senior Supervisor, Construction/Inspection	Hourly	$43.67	$45.85	$48.15	$50.56	$53.08
	Bi-Monthly	$3,784.50	$3,974.00	$4,173.00	$4,381.50	$4,600.50
	Monthly	$7,569	$7,948	$8,346	$8,763	$9,201
	Yearly	$90,828	$95,376	$100,152	$105,156	$110,412
Senior Supervisor, Distribution & Collections	Hourly	$43.67	$45.85	$48.15	$50.56	$53.08
	Bi-Monthly	$3,784.50	$3,974.00	$4,173.00	$4,381.50	$4,600.50
	Monthly	$7,569	$7,948	$8,346	$8,763	$9,201
	Yearly	$90,828	$95,376	$100,152	$105,156	$110,412
Senior Supervisor, Electrical/SCADA	Hourly	$50.54	$53.08	$55.73	$58.52	$61.45
	Bi-Monthly	$4,380.50	$4,600.00	$4,830.00	$5,071.50	$5,325.50
	Monthly	$8,761	$9,200	$9,660	$10,143	$10,651
	Yearly	$105,132	$110,400	$115,920	$121,716	$127,812
Senior Supervisor, W/WW Operations	Hourly	$43.67	$45.85	$48.15	$50.56	$53.08
	Bi-Monthly	$3,784.50	$3,974.00	$4,173.00	$4,381.50	$4,600.50
	Monthly	$7,569	$7,948	$8,346	$8,763	$9,201
	Yearly	$90,828	$95,376	$100,152	$105,156	$110,412
Utility Worker I*	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
Utility Worker II*	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Utility Worker Senior*	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376
W/WW Treatment Plant Operator OIT	Hourly	$25.52	$26.80	$28.15	$29.56	$31.03
	Bi-Monthly	$2,212.00	$2,323.00	$2,439.50	$2,561.50	$2,689.50
	Monthly	$4,424	$4,646	$4,879	$5,123	$5,379
	Yearly	$53,088	$55,752	$58,548	$61,476	$64,548
W/WW Treatment Plant Operator I	Hourly	$28.14	$29.55	$31.03	$32.58	$34.21
	Bi-Monthly	$2,439.00	$2,561.00	$2,689.50	$2,824.00	$2,965.00
	Monthly	$4,878	$5,122	$5,379	$5,648	$5,930
	Yearly	$58,536	$61,464	$64,548	$67,776	$71,160
W/WW Treatment Plant Operator II	Hourly	$31.03	$32.58	$34.22	$35.93	$37.73
	Bi-Monthly	$2,689.50	$2,824.00	$2,965.50	$3,113.50	$3,269.50
	Monthly	$5,379	$5,648	$5,931	$6,227	$6,539
	Yearly	$64,548	$67,776	$71,172	$74,724	$78,468
W/WW Treatment Plant Operator III	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508

APPENDIX B - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2022 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
W/WW Treatment Plant Operator, Senior	Hourly	$37.72	$39.61	$41.59	$43.67	$45.85
	Bi-Monthly	$3,269.00	$3,432.50	$3,604.50	$3,784.50	$3,974.00
	Monthly	$6,538	$6,865	$7,209	$7,569	$7,948
	Yearly	$78,456	$82,380	$86,508	$90,828	$95,376
Water Conservation Coordinator	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508
Water Resrouces Specialist+	Hourly	$35.87	$37.67	$39.55	$41.53	$43.61
	Bi-Monthly	$3,109.00	$3,264.50	$3,428.00	$3,599.50	$3,779.50
	Monthly	$6,218	$6,529	$6,856	$7,199	$7,559
	Yearly	$74,616	$78,348	$82,272	$86,388	$90,708

[1] Addition of Utility Worker Series per Res. No. 2021-82

[2] Addition of Customer Service Supervisor per Res. No. 2021-84

[3] Removal of Information Systems Administrator per Res. No. 2022-

[4] Addition of Information Systems Technician I/II per Res. No. 2022-

[5] Addition of Water Resources Specialist per Res. No. 2022-

[6] Formula Calculation Correction per Res. No. 2022-

APPENDIX C - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2023 (with a 3.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Accountant I	Hourly	$38.09	$40.00	$42.01	$44.11	$46.31
	Bi-Monthly	$3,301.50	$3,467.00	$3,640.50	$3,822.50	$4,013.50
	Monthly	$6,603	$6,934	$7,281	$7,645	$8,027
	Yearly	$79,236	$83,208	$87,372	$91,740	$96,324
Accountant II	Hourly	$42.00	$44.10	$46.31	$48.62	$51.05
	Bi-Monthly	$3,640.00	$3,822.00	$4,013.50	$4,214.00	$4,424.50
	Monthly	$7,280	$7,644	$8,027	$8,428	$8,849
	Yearly	$87,360	$91,728	$96,324	$101,136	$106,188
Accounting Technician I	Hourly	$31.34	$32.91	$34.56	$36.28	$38.10
	Bi-Monthly	$2,716.00	$2,852.00	$2,995.00	$3,144.50	$3,302.00
	Monthly	$5,432	$5,704	$5,990	$6,289	$6,604
	Yearly	$65,184	$68,448	$71,880	$75,468	$79,248
Accounting Technician II	Hourly	$34.55	$36.28	$38.09	$40.00	$42.00
	Bi-Monthly	$2,994.00	$3,144.00	$3,301.50	$3,466.50	$3,640.00
	Monthly	$5,988	$6,288	$6,603	$6,933	$7,280
	Yearly	$71,856	$75,456	$79,236	$83,196	$87,360
Administrative Technician I	Hourly	$24.55	$25.78	$27.07	$28.42	$29.84
	Bi-Monthly	$2,127.50	$2,234.00	$2,346.00	$2,463.00	$2,586.50
	Monthly	$4,255	$4,468	$4,692	$4,926	$5,173
	Yearly	$51,060	$53,616	$56,304	$59,112	$62,076
Administrative Technician II	Hourly	$28.43	$29.85	$31.34	$32.91	$34.56
	Bi-Monthly	$2,463.50	$2,587.00	$2,716.50	$2,852.50	$2,995.00
	Monthly	$4,927	$5,174	$5,433	$5,705	$5,990
	Yearly	$59,124	$62,088	$65,196	$68,460	$71,880
Administrative Technician, Senior	Hourly	$31.34	$32.91	$34.56	$36.28	$38.10
	Bi-Monthly	$2,716.00	$2,852.00	$2,995.00	$3,144.50	$3,302.00
	Monthly	$5,432	$5,704	$5,990	$6,289	$6,604
	Yearly	$65,184	$68,448	$71,880	$75,468	$79,248
Collection System Worker Trainee	Hourly	$23.85	$25.04	$26.30	$27.61	$29.00
	Bi-Monthly	$2,067.00	$2,170.50	$2,279.50	$2,393.00	$2,513.00
	Monthly	$4,134	$4,341	$4,559	$4,786	$5,026
	Yearly	$49,608	$52,092	$54,708	$57,432	$60,312
Collection System Worker I	Hourly	$26.29	$27.61	$28.99	$30.44	$31.96
	Bi-Monthly	$2,278.50	$2,392.50	$2,512.50	$2,638.00	$2,770.00
	Monthly	$4,557	$4,785	$5,025	$5,276	$5,540
	Yearly	$54,684	$57,420	$60,300	$63,312	$66,480
Collection System Worker II	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Collection System Worker III	Hourly	$31.97	$33.57	$35.25	$37.02	$38.87
	Bi-Monthly	$2,770.50	$2,909.50	$3,055.00	$3,208.00	$3,368.50
	Monthly	$5,541	$5,819	$6,110	$6,416	$6,737
	Yearly	$66,492	$69,828	$73,320	$76,992	$80,844
Collection System Worker IV	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Collection System Worker, Senior	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244
Construction Inspector I	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Construction Inspector II	Hourly	$31.97	$33.57	$35.25	$37.02	$38.87
	Bi-Monthly	$2,770.50	$2,909.50	$3,055.00	$3,208.00	$3,368.50
	Monthly	$5,541	$5,819	$6,110	$6,416	$6,737
	Yearly	$66,492	$69,828	$73,320	$76,992	$80,844
Construction Inspector III	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Construction Inspector, Senior	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244

APPENDIX C - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2023 (with a 3.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Construction Worker I	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Construction Worker II	Hourly	$31.97	$33.57	$35.25	$37.02	$38.87
	Bi-Monthly	$2,770.50	$2,909.50	$3,055.00	$3,208.00	$3,368.50
	Monthly	$5,541	$5,819	$6,110	$6,416	$6,737
	Yearly	$66,492	$69,828	$73,320	$76,992	$80,844
Construction Worker III	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Construction Worker, Senior	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244
Customer Service Representative I	Hourly	$24.55	$25.78	$27.07	$28.42	$29.84
	Bi-Monthly	$2,127.50	$2,234.00	$2,346.00	$2,463.00	$2,586.50
	Monthly	$4,255	$4,468	$4,692	$4,926	$5,173
	Yearly	$51,060	$53,616	$56,304	$59,112	$62,076
Customer Service Representative II	Hourly	$28.43	$29.85	$31.34	$32.91	$34.56
	Bi-Monthly	$2,463.50	$2,587.00	$2,716.50	$2,852.50	$2,995.00
	Monthly	$4,927	$5,174	$5,433	$5,705	$5,990
	Yearly	$59,124	$62,088	$65,196	$68,460	$71,880
Customer Service Representative III	Hourly	$31.34	$32.91	$34.56	$36.28	$38.10
	Bi-Monthly	$2,716.00	$2,852.00	$2,995.00	$3,144.50	$3,302.00
	Monthly	$5,432	$5,704	$5,990	$6,289	$6,604
	Yearly	$65,184	$68,448	$71,880	$75,468	$79,248
Customer Service Representative, Senior	Hourly	$34.55	$36.28	$38.09	$40.00	$42.00
	Bi-Monthly	$2,994.00	$3,144.00	$3,301.50	$3,466.50	$3,640.00
	Monthly	$5,988	$6,288	$6,603	$6,933	$7,280
	Yearly	$71,856	$75,456	$79,236	$83,196	$87,360
Customer Service Supervisor [2,6]	Hourly	$38.09	$40.00	$42.01	$44.11	$46.31
	Bi-Monthly	$3,301.50	$3,467.00	$3,640.50	$3,822.50	$4,013.50
	Monthly	$6,603	$6,934	$7,281	$7,645	$8,027
	Yearly	$79,236	$83,208	$87,372	$91,740	$96,324
Distribution Worker Trainee	Hourly	$23.85	$25.04	$26.30	$27.61	$29.00
	Bi-Monthly	$2,067.00	$2,170.50	$2,279.50	$2,393.00	$2,513.00
	Monthly	$4,134	$4,341	$4,559	$4,786	$5,026
	Yearly	$49,608	$52,092	$54,708	$57,432	$60,312
Distribution Worker I	Hourly	$26.29	$27.61	$28.99	$30.44	$31.96
	Bi-Monthly	$2,278.50	$2,392.50	$2,512.50	$2,638.00	$2,770.00
	Monthly	$4,557	$4,785	$5,025	$5,276	$5,540
	Yearly	$54,684	$57,420	$60,300	$63,312	$66,480
Distribution Worker II	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Distribution Worker III	Hourly	$31.97	$33.57	$35.25	$37.02	$38.87
	Bi-Monthly	$2,770.50	$2,909.50	$3,055.00	$3,208.00	$3,368.50
	Monthly	$5,541	$5,819	$6,110	$6,416	$6,737
	Yearly	$66,492	$69,828	$73,320	$76,992	$80,844
Distribution Worker IV	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Distribution Worker, Senior	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244
Electrician/Instrumentation Tech I	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Electrician/Instrumentation Tech II	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244

APPENDIX C - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2023 (with a 3.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Electrician/Instrumentation Tech, Senior	Hourly	$42.84	$44.99	$47.24	$49.60	$52.08
	Bi-Monthly	$3,713.00	$3,899.00	$4,094.00	$4,299.00	$4,514.00
	Monthly	$7,426	$7,798	$8,188	$8,598	$9,028
	Yearly	$89,112	$93,576	$98,256	$103,176	$108,336
Engineer - Associate	Hourly	$46.30	$48.62	$51.06	$53.61	$56.29
	Bi-Monthly	$4,013.00	$4,214.00	$4,425.00	$4,646.00	$4,878.50
	Monthly	$8,026	$8,428	$8,850	$9,292	$9,757
	Yearly	$96,312	$101,136	$106,200	$111,504	$117,084
Engineer - Civil	Hourly	$51.05	$53.60	$56.28	$59.10	$62.05
	Bi-Monthly	$4,424.00	$4,645.50	$4,878.00	$5,122.00	$5,378.00
	Monthly	$8,848	$9,291	$9,756	$10,244	$10,756
	Yearly	$106,176	$111,492	$117,072	$122,928	$129,072
Engineer - Civil Senior	Hourly	$56.28	$59.09	$62.05	$65.15	$68.41
	Bi-Monthly	$4,877.50	$5,121.50	$5,378.00	$5,646.50	$5,929.00
	Monthly	$9,755	$10,243	$10,756	$11,293	$11,858
	Yearly	$117,060	$122,916	$129,072	$135,516	$142,296
Engineering Analyst	Hourly	$48.62	$51.05	$53.61	$56.29	$59.10
	Bi-Monthly	$4,213.50	$4,424.50	$4,646.00	$4,878.50	$5,122.00
	Monthly	$8,427	$8,849	$9,292	$9,757	$10,244
	Yearly	$101,124	$106,188	$111,504	$117,084	$122,928
Engineering Coordinator	Hourly	$34.55	$36.28	$38.09	$40.00	$42.00
	Bi-Monthly	$2,994.00	$3,144.00	$3,301.50	$3,466.50	$3,640.00
	Monthly	$5,988	$6,288	$6,603	$6,933	$7,280
	Yearly	$71,856	$75,456	$79,236	$83,196	$87,360
Engineering Technician I	Hourly	$32.91	$34.56	$36.29	$38.10	$40.01
	Bi-Monthly	$2,852.00	$2,995.00	$3,145.00	$3,302.00	$3,467.50
	Monthly	$5,704	$5,990	$6,290	$6,604	$6,935
	Yearly	$68,448	$71,880	$75,480	$79,248	$83,220
Engineering Technician II	Hourly	$38.09	$40.00	$42.01	$44.11	$46.31
	Bi-Monthly	$3,301.50	$3,467.00	$3,640.50	$3,822.50	$4,013.50
	Monthly	$6,603	$6,934	$7,281	$7,645	$8,027
	Yearly	$79,236	$83,208	$87,372	$91,740	$96,324
Engineering Technician, Senior	Hourly	$44.09	$46.30	$48.62	$51.05	$53.61
	Bi-Monthly	$3,821.50	$4,013.00	$4,214.00	$4,424.50	$4,646.00
	Monthly	$7,643	$8,026	$8,428	$8,849	$9,292
	Yearly	$91,716	$96,312	$101,136	$106,188	$111,504
Facilities Maintenance Technician	Hourly	$27.07	$28.43	$29.85	$31.34	$32.91
	Bi-Monthly	$2,346.00	$2,463.50	$2,587.00	$2,716.50	$2,852.00
	Monthly	$4,692	$4,927	$5,174	$5,433	$5,704
	Yearly	$56,304	$59,124	$62,088	$65,196	$68,448
~~Information Systems Administrator~~ [3]	~~Hourly~~	~~$48.62~~	~~$51.05~~	~~$53.61~~	~~$56.29~~	~~$59.10~~
	~~Bi-Monthly~~	~~$4,213.50~~	~~$4,424.50~~	~~$4,646.00~~	~~$4,878.50~~	~~$5,122.00~~
	~~Monthly~~	~~$8,427~~	~~$8,849~~	~~$9,292~~	~~$9,757~~	~~$10,244~~
	~~Yearly~~	~~$101,124~~	~~$106,188~~	~~$111,504~~	~~$117,084~~	~~$122,928~~
Information Systems Technician I [4]	Hourly	$28.99	$30.44	$31.96	$33.56	$35.23
	Bi-Monthly	$2,512.17	$2,637.78	$2,769.67	$2,908.15	$3,053.56
	Monthly	$5,024	$5,276	$5,539	$5,816	$6,107
	Yearly	$60,292	$63,307	$66,472	$69,796	$73,285
Information Systems Technician II [4]	Hourly	$31.96	$33.56	$35.23	$37.00	$38.84
	Bi-Monthly	$2,769.67	$2,908.15	$3,053.56	$3,206.24	$3,366.55
	Monthly	$5,539	$5,816	$6,107	$6,412	$6,733
	Yearly	$66,472	$69,796	$73,285	$76,950	$80,797
Information Systems Analyst	Hourly	$34.55	$36.28	$38.09	$40.00	$42.00
	Bi-Monthly	$2,994.00	$3,144.00	$3,301.50	$3,466.50	$3,640.00
	Monthly	$5,988	$6,288	$6,603	$6,933	$7,280
	Yearly	$71,856	$75,456	$79,236	$83,196	$87,360
Mechanic I	Hourly	$32.59	$34.22	$35.94	$37.74	$39.62
	Bi-Monthly	$2,824.50	$2,966.00	$3,114.50	$3,270.50	$3,434.00
	Monthly	$5,649	$5,932	$6,229	$6,541	$6,868
	Yearly	$67,788	$71,184	$74,748	$78,492	$82,416
Mechanic II	Hourly	$35.93	$37.73	$39.62	$41.60	$43.68
	Bi-Monthly	$3,114.00	$3,270.00	$3,433.50	$3,605.50	$3,785.50
	Monthly	$6,228	$6,540	$6,867	$7,211	$7,571
	Yearly	$74,736	$78,480	$82,404	$86,532	$90,852
Mechanic, Senior	Hourly	$39.61	$41.60	$43.68	$45.87	$48.16
	Bi-Monthly	$3,433.00	$3,605.00	$3,785.50	$3,975.00	$4,173.50
	Monthly	$6,866	$7,210	$7,571	$7,950	$8,347
	Yearly	$82,392	$86,520	$90,852	$95,400	$100,164

APPENDIX C - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2023 (with a 3.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Meter Reader Trainee	Hourly	$23.85	$25.04	$26.30	$27.61	$29.00
	Bi-Monthly	$2,067.00	$2,170.50	$2,279.50	$2,393.00	$2,513.00
	Monthly	$4,134	$4,341	$4,559	$4,786	$5,026
	Yearly	$49,608	$52,092	$54,708	$57,432	$60,312
Meter Reader I	Hourly	$26.29	$27.61	$28.99	$30.44	$31.96
	Bi-Monthly	$2,278.50	$2,392.50	$2,512.50	$2,638.00	$2,770.00
	Monthly	$4,557	$4,785	$5,025	$5,276	$5,540
	Yearly	$54,684	$57,420	$60,300	$63,312	$66,480
Meter Reader II	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Purchasing Agent	Hourly	$38.09	$40.00	$42.01	$44.11	$46.31
	Bi-Monthly	$3,301.50	$3,467.00	$3,640.50	$3,822.50	$4,013.50
	Monthly	$6,603	$6,934	$7,281	$7,645	$8,027
	Yearly	$79,236	$83,208	$87,372	$91,740	$96,324
SCADA Technician I	Hourly	$42.84	$44.99	$47.24	$49.60	$52.08
	Bi-Monthly	$3,713.00	$3,899.00	$4,094.00	$4,299.00	$4,514.00
	Monthly	$7,426	$7,798	$8,188	$8,598	$9,028
	Yearly	$89,112	$93,576	$98,256	$103,176	$108,336
SCADA Technician, Senior	Hourly	$47.23	$49.59	$52.07	$54.68	$57.41
	Bi-Monthly	$4,093.00	$4,298.00	$4,513.00	$4,739.00	$4,975.50
	Monthly	$8,186	$8,596	$9,026	$9,478	$9,951
	Yearly	$98,232	$103,152	$108,312	$113,736	$119,412
Senior Supervisor, Construction/Inspection	Hourly	$44.98	$47.23	$49.60	$52.08	$54.68
	Bi-Monthly	$3,898.50	$4,093.50	$4,298.50	$4,513.50	$4,739.00
	Monthly	$7,797	$8,187	$8,597	$9,027	$9,478
	Yearly	$93,564	$98,244	$103,164	$108,324	$113,736
Senior Supervisor, Distribution & Collections	Hourly	$44.98	$47.23	$49.60	$52.08	$54.68
	Bi-Monthly	$3,898.50	$4,093.50	$4,298.50	$4,513.50	$4,739.00
	Monthly	$7,797	$8,187	$8,597	$9,027	$9,478
	Yearly	$93,564	$98,244	$103,164	$108,324	$113,736
Senior Supervisor, Electrical/SCADA	Hourly	$52.06	$54.67	$57.40	$60.28	$63.29
	Bi-Monthly	$4,512.00	$4,738.00	$4,975.00	$5,224.00	$5,485.00
	Monthly	$9,024	$9,476	$9,950	$10,448	$10,970
	Yearly	$108,288	$113,712	$119,400	$125,376	$131,640
Senior Supervisor, W/WW Operations	Hourly	$44.98	$47.23	$49.60	$52.08	$54.68
	Bi-Monthly	$3,898.50	$4,093.50	$4,298.50	$4,513.50	$4,739.00
	Monthly	$7,797	$8,187	$8,597	$9,027	$9,478
	Yearly	$93,564	$98,244	$103,164	$108,324	$113,736
Utility Worker I [1]	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
Utility Worker II [1]	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Utility Worker Senior [1]	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244
W/WW Treatment Plant Operator OIT	Hourly	$26.29	$27.61	$28.99	$30.44	$31.96
	Bi-Monthly	$2,278.50	$2,392.50	$2,512.50	$2,638.00	$2,770.00
	Monthly	$4,557	$4,785	$5,025	$5,276	$5,540
	Yearly	$54,684	$57,420	$60,300	$63,312	$66,480
W/WW Treatment Plant Operator I	Hourly	$28.99	$30.44	$31.97	$33.57	$35.24
	Bi-Monthly	$2,512.50	$2,638.50	$2,770.50	$2,909.00	$3,054.50
	Monthly	$5,025	$5,277	$5,541	$5,818	$6,109
	Yearly	$60,300	$63,324	$66,492	$69,816	$73,308
W/WW Treatment Plant Operator II	Hourly	$31.97	$33.57	$35.25	$37.02	$38.87
	Bi-Monthly	$2,770.50	$2,909.50	$3,055.00	$3,208.00	$3,368.50
	Monthly	$5,541	$5,819	$6,110	$6,416	$6,737
	Yearly	$66,492	$69,828	$73,320	$76,992	$80,844
W/WW Treatment Plant Operator III	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
W/WW Treatment Plant Operator, Senior	Hourly	$38.86	$40.80	$42.84	$44.98	$47.23
	Bi-Monthly	$3,367.50	$3,536.00	$3,713.00	$3,898.50	$4,093.50
	Monthly	$6,735	$7,072	$7,426	$7,797	$8,187
	Yearly	$80,820	$84,864	$89,112	$93,564	$98,244
Water Conservation Coordinator	Hourly	$35.24	$37.00	$38.86	$40.80	$42.84
	Bi-Monthly	$3,054.00	$3,207.00	$3,367.50	$3,536.00	$3,713.00
	Monthly	$6,108	$6,414	$6,735	$7,072	$7,426
	Yearly	$73,296	$76,968	$80,820	$84,864	$89,112
Water Resrouces Specialist [5]	Hourly	$36.95	$38.80	$40.75	$42.78	$44.93
	Bi-Monthly	$3,202.50	$3,363.00	$3,531.50	$3,708.00	$3,893.50
	Monthly	$6,405	$6,726	$7,063	$7,416	$7,787
	Yearly	$76,860	$80,712	$84,756	$88,992	$93,444

[1] Addition of Utility Worker Series per Res. No. 2021-82

[2] Addition of Customer Service Supervisor per Res. No. 2021-84

[3] Removal of Information Systems Administrator per Res. No. 2022-

[4] Addition of Information Systems Technician I/II per Res. No. 2022-

[5] Addition of Water Resources Specialist per Res. No. 2022-

[6] Formula Calculation Correction per Res. No. 2022-

APPENDIX D - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2024 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Accountant I	Hourly	$39.05	$41.01	$43.06	$45.21	$47.48
	Bi-Monthly	$3,384.50	$3,554.00	$3,732.00	$3,918.50	$4,114.50
	Monthly	$6,769	$7,108	$7,464	$7,837	$8,229
	Yearly	$81,228	$85,296	$89,568	$94,044	$98,748
Accountant II	Hourly	$43.05	$45.21	$47.47	$49.85	$52.34
	Bi-Monthly	$3,731.00	$3,918.00	$4,114.00	$4,320.00	$4,536.00
	Monthly	$7,462	$7,836	$8,228	$8,640	$9,072
	Yearly	$89,544	$94,032	$98,736	$103,680	$108,864
Accounting Technician I	Hourly	$32.12	$33.73	$35.42	$37.19	$39.05
	Bi-Monthly	$2,784.00	$2,923.50	$3,070.00	$3,223.50	$3,384.50
	Monthly	$5,568	$5,847	$6,140	$6,447	$6,769
	Yearly	$66,816	$70,164	$73,680	$77,364	$81,228
Accounting Technician II	Hourly	$35.41	$37.18	$39.05	$41.00	$43.04
	Bi-Monthly	$3,069.00	$3,222.50	$3,384.00	$3,553.00	$3,730.50
	Monthly	$6,138	$6,445	$6,768	$7,106	$7,461
	Yearly	$73,656	$77,340	$81,216	$85,272	$89,532
Administrative Technician I	Hourly	$25.17	$26.43	$27.76	$29.14	$30.60
	Bi-Monthly	$2,181.00	$2,290.50	$2,405.50	$2,525.50	$2,652.00
	Monthly	$4,362	$4,581	$4,811	$5,051	$5,304
	Yearly	$52,344	$54,972	$57,732	$60,612	$63,648
Administrative Technician II	Hourly	$29.14	$30.60	$32.13	$33.74	$35.43
	Bi-Monthly	$2,525.50	$2,652.00	$2,785.00	$2,924.00	$3,070.50
	Monthly	$5,051	$5,304	$5,570	$5,848	$6,141
	Yearly	$60,612	$63,648	$66,840	$70,176	$73,692
Administrative Technician, Senior	Hourly	$32.12	$33.73	$35.42	$37.19	$39.05
	Bi-Monthly	$2,784.00	$2,923.50	$3,070.00	$3,223.50	$3,384.50
	Monthly	$5,568	$5,847	$6,140	$6,447	$6,769
	Yearly	$66,816	$70,164	$73,680	$77,364	$81,228
Collection System Worker Trainee	Hourly	$24.45	$25.67	$26.96	$28.31	$29.72
	Bi-Monthly	$2,119.00	$2,225.00	$2,336.50	$2,453.50	$2,576.00
	Monthly	$4,238	$4,450	$4,673	$4,907	$5,152
	Yearly	$50,856	$53,400	$56,076	$58,884	$61,824
Collection System Worker I	Hourly	$26.95	$28.30	$29.72	$31.20	$32.76
	Bi-Monthly	$2,335.50	$2,452.50	$2,575.50	$2,704.00	$2,839.50
	Monthly	$4,671	$4,905	$5,151	$5,408	$5,679
	Yearly	$56,052	$58,860	$61,812	$64,896	$68,148
Collection System Worker II	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Collection System Worker III	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Collection System Worker IV	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Collection System Worker, Senior	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716
Construction Inspector I	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Construction Inspector II	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Construction Inspector III	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Construction Inspector, Senior	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716

APPENDIX D - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2024 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Construction Worker I	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Construction Worker II	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Construction Worker III	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Construction Worker, Senior	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716
Customer Service Representative I	Hourly	$25.17	$26.43	$27.76	$29.14	$30.60
	Bi-Monthly	$2,181.00	$2,290.50	$2,405.50	$2,525.50	$2,652.00
	Monthly	$4,362	$4,581	$4,811	$5,051	$5,304
	Yearly	$52,344	$54,972	$57,732	$60,612	$63,648
Customer Service Representative II	Hourly	$29.14	$30.60	$32.13	$33.74	$35.43
	Bi-Monthly	$2,525.50	$2,652.00	$2,785.00	$2,924.00	$3,070.50
	Monthly	$5,051	$5,304	$5,570	$5,848	$6,141
	Yearly	$60,612	$63,648	$66,840	$70,176	$73,692
Customer Service Representative III	Hourly	$32.12	$33.73	$35.42	$37.19	$39.05
	Bi-Monthly	$2,784.00	$2,923.50	$3,070.00	$3,223.50	$3,384.50
	Monthly	$5,568	$5,847	$6,140	$6,447	$6,769
	Yearly	$66,816	$70,164	$73,680	$77,364	$81,228
Customer Service Representative, Senior	Hourly	$35.41	$37.18	$39.05	$41.00	$43.04
	Bi-Monthly	$3,069.00	$3,222.50	$3,384.00	$3,553.00	$3,730.50
	Monthly	$6,138	$6,445	$6,768	$7,106	$7,461
	Yearly	$73,656	$77,340	$81,216	$85,272	$89,532
Customer Service Supervisor [2,6]	Hourly	$39.05	$41.01	$43.06	$45.21	$47.48
	Bi-Monthly	$3,384.50	$3,554.00	$3,732.00	$3,918.50	$4,114.50
	Monthly	$6,769	$7,108	$7,464	$7,837	$8,229
	Yearly	$81,228	$85,296	$89,568	$94,044	$98,748
Distribution Worker Trainee	Hourly	$24.45	$25.67	$26.96	$28.31	$29.72
	Bi-Monthly	$2,119.00	$2,225.00	$2,336.50	$2,453.50	$2,576.00
	Monthly	$4,238	$4,450	$4,673	$4,907	$5,152
	Yearly	$50,856	$53,400	$56,076	$58,884	$61,824
Distribution Worker I	Hourly	$26.95	$28.30	$29.72	$31.20	$32.76
	Bi-Monthly	$2,335.50	$2,452.50	$2,575.50	$2,704.00	$2,839.50
	Monthly	$4,671	$4,905	$5,151	$5,408	$5,679
	Yearly	$56,052	$58,860	$61,812	$64,896	$68,148
Distribution Worker II	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Distribution Worker III	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Distribution Worker IV	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Distribution Worker, Senior	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716
Electrician/Instrumentation Tech I	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Electrician/Instrumentation Tech II	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716

APPENDIX D - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2024 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Electrician/Instrumentation Tech, Senior	Hourly	$43.92	$46.11	$48.42	$50.84	$53.38
	Bi-Monthly	$3,806.00	$3,996.50	$4,196.50	$4,406.50	$4,626.50
	Monthly	$7,612	$7,993	$8,393	$8,813	$9,253
	Yearly	$91,344	$95,916	$100,716	$105,756	$111,036
Engineer - Associate	Hourly	$47.46	$49.84	$52.33	$54.95	$57.70
	Bi-Monthly	$4,113.50	$4,319.50	$4,535.50	$4,762.50	$5,000.50
	Monthly	$8,227	$8,639	$9,071	$9,525	$10,001
	Yearly	$98,724	$103,668	$108,852	$114,300	$120,012
Engineer - Civil	Hourly	$52.33	$54.95	$57.70	$60.58	$63.61
	Bi-Monthly	$4,535.00	$4,762.00	$5,000.50	$5,250.50	$5,513.00
	Monthly	$9,070	$9,524	$10,001	$10,501	$11,026
	Yearly	$108,840	$114,288	$120,012	$126,012	$132,312
Engineer - Civil Senior	Hourly	$57.69	$60.57	$63.60	$66.78	$70.12
	Bi-Monthly	$4,999.50	$5,249.50	$5,512.00	$5,788.00	$6,077.00
	Monthly	$9,999	$10,499	$11,024	$11,576	$12,154
	Yearly	$119,988	$125,988	$132,288	$138,912	$145,848
Engineering Analyst	Hourly	$49.83	$52.33	$54.95	$57.69	$60.58
	Bi-Monthly	$4,319.00	$4,535.00	$4,762.00	$5,000.00	$5,250.00
	Monthly	$8,638	$9,070	$9,524	$10,000	$10,500
	Yearly	$103,656	$108,840	$114,288	$120,000	$126,000
Engineering Coordinator	Hourly	$35.41	$37.18	$39.05	$41.00	$43.04
	Bi-Monthly	$3,069.00	$3,222.50	$3,384.00	$3,553.00	$3,730.50
	Monthly	$6,138	$6,445	$6,768	$7,106	$7,461
	Yearly	$73,656	$77,340	$81,216	$85,272	$89,532
Engineering Technician I	Hourly	$33.73	$35.42	$37.19	$39.06	$41.01
	Bi-Monthly	$2,923.50	$3,070.00	$3,223.50	$3,385.00	$3,554.00
	Monthly	$5,847	$6,140	$6,447	$6,770	$7,108
	Yearly	$70,164	$73,680	$77,364	$81,240	$85,296
Engineering Technician II	Hourly	$39.05	$41.01	$43.06	$45.21	$47.48
	Bi-Monthly	$3,384.50	$3,554.00	$3,732.00	$3,918.50	$4,114.50
	Monthly	$6,769	$7,108	$7,464	$7,837	$8,229
	Yearly	$81,228	$85,296	$89,568	$94,044	$98,748
Engineering Technician, Senior	Hourly	$45.20	$47.46	$49.84	$52.33	$54.95
	Bi-Monthly	$3,917.50	$4,113.50	$4,319.50	$4,535.50	$4,762.00
	Monthly	$7,835	$8,227	$8,639	$9,071	$9,524
	Yearly	$94,020	$98,724	$103,668	$108,852	$114,288
Facilities Maintenance Technician	Hourly	$27.75	$29.14	$30.60	$32.13	$33.74
	Bi-Monthly	$2,405.00	$2,525.50	$2,652.00	$2,784.50	$2,924.00
	Monthly	$4,810	$5,051	$5,304	$5,569	$5,848
	Yearly	$57,720	$60,612	$63,648	$66,828	$70,176
~~Information Systems Administrator~~ [3]	~~Hourly~~	~~$49.83~~	~~$52.33~~	~~$54.95~~	~~$57.69~~	~~$60.58~~
	~~Bi-Monthly~~	~~$4,319.00~~	~~$4,535.00~~	~~$4,762.00~~	~~$5,000.00~~	~~$5,250.00~~
	~~Monthly~~	~~$8,638~~	~~$9,070~~	~~$9,524~~	~~$10,000~~	~~$10,500~~
	~~Yearly~~	~~$103,656~~	~~$108,840~~	~~$114,288~~	~~$120,000~~	~~$126,000~~
Information Systems Analyst I [4]	Hourly	$29.71	$31.19	$32.75	$34.39	$36.11
	Bi-Monthly	$2,574.80	$2,703.54	$2,838.72	$2,980.65	$3,129.69
	Monthly	$5,150	$5,407	$5,677	$5,961	$6,259
	Yearly	$61,795	$64,885	$68,129	$71,536	$75,112
Information Systems Analyst II [4]	Hourly	$32.75	$34.39	$36.11	$37.92	$39.81
	Bi-Monthly	$2,838.74	$2,980.67	$3,129.71	$3,286.19	$3,450.50
	Monthly	$5,677	$5,961	$6,259	$6,572	$6,901
	Yearly	$68,130	$71,536	$75,113	$78,869	$82,812
Information Systems Analyst	Hourly	$35.41	$37.18	$39.05	$41.00	$43.04
	Bi-Monthly	$3,069.00	$3,222.50	$3,384.00	$3,553.00	$3,730.50
	Monthly	$6,138	$6,445	$6,768	$7,106	$7,461
	Yearly	$73,656	$77,340	$81,216	$85,272	$89,532
Mechanic I	Hourly	$33.41	$35.08	$36.84	$38.68	$40.62
	Bi-Monthly	$2,895.50	$3,040.50	$3,193.00	$3,352.50	$3,520.00
	Monthly	$5,791	$6,081	$6,386	$6,705	$7,040
	Yearly	$69,492	$72,972	$76,632	$80,460	$84,480
Mechanic II	Hourly	$36.83	$38.68	$40.62	$42.65	$44.78
	Bi-Monthly	$3,192.00	$3,352.00	$3,520.00	$3,696.00	$3,880.50
	Monthly	$6,384	$6,704	$7,040	$7,392	$7,761
	Yearly	$76,608	$80,448	$84,480	$88,704	$93,132
Mechanic, Senior	Hourly	$40.60	$42.63	$44.77	$47.01	$49.36
	Bi-Monthly	$3,519.00	$3,695.00	$3,880.00	$4,074.00	$4,277.50
	Monthly	$7,038	$7,390	$7,760	$8,148	$8,555
	Yearly	$84,456	$88,680	$93,120	$97,776	$102,660

