



RESOLUTION NO. 2021-72 RESOLUTION NO. PFA-02 ORDINANCE NO. 2021-01

#### <u>AGENDA</u>

#### **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, Sept 22, 2021 1:00 p.m. Calaveras County Water District 120 Toma Court San Andreas, California 95249

This meeting will not be physically open to the public. All members of the public may participate in the meeting via teleconference and will be given the opportunity to provide public comment.

#### Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

+1 689-206-0281,,147934627# United States, Orlando

Phone Conference ID: 147 934 627#

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.

#### **BOARD OF DIRECTORS**

#### 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.

- Report on the Monthly Investment Transactions for August 2021 (Rebecca Callen, Director of Administrative Services)
- 3b Region 3 Election Ballot for the Association of California Water Agencies (Michael Minkler, General Manager)

#### 4. **PUBLIC HEARING**

4a Discussion/Action regarding Amending Ordinance 2020-01 Establishing Application of Service Rates and Billing Quotes
(Rebecca Callen, Director of Administrative Services)

ORD 2021-

#### 5. <u>NEW BUSINESS</u>

- Discussion/Action regarding Selection of Consultant and Award of Professional Services
  Agreement for The Sheep Ranch Water Supply Reliability Study and Facilities Master Plan
  (Charles Palmer, District Engineer)

  RES 2021-
- 5b Discussion/Action regarding the Acceptance of an Easement and Related Agreement for the Sheep Ranch Water System's Fire protection Tank
  (Damon Wyckoff, Director of Operations) RES 2021-\_\_\_\_
- Discussion/Action Regarding the Acceptance of the Memorandum of Understanding between Calaveras County and Calaveras County Water District concerning the Relocation of a Water Tank in Sheep Ranch (Jessica Self, External Affairs Manager)

#### 6. <u>OLD BUSINESS</u>

6a Update regarding the Tyler Software Conversion (Rebecca Callen, Director of Administrative Services)

#### 7. **REPORTS**

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

#### 8.\* BOARD REPORTS / INFORMATION / FUTURE AGENDA ITEMS

#### 9. NEXT BOARD MEETINGS

- Wednesday, October 13, 2021, 1:00 p.m., Regular Board Meeting
- Wednesday, October 27, 2021, 1:00 p.m., Regular Board Meeting

#### 10. <u>CLOSED SESSION</u>

- 10a Conference with Real Property Negotiators Gov. Code § 54956.8 Property: APN 055-051-008 Agency negotiators: M. Minkler and D. Wyckoff Under negotiation: Price and/or terms of payment.
- 10b Conference with Legal Counsel-Anticipated Litigation
  Significant Exposure to Potential Litigation-Government Code § 54956.9(d)(2)-1 case

#### 11. REPORTABLE ACTION FROM CLOSED SESSION

#### 12. <u>ADJOURNMENT</u>



### CALAVERAS COUNTY WATER DISTRICT

#### **Board of Directors**

#### **Legal Counsel**

District 1 Scott Ratterman Matthew Weber, Esq. Downey Brand, LLP

District 2 Cindy Secada

District 3 Bertha Underhill

District 4 Russ Thomas

District 5 Jeff Davidson

Financial Services

Umpqua Bank US Bank Wells Fargo Bank <u>Auditor</u>

Richardson & Company, LLP

**CCWD Committees** 

\*Engineering Committee \*Finance Committee \*Legal Affairs Committee Membership\*\*

Davidson / Thomas (alt. Secada)
Underhill / Secada (alt. Thomas)
Ratterman / Davidson (alt. Thomas)

#### **Joint Power Authorities**

ACWA / JPIA

**CCWD** Public Financing Authority

Calaveras-Amador Mokelumne River Authority (CAMRA)

Calaveras Public Power Agency (CPPA)
Eastern San Joaquin Groundwater Authority

Tuolumne-Stanislaus Integrated Regional Water

Management Joint Powers Authority (T-Stan JPA)

Upper Mokelumne River Watershed Authority (UMRWA)

Ratterman (alt. Michael Minkler)

All Board Members

Ratterman / Underhill (alt. Secada) Michael Minkler (Alt. Brad Arnold)

**Thomas** 

Secada (alt. Thomas)

Davidson (alt. Ratterman)

#### Other Regional Organizations of Note

Calaveras LAFCO

Calaveras County Parks and Recreation

Committee

Highway 4 Corridor Working Group Mountain Counties Water Resources

Association (MCWRA)

Mokelumne River Association (MRA)

Tuolumne-Stanislaus Integrated Regional Water

Mgt. JPA Watershed Advisory Committee (WAC)
Eastern San Joaquin Groundwater Authority-Technical

Advisory Committee

Ratterman / Thomas Thomas (alt. Ratterman)

Thomas / Underhill All Board Members

All Board Members

**Brad Arnold** 

**Brad Arnold** 

<sup>\*</sup> Standing committees, meetings of which require agendas & public notice 72 hours in advance of meeting.

<sup>\*\*</sup> The 1st name listed is the committee chairperson.

## Agenda Item

DATE: September 22, 2021

TO: Michael Minkler, General Manager

FROM: Rebecca Callen, Director of Administrative Services

SUBJECT: Report on the Monthly Investment Transactions for August 2021

#### **RECOMMENDED ACTION:**

For information only.

#### **SUMMARY:**

Per the District's Investment Policy, Staff will report the monthly investment activity for the preceding month. During August 2021, the following investment transactions occurred:

Chandler Asset Management Activity:	
Book Value at 7/31/21	19,987,083.88
Security Purchases	3,564,291.54
Money Market Fund Purchases	8,671.87
Money Market Fund Sales	(3,570,037.87)
Money Market Fund Withdrawals	(1,415.83)
Amortization/Accretion	(4,427.78)
Book Value at 8/31/21	19,984,165.81
Local Agency Investment Fund Activity:	
none	
Balance at 8/31/21	12,891,342.32

LAIF (Local Agency Investment Fund) interest rates are 0.21% as of 8/31/2021. 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 August 2021

## CALAVERAS COUNTY WATER DISTRICT INVESTMENT ACTIVITY

#### FOR THE MONTH ENDING AUGUST 31, 2021

			INVESTMENT COST			
INVESTMENT TRUSTEE/TYPE	MARKET VALUE	COST	PAR (PRINC)	CPN RATE	DATE INVST	RECVD
Local Agency Investment Fund	12,891,342.32	12,891,342.32	12,891,342.32	0.210%	ongoing	18,501.36
Chandler Asset Management	19,973,460.47	19,984,165.81	19,830,817.78	0.370%	2/17/2021	-
Totals	32,864,802.79	32,875,508.13	32,722,160.10			18,501.36

Chandler Asset Management Activity:	
Book Value at 7/31/21	19,987,083.88
Security Purchases	3,564,291.54
Money Market Fund Purchases	8,671.87
Money Market Fund Sales	(3,570,037.87)
Money Market Fund Withdrawals	(1,415.83)
Amortization/Accretion	(4,427.78)
Book Value at 8/31/21	19,984,165.81
Local Agency Investment Fund Activity:	
Balance at 8/31/21	12,891,342.32

## CALAVERAS COUNTY WATER DISTRICT CHANDLER ASSET MANAGEMENT

FOR THE MONTH ENDED AUGUST 31, 2021

		INVESTMENT COST							
					Dividends	Interest	Interest on		_
INVESTMENT TRUSTEE/TYPE	MARKET VALUE	BOOK	PAR Value/Units	CPN RATE	Earned	Earned	Sales	Purchases	Income
Agency Securities	2,013,186.80	2,016,361.24	2,000,000.00	0.40%	-	1	-	326.33	326.33
Asset Backed Security	574,993.06	574,964.84	575,000.00	0.37%	-	1	72.84	-	72.84
CMO	212,296.60	212,219.85	200,000.00	0.62%	-	ı	-	-	-
Corporate Securities	2,980,959.98	2,979,697.95	2,905,000.00	0.64%	-	1	-	1,780.59	1,780.59
Money Market Fund (Cash)	5,795,817.78	5,795,817.78	5,795,817.78	0.01%	-	ı	-	-	-
Negotiable CD	1,150,080.00	1,149,999.91	1,150,000.00	0.21%	-	1	-	8.33	8.33
Supernational Securities	808,251.05	807,110.51	805,000.00	0.69%	-	1	-	-	-
US Treasury	6,437,875.20	6,447,993.73	6,400,000.00	0.54%	-	1	-	3,631.18	3,631.18
Totals	19,973,460.47	19,984,165.81	19,830,817.78	0.37%	•	-	72.84	5,746.43	5,819.27

## Agenda Item

DATE:	September 22, 2021					
TO:	Board of Directors					
FROM:	Michael Minkler, General Manager					
SUBJECT:	Region 3 Election Ballot for the Association of California Water Agencies					
RECOMMEN	IDED ACTION:					
	by Minute Entry the Board of Directors authorizes ote for the Region 3 Officers and Board Members' nominations by the Committee's slate for the Association of the California Water Agencies					
SUMMARY:						
concur with the candidates a 30 <sup>th</sup> . Election	ne Ballot for ACWA Region 3 Officers and Board Members. The Board can ne Region 3 Nominating Committee's recommendation or vote for individual s noted on the ballot. The Region 3 Ballots are due to ACWA by September n results will be announced on October 4, 2021. ACWA Board Member pin January 1, 2022 and are two-year terms (2022-2023).					
FINANCIAL	CONSIDERATIONS:					
None.						
Attachment: ACV	VA Region 3 Board Ballot					

## REGION 3 Board Ballot



### Please return completed ballot by Sept. 30, 2021

E-mail: regionelections@acwa.com

Mail: ACWA

980 9th Street, Suite 1000 Sacramento, CA 95814

### **General Voting Instructions:**

- 1 You may either vote for the slate recommended by the Region 3 Nominating Committee or vote for individual region board members. Please mark the appropriate box to indicate your decision.
- Complete your agency information. The authorized representative is determined by your agency in accordance with your agency's policies and procedures.

MOU	ninating Committee's Recommended Slate
O 1	concur with the Region 3 Nominating Committee's recommended slate below.
CHAI	R:
• .	<b>Joshua Alpine</b> , Director, Placer County Water Agency
	CHAIR: Michael Minkler, General Manager, Calaveras County Water District
BOAF	RD MEMBERS:
• ,	Jim Abercrombie, General Manager, El Dorado Irrigation District
• !	Sean Barclay, General Manager, Tahoe City Public Utility District
	Larry McKenney, General Manager, Amador Water Agency
	Laura L. Peters, Director, Division 4, Nevada Irrigation District
•	Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility Distric
	OR
Indi	vidual Board Candidate Nominations
	do not concur with the Region 3 Nominating Committee's recommended slate. I will vote for individual candidates below as indicated.
CANE	DIDATES FOR CHAIR: (CHOOSE ONE)
(	Jim Abercrombie, General Manager, El Dorado Irrigation District
(	Joshua Alpine, Director, Placer County Water Agency
CANE	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE)
CANE	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District
CANE	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District Michael Minkler, General Manager, Calaveras County Water District
CANE	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District
(	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District Michael Minkler, General Manager, Calaveras County Water District Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility
(	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District Michael Minkler, General Manager, Calaveras County Water District Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility District
(	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District Michael Minkler, General Manager, Calaveras County Water District Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility District DIDATES FOR BOARD MEMBERS: (MAX OF 5 CHOICES)
(	Joshua Alpine, Director, Placer County Water Agency DIDATES FOR VICE CHAIR: (CHOOSE ONE) Jim Abercrombie, General Manager, El Dorado Irrigation District Michael Minkler, General Manager, Calaveras County Water District Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility District DIDATES FOR BOARD MEMBERS: (MAX OF 5 CHOICES) Jim Abercrombie, General Manager, El Dorado Irrigation District