APPENDIX D - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2024 (with a 2.5% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Meter Reader Trainee	Hourly	$24.45	$25.67	$26.96	$28.31	$29.72
	Bi-Monthly	$2,119.00	$2,225.00	$2,336.50	$2,453.50	$2,576.00
	Monthly	$4,238	$4,450	$4,673	$4,907	$5,152
	Yearly	$50,856	$53,400	$56,076	$58,884	$61,824
Meter Reader I	Hourly	$26.95	$28.30	$29.72	$31.20	$32.76
	Bi-Monthly	$2,335.50	$2,452.50	$2,575.50	$2,704.00	$2,839.50
	Monthly	$4,671	$4,905	$5,151	$5,408	$5,679
	Yearly	$56,052	$58,860	$61,812	$64,896	$68,148
Meter Reader II	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Purchasing Agent	Hourly	$39.05	$41.01	$43.06	$45.21	$47.48
	Bi-Monthly	$3,384.50	$3,554.00	$3,732.00	$3,918.50	$4,114.50
	Monthly	$6,769	$7,108	$7,464	$7,837	$8,229
	Yearly	$81,228	$85,296	$89,568	$94,044	$98,748
SCADA Technician I	Hourly	$43.92	$46.11	$48.42	$50.84	$53.38
	Bi-Monthly	$3,806.00	$3,996.50	$4,196.50	$4,406.50	$4,626.50
	Monthly	$7,612	$7,993	$8,393	$8,813	$9,253
	Yearly	$91,344	$95,916	$100,716	$105,756	$111,036
SCADA Technician, Senior	Hourly	$48.41	$50.83	$53.38	$56.05	$58.85
	Bi-Monthly	$4,195.50	$4,405.50	$4,626.00	$4,857.50	$5,100.00
	Monthly	$8,391	$8,811	$9,252	$9,715	$10,200
	Yearly	$100,692	$105,732	$111,024	$116,580	$122,400
Senior Supervisor, Construction/Inspection	Hourly	$46.11	$48.42	$50.84	$53.38	$56.05
	Bi-Monthly	$3,996.00	$4,196.00	$4,406.00	$4,626.50	$4,857.50
	Monthly	$7,992	$8,392	$8,812	$9,253	$9,715
	Yearly	$95,904	$100,704	$105,744	$111,036	$116,580
Senior Supervisor, Distribution & Collections	Hourly	$46.11	$48.42	$50.84	$53.38	$56.05
	Bi-Monthly	$3,996.00	$4,196.00	$4,406.00	$4,626.50	$4,857.50
	Monthly	$7,992	$8,392	$8,812	$9,253	$9,715
	Yearly	$95,904	$100,704	$105,744	$111,036	$116,580
Senior Supervisor, Electrical/SCADA	Hourly	$53.37	$56.04	$58.84	$61.78	$64.88
	Bi-Monthly	$4,625.00	$4,856.50	$5,099.50	$5,354.50	$5,622.50
	Monthly	$9,250	$9,713	$10,199	$10,709	$11,245
	Yearly	$111,000	$116,556	$122,388	$128,508	$134,940
Senior Supervisor, W/WW Operations	Hourly	$46.11	$48.42	$50.84	$53.38	$56.05
	Bi-Monthly	$3,996.00	$4,196.00	$4,406.00	$4,626.50	$4,857.50
	Monthly	$7,992	$8,392	$8,812	$9,253	$9,715
	Yearly	$95,904	$100,704	$105,744	$111,036	$116,580
Utility Worker I [1]	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
Utility Worker II [1]	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Utility Worker Senior [1]	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716
W/WW Treatment Plant Operator OIT	Hourly	$26.95	$28.30	$29.72	$31.20	$32.76
	Bi-Monthly	$2,335.50	$2,452.50	$2,575.50	$2,704.00	$2,839.50
	Monthly	$4,671	$4,905	$5,151	$5,408	$5,679
	Yearly	$56,052	$58,860	$61,812	$64,896	$68,148
W/WW Treatment Plant Operator I	Hourly	$29.72	$31.21	$32.77	$34.41	$36.13
	Bi-Monthly	$2,575.50	$2,704.50	$2,840.00	$2,982.00	$3,131.00
	Monthly	$5,151	$5,409	$5,680	$5,964	$6,262
	Yearly	$61,812	$64,908	$68,160	$71,568	$75,144
W/WW Treatment Plant Operator II	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
W/WW Treatment Plant Operator III	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
W/WW Treatment Plant Operator, Senior	Hourly	$39.83	$41.83	$43.92	$46.12	$48.42
	Bi-Monthly	$3,452.00	$3,625.00	$3,806.50	$3,997.00	$4,196.50
	Monthly	$6,904	$7,250	$7,613	$7,994	$8,393
	Yearly	$82,848	$87,000	$91,356	$95,928	$100,716
Water Conservation Coordinator	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Water Resrouces Specialist [5]	Hourly	$37.88	$39.78	$41.77	$43.86	$46.05
	Bi-Monthly	$3,283.00	$3,447.50	$3,620.00	$3,801.00	$3,991.00
	Monthly	$6,566	$6,895	$7,240	$7,602	$7,982
	Yearly	$78,792	$82,740	$86,880	$91,224	$95,784

[1] Addition of Utility Worker Series per Res. No. 2021-82

[2] Addition of Customer Service Supervisor per Res. No. 2021-84

[3] Removal of Information Systems Administrator per Res. No. 2022-

[4] Addition of Information Systems Technician I/II per Res. No. 2022-

[5] Addition of Water Resources Specialist per Res. No. 2022-

[6] Formula Calculation Correction per Res. No. 2022-

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Accountant I	Hourly	$39.84	$41.83	$43.93	$46.13	$48.43
	Bi-Monthly	$3,452.50	$3,625.50	$3,807.00	$3,997.50	$4,197.00
	Monthly	$6,905	$7,251	$7,614	$7,995	$8,394
	Yearly	$82,860	$87,012	$91,368	$95,940	$100,728
Accountant II	Hourly	$43.92	$46.11	$48.42	$50.84	$53.38
	Bi-Monthly	$3,806.00	$3,996.50	$4,196.50	$4,406.50	$4,626.50
	Monthly	$7,612	$7,993	$8,393	$8,813	$9,253
	Yearly	$91,344	$95,916	$100,716	$105,756	$111,036
Accounting Technician I	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Accounting Technician II	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Administrative Technician I	Hourly	$25.67	$26.96	$28.31	$29.72	$31.21
	Bi-Monthly	$2,225.00	$2,336.50	$2,453.50	$2,576.00	$2,705.00
	Monthly	$4,450	$4,673	$4,907	$5,152	$5,410
	Yearly	$53,400	$56,076	$58,884	$61,824	$64,920
Administrative Technician II	Hourly	$29.73	$31.22	$32.78	$34.42	$36.14
	Bi-Monthly	$2,576.50	$2,705.50	$2,841.00	$2,983.00	$3,132.00
	Monthly	$5,153	$5,411	$5,682	$5,966	$6,264
	Yearly	$61,836	$64,932	$68,184	$71,592	$75,168
Administrative Technician, Senior	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Collection System Worker Trainee	Hourly	$24.94	$26.19	$27.50	$28.88	$30.32
	Bi-Monthly	$2,161.50	$2,270.00	$2,383.50	$2,503.00	$2,628.00
	Monthly	$4,323	$4,540	$4,767	$5,006	$5,256
	Yearly	$51,876	$54,480	$57,204	$60,072	$63,072
Collection System Worker I	Hourly	$27.49	$28.87	$30.32	$31.83	$33.42
	Bi-Monthly	$2,382.50	$2,502.00	$2,627.50	$2,758.50	$2,896.50
	Monthly	$4,765	$5,004	$5,255	$5,517	$5,793
	Yearly	$57,180	$60,048	$63,060	$66,204	$69,516
Collection System Worker II	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Collection System Worker III	Hourly	$33.43	$35.10	$36.86	$38.70	$40.63
	Bi-Monthly	$2,897.00	$3,042.00	$3,194.50	$3,354.00	$3,521.50
	Monthly	$5,794	$6,084	$6,389	$6,708	$7,043
	Yearly	$69,528	$73,008	$76,668	$80,496	$84,516
Collection System Worker IV	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Collection System Worker, Senior	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744
Construction Inspector I	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Construction Inspector II	Hourly	$33.43	$35.10	$36.86	$38.70	$40.63
	Bi-Monthly	$2,897.00	$3,042.00	$3,194.50	$3,354.00	$3,521.50
	Monthly	$5,794	$6,084	$6,389	$6,708	$7,043
	Yearly	$69,528	$73,008	$76,668	$80,496	$84,516
Construction Inspector III	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Construction Inspector, Senior	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Construction Worker I	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Construction Worker II	Hourly	$33.43	$35.10	$36.86	$38.70	$40.63
	Bi-Monthly	$2,897.00	$3,042.00	$3,194.50	$3,354.00	$3,521.50
	Monthly	$5,794	$6,084	$6,389	$6,708	$7,043
	Yearly	$69,528	$73,008	$76,668	$80,496	$84,516
Construction Worker III	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Construction Worker, Senior	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744
Customer Service Representative I	Hourly	$25.67	$26.96	$28.31	$29.72	$31.21
	Bi-Monthly	$2,225.00	$2,336.50	$2,453.50	$2,576.00	$2,705.00
	Monthly	$4,450	$4,673	$4,907	$5,152	$5,410
	Yearly	$53,400	$56,076	$58,884	$61,824	$64,920
Customer Service Representative II	Hourly	$29.73	$31.22	$32.78	$34.42	$36.14
	Bi-Monthly	$2,576.50	$2,705.50	$2,841.00	$2,983.00	$3,132.00
	Monthly	$5,153	$5,411	$5,682	$5,966	$6,264
	Yearly	$61,836	$64,932	$68,184	$71,592	$75,168
Customer Service Representative III	Hourly	$32.77	$34.41	$36.13	$37.94	$39.84
	Bi-Monthly	$2,840.00	$2,982.00	$3,131.50	$3,288.00	$3,452.50
	Monthly	$5,680	$5,964	$6,263	$6,576	$6,905
	Yearly	$68,160	$71,568	$75,156	$78,912	$82,860
Customer Service Representative, Senior	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Customer Service Supervisor [2,6]	Hourly	$39.84	$41.83	$43.93	$46.13	$48.43
	Bi-Monthly	$3,452.50	$3,625.50	$3,807.00	$3,997.50	$4,197.00
	Monthly	$6,905	$7,251	$7,614	$7,995	$8,394
	Yearly	$82,860	$87,012	$91,368	$95,940	$100,728
Distribution Worker Trainee	Hourly	$24.94	$26.19	$27.50	$28.88	$30.32
	Bi-Monthly	$2,161.50	$2,270.00	$2,383.50	$2,503.00	$2,628.00
	Monthly	$4,323	$4,540	$4,767	$5,006	$5,256
	Yearly	$51,876	$54,480	$57,204	$60,072	$63,072
Distribution Worker I	Hourly	$27.49	$28.87	$30.32	$31.83	$33.42
	Bi-Monthly	$2,382.50	$2,502.00	$2,627.50	$2,758.50	$2,896.50
	Monthly	$4,765	$5,004	$5,255	$5,517	$5,793
	Yearly	$57,180	$60,048	$63,060	$66,204	$69,516
Distribution Worker II	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Distribution Worker III	Hourly	$33.43	$35.10	$36.86	$38.70	$40.63
	Bi-Monthly	$2,897.00	$3,042.00	$3,194.50	$3,354.00	$3,521.50
	Monthly	$5,794	$6,084	$6,389	$6,708	$7,043
	Yearly	$69,528	$73,008	$76,668	$80,496	$84,516
Distribution Worker IV	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Distribution Worker, Senior	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744
Electrician/Instrumentation Tech I	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Electrician/Instrumentation Tech II	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744

APPENDIX E - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2025 (with a 2.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Electrician/Instrumentation Tech, Senior	Hourly	$44.80	$47.04	$49.40	$51.87	$54.46
	Bi-Monthly	$3,882.50	$4,077.00	$4,281.00	$4,495.00	$4,720.00
	Monthly	$7,765	$8,154	$8,562	$8,990	$9,440
	Yearly	$93,180	$97,848	$102,744	$107,880	$113,280
Engineer - Associate	Hourly	$48.42	$50.84	$53.38	$56.05	$58.85
	Bi-Monthly	$4,196.00	$4,406.00	$4,626.50	$4,858.00	$5,100.50
	Monthly	$8,392	$8,812	$9,253	$9,716	$10,201
	Yearly	$100,704	$105,744	$111,036	$116,592	$122,412
Engineer - Civil	Hourly	$53.38	$56.05	$58.85	$61.79	$64.89
	Bi-Monthly	$4,626.00	$4,857.50	$5,100.50	$5,355.50	$5,623.50
	Monthly	$9,252	$9,715	$10,201	$10,711	$11,247
	Yearly	$111,024	$116,580	$122,412	$128,532	$134,964
Engineer - Civil Senior	Hourly	$58.84	$61.78	$64.88	$68.12	$71.53
	Bi-Monthly	$5,099.50	$5,354.50	$5,622.50	$5,903.50	$6,199.00
	Monthly	$10,199	$10,709	$11,245	$11,807	$12,398
	Yearly	$122,388	$128,508	$134,940	$141,684	$148,776
Engineering Analyst	Hourly	$50.83	$53.38	$56.05	$58.85	$61.79
	Bi-Monthly	$4,405.50	$4,626.00	$4,857.50	$5,100.50	$5,355.50
	Monthly	$8,811	$9,252	$9,715	$10,201	$10,711
	Yearly	$105,732	$111,024	$116,580	$122,412	$128,532
Engineering Coordinator	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Engineering Technician I	Hourly	$34.41	$36.13	$37.94	$39.84	$41.83
	Bi-Monthly	$2,982.00	$3,131.50	$3,288.50	$3,452.50	$3,625.50
	Monthly	$5,964	$6,263	$6,577	$6,905	$7,251
	Yearly	$71,568	$75,156	$78,924	$82,860	$87,012
Engineering Technician II	Hourly	$39.84	$41.83	$43.93	$46.13	$48.43
	Bi-Monthly	$3,452.50	$3,625.50	$3,807.00	$3,997.50	$4,197.00
	Monthly	$6,905	$7,251	$7,614	$7,995	$8,394
	Yearly	$82,860	$87,012	$91,368	$95,940	$100,728
Engineering Technician, Senior	Hourly	$46.11	$48.42	$50.84	$53.38	$56.05
	Bi-Monthly	$3,996.00	$4,196.00	$4,406.00	$4,626.50	$4,857.50
	Monthly	$7,992	$8,392	$8,812	$9,253	$9,715
	Yearly	$95,904	$100,704	$105,744	$111,036	$116,580
Facilities Maintenance Technician	Hourly	$27.61	$29.00	$30.45	$31.97	$33.57
	Bi-Monthly	$2,393.00	$2,513.00	$2,639.00	$2,771.00	$2,909.50
	Monthly	$4,786	$5,026	$5,278	$5,542	$5,819
	Yearly	$57,432	$60,312	$63,336	$66,504	$69,828
~~Information Systems Administrator~~[3]	~~Hourly~~	~~$50.83~~	~~$53.38~~	~~$56.05~~	~~$58.85~~	~~$61.79~~
	~~Bi-Monthly~~	~~$4,405.50~~	~~$4,626.00~~	~~$4,857.50~~	~~$5,100.50~~	~~$5,355.50~~
	~~Monthly~~	~~$8,811~~	~~$9,252~~	~~$9,715~~	~~$10,201~~	~~$10,711~~
	~~Yearly~~	~~$105,732~~	~~$111,024~~	~~$116,580~~	~~$122,412~~	~~$128,532~~
Information SystemsTechnician I [4]	Hourly	$30.31	$31.82	$33.41	$35.08	$36.84
	Bi-Monthly	$2,626.50	$2,757.83	$2,895.72	$3,040.50	$3,192.53
	Monthly	$5,253	$5,516	$5,791	$6,081	$6,385
	Yearly	$63,036	$66,188	$69,497	$72,972	$76,621
Information SystemsTechnician II [4]	Hourly	$33.41	$35.08	$36.83	$38.67	$40.61
	Bi-Monthly	$2,895.27	$3,040.03	$3,192.04	$3,351.64	$3,519.22
	Monthly	$5,791	$6,080	$6,384	$6,703	$7,038
	Yearly	$69,486	$72,961	$76,609	$80,439	$84,461
Information Systems Analyst	Hourly	$36.12	$37.93	$39.83	$41.82	$43.92
	Bi-Monthly	$3,130.50	$3,287.50	$3,452.00	$3,624.50	$3,806.00
	Monthly	$6,261	$6,575	$6,904	$7,249	$7,612
	Yearly	$75,132	$78,900	$82,848	$86,988	$91,344
Mechanic I	Hourly	$34.08	$35.79	$37.58	$39.46	$41.43
	Bi-Monthly	$2,953.50	$3,101.50	$3,257.00	$3,419.50	$3,590.50
	Monthly	$5,907	$6,203	$6,514	$6,839	$7,181
	Yearly	$70,884	$74,436	$78,168	$82,068	$86,172
Mechanic II	Hourly	$37.57	$39.45	$41.42	$43.49	$45.67
	Bi-Monthly	$3,256.00	$3,419.00	$3,590.00	$3,769.50	$3,958.00
	Monthly	$6,512	$6,838	$7,180	$7,539	$7,916
	Yearly	$78,144	$82,056	$86,160	$90,468	$94,992
Mechanic, Senior	Hourly	$41.42	$43.49	$45.66	$47.95	$50.35
	Bi-Monthly	$3,589.50	$3,769.00	$3,957.50	$4,155.50	$4,363.50
	Monthly	$7,179	$7,538	$7,915	$8,311	$8,727
	Yearly	$86,148	$90,456	$94,980	$99,732	$104,724

APPENDIX E - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2025 (with a 2.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
Meter Reader Trainee	Hourly	$24.94	$26.19	$27.50	$28.88	$30.32
	Bi-Monthly	$2,161.50	$2,270.00	$2,383.50	$2,503.00	$2,628.00
	Monthly	$4,323	$4,540	$4,767	$5,006	$5,256
	Yearly	$51,876	$54,480	$57,204	$60,072	$63,072
Meter Reader I	Hourly	$27.49	$28.87	$30.32	$31.83	$33.42
	Bi-Monthly	$2,382.50	$2,502.00	$2,627.50	$2,758.50	$2,896.50
	Monthly	$4,765	$5,004	$5,255	$5,517	$5,793
	Yearly	$57,180	$60,048	$63,060	$66,204	$69,516
Meter Reader II	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Purchasing Agent	Hourly	$39.84	$41.83	$43.93	$46.13	$48.43
	Bi-Monthly	$3,452.50	$3,625.50	$3,807.00	$3,997.50	$4,197.00
	Monthly	$6,905	$7,251	$7,614	$7,995	$8,394
	Yearly	$82,860	$87,012	$91,368	$95,940	$100,728
SCADA Technician I	Hourly	$44.80	$47.04	$49.40	$51.87	$54.46
	Bi-Monthly	$3,882.50	$4,077.00	$4,281.00	$4,495.00	$4,720.00
	Monthly	$7,765	$8,154	$8,562	$8,990	$9,440
	Yearly	$93,180	$97,848	$102,744	$107,880	$113,280
SCADA Technician, Senior	Hourly	$49.38	$51.85	$54.44	$57.17	$60.02
	Bi-Monthly	$4,279.50	$4,493.50	$4,718.50	$4,954.50	$5,202.00
	Monthly	$8,559	$8,987	$9,437	$9,909	$10,404
	Yearly	$102,708	$107,844	$113,244	$118,908	$124,848
Senior Supervisor, Construction/Inspection	Hourly	$47.03	$49.38	$51.85	$54.45	$57.17
	Bi-Monthly	$4,076.00	$4,280.00	$4,494.00	$4,719.00	$4,955.00
	Monthly	$8,152	$8,560	$8,988	$9,438	$9,910
	Yearly	$97,824	$102,720	$107,856	$113,256	$118,920
Senior Supervisor, Distribution & Collections	Hourly	$47.03	$49.38	$51.85	$54.45	$57.17
	Bi-Monthly	$4,076.00	$4,280.00	$4,494.00	$4,719.00	$4,955.00
	Monthly	$8,152	$8,560	$8,988	$9,438	$9,910
	Yearly	$97,824	$102,720	$107,856	$113,256	$118,920
Senior Supervisor, Electrical/SCADA	Hourly	$54.43	$57.16	$60.02	$63.02	$66.17
	Bi-Monthly	$4,717.50	$4,953.50	$5,201.50	$5,461.50	$5,734.50
	Monthly	$9,435	$9,907	$10,403	$10,923	$11,469
	Yearly	$113,220	$118,884	$124,836	$131,076	$137,628
Senior Supervisor, W/WW Operations	Hourly	$47.03	$49.38	$51.85	$54.45	$57.17
	Bi-Monthly	$4,076.00	$4,280.00	$4,494.00	$4,719.00	$4,955.00
	Monthly	$8,152	$8,560	$8,988	$9,438	$9,910
	Yearly	$97,824	$102,720	$107,856	$113,256	$118,920
Utility Worker I [1]	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
Utility Worker II [1]	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Utility Worker Senior [1]	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744
W/WW Treatment Plant Operator OIT	Hourly	$27.49	$28.87	$30.32	$31.83	$33.42
	Bi-Monthly	$2,382.50	$2,502.00	$2,627.50	$2,758.50	$2,896.50
	Monthly	$4,765	$5,004	$5,255	$5,517	$5,793
	Yearly	$57,180	$60,048	$63,060	$66,204	$69,516
W/WW Treatment Plant Operator I	Hourly	$30.32	$31.83	$33.43	$35.10	$36.85
	Bi-Monthly	$2,627.50	$2,759.00	$2,897.00	$3,042.00	$3,194.00
	Monthly	$5,255	$5,518	$5,794	$6,084	$6,388
	Yearly	$63,060	$66,216	$69,528	$73,008	$76,656
W/WW Treatment Plant Operator II	Hourly	$33.43	$35.10	$36.86	$38.70	$40.63
	Bi-Monthly	$2,897.00	$3,042.00	$3,194.50	$3,354.00	$3,521.50
	Monthly	$5,794	$6,084	$6,389	$6,708	$7,043
	Yearly	$69,528	$73,008	$76,668	$80,496	$84,516
W/WW Treatment Plant Operator III	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180

APPENDIX E - SEIU Local 1021 Union Wage Schedule
PROPOSED Effective 7/01/2025 (with a 2.0% Salary Increase)

Classification	Pay Freq.	Step 1	Step 2	Step 3	Step 4	Step 5
W/WW Treatment Plant Operator, Senior	Hourly	$40.63	$42.67	$44.80	$47.05	$49.40
	Bi-Monthly	$3,521.50	$3,698.00	$3,883.00	$4,077.50	$4,281.00
	Monthly	$7,043	$7,396	$7,766	$8,155	$8,562
	Yearly	$84,516	$88,752	$93,192	$97,860	$102,744
Water Conservation Coordinator	Hourly	$36.85	$38.69	$40.63	$42.66	$44.80
	Bi-Monthly	$3,193.50	$3,353.50	$3,521.50	$3,697.50	$3,882.50
	Monthly	$6,387	$6,707	$7,043	$7,395	$7,765
	Yearly	$76,644	$80,484	$84,516	$88,740	$93,180
Water Resrouces Specialist [5]	Hourly	$34.21	$35.93	$37.73	$39.61	$41.59
	Bi-Monthly	$2,965.00	$3,113.50	$3,269.50	$3,433.00	$3,604.50
	Monthly	$5,930	$6,227	$6,539	$6,866	$7,209
	Yearly	$71,160	$74,724	$78,468	$82,392	$86,508

[1] Addition of Utility Worker Series per Res. No. 2021-82
[2] Addition of Customer Service Supervisor per Res. No. 2021-84
[3] Removal of Information Systems Administrator per Res. No. 2022-
[4] Addition of Information Systems Technician I/II per Res. No. 2022-
[5] Addition of Water Resources Specialist per Res. No. 2022-
[6] Formula Calculation Correction per Res. No. 2022-

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING A SIDE LETTER TO THE MEMORANDUM OF UNDERSTANDING (MOU) BETWEEN THE CALAVERAS COUNTY WATER DISTRICT AND THE SERVICE EMPLOYEES INTERNATIONAL UNION (SEIU) LOCAL 1021 EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2026

WHEREAS, both the Board of Directors of the Calaveras County Water District (CCWD) and SEIU Local 1021 entered into a MOU having an effective date of July 1, 2021 through June 30, 2026, the terms of which the MOU are incorporated herein by this reference; and

WHEREAS, the Board of Directors agree to the addition of an Information Systems Technician classification series; and

WHEREAS, the Board of Directors agree to the deletion of an Information Systems Administrator classification; and

WHEREAS, the Board of Directors agree to the formula corrections for the Customer Service Supervisor classification; and

WHEREAS, District staff has successfully met and conferred with SEIU Local 1021 executive team to address concerns regarding the addition of the classification.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT approve the addition of the Information Systems Technician classification series as depicted in the wage schedule effective July 1, 2022, attached hereto and made a part hereof.

PASSED AND ADOPTED by this 27Th day of July 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

AGREEMENT BETWEEN
CALAVERAS COUNTY WATER DISTRICT
AND
MANAGEMENT & CONFIDENTIAL UNIT

Term: July 1, 2021 through June 30, 2026

Side Letter of Agreement
Amendment to Article 8.G, Appendix B, C, D, and E

Effective July 1, 2022, the Calaveras County Water District (CCWD or the District) and Management and Confidential Unit (the MCU) agree to the following side letter amending the Agreement for the term July 1, 2021 through June 30, 2026.

Article 8 Medical and Related Benefits

The following language will be added to Section G. Retiree Medical

1. Limited Eligibility Exception for Reinstated Retirees – District retirees who meet the following criteria:
    a. District retiree who retired from CCWD before the recension of the vesting schedule; AND
    b. Reinstates from retirement for the sole purpose to work for CCWD; AND
    c. Retirees once again from CCWD

    will receive a retiree medical benefit equal to 22893, minus the minimum equal contribution as established annually by CalPERS, if all the above conditions are met.

Appendix B, C, D and E Salary Schedules

An updated Salary schedule effective July 1, 2022 and all wage schedules remaining for the term of the MOU will:

a. Addition of the Information Systems Administrator classification.
b. Increase the salary range of the District Engineer classification to match the Director of Operations classification.

All MOU language not included in this amendment remains the same and continues to be valid.

AGREEMENT BETWEEN
CALAVERAS COUNTY WATER DISTRICT
AND
MANAGEMENT & CONFIDENTIAL UNIT

Term: July 1, 2021 through June 30, 2026

Signed and agreed:

For the District:

_____
Michael Minkler
General Manager

Date: _____

For the MCU:

_____
Damon Wyckoff
MCU Representative

Date: _____

_____
Patrick Burkhardt
MCU Representative

Date: _____

APPENDIX B - Management and Confidential Unit Salary Schedule
Effective July 1, 2022 (with 3.0% Salary Increase and Equity Adjustment)

Classification	Rate Type	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Director of Administrative Services	Bi-monthly	$5,169.00	$5,427.50	$5,699.00	$5,984.00	$6,283.50	$6,441.00	$6,602.50	$6,768.00	$6,937.50
	Monthly	$10,338	$10,855	$11,398	$11,968	$12,567	$12,882	$13,205	$13,536	$13,875
	Yearly	$124,056	$130,260	$136,776	$143,616	$150,804	$154,584	$158,460	$162,432	$166,500
Director of Operations	Bi-monthly	$5,323.00	$5,589.50	$5,869.00	$6,162.50	$6,471.00	$6,633.00	$6,799.00	$6,969.00	$7,143.50
	Monthly	$10,646	$11,179	$11,738	$12,325	$12,942	$13,266	$13,598	$13,938	$14,287
	Yearly	$127,752	$134,148	$140,856	$147,900	$155,304	$159,192	$163,176	$167,256	$171,444
Deputy Director of Operations	Bi-monthly	$4,486.50	$4,711.00	$4,947.00	$5,194.50	$5,454.50	$5,591.00	$5,731.00	$5,874.50	$6,021.50
	Monthly	$8,973	$9,422	$9,894	$10,389	$10,909	$11,182	$11,462	$11,749	$12,043
	Yearly	$107,676	$113,064	$118,728	$124,668	$130,908	$134,184	$137,544	$140,988	$144,516
Distribution/Collections Manager	Bi-monthly	$4,272.50	$4,486.50	$4,711.00	$4,947.00	$5,194.50	$5,324.50	$5,458.00	$5,594.50	$5,734.50
	Monthly	$8,545	$8,973	$9,422	$9,894	$10,389	$10,649	$10,916	$11,189	$11,469
	Yearly	$102,540	$107,676	$113,064	$118,728	$124,668	$127,788	$130,992	$134,268	$137,628
District Engineer**	Bi-monthly	$5,323.00	$5,589.50	$5,869.00	$6,162.50	$6,471.00	$6,633.00	$6,799.00	$6,969.00	$7,143.50
	Monthly	$10,646	$11,179	$11,738	$12,325	$12,942	$13,266	$13,598	$13,938	$14,287
	Yearly	$127,752	$134,148	$140,856	$147,900	$155,304	$159,192	$163,176	$167,256	$171,444
Executive Assistant/Clerk to the Board (C)	Hourly	$31.79	$33.38	$35.05	$36.81	$38.65	$39.62	$40.61	$41.63	$42.67
	Bi-monthly	$2,755.00	$2,893.00	$3,038.00	$3,190.00	$3,349.50	$3,433.50	$3,519.50	$3,607.50	$3,698.00
	Monthly	$5,510	$5,786	$6,076	$6,380	$6,699	$6,867	$7,039	$7,215	$7,396
	Yearly	$66,120	$69,432	$72,912	$76,560	$80,388	$82,404	$84,468	$86,580	$88,752
External Affairs Manager I	Bi-monthly	$4,011.50	$4,212.50	$4,423.50	$4,645.00	$4,877.50	$4,999.50	$5,124.50	$5,253.00	$5,384.50
	Monthly	$8,023	$8,425	$8,847	$9,290	$9,755	$9,999	$10,249	$10,506	$10,769
	Yearly	$96,276	$101,100	$106,164	$111,480	$117,060	$119,988	$122,988	$126,072	$129,228
External Affairs Manager II	Bi-monthly	$4,212.50	$4,423.50	$4,645.00	$4,877.50	$5,121.50	$5,250.00	$5,381.50	$5,516.50	$5,654.50
	Monthly	$8,425	$8,847	$9,290	$9,755	$10,243	$10,500	$10,763	$11,033	$11,309
	Yearly	$101,100	$106,164	$111,480	$117,060	$122,916	$126,000	$129,156	$132,396	$135,708
Human Resources Manager***	Bi-monthly	$4,422.00	$4,643.50	$4,876.00	$5,120.00	$5,376.00	$5,510.50	$5,648.50	$5,790.00	$5,935.00
	Monthly	$8,844	$9,287	$9,752	$10,240	$10,752	$11,021	$11,297	$11,580	$11,870
	Yearly	$106,128	$111,444	$117,024	$122,880	$129,024	$132,252	$135,564	$138,960	$142,440
Human Resources Technician (C)	Hourly	$30.27	$31.79	$33.38	$35.05	$36.81	$37.73	$38.68	$39.65	$40.64
	Bi-monthly	$2,623.50	$2,755.00	$2,893.00	$3,038.00	$3,190.00	$3,270.00	$3,352.00	$3,436.00	$3,522.00
	Monthly	$5,247	$5,510	$5,786	$6,076	$6,380	$6,540	$6,704	$6,872	$7,044
	Yearly	$62,964	$66,120	$69,432	$72,912	$76,560	$78,480	$80,448	$82,464	$84,528
Information Systems Administrator*	Bi-monthly	$4,110.00	$4,315.50	$4,531.50	$4,758.50	$4,996.50	$5,121.50	$5,250.00	$5,381.50	$5,516.50
	Monthly	$8,220	$8,631	$9,063	$9,517	$9,993	$10,243	$10,500	$10,763	$11,033
	Yearly	$98,640	$103,572	$108,756	$114,204	$119,916	$122,916	$126,000	$129,156	$132,396
Construction & Maintenance Manager	Bi-monthly	$4,272.50	$4,486.50	$4,711.00	$4,947.00	$5,194.50	$5,324.50	$5,458.00	$5,594.50	$5,734.50
	Monthly	$8,545	$8,973	$9,422	$9,894	$10,389	$10,649	$10,916	$11,189	$11,469
	Yearly	$102,540	$107,676	$113,064	$118,728	$124,668	$127,788	$130,992	$134,268	$137,628
Plant Operations Manager	Bi-monthly	$4,486.50	$4,711.00	$4,947.00	$5,194.50	$5,454.50	$5,591.00	$5,731.00	$5,874.50	$6,021.50
	Monthly	$8,973	$9,422	$9,894	$10,389	$10,909	$11,182	$11,462	$11,749	$12,043
	Yearly	$107,676	$113,064	$118,728	$124,668	$130,908	$134,184	$137,544	$140,988	$144,516
Manager of Water Resources	Bi-monthly	$4,486.50	$4,711.00	$4,947.00	$5,194.50	$5,454.50	$5,591.00	$5,731.00	$5,874.50	$6,021.50
	Monthly	$8,973	$9,422	$9,894	$10,389	$10,909	$11,182	$11,462	$11,749	$12,043
	Yearly	$107,676	$113,064	$118,728	$124,668	$130,908	$134,184	$137,544	$140,988	$144,516

*Addition of Information Systems Administrator per Res. No. 2022-__
**District Engineer salary range updated per Res. No. 2022-__

APPENDIX C - Management and Confidential Unit Salary Schedule
Effective July 1, 2023 (with 3.0% Salary Increase)

Classification	Rate Type	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Director of Administrative Services	Bi-monthly	$5,324.50	$5,591.00	$5,871.00	$6,165.00	$6,473.50	$6,635.50	$6,801.50	$6,972.00	$7,146.50
	Monthly	$10,649	$11,182	$11,742	$12,330	$12,947	$13,271	$13,603	$13,944	$14,293
	Yearly	$127,788	$134,184	$140,904	$147,960	$155,364	$159,252	$163,236	$167,328	$171,516
Director of Operations	Bi-monthly	$5,592.50	$5,872.50	$6,166.50	$6,475.00	$6,799.00	$6,969.00	$7,143.50	$7,322.50	$7,506.00
	Monthly	$11,185	$11,745	$12,333	$12,950	$13,598	$13,938	$14,287	$14,645	$15,012
	Yearly	$134,220	$140,940	$147,996	$155,400	$163,176	$167,256	$171,444	$175,740	$180,144
Deputy Director of Operations	Bi-monthly	$4,621.50	$4,853.00	$5,096.00	$5,351.00	$5,619.00	$5,759.50	$5,903.50	$6,051.50	$6,203.00
	Monthly	$9,243	$9,706	$10,192	$10,702	$11,238	$11,519	$11,807	$12,103	$12,406
	Yearly	$110,916	$116,472	$122,304	$128,424	$134,856	$138,228	$141,684	$145,236	$148,872
Distribution/Collections Manager	Bi-monthly	$4,401.00	$4,621.50	$4,853.00	$5,096.00	$5,351.00	$5,485.00	$5,622.50	$5,763.50	$5,908.00
	Monthly	$8,802	$9,243	$9,706	$10,192	$10,702	$10,970	$11,245	$11,527	$11,816
	Yearly	$105,624	$110,916	$116,472	$122,304	$128,424	$131,640	$134,940	$138,324	$141,792
District Engineer**	Bi-monthly	$5,592.50	$5,872.50	$6,166.50	$6,475.00	$6,799.00	$6,969.00	$7,143.50	$7,322.50	$7,506.00
	Monthly	$11,185	$11,745	$12,333	$12,950	$13,598	$13,938	$14,287	$14,645	$15,012
	Yearly	$134,220	$140,940	$147,996	$155,400	$163,176	$167,256	$171,444	$175,740	$180,144
Executive Assistant/Clerk to the Board (C)	Hourly	$32.75	$34.38	$36.10	$37.91	$39.81	$40.81	$41.83	$42.88	$43.95
	Bi-monthly	$2,838.00	$2,980.00	$3,129.00	$3,285.50	$3,450.00	$3,536.50	$3,625.00	$3,716.00	$3,809.00
	Monthly	$5,676	$5,960	$6,258	$6,571	$6,900	$7,073	$7,250	$7,432	$7,618
	Yearly	$68,112	$71,520	$75,096	$78,852	$82,800	$84,876	$87,000	$89,184	$91,416
External Affairs Manager I	Bi-monthly	$4,132.00	$4,339.00	$4,556.00	$4,784.00	$5,023.50	$5,149.50	$5,278.50	$5,410.50	$5,546.00
	Monthly	$8,264	$8,678	$9,112	$9,568	$10,047	$10,299	$10,557	$10,821	$11,092
	Yearly	$99,168	$104,136	$109,344	$114,816	$120,564	$123,588	$126,684	$129,852	$133,104
External Affairs Manager II	Bi-monthly	$4,339.00	$4,556.00	$4,784.00	$5,023.50	$5,275.00	$5,407.00	$5,542.50	$5,681.50	$5,824.00
	Monthly	$8,678	$9,112	$9,568	$10,047	$10,550	$10,814	$11,085	$11,363	$11,648
	Yearly	$104,136	$109,344	$114,816	$120,564	$126,600	$129,768	$133,020	$136,356	$139,776
Human Resources Manager***	Bi-monthly	$4,555.00	$4,783.00	$5,022.50	$5,274.00	$5,538.00	$5,676.50	$5,818.50	$5,964.00	$6,113.50
	Monthly	$9,110	$9,566	$10,045	$10,548	$11,076	$11,353	$11,637	$11,928	$12,227
	Yearly	$109,320	$114,792	$120,540	$126,576	$132,912	$136,236	$139,644	$143,136	$146,724
Human Resources Technician (C)	Hourly	$31.18	$32.75	$34.38	$36.10	$37.91	$38.86	$39.84	$40.83	$41.86
	Bi-monthly	$2,702.50	$2,838.00	$2,980.00	$3,129.00	$3,285.50	$3,368.00	$3,452.50	$3,539.00	$3,627.50
	Monthly	$5,405	$5,676	$5,960	$6,258	$6,571	$6,736	$6,905	$7,078	$7,255
	Yearly	$64,860	$68,112	$71,520	$75,096	$78,852	$80,832	$82,860	$84,936	$87,060
Information Systems Administrator*	Bi-monthly	$4,233.50	$4,445.50	$4,668.00	$4,901.50	$5,147.00	$5,276.00	$5,408.00	$5,543.50	$5,682.50
	Monthly	$8,467	$8,891	$9,336	$9,803	$10,294	$10,552	$10,816	$11,087	$11,365
	Yearly	$101,604	$106,692	$112,032	$117,636	$123,528	$126,624	$129,792	$133,044	$136,380
Construction & Maintenance Manager	Bi-monthly	$4,401.00	$4,621.50	$4,853.00	$5,096.00	$5,351.00	$5,485.00	$5,622.50	$5,763.50	$5,908.00
	Monthly	$8,802	$9,243	$9,706	$10,192	$10,702	$10,970	$11,245	$11,527	$11,816
	Yearly	$105,624	$110,916	$116,472	$122,304	$128,424	$131,640	$134,940	$138,324	$141,792
Plant Operations Manager	Bi-monthly	$4,621.50	$4,853.00	$5,096.00	$5,351.00	$5,619.00	$5,759.50	$5,903.50	$6,051.50	$6,203.00
	Monthly	$9,243	$9,706	$10,192	$10,702	$11,238	$11,519	$11,807	$12,103	$12,406
	Yearly	$110,916	$116,472	$122,304	$128,424	$134,856	$138,228	$141,684	$145,236	$148,872
Manager of Water Resources	Bi-monthly	$4,621.50	$4,853.00	$5,096.00	$5,351.00	$5,619.00	$5,759.50	$5,903.50	$6,051.50	$6,203.00
	Monthly	$9,243	$9,706	$10,192	$10,702	$11,238	$11,519	$11,807	$12,103	$12,406
	Yearly	$110,916	$116,472	$122,304	$128,424	$134,856	$138,228	$141,684	$145,236	$148,872

*Addition of Information Systems Administrator per Res. No. 2022-
**District Engineer salary range updated per Res. No. 2022-__

APPENDIX D - Management and Confidential Unit Salary Schedule
Effective July 1, 2024 (with 2.0% Salary Increase)