AGENCY NAME	

Michael Saunders, President, Board of Directors, Georgetown Divide Public Utility

Laura L. Peters, Director, Division 4, Nevada Irrigation District

District

## Agenda Item

DATE: September 22, 2021

TO: Michael Minkler

FROM: Rebecca Callen, Director of Administrative Services

SUBJECT: Discussion/Action regarding Amending Ordinance 2020-01 Establishing

Application of Service Rates and Billing Quotes

#### RECOMMENDED ACTION:

Motion:			1	a	dopt	ing Ordinand	ce No.	202	<u> </u>	Am	ending
Ordinand	e 2020-	-01 E	stablishir	ng Appl	licatio	on of Service	Rates	and E	Billing C	Quotes f	or New
Services	Under	the	District's	Rules	and	Regulations	Gover	ning	Water	and/or	Sewer
Service to	o Consi	ımer	`S								

#### SUMMARY:

Article III of the Rules and Regulations covers most of what Customer Service and Finance address daily. This policy section includes Sections 21-30 and was created under several resolutions and ordinances from 1954 through 2020. Most of the changes were adopted on September 8, 2021. Section 30 required an ordinance change and additional notification and publishing requirements, prior to adoption.

A working group made up of staff from Engineering, Customer Service, Finance, and Operations have spent months going over the document and working through various questions and comments to ensure that conflicting language, missing language, fee adjustments were all contemplated to allow for the most comprehensive amendments of Article III since its inception.

Ordinance 2003-01 addressed quotation costs for properties that had service (laterals). Ordinance 2006-03 addressed quotation costs for properties that did not have service, in addition to establishing several other fees and methodologies associated with how to apply them.

This action rescinds 2003-01, adds that language to the intent of 2006-03, increases the costs of providing quotes to both type of properties, as well as adds the ability for the District to apply the CPI factor, annually, to heavy equipment rates.

Section 30

Section 1. Application for service, Fee Quotes

Requests for general information on fee schedules within an area serviced by a District facility are free of charge. Quotes for new service capacity charges and connection fees will be given to all interested parties requesting them for specific properties wishing to connect to the established facilities. The applicant shall fill out an application that will establish the type of residence/commercial business that is to use the new service(s) prior to a quote being provided.

#### For Properties with a Service Connection

A \$30.00 (thirty dollar) and a \$75.00 (seventy-five dollar) application fee is required to be paid for residential and commercial quotes, respectively, prior to the issuance of a quote for capacity charges and connection fees for new services, adjusted annually by the CPI.

#### For Properties without a Service Connection

A fee of \$195, adjusted annually by the CPI, application fee is required to be paid for residential and commercial quotes, prior to the issuance of a quote for capacity charges and connection fees for new service. Application fee will be refunded to original applicants who pay all connection charges and capacity fees and submit a County building permit within 90 days of the new service quote.

Material differences between the information on an application and the subsequent actual use of the CCWD services may render the quote invalid, as determined by the General Manager or any of his authorized designees.

Section 1.2 Special Services Fees and Charges Schedule B attached hereto

Section 1.2.3 Heavy Equipment Rates – The charge out rates for use of certain pieces of District heavy equipment are adopted as Item 2 of Schedule B. Pickup trucks are intentionally excluded from this list and will not be separately charged. On July 1<sup>st</sup> of each year, the fees under Item 2 of Schedule B shall increase or decrease in accordance with the December-to-December percentage change in the Consumer Price Index All Urban Consumers (CPI-U) U.S. City Average / All Items of the previous year.

#### Section 2. Rates, Tolls, Fares and Charges

The establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other changes by this Ordinance are for the purposes of meeting operating expenses, including, without limitation, employee wage rates and fringe benefits, purchasing or leasing supplies, equipment, or materials, meeting financial reserve requirements, or obtaining funds for capital projects necessary to maintain or expand service to District customers.

#### FINANCIAL CONSIDERATIONS:

None at this time.

Attachments: Ordinance 2021-\_\_-Amending Ordinance 2021-01

Schedule B

Article III Section 30 Ordinance 2020--01

#### **ORDINACE NO 2021-**

# AN ORDINACE OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT AMENDING ORDINANCE 2020-01 ESTABLISHING APPLICATION OF SERVICE RATES AND BILLING QUOTES FOR NEW SERVICES UNDER THE DISTRICT'S RULES AND REGULATIONS GOVERNING WATER AND/OR SEWER SERVICE TO CONSUMERS

**WHEREAS**, the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT adopted Ordinance 2003-01 clarifying that quotes are not guarantees for service; and

**WHEREAS**, the Board of Directors established fees for quotes with Ordinance 2003-01 for properties that have service; and

**WHEREAS**, the Board of Directors established fees for quotes with Ordinance 2006-03 for properties that did not have service, along with establishing several other fees; and

**WHEREAS**, the Board of Directors has amended Ordinance 2006-03 several times, lastly with Ordinance 2020-01; and

**WHEREAS**, the Board of Directors will rescind Ordinance 2003-01 and consolidate the fee associated with properties that have service with Ordinance 2020-01 and all associated fees in addition to updating the fee for properties that have service; and

**WHEREAS**, the Board of Directors does hereby find that the Heavy Equipment rates and Cost to Serve fees need to be adjusted to current cost; and

**WHEREAS**, the Board of Directors does hereby find that Section 1.2.3 for Heavy Equipment rates should be adjusted annually per CPI in the same method as Section 1.2.5; and

**WHEREAS**, the Board of Directors of the Calaveras County Water District does hereby find that Article III, Section 30 needs to be revised to acknowledge fees for properties that do not have service and properties that do have service.