Classification	Rate Type	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Director of Administrative Services	Bi-monthly	$5,431.00	$5,703.00	$5,988.50	$6,288.00	$6,602.50	$6,768.00	$6,937.50	$7,111.00	$7,289.00
	Monthly	$10,862	$11,406	$11,977	$12,576	$13,205	$13,536	$13,875	$14,222	$14,578
	Yearly	$130,344	$136,872	$143,724	$150,912	$158,460	$162,432	$166,500	$170,664	$174,936
Director of Operations	Bi-monthly	$5,818.50	$6,109.50	$6,415.00	$6,736.00	$7,073.00	$7,250.00	$7,431.50	$7,617.50	$7,808.00
	Monthly	$11,637	$12,219	$12,830	$13,472	$14,146	$14,500	$14,863	$15,235	$15,616
	Yearly	$139,644	$146,628	$153,960	$161,664	$169,752	$174,000	$178,356	$182,820	$187,392
Deputy Director of Operations	Bi-monthly	$4,714.00	$4,950.00	$5,197.50	$5,457.50	$5,730.50	$5,874.00	$6,021.00	$6,172.00	$6,326.50
	Monthly	$9,428	$9,900	$10,395	$10,915	$11,461	$11,748	$12,042	$12,344	$12,653
	Yearly	$113,136	$118,800	$124,740	$130,980	$137,532	$140,976	$144,504	$148,128	$151,836
Distribution/Collections Manager	Bi-monthly	$4,489.50	$4,714.00	$4,950.00	$5,197.50	$5,457.50	$5,594.00	$5,734.00	$5,877.50	$6,024.50
	Monthly	$8,979	$9,428	$9,900	$10,395	$10,915	$11,188	$11,468	$11,755	$12,049
	Yearly	$107,748	$113,136	$118,800	$124,740	$130,980	$134,256	$137,616	$141,060	$144,588
District Engineer**	Bi-monthly	$5,818.50	$6,109.50	$6,415.00	$6,736.00	$7,073.00	$7,250.00	$7,431.50	$7,617.50	$7,808.00
	Monthly	$11,637	$12,219	$12,830	$13,472	$14,146	$14,500	$14,863	$15,235	$15,616
	Yearly	$139,644	$146,628	$153,960	$161,664	$169,752	$174,000	$178,356	$182,820	$187,392
Executive Assistant/Clerk to the Board (C)	Hourly	$33.40	$35.08	$36.83	$38.68	$40.62	$41.63	$42.68	$43.74	$44.84
	Bi-monthly	$2,895.00	$3,040.00	$3,192.00	$3,352.00	$3,520.00	$3,608.00	$3,698.50	$3,791.00	$3,886.00
	Monthly	$5,790	$6,080	$6,384	$6,704	$7,040	$7,216	$7,397	$7,582	$7,772
	Yearly	$69,480	$72,960	$76,608	$80,448	$84,480	$86,592	$88,764	$90,984	$93,264
External Affairs Manager I	Bi-monthly	$4,215.00	$4,426.00	$4,647.50	$4,880.00	$5,124.00	$5,252.50	$5,384.00	$5,519.00	$5,657.00
	Monthly	$8,430	$8,852	$9,295	$9,760	$10,248	$10,505	$10,768	$11,038	$11,314
	Yearly	$101,160	$106,224	$111,540	$117,120	$122,976	$126,060	$129,216	$132,456	$135,768
External Affairs Manager II	Bi-monthly	$4,426.00	$4,647.50	$4,880.00	$5,124.00	$5,380.50	$5,515.50	$5,653.50	$5,795.00	$5,940.00
	Monthly	$8,852	$9,295	$9,760	$10,248	$10,761	$11,031	$11,307	$11,590	$11,880
	Yearly	$106,224	$111,540	$117,120	$122,976	$129,132	$132,372	$135,684	$139,080	$142,560
Human Resources Manager***	Bi-monthly	$4,646.50	$4,879.00	$5,123.00	$5,379.50	$5,648.50	$5,790.00	$5,935.00	$6,083.50	$6,236.00
	Monthly	$9,293	$9,758	$10,246	$10,759	$11,297	$11,580	$11,870	$12,167	$12,472
	Yearly	$111,516	$117,096	$122,952	$129,108	$135,564	$138,960	$142,440	$146,004	$149,664
Human Resources Technician (C)	Hourly	$31.81	$33.40	$35.08	$36.83	$38.68	$39.65	$40.64	$41.66	$42.70
	Bi-monthly	$2,757.00	$2,895.00	$3,040.00	$3,192.00	$3,352.00	$3,436.00	$3,522.00	$3,610.50	$3,701.00
	Monthly	$5,514	$5,790	$6,080	$6,384	$6,704	$6,872	$7,044	$7,221	$7,402
	Yearly	$66,168	$69,480	$72,960	$76,608	$80,448	$82,464	$84,528	$86,652	$88,824
Information Systems Administrator*	Bi-monthly	$4,318.50	$4,534.50	$4,761.50	$5,000.00	$5,250.00	$5,381.50	$5,516.50	$5,654.50	$5,796.00
	Monthly	$8,637	$9,069	$9,523	$10,000	$10,500	$10,763	$11,033	$11,309	$11,592
	Yearly	$103,644	$108,828	$114,276	$120,000	$126,000	$129,156	$132,396	$135,708	$139,104
Construction & Maintenance Manager	Bi-monthly	$4,489.50	$4,714.00	$4,950.00	$5,197.50	$5,457.50	$5,594.00	$5,734.00	$5,877.50	$6,024.50
	Monthly	$8,979	$9,428	$9,900	$10,395	$10,915	$11,188	$11,468	$11,755	$12,049
	Yearly	$107,748	$113,136	$118,800	$124,740	$130,980	$134,256	$137,616	$141,060	$144,588
Plant Operations Manager	Bi-monthly	$4,714.00	$4,950.00	$5,197.50	$5,457.50	$5,730.50	$5,874.00	$6,021.00	$6,172.00	$6,326.50
	Monthly	$9,428	$9,900	$10,395	$10,915	$11,461	$11,748	$12,042	$12,344	$12,653
	Yearly	$113,136	$118,800	$124,740	$130,980	$137,532	$140,976	$144,504	$148,128	$151,836
Manager of Water Resources	Bi-monthly	$4,714.00	$4,950.00	$5,197.50	$5,457.50	$5,730.50	$5,874.00	$6,021.00	$6,172.00	$6,326.50
	Monthly	$9,428	$9,900	$10,395	$10,915	$11,461	$11,748	$12,042	$12,344	$12,653
	Yearly	$113,136	$118,800	$124,740	$130,980	$137,532	$140,976	$144,504	$148,128	$151,836

*Addition of Information Systems Administrator per Res. No. 2022-
**District Engineer salary range updated per Res. No. 2022-__

Management and Confidential Unit Salary Schedule
Effective July 1, 2025 (with 2.0% Salary Increase)

Classification	Rate Type	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Director of Administrative Services	Bi-monthly	$5,540.00	$5,817.00	$6,108.00	$6,413.50	$6,734.50	$6,903.00	$7,076.00	$7,253.00	$7,434.50
	Monthly	$11,080	$11,634	$12,216	$12,827	$13,469	$13,806	$14,152	$14,506	$14,869
	Yearly	$132,960	$139,608	$146,592	$153,924	$161,628	$165,672	$169,824	$174,072	$178,428
Director of Operations	Bi-monthly	$6,054.00	$6,357.00	$6,675.00	$7,009.00	$7,359.50	$7,543.50	$7,732.50	$7,926.00	$8,124.50
	Monthly	$12,108	$12,714	$13,350	$14,018	$14,719	$15,087	$15,465	$15,852	$16,249
	Yearly	$145,296	$152,568	$160,200	$168,216	$176,628	$181,044	$185,580	$190,224	$194,988
Deputy Director of Operations	Bi-monthly	$4,808.50	$5,049.00	$5,301.50	$5,567.00	$5,845.50	$5,992.00	$6,142.00	$6,296.00	$6,453.50
	Monthly	$9,617	$10,098	$10,603	$11,134	$11,691	$11,984	$12,284	$12,592	$12,907
	Yearly	$115,404	$121,176	$127,236	$133,608	$140,292	$143,808	$147,408	$151,104	$154,884
Distribution/Collections Manager	Bi-monthly	$4,579.50	$4,808.50	$5,049.00	$5,301.50	$5,567.00	$5,706.50	$5,849.50	$5,996.00	$6,146.00
	Monthly	$9,159	$9,617	$10,098	$10,603	$11,134	$11,413	$11,699	$11,992	$12,292
	Yearly	$109,908	$115,404	$121,176	$127,236	$133,608	$136,956	$140,388	$143,904	$147,504
District Engineer**	Bi-monthly	$6,054.00	$6,357.00	$6,675.00	$7,009.00	$7,359.50	$7,543.50	$7,732.50	$7,926.00	$8,124.50
	Monthly	$12,108	$12,714	$13,350	$14,018	$14,719	$15,087	$15,465	$15,852	$16,249
	Yearly	$145,296	$152,568	$160,200	$168,216	$176,628	$181,044	$185,580	$190,224	$194,988
Executive Assistant/Clerk to the Board (C)	Hourly	$34.07	$35.78	$37.58	$39.46	$41.43	$42.47	$43.53	$44.63	$45.74
	Bi-monthly	$2,953.00	$3,101.00	$3,256.50	$3,419.50	$3,590.50	$3,680.50	$3,773.00	$3,867.50	$3,964.50
	Monthly	$5,906	$6,202	$6,513	$6,839	$7,181	$7,361	$7,546	$7,735	$7,929
	Yearly	$70,872	$74,424	$78,156	$82,068	$86,172	$88,332	$90,552	$92,820	$95,148
External Affairs Manager I	Bi-monthly	$4,299.50	$4,514.50	$4,740.50	$4,978.00	$5,227.00	$5,358.00	$5,492.00	$5,629.50	$5,770.50
	Monthly	$8,599	$9,029	$9,481	$9,956	$10,454	$10,716	$10,984	$11,259	$11,541
	Yearly	$103,188	$108,348	$113,772	$119,472	$125,448	$128,592	$131,808	$135,108	$138,492
External Affairs Manager II	Bi-monthly	$4,515.00	$4,741.00	$4,978.50	$5,227.50	$5,489.00	$5,626.50	$5,767.50	$5,912.00	$6,060.00
	Monthly	$9,030	$9,482	$9,957	$10,455	$10,978	$11,253	$11,535	$11,824	$12,120
	Yearly	$108,360	$113,784	$119,484	$125,460	$131,736	$135,036	$138,420	$141,888	$145,440
Human Resources Manager***	Bi-monthly	$4,739.50	$4,976.50	$5,225.50	$5,487.00	$5,761.50	$5,906.00	$6,054.00	$6,205.50	$6,361.00
	Monthly	$9,479	$9,953	$10,451	$10,974	$11,523	$11,812	$12,108	$12,411	$12,722
	Yearly	$113,748	$119,436	$125,412	$131,688	$138,276	$141,744	$145,296	$148,932	$152,664
Human Resources Technician (C)	Hourly	$32.45	$34.08	$35.79	$37.58	$39.46	$40.45	$41.46	$42.50	$43.57
	Bi-monthly	$2,812.50	$2,953.50	$3,101.50	$3,257.00	$3,420.00	$3,505.50	$3,593.50	$3,683.50	$3,776.00
	Monthly	$5,625	$5,907	$6,203	$6,514	$6,840	$7,011	$7,187	$7,367	$7,552
	Yearly	$67,500	$70,884	$74,436	$78,168	$82,080	$84,132	$86,244	$88,404	$90,624
Information Systems Administrator*	Bi-monthly	$4,405.00	$4,625.50	$4,857.00	$5,100.00	$5,355.00	$5,489.00	$5,626.50	$5,767.50	$5,912.00
	Monthly	$8,810	$9,251	$9,714	$10,200	$10,710	$10,978	$11,253	$11,535	$11,824
	Yearly	$105,720	$111,012	$116,568	$122,400	$128,520	$131,736	$135,036	$138,420	$141,888
Construction & Maintenance Manager	Bi-monthly	$4,579.50	$4,808.50	$5,049.00	$5,301.50	$5,567.00	$5,706.50	$5,849.50	$5,996.00	$6,146.00
	Monthly	$9,159	$9,617	$10,098	$10,603	$11,134	$11,413	$11,699	$11,992	$12,292
	Yearly	$109,908	$115,404	$121,176	$127,236	$133,608	$136,956	$140,388	$143,904	$147,504
Plant Operations Manager	Bi-monthly	$4,808.50	$5,049.00	$5,301.50	$5,567.00	$5,845.50	$5,992.00	$6,142.00	$6,296.00	$6,453.50
	Monthly	$9,617	$10,098	$10,603	$11,134	$11,691	$11,984	$12,284	$12,592	$12,907
	Yearly	$115,404	$121,176	$127,236	$133,608	$140,292	$143,808	$147,408	$151,104	$154,884
Manager of Water Resources	Bi-monthly	$4,808.50	$5,049.00	$5,301.50	$5,567.00	$5,845.50	$5,992.00	$6,142.00	$6,296.00	$6,453.50
	Monthly	$9,617	$10,098	$10,603	$11,134	$11,691	$11,984	$12,284	$12,592	$12,907
	Yearly	$115,404	$121,176	$127,236	$133,608	$140,292	$143,808	$147,408	$151,104	$154,884

*Addition of Information Systems Administrator per Res. No. 2022-
**District Engineer salary range updated per Res. No. 2022-__

RESOLUTION NO 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

APPROVING A SIDE LETTER TO THE AGREEMENT BETWEEN THE CALAVERAS COUNTY WATER DISTRICT AND THE MANAGEMENT AND CONFIDENTIAL UNIT (MCU) EFFECTIVE JULY 1, 2021 THROUGH JUNE 30, 2026

WHEREAS, both the Board of Directors of the Calaveras County Water District (CCWD) and MCU entered into an Agreement having an effective date of July 1, 2021 through June 30, 2026, the terms of which the Agreement are incorporated herein by this reference; and

WHEREAS, the Board of Directors agree to the addition of the Information Administrator classification; and

WHEREAS, the Board of Directors agree to revise language under section 8 – Medical and Related Benefits for the clarification of eligible employees; and

WHEREAS, the Board of Directors agree to amend the salary for the District Engineer classification; and

WHEREAS, District staff has successfully met and conferred with Management and Confidential Unit to address concerns regarding the addition of the classification.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT approve the addition of the Information Administrator classification series as depicted in the wage schedule effective July 1, 2022, attached hereto and made a part hereof.

PASSED AND ADOPTED by this 27th day of July 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

Agenda Item

DATE: July 27, 2022

TO: Michael Minkler, General Manager

FROM: Jessica Self, External Affairs Manager

SUBJECT: Approval of Variance Request from the Owner of 49 Cosmic Court, Copperopolis

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CUSTOMER REQUEST:

Motion: _____/_____ adopting Resolution No. 2022 - __ Granting a Variance to the Calaveras County Water District Rules And Regulations Governing The Furnishing Of Water and/or Wastewater, for APN 061-040-022, 49 Cosmic Court, Copperopolis

SUMMARY:

This variance was discussed in depth and tentatively approved at the Board Meeting of July 13, 2022. Staff have drafted the attached Resolution according to Board direction and final approval is required.

FINANCIAL CONSIDERATIONS:

The accounts for water for suites A, B and C located at 49 Cosmic Court would be terminated and removed. Suite D will become the master meter for the building. Wastewater would be updated to reflect the entire building demand of to 2.2 EDU's. This change will be effective the original approval date of July 13, 2022. The customer is aware that the reduction in accounts is equivalent to the forfeiture of current capacity.

Attachments: *Resolution 2022-__ Granting a Variance for 49 Cosmic Court*

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

GRANTING A VARIANCE TO CALAVERAS COUNTY WATER DISTRICT RULES AND REGULATIONS GOVERNING THE FURNISHING OF WATER AND/OR WASTEWATER, FOR APN 061-040-022, 49 COSMIC COURT, COPPEROPOLIS

WHEREAS, the Board of Directors of the Calaveras County Water District (District) adopted the Rules and Regulations Governing the Furnishing of Water and/or Wastewater Services on December 7, 1954; and

WHEREAS, on April 8, 2020, the Board of Directors adopted Resolution No. 2020-24 Policy No. 22 Exceptions to Standards, Rules and Policies which allows for exceptions or variances to the Rules and Regulations;

WHEREAS, on July 12, 2022 Mr. and Mrs. Benites requested a variance to CCWD's Rules and Regulations Governing the Furnishing of Water and/or Wastewater Service, to shut off three of the four water meters and allow the remaining water meter to become the Master Meter for the entire building; and

WHEREAS, Mr. and Mrs. Benites also requested a variance to CCWD's Rules and Regulations Governing the Furnishing of Water and/or Wastewater Service, to remove three of the four sewer equivalents; and

NOW, THEREFORE, BE IT RESOLVED that the Board finds the variance request is consistent with the guidelines set out in CCWD's Variance Policy (Board Policy No. 22), in that it does not discriminate for or against any ratepayer, does not establish sub-standard facilities, puts water to reasonable and beneficial use, and achieves a fair result for the applicant; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT hereby approves a variance of CCWD's Rules and Regulations Governing the Furnishing of Water and/or Wastewater Services as follows:

Unit A–Account #711-08939-00-removal of water meter and one sewer equivalent
Unit B–Account #711-08942-00-removal of water meter and one sewer equivalent
Unit C–Account #711-08943-00-removal of water meter and one sewer equivalent
Unit D–Account #711-08944-00–will become the Master Meter for the entire building and the sewer equivalents will be updated to reflect the entire building demand of 2.2 EDU

THEREFORE, BE IT FURTHER RESOLVED that Mr. and Mrs. Benites understand that a reduction in accounts is also equivalent to the forfeiture of current capacity. Should the property owner need additional capacity in the future, they must apply for and pay fees associated with obtaining the increased capacity.

PASSED AND ADOPTED this 27th day of July 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Bertha Underhill, President
Board of Directors

ATTEST**:**

_____
Rebecca Hitchcock
Clerk to the Board

Agenda Item

DATE: July 27, 2022

TO: Board of Directors

FROM: Brad Arnold, Water Resources Program Manager

SUBJECT: Discussion/Action regarding Amendments to Eastside GSA Memorandum of Understanding and Groundwater Sustainability Plan

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RECOMMENDED ACTIONS:

Motion ____/____ adopting Resolution No. 2022-____ executing the First Amendment to the First Amended and Restated Memorandum of Understanding for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency.

Motion ____/____ adopting Resolution No. 2022-____ accepting the Amendment to the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan.

KEY POINTS:

1. Amendment to Eastside GSA Restated MOU is needed to address requirements of Executive Order N-7-22, by formalizing a GSA "Technical Advisory Committee" (TAC) tasked with reviewing new groundwater well or existing well alteration permits in the Subbasin for consistency with the Groundwater Sustainability Plan (GSP).
2. The Eastern San Joaquin Groundwater Authority (GWA), in coordination with the Eastside GSA and other GWA members, developed Technical Memorandums 1 through 4 (TMs) as appendices to an amended GSP to directly address the deficiencies identified in the California Department of Water Resources' GSP review notice, which must be adopted by the GWA members by July 27, 2022.
3. The Eastside GSA is moving forward with the GSP implementation phase of SGMA, but has continued to deal with issues surrounding governance, multi-county structuring, member involvement, etc. Additionally, there are Project Management Actions (PMAs) which have been brought to the GSA for consideration and approval which still need to be addressed (e.g., Threfall Ranch Reservoir Project).

SUMMARY:

Calaveras County Water District (CCWD) overlies a portion of the Eastern San Joaquin Groundwater Sub-Basin (Subbasin), primarily in northwestern parts of Calaveras County including its Wallace and Jenny Lind Water Service Areas. Per the requirements of the Sustainable Groundwater Management Act of 2014 (SGMA), CCWD and other agencies across the Subbasin formed the Eastern San Joaquin Groundwater Authority

(GWA), aimed at developing a unified Groundwater Sustainability Plan (GSP) to help define long-term management of Sub-Basin groundwater resources. Within the SGMA framework, CCWD and other local agencies also formed the Eastside Groundwater Sustainability Agency (Eastside GSA) aimed at managing Subbasin issues and enacting SGMA within Calaveras County and portions of Stanislaus County. As such, the Eastside GSA has been responsible for groundwater management in this region since its formation under a Memorandum of Understanding (MOU) in 2017.

MOU Amendment

On March 28, 2022, California Governor Gavin Newsom issued Executive Order N-7-22 (Executive Order) which requires applicable Groundwater Sustainability Agencies (GSAs) to make finding(s) of consistency with applicable GSPs for new groundwater well or existing well alteration permits (Applications) in a subbasin subject to SGMA. The Eastside GSA is subject to this Executive Order requirement and must therefore develop the ability to make GSP consistency determinations and findings for Applications in its portion of the Subbasin. The proposed amendment to the MOU, provided in Attachment A, formalizes the formation of a "Technical Advisory Committee" (TAC) within the Eastside GSA, comprised of a staff member from each GSA participant, tasked with making these determination(s) on behalf of the Eastside GSA. A copy of the draft TAC findings form is provided in Attachment B, planned to be provided to Calaveras and/or Stanislaus County staff as part of their Application review and approval processes. Note the counties will continue to lead these processes, and the TAC will not have the authority to approve or deny an Application.

GSP Amendment

In January 2020, the GWA submitted its GSP to the California Department of Water Resources (DWR) for its review for compliance with SGMA. On January 27, 2022, DWR completed its initial review (Initial Review) of the GSP and identified several potential deficiencies that need to be addressed and resolved by the GWA members within 180 days. The GWA, in coordination with the Eastside GSA and the other GWA members, developed Technical Memorandums 1 through 4 (TMs) intended as a package amendment to the GSP as appendices which directly address the deficiencies identified in the Initial Review, along with some other revisions to other parts of the GSP. An overview of each of the TMs is provided below and in Attachment C:

1. *Undesirable Result Definition and Projects and Management Actions*: outlines several of the projects and management actions contemplated in the GSP, providing additional details and model analyses as prompted by the Initial Review. Many of the projects are either in-lieu recharge (i.e., existing groundwater use offset via surface water) or direct recharge projects. Note there are several projects identified by Stockton East Water District which intend to make use water made available from New Hogan Reservoir, likely from underutilized portions of CCWD's contractual allocations.
2. *Drinking Water & Shallow Wells*: additional thresholds added for domestic drinking water and shallow well monitoring within 3-mile radius of Subbasin monitoring wells to ensure these users' wells remain viable. Proposed

management actions in TM include additional outreach to domestic well owners and small water systems, distribution of current and forecast groundwater levels, and review of well standards to evaluate conditions and project opportunities.

3. *Groundwater Quality Degradation in Areas where further Groundwater Level Decline is Allowed*: TM continues to emphasize nexus between monitored groundwater levels and groundwater quality as method for monitoring impacts – only major concern in western portions of Subbasin bordering the Bay Delta. TM proposes additional monitoring and data sharing programs.
4. *Land Subsidence*: Despite long-term declining groundwater levels in the Subbasin, there are no historical records of impacts from land subsidence. Proposed to establish numerical or other quantifiable value to monitor and assess issues going forward.

These TMs must be adopted by the GWA members and individual Eastside GSA participants, given the current structure of the GSA. CCWD staff have reviewed the TMs in coordination with the other Eastside GSA participants and developed a joint feedback document sent to the GWA, with a copy provided as Attachment D. The GWA held a public meeting for final adoption of the TMs and incorporation into the GSP which addressed the comments provided by the public and most GWA members – however, the Eastside GSA comments were not incorporated into the attached TMs.

Eastside GSA Comments

Although not addressed in the TMs, none of the Eastside GSA comments or feedback affected the major conclusions of the TMs or the responses to DWR's Initial Review. CCWD staff recommended that the CCWD Board of Directors (Board) approve the amended given the deadline and risks associated with not adopting the amended GSP. That said, CCWD should acknowledge that its adoption of the amended GSP materials does not change the following facts:

1. Contemplated water source for Stockton East Water District (SEWD) Projects 1-3 of the GSP are from a contract with Bureau of Reclamation and CCWD for water made available from New Hogan Reservoir. SEWD receives an annual supply allocation per that contract and may use the portion of CCWD supply allocation that is not currently utilized. Given SEWD typically uses their entire allocation and has borrowed from CCWD's, the contemplated supplies available to these GSP projects is likely subject to CCWD's future utilization of its water supply.
2. OID/SSJID water rights remain subject to the terms of the 1988 operations agreement with the Bureau of Reclamation for use of the New Melones Reservoir facility. The terms of that agreement will govern the contemplated actions of Project 5 of the GSP.

These facts may impact the water supplies ultimately made available by the Project Management Actions (PMAs) aimed at achieving the long-term objectives of the Eastern San Joaquin Subbasin GSP. CCWD should continue to work with the GWA and other Eastside GSA members to help mitigate these issues and to balance CCWD's long term objectives with the GSP.

Eastside GSA Update

The Eastside GSA was established as a multi-county organization to address local groundwater issues and management under SGMA, as well as to leverage staff resources during development of the GSP. As SGMA reaches the "implementation phase" and certain GSP-contemplated management actions, projects, and analyses need to be performed, the Eastside GSA must resolve several outstanding issues to be best positioned to achieve the SGMA required deadlines (e.g., 2040 Subbasin sustainability targets). For the purposes of CCWD discussion, these issues include:

- Long-term governance of the Eastside GSA (MOU/Joint Powers Authority).
- Disparities in groundwater consumption/reliance and coverage areas versus Eastside GSA commitments, as illustrated in Attachment E.
    - Participant contributions, supplemental water, well user curtailments, etc.
    - Multi-County structure and County-level authorities.
    - Ongoing agency and staffing commitments.
- Address historic overdraft and monitoring requirements.

Threfall Ranch Reservoir Project

In late-2021, proponents of the Threfall Ranch Reservoir Project (Threfall Project) approached the Eastside GSA to review and approve it for possible inclusion in the GSP list of PMAs – which would open the Threfall Project to possible grant funding. The Threfall Project is a proposed in-lieu surface water storage project to offset groundwater use in Stanislaus County located near Knights Ferry and Sonora Road, which would ultimately benefit the Eastside GSA by reducing groundwater consumption. On March 5, 2022, the Eastside GSA reviewed the Threfall Project and approved it for consistency with the Subbasin GSP. The project proponents were instructed to work with Stanislaus County staff to investigate if the Threfall Project could be incorporated into the then-pending amended GSP materials.

Due to an oversight, the Threfall Project was not explicitly incorporated in the amended GSP TMs. Given the potential benefits of the project to the Eastside GSA region, without funding required from the GSA members, the GSA must now determine how best to include the Threfall Project in its long-term planning efforts. CCWD staff will update the Board as the GSA makes plans for next steps, for example, separate member resolutions referencing the Threfall Ranch Project.

FINANCIAL CONSIDERATIONS:

None at this time.

ENVIRONMENTAL CONSIDERATIONS:

This is not a project under the California Environmental Quality Act (CEQA), therefore CEQA requirements do not apply.

STRATEGIC PLANNING:

The 2021-2026+ CCWD Strategic Plan (Strategic Plan), adopted April 28, 2021, per Board of Directors' Resolution No. 2021-24, outlines several Goals and Objectives (Objectives) meant to identify organizational opportunities and measure CCWD's results over time. Consistent with the Strategic Plan, this Agenda Item supports the following Objectives:

- PI-02, Strategic Plan pg. 10: Responsible management of groundwater resources countywide and evaluating opportunities for conjunctive use.
- PP-04, Strategic Plan pg. 12: Continue to develop relationships with local, regional, state, and federal partners to manage CCCWD's risk and leverage its assets.

For more info on the Strategic Plan, visit: ccwd.org/ccwd-adopts-2021-2026-strategic-plan/

Attachments:
A) GSA Restated MOU Amendment
B) Draft GSA TAC Findings Document
C) GSP Amendment Materials (Technical Memos)
D) GSA TMs Feedback
E) GSA Coverage Area & Consumption Overview
F) Resolution No. 2022-__Adopting the Amended GSP for the Eastern San Joaquin Subbasin
G) Resolution No. 2022-__ Amending the MOU for Implementation of the SGMA in Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastern San Joaquin Groundwater Management Agency

FIRST AMENDMENT TO THE FIRST AMENDED AND RESTATED MEMORANDUM OF UNDERSTANDING FOR IMPLEMENTATION OF THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT IN THE EASTERN SAN JOAQUIN GROUNDWATER BASIN BY SUPPORTING FORMATION OF THE EASTSIDE SAN JOAQUIN GROUNDWATER MANAGEMENT AGENCY

WHEREAS, on April 17, 2017, the Eastside San Joaquin Groundwater Sustainability Agency ("Eastside GSA") was formed via a Memorandum of Understanding ("MOU") executed by the governing bodies of Stanislaus County, the Calaveras County Water District, and the Rock Creek Water District to begin implementing the Sustainable Management Groundwater Act ("SGMA"); and

WHEREAS, on April 9, 2018, the governing body of Calaveras County joined the Eastside GSA through the adoption of a First Amended and Restated Memorandum of Understanding for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency ("Restated MOU"); and

WHEREAS, the Eastside GSA is a member of the Eastern San Joaquin Groundwater Authority, a Joint Powers Authority; and

WHEREAS, on March 28, 2022, Governor Gavin Newsom issued Executive Order N-7-22, Section 9 of which concerns GSA findings for permits for a new groundwater well or for alteration of an existing well in a basin subject to the SGMA and classified as medium- or high-priority; and

WHEREAS, Eastside GSA anticipates the possibility that there might arise additional circumstances in which it might want or need to consider certain additional development permits or projects within its boundaries;

NOW, THEREFORE, it is hereby agreed among the members of the Eastside GSA that Restated MOU is amended as follows:

1. Section 6 (e) will be added to the MOU, stating:

   The GSA would have the authority to establish and maintain a Technical Advisory Committee ("TAC") for the purposes of supporting GSA technical analysis and handling requests for technical review. Each Party may appoint one representative to the TAC.

2. Section 23 will be added to the MOU, stating:

   *23. **Technical Review.** When a Party, or any other local public agency that is wholly or partially located within the boundary of the GSA, is required by law to seek GSA review or verification, such review or verification will be undertaken by the TAC. The TAC will have no authority to approve or deny a project.*

3. Except as specifically amended herein, the terms of the Restated MOU remain in full force and effect.

4. This instrument may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will be deemed to be one and the same agreement.

By signing below, the governing bodies of the Eastside GSA, through their duly authorized representatives, agree to comply with and be bound by the terms of this amendment to the Restated MOU.

[**SIGNATURE PAGE]**

COUNTY OF CALAVERAS

Signature _____

Name _____

Title _____

CALAVERAS COUNTY WATER DISTRICT

Signature _____

Name _____

Title _____

ROCK CREEK WATER DISTRICT

Signature _____

Name _____

Title _____

COUNTY OF STANISLAUS

Signature _____

Name _____

Title _____

Contact Information:
Eastside San Joaquin Groundwater Sustainability Agency
c/o Calaveras County Water District
120 Toma Court, San Andreas, CA 95249
Phone: (209) 754-3028
E-mail: administration@ccwd.org

EASTSIDE GSA FINDINGS PER EO N-7-22
FOR WELL PERMITS AND WELL ALTERATION APPLICATIONS
LOCATED IN THE EASTERN SAN JOAQUIN GROUNDWATER SUBBASIN

As required by the Governor's Executive Order N-7-22 (EO N-7-22), enacted March 28, 2022, the Eastside San Joaquin Groundwater Sustainability Agency (Eastside GSA) has made the following findings concerning Well Permit or Well Alteration Application No. _____ (Application) located within the Eastern San Joaquin Groundwater Subbasin (Subbasin) and in _____ County.

THE GROUNDWATER EXTRACTION USES PROPOSED BY THIS APPLICATION _____ INCONSISTENT WITH ANY SUSTAINABLE GROUNDWATER MANAGEMENT PROGRAM ESTABLISHED IN THE APPLICABLE GROUNDWATER SUSTAINABILITY PLAN (GSP) ADOPTED BY THE EASTSIDE GSA MEMBERS.

THE GROUNDWATER EXTRACTION PROPOSED THROUGH THIS APPLICATION _____ DECREASE THE LIKELIHOOD OF THE EASTSIDE GSA ACHIEVING ITS SUSTAINABILITY GOALS FOR THE PORTION OF THE SUBBASIN IT MANAGES.

These findings have been provided by the Eastside GSA's Technical Advisory Committee on _____, 2022, per the authorities granted under Section 23 of the "First Amendment to the First Amended and Restated Memorandum of Understanding for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency." These findings do not constitute an approval or denial of the Application by the Eastside GSA or its members.

_____
Signature

_____
Name

_____
Eastside GSA Member Name

Eastern San Joaquin Groundwater Subbasin

Groundwater Sustainability Plan: Executive Summary

Prepared by:

EASTERN SAN JOAQUIN GROUNDWATER AUTHORITY

November 2019; Revised June 2022

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Acronyms

AF	acre-feet
AF/year	acre-feet per year
Cal Water	California Water Service Company Stockton District
CASGEM	California Statewide Groundwater Elevation Monitoring
CCWD	Calaveras County Water District
CDWA	Central Delta Water Agency
CSJWCD	Central San Joaquin Water Conservation District
Delta	Sacramento-San Joaquin River Delta
DMS	data management system
DWR	Department of Water Resources
Eastside GSA	Eastside San Joaquin GSA
ESJGWA	Eastern San Joaquin Groundwater Authority
ESJGWA Board	Eastern San Joaquin Groundwater Authority Board of Directors
ESJWRM	Eastern San Joaquin Water Resources Model
GAMA	Groundwater Ambient Monitoring and Assessment
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
LCWD	Linden County Water District
LCSD	Lockeford Community Services District
Letter	Consultation Initiation Letter
MAF	million acre-feet
mg/L	milligrams per liter
NSJWCD	North San Joaquin Water Conservation District
OID	Oakdale Irrigation District
PMAs	projects and management actions
SDWA	South Delta Water Agency
SEWD	Stockton East Water District
SGMA	Sustainable Groundwater Management Act
SMCL	secondary maximum contaminant levels
SSJID	South San Joaquin Irrigation District
TDS	total dissolved solids
TSS	Technical Support Services
USGS	United States Geological Survey
WID	Woodbridge Irrigation District
Workgroup	Groundwater Sustainability Workgroup

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EXECUTIVE SUMMARY

ES-1. INTRODUCTION

Critical Dates for the Eastern San Joaquin Subbasin

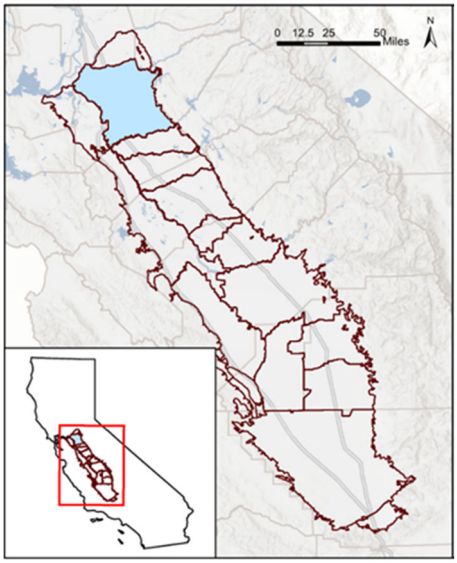
- 2020 By January 31: Submit GSP to DWR
- 2025 Evaluate GSP and update if warranted
- 2030 Evaluate GSP and update if warranted
- 2035 Evaluate GSP and update if warranted
- 2040 Achieve sustainability for the Subbasin

In 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) in response to continued overdraft of California's groundwater resources. The Eastern San Joaquin Groundwater Subbasin (Eastern San Joaquin Subbasin, or Subbasin) is one of 21 basins and subbasins identified by the California Department of Water Resources (DWR) as being in a state of critical overdraft. SGMA requires preparation of a Groundwater Sustainability Plan (GSP) to address measures necessary to attain sustainable conditions in the Subbasin. Within the framework of SGMA, sustainability is generally defined as long-term reliability of the groundwater supply and the absence of undesirable results.

The Eastern San Joaquin Groundwater Authority (ESJGWA) was formed in 2017 in response to SGMA. A Joint Exercise of Powers Agreement establishes the ESJGWA, which is composed of 16 Groundwater Sustainability Agencies (GSAs): Central Delta Water Agency (CDWA), Central San Joaquin Water Conservation District (CSJWCD), City of Lodi, City of Manteca, City of Stockton, Eastside San Joaquin GSA (Eastside GSA) (composed of Calaveras County Water District [CCWD], Stanislaus County, and Rock Creek Water District), Linden County Water District (LCWD), Lockeford Community Services District (LCSD), North San Joaquin Water Conservation District (NSJWCD), Oakdale Irrigation District (OID), San Joaquin County No. 1, San Joaquin County No. 2 (with participation from California Water Service Company Stockton District [Cal Water]), South Delta Water Agency (SDWA), South San Joaquin GSA (composed of South San Joaquin Irrigation District [SSJID] including Woodward Reservoir, City of Ripon, and City of Escalon), Stockton East Water District (SEWD), and Woodbridge Irrigation District (WID). The ESJGWA is governed by a 16-member Board of Directors (ESJGWA Board), with one representative from each GSA. The Board is guided by an Advisory Committee, also with one representative from each GSA, that is tasked with making recommendations to the ESJGWA Board on technical and substantive matters.

SGMA requires development of a GSP that achieves groundwater sustainability in the Subbasin by 2040. The GSP outlines the need to reduce overdraft conditions and has identified 23 projects for potential development that either replace groundwater use (offset) or supplement groundwater supplies (recharge) to meet current and future water demands. Although current analysis indicates that groundwater pumping offsets and/or recharge on the order of ~~78~~,37,000 acre-feet per year (AF/year) may be required to achieve sustainability, additional efforts are needed to confirm the level of pumping offsets and/or recharge required to achieve sustainability. These efforts include collecting additional data and a review of the Subbasin groundwater model, along with other efforts as outlined in the GSP.

Figure ES-1: GSP Plan Area within the San Joaquin Valley



A Public Draft GSP was prepared and made available for public review and comment on July 10, 2019 for a period of 45 days ending on August 25, 2019. The ESJGWA received numerous comments from the public, reviewed and prepared responses to comments, and revised the Draft GSP. This Final GSP includes those edits and revisions. Comment letters and responses are included as appendices to the GSP.

On November 18, 2021, the ESJGWA received a Consultation Initiation Letter (Letter) from DWR. The Letter identified two potential deficiencies in the Subbasin GSPs which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter initiated consultation between DWR, the Plan Manager, the ESJGWA, and the Subbasin's GSAs.

~~defiences and corrective actions to be addressed.~~ In response to DWR's comments, the~~is~~is GSP was revised in June 2022. DWR comments have also been addressed in a series of four technical memoranda appended to this revised GSP and referenced throughout the document.

ES-2. PLAN AREA

The ESJGWA's jurisdictional area is defined by the boundaries of the Eastern San Joaquin Subbasin in DWR's 2003 Bulletin 118 as updated in 2016 and 2018. The Subbasin underlies the San Joaquin Valley, as shown in Figure ES-1.

ES-3. OUTREACH EFFORTS

Figure ES-2 - Informational Open House Events

A stakeholder engagement strategy was developed to enable the interests of beneficial users of groundwater in the Subbasin to be considered. The strategy incorporated monthly Groundwater Sustainability Workgroup (Workgroup) meetings, monthly Advisory Committee meetings, monthly ESJGWA Board meetings, approximately quarterly informational open house events, outreach presentations to community groups, and information distribution to property owners and residents in the Subbasin. Figure ES-2 shows attendees at one of the informational open house events conducted during development of the GSP.

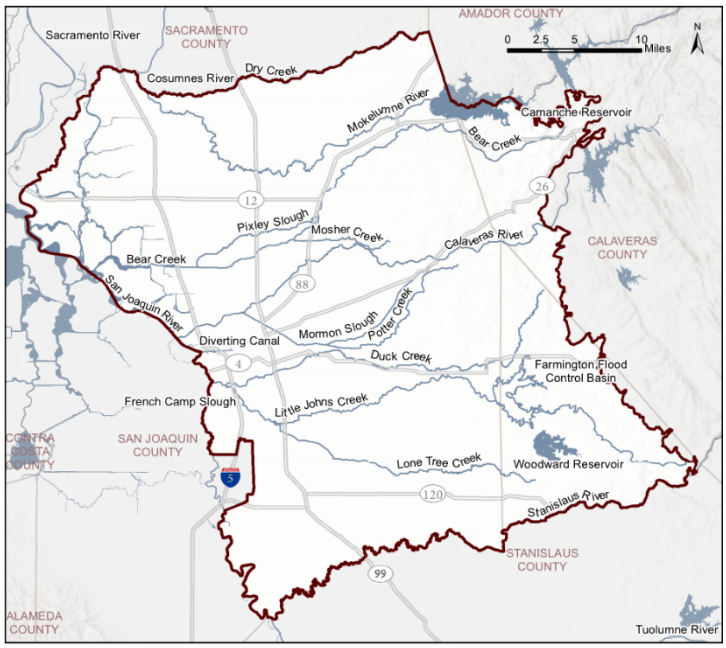
Public Meeting Type	Number of Meetings
ESJGWA Board Meetings	25
Advisory Committee Meetings	17
Groundwater Sustainability Workgroup Meetings	13
Informational Open House Events	4
Outreach Presentations to Community Groups	10

The Workgroup was established to encourage active involvement from diverse social, cultural, and economic elements of the population in the Subbasin. The 23 Workgroup members represent large and small landowners and growers from different geographic locations in the Subbasin, long-time residents, representatives from non-governmental organizations, disadvantaged community policy advocates, and outreach coordinators. Spanish translation was provided at informational open house events, creating an opportunity for local Spanish-speaking individuals to engage in the GSP development process. Input from the Workgroup was presented to the ESJGWA Board and has also been incorporated into the GSP.

ES-4. BASIN SETTING

The Subbasin is located to the west of the Sacramento-San Joaquin River Delta (Delta) and is bounded by the Sierra Nevada foothills to the east, the San Joaquin River to the west, Dry Creek to the north, and Stanislaus River to the south. In the eastern portion of the Subbasin, groundwater flows from east to west and generally mirrors the eastward sloping topography of the geologic formations. In the western portion of the Subbasin, groundwater flows eastward toward areas with relatively lower groundwater elevation. Surface water generally flows from east to west, with the major river systems traversing the Subbasin being the Calaveras, Mokelumne, and Stanislaus rivers. Multiple smaller streams flow into the San Joaquin River, which flows from south to north. The location of the Subbasin is shown in Figure ES-3.

Figure ES-3: Basin Setting

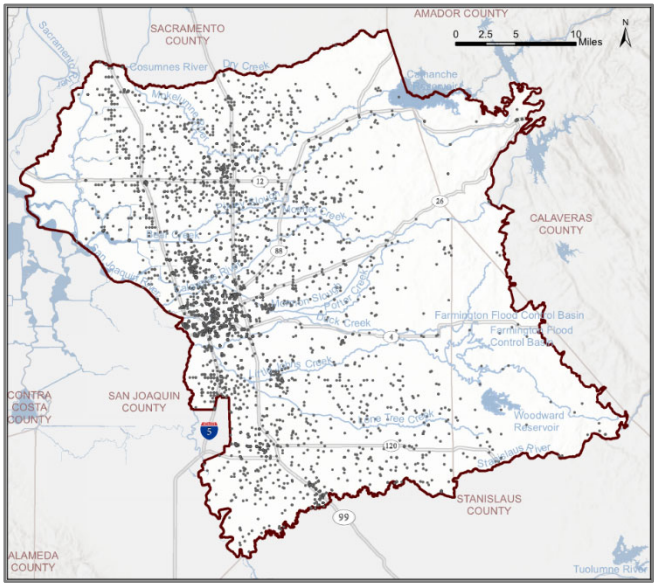


ES-5. EXISTING GROUNDWATER CONDITIONS

Groundwater levels in some portions of the Subbasin have been declining for many years, while groundwater levels in other areas of the Subbasin have remained stable or increased in recent years. The change in groundwater levels varies across the Subbasin, with the greatest declines occurring in the central portion of the Subbasin. The western and southern portions of the Subbasin have experienced less change in groundwater levels, in part due to the minimal groundwater pumping in the Delta area to the west and the import of surface water for agricultural and urban uses.

Groundwater quality in the Subbasin varies by location. Areas along the western margin have historically had higher levels of salinity. Salinity may be naturally occurring or the result of human activity. Sources of salinity in the Subbasin include Delta sediments, deep saline groundwater, and irrigation return water. Total dissolved solids (TDS), which is a measure of all inorganic and organic substances present in a liquid in molecular, ionized, or colloidal suspended form, is commonly used to measure salinity. The Groundwater Ambient Monitoring and Assessment (GAMA) Program includes numerous water quality monitoring sites in the Subbasin compiled from different sources, shown in Figure ES-4. Maximum TDS concentrations across the Subbasin have been reported as high as 2,500 milligrams per liter (mg/L) along portions of the Subbasin's western boundary. For drinking water, California has three secondary maximum contaminant level (SMCL) standards for TDS, all based on aesthetic considerations such as taste and odor, not public health concerns. These are 500 mg/L (recommended limit), 1,000 mg/L (upper limit), and 1,500 mg/L (short-term limit). TDS concentrations decrease significantly to the east, to typically less than 500 mg/L (the recommended limit for aesthetic considerations). Elevated concentrations of other constituents, such as nitrate, arsenic, and point-source contaminants, are generally localized and not widespread and are

Figure ES-4: GAMA Water Quality Sampling Locations



generally related to natural sources or land use activities. The GSP establishes ongoing monitoring of salinity, arsenic, nitrate, and a number of other common water quality constituents to fill data gaps and identify potential trends of concern.

While the total volume of groundwater in storage in the Subbasin has declined over time, groundwater storage reduction has not historically been an area of concern in the Subbasin, as there are large volumes of fresh water stored in the aquifer. The total fresh groundwater in storage was estimated at over 50 million-acre-feet (MAF) in 2015. The amount of groundwater in storage has decreased by approximately .01 percent per year between 1995 and 2015. As such, it is highly unlikely the Subbasin will experience conditions under which the volume of stored groundwater poses a concern, although the depth to access that groundwater does pose a concern.

Land subsidence has not historically been an area of concern in the Subbasin, and there are no records of land subsidence caused by groundwater pumping in the Subbasin.

Seawater intrusion is not present in the Subbasin. While the Delta ecosystem evolved with a natural salinity cycle that brought brackish tidal water in from the San Francisco Bay, current management practices endeavor to maintain freshwater flows through a combination of hydraulic and physical barriers and alterations to existing channels.

Surface waters can be hydraulically interconnected with the groundwater system, where the stream baseflow is either derived from the aquifer (gaining stream) or recharged to the aquifer (losing stream). If the water table beneath the stream lowers as a result of groundwater pumping, the stream may disconnect entirely from the underlying aquifer. Major river systems in the Subbasin are highly managed to meet instream flow requirements for fisheries, water quality standards, and water rights of users downstream.

ES-6. SUSTAINABLE MANAGEMENT CRITERIA

SGMA introduces several terms to measure sustainability, including:

Sustainability Indicators – Sustainability indicators refer to any of the effects caused by groundwater conditions occurring throughout the Subbasin that, when significant and unreasonable, cause undesirable results. The six sustainability indicators identified by DWR are the following:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon
- Significant and unreasonable reduction of groundwater storage
- Significant and unreasonable seawater intrusion
- Significant and unreasonable degraded water quality
- Significant and unreasonable land subsidence that substantially interferes with surface land uses
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

Sustainability Goal – This goal is the culmination of conditions resulting in a sustainable condition (absence of undesirable results) within 20 years.

Undesirable Results – Undesirable results are the significant and unreasonable occurrence of conditions that adversely affect groundwater use in the Subbasin, including reduction in the long-term viability of domestic, agricultural, municipal, or environmental uses of the Subbasin's groundwater. Categories of undesirable results are defined through the sustainability indicators.

Minimum Thresholds – Minimum thresholds are numeric values for each sustainability indicator and are used to define when undesirable results occur. Undesirable results occur if minimum thresholds are exceeded in an established percentage of sites in the Subbasin's representative monitoring network.

Measurable Objectives – Measurable objectives are a specific set of quantifiable goals for the maintenance or improvement of groundwater conditions.

The method prescribed by SGMA to measure undesirable results involves setting minimum thresholds and measurable objectives for a series of representative wells. Representative wells are identified to provide a basis for measuring groundwater conditions throughout a basin or subbasin without having to measure each well, which would be cost prohibitive. In the Eastern San Joaquin Subbasin, representative wells were selected based on history of recorded groundwater levels and potential to effectively represent the groundwater conditions.

Revisions to Sustainable Management Criteria –This revised GSP reflects changes made to the sustainable management criteria in response to the potential corrective actions ~~suggested~~recommended by DWR. In their Consultation Initiation Letter, DWR identified the following two deficiencies:

> **Potential Deficiency 1** – The GSP lacks sufficient justification for determining that undesirable results for chronic lowering of groundwater levels, subsidence, and depletion of interconnected surface waters can only occur in consecutive non-dry water year types. The GSP also lacks sufficient explanation for its minimum thresholds and undesirable results for chronic lowering of groundwater levels.
>
> **Potential Deficiency 2** - The GSP does not provide enough information to support the use of the chronic lowering of groundwater level sustainable management criteria and representative monitoring network as a proxy for land subsidence.

Revisions made to sustainable management crieria, as well as additional explanations as to how the Subbasin sustainability indicators and sustainable management criteria were determined, are described in Chapter 3: Sustainable Management Criteria.

~~The Letter identified two potential deficiencies with the GSP which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter thus initiated consultation between DWR, the Plan Manager, and the Subbasin's GSAs regarding the amount of time needed to address the potential deficiencies and corrective actions. A subsequent meeting with DWR was held on April 4, 2022 to discuss the Subbasin's proposed approach to addressing the identified deficiencies. The revisions to the sustainability indicators and sustainability management criteria represent the response to the Letter based on direction provided by the ESJGWA, the Subbasin GSAs, and DWR.~~

~~In their Letter, DWR identified the following two deficiencies:~~

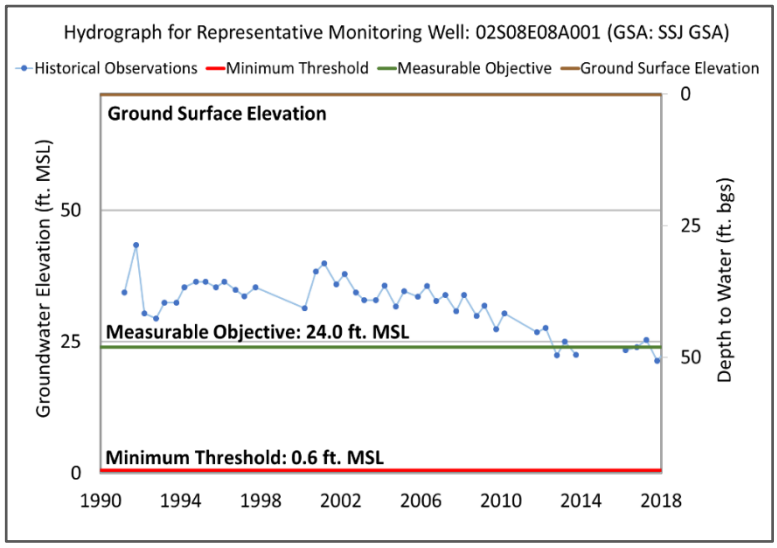
~~**Potential Deficiency 1** – The GSP lacks sufficient justification for determining that undesirable results for chronic lowering of groundwater levels, subsidence, and depletion of interconnected surface waters can only occur in consecutive non-dry water year types. The GSP also lacks sufficient explanation for its minimum thresholds and undesirable results for chronic lowering of groundwater levels.~~

~~**Potential Deficiency 2** – The GSP does not provide enough information to support the use of the chronic lowering of groundwater level sustainable management criteria and representative monitoring network as a proxy for land subsidence.~~

~~The Letter also provided Potential Corrective Actions. Six potential corrective actions were identified for Deficiency 1, and three potential corrective actions were identified for Deficiency 2. Revisions to this GSP reflect changes made to the Subbasin sustainability indicators and sustainable management criteria resulting from analyses and decisions made to address these deficiencies. Documentation of modifications made to Subbasin sustainability indicators and sustainable management criteria and additional explanation as to how the Subbasin sustainability indicators and sustainable management criteria were determined can be found in the appendices.~~

A total of 20 representative wells were identified for measurement of groundwater levels in the Subbasin, and 10 representative wells were identified for groundwater quality monitoring. The GSP uses groundwater quality data as the basis for evaluating conditions for seawater intrusion and uses groundwater level data as the basis for evaluating conditions for groundwater storage, depletions of interconnected surface water, and land subsidence. As such, these representative wells provide the basis for measuring the six sustainability indicators across the Subbasin.

Figure ES-5: Sample Relationship Between Minimum Threshold and Measurable Objective



Minimum thresholds and measurable objectives were developed for each of the representative wells. Figure ES-5 shows a typical relationship of the minimum thresholds, measurable objectives, and historical groundwater level data for a sample groundwater level representative monitoring well.

Minimum thresholds for groundwater levels were developed with reference to historical drought low conditions and domestic well depths. Specifically, minimum thresholds were established based on the deeper of the historical drought low plus a buffer of the historical fluctuation *or* the 10th percentile domestic well depth, whichever is shallower – establishing levels that are protective of 90 percent of domestic wells. In municipalities with ordinances requiring the use of City water (water provided by the City's municipal wells), the 10th percentile municipal well depth is used in place of the 10th percentile domestic well depth criteria.

Measurable objectives were established based on the historical drought low and provide a buffer above the minimum threshold. A table summarizing minimum thresholds and measurable objectives is included in the GSP. Graphs showing the minimum threshold and measurable objective for each of the representative wells are contained in an appendix to the GSP.

Minimum thresholds for water quality were defined by considering two primary beneficial uses at risk of undesirable results related to salinity: drinking water and agriculture uses. Minimum thresholds are 1,000 mg/L for each representative monitoring well, consistent with the upper limit SMCL for TDS. Crop tolerances in the Subbasin range by crop type from 900 mg/L TDS for almonds up to 4,000 mg/L TDS for wheat, assuming a 90 percent yield.

The minimum threshold for seawater intrusion is a 2,000 mg/L chloride isocontour line established near the western edge of the Subbasin, between sentinel monitoring locations. 2,000 mg/L chloride is approximately 10 percent of seawater chloride concentrations (19,500 mg/L) and was developed as a minimum threshold based on consideration of existing management practices in other areas of the state.

For depletions of interconnected surface water, the minimum thresholds and measurable objectives for groundwater levels are used. There is significant correlation between groundwater levels and depletions, and the groundwater levels minimum thresholds are found to be protective of depletions.

Similarly, the minimum thresholds and measurable objectives for groundwater levels are used for the land subsidence and groundwater storage sustainability indicators, as both are strongly linked to groundwater levels. The groundwater levels minimum thresholds are found to be protective of land subsidence and groundwater storage.

~~Two consecutive years of minimum threshold exceedances are used to determine if an undesirable result has occurred to establish a pattern rather than an isolated event. The lowering of groundwater levels during dry or critically dry years is not considered to be unreasonable unless the levels do not rebound to above the thresholds following wet conditions or are otherwise mitigated through adaptive management or implementation of projects and management actions. While statistically, three data points are required to establish a trend, three years of exceedances was felt to be too extreme, whereas a single exceedance was not sufficient to establish a trend. Therefore, the two consecutive years was selected as part of this definition.~~

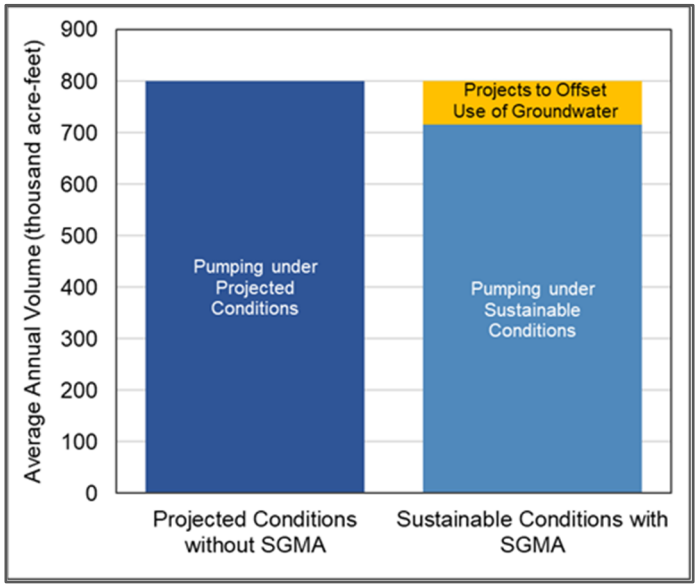
~~At least 25 percent of representative monitoring wells used to monitor groundwater levels falling below their minimum thresholds for two consecutive years was presented to the Eastern San Joaquin Technical Advisory Committee (ESJ TAC) during the April 10, 2019 meeting and was approved by the Eastern San Joaquin Groundwater Authority (ESJGWA) Board during the May 8, 2019 meeting. The Eastern San Joaquin Water Resources Model (ESJWRM) results under the projected conditions baseline scenario were used to evaluate minimum threshold exceedances, and the model results considered in determining that a 25 percent exceedance threshold was sufficient to determine that undesirable results would occur subbasin-wide (e.g., were not a localized event).~~

ES-7. WATER BUDGETS

The Eastern San Joaquin Subbasin has been in an overdraft condition for many years. Overdraft occurs when the amount of groundwater extracted exceeds the long-term average groundwater recharged.

The groundwater evaluations conducted as a part of GSP development have provided estimates of the historical, current, and projected groundwater budget conditions. The current analysis was prepared using the best available information and through development of a new groundwater modeling tool, the Eastern San Joaquin Water Resources Model (ESJWRM). It is anticipated that as additional information becomes available, the model can be updated, and more refined estimates of annual pumping and overdraft can be developed.

Figure ES-6: Subbasin-Wide Total Groundwater Pumping and Offsets Required to Achieve Sustainability



Following the submittal of the Eastern San Joaquin Subbasin GSP in January 2020, the ESJWRM was revised to correct data relating to historical surface water deliveries and to include additional data for Water Year (WY) 2016 through WY 2020. The ESJWRM simulation period was extended to simulate Water Years 1995 through 2020 and the model recalibrated for the extended period. As a result of the model update, both the historical and projected water budgets were revised in 2021 to reflect the new data sets used in the model. Additionally, refinements and enhancements were made to the historical data for the updated historical ESJWRM requiring an update to the projected conditions baseline ESJWRM. The updated version of the Projected Conditions Baseline (PCBL) used the extended dataset and calibration results, along with updated data sources and assumptions for projected conditions, representing approximately water year 2040 conditions.

Based on these analyses, at projected groundwater pumping levels, the long-term groundwater pumping offset and/or recharge required for the Subbasin to achieve sustainability is approximately ~~78~~16,000 AF/year. Groundwater levels are expected to continue to decline based on projections of current land and water uses. Projects that offset groundwater pumping and/or increase recharge will help the Subbasin reach sustainability, as illustrated in Figure ES-6.

The projected Subbasin water budget was also evaluated under climate change conditions, which simulate higher demand requiring increased groundwater pumping despite more precipitation and streamflows. ~~With the updated PCBL, the potential impact of climate change on the Subbasin in the future was also updated. The updated version of the Projected Conditions Baseline with Climate Change (PCBL-CC) largely used the same perturbation factors (2070 Central Tendency climate change conditions), but the updated PCBL-CC extends the simulation time period by two years. The climate change scenario used for the analysis was the 2070 central tendency climate change scenario prescribed by DWR. The overdraft modeled under climate change conditions is simulated to increase above projected conditions without climate change.~~

~~With the updated PCBL, the potential impact of climate change on the Subbasin in the future was also updated.~~ The updated version of the Projected Conditions Baseline with Climate Change (PCBL-CC) largely used the same perturbation factors (2070 Central Tendency climate change conditions) as the original simulation, but the updated PCBL-CC extended~~s~~ the simulation time period by two years. ~~The~~The overdraft modeled under climate change conditions is simulated to increase above projected conditions without climate change, requiring long-term groundwater pumping offset and/or recharge required for the Subbasin to achieve sustainability of approximately 38,000 AF/year.

Finally, as part of the revisions to this GSP to address DWR-identified deficiencies, projects and management actions (PMAs) likely to be implemented over the next five years were simulated in the projected water budget, both with and without climate change. The projected water budget with PMAs demonstrated that with implementation of the identified subset of projects, the Subbasin could achieve and maintain sustainability. However, when climate change impacts are added to the scenario, the Subbasin remains in overdraft conditions, indicating that additional PMAs will be required in the future to address climate change impacts on the groundwater basin.

ES-8. MONITORING NETWORKS

The GSP outlines the monitoring networks for the six sustainability indicators. The objective of these monitoring networks is to monitor conditions across the Subbasin and to detect trends toward undesirable results. Specifically, the monitoring network was developed to do the following:

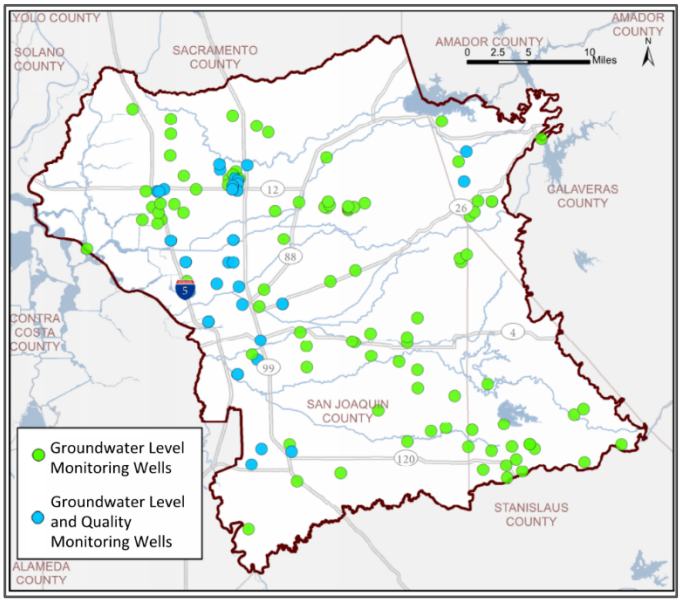
- Monitor impacts to the beneficial uses or users of groundwater
- Monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds
- Demonstrate progress toward achieving measurable objectives described in the GSP

There are four monitoring networks in the Eastern San Joaquin Subbasin: a representative network for water levels, a broad network for water levels, a representative network for water quality, and a broad network for water quality. Representative networks are used to determine compliance with the minimum thresholds, while the broad networks collect data for informational purposes to identify trends and fill data gaps. The two monitoring networks for water quality will additionally be used to develop a chloride isocontour to monitor for potential seawater intrusion and water levels data will inform depletions of interconnected surface water.

The monitoring networks were designed by evaluating data from the DWR's California Statewide Groundwater Elevation Monitoring (CASGEM) Program, the United States Geological Survey (USGS), and participating GSAs. The monitoring network consists largely of wells that are already being used for monitoring in the Subbasin. Additional wells are being added, including two new deep, multi-completion monitoring wells awarded under DWR's Technical Support Services (TSS) program. Figure ES-7 shows the location of existing groundwater monitoring wells in both the representative and broad monitoring networks.

Wells in the monitoring networks will be measured on a semi-annual schedule. Historical measurements have been entered into the Subbasin Data Management System (DMS), and future data will also be stored in the DMS.

Figure ES-7: Groundwater Monitoring Wells



A summary of the wells in the monitoring networks is shown in the table below.

Summary of Monitoring Network Wells	
Representative Networks	**Well Count**
Groundwater Level	20
Groundwater Quality	10
Broad Networks	
CASGEM (Groundwater Levels)	76
Nested or Clustered Wells (Groundwater Levels & Quality)	16
Agency Wells (Groundwater Levels & Quality)	5

ES-9. DATA MANAGEMENT SYSTEM

The Eastern San Joaquin DMS was built on a flexible, open software platform that uses familiar Google maps and charting tools for analysis and visualization. The DMS serves as a data-sharing portal that enables use of the same data and tools for visualization and analysis. These tools support sustainable groundwater management and create transparent reporting about collected data and analysis results.

The DMS is web-based; the public can easily access this portal using common web browsers such as Google Chrome, Firefox, and Microsoft Edge. The DMS is currently populated with available historical data. Future data will also be entered into the system as it is collected.

The DMS portal provides easy access and the ability to query information stored in the system. Groundwater data can be plotted for any of the available data points, providing a pictorial view of historical and current data.

The DMS can be accessed at this link using the Guest Login:
https://opti.woodardcurran.com/esj/

Figure ES-8: Opti DMS Screenshot

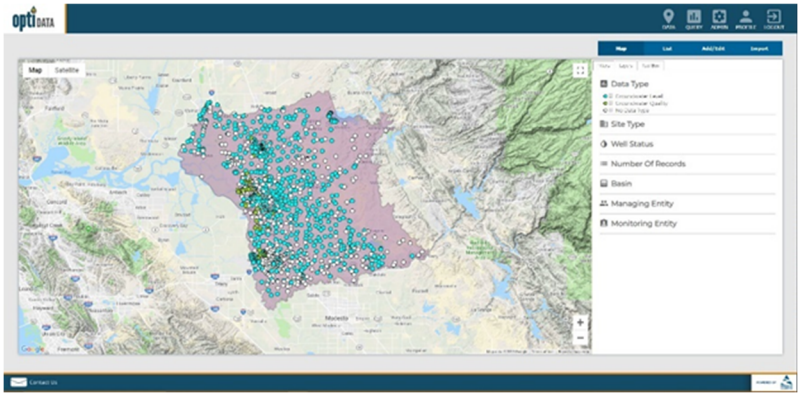
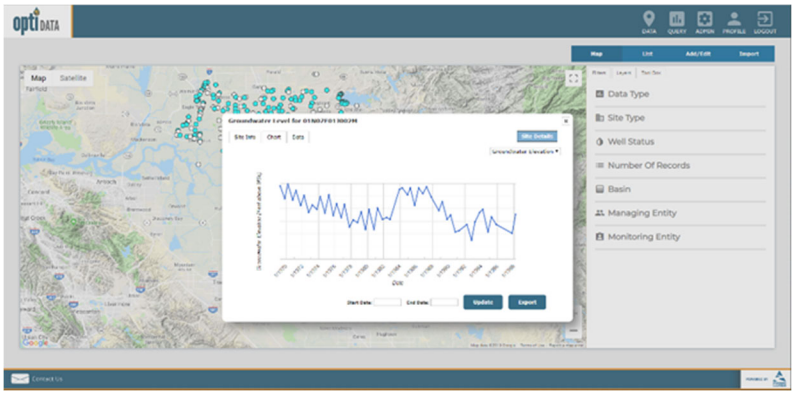


Figure ES-9: Typical DMS Data Display



ES-10. PROJECTS AND MANAGEMENT ACTIONS

Achieving sustainability in the Subbasin requires implementation of projects and management actions. The Subbasin will achieve sustainability by implementing water supply projects that either replace groundwater use or supplement groundwater supplies to attain the current estimated pumping offset and/or recharge need of ~~78~~16,000 AF/year. It should be noted that this number will be reevaluated in the future after additional data are collected and analyzed. In addition, three projects have been identified that support demand conservation activities, including water use efficiency upgrades. Currently, no pumping restrictions have been proposed for the Subbasin; however, GSAs maintain the flexibility to implement such demand-side management actions in the future if need is determined.

Although the ESJGWA does not have direct authority to require GSAs to implement projects, the ESJGWA will coordinate analysis of GSA-level demands and will compile annual or biannual reports to evaluate progress. If projects do not progress, or if monitoring efforts demonstrate that the projects are not effective in achieving stated recharge and/or offset targets, the GWA will convene a working group to evaluate supply-side and demand-side management actions such as the implementation of groundwater pumping curtailments, land fallowing, etc.

Projects to increase water supply availability in the Subbasin were identified by individual GSAs. The initial set of projects was reviewed with the ESJGWA Board, Advisory Committee, and Workgroup. A final list of 23 potential projects are included in the GSP, representing a variety of project types including direct and in-lieu[1] recharge, intra-basin water transfers, demand conservation, water recycling, and stormwater reuse. Projects are classified into three categories based on project status: Planned, Potential, and Longer-term/Conceptual. Planned projects are anticipated to be completed and implemented prior to 2040. Near-term P~~p~~lanned projects are anticipated to provide enough water to meet the ~~78,000 AFY of~~required groundwater pumping offset and/or recharge needed to reach sustainability without climate change; however, additional projects will be required in the future to address climate change impacts. Potential projects provide a menu of options for additional water supply projects that can be implemented in the Subbasin. These projects require further analysis and permitting to determine feasibility and cost effectiveness. Longer-term/Conceptual projects are in the early conceptual planning stages and would require significant additional work to move forward. ~~Projects are summarized in the table below.~~

Additionally, a study has been proposed by NSJWCD to evaluate reaches of the Mokelumne River downstream of Camanche Reservoir to support model refinement and validation and to inform SGMA basin accounting. These projects are summarized below.

[1] In-lieu recharge refers to the use of surface water or recycled water supplies for applications where groundwater is currently used. This "in-lieu" use reduces groundwater pumping and allows groundwater to remain in the aquifer.

Project Description	Project Type	Project Proponent	Estimated Demand Reduction (AF/year)
Planned Projects:			
Lake Grupe In-lieu Recharge	In-lieu Recharge	Stockton East Water District	10,000
SEWD Surface Water Implementation Expansion	In-lieu Recharge	Stockton East Water District	19,000
City of Manteca Advanced Metering Infrastructure	Conservation	City of Manteca	272
City of Lodi Surface Water Facility Expansion & Delivery Pipeline	In-lieu Recharge	City of Lodi	4,750
White Slough Water Pollution Control Facility Expansion	Recycling/In-lieu Recharge	City of Lodi	115
CSJWCD Capital Improvement Program	In-lieu Recharge	Central San Joaquin Water Conservation District	5,000
NSJWCD South System Modernization	In-lieu Recharge	North San Joaquin Water Conservation District	4,500
Long-term Water Transfer to SEWD and CSJWCD	Transfers/In-lieu Recharge	South San Joaquin GSA	45,000
Potential Projects			
BNSF Railway Company Intermodal Facility Recharge Pond	Direct Recharge	Central San Joaquin Water Conservation District	1,000
City of Stockton Advanced Metering Infrastructure	Conservation	City of Stockton	2,000
South System Groundwater Banking with EBMUD	In-lieu Recharge	North San Joaquin Water Conservation District	4,000
NSJWCD North System Modernization/Lakso Recharge	In-Lieu Recharge/Direct Recharge	North San Joaquin Water Conservation District	2,600
Manassero Recharge Project	Direct Recharge	North San Joaquin Water Conservation District	8,000
Tecklenburg Recharge Project	Direct Recharge	North San Joaquin Water Conservation District	8,000
City of Escalon Wastewater Reuse	Recycling/In-lieu Recharge/Transfers	South San Joaquin GSA	672
City of Ripon Surface Water Supply	In-lieu Recharge	South San Joaquin GSA	6,000
City of Escalon Connection to Nick DeGroot Water Treatment Plant	In-lieu Recharge	South San Joaquin GSA	2,015
Longer-term/Conceptual Projects			
Farmington Dam Repurpose Project	Direct Recharge	Stockton East Water District	30,000
Recycled Water Transfer to Agriculture	Recycling/Transfers/ In-lieu Recharge	City of Manteca	5,193
Mobilizing Recharge Opportunities	Direct Recharge	San Joaquin County	Not determined
NSJWCD Winery Recycled Water	Recycling/In-Lieu Recharge/Direct Recharge	North San Joaquin Water Conservation District	750
Pressurization of SSJID Facilities	Conservation	South San Joaquin GSA	30,000
SSJID Storm Water Reuse	Stormwater/In-lieu Recharge/Direct Recharge	South San Joaquin GSA	1,100

As previously noted, ~~The ESJGWA received the Letter from~~ DWR's Consultation Initiation Letter ~~that that identified two potential deficiencies with the Subbasin GSP which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. Potential Deficiency 1 related to the GSP's requirement of two consecutive non-dry (i.e., below normal, above normal, or wet) water year types and the exclusion of dry and critically dry water-year types in the identification of undesirable results. (Please see Chapter 3, Sustainable Management Criteria, for revisions that address this deficiency). Potential Deficiency 1 also r~~requested~~s~~ additional detail on how projects and management actions, in conjunction with the proposed chronic lowering of groundwater levels sustainable management criteria, will ~~offset drought related groundwater reductions~~help the subbasin achieve sustainability and avoid significant and unreasonable impacts. ~~Specifically, Potential Correction Action 1(b) stated that the GSP "fails to identify specific extraction and groundwater recharge management actions the GSAs would implement or otherwise describe how the Subbasin would be managed to offset...dry year reductions of groundwater storage". As a Potential Corrective Action, the following is suggested: "The GSP should be revised to include specific projects and management actions the GSAs would implement to offset drought year groundwater level declines."~~

As part of the process to respond to DWR, the ESJGWA worked with each GSA individually to update GSP project descriptions with new information that has become available in the past two years since the GSP was first adopted in 2020. These revised projects were then divided into two categories: Category A projects (projects that are likely to advance in the next five years and have existing water rights or agreements) and Category B projects (projects that are not anticipated to advance in the next five years, but could be leveraged in the future, particularly if Category A projects do not fully achieve stated recharge and/or offset targets). ~~Category A projects and Category B projects are shown in Table 6-2 and Table 6-3, respectively, along with project assumptions; please see Chapter 2, Basin Setting, for information as to how the~~ Category A projects were simulated in the projected water budget to evaluate their effectiveness on achieving Subbasin sustainability~~and for a description of their effectiveness on addressing overdraft in the Subbasin~~. Category B projects may be elevated to a Category A project should feasibility studies demonstrate a viable project, if water rights or contracts are firmly identified, if partnerships are formed, and if economic evaluation demonstrate that the projects are cost effective, and remain part of the overall adaptive management strategy that the Subbasin is utilizing in GSP implementation to achieve and maintain Subbasin sustainability.~~.~~

~~Table ES-810:~~ Category A Projects

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
1. Lake Grupe In-Lieu Recharge	Stockton East Water District	In-Lieu Recharge	The surface water source of this project is from SEWD's existing contract with the U.S. Bureau of Reclamation (USBR) for the New Hogan Reservoir. Surface water is diverted from the Calaveras River. This is an existing surface water right.	Drought	2,000	Range of 0-2,000 AFY in multiple dry years
				Dry	4,900	
				Normal	4,900	
				Wet	4,900	
2. SEWD Surface Water Implementation Expansion	Stockton East Water District	In Lieu Recharge	This project relies on water from New Hogan Reservoir (Calaveras River water) and New Melones Reservoir (Stanislaus River water). This is an existing surface water right. SEWD has long-term water supply contracts with USBR for both New Hogan Reservoir and New Melones Reservoir.	Drought	4,000	Range of 0-4,000 AFY in multiple drought years
				Dry	8,000	
				Normal	19,000	
				Wet	19,000	
3. West Groundwater Recharge Basin	Stockton East Water District	Direct Recharge	This project relies on water from New Hogan Reservoir (Calaveras River water) and New Melones Reservoir (Stanislaus River water). This is an existing surface water right. SEWD has long-term water supply contracts with USBR for both New Hogan Reservoir and New Melones Reservoir. In addition to Calaveras River and Stanislaus River water, stormwater runoff will also contribute to the volume of water available for recharge.	Drought	1,500	
				Dry	4,000	
				Normal	16,000	
				Wet	16,000	
4. CSJWCD Capital Improvement Program	Central San Joaquin Water Conservation District	In-Lieu Recharge	This project relies on water from New Melones Reservoir. This is an existing surface water right. CSJWCD has long-term water supply contracts with USBR for the New Melones Unit Central Valley Project.	Drought	0	
				Dry	12,000	
				Normal	24,000	
				Wet	24,000	
				Drought	20,000	

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
5. Long-Term Water Transfer to SEWD and CSJWCD	South San Joaquin GSA	Transfers/In-Lieu Recharge	This project relies on water from New Melones Reservoir (Stanislaus River water). This is an existing surface water right (pre-1914) held by Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID).	Dry	5,000	This project currently only covers the transfer of water from OID and SSJID to SEWD urban customers.
				Normal	0	
				Wet	0	
6. White Slough Pollution Control Facility Expansion	City of Lodi	Recycled Water/In-Lieu Recharge	Treated wastewater effluent from White Slough Water Pollution Control Facility.	Drought	3,729	
				Dry	3,729	
				Normal	3,729	
				Wet	3,729	
7. NSJWCD South System Modernization	North San Joaquin Water Conservation District	In-Lieu Recharge/Direct Recharge	This project relies on water from the Mokelumne River. This is an existing water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	0	
				Normal	4,800	
				Wet	6,000	
8. NSJWCD Tecklenburg Recharge Project	North San Joaquin Water Conservation District	Direct Recharge	This project relies on water from the Mokelumne River. This is an existing surface water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	1,000	
				Normal	4,800	
				Wet	6,000	
9. NSJWCD South System Groundwater Banking with EBMUD	North San Joaquin Water Conservation District	In-Lieu Recharge	This project relies on water from the Mokelumne River. This is an existing water right held by East Bay Municipal Utility District (EBMUD) (Permit 10478) as per Protest Dismissal Agreement from 11/25/2014.	Drought	0	
				Dry	1,500	
				Normal	6,400	80% of wet year supply
				Wet	8,000	
10. NSJWCD North System Modernization/Lakso Recharge	North San Joaquin Water Conservation District	In-Lieu Recharge/Direct Recharge	This project relies on water from the Mokelumne River. This is an existing surface water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	1,000	
				Normal	3,200	
				Wet	4,000	
11. Delta Water Treatment Plant Groundwater Recharge Improvements Project	City of Stockton	Direct Recharge	This project relies on raw water from the Delta Water Treatment Plant.	Drought	5,040	
				Dry	5,040	
				Normal	5,040	

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
Geotechnical Investigation				Wet	5,040	

~~Table ES-810:~~ Category B Projects

Project Name	Project Type	Submitting GSA	Current Status	Time-table (initiation and completion)	Annual Volume (AFY)
Perfecting Mokelumne River Water Right	In-lieu Recharge	San Joaquin County	Planning phase	2022-2025	20,000 to 50,000
City of Manteca Advanced Metering Infrastructure	Conservation	City of Manteca	Currently underway	2019-2021	272
City of Lodi Surface Water Facility Expansion & Delivery Pipeline	In-lieu Recharge	City of Lodi	Planning phase	2030-2033	4,750
BNSF Railway Company Intermodal Facility Recharge Pond	Direct Recharge	CSJWCD	Planning phase	2020-2023	1,000
City of Stockton Advanced Metering Infrastructure	Conservation	City of Stockton	Initial study completed in 2011	2020/25-2025/28	2,000
Manaserro Recharge Project	Direct Recharge	NSJWCD	Planning phase	2019-2022*	8,000
City of Escalon Wastewater Reuse	Recycling/ In-lieu Recharge/ Transfers	SSJ GSA	Planning phase	2020-2028	672
City of Ripon Surface Water Supply	In-lieu Recharge	SSJ GSA	Design complete; environmental permitting underway	2020-2024	6,000
City of Escalon Connection to Nick DeGroot Water Treatment Plant	In-lieu Recharge	SSJ GSA	Conceptual design phase; environmental review complete	2020-2023	2,015
Farmington Dam Repurpose Project	Direct Recharge	SEWD	Preplanning phase with reconnaissance study complete	2030-2050	30,000
Recycled Water Transfer to Agriculture	Recycling/Transfers/ In-lieu Recharge	City of Manteca	Planning phase with evaluation completed in Draft Reclaimed Water Facilities Master Plan	Not determined	5,193
Mobilizing Recharge Opportunities	Direct Recharge	San Joaquin County	Early conceptual planning phase	Not determined	Not determined
NSJWCD Winery Recycled Water	Recycling/ In-Lieu Recharge/ Direct Recharge	NSJWCD	Conceptual planning and discussion	2025-2027	750

Project Name	Project Type	Submitting GSA	Current Status	Time-table (initiation and completion)	Annual Volume (AFY)
Pressurization of SSJID Facilities	Conservation	SSJ GSA	Feasibility study complete	2019-2030	30,000
SSJID Storm Water Reuse	Storm Water/ In-lieu Recharge/ Direct Recharge	SSJ GSA	Planning phase	2027-2030	1,100

ES-11. GSP IMPLEMENTATION

The overdraft condition in the Subbasin requires projects to offset groundwater pumping and/or increase recharge. The exact amount of required offset/recharge will be reevaluated after additional data are collected and analyzed.