**NOW, THEREFORE BE IT ORDAINED,** the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT Ordinance 2020-01 shall be amended as follows:

Section 1. Application for service, Fee Quotes

Requests for general information on fee schedules within an area serviced by a District facility are free of charge. Quotes for new service capacity charges and connection fees will be given to all interested parties requesting them for specific properties wishing to connect to the established facilities. The applicant shall fill out an application that will establish the type of residence/commercial business that is to use the new service(s) prior to a quote being provided.

#### For Properties with a Service Connection

A \$30.00 (thirty dollar) and a \$75.00 (seventy-five dollar) application fee is required to be paid for residential and commercial quotes, respectively, prior to the issuance of a quote for capacity charges and connection fees for new services, adjusted annually by the CPI.

#### For Properties without a Service Connection

A fee of \$195, adjusted annually by the CPI, application fee is required to be paid for residential and commercial quotes, prior to the issuance of a quote for capacity charges and connection fees for new service. Application fee will be refunded to original applicants who pay all connection charges and capacity fees and submit a County building permit within 90 days of the new service quote.

Material differences between the information on an application and the subsequent actual use of the CCWD services may render the quote invalid, as determined by the General Manager or any of his authorized designees.

Section 1.2 Special Services Fees and Charges Schedule B attached hereto

Section 1.2.3 Heavy Equipment Rates – The charge out rates for use of certain pieces of District heavy equipment are adopted as Item 2 of Schedule B. Pickup trucks are intentionally excluded from this list and will not be separately charged. On July 1<sup>st</sup> of each year, the fees under Item 2 of Schedule B shall increase or decrease in accordance with the December-to-December percentage change in the Consumer Price Index All Urban Consumers (CPI-U) U.S. City Average / All Items of the previous year.

#### Section 2. Rates, Tolls, Fares and Charges

The establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other changes by this Ordinance are for the purposes of meeting operating expenses, including, without limitation, employee wage rates and fringe benefits, purchasing or leasing supplies, equipment, or materials, meeting financial reserve requirements, or obtaining funds for capital projects necessary to maintain or expand service to District customers.

Section 3. <u>Effect on prior actions.</u> All provisions of prior ordinances and resolutions of CCWD not consistent with this Ordinance shall remain in full force and effect.

Section 4. <u>Severability.</u> This Ordinance and the various sections thereof are hereby declared to be severable. To the extent the terms and provisions of any prior District ordinances, resolutions, rules, and other actions, the terms and provisions of this Ordinance shall prevail with respect thereto.

	e. Within ten (10) days of adoption, this vspaper of general circulation within Calaveras at thirty (30) days after its adoption.
PASSED AND ADOPTED this 22nd day	y of September, 2021 by the following vote:
AYES: NOES: ABSTAIN: ABSENT:	
	CALAVERAS COUNTY WATER DISTRICT
	Jeff Davidson, President
	Board of Directors
ATTEST:	

Rebecca Hitchcock Clerk to the Board

#### Schedule B

#### **Special Service Fees and Charges**

- 1) Multiplier = 2.5 (Applied to direct salary cost where permitted by policy)
- 2) Heavy Equipment Rates (Annually adjusted per Sect. 1.2.5 or Ordinance)

	Equipment Type	\$ Per Hour
2.1	Vac Con	80
2.2	Backhoe	55
2.3	Dump Truck	50
2.4	Mini Push Camera	95
2.5	TV Van & Equip	150
2.5	Boom Truck	70

#### 3) Services Performed "At Cost"

"At Cost" defined as total of:

- 3.1. Direct Labor Costs x Multiplier approved under Schdule B
- 3.2. Materials Cost including purchase price, tax and shipping
- 3.3. Heavy Equipement Cost per approved Schedule B rates
- 3.4. Cost of contractors, sub-contractors, agencies, rental equipement, services or consultants
- 3.5. Administrative charge of 10% of (3.2 + 3.4)

Applicable Installation on other Services under this section:

- Meters Boxes
- Water Meters >5/8"
- Water or Sewer Line extensions
- Water or Sewer taps
- Septic tanks and tank pumps
- Pressure reducing valves
- Backflow devices
- Assistance to Other Water/Sewer Service Providers

#### 4) Services Performed for Fixed Cost (Annually adjusted per Sect. 1.2.5 or Ordinance)

Service	Charge \$
Inspection of connection to the sewer system	195
Installation of standard 5/8" radio read water meter (1)	510
Installation of standard 1" radio read water meter (1)	635
Upsize of 5/8" meter to 1" (1)	1,148
Account establishment or account transfer	50
After-hours account establishment or account transfer	82
Residential or commercial cost-to-serve letter on lot	195
without service stub to parcel	
Residential cost-to-serve letter on lot WITH service stub to parcel	30
Commerical cost-to-serve letter on lot WITH service stub to parcel	75

## CALAVERAS COUNTY WATER DISTRICT RULES AND REGULATIONS GOVERNING THE FURNISHING OF WATER AND/OR WASTEWATER SERVICES ARTICLE III

#### APPLICATION FOR SERVICE RATES AND BILLING

#### Section 30.

1. Application for service, Fee Quotes

Formatted: No underline

Requests for general information on fee schedules within an area serviced by a District facility are free of charge. Quotes for new service capacity charges and connection fees will be given to all interested parties requesting them for specific properties wishing to connect to the established facilities. The applicant shall fill out an application that will establish the type of residence/commercial business that is to use the new service(s) prior to a quote being provided.

#### For Properties with a Service Connection

Additionally, aA \$3015.00 (fifteen\_thirty dollar) and a \$745.00 (fortyseventy-five dollar) application fee is required to be paid for residential and commercial quotes, respectively, prior to the issuance of a quote for capacity charges and connection fees for new services.

#### For Properties without a Service Connection

A fee of \$195, adjusted annually by the CPI per Ordinance 2006-03, application fee is required to be paid for residential and commercial quotes, prior to the issuance of a quote for capacity charges and connection fees for new service.

Application fee will be refunded to original applicants who pay all connection charges and capacity fees and submit a County building permit within 90 days of the new service quote.

Material differences between the information on an application and the subsequent actual use of the CCWD services may render the quote invalid, as determined by the General Manager or any of his authorized designees.

#### 2. Rates, Tolls, Fares and Charges

The establishment, modification, structuring, restructuring, or approval of rates, tolls, fares, and other changes by this Ordinance are for the purposes of meeting operating expenses, including, without limitation, employee wage rates and fringe benefits, purchasing or leasing supplies, equipment, or materials, meeting financial reserve requirements, or obtaining funds for capital projects necessary to maintain or expand service to District customers.

Formatted: No Spacing, Justified

## CALAVERAS COUNTY WATER DISTRICT RULES AND REGULATIONS GOVERNING THE FURNISHING OF WATER AND/OR WASTEWATER SERVICES ARTICLE III

#### APPLICATION FOR SERVICE RATES AND BILLING

Amended by Ordinance 2021-XX September 22 Replaced by Ordinance 2003-01 Rescinded Resolution No. 2002-80, December 10, 2002 Incorporating Ordinance No. 2002-01, November 13, 2002

#### **ORDINANCE NO. 2020-01**

### AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE CALAVERAS COUNTY WATER DISTRICT

## AMENDMENT TO ORDINANCE NO. 2006-03 SCHEDULE B SETTING AND REVISING CHARGES FOR SPECIAL SERVICES

WHEREAS, the Board of Directors of the Calaveras County Water District (District) adopted Ordinance No. 2006-03 on September 27, 2006, and;

**WHEREAS**, the Board of Directors of the Calaveras County Water District has determined that the water capacity fees are to be updated; and

WHEREAS, the Board of Directors published a notification and provided for a public meeting, in compliance with Government Code Sections 66013 and 66016, to receive comments regarding special services fees and charges for water meters; and

**NOW, THEREFORE, BE IT ORDAINED** by the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT as follows:

**Section 1.** Ordinance No. 2006-03 shall be amended with the attached updated Schedule B Special Services Fees and Charges attached hereto and made a part of; and

**Section 2.** <u>Effect on prior actions</u>. All provisions of prior ordinances and resolutions of CCWD not inconsistent with this Ordinance shall remain in full force and effect.

**Section 3.** <u>Severability.</u> This Ordinance and the various sections thereof are hereby declared to be severable. To the extent the terms and provisions of this Ordinance are in conflict or are otherwise inconsistent with the terms and provisions of any prior District ordinances, resolutions, rules, and other actions, the terms and provisions of this Ordinance shall prevail with respect thereto.

**Section 4.** Publication/Effective Date. Within ten (10) days of adoption, this Ordinance shall be published in a newspaper of general circulation within Calaveras County. This Ordinance shall take effect thirty (30) days after its adoption.

**PASSED AND ADOPTED** this 9th day of December 2020, after a noticed Public Hearing by the following vote:

AYES:

Directors Ratterman, Thomas, Secada, Underhill, and Davidson

NOES:

None

ABSTAIN: ABSENT:

None None

#### CALAVERAS COUNTY WATER DISTRICT

Jeff Davidson, President

Jeff Davidson, President Board of Directors

ATTEST:

Rebecca Hitchcock Clerk to the Board

#### Schedule B

#### **Special Services Fees and Charges**

1) Multiplier= 2.5 (Applied to direct salary cost where permitted by policy.)

#### 2) Heavy Equipment Rates

	Equipment Type	\$ Per Hour
2.1	Vac Con	80
2.2	Backhoe	55
2.3	Dump Truck	50
2.4	Mini Push Camera	95
2.5	TV Van & Equip	150
2.6	Boom Truck	70

#### 3) Services Performed "At Cost"

- "At Cost" defined as total of:
  - 3.1) Direct Labor Cost x Multiplier approved under Schedule B
  - 3.2) Materials Cost including purchase price, tax and shipping
  - 3.3) Heavy Equipment Cost per approved Schedule B rates
  - 3.4) Cost of contractors, sub-contractors, agencies, services or consultants
  - 3.5) Administrative charge of 10% of (3.2 + 3.4)

Applicable Installation or other Services under this section:

- Meter Boxes
- Water Meters >5/8"
- Water or Sewer Line extensions
- Water or Sewer Service taps
- Septic tanks and tankpumps
- Pressure reducing valves
- Backflow devices
- Assistance to Other Water/Sewer Service Providers

#### **4) Services Performed for Fixed Cost** - (Annually adjusted per Sect. 1.2.5 of Ordinance)

Service	Charges - \$
Inspection of connection to the sewer system	110.00
Installation of standard 5/8" radio read water meter	502.54
Installation of standard 1" radio read water meter	625.87
Upsize of 5/8" meter to 1"	1,133.41
Account establishment or account transfer	37.50
After-hours account establishment or account transfer	60.00
Residential or commercial cost-to-serve letter on lot without	145.00
service stub to parcel	



#### **LEGAL NOTICE**

The Calaveras County Water District Board of Directors will hold a Public Hearing at its Regular Board Meeting on September 22, 2021, at approximately 1:00 p.m. to consider adopting an amendment to Ordinance 2020-01 establishing application of service rates and billing quotes for new services under the District's Rules and Regulations Governing Water and/or Sewer Service to Consumers.

The Calaveras County Water District's Board of Directors meetings are held at the District office at 120 Toma Court, San Andreas. Board chamber's capacity will be limited to 8 persons during public meetings. Social distancing and cloth facemasks are required. The meeting will be available virtually as an alternative and login information can be found on the agenda at ccwd.org.