Projects will be administered by the GSA project proponents. GSAs may elect to implement projects individually or jointly with one or more GSAs or with the ESJGWA.

Implementing the GSP will require numerous management activities that will be undertaken by the ESJGWA, including the following:

- Monitoring and recording of groundwater levels and groundwater quality data
- Maintaining and updating the Subbasin DMS with newly collected data
- Annual monitoring of progress toward sustainability
- Annual reporting of Subbasin conditions to DWR as required by SGMA
- Refining Subbasin model and water budget planning estimates
- Evaluating the GSP once every 5 years and updating if warranted

The ESJGWA Board adopted a preliminary schedule for project implementation. Project implementation is scheduled to begin in 2020, with full implementation by 2040. This approach provides adequate time to put in place methods necessary to refine model estimates and verify project cost effectiveness.

Implementation of the eight identified Planned Projects will begin prior to 2030 and will continue through 2040. Evaluation and possible implementation of the nine Potential Projects and six Longer-term/Conceptual Projects will be based on long-term management or changing needs of the GSA or Subbasin. Further evaluation is necessary to determine technical, economic, and institutional feasibility.

ES-12. FUNDING

Implementation of the GSP requires funding sources. To the degree they become available, outside grants will be sought to assist in reducing cost of implementation to participating agencies, residents, and landowners of the Subbasin. However, there will be a need to collect funds to support implementation.

The areas associated with ESJGWA-wide management and GSP implementation will be borne by the ESJGWA through contributions from the member GSAs, under a cost-sharing arrangement to be developed following GSP adoption. These costs include:

- ESJGWA administration
- Groundwater level monitoring and reporting
- Groundwater quality monitoring and reporting

- Water use estimation
- Data management
- Stakeholder engagement
- Annual report preparation and submittal to DWR
- Developing and implementing a funding mechanism
- Grant applications
- GSP evaluation and updates, if warranted (every 5 years)

For budgetary purposes, the estimated initial cost of these activities is on the order of $600,000 to $1 million per year excluding projects and management actions costs and costs associated with the installation of new monitoring wells and grant writing. Additional one-time costs, such as model refinement, are estimated to be on the order of $315,000.

GSAs will individually fund implementation of projects in their respective areas. Options for GSA funding include fees based on groundwater pumping, acreage, or combinations of these, and pursuit of any available grant funds. The GSAs will evaluate options for securing the needed funding on an individual basis.

The estimated initial costs of projects range from on the order of $50,000 to $328 million, depending on the project. Annual project costs range from $3,000 to $9 million per year to provide funds for operations and maintenance.

TECHNICAL MEMORANDUM NO. 1 – Undesirable Result Definition and Projects and Management Actions

TO: Paul Gosselin, California Department of Water Resources Deputy Director

CC: Matt Zidar, on behalf of the Eastern San Joaquin Groundwater Authority

PREPARED BY: Leslie Dumas, Sara Miller, and Lindsay Martien/Woodard & Curran

DATE: June 24, 2022

RE: Eastern San Joaquin Groundwater Authority Response to DWR's November 18, 2021 Consultation Initiation Letter - Technical Memorandum 1, Response to DWR Deficiency No. 1 and Corrective Actions 1(a)-1(c)

1. Introduction

The Eastern San Joaquin Groundwater Authority (ESJGWA) received a Consultation Initiation Letter (Letter) on November 18, 2021 (**Attachment 1**), from the California Department of Water Resources (DWR). The Letter identified two potential deficiencies with the Eastern San Joaquin Groundwater Subbasin (Subbasin) Groundwater Sustainability Plan (GSP) which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter thus initiated consultation between DWR, the Plan Manager, and the Subbasin's groundwater sustainability agencies (GSAs) regarding the amount of time needed to address the potential deficiencies and corrective actions. A subsequent meeting with DWR was held on April 4, 2022 to discuss the Subbasin's proposed approach to addressing the identified deficiencies. The analysis presented in this memorandum was completed in response to the Letter, based on direction provided by the ESJGWA, the Subbasin GSAs, and DWR. It is intended to supplement the Eastern San Joaquin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR.

The following sections provide a response to **Potential Corrective Actions 1(a) and 1(b)**, identified under **Potential Deficiency 1**. Per discussion with DWR staff, in adequately addressing Potential Corrective Action 1(a) and 1(b), **Potential Corrective Action 1(c)** is no longer applicable and will not need to be addressed by the GSAs.

Potential Deficiency 1

Potential Deficiency 1 relates to the GSP's requirement of two consecutive non-dry (i.e., below normal, above normal, or wet) water year types and the exclusion of dry and critically dry water-year types in the identification of undesirable results. It also requests additional detail on how projects and management actions, in conjunction with the proposed chronic lowering of groundwater levels sustainable management criteria, will offset drought related groundwater reductions and avoid significant and unreasonable impacts.

Potential Corrective Action 1 contains six subparts, 1(a) through 1(f). Potential Corrective Actions 1(a) and 1(b), the focus of this memorandum, are summarized below. As stated above, Potential Corrective Action 1(c) is no longer applicable once 1(a) and 1(b) are addressed. Potential Corrective Actions 1(d) through 1(f) are addressed in separate technical memoranda.

- **Potential Corrective Action 1(a):** The Letter states that DWR staff find the water year type requirement in the definition for undesirable results for groundwater levels (i.e., two consecutive *non-dry* years) to be "inconsistent with the objectives of SGMA", and that this requirement could potentially allow for "unmanaged and continued lowering of groundwater levels under certain hydraulic and climatic conditions that have occurred historically". As a Potential Corrective Action, the following is suggested: "The GSAs should remove the water year type requirement from the GSP's undesirable result definition."

- **Potential Corrective Action 1(b):** The second part of this Potential Corrective Action seeks additional detail on how projects and management actions will offset drought-related groundwater reductions and avoid significant and unreasonable impacts. The Letter states that the GSP "fails to identify specific extraction and groundwater recharge management actions the GSAs would implement or otherwise describe how the Subbasin would be managed to offset...dry year reductions of groundwater storage". As a Potential Corrective Action, the following is suggested: "The GSP should be revised to include specific projects and management actions the GSAs would implement to offset drought year groundwater level declines."

The following sections provide a response to Potential Corrective Actions 1(a) and 1(b) and include a discussion of updated modeling work related to both Potential Corrective Actions. The purpose of this new analysis is to provide supplemental information, justification, and data needed to support the GSP and address each issue identified.

2. Removal of Water Year Type Requirement

In response to the comments provided by DWR in Potential Corrective Action 1(a), the ESJGWA has removed the non-dry water year type requirement from the definition of undesirable results for chronic lowering of groundwater levels, and, by proxy, for reduction of groundwater storage, land subsidence, and depletions of interconnected surface water. An updated redline strike out version of the GSP has been developed and adopted by the GSAs in response to this review. Relevant updated text is provided below.

> **Section 3.2.1.1.2. Identification of Undesirable Results (Chronic Lowering of Groundwater Levels)**
>
> *An undesirable result is considered to occur during GSP implementation when at least 25 percent of representative monitoring wells used to monitor groundwater levels (5 of 20 wells in the Subbasin) fall below their minimum level thresholds for two consecutive years ~~that are categorized as non-dry years (below-normal, above-normal, or wet), according to the San Joaquin Valley Water Year Hydrologic Classification. The lowering of groundwater levels during consecutive dry or critically dry years is not considered to be unreasonable,~~*

~~*and would therefore not be considered an undesirable result, unless the levels do not rebound to above the thresholds following those consecutive non-dry years*~~.

Additional modeling, described in the sections below, demonstrates that the Subbasin is not projected to be in violation of its minimum thresholds with this updated definition of undesirable results once planned projects and management actions are in place.

3. Project and Management Actions Assumptions

As part of the process to respond to DWR, the ESJGWA worked with each GSA individually to update GSP project descriptions with new information that has become available in the past two years since the GSP was first adopted in 2020. These revised projects were divided into two categories: Category A projects (projects that are likely to advance in the next five years and have existing water rights or agreements) and Category B projects (projects that are not anticipated to advance in the next five years, but could be leveraged in the future, particularly if Category A projects do not fully achieve stated recharge and/or offset targets). Category B projects may be elevated to a Category A project should feasibility studies demonstrate a viable project, if water rights or contracts are firmly identified, if partnerships are formed, and if economic evaluation demonstrate that the projects are cost effective.

The analysis presented in this TM focuses on the simulation of implementation of Category A projects, which includes in lieu and direct recharge projects. **Table 1** provides a list of these Category A projects, submitting GSA, project type, water source, and volume anticipated in each water year type. **Table 2** provides a list of Category B projects for reference. Additional details, including water year type descriptions and updated project descriptions, assumptions, and Subbasin model results, can be found in **Attachment 2**.

In total, 11 Category A projects have been identified. Six are in-lieu recharge projects, three are direct recharge projects, and two are a combination of in-lieu recharge and direct recharge. Overall, the total additional surface water provided by Category A projects (either by in lieu or direct recharge) varies by water year type and ranges from 36,300 to 96,700 acre-feet per year (AFY) and is a mixture of deliveries to agricultural customers (including assumptions on evaporation and delivery losses), deliveries to urban customers, and direct recharge projects. A summary of the total additional water supply (excluding assumed losses) anticipated from Category A projects is below.

- Additional surface water delivered to the Subbasin for agricultural uses: average of 39,700 AFY (range of 9,500-56,300 AFY)
- Additional surface water delivered to the Subbasin for urban uses: 5,000 AFY or 20,000 AFY in only dry and drought years, respectively
- Additional groundwater stored via direct groundwater recharge: average of 21,200 AFY (range of 6,500-32,000 AFY)

Table 1: Category A Projects

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
1. Lake Grupe In-Lieu Recharge	Stockton East Water District	In-Lieu Recharge	The surface water source of this project is from SEWD's existing contract with the U.S. Bureau of Reclamation (USBR) for the New Hogan Reservoir. Surface water is diverted from the Calaveras River. This is an existing surface water right.	Drought	2,000	Range of 0-2,000 AFY in multiple dry years
				Dry	4,900	
				Normal	4,900	
				Wet	4,900	
2. SEWD Surface Water Implementation Expansion	Stockton East Water District	In Lieu Recharge	This project relies on water from New Hogan Reservoir (Calaveras River water) and New Melones Reservoir (Stanislaus River water). This is an existing surface water right. SEWD has long-term water supply contracts with USBR for both New Hogan Reservoir and New Melones Reservoir.	Drought	4,000	Range of 0-4,000 AFY in multiple drought years
				Dry	8,000	
				Normal	19,000	
				Wet	19,000	
3. West Groundwater Recharge Basin	Stockton East Water District	Direct Recharge	This project relies on water from New Hogan Reservoir (Calaveras River water) and New Melones Reservoir (Stanislaus River water). This is an existing surface water right. SEWD has long-term water supply contracts with USBR for both New Hogan Reservoir and New Melones Reservoir. In addition to Calaveras River and Stanislaus River water, stormwater runoff will also contribute to the volume of water available for recharge.	Drought	1,500	
				Dry	4,000	
				Normal	16,000	
				Wet	16,000	

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
4. CSJWCD Capital Improvement Program	Central San Joaquin Water Conservation District	In-Lieu Recharge	This project relies on water from New Melones Reservoir. This is an existing surface water right. CSJWCD has long-term water supply contracts with USBR for the New Melones Unit Central Valley Project.	Drought	0	
				Dry	12,000	
				Normal	24,000	
				Wet	24,000	
5. Long-Term Water Transfer to SEWD and CSJWCD	South San Joaquin GSA	Transfers/In-Lieu Recharge	This project relies on water from New Melones Reservoir (Stanislaus River water). This is an existing surface water right (pre-1914) held by Oakdale Irrigation District (OID) and South San Joaquin Irrigation District (SSJID).	Drought	20,000	This project currently only covers the transfer of water from OID and SSJID to SEWD urban customers.
				Dry	5,000	
				Normal	0	
				Wet	0	
6. White Slough Pollution Control Facility Expansion	City of Lodi	Recycled Water/In-Lieu Recharge	Treated wastewater effluent from White Slough Water Pollution Control Facility.	Drought	3,729	
				Dry	3,729	
				Normal	3,729	
				Wet	3,729	
7. NSJWCD South System Modernization	North San Joaquin Water Conservation District	In-Lieu Recharge/ Direct Recharge	This project relies on water from the Mokelumne River. This is an existing water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	0	
				Normal	4,800	
				Wet	6,000	
8. NSJWCD Tecklenburg Recharge Project	North San Joaquin Water Conservation District	Direct Recharge	This project relies on water from the Mokelumne River. This is an existing surface water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	1,000	
				Normal	4,800	
				Wet	6,000	
				Drought	0	

Project	Submitting GSA	Project Type	Water Source	Baseline Water Year Type	Annual Volume (AFY)	Notes
9. NSJWCD South System Groundwater Banking with EBMUD	North San Joaquin Water Conservation District	In-Lieu Recharge	This project relies on water from the Mokelumne River. This is an existing water right held by East Bay Municipal Utility District (EBMUD) (Permit 10478) as per Protest Dismissal Agreement from 11/25/2014.	Dry	1,500	
				Normal	6,400	80% of wet year supply
				Wet	8,000	
10. NSJWCD North System Modernization/Lakso Recharge	North San Joaquin Water Conservation District	In-Lieu Recharge/ Direct Recharge	This project relies on water from the Mokelumne River. This is an existing surface water right held by NSJWCD (Permit 10477).	Drought	0	
				Dry	1,000	
				Normal	3,200	
				Wet	4,000	
11. Delta Water Treatment Plant Groundwater Recharge Improvements Project Geotechnical Investigation	City of Stockton	Direct Recharge	This project relies on raw water from the Delta Water Treatment Plant.	Drought	5,040	
				Dry	5,040	
				Normal	5,040	
				Wet	5,040	

Table 2: Category B Projects

Project Name	Project Type	Submitting GSA	Current Status	Time-table (initiation and completion)	Annual Volume (AFY)
Perfecting Mokelumne River Water Right	In-lieu Recharge	San Joaquin County	Planning phase	2022-2025	20,000 to 50,000
City of Manteca Advanced Metering Infrastructure	Conservation	City of Manteca	Currently underway	2019-2021	272
City of Lodi Surface Water Facility Expansion & Delivery Pipeline	In-lieu Recharge	City of Lodi	Planning phase	2030-2033	4,750
BNSF Railway Company Intermodal Facility Recharge Pond	Direct Recharge	CSJWCD	Planning phase	2020-2023	1,000
City of Stockton Advanced Metering Infrastructure	Conservation	City of Stockton	Initial study completed in 2011	2020/25-2025/28	2,000
Manaserro Recharge Project	Direct Recharge	NSJWCD	Planning phase	2019-2022*	8,000
City of Escalon Wastewater Reuse	Recycling/ In-lieu Recharge/ Transfers	SSJ GSA	Planning phase	2020-2028	672
City of Ripon Surface Water Supply	In-lieu Recharge	SSJ GSA	Design complete; environmental permitting underway	2020-2024	6,000
City of Escalon Connection to Nick DeGroot Water Treatment Plant	In-lieu Recharge	SSJ GSA	Conceptual design phase; environmental review complete	2020-2023	2,015

Project Name	Project Type	Submitting GSA	Current Status	Time-table (initiation and completion)	Annual Volume (AFY)
Farmington Dam Repurpose Project	Direct Recharge	SEWD	Preplanning phase with reconnaissance study complete	2030-2050	30,000
Recycled Water Transfer to Agriculture	Recycling/Transfers/ In-lieu Recharge	City of Manteca	Planning phase with evaluation completed in Draft Reclaimed Water Facilities Master Plan	Not determined	5,193
Mobilizing Recharge Opportunities	Direct Recharge	San Joaquin County	Early conceptual planning phase	Not determined	Not determined
NSJWCD Winery Recycled Water	Recycling/ In-Lieu Recharge/ Direct Recharge	NSJWCD	Conceptual planning and discussion	2025-2027	750
Pressurization of SSJID Facilities	Conservation	SSJ GSA	Feasibility study complete	2019-2030	30,000
SSJID Storm Water Reuse	Storm Water/ In-lieu Recharge/ Direct Recharge	SSJ GSA	Planning phase	2027-2030	1,100

3.1 GSA Managed Water

All of the Category A projects included above are recharge projects (either direct or in-lieu) that have water available to complete the project through current water rights, contracts, or existing interagency agreements. The existing water rights in the Subbasin are included in **Table 3**. These water rights are held and managed by individual agencies in the Subbasin, and it would be up to the water rights holder to determine how much water was made available for any planned or future recharge projects, including the Category A projects. Though the total water available included in **Table 3** reduces in drier water years, several agencies still have firm rights and contracts within their control aimed to maximize beneficial use in dry years when considering conjunctive use, banking, and groundwater storage projects. In addition to the total surface water rights included in **Table 3**, other supplies, such as stormwater runoff, recycled water, and water supplies from other agencies that may bank water in the subbasin in the future (e.g., EBMUD, Valley Water, etc.), may also be utilized for future Subbasin recharge projects. This water may be available for recharge by the GSAs that maintain and possess the water right. The water is currently, or is planned, for beneficial use by the holder, and GSAs are responsible for evaluating their highest and best use and how these supplies may be used to achieve sustainability.

Table 3: Total Current Water Rights and Contracts in Eastern San Joaquin Subbasin

District/ Agency	Source River/Reservoir	Water Use	Wet Year Volume (AFY)[1]	Dry Year Volume (AFY)[1]	Comments
WID	Mokelumne/ Camanche Reservoir	Agricultural/ M&I	60,000	39,000	Firm; Agreements with City of Lodi and City of Stockton
		Agricultural/ M&I	See note[3]	0	Non-firm
NSJWCD	Mokelumne/ Camanche Reservoir	Agricultural/ M&I	20,000	0	Subject to EBMUD supply and future requirements
City of Stockton	Delta/ San Joaquin River	M&I	33,600	<33,600	Can take as much water as is discharged by wastewater treatment plant
CCWD [2]	Calaveras River	Agricultural	1,900	1,900	Up to 43.5% of New Hogan yield (up to 30,928 of 71,100 AFY). Reduce by 7,800 AF if end of October New Hogan storage is less than 71,400 AF.
	New Hogan Reservoir	M&I	2,700	2,700	
SEWD	Calaveras/ New Hogan Reservoir[2]	Agricultural/ M&I	40,115	<40,115	56.5% of New Hogan yield. Reduced by 10,000 AF if end of October New

District/ Agency	Source River/Reservoir	Water Use	Wet Year Volume (AFY)[1]	Dry Year Volume (AFY)[1]	Comments
					Hogan storage is less than 71,400 AF.
		Agricultural/ M&I	27,000	<27,000	Estimated unused portion of CCWD's up to 43.5% New Hogan allocation
	Stanislaus/ New Melones Reservoir	Agricultural/ M&I	75,000	<75,000	Interim, subject to other users requirements and availability
	Stanislaus/ New Melones Reservoir	M&I	0	15,000	From agreement with CSJWCD to receive first 15,000 AF of 49,000 AF firm supply
CSJWCD	Stanislaus/ New Melones Reservoir	Agricultural	80,000	34,000	49,000 AF firm supply, 31,000 AF interim supply subject to other user's requirements
	Stanislaus/ New Melones Reservoir				other user's requirements
SSJID/ OID[4]	Stanislaus/ New Melones Reservoir	Agricultural/ M&I	600,000	<600,000	Includes agricultural use in SSJID and OID. Includes potential water sales to SEWD/CSJWCD and other out-of-district customers. Includes agreement between SSJID and City of Escalon, City of Lathrop, City of Manteca, and City of Tracy.
CDWA	Delta	Agricultural	118,000	118,000	Estimated based on current demand within Subbasin.
SDWA	Delta	Agricultural	17,000	17,000	

Notes:

[1] The volumes in this table are not necessarily authoritative and are provided for general information purposes only. The actual quantity of water available from year to year and the quantity that is actually used vary significantly.

[2] New Hogan Reservoir has an estimated "conservation storage" yield of 71,400 AFY. Stockton East Water District contract with the Bureau of Reclamation is for 56.5% of the yield, and Calaveras County Water District rights to the remaining 43.5%. CCWD currently uses approximately 3,500 AFY of its allocation.

Based on an agreement between CCWD and SEWD, SEWD currently has use of the unused portion of CCWD's allocation.

[3] Under the WID-EBMUD water right settlement agreement, 60,000 AFY is the firm portion of the Woodbridge Irrigation District water rights. 60,000 AFY is the minimum amount available to WID during any year when the inflow to Pardee Reservoir is greater than 375,000 AF. When the Pardee inflow is less than 375,000 AF, the minimum amount available to WID is 39,000 AFY. WID is entitled to divert water in excess of the 60,000 AFY under the priority of its water right licenses when such water is available at WID's point of diversion and is surplus to EBMUD's downstream commitments under the Joint Settlement Agreement. Through this water right, WID has agreements with City of Lodi and City of Stockton to provide raw water.

[4] OID and SSJID share equally rights to 600,000 AFY when available. Of its 300,000 AFY share, OID provides water to its district area, of which about 40% is within the Eastern San Joaquin Subbasin and 60% is outside. SSJID is located completely within the Subbasin and has agreements to provide water to several cities both inside and outside the Subbasin (City of Escalon, City of Lathrop, City of Manteca, and City of Tracy). Both agencies participate in water transfers or sales to out-of-district deliveries, including SEWD and CSJWCD. In years when the full allotment is not available, the amount is less than 320,000 AFY and is based on a formula which is part of the agreement with USBR

4. Updated Modeling Work: Methods

The ESJGWA has performed updated projected water budget modeling and hydrograph analysis to identify: 1) where, when, and how often established minimum thresholds may be exceeded under projected conditions using the updated definition for undesirable results (with the water year type requirement removed from the definition), 2) what the impact of planned projects will have on the Subbasin groundwater storage deficit, 3) the amount of demand and pumping reduction to keep groundwater levels above the minimum thresholds, and 4) the potential effects of climate change.

Four scenarios were analyzed using the Eastern San Joaquin Water Resources Model (ESJWRM):

- Projected Conditions Baseline (PCBL): This model run doesn't include any projects or climate change. The PCBL represents long-term hydrologic conditions of the Subbasin under the foreseeable future level of development. The future level of development represents approximately Water Year (WY) 2040 or the closest information available from planning documents, and includes urban build out to either the sphere of influence or general plan boundaries. The model update documentation is included in **Attachment 3.**

- Projected Conditions Baseline with Climate Change (PCBL-CC): This model run is the same as the PCBL, but includes estimates of climate change in datasets for model stream inflows, precipitation, and evapotranspiration as provided by DWR. The model update documentation is included in **Attachment 3.**

- Projected Conditions Baseline with Category A Projects (PCBL-PMA): This model is the same as the PCBL without climate change and includes the 11 Category A projects. The assumptions and results are included in **Attachment 2.**

- Projected Conditions Baseline with Climate Change and Category A Projects (PCBL-CC-PMA): This model is the same as the PCBL-CC and includes climate change and the 11 Category A projects. The assumptions and results are included in **Attachment 2.**

For modeling purposes in this analysis, only projects designated as Category A were considered. For additional detail on the data and assumptions that went into this analysis, see **Attachment 2** of this memorandum.

5. Updated Modeling Work: Results

5.1 Evaluating Impact of Projects on Groundwater Storage Deficit

Modeling results indicate that the Category A projects, as currently estimated in **Attachment 2,** will resolve the Subbasin overdraft condition when impacts due to climate change are not included. Without projects, the modeling shows an average overdraft of 16,300 AFY over the 52 years of the PCBL simulation. With Category A projects in place, the modelling shows a projected overdraft of -5,300 AFY on average in the PCBL-PMA (a negative number indicating the absence of an overdraft condition). The PCBL-PMA shows an average increase of 21,600 AFY of groundwater in storage when compared to the PCBL. Compared to the PCBL, with Category A projects modeled, the PCBL-PMA has 38,400 AFY less groundwater pumping due to in-lieu recharge projects, 24,500 AFY more recharge, and 28,900 AFY less stream seepage into the groundwater system. Other hydrologic groundwater budget component differences are small between the PCBL and PCBL-PMA simulations.

While the groundwater storage deficit in the PCBL is projected to be corrected through the implementation of Category A projects as seen in PCBL-PMA, the modeling shows that when climate change is factored in, there is still additional work (e.g., projects and/or management actions) that may need to be done to maintain subbasin sustainability. The PCBL water budget without projects and with climate change (PCBL-CC) shows a projected overdraft of 38,100 AFY. When projects are added in, as simulated in PCBL-CC-PMA, this overdraft amount is reduced to 15,700 AFY, but still represents continuing groundwater overdraft in the Subbasin that is not sustainable.

5.2 Identifying Areas Where Groundwater Levels May Exceed Minimum Thresholds

The groundwater level representative monitoring network well hydrographs were analyzed for the model runs completed to review the potential impact to groundwater levels that the 52 years of varying hydrologic conditions and projected demands and supplies may have. The results below discuss the hydrographs for the PCBL, PCBL-CC, PCBL-PMA, and PCBL-CC-PMA and where, when, and how often the hydrographs exceed the minimum thresholds. A full description of the process, analysis, and results, along with all the representative monitoring network hydrographs, are included in **Attachment 2.**

In the PCBL without projects model run (**Figure 1**), two representative monitoring network wells are projected to fall below their minimum thresholds (MT) for groundwater levels at some point in the 52-year projection:

- Well Swenson-3 exceeds its MT in 8 percent of total months or 15 percent of water years
- Well 01S10E04C001M exceeds its MT in 50 percent of total months or 79 percent of water years.

In the PCBL water budget scenario without projects, but with climate change factored in (PCBL-CC) (**Figure 2**), the modeling results show five representative monitoring network wells are expected to fall below their minimum thresholds at some point in the 52-year projection:

- Well 01S09E05H002 exceeds its MT in 24 percent of total months or 33 percent of water years
- Well Swenson-3 exceeds its MT in 8 percent of total months or 19 percent of water years
- Well #3 Bear Creek exceeds its MT in 8 percent of total months or 56 percent of water years
- Well Hirschfeld [OID-8] exceeds its MT in 18 percent of total months or 25 percent of water years
- Well 01S10E04C001M exceeds its MT in 82 percent of total months or 90 percent of water years).

These five wells exceeding their minimum thresholds demonstrates the need for planned projects and management actions that the ESJGWA will implement to recharge and/or offset groundwater to raise Subbasin groundwater levels.

When Category A projects are included in the ESJWRM, groundwater levels rise across the Subbasin, though the impact to levels varies from area to area. In the PCBL water budget scenario with projects included (PCBL-PMA) (**Figure 3**), projections show only one well falling below its minimum threshold for groundwater levels (Well 01S10E04C001M exceeds its MT in 8 percent of total months or 19 percent of water years) as compared to the two wells in the PCBL without Category A projects.

As seen with the five wells with exceedances in the PCBL-CC, the effects of climate change could significantly impact Subbasin groundwater overdraft and groundwater levels. In the PCBL water budget scenario with projects and climate change factored in (PCBL-CC-PMA), modeling results show three wells still falling below their minimum thresholds for groundwater in a 52-year projection:

- Well 01S09E05H002 exceeds its MT in 1 percent of total months or 4 percent of water years
- Well Hirschfeld [OID-8] exceeds its MT in 1 percent of total months or 4 percent of water years
- Well 01S10E04C001M exceeds its MT in 60 percent of total months or 79 percent of water years).

Notably, all three of these wells are clustered in the same area of the Subbasin, perhaps indicating the need for additional study or a targeted project or management action specific to this area.

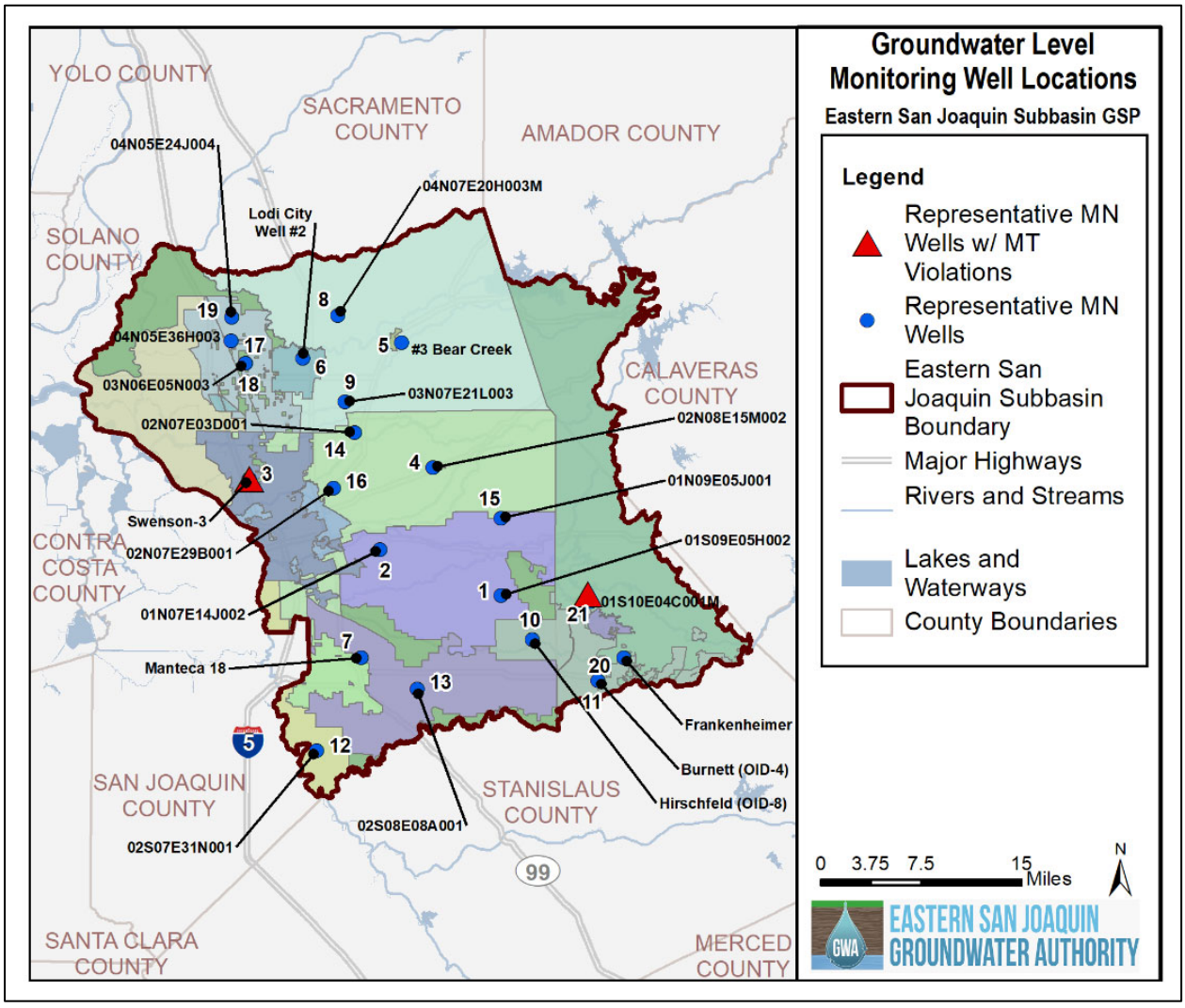


Figure 1: Projected Conditions Baseline (PCBL) Water Budget Without Projects

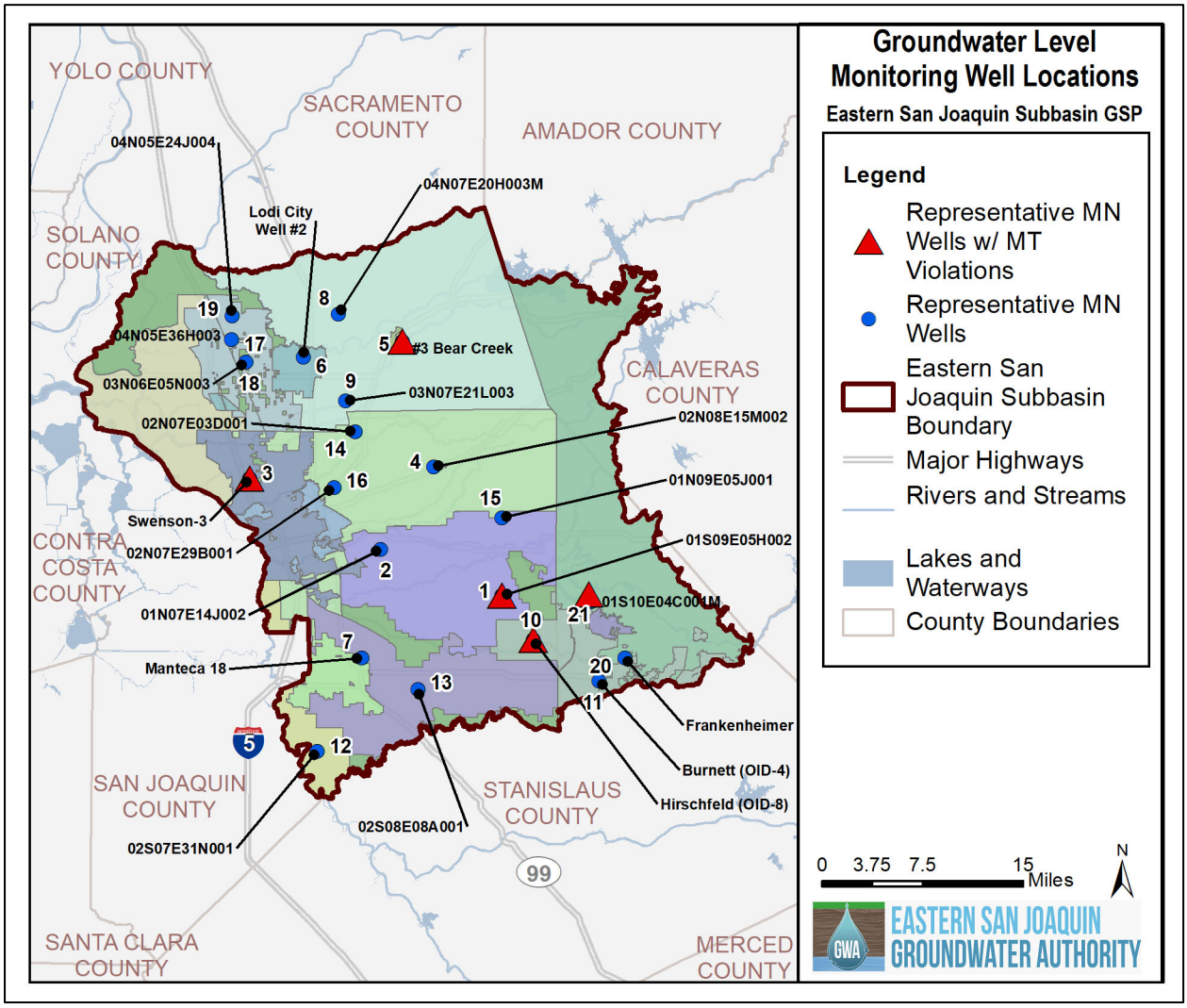


Figure 2: Projected Conditions Baseline (PCBL) Water Budget Without Projects + Climate Change

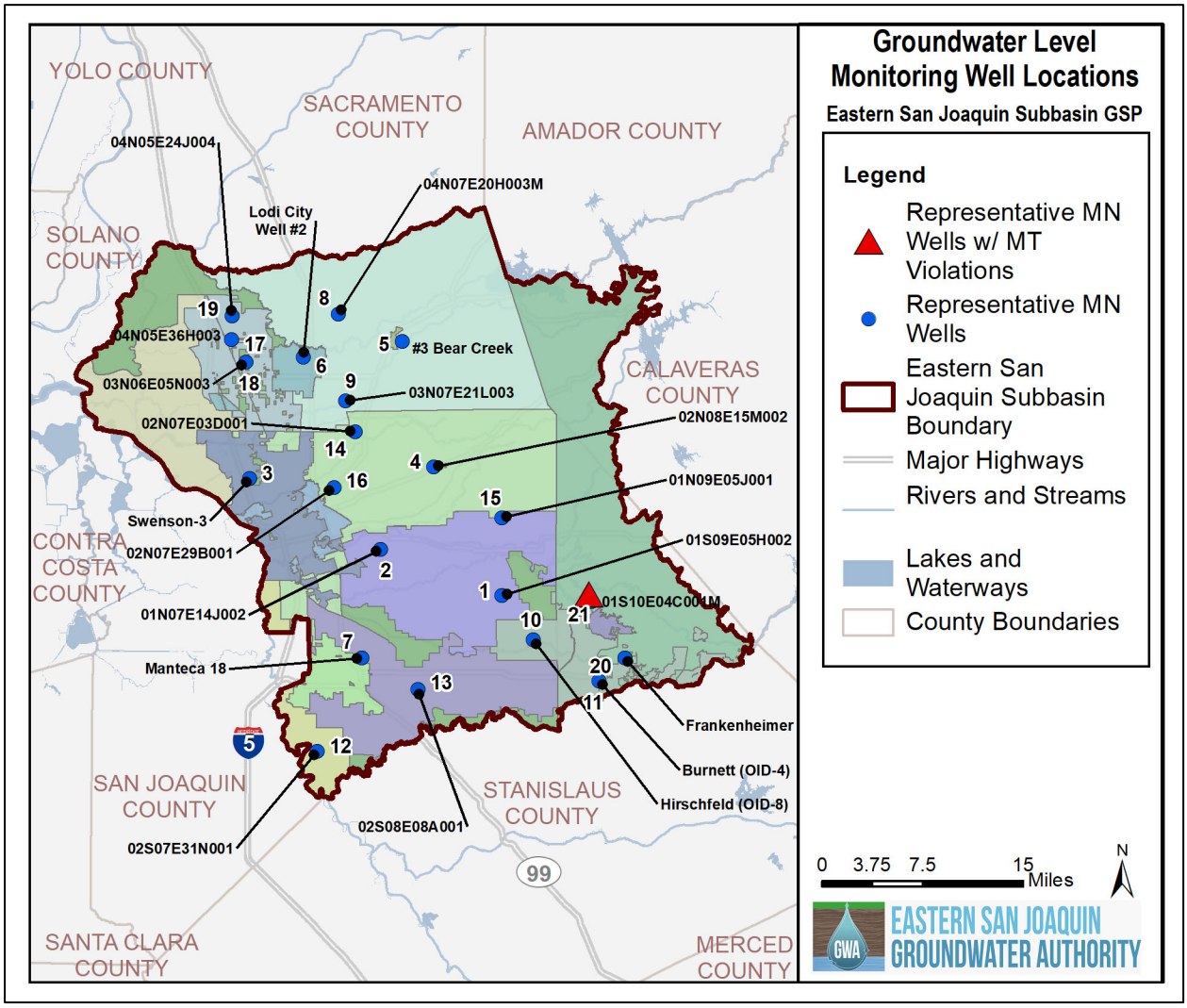


Figure 3: Projected Conditions Baseline (PCBL) Water Budget With Projects

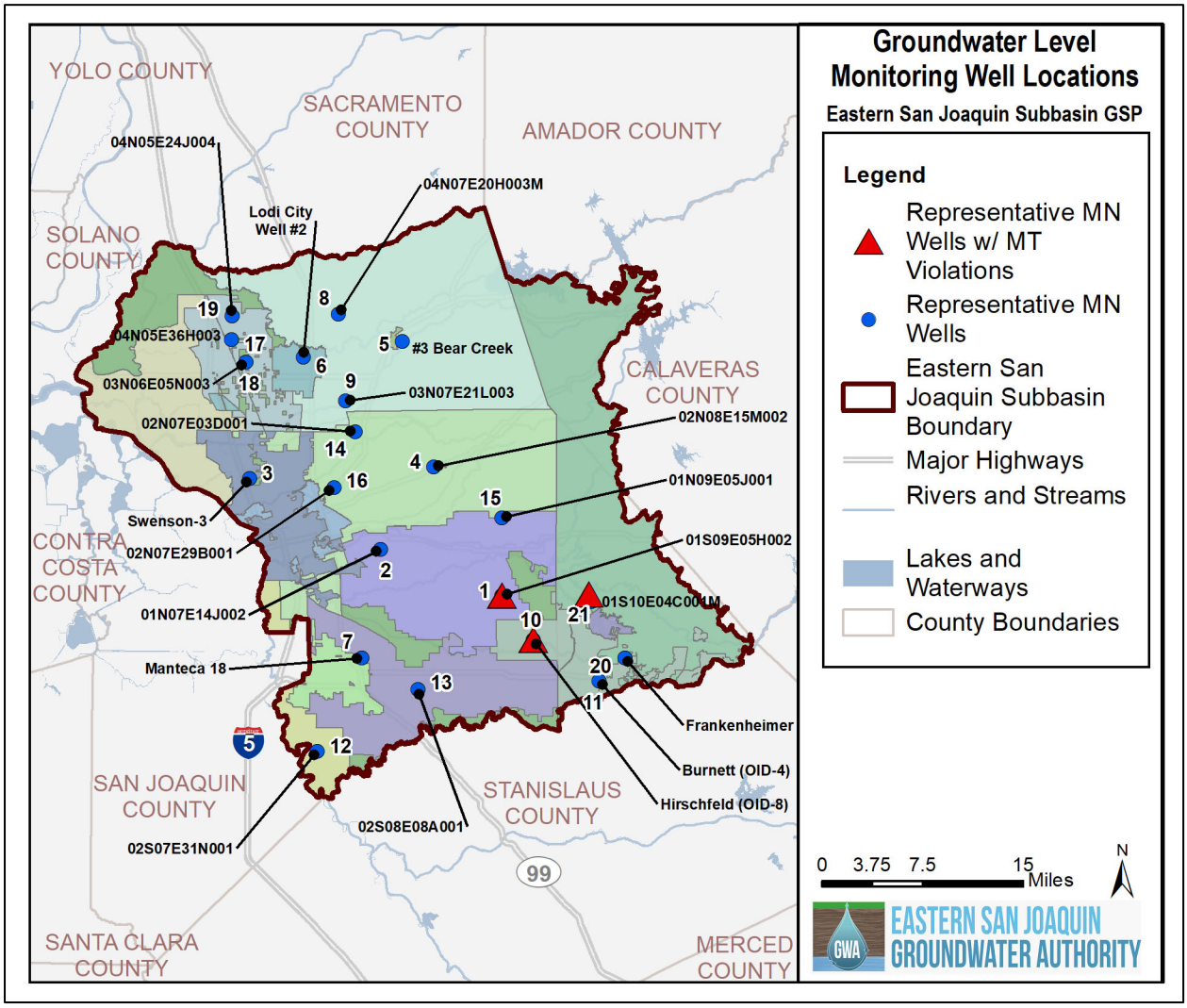


Figure 4: Projected Conditions Baseline (PCBL) Water Budget With Projects + Climate Change

An undesirable result for groundwater levels is defined as occurring when at least 25 percent of representative monitoring network wells used to monitor groundwater levels (5 of 21 wells in the Subbasin) fall below their minimum level threshold for two consecutive years. The consecutive year analysis for the model runs is covered in **Attachment 2.** The modeling results suggest that, with Category A projects implemented as planned, the Subbasin is not projected to see undesirable results within the planning timeframe of the GSP since neither model run with Category A projects has five wells with minimum threshold exceedances. However, given the undesirable result for groundwater levels projected to occur in five water years in the PCBL-CC, the GSAs need a plan to address potential minimum threshold exceedances where possible and adaptively manage around the uncertainty of climate change impacts on groundwater levels in the case that the Category A projects do not occur as anticipated.

5.3 Evaluating the Impact of Projects and Management Actions on Groundwater Levels During Dry Conditions

The hydrographs for the representative monitoring network wells tend to have the similar trends for when minimum threshold exceedances do occur. A full discussion of water year type conditions where exceedances occur is included in **Attachment 2.** According to the model results, minimum threshold exceedances occur in all water year types, though are less likely to occur in normal water years (above normal or below normal water years in the San Joaquin Valley Water Year Hydrologic Classification).

The 52 years of projected hydrology includes a range of hydrologic conditions, including three periods of multi-year droughts with at least two consecutive critical water years and surface water supplies reduced consistent to what occurred in WY 2015. Exceedances typically occur during or follow these multi-year drought periods. For the three wells with minimum threshold exceedances under climate change with Category A projects simulated (Well 01S09E05H002, Well Hirschfeld [OID-8], and Well 01S10E04C001M), Well 01S09E05H002 under the PCBL-CC-PMA exceeds its minimum threshold in September of Year 24 at the end of a sixth consecutive drought year and continues for two more months for three months total across two water years. It recovers during the following wet year and doesn't exceed again. Well Hirschfeld [OID-8] exceeds its minimum threshold at almost the same time (August of Year 24 toward the end of a sixth consecutive drought year) and continues for seven months in total across two water years before recovering. Therefore, in the case of these two wells, exceedances only occur after a prolonged drought period of just under six years. The last well, Well 01S10E04C001M, drops below its minimum threshold in the PCBL-CC-PMA in July of Year 8, which is the first of a two-year drought period. Though it comes above the minimum threshold for a few scattered months, it remains below the minimum threshold for eight consecutive water years (through Year 15). In July of Year 21 with continuing drought conditions, the groundwater level drops below the minimum threshold again and remains below for the remainder of the simulation (33 consecutive water years), even though there are scattered months where the water level recovers above the minimum threshold.

The three wells described above only represent the wells that still exceed in the case of climate change and with Category A projects (in the PCBL-CC-PMA). Across the five total wells with exceedances, the most typical time for exceedances is during or immediately after a multi-year

drought. However, with project and management actions implemented, the groundwater level undesirable results do not occur in any year.

6. Conclusions

In response to Potential Corrective Actions 1(a), the ESJGWA has removed the water year type requirement from the definition of undesirable results for chronic lowering of groundwater levels. In response to Potential Corrective Actions 1(b), the ESJGWA has evaluated the impact of project management actions on groundwater levels during drought conditions. As part of this work, the ESJGWA has developed an updated immediate and near-term (within next 5 years) plan for Category A project implementation and has performed modelling analyses to better understand these projects' impact on avoiding minimum thresholds and undesirable results. Remaining projects are included in Category B (projects to be implemented longer-term) to be implemented in the case of Category A projects do not produce a response as simulated in the model and/or if additional recharge projects are required to achieve Subbasin sustainability by 2040. The GSAs are continuing to evaluate opportunities to increase supply reliability, resiliency, and efficiency, and projects may be added to the GSP priorities by the GWA as they become ready for decisions. The adaptive management strategy envisioned in the GSP is based on observation of groundwater levels, management objectives, minimum thresholds and triggers established by the GWA. The GWA is currently evaluating the funding and financing strategies that may be implemented with an eye towards an investment strategy. In addition, the ESJGWA has amended the GSP with actions and language to more specifically describe management actions that may be implemented as adaptive management measures if projects fall short of anticipated recharge and/or offset targets (See Adaptive Management actions described below). Key takeaways from these efforts are described below.

6.1 Conclusion 1: Removal of the Water Year Type Requirement Does Not Significantly Increase Projected Minimum Threshold Exceedances

In response to Potential Corrective Actions 1(a), the ESJGWA has removed the water year type requirement from the definition of undesirable results for the chronic lowering of groundwater levels. The modeling analyses, as described in the sections above, identified where, when, and how often established minimum thresholds may be exceeded under projected conditions. The modeling suggests that the removal of the water year requirement from the definition of undesirable results will not significantly increase the number of representative monitoring network wells that exceed their minimum thresholds, and therefore, is not anticipated to impact the Subbasin's overall sustainability status and avoidance of undesirable results. The modeling also evaluated demand reduction and groundwater level responses to climate change for purposes of comparison.

By proxy, undesirable results are not anticipated for reduction in groundwater storage, land subsidence or depletions of interconnected surface water. The chronic lowering of groundwater levels minimum thresholds are determined to be protective of these three sustainability indicators by the same rationale as described in the GSP. The removal of the water year type requirement from the definition of undesirable results for groundwater levels is more protective than the definition previously provided in the GSP submitted in January 2020.

6.2 Conclusion 2: With Climate Change, the Subbasin Will Likely Need to Implement Additional Projects and Management Actions

As noted previously, modelling indicates that a basin wide, average groundwater storage deficit of 15,700 AFY is anticipated under the effects of climate change, even after the implementation of Category A projects is simulated. While there is still much uncertainty around what the impacts of climate change may be, the ESJGWA should prepare for a continuing overdraft condition even with its Category A projects and will likely need to either cut back on groundwater use, add additional recharge projects, or access new or additional surface water supplies for in-lieu use. The Mokelumne River Water and Power Authority plans to perfect their Mokelumne River water right and build additional projects to utilize that water right, either by implementing previously identified projects such as those projects now in Category B or by developing new projects. Beyond this, alternative demand-side adaptive management actions will be considered as an alternative where necessary to achieve basin sustainability. Such actions could include fallowing of crops or mandatory demand reduction measures, as described below.

6.2.1 *Adaptive Management Measures that may be Considered for Implementation*

GSP Section 6.4 *Adaptive Management Strategies* provides a high-level summary of the ESJGWA's plans to evaluate additional supply-side and demand-side management actions if monitoring efforts demonstrate that the projects are not effective in achieving stated recharge and/or offset targets. However, based on comments from DWR requesting additional detail on management actions that could be implemented, the ESJGWA has developed descriptions of adaptive management measures to be considered for implementation if projects are demonstrated to not be effective in achieving Subbasin sustainability targets.

After implementation of the Category A projects, the adaptive management actions identified below could be implemented if additional measures are required to sustainably manage groundwater in the Subbasin. These adaptive management actions are programs that are not currently ready for implementation, are in the early planning stages, and do not have a firm schedules for development but rather would be implemented as needed sometime after 2026 following reevaluation of Subbasin sustainability during the 5-Year GSP Update in 2025. The sections below describe these potential programs as they are currently contemplated; none of these programs are planned for implementation in the Subbasin at this time.

6.2.1.1 Groundwater Extraction Fee with Land Use Modifications

A groundwater extraction fee or groundwater production charge could be collected from entities that own or operate an agricultural well. Revenue from these fees could then be used to pay for a variety of activities such as the construction of water infrastructure, groundwater conservation initiatives, proper construction and destruction of wells to prevent contamination, groundwater recharge and recovery projects, purchase of imported water or other supplies to replenish the groundwater basin through direct or in-lieu recharge, and/or purchasing and permanent fallowing of marginally-productive agricultural lands dependent on groundwater. Several agencies in California have already implemented such a program and have seen success in utilizing revenue to benefit the local groundwater basin. A similar methodology could be applied within the Eastern San Joaquin Subbasin.

6.2.1.2 Rotational Fallowing or Permanent Fallowing of Crop Lands

Agricultural water use can be temporarily reduced by fallowing crop lands. While this can have economic impacts to a region, the benefits may also include improved water supply reliability, improved groundwater quality, increased groundwater levels, reduced subsidence, and operational flexibility. Rotational fallowing of crop lands reduces the economic impacts to any one area by rotating the areas of fallowing. This management action could be combined with a recharge project through the application of surplus water supplies to the fallowed lands resulting in in-lieu groundwater recharge or the repurposing of the permanently fallowed lands to create wildlife habitat or some other land use benefit that is not reliant on groundwater as a supply. This management action could be implemented, if needed, to help the Subbasin work towards its sustainability goals. However, the rules by which this management action would be implemented would have to be developed by the GSAs within the Subbasin.

6.2.1.3 Conservation Programming for Demand Reduction

A demand reduction measure serves to reduce water demand, surface water losses, and/or nonessential water uses. Demand reduction measures may include a conservation rate structure or a uniform rate structure with a conservation program that achieves demand reduction. Conservation and demand management programs have been a priority for utility providers across the state for decades. Water conservation programs can by implemented by utilities to help offset the increasing demands being placed on water resources. Actions that may be considered a demand reduction measure include, but are not limited to, the following activities:

- Conservation rates
- Water efficient landscaping
- Smart meters
- Water efficient fixtures and appliances
- Water conservation education effort

Many of the GSAs in the Subbasin are currently implementing conservation programming for demand reduction. Under this management action, additional resources would be directed toward conservation programming for demand reduction such that these programs can be enhanced or expanded.

6.2.1.4 Mandatory Demand Reduction

To reduce groundwater demand to allow and encourage the recovery of the groundwater aquifer, mandatory demand reduction may be considered by the ESJGWA as needed to meet the sustainability needs of the Subbasin if projects and management actions fall short of reduction and offset targets. Mandatory measures could include establishment of a per-acre groundwater allocation, metering, extraction reporting, land retirement, and other measures to ensure land is not in production. The proposed PMAs demonstrate that these mandatory demand reduction programs are not likely to be needed in the Eastern San Joaquin Subbasin and are a low priority. Several GSAs in critically overdrafted subbasins are implementing mandatory demand reductions as part of their sustainability efforts under SGMA.

6.3 Conclusion 3: There Is a Need for Implementing Additional Projects or Management Actions in Focused Areas of The Subbasin

Modeling results indicate that, with Category A projects implemented as planned (in progress over the next five years and fully online prior to 2040), the Subbasin is not projected to see undesirable results related to chronic declines in groundwater levels within the planning timeframe of the GSP. However, there are still certain representative monitoring network wells projected to exceed their minimum thresholds for groundwater levels periodically, both with and without climate change, especially following years of extreme drought conditions. The Subbasin will need to monitor these wells as project implementation moves forward to determine if the simulated trends are accurate. Groundwater levels have been, and will continue to be, evaluated annually by the ESJGWA in order to monitor the levels against the chronic lowering of groundwater level minimum thresholds. These data are compiled and evaluated each year as part of the data assessment and production of the Annual Report, submitted to DWR each April 1. Any groundwater level exceedances would be reviewed by a technical workgroup of the ESJGWA and elevated to the Steering Committee and ESJGWA Board for further consideration and action.

Even with Category A projects, the modeling suggests that potentially there are areas where one or more representative monitoring network wells are shown to exceed their minimum thresholds. For these areas, which are outside of the area of influence of existing Category A projects, there is a demonstrated need to implement additional projects or management actions from Category B, beyond the Category A projects that are anticipated, to address groundwater levels in this portion of the groundwater basin. Modelling suggests that the benefits of projects and management actions to groundwater levels are most directly distributed locally to the project area, further supporting this approach.

Memo Attachments not included with Agenda Package

TECHNICAL MEMORANDUM NO. 2 – Drinking Water & Shallow Wells

TO: Paul Gosselin, California Department of Water Resources Deputy Director

CC: Matt Zidar, on behalf of the Eastern San Joaquin Groundwater Authority

PREPARED BY: Leslie Dumas and Natalie Cochran/Woodard & Curran

DATE: June 24, 2022

RE: Eastern San Joaquin Groundwater Authority Response to DWR's November 18, 2021 Consultation Initiation Letter - Response to DWR Deficiency 1(d) and 1(e) and Corrective Actions

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The Eastern San Joaquin Groundwater Authority (ESJGWA or GWA) received a Consultation Initiation Letter (Letter) on November 18, 2021 (Attachment 1), from the California Department of Water Resources (DWR). The Letter identified two potential deficiencies with the Eastern San Joaquin Groundwater Subbasin (Subbasin) Groundwater Sustainability Plan (GSP) which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter thus initiated consultation between DWR, the Plan Manager, and the Subbasin's groundwater sustainability agencies (GSAs) regarding the amount of time needed to address the potential deficiencies and corrective actions. A subsequent meeting with DWR was held on April 4, 2022 to discuss the Subbasin's proposed approach to addressing the identified deficiencies. The analysis presented in this memorandum was completed in response to the Letter, based on direction provided by the ESJGWA, the Subbasin GSAs and DWR. It is intended to supplement the Eastern San Joaquin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR.

Deficiency 1, as described in the DWR November 18, 2021 letter, is summarized as follows:

Potential Deficiency 1: The GSP lacks sufficient justification for determining that undesirable results for chronic lowering of groundwater levels, subsidence, and depletion of interconnected surface waters can only occur in consecutive non-dry water year types. The GSP also lacks sufficient explanation for its minimum thresholds and undesirable results for chronic lowering of groundwater levels.

The letter then went on to identify six potential corrective actions that could address this deficiency. This Technical Memorandum (TM) was prepared to address the deficiency as described in Potential Correction Actions 1(d) and 1(e) which states the following:

"1(d) Removing the water-year type requirement from the definition of an undesirable result (item a, above) would result in a GSP with groundwater level minimum thresholds designed to be generally protective of 90 percent of domestic wells regardless of regional hydrologic conditions. In that scenario, the

GSAs should explain the rationale for determining that groundwater levels can exceed those thresholds at 25 percent of monitoring sites for two consecutive years before the effects would be considered significant and unreasonable. The GSAs should also explain how other factors they identified as "potential undesirable results" (e.g., adverse impacts to environmental uses and users) factored into selecting minimum thresholds and describe anticipated effects of the thresholds on beneficial uses and users of groundwater. Furthermore, the GSAs should explain whether other drinking water users that may rely on shallow wells, such as public water systems and state small water systems, were considered in the GSAs' site-specific thresholds. If not, the GSAs should conduct outreach with those users and incorporate their shallow wells, as applicable, into the site-specific minimum thresholds and measurable objectives.

1(e) The GSAs should revise the GSP to describe how they would address drinking water impacts caused by continued overdraft during the period between the start of GSP implementation and achieving the sustainability goal. If the GSP does not include projects or management actions to address those impacts, the GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why the GSAs determined not to include specific actions to address drinking water impacts from continued groundwater lowering below pre-SGMA levels."

The following subsections provide a response to each of the Potential Corrective Action subparts listed above, and include a discussion with supplemental information, analysis, justification, and data needed to support the GSP and address each issue identified.

Potential Corrective Action 1(d)-1: Explain the rationale for determining groundwater levels can exceed those thresholds at 25% of monitoring sites for two consecutive years before the effects would be considered significant and unreasonable.

Initial Review Provided by DWR

The Letter states the GSP "…identifies that the chronic lowering of groundwater levels could cause undesirable results from wells going dry, reductions in pumping capacities, increased pumping costs, the need for deeper well installations or lowering of pumps, and adverse impacts to environmental uses and users. The GSP builds an analysis of domestic wells going dry into its minimum thresholds, thereby considering the factors of wells going dry and the need for deeper well installations. However, it does not address how the management criteria address the other factors identified by the GSAs as potential undesirable results, including reductions in pumping capacity or increased pumping costs for shallow groundwater users, or adverse impacts to environmental uses and users."

As a Potential Corrective Action, the following is suggested: "Removing the water-year type requirement from the definition of an undesirable result (item a, above) would result in a GSP with groundwater level minimum thresholds designed to be generally protective of 90 percent of domestic wells regardless of regional hydrologic conditions. In that scenario, the GSAs should explain the rationale for determining

that groundwater levels can exceed those thresholds at 25 percent of monitoring sites for two consecutive years before the effects would be considered significant and unreasonable."

Supplemental Information in Response to DWR Letter

Explanation of Rationale For Threshold Exceedance

Refer to "Response to DWR Deficiency 1(a) and 1(b)" technical memorandum for discussion regarding removal of the water-year type requirement from the definition of an undesirable result for the chronic lowering of groundwater levels minimum threshold. As noted in this TM, the revised definition of an undesirable result for the chronic lowering of groundwater levels is when at least 25 percent of representative monitoring wells used to monitor groundwater levels (5 of 20 representative monitoring wells in the Subbasin) fall below their minimum level thresholds for two consecutive years. Significant and unreasonable impacts that may occur when the minimum thresholds are exceeded for more than two consecutive years includes de-watering of a subset of the existing groundwater infrastructure, starting with the shallowest wells, which are generally domestic wells, and adverse effects on GDEs .

Two consecutive years of minimum threshold exceedances are used to determine if an undesirable result has occurred to establish a pattern rather than an isolated event. The lowering of groundwater levels during two consecutive dry or critically-dry years is not considered to be unreasonable unless the levels do not rebound to above the thresholds following wet conditions or are otherwise mitigated through adaptive management or implementation of projects and management actions. While statistically, three data points are required to establish a trend, three years of exceedances was felt to be too extreme, whereas a single exceedance was not sufficient to establish a trend. Therefore, the two consecutive years was selected as part of this definition.

At least 25 percent of representative monitoring wells used to monitor groundwater levels falling below their minimum thresholds for two consecutive years was presented to the Eastern San Joaquin Technical Advisory Committee (ESJ TAC) during the April 10, 2019 meeting and was approved by the Eastern San Joaquin Groundwater Authority (ESJGWA) Board during the May 8, 2019 meeting. Opportunity was available for public comment during the Public Draft GSP 45-day review period from July 10, 2019 to August 25, 2019. The Eastern San Joaquin Water Resources Model (ESJWRM) results under the projected conditions baseline scenario were used to evaluate minimum threshold exceedances, and the model results considered in determining that a 25 percent exceedance threshold was sufficient to determine that undesirable results would occur subbasin-wide (e.g., were not a localized event).

As the GSP is implemented, the definition of undesirable results for the chronic lowering of groundwater sustainability indicator, as well as all other applicable sustainability indicators, will continue to be evaluated to determine it supports the sustainability goal of the Subbasin.

Potential Corrective Action 1(d)-2: Explain how other factors they identified as "potential undesirable results" (e.g., adverse impacts to environmental uses and users) factored into

selecting minimum thresholds and describe anticipated effects of the thresholds on beneficial uses and users of groundwater

Initial Review Provided by DWR

The Letter states the GSP "…builds an analysis of domestic wells going dry into its minimum thresholds, thereby considering the factors of wells going dry and the need for deeper well installations. However, it does not address how the management criteria address the other factors identified by the GSAs as potential undesirable results, including reductions in pumping capacity or increased pumping costs for shallow groundwater users, or adverse impacts to environmental uses and users."

As a Potential Corrective Action, the following is suggested: "The GSAs should also explain how other factors they identified as "potential undesirable results" (e.g., adverse impacts to environmental uses and users) factored into selecting minimum thresholds and describe anticipated effects of the thresholds on beneficial uses and users of groundwater."

Supplemental Information in Response to DWR Letter

Explanation of Other Factors in Potential Undesirable Results

During GSP development (and as stated under Section 3.2.1.1.1 of the GSP), potential undesirable results identified by stakeholders included a significant and unreasonable:

- Number of wells going dry
- Reduction in the pumping capacity of existing wells
- Increase in pumping costs due to greater lift
- Need for deeper well installations or lowering of pumps
- Adverse impacts to environmental uses and users, including interconnected surface waters and groundwater-dependent ecosystems (GDEs)

As stated under Section 3.2.1.2 of the GSP, the minimum thresholds for chronic lowering of groundwater levels are the shallower at each representative monitoring well site of the following:

- The deeper of 1992 and 2015-2016 historical groundwater levels with a buffer of 100 percent of historical range applied, or

- The 10th percentile domestic well total depth of wells within a 3-mile radius of the monitoring well.[1,2]

To develop these thresholds, members of the ESJGWA Board, TAC, and Workgroup evaluated the potential for undesirable results based on past, present, and future conditions. In addition to anecdotal on-the-ground data, data from DWR and Subbasin GSAs, as well as information from reports and planning documents, were used to identify how a given area falls into any one of three general conditions: 1) Areas with significant and unreasonable existing issues, 2) Areas that previously had issues, and 3) Areas that have never had issues. Each of the three conditions correspond to a different pathway to setting minimum thresholds. Classification of the various areas were based on input from GSAs and stakeholders and review of prior planning documents.

- Areas with significant and unreasonable existing issues: these areas are considered to have undesirable results, and minimum thresholds are set to 2015 in accordance with Sustainable Groundwater Management Act (SGMA) legislation. No areas were identified by the ESJGWA Board or other stakeholders under this condition within the Subbasin.

- Areas that previously had significant and unreasonable issues: for areas with historical but not current significant and unreasonable results (as identified by GSAs, stakeholders, and prior planning documents), historical levels were considered in the development of minimum thresholds in addition to existing basin management criteria.

- Areas that have never had significant and unreasonable issues: in areas that have never had recognized issues (e.g., cones of depression), discussions on what the ESJGWA would consider to be significant and unreasonable drove identification of potential thresholds, and minimum thresholds were developed based on the preservation of future beneficial uses.

The ESJGWA Board and Advisory Committee reviewed previously adopted groundwater-related planning documents including the 2014 ESJ Integrated Regional Water Management Plan (IRWMP), the 2004 Groundwater Management Plan (GMP), Agricultural Water Management Plans (AWMPs), and the Mokelumne Watershed Interregional Sustainability Evaluation (MokeWISE) Water Program. These

[1] A radius of 2 miles was used for well 0307E21L003 to reflect domestic well depths in close proximity to the Mokelumne River.

[2] In municipalities with ordinances requiring the use of City water (water provided by the City's municipal wells), the 10th percentile municipal well depth is used in place of the 10th percentile domestic well depth criteria.

documents provided a starting point for setting minimum thresholds. The ESJ IRWMP indicates fall 1992 groundwater elevation levels as a historically low benchmark for the Subbasin, stating "The Eastern San Joaquin Groundwater Basin contour measured in 1992 is proposed as the basin management framework baseline. Groundwater fell to its lowest recorded elevation in 1992 following a significant drought period and it is considered undesirable to drop below this level" (Eastern San Joaquin County GBA, 2014). This language, although developed within the SGMA framework, has severed as a starting point for developing minimum thresholds under SGMA.

Fall 1992 groundwater levels were examined and compared to levels following the recent drought (fall 2015-2016) using groundwater elevation data from officially monitored California Statewide Groundwater Elevation Monitoring (CASGEM) wells, voluntarily monitored CASGEM wells, clustered and nested wells, and San Joaquin County database wells (described in further detail in Section 2.1.1.1 of the GSP). This examination showed that groundwater levels in some areas of the Subbasin have recovered since 1992, with much of the central portion of the Subbasin showing an increase of greater than 10 feet. However, groundwater levels in other portions of the Subbasin have further decreased below 1992 levels without undesirable effects being observed by the GSAs and other stakeholders. In many cases, areas that experienced undesirable effects in 1992 put mitigation measures in place, often deepening wells, meaning that 1992 groundwater levels would no longer trigger undesirable effects.

The deepest conditions between fourth quarter 1992 and 2015-2016 groundwater levels were examined to develop a greater understanding of potential impacts to beneficial uses experienced under historical low groundwater levels. These years were chosen based on the threshold language in the ESJ IRWMP and also to capture the end of the two most recent droughts. Fourth quarter 2014 data were used in the northwest corner of the Subbasin, where data are limited.

Individual GSAs confirmed understanding of the historical lows based on their experience and data, provided feedback on groundwater conditions for their GSAs, and indicated if undesirable results could occur if the minimum threshold was set deeper than the deeper of 1992 and 2015-2016 based on their understanding. GSAs then identified potential wells to be included in the representative monitoring network for the groundwater level sustainability indicator based on the adequate spatial coverage, availability of historical data, and reliability of the monitoring well. For the majority of the Subbasin, GSA representatives identified no undesirable results, even if groundwater were to reach historical low groundwater levels. As a starting point, a potential minimum threshold was considered for each representative monitoring well based on the lower of 1992 or 2015-2016 values unless otherwise indicated. A buffer was subtracted from the minimum 1992 or 2015 groundwater elevation. The buffer was calculated by finding the difference between the minimum and maximum groundwater level over the historical record for each representative monitoring well. The subtraction of the buffer provides a range in which groundwater levels may continue to decline during implementation of projects and management actions until sustainable yield is reached. The buffer allows for flexibility to account for natural fluctuations in groundwater levels but would avoid significant and unreasonable impacts to groundwater levels.

Information used to support development of well-specific minimum thresholds is included in Appendix 3-A and 3-B of the GSP.

Potential Corrective Action 1(d)-3: Explain whether other drinking water users that rely on shallow wells were considered or conduct outreach to shallow well users and incorporate their wells into consideration of site-specific MTs and MOs

Initial Review Provided by DWR

The Letter states "The GSAs set minimum thresholds in the Subbasin at the shallower of the 10th percentile domestic [or municipal] well depth or the historical low groundwater levels with a subtracted buffer value, which the GSP states allows for operational flexibility. These minimum threshold values generally allow groundwater levels to decline below historic lows; minimum thresholds defined using the buffer value approach allow twice the historical drawdown from the shallowest recorded groundwater levels. Aside from the GSP's domestic well analysis, the only description of how minimum thresholds were evaluated to avoid undesirable results appears to be the statements that "for the majority of the Subbasin, GSA representatives identified no undesirable results, even if groundwater were to reach historical low groundwater levels" and that no GSA indicated undesirable results would occur "if the minimum threshold was set deeper than the [historic low] based on their understanding." The GSP provides no further explanation or description of how the individual GSAs concluded that there would be no undesirable results based on the minimum thresholds.

As a Potential Corrective Action, the following is suggested: "The GSAs should explain whether other drinking water users that may rely on shallow wells, such as public water systems and state small water systems, were considered in the GSAs' site-specific thresholds. If not, the GSAs should conduct outreach with those users and incorporate their shallow wells, as applicable, into the site-specific minimum thresholds and measurable objectives."

Supplemental Information in Response to DWR Letter

Explanation of Drinking Water User Consideration

The ESJGWA Board determined that dewatering of domestic wells may be a potential undesirable result that could potentially be used to confirm the adequacy of the minimum threshold methodology. Domestic wells are generally shallower than agricultural and municipal wells and thus more sensitive to undesirable effects such as wells going dry. Additionally, the loss of a domestic well usually results in a loss of water for consumption, cooking, and sanitary purposes, which can often have substantial impacts on the users of the water and can be financially difficult for the well owner to replace. The 10th percentile domestic well depth (i.e., the depth of the top 10th percent most shallow well) was examined within a radius around the monitoring well representative of local conditions. A radius of three miles around each representative monitoring well was used to identify the 10th percentile domestic well construction depth. For representative monitoring well 03N07E21L003, a 2-mile radius was used due to variations in groundwater levels due to its

proximity to the Mokelumne River. The 3-mile radius of each representative monitoring well (including the 2-mile radius of monitoring well 03N07E21L003), includes an average of 400 domestic wells each, collectively capturing approximately 76 percent of the domestic wells in the Subbasin. In cases where the 10th percentile domestic well depth was shallower than the historical drought low with the buffer, that value was developed as the minimum threshold to prevent undesirable results associated with dewatering wells in the Subbasin.

Domestic well data were retrieved from the Online System for Well Completion Reports (OSWCR) database, which is sparsely populated with information on total casing depth, screening intervals, and the age of the well. The 10th percentile well depth was chosen due to the uncertainty in the database and to account for the fact that domestic wells may have been drilled to a very shallow depth prior to the current well drilling standards enforced by local jurisdictions and/or have reached the end of their lifecycle. The 10th percentile domestic well depth for groundwater levels is protective of approximately 90 percent of the domestic wells in the OSWCR dataset and is used as a criterion for determining if a decline in groundwater levels is significant and unreasonable under SGMA. In municipalities with ordinances requiring the use of City water (water provided by the City's municipal wells), the 10th percentile municipal well depth is used in place of the 10th percentile domestic well depth criteria. Furthermore, removal of the dry water year designation from the definition of identification of undesirable results ensures that groundwater levels will not decline below the established minimum thresholds (See Technical Memorandum No. 1 – *Undesirable Result Definition and Projects and Management Actions*).

Potential Corrective Action 1(e)-1: Describe how they [the GSAs] would address drinking water impacts caused by continued overdraft during the period between the start of GSP implementation and achieving the sustainability goal. If the GSP does not include projects or management actions to address those impacts, the GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why the GSAs determined not to include specific actions to address drinking water impacts from continued groundwater lowering below pre-SGMA levels.

Initial Review Provided by DWR

The Letter states "The GSAs should describe how projects and management actions would address drinking water impacts due to continued overdraft between the start of GSP implementation and the achievement of the sustainability goal. If the GSP does not include projects or management actions to address drinking water impacts, the GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why GSAs determined not to include actions to address those impacts from continued groundwater lowering below pre-SGMA levels."

As a Potential Corrective Action, the following is suggested: "The GSAs should revise the GSP to describe how they would address drinking water impacts caused by continued overdraft during the period between the start of GSP implementation and achieving the sustainability goal. If the GSP does not

include projects or management actions to address those impacts, the GSP should contain a thorough discussion, with supporting facts and rationale, explaining how and why the GSAs determined not to include specific actions to address drinking water impacts from continued groundwater lowering below pre-SGMA levels."

Supplemental Information in Response to DWR Letter

Addressing Drinking Water Impacts

Refer to "Response to DWR Deficiency 1(a) and 1(b)" technical memorandum for discussion regarding removal of the water-year type requirement from the definition of an undesirable result for the chronic lowering of groundwater levels minimum threshold. As noted in this TM, the revised definition of an undesirable result for the chronic lowering of groundwater levels is when at least 25 percent of representative monitoring wells used to monitor groundwater levels (5 of 20 representative monitoring wells in the Subbasin) fall below their minimum level thresholds for two consecutive years.

The Eastern San Joaquin GSP contains 23 projects, where additional projects that support SGMA objectives have been identified since GSP adoption and submittal. Refer to "Response to DWR Deficiency 1(a) and 1(b)" technical memorandum for the latest project information and how the projects will mitigate overdraft conditions. The majority of projects in the GSP include groundwater recharge utilizing existing and pending surface water rights, which will elevate groundwater levels within the project benefitting areas throughout the Subbasin.

The basis for design and selection of the sustainable management criteria (SMCs) is the lowest drought-related groundwater conditions observed. The GWA and GSAs focused the GSP goals on the long-term sustainability of the Subbasin and implementation of projects that would help all beneficial users to have a reliable and resilient water supply, even in time of drought, and provide the ability to respond to climate change. The GWA and GSAs are supportive of ongoing agricultural, urban, and industrial water conservation efforts and to achieving the highest levels of water use efficiency technically achievable. It should be noted that water conservation programs have been successful in reducing urban and agricultural water demands such that those demands have become "hardened" and are less able to be reduced in time of drought without real impacts to the quality of life or economy. GSP projects and management actions are to reduce overdraft, and are designed to provide sustainable supplies through a drought without severe impacts to quality of life or the economy.