For a complete copy of the proposed ordinance for consideration or a copy of the meeting notice, contact the Calaveras County Water District office at (209) 754-3543 or administration@ccwd.org.

Published: September 8, 10, 15 & 17, 2021 Valley Springs News

## Agenda Item

DATE: September 22, 2021

TO: Michael Minkler, General Manager

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

SUBJECT: Discussion/Action Regarding Selection of Consultant and Award of

Professional Services Agreement for The Sheep Ranch Water Supply

Reliability Study and Facilities Master Plan

#### **RECOMMENDED ACTION:**

Motion: \_\_\_\_\_/\_\_\_ adopting Resolution No. 2021 - \_\_ approving the selection committee's recommendations for award and authorizing the General Manager to execute a professional services agreement with the selected consultant for the Sheep Ranch Water Supply Reliability Study and Facilities Master Plan.

#### SUMMARY:

On July 30, 2021, CCWD issued a request for proposals (RFP) for a study to evaluate the existing water supply and infrastructure requirements to continue supplying the Community of Sheep Ranch either from its existing source from White Pines Lake and San Antonio Creek or the feasibility and reliability of other sources of water supply such as local groundwater or an intertie to the Ebbetts Pass system. In addition to raw water supply, the study will also evaluate the condition and provide recommendations for capital improvements to the potable water treatment, storage, and distribution facilities,

On the proposal due date of September 2, 2021, CCWD received five (5) proposals for the subject study including proposals from Blackwater Engineers, KASL, Keller & Associates, Lumos & Associates and Woodard & Curran. A selection committee comprised of CCWD staff evaluated and ranked proposals. Proposals were first reviewed based on specific criteria: a) responsiveness to the RFP requirements, b) project understanding and approach, c) project management, d) project team qualifications, e) related project experience, f) schedule, and g) level of effort. Cost proposals and hours devoted to the project were then reviewed in order to develop a comprehensive evaluation of each proposal. The intent of the selection process is to identify and rank the consultant(s) determined to be most qualified to perform the study, relevant experience, offering the best approach to work and ability to perform the work within an acceptable schedule. The consultant fee is considered in terms of overall value provided and differences in the scope of work, level of effort, and hourly rates.

#### PROPOSAL SUMMARY AND RANKING:

The top two highest ranked proposals are shown below. The proposal from Lumos & Associates was ranked the highest by the selection committee. During the proposal period, Lumos & Associates demonstrated a strong interest in the project, proactively engaged staff collaboratively, requested information, and conducted field visits of the existing facilities. Through its initial legwork and outreach during the proposal period, Lumos & Associates gained a detailed understanding of the key project issues and challenges of the existing system and potential solutions. While staff agreed Woodard & Curran's proposal was very strong and liked their project approach, some important elements of the study were excluded as optional, extra services. Other proposals were not ranked among the highest for various reasons.

CONSULTANT	RANK	FEE	HOURS
Blackwater	-	\$76,752	460
KASL	-	\$127,856	506
Keller & Associates	-	\$98,810	544
Lumos & Associates	1	\$72,970	448
Woodard & Curran	-	\$122,596	674

#### FINANCIAL CONSIDERATIONS:

The approved Fiscal Year 2020-21 includes \$150,000 budget, which is sufficient to cover the cost of the proposed study.

Attachments: Proposal from Highest Ranked Firm, Lumos & Associates

#### **RESOLUTION NO. 2021-**

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

#### AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT FOR THE SHEEP RANCH WATER SUPPLY RELIABLITY STUDY AND FACILITIES MASTER PLAN

WHEREAS, on July 30, 2021, CCWD issued a request for proposals (RFP) for a study to evaluate the existing water supply and infrastructure requirements to continue supplying the Community of Sheep Ranch either from its existing source from White Pines Lake and San Antonio Creek or the feasibility and reliability of other sources of water supply such as groundwater or an intertie to the Ebbetts Pass system; and

**WHEREAS,** in addition to raw water supply, the study will also evaluate the condition and provide recommendations for capital improvements to the potable water treatment, storage and distribution facilities; and

**WHEREAS,** as of the proposal due date of September 2, 2021, CCWD received five (5) proposals for the subject study including proposals from Blackwater Engineers, KASL, Keller & Associates, Lumos & Associates and Woodard & Curran; and

**WHEREAS**, a selection committee comprised of CCWD staff evaluated and ranked proposals and is recommending an contract award based on specific criteria including responsiveness to the RFP requirements, project understanding and approach, project management, team qualifications, relevant experience, schedule, and level of effort.

**NOW, THEREFORE BE IT RESOLVED,** the Board of Directors of the CALAVERAS COUNTY WATER DISTRICT approves the selection committee recommendations to award a contract to Lumos & Associates for the Sheep Ranch Water Supply Reliability Study and Facilities Master Plan; and

**BE IT FURTHER RESOLVED** that the Board of Directors does hereby authorize the General Manager to execute a professional services agreement with Lumos & Associates according to the submitted scope of work and fee of \$72,970 to complete the subject study.

PASSED AND ADOPTED this 22nd	day of September,	2021 by the following vote:
------------------------------	-------------------	-----------------------------

AYES:	
NOES:	
ABSTAIN:	
ABSENT:	

	Jeff Davidson, President	
	Board of Directors	
ATTEST:		
Rebecca Hitchcock	<del></del>	

Clerk to the Board

CALAVERAS COUNTY WATER DISTRICT





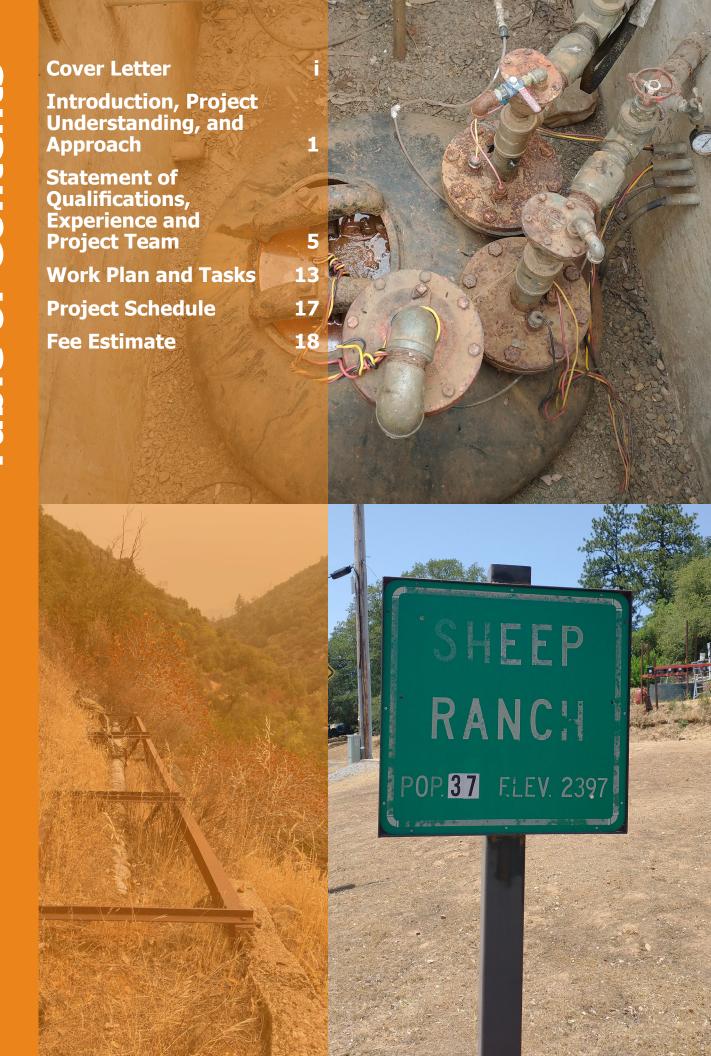


PREPARED FOR CALAVERAS COUNTY WATER DISTRICT

## SHEEP RANCH WATER SUPPLY RELIABILITY STUDY AND FACILITIES MASTER PLAN

Calaveras County, CA

**SEPTEMBER 2, 2021** 





Carson City • Fallon • Lake Tahoe • Reno

Carson City 308 N. Curry Street, Suite 200 Carson City, Nevada 89703 775.883.7077

September 2, 2021

Kate Jesus Calaveras County Water District 120 Toma Court San Andreas, CA 95249

Subject: Sheep Ranch Water Supply Reliability Study and Facilities Master Plan

Dear Ms. Kate Jesus and Members of the Selection Committee:

Lumos & Associates is pleased to submit our qualifications and proposal for the Sheep Ranch Water Supply Reliability Study and Facilities Master Plan Project. Since 1978, Lumos has been providing engineering services to water districts throughout northern California and Nevada. Lumos looks forward to collaborating with the Calaveras County Water District (CCWD) to identify creative, cost effective solutions for a long-term, resilient, and reliable source of potable water for the Sheep Ranch Community through the initial water supply reliability study. We are also eager to assist CCWD to establish a feasible, practical, and economical Facility Master Plan for the Sheep Ranch Service Area and its water system. We are particularly excited to explore opportunities with CCWD for regional, multi-agency, and potential water system consolidation solutions for this project.

The current wildfire emergencies throughout the western slope of the Sierras emphasize the critical importance and timeliness of establishing regional and multi-agency solutions to water supply challenges. We are confident that through a partnership with CCWD that we will identify meaningful and effective solutions that not only serve the Sheep Ranch Community but also other stakeholders in the region. Having visited the site of the Sheep Ranch water diversion off San Antonio Creek, we understand firsthand the vulnerable and precarious nature of the water supply infrastructure. Lumos has a long history of collaborating with local water districts to address major system challenges and deficiencies. We currently provide these very services to multiple water districts throughout northern California and Nevada; working with rural communities to address their water system challenges and complete successful projects is part of who we are as a company.

With over 15 years of industry experience, **Nicholas (Nick) Charles**, will lead our team. Nick's experience includes providing engineering and operational support to water and sewer utilities, having worked in both engineering consulting as well as serving as the Douglas County Utility Engineer for six years. Assisting Nick will be **Jonathan Lesperance**, **P.E.**, who will serve as the project's Responsible Charge Engineer, **Kristin Tokheim**, **P.E.**, Senior Engineer; and **Lauren Frei**, **P.E.**, Project Engineer. In addition to our proposed key personnel, Nick has the additional resources and support of Lumos' 95 employees spanning our four divisions: Civil Engineering, Structural Engineering, Surveying, and Construction Services. We are large enough to provide the resources and expertise that CCWD needs, and small enough to ensure that CCWD will be supported from start to finish by a project team that CCWD knows on a first name basis.

If you have any questions, please do not hesitate to contact me at 775.883.7077 or via email at trussell@ LumosInc.com.

Sincerely,

Tim Russell, P.E.

**Engineering Division Director** 



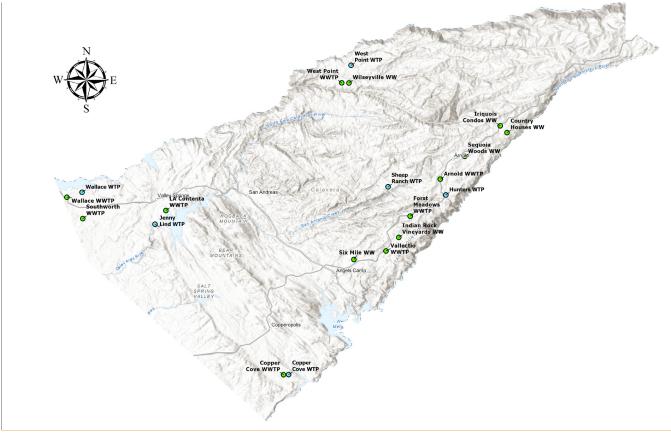
#### **Introduction**

The Calaveras County Water District (CCWD) provides potable water and wastewater services throughout Calaveras County. CCWD provides water service to six different service areas within the county, with the Sheep Ranch Service area (Sheep Ranch) being the smallest at approximately 50 service connections. The "town" of Sheep Ranch is a remote, rural community located between Mountain Ranch and Avery. Historically, Sheep Ranch and nearby mining operations received water diverted from San Antonio Creek through a diversion and ditch system. This ditch system became costly to maintain and operate and in 1960, CCWD established the Sheep Ranch water system.