The GSP was not targeted toward emergency responses to drought or the short-term impacts associated with drought since this is the focus of the County Office of Emergency Services (OES) and a requirement for the water purveyors. In addition, the prevailing urban water management plans (UWMPs) and agricultural water management plans (AWMPs) identify water conservation goals and demand reduction targets, including water shortage contingency plans, and the GWA and GSAs are supportive of those plans (and the drought contingency responses) and will encourage the lead agencies for those plans to implement actions and programs consistent with local and state requirements. The GWA will work to better coordinate with

the OES and urban purveyors to support emergency drought response efforts. The GWA and GSP development has included representatives from the urban suppliers and will continue to seek opportunities to engage with OES, the urban purveyors and to work to identify mutual goals, objectives and project opportunities.

With the removal of the water-year type requirement from the definition of an undesirable result for the chronic lowering of groundwater levels minimum threshold, established minimum thresholds will not allow for continued lowering of groundwater levels that will likely most severely impact shallow domestic well users. As noted in the prior explanation, the depth of shallow domestic wells and production wells was considered in establishing the numerical minimum thresholds at the representative monitoring sites, thereby considering the depths of and potential impacts to drinking water users relying on groundwater. If drinking water impacts are observed during GSP implementation as a result of the established minimum thresholds, the ESJGWA will evaluate the need to revise the minimum threshold methodology and/or implement additional projects or management actions to mitigate such impacts (as described in the "Response to DWR Deficiency 1(a) and 1(b)" technical memorandum). The GWA and GSAs will evaluate other programs as part of the adaptive management strategy, and annual program evaluation and reporting. Neither SGMA nor the California Water Code include requirements to mitigate for small and domestic systems or to include drought contingency plans in a GSP as this is the responsibility of other agencies or members of a GSA/GWA. If there is a statutory requirement included in the SGMA legislation at a future date, the GWA and GSAs will evaluate their programs and consider a well mitigation program. In the meantime, the following management actions will be included:

1. Outreach to domestic well owners and small water systems. This will include information related to forecasted water levels with and without projects to inform subsequent investments decisions for well improvement and replacement.

2. Production and distribution of current and forecasted groundwater level information to be provided to well permit applicants to inform the permitting process.

3. Review of well standards to evaluate opportunities to establish standards to better reflect current and forecasted groundwater level conditions.

4. The GWA and GSAs will actively promote small systems interties and/or consolidation of their systems to achieve supply reliability.

The future five-year update to the GSP will more closely evaluate and include information on UWMP water shortage contingency plans, and the GWA will coordinate with the County OES to support emergency drought responses and plans.

The GSAs recognize that domestic wells may be impacted by declining groundwater levels, as well as other factors, including but not limited to, end of useful life. The GSAs intentionally set the minimum thresholds in the GSP to avoid domestic well failures due to declining groundwater levels. However, the GSAs recognize the need for a back-up process to mitigate the impact of GSP management on domestic well failures, if

necessary. As part of the five-year update to the GSP, the GSAs, through the GWA, will identify additional management actions that can be implemented to address this situation, including considering development of a domestic well mitigation policy and program ("DWMP").

REFERENCES

San Joaquin County Groundwater Basin Authority (Eastern San Joaquin County GBA). (2014). *Eastern San Joaquin Integrated Regional Water Management Plan Update*.

Memo Attachments not included with Agenda Package

TECHNICAL MEMORANDUM NO. 3 - Groundwater Quality Degradation in Areas where further Groundwater Level Decline is Allowed

TO: Paul Gosselin, California Department of Water Resources Deputy Director

CC: Kris Balaji, on behalf of the Eastern San Joaquin Groundwater Authority

PREPARED BY: Matt Zidar, San Joaquin County Public Works, Water Resources Division
Leslie Dumas and Natalie Cochran/Woodard & Curran

DATE: June 24, 2022

RE: Eastern San Joaquin Groundwater Authority Response to DWR's November 18, 2021 Consultation Initiation Letter - Response to DWR Deficiency 1(f) and Corrective Actions

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The Eastern San Joaquin Groundwater Authority (ESJGWA) received a Consultation Initiation Letter (Letter) on November 18, 2021 (Attachment 1), from the California Department of Water Resources (DWR). The Letter identified two potential deficiencies with the Eastern San Joaquin Groundwater Subbasin (Subbasin) Groundwater Sustainability Plan (GSP) which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter thus initiated consultation between DWR, the Plan Manager, and the Subbasin's groundwater sustainability agencies (GSAs) regarding the amount of time needed to address the potential deficiencies and corrective actions. A subsequent meeting with DWR was held on April 4, 2022 to discuss the Subbasin's proposed approach to addressing the identified deficiencies. The analysis presented in this memorandum was completed in response to the Letter, based on direction provided by the ESJGWA, the Subbasin GSAs and DWR. It is intended to supplement the Eastern San Joaquin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR.

Deficiency 1, as described in the DWR November 18, 2021 letter, is summarized as follows:

Potential Deficiency 1: The GSP lacks sufficient justification for determining that undesirable results for chronic lowering of groundwater levels, subsidence, and depletion of interconnected surface waters can only occur in consecutive non-dry water year types. The GSP also lacks sufficient explanation for its minimum thresholds and undesirable results for chronic lowering of groundwater levels.

The letter then went on to identify six potential corrective actions that could address this deficiency. This Technical Memorandum (TM) was prepared to address the deficiency as described in Potential Correction Actions 1(f), which states the following:

"1(f) The GSP should be revised to explain how the GSAs will assess groundwater quality degradation in areas where further groundwater level decline, below historic lows, is allowed via the minimum thresholds. The GSAs should further describe how they will coordinate with the appropriate groundwater users, including drinking water, environmental, and irrigation users as identified in the GSP. The GSAs should also discuss efforts to coordinate with water quality regulatory agencies and

programs in the Subbasin to understand and develop a process for determining if continued lowering of groundwater levels is resulting in degraded water quality in the Subbasin during GSP implementation."

The following subsections provide a response to each of the Potential Corrective Action 1(f) subparts listed above, and include a discussion with supplemental information, analysis, justification, and data needed to support the GSP and to address each issue identified.

Potential Corrective Action 1(f)-1: Explain how the GSAs will assess groundwater quality degradation in areas where further groundwater level decline, below historic lows, is allowed via the minimum thresholds.

Initial Review Provided by DWR

The Letter states the GSAs "…have not explained how those groundwater level declines [allowed for by the GSP's minimum thresholds] relate to the degradation of groundwater quality sustainability indicator. GSAs must describe, among other items, the relationship between minimum thresholds for a given sustainability indicator (in this case, chronic lowering of groundwater levels) and the other sustainability indicators."

As a Potential Corrective Action, the following is suggested: "Explain how the GSAs will assess groundwater quality degradation in areas where further groundwater level decline, below historic lows, is allowed via the minimum thresholds."

Proposed Supplemental Information in Response to DWR Letter

Explanation of Groundwater Level Declines and Degradation of Water Quality

The only clear correlation between groundwater levels and water quality impairment from constituents of concern are related to the regional migration of poor-quality water from under the Delta to the groundwater pumping trough that is east of the City of Stockton. A gradient from the Delta toward the east causes the migration of poor-quality water into the Subbasin's principal aquifers which can be exacerbated by increased pumping east of the Delta. U.S. Geologic Survey (USGS) data and prior studies suggest that high chloride groundwater is the result of the eastern movement of brackish San Joaquin Delta water and the upward movement of saline water associated with older marine deposits underlying freshwater aquifer units (Izbicki, 2006). Chloride and total dissolved solids (TDS) have been the indicator constituents for this potential degradation mechanism.

Other than for the movement of poor-quality saline groundwater from the Delta eastward as a result changes in groundwater gradients (whether occurring naturally, induced by groundwater pumping, and/or as a result of some other hydrologically-related parameter), there is no simple correlation between groundwater levels and groundwater quality (as characterized by a large number of naturally-occurring constituents such as manganese, arsenic, boron, and manmade constituents such as 1,2,3-TCP and PFOS. Numerical modeling is one method of evaluating the hydraulic conditions which could cause migration and mixing of poor-quality water and the resultant degradation in groundwater quality; however, with the exception of simulating project-specific impacts, simulating long-term basin management would be difficult

and speculative given the large number of potential constituents of concern and possible sources of those constituents.

This potential for regional migration of saline waters was one of the reasons for developing prior groundwater management plans and the Integrated Conjunctive Use Program, and for implementing related Project Management Actions (PMAs) over the past 20 years. Projects implemented to date include projects to reduce groundwater pumping by providing treated surface water in-lieu of groundwater use, such as the City of Stockton's Delta Diversion Project, which diverts Delta water for treatment and distribution in lieu of groundwater supplies. The Stockton East Water District (SEWD) Dr. Joe Waidhofer Water Treatment Plant also treats and purveys surface water to urban contractors, including the County of San Joaquin, City of Stockton, and California Water Service. These two in-lieu projects have helped decrease groundwater pumping and have allowed for recovery of groundwater levels on the order of 14 to 20 feet. This has reduced, but not eliminated, the eastern migration of poor-quality water from the Delta into the Subbasin by reducing the groundwater hydraulic gradient eastward from the Delta.

Implementation of the other PMAs included in the Eastern San Joaquin (ESJ) Groundwater Sustainability Plan (GSP) is intended to raise groundwater levels or, at minimum, keep levels in the operating zone defined as the elevations between the Measurable Objective (MO) and the Minimum Threshold (MT) established to avoid undesirable results. These sustainable management criteria were set specifically to help prevent the further migration of saline water. The relationship between the MOs and MTs for groundwater levels considered water quality and the afore-described saline water migration because there was a known potential and causality, even if no clear correlations.

There are dedicated monitoring wells that have been constructed in the past 20 years and a production well network which together serve as sentinels to track chloride and TDS as indicators of the saline water and potential migration (please see ESJ GSP Figure 2-58, pg. 2-84) and to monitor the sustainability indicators for this management problem. These wells are also part of the ESJ GSP representative monitoring well network.

California Code of Regulations (CCR) Title 22 establishes water quality standards for drinking water contaminants. A secondary MCL (SMCL) is defined for a variety of parameters, including chloride and TDS. Secondary MCLs are based on user acceptability of the quality of drinking water, as opposed to being established to protect human health. For the purposes of this GSP, comparing chloride and TDS concentrations to their respective SMCLs is the basis for monitoring the above-described groundwater quality concerns in the Eastern San Joaquin Subbasin. [should reference data for the water in or under the Delta that is of concern – do levels of chloride and/or TDS in these waters exceed SMCLs? i.e. do they pose a risk of causing exceedances in adjacent groundwater?]

Nexus Between GWL and WQ

Except for the potential for regional migration of saline water, there is no evidence or historical data to indicate that there is relationship between lowering of groundwater levels and groundwater quality degradation. We have not observed, nor can we anticipate, any causal connection between groundwater management actions that can be undertaken by GSAs, and lowering groundwater levels that would result in degradation associated with other constituents of concern.

There are, however, potential mechanisms for lowering groundwater levels to influence water quality. These include:

- Falling groundwater levels which may cause migration of already-contaminated groundwater from natural sources, nonpoint sources (salt, nitrate), or a plume from a point source where a potential responsible party is known.
- Rising groundwater levels creating changes in oxidation potential and mobilization of arsenic.
- Rising groundwater levels from recharge operations or reduce pumping that could mobilize nitrates or salts in the vadose zone.

The GSP reviews water quality issues regarding nitrates, arsenic, and salts, referencing Regional Water Quality Control Board (RWQCB) programs under the Central Valley Water Quality Control Plan, and those of the State Water Resources Control Board, including the Irrigated Lands Regulatory Program and the CVSALTS initiative, generally describing these programs and relationship to these efforts. The intent is to acknowledge those jurisdictions and authorities, create awareness of the areas of responsibility for management and regulation, and identify where there are known water quality issues and impairments to beneficial use being addressed through those authorities. The GSP acknowledges the Central Valley Regional Water Quality Control Board (RWQCB)/State Water Resources Control Board (SWRCB) responsibilities, including those of the Division of Drinking Water, and documents these programs and how they influence the GSAs PMAs and groundwater management in the region to be consistent and respectful of the authorities and programs of these related agencies. This includes local Environmental Health Department authorities to protect drinking water quality, health, and safety.

There may be a relationship between PMAs to be implemented by GSAs that merit review at the time such projects are proposed and subject to California Environmental Quality Act (CEQA), and if potential impacts are identified during scoping and the input of the responsible or trustee agencies. Any PMA that could result in violation of MCLs as a threshold of significance would require mitigation and monitoring to ensure there are no negative effects. For example, groundwater recharge has been observed to result in short term increases in nitrogen concentration in groundwater due to the flushing of nitrate from the soil and/or vadose zone to the water table. This known potential negative effect would require evaluation during project development and ongoing monitoring and mitigation during operation. The rising water table associated with a recharge project could also intersect with nitrogen entrained in the pore space in the vadose zone and mobilizing this constituent. Both effects have been observed to be short term in nature as more clean water is recharged over time and typically improves ambient water quality. Regardless, impacts would be evaluated and mitigated as required under CEQA.

Varying groundwater levels may also change geochemical conditions and result in oxidation and mobilization of some elements. This is one mechanism for mobilizing arsenic; however, there is not enough data to evaluate causal relationship or correlations with groundwater levels at this time. The GSP notes the monitoring well and drinking water well monitoring and reporting of arsenic levels.

Potential Corrective Action 1(f)-2: Describe how they will coordinate with the appropriate groundwater users, including drinking water, environmental, and irrigation users as identified in the GSP

Initial Review Provided by DWR

The Letter states "The GSAs generally commit to monitoring a wide range of water quality constituents, but they have only developed sustainable management criteria for total dissolved solids because they state they have not observed a causal nexus between groundwater management and degradation associated with the other constituents. While Department staff are not aware of evidence sufficient to conclude that the GSAs acted unreasonably by focusing on total dissolved solids, it is clear that the GSAs did not consider, or at least did not document, the potential for degradation to occur due to further lowering of groundwater levels beyond the historic low."

As a Potential Corrective Action, the following is suggested: "The GSAs should further describe how they will coordinate with the appropriate groundwater users, including drinking water, environmental, and irrigation users as identified in the GSP."

Supplemental Information in Response to DWR Letter

GSAs Assessment of Groundwater Quality Degradation

The ESJ GSP and PMAs are designed to prevent further groundwater level declines below the historic level and MTs established. The representative water quality monitoring well network in the area where lowering of groundwater levels may lead to degradation of water quality, along with tracking of other regional monitoring by the RWQCB, SWRCB and local water purveyors, will allow the GSAs to observe water quality conditions and identify when groundwater level MTs are exceeded to determine if water quality exceeds the SMCLs at the MT for the constituents of concern referenced in the GSP. If groundwater level MTs and groundwater quality SMCLs as MTs are exceeded, the GWA will convene a working group consisting of GSAs, regulators and local water purveyors to conduct and publish an assessment of the effect of groundwater management activities on the documented exceedance and propose timely corrective actions to manage groundwater differently, if needed, to avoid exacerbating the exceedance and to address the resultant undesirable results.

Through the ESJGWA, the GSAs will collaborate and share data with other programs monitoring water quality data to observe both ambient and regulated conditions.

Coordination with Groundwater Users

GSP implementation by the ESJGWA includes stakeholder coordination, outreach and engagement of groundwater users, and seeks to involve representatives of the different beneficial uses and users, including non-governmental organizations. The ESJGWA maintains a web site, is working to implement a data management system to provide transparent access to available groundwater level and quality data, and produces and distributes the required Annual Report which is a primary tool for communicating basin conditions and progress in achieving sustainability. The Annual Report includes documentation of efforts to coordinate with the other monitoring and regulatory programs to bring data and information into the

ESJGWA discussions and build awareness of how groundwater levels and quality may be managed together to achieve sustainability.

The Subbasin's Technical Advisory Committee will be used to review monitoring data from the GSP programs, and to integrate information from other monitoring programs into the Annual Report to identify where constituents of concern are degrading water quality and will seek to define if there is a relationship between groundwater levels and impacts to beneficial use.

Potential Corrective Action 1(f)-3: Discuss efforts to coordinate with water quality regulatory agencies and programs in the Subbasin to understand and develop a process for determining if continued lowering of groundwater levels is resulting in degraded water quality in the Subbasin during GSP implementation

Initial Review Provided by DWR

The Letter states "While Department staff are not aware of evidence sufficient to conclude that the GSAs acted unreasonably by focusing on total dissolved solids, it is clear that the GSAs did not consider, or at least did not document, the potential for degradation to occur due to further lowering of groundwater levels beyond the historic lows."

As a Potential Corrective Action, the following is suggested: "The GSAs should also discuss efforts to coordinate with water quality regulatory agencies and programs in the Subbasin to understand and develop a process for determining if continued lowering of groundwater levels is resulting in degraded water quality in the Subbasin during GSP implementation."

Supplemental Information in Response to DWR Letter

Coordination with Water Quality Regulatory Agencies and Programs

The primary state authority for protecting water quality under the Porter Cologne Water Act is the SWRCB and RWQCB via the *Water Quality Control Plans* (also known as Basin Plans) which define the beneficial uses of water (including groundwater), set water quality numeric and narrative objectives, establish priorities, and implement programs to manage both point and non- point sources of contamination. The Water Boards coordinate with the other state programs including, the Department of Pesticide Regulation.

Section 3.2.3.1.1 of the GSP discusses the Irrigated Lands Regulatory Program (ILRP) and Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS), two existing regulatory programs for the monitoring and regulation of nitrate and salts in the Central Valley. Under the ILRP, the San Joaquin County & Delta Water Quality Coalition (Coalition) is required to test and potentially mitigate for nitrate in domestic wells. The Coalition has 40 trend monitoring wells throughout San Joaquin County that are sampled yearly to determine the nitrate levels in the groundwater. They also hold grower meetings and conduct outreach to growers on best management practices that are protective of water quality for both surface water and groundwater. The Coalition completed its *Groundwater Assessment Report* in 2015 that identified areas that were highly susceptible to nitrate from agriculture leaching into groundwater (High Vulnerability Areas). The Coalition also analyzes monitoring data and grower-prepared nitrate

management plan information to determine if the growers follow the requirements of the Irrigated Lands Regulatory Program. The Coalition then reports this analysis with required information to the Central Valley Regional Water Quality Board on an annual basis.

Additionally, the 2017 Salt and Nitrate Control Program, developed by CV-SALTS, identifies long-term nitrate management requirements (CVRWQCB, 2016). The Eastern San Joaquin Basin is Priority 2 Basin under the nitrate control program. The CV-SALTS Prioritization and Optimization (P&O) Study is a long-term effort to develop, plan and implement solutions for managing and controlling salt accumulation in the Valley.

In May 2018, because of CV-SALTS program efforts, a new Salt and Nitrate Management Plan (SNMP) was approved by the Central Valley Regional Water Quality Control Board as Amendments to the Basin Plans for the Sacramento River, San Joaquin River Basin and the Tulare Lake Basin. The State Water Resources Control Board then directed targeted revisions to the Amendments adopted by the Central Valley Water Board. The following Proposed Revisions were approved with an effective date of November 10, 2021.

- Salt and Nitrate Control Program Basin Plan Amendments – Proposed Revisions (2021)
- Salt and Nitrate Control Program – Basin Plan Amendment (2019)

The State Water Resources Control Board Division of Drinking Water and local health agencies monitor drinking water quality to protect public health and safety. Their programs and the proposed ESJ monitoring should share data to better diagnose and treat potential or known water quality impairments.

ESJGWA and GSA Project Management Actions

The ESJ GSP also proposes the following program management actions for the Subbasin GSAs to be coordinated through the ESJGWA. These include:

1. Regular Process for coordination

    a. The ESJGWA will hold an annual "groundwater water quality state of the basin" meeting or workshop in January and invite the members of the Coalitions to present the results of the monitoring program.

    b. The ESJ Technical Advisory Committee (TAC) will invite participation and *ex officio* representation from the RWQCB staff to receive regular information regarding ILRP, CV-SALTS and any planned updates or amendments to the San Joaquin Water Quality Control Plan.

2. Monitoring

    a. The ESJGWA will seek to develop monitoring and data sharing agreements with the Coalition.

    b. ESJGWA staff will work with the local Environmental Health Division and SWRCB Division of Drinking to identify drinking water wells which are nearing or have exceeded MCLs or SMCLs, noting the location, number of wells and the constituents of concern.

3. Data Management. Where possible, the ESJGWA will include the water quality data collected via other monitoring networks in their annual assessments, and will use this information to further evaluate trends and any correlations between groundwater levels, the groundwater level MTs, and observed water quality conditions.

4. Annual Report. Beyond the reporting of data from the GSP groundwater level and water quality monitoring network, the ESJ Annual Report will include expanded groundwater quality discussion to document:

    a. The annual results of the Coalitions monitoring program

    b. Known impairments identified by the RWQCB pursuant to the Water Quality Control Plans

    c. Wells and locations where MCLs have been exceeded as identified by the SWRCB Division of Drinking Water, consumer confidence reports, or the local Environmental Health Department

REFERENCES

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TECHNICAL MEMORANDUM NO. 4 – LAND SUBSIDENCE

TO: Paul Gosselin, California Department of Water Resources Deputy Director

PREPARED BY: Kris Balaji, on behalf of the Eastern San Joaquin Groundwater Authority

DATE: June 24, 2022

RE: Eastern San Joaquin Groundwater Authority Response to DWR's November 18, 2021 Consultation Initiation Letter – Response to Potential Deficiency No. 2 and Corrective Actions

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1. Introduction

The Eastern San Joaquin Groundwater Authority (ESJGWA) received a Consultation Initiation Letter (Letter) on November 18, 2021 (Attachment 1), from the California Department of Water Resources (DWR). The Letter identified two potential deficiencies with the Eastern San Joaquin Groundwater Subbasin (Subbasin) Groundwater Sustainability Plan (GSP) which may preclude DWR's approval, as well as potential corrective actions to address each potential deficiency. The Letter thus initiated consultation between DWR, the Plan Manager, and the Subbasin's groundwater sustainability agencies (GSAs) regarding the amount of time needed to address the potential deficiencies and corrective actions. A subsequent meeting with DWR was held on April 4, 2022 to discuss the Subbasin's proposed approach to addressing the identified deficiencies. The analysis presented in this memorandum was completed in response to the Letter, based on direction provided by the ESJGWA, the Subbasin GSAs and DWR. It is intended to supplement the Eastern San Joaquin GSP that was submitted in January 2020 and fill potential gaps identified in the Letter provided by DWR.

The following sections provide a response to the Potential Corrective Actions identified under **Potential Deficiency 2**.

2. Potential Deficiency 2

Potential Deficiency 2. The GSP does not provide enough information to support the use of the chronic lowering of groundwater levels sustainable management criteria and representative monitoring network as a proxy for land subsidence

Under Potential Deficiency 2, DWR identified deficiencies related to the use of the chronic lowering of groundwater levels sustainable management criteria and representative monitoring network as a proxy for land subsidence. Specifically, DWR requests additional information demonstrating significant correlation between groundwater levels and land subsidence to demonstrate that groundwater level minimum thresholds represent a reasonable proxy for avoiding land subsidence undesirable results. The GSAs must additionally demonstrate how the monitoring network is adequate to identify undesirable results for land subsidence.

To address findings identified under Potential Deficiency 2, DWR has put forward Potential Corrective Action 2 for GSA consideration. Potential Corrective Action 2 contains three subparts, which are summarized below.

- **Potential Corrective Action 2-1:** Identify the total extent and rates of subsidence that critical infrastructure in the Subbasin can tolerate during GSP implementation.

- **Potential Corrective Action 2-2**: Document a significant correlation between groundwater levels and specific amounts or rates of land subsidence. Account for potential subsidence related to groundwater level declines below historic lows and further declines that would exceed minimum threshold levels. Demonstrate that

groundwater level declines allowed during GSP implementation are preventative of the rates and extent of land subsidence.

- **Potential Corrective Action 2-3:** Explain how the groundwater level representative monitoring network is sufficient to detect significant and unreasonable rates or extents of land subsidence that may substantially interfere with land uses.

The following subsections provide a response to each of the Potential Corrective Action subparts listed above, and include a discussion with supplemental information, analysis, justification, and data needed to support the GSP and address each issue identified.

Potential Corrective Action 2-1: Identify the total extent and rates of subsidence that critical infrastructure in the Subbasin can tolerate during GSP implementation

Initial Review Provided by DWR

The Letter states the GSP "does not adequately identify or define minimum thresholds and undesirable results for land subsidence… [and] does not identify specific infrastructure locations, particularly those associated with public safety, in the subbasin and the rate and extent of subsidence that would substantially interfere with those land surface uses and may lead to undesirable results". The Letter further clarifies that, "without identifying infrastructure considered at risk for interference from land subsidence, Department staff cannot evaluate whether the groundwater level representative monitoring network is adequate to detect potential subsidence-related impacts."

As a Potential Corrective Action, the following is suggested: "The GSA should revise the GSP to identify the total subsidence that critical infrastructure in the Subbasin can tolerate during GSP implementation. Support this identification with information on the effects of subsidence on land surface beneficial uses and users and the amount of subsidence that would substantially interfere with those uses and users."

Supplemental Information in Response to DWR Letter

Identification of Critical Infrastructure

The GSP describes an undesirable result for land subsidence in the Eastern San Joaquin Subbasin as occurring if land subsidence substantially interferes with beneficial uses of groundwater and infrastructure within the Subbasin over the planning and implementation horizon of the GSP. In coordination with the San Joaquin County Department of Public Works and the San Joaquin County Office of Emergency Services, the following infrastructure types have been identified as those potentially at risk for interference from land subsidence, if it were to occur in the Subbasin. Please note that, as discussed with DWR during the April 4th meeting, due to the sensitive nature of the critical infrastructure, specific infrastructure are not named and, rather, only the principal categories of these types of infrastructure are discussed below.

Critical infrastructure at risk for subsidence impacts:

- Major highways, roadways, and bridges
- Canals, pipelines, and levees
- Electrical transmission lines
- Schools
- Fire stations
- Hospitals and other medical facilities
- Law enforcement facilities (police stations, jails, correctional facilities)
- Water and wastewater treatment, distribution, and storage facilities
- Communication facilities

The Subbasin is served by an extensive road network, including major interstate highways. The San Joaquin County Department of Public Works maintains the County's 120-mile network of underground facilities, over 1,600 miles of roadway, 265 bridges, and 364 minor structures. In addition, San Joaquin County supports air service, a deep water port, transcontinental rail, and commuter trains. Major roadways located within the Subbasin boundary include Interstate 5 (I-5) and multiple State Routes (4, 12, 26, 88, 99, 120). Major bridges in the Subbasin serve both automobile and railroad transport. Major bridges in the subbasin include the San Joaquin River Bridge, Littlejohns Creek Bridge, Mormon Slough Bridge, and the Union Pacific Mossdale Bridge East.

Service buildings within the Subbasin include fire stations, hospitals, jails and correction facilities, police stations, and wastewater plants. The County also maintains 30 water systems with 52 wells, 3 sewage treatment plants, 9 sewage pumping stations, 68 storm drain pumping stations, and over 300 miles of levees and flood channels. In general, major pipelines that run through the County are in areas south of Lodi and southwest of Tracy along the foothills (outside of the Subbasin boundary).

In addition to identifying critical infrastructure at risk for subsidence impacts, the ESJGWA has worked with OES to identify the total subsidence load that critical infrastructure in the Subbasin can tolerate during GSP implementation, and what would be considered an undesirable result. Through input from OES, the critical infrastructure in the Subbasin can generally tolerate a significant amount of uniform settlement due to subsidence across the Subbasin, though the total amount of settlement that can be tolerated is dependent on the design of the specific infrastructure. Differential settlement across facilities in a locale, on the other hand, will result in more damage. However, it is worth noting that it is less common for subsidence to cause significant local differential sediment. In addition, the *San Joaquin County 2017 Local Hazard Mitigation Plan* identifies land subsidence as a potential cause for levee breakage; however, the hazard of subsidence is ranked "not likely" to occur.

Potential Corrective Action 2-2: Document a significant correlation between groundwater levels and specific amounts or rates of land subsidence. Account for potential subsidence related to groundwater level declines below historic lows and further declines that would exceed minimum threshold levels. Demonstrate that groundwater level declines allowed during GSP implementation are preventative of the rates and extent of land subsidence.

Initial Review Provided by DWR

The second part of this Potential Corrective Action seeks additional information to document a significant correlation between groundwater levels and land subsidence. The Letter states the GSP "fails to provide adequate evidence to evaluate further [the correlation between groundwater levels and land subsidence], specifically concerning potential subsidence caused by groundwater levels falling below historic lows, as would be allowed by the groundwater level minimum threshold set in the GSP. The Letter further states that the GSP "presents no analysis of historic groundwater levels or historically dewatered subsurface materials to support the conclusion that the geologic units are not compressible", "does not provide an evaluation showing how additional declines in groundwater levels would only affect subsurface materials similar to those which have been historically dewatered", and "is unclear on whether the conditions required to identify an undesirable result for chronic lowering of groundwater levels in the subbasin are also required to identify an undesirable result for land subsidence."

As a Potential Corrective Action, the following is suggested: "The GSAs should revise the GSP to document a significant correlation between groundwater levels and specific amounts or rates of land subsidence. The analysis should account for potential subsidence related to groundwater level declines below historical lows and further declines that are allowed to exceed minimum thresholds (i.e., during non-consecutive non-dry years, if applicable based on the resolution to Potential Deficiency 1, above). This analysis should demonstrate that groundwater level declines allowed during GSP implementation are preventative of the rates and magnitudes of land subsidence considered significant and unreasonable based on the identified infrastructure of concern. If there is not sufficient data to establish a correlation, the GSAs should consider other options such as direct monitoring of land subsidence (e.g., remotely

sensed data provided by the Department, extensometers, or GPS stations) until such time that the GSAs can establish a correlation."

Supplemental Information in Response to DWR Letter

Areas Potentially At-Risk for Subsidence

As discussed in the GSP, despite long-term declining groundwater levels in the Subbasin, there are no historical records of impacts from land subsidence in the Eastern San Joaquin Subbasin. **Figure 1** shows regional subsidence produced from TRE Altamira Interferometric Synthetic Aperture Radar (InSAR) data, provided by DWR for SGMA application. This figure illustrates that subsidence has historically been minimal in the Subbasin and surrounding areas (ranging from -0.1 to 0.1 feet of vertical displacement annually). This corresponds with what San Joaquin County Public Works and San Joaquin County Office of Emergency Services staff have observed anecdotally, that the Subbasin has not historically experienced issues with land subsidence.

In the Subbasin, there are two potential mechanisms that could potentially contribute to inelastic land subsidence: 1) groundwater extraction resulting in dewatering and collapse of compressible clays in the subsurface, 2) and the oxidation of peaty soils.

Mechanism 1: Subsidence Caused by Dewatering and Collapse of Compressible Clays

The first mechanism for inelastic land subsidence involves the presence of compressible clays and strata in the subsurface, which are not known to be common in the Eastern San Joaquin Subbasin. The Corcoran Clay is one type of subsurface material that is potentially predisposed to compression, especially in the San Joaquin Valley. While dominant in basins to the south, the extent of Corcoran Clay within the Eastern San Joaquin Subbasin is limited to the extreme southwest corner of the Subbasin, near the City of Manteca. **Figure 2** shows the extent of Corcoran Clay within the Subbasin. This figure also includes hydrographs for two monitoring wells located in this area, one in the Representative monitoring network for chronic lowering of groundwater levels, and one in the Broad monitoring network for chronic lowering of groundwater levels. In addition, there are two other Broad groundwater level monitoring network wells that fall within the Corcoran Clay boundary but are outside of the boundary of the available Corcoran Clay depth raster dataset. As shown in the hydrographs provided, historical water levels have remained relatively constant in this area and are well above the Corcoran Clay elevation.

Well 02S07E31N001M (shown as well "A" in **Figure 1**) is in the Representative monitoring network for chronic lowering of groundwater levels. This well is located in the South Delta Water Agency (SDWA) GSA and has a minimum threshold set at 1.5 feet mean sea level (ft MSL), which while below the historical average, is still well above the Corcoran Clay elevation at that location (-176 ft MSL). The ESJGWA has identified a numeric trigger for groundwater levels at which subsidence would become a concern as -150 ft MSL in the portion of the Subbasin were Corcoran Clay is present. This numeric trigger was selected based on available Corcoran Clay elevation data and is intended to capture the shallowest Corcoran Clay in the Subbasin.

The Corcoran Clay layer in the Subbasin is not anticipated to become dewatered if groundwater levels do not drop below the elevation at which Corcoran Clay is present. Because the minimum thresholds for groundwater levels in the portion of the Subbasin where Corcoran Clay is present are higher in the aquifer than the elevation of the Corcoran Clay, groundwater levels are not anticipated to drop below the elevation at which Corcoran Clay is present. Therefore, if groundwater levels are maintained above their minimum thresholds, the Corcoran Clay layer, which is lower in elevation, would not become dewatered and therefore would not become compressed. Thus, the chronic lowering of groundwater levels minimum threshold is protective against dewatering of Corcoran Clay in the Subbasin.

Figure 3 (GSP Hydrogeologic Cross-Section E-E') shows the extent of Corcoran Clay in cross-section. As shown, the Corcoran Clay becomes interbedded with the sands and silt of the upper Turlock Lake Formation. Here, the clay is typically 20 to over 100 feet thick and is locally eroded and interfingered with coarser materials at its margin. It is not found in the central and northern portions of the Subbasin.

Mechanism 2: Subsidence Caused by the Oxidation of Peaty Soils

The second mechanism for inelastic land subsidence in the Subbasin area, the oxidation of peaty soils, does not appear to be directly related to groundwater pumping in the Subbasin (the management mechanism for Subbasin sustainability). As shown in **Figure 4**, the organic basin soils are restricted to the lower Sacramento-San Joaquin River Delta (Delta) portion of the Subbasin. Peat, muck, and clay loam are terms commonly applied to soils in this group. **Figure 5** shows the distribution of present-day modeled subsidence rates due to the oxidation of peaty soils in the Delta region, which ranges from 0 to 1.84 centimeters per year.

There are numerous factors that contribute to peat oxidation-related subsidence. Generally, these include (1) shrinkage due to dewatering, (2) consolidation due to loss of buoyant force and loading, (3) wind and water erosion, (4) oxidation of soil organic matter, and (5) burning. According to findings presented in *Present-day oxidative subsidence of organic soils and mitigation in the Sacramento-San Joaquin Delta, California, USA* (Deverel et al., 2016), subsidence rates in the Sacramento-San Joaquin Delta are primarily related to soil organic matter content, and secondarily to water- and land-management practices that determine depth to groundwater. This paper identifies rice cultivation and permanently flooded wetlands as the primary mitigation tools. As noted by Deverel *et. al*., depth to groundwater on Delta subsided islands is controlled primarily by networks of drainage ditches that feed to island drainage pumping stations that, in turn, continuously discharge drainage water to Delta channels. Drainage ditches collect water that seeps from adjacent channels and deep percolation of applied irrigation water. There are few depth-to-groundwater measurements in Delta organic soils and, in general, groundwater levels have been maintained at about 0.8–1.2 meters below land surface as the result of drainage system operation. Deverel also notes that based on his experience in working in the organic soils throughout the Delta since the early 1980s, depth to groundwater has not changed substantially over time in most places and prior research indicates a lack of change in Delta groundwater levels since the late 1980s (Deverel et al. 2016).

Figure 6 shows annual groundwater pumping in the Subbasin for Water Year 2021 and indicates that minimal groundwater extraction occurs in this area of the Subbasin.

Supplemental Land Subsidence Monitoring

To further supplement the land subsidence data collection efforts put forward in the GSP, continuous global positioning system (CGPS) data, InSAR data, and other subsidence data have been, and will continue to be, evaluated annually by the ESJGWA in coordination with the planned use of chronic lowering of groundwater level minimum thresholds as a proxy for land subsidence. The GSAs will monitor these data sets to better understand and report actual subsidence that occurs (if any) as groundwater levels decline. These data will be compiled and evaluated each year as part of the data assessment and production of the Annual Report, submitted to DWR each April 1. In addition, the ESJGWA will revisit the Hydrogeologic Conceptual Model (HCM) presented in the Subbasin's GSP after DWR's Airborne Electromagnetic (AEM) data become available.[1] At that time, the ESJGWA will adjust the representative monitoring network and methods as needed based on improved basin understanding to refine their methods for monitoring for inelastic land subsidence. This analysis and any subsequent revisions will be incorporated in the GSP five-year update. In time, the ESJGWA will endeavor to identify a correlation between groundwater levels and subsidence, as suggested by DWR. Below is a description of land subsidence datasets currently available for ESJGWA use and analysis.

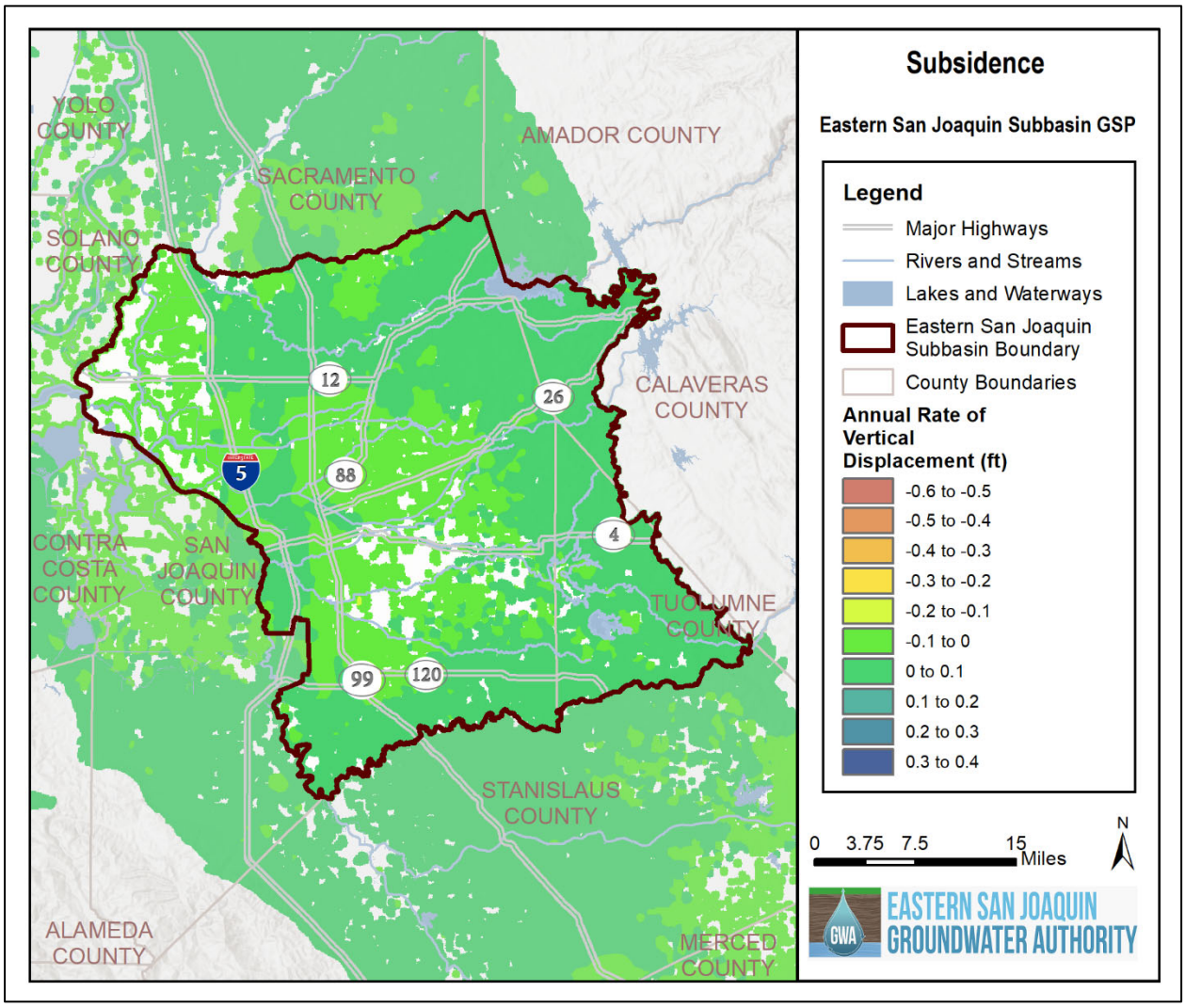
UNAVCO's Plate Boundary Observatory Program – Reporting since 2004, the UNAVCO (formerly University Navigation Satellite Timing and Ranging or NAVSTAR Consortium) Plate Boundary Observatory network consists of a

[1] DWR is conducting AEM surveys in California's high- and medium-priority groundwater basins, where data collection is feasible, to assist local water managers as they implement the Sustainable Groundwater Management Act (SGMA) to manage groundwater for long term sustainability. AEM surveys began in the summer of 2021 and will continue over the next several years. Eastern San Joaquin Subbasin is included in DWR's Survey Area 6, which is expected to be surveyed April 3-23, 2022, per the Tentative AEM Survey Schedule released by DWR. By this schedule, AEM data for the Subbasin is tentatively expected to be available in the first quarter of 2023.

network of about 1,100 CGPS and meteorology stations in the western United States to measure deformation resulting from the constant motion of the Pacific and North American tectonic plates in the western United States. Stations located within the Subbasin contain data from at least 2006 to current and include Station P309, located east of Linden, and Station P273, located west of Lodi. Other stations are also available in nearby Subbasins.

United States Geological Survey – The USGS report *Land Subsidence along the Delta-Mendota Canal in the Northern Part of the San Joaquin Valley, California*, *2003-10* (Sneed et al., 2013) presents land subsidence data in the southwestern portion of the Eastern San Joaquin Subbasin from 2007 to 2010. Data for about 100 square miles of the Subbasin were recorded using InSAR processing, a satellite-based remote sensing technique that can detect ground-surface deformation. Two InSAR techniques were used: conventional InSAR and persistent scatter (PS) InSAR. Both sources of data were collected from the Japanese Aerospace Exploration Agency's Advanced Land Observing Satellite.

Other -– DWR has made two InSAR datasets available for SGMA application: TRE Altamira InSAR point and raster data and NASA JPL raster data. Vertical displacement approximations in both datasets are collected by the European Space Agency's Sentinel-1A satellite. The two different datasets represent two different processing results, one by TRE Altamira Inc. and one by NASA JPL. The TRE Altamira data have coverage between January 2015 and October 2020. Both annual and total raster datasets from TRE Altamira are available and represent interpolations of the vertical displacement point features. The NASA JPL processed dataset spans Spring of 2015 to Summer of 2017.



Note: This dataset represents measurements of vertical ground surface displacement in between spring 2015 and summer 2017 (TRE Altamira, 2019).

Figure 1. Subsidence (Annual Rate of Vertical Displacement)

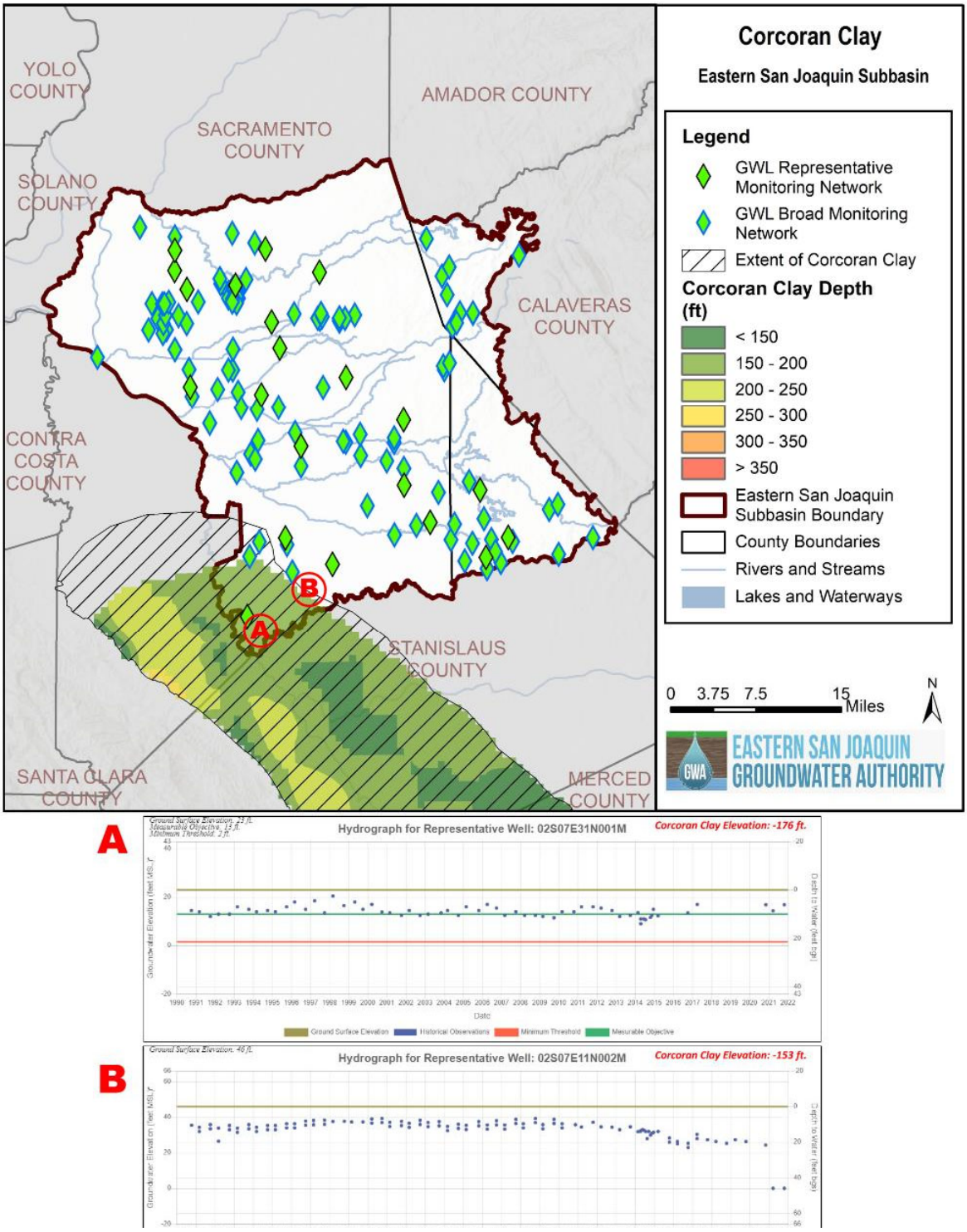


Figure 2. Extent of Corcoran Clay in the Eastern San Joaquin Subbasin with Select Representative Well Hydrographs

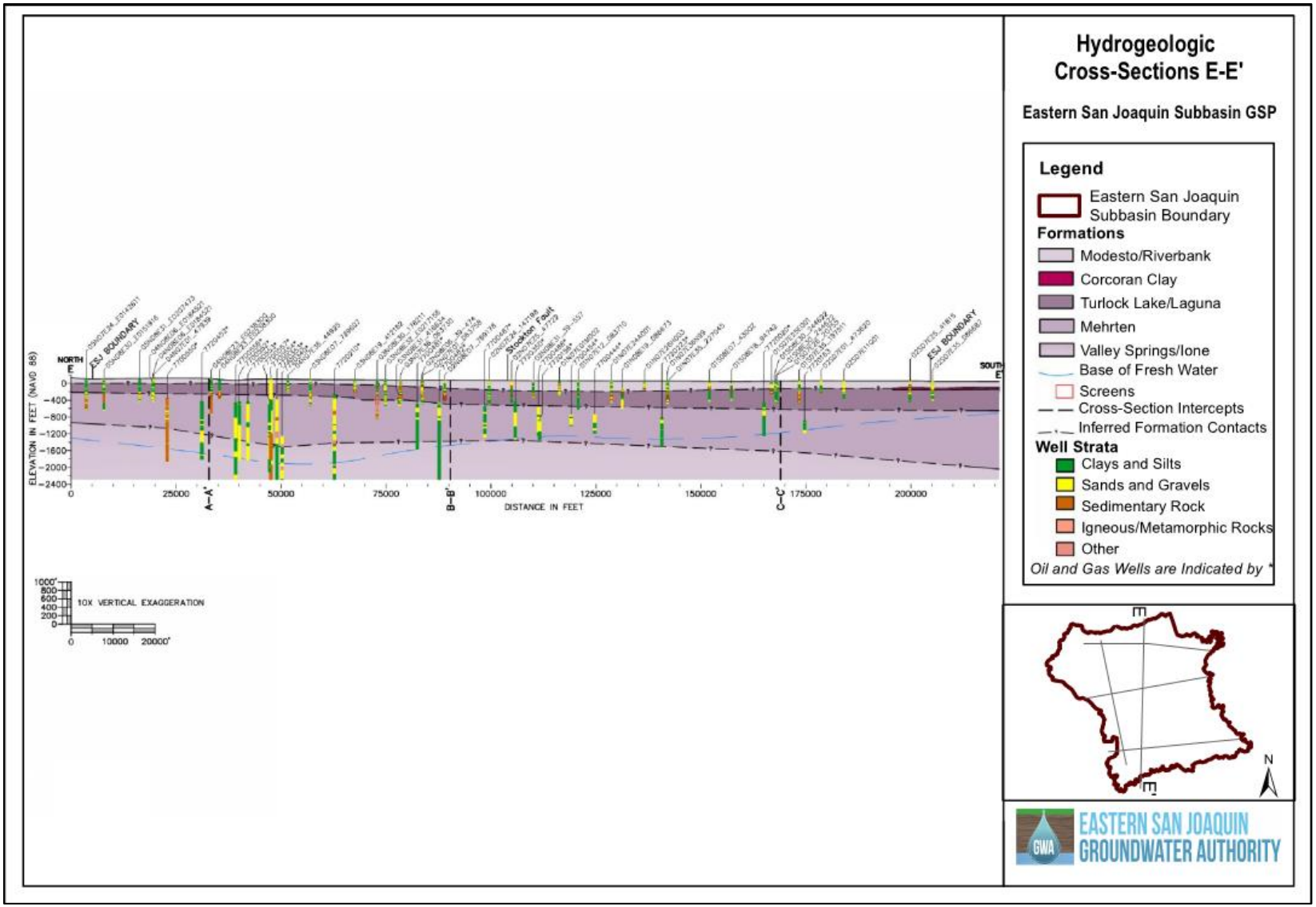


Figure 3. Hydrogeologic Cross-Section E-E'

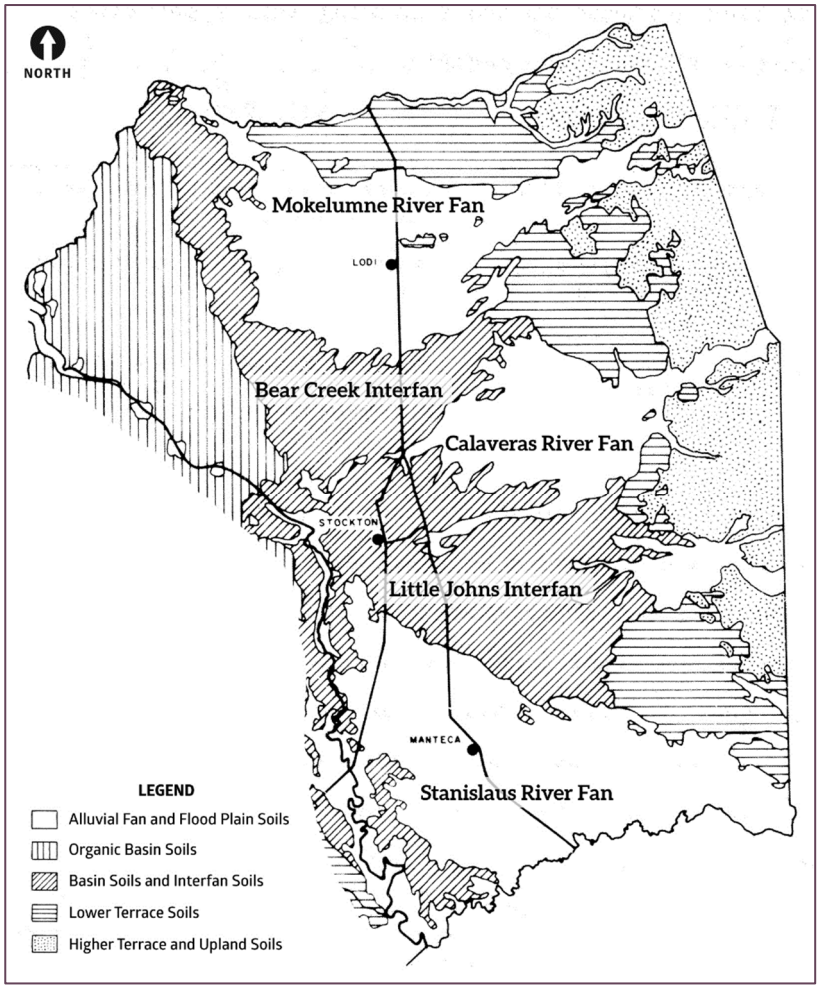
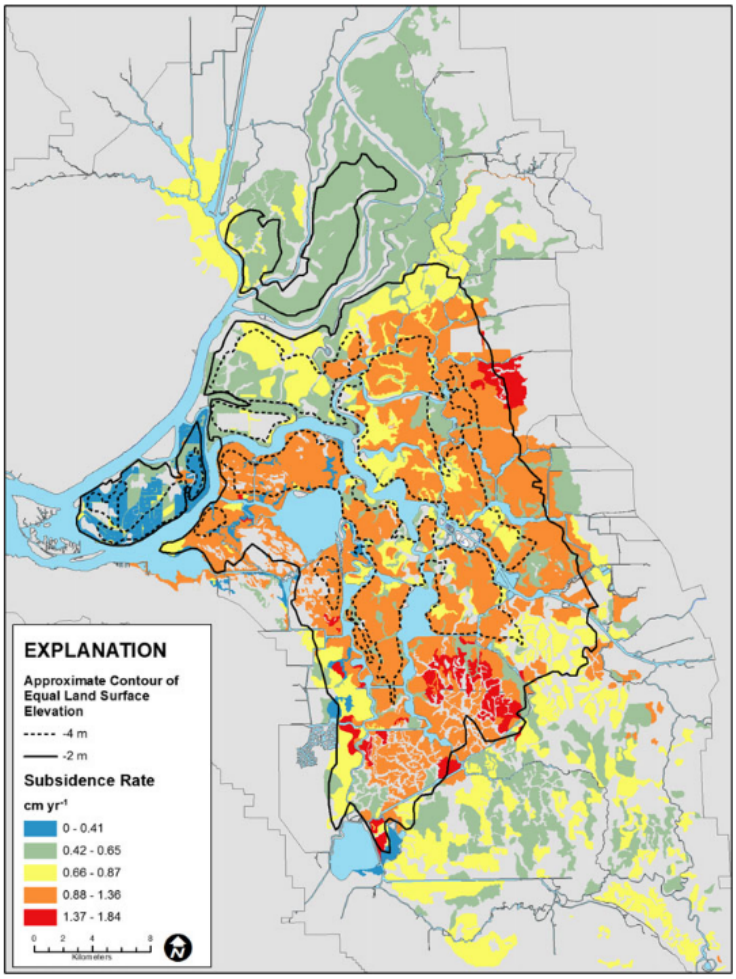


Figure 4. Soil Depositional Areas



Source: *Present-day oxidative subsidence of organic soils and mitigation in the Sacramento-San Joaquin Delta, California, USA* (Deverel et. al, 2016)

Figure 5. Oxidative Subsidence Rates in the Sacramento-San Joaquin Delta

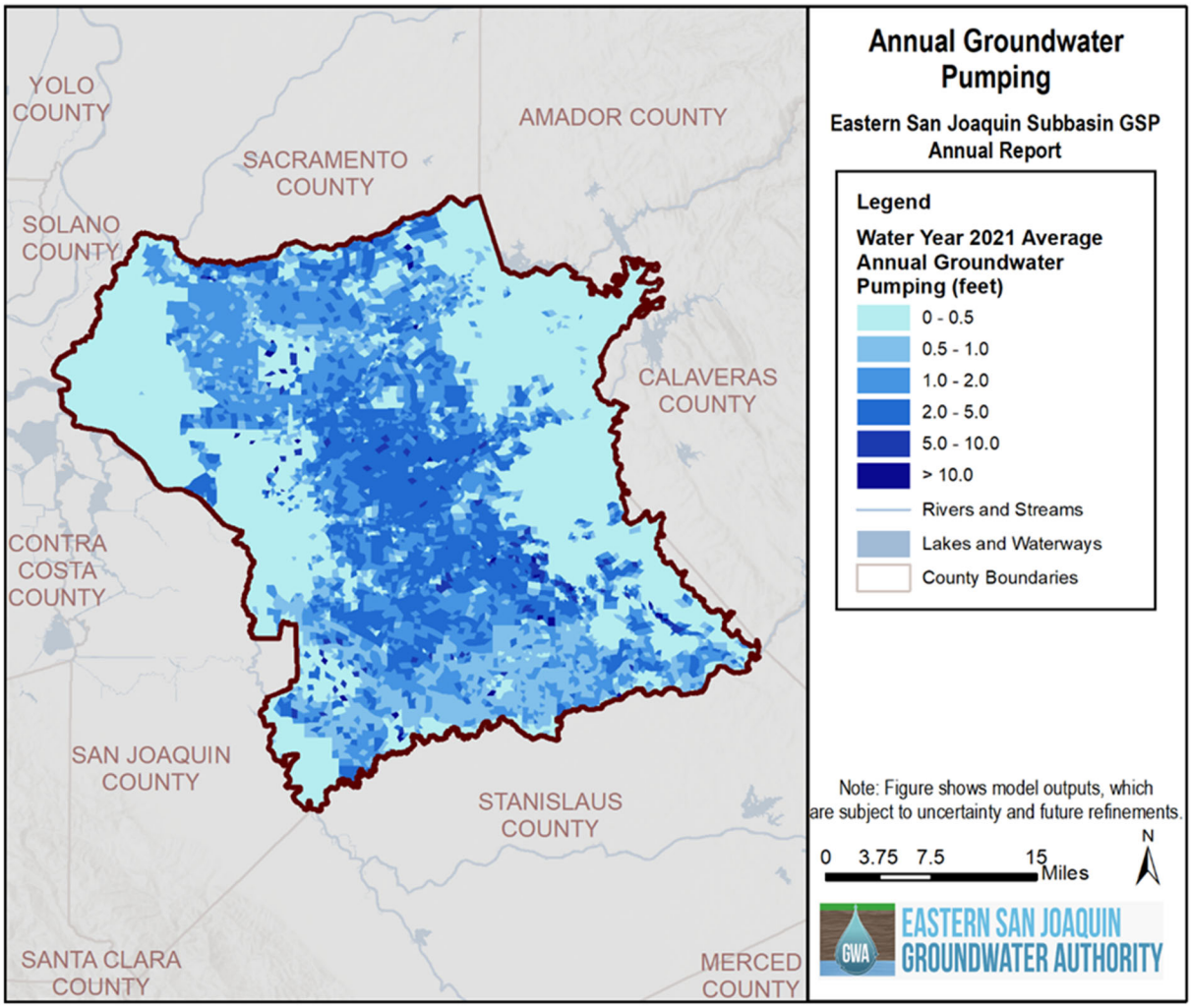


Figure 6. Average Annual Groundwater Pumping (Water Year 2021)

Potential Corrective Action 2-3: Explain how the groundwater level representative monitoring network is sufficient to detect significant and unreasonable rates or extents of land subsidence that may substantially interfere with land uses.

Initial Review Provided by DWR

The third part of the Potential Corrective Action under Deficiency 2 seeks additional information on how the chronic lowering of groundwater levels representative monitoring network is sufficient to detect significant and unreasonable subsidence that may substantially interfere with land uses, specifically any identified infrastructure of concern. The Letter states the GSP "is unclear on whether the conditions required to identify an undesirable result for chronic lowering of groundwater levels in the Subbasin are also required to identify an undesirable result for land subsidence." In addition, the Letter states, "While SGMA does not require prevention of all land subsidence, the GSP does not provide sufficient evidence to conclude that the proposed chronic lowering of groundwater level minimum thresholds are adequate to detect and avoid land subsidence undesirable results."

As a Potential Corrective Action, the following is suggested: "The GSAs should explain how the groundwater level representative monitoring network is sufficient to detect significant and unreasonable subsidence that may substantially interfere with land uses, specifically any identified infrastructure of concern. If the groundwater level monitoring network alone is not adequate, based on specific infrastructure locations, Department staff suggest incorporating continued analysis of available InSAR data to cover areas with data gaps."

Supplemental Information in Response to DWR Letter

The decision to use the groundwater levels representative monitoring network as a proxy for land subsidence was based on the information discussed in the prior section of this document. The GSAs recognize that additional land subsidence data collection and monitoring in the Subbasin over the first few years of GSP implementation will be an important indicator in assessing if the groundwater levels representative monitoring network alone will be sufficient to evaluate potential movement towards significant and unreasonable impacts to infrastructure due to inelastic land subsidence, particularly given that the Subbasin has not historically experienced issues related to land subsidence. For this reason, and in response to DWR's suggestion to incorporate continued analysis of available InSAR data to cover areas with data gaps, the GSAs have committed to annual collection and evaluation of land subsidence data from publicly available sources, including CGPS, InSAR, and other data sources, for assessment with data collected from its representative monitoring network. Data will be evaluated annually, and if subsidence is apparent, projects and management actions in that area will be triggered. The ESJGWA will establish a trigger value of 0.25 feet (annual rate of vertical displacement) at which point an analysis will occur to determine if the subsidence is directly related to groundwater management, and if deemed so, additional projects and management actions are triggered.

The ESJGWA has also determined that, following receipt of the DWR's AEM data, the GSAs will re-evaluate and update the representative monitoring network for land subsidence as part of GSP five-year update and in coordination with improvements and refinements to the GSP HCM through the use of the AEM survey data and new boring log data that becomes available.

REFERENCES

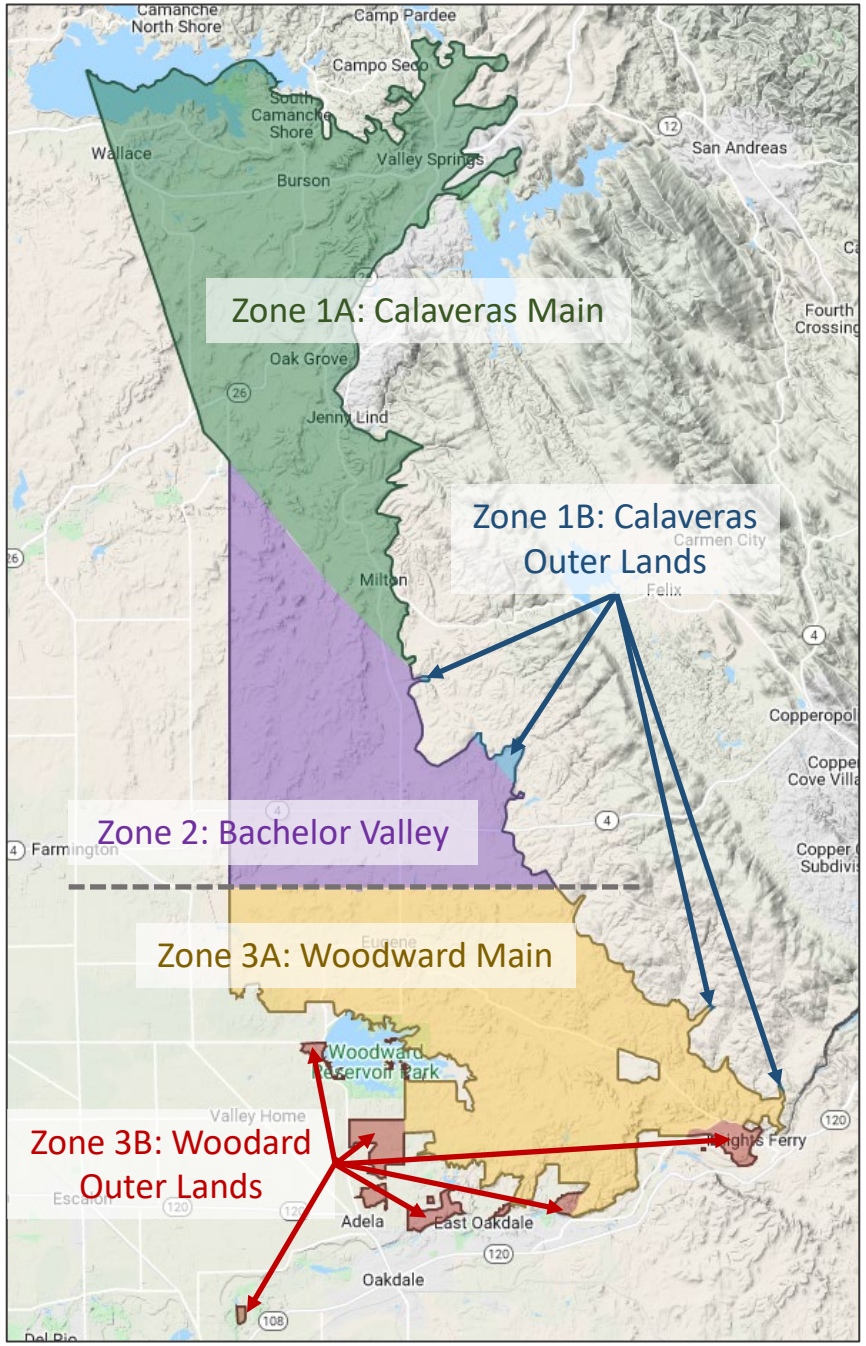
Deverel, Steven J., Timothy Ingrum, and David Leighton (2016), *Present-day oxidative subsidence of organic soils and mitigation in the Sacramento-San Joaquin Delta, California, USA*. Hydrogeology Journal (2016) 24:569-586.

Sneed, Michelle, Justin T. Brandt, and Mike Solt (2013), *Land Subsidence along the Delta-Mendota Canal in the Northern Part of the San Joaquin Valley, California*, *2003-10*. U.S. Geological Survey Scientific Investigations Report 2013-5142. As viewed at https://pubs.er.usgs.gov/publication/sir20135142.

Eastside GSA Review of Proposed GSP Amendment (Technical Memos)
Provided July 1, 2022

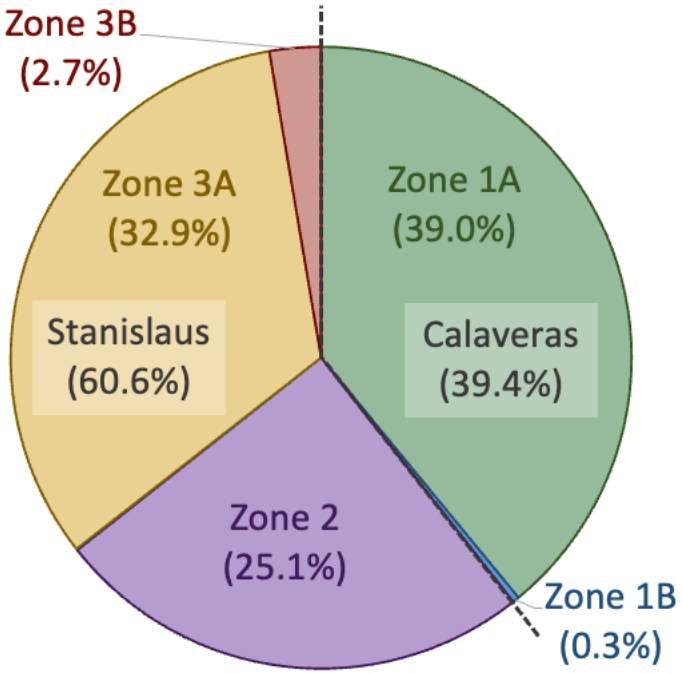
TM	Page	Note/Feedback
1 (A)	2 3 4	*Request for listed projects #1 thru #3 clarifications*. Calaveras River water source is from SEWD contract with USBR and Calaveras County Water District (CCWD) for water made available from New Hogan Reservoir (Contract No. 14-66-200-5057A). SEWD receives annual supply allocation per contract and may use portion of CCWD supply allocation that is not utilized[1]. As such, project supply availability is subject to CCWD's future utilization. This is an existing surface water right held by USBR (P014434).
1 (A)	Ref. Above	Please note CCWD is investigating its options for use of its New Hogan Reservoir contract allocation, which may include: A) in-lieu project to deliver surface water to current groundwater users in Calaveras County, B) development of a direct recharge and conjunctive use program located near Wallace-Burson, and/or C) permanent transfer of portion of CCWD supply allocation to SEWD. Several of these options may benefit the Eastside GSA and could provide similarly contemplated groundwater benefits to the Subbasin. Depending on the outcome of this investigation and CCWD's plans, supplies available to the TM listed project(s) may be impacted.
1 (A)	6	*Request for listed project #5 clarification.* OID/SSJID water rights are subject to terms of 1988 operations agreement with USBR. The terms of that agreement will govern the contemplated actions.
2	3	Remove reference to "statistically, three data points are required to establish a trend" considering less years are being proposed in GSP. Additional details should be provided as to why GWA members felt the three years of exceedances was "too extreme".
2	10	In light of Governor's EO N-7-22, listed management actions #2 and #3 could be consolidated as examples of the types of information provided with GSA's consistency determination(s) for well permits.
3	2	Remove redundant statements "no simple correlation between groundwater levels and quality", as we don't want to undercut GSP. Additional details should be noted as to why Delta saline intrusion is only contemplated source of groundwater quality degradation (list surveys, TAC work, data sources, etc.)
3	3-4	Table listing relevant agencies, regulations, and engagement action(s) may be more effective in this section.
4	3	Concur with OID, TM should establish and provide numerical (quantifiable) metric associated with undesirable land subsidence.

[1] CCWD allocation is 43.5 percent of yield made available from New Hogan Reservoir.

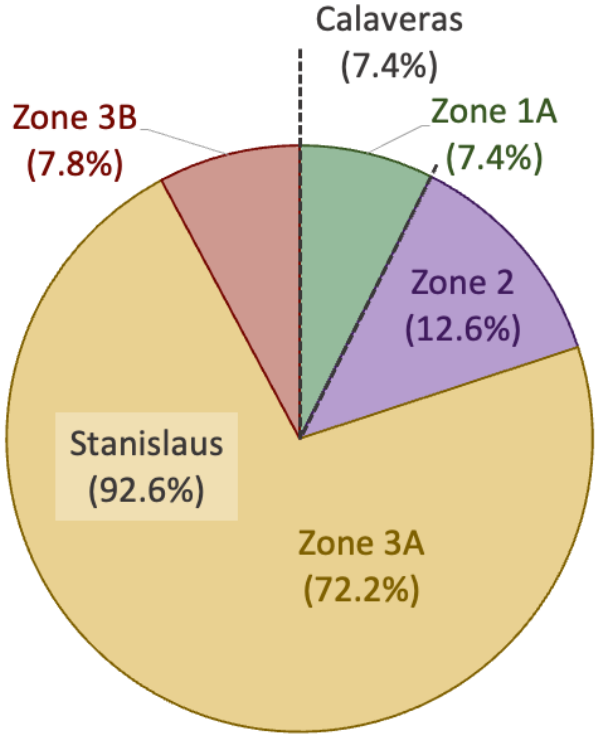


Recap: **Eastside GSA Jurisdiction**

- Calaveras and Stanislaus County areas within Eastern San Joaquin Sub-Basin
- Minimal agency rep. in areas not covered by districts (Knights Ferry CSD?)
- GSA management and equity issues remain.



Land Area
(127,889 acres Total GSA)



Groundwater Consumption
(55,691 AF/yr Total GSA Estimated)

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

ADOPT THE AMENDED GROUNDWATER SUSTAINABILITY PLAN FOR THE EASTERN SAN JOAQUIN GROUNDWATER SUBBASIN

WHEREAS, in 2014, Sustainable Groundwater Management Act (SGMA) was enacted to empower local management of California's groundwater subbasins; and

WHEREAS, the California Department of Water Resources (DWR) determined the Eastern San Joaquin Groundwater Subbasin (Subbasin, No. 5-22.01) underlying portions of San Joaquin, Stanislaus, and Calaveras Counties is a 'high priority' and "critically over-drafted" subbasin; and

WHEREAS, the Calaveras County Water District (CCWD), Rock Creek Water District (RCWD), County of Stanislaus, and County of Calaveras formed the Eastside San Joaquin Groundwater Sustainability Agency (Eastside GSA) to begin implementing SGMA in its portion of the Subbasin; and

WHEREAS, the Eastside GSA is also a member of the Eastern San Joaquin Groundwater Authority (GWA), formed for the purposes of coordinating multi-agency groundwater management efforts and developing a Groundwater Sustainability Plan (GSP) for the Subbasin; and

WHEREAS, in January 2020, the GWA submitted the GSP for the Subbasin to DWR on behalf of its members for review, and on January 28, 2022, DWR determined the GSP was incomplete and identified corrective actions to be completed within 180 days; and

WHEREAS, on April 15, 2022, on behalf of all its member GSAs (including the Eastside GSA), the Authority noticed the intent to adopt an amended GSP pursuant to California Water Code Section 10728.4, noting that each of the GSAs intend to hold separate noticed public hearings to consider adoption of the amended GSP after July 15, 2022, which is no earlier than ninety (90) days from the date of the Notice of Intent; and

WHEREAS, the GWA, in coordination with the Eastside GSA and the other GWA members, developed: (i) a Revised GSP with Executive Summary dated June 2022; (ii) a GSP dated June 2022; (iii) a GSP with Complete Appendices, which includes, among other things, Appendices 2-B through 3-F as Technical Memorandums 1 through 4 (collectively, the "Amended GSP"), the Amended GSP being incorporated herein by reference and included in the associated staff report for this Resolution.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors (Board) of CALAVERAS COUNTY WATER DISTRICT, as a member of the EASTSIDE SAN JOAQUIN GROUNDWATER SUSTAINABILITY AGENCY, that the Board adopts the Amended GSP.

BE IT FURTHER RESOLVED that the Board, as a member of the Eastside GSA, authorizes the GWA, its staff, and its consultants to take such action as may be reasonably necessary to submit the Amended GSP to DWR no later than July 27, 2022.

PASSED AND ADOPTED this 27th day of July, 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board

RESOLUTION NO. 2022-

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

FIRST AMENDMENT TO THE FIRST AMENDED AND RESTATED MEMORANDUM OF UNDERSTANDING FOR IMPLEMENTATION OF THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT IN THE EASTERN SAN JOAQUIN GROUNDWATER BASIN BY SUPPORTING FORMATION OF THE EASTSIDE SAN JOAQUIN GROUNDWATER MANAGEMENT AGENCY

WHEREAS, on April 17, 2017, the Calaveras County Water District (CCWD), Rock Creek Water District (RCWD), and County of Stanislaus formed the Eastside San Joaquin Groundwater Sustainability Agency (Eastside GSA) to begin implementing the Sustainable Groundwater Management Act (SGMA) in the 'critically over-drafted' Eastern San Joaquin Groundwater Subbasin (Subbasin); and

WHEREAS, on April 9, 2018, the County of Calaveras joined the Eastside GSA through the adoption of the "First Amended and Restated Memorandum of Understanding for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency" (Restated MOU); and

WHEREAS, the Eastside GSA is a member of the Eastern San Joaquin Groundwater Authority (GWA), a Joint Powers Authority, along with several other managing agencies in the Subbasin, for the purposes of coordinating multi-agency groundwater management efforts and to develop a Groundwater Sustainability Plan (GSP); and

WHEREAS, on March 28, 2022, California Governor Gavin Newsom issued Executive Order N-7-22 (Executive Order) which requires applicable Groundwater Sustainability Agencies (GSAs) to make finding(s) of consistency with applicable GSPs for new groundwater well or existing well alteration permits in a subbasin subject to SGMA; and

WHEREAS, the Eastside GSA is subject to this Executive Order requirement and must therefore develop the ability to make GSP consistency determinations and findings for new groundwater well or existing well alteration permits (Application) in its portion of the Subbasin, although this is not granting an authority to approve or deny an Application.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors (Board) of CALAVERAS COUNTY WATER DISTRICT that the "First Amendment to the First Amended and Restated Memorandum of Understanding for Implementation of the Sustainable Groundwater Management Act in the Eastern San Joaquin Groundwater Basin by Supporting Formation of the Eastside San Joaquin Groundwater Management Agency" (Amendment) be executed, attached hereto and made a part hereof.

BE IT FURTHER RESOLVED that the General Manager is hereby authorized to execute the Amendment and any other pertinent documents related thereto.

PASSED AND ADOPTED this 27th day of July, 2022 by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

CALAVERAS COUNTY WATER DISTRICT

_____
Cindy Secada, President
Board of Directors

ATTEST:

_____
Rebecca Hitchcock
Clerk to the Board