The current Sheep Ranch water system uses water stored in White Pines reservoir. Water released from White Pines flows down San Antonio Creek to a diversion dam, where water is diverted into a raw water piping system that is primarily located in the old ditch alignment. This raw water pipeline runs through a heavily timbered area with a narrow footpath providing the only access. In many places, the pipeline is exposed and at risk of damage due to falling debris (i.e. rocks) and wildfire. This raw water pipeline flows to a pumping station located adjacent to Avery Sheep Ranch Road.

At the pump station, water flows via gravity to the nearby Rite of Passage facility or is pumped via a small, underground pump station to the water treatment plant in Sheep Ranch. Due to the remote location and the current alignment, operation and maintenance (O&M) is difficult, and all equipment used for O&M must be moved by hand up the footpath or supplied via helicopter. The water treatment plant for Sheep Ranch is located on Armstrong Road, approximately 1/2 mile east of Main Street and consists of a single pressure filter, and a sodium hypochlorite disinfection system. The distribution system consists of a 100,000 gallon storage tank in very poor condition and an undersized distribution system that is near to or has exceeded its design life. The storage tank and water distribution piping do not have the capacity to meet the California Fire Code and would score poorly on the ISO Fire Suppression Rating Schedule (FSRS) resulting in a poor ISO Public Protection Classification (PPC).

The community of Sheep Ranch is listed in the National Fire Plan as a Community at Risk List, meaning Sheep Ranch is at risk of a potentially catastrophic wildfire located in the wildland-urban interface. Additionally, the community of Sheep Ranch is in a "Very High" fire hazard severity zone, according to the Office of the State Fire Marshall.



Sheep Ranch Water Supply Study and Facilities Master Plan



#### **Project Understanding and Approach**

The current raw water supply, treatment, and distribution system for Sheep Ranch poses many operational and reliability challenges for CCWD. To identify these issues and cost-effective solutions, CCWD is initiating a Reliability Study and Facilities Master Plan for the Sheep Ranch water system. The Reliability Study and Facilities Master Plan will review historical data; establish water system demands; evaluate water supply improvements, including: 1) rehabilitating the current system, 2) intertie the Sheep Ranch water system to the nearby Ebbetts Pass Service Area, or 3) using groundwater for water supply; and evaluate improvements to the treatment, storage, and distribution system. Through CCWD and Stakeholder collaboration, a cost-effective Facilities Master Plan will be developed.

Given the devastation from wildfires in recent years, it is critical to clearly define objectives and goals for the Facilities Master Plan. Prior to evaluating the water supply, distribution, and storage options for the Sheep Ranch water system, the current and future water demand in the Sheep Ranch area must be established. The demand includes both potable demand and fire suppression demand. Currently, the Sheep Ranch water system is not equipped with adequate fire hydrants, distribution piping, nor does it have the storage capacity to meet established fire codes or provide sufficient fire suppression resources in the event of a catastrophic fire. For example, the International Wildland Urban Interface Code (IWUIC), requires a minimum fire flow of 1,000 gpm for 30 minutes for one- and two- family dwellings (smaller than 3,600 ft2) and the International Fire Code requires 1,000 to 1,500 gpm for 1 to 2 hours for the same residential structure (120,000 to 180,000 gallons of storage required). When evaluating potential water supply sources to serve the Sheep Ranch service area, Lumos will collaborate with CCWD and other Stakeholders, such as CALFIRE, Calaveras County, and adjacent private property owners, to establish demand objectives, storage capacity needs, and source supply reliability/redundancy goals.

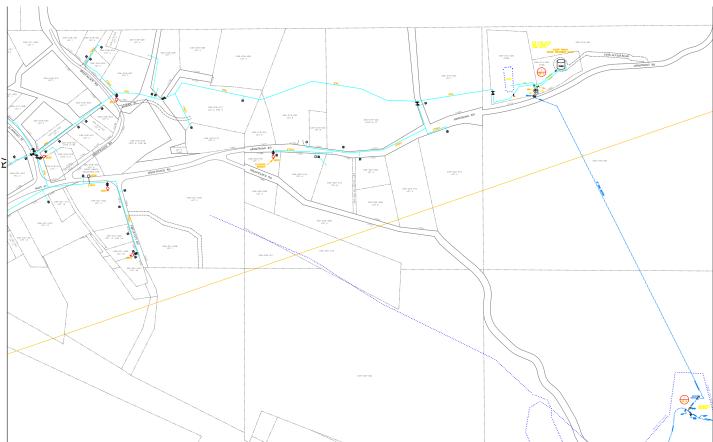
To evaluate continued use of the current water source, Lumos will look at the cost of rehabilitating the current water supply infrastructure off of the San Antone Diversion . The current diversion pipeline is exposed in many places along the ground and in other locations is attached to rock outcroppings, making it very susceptible to falling rocks and debris. Lumos will evaluate options to ensure that the pipe is less susceptible to rocks and/or falling debris, and for easier operation and maintenance(O&M). Lumos will evaluate

the current pumps to ensure that they are sufficient to meet current demand. While the current treatment system is functioning, it has reached the end of its useful life and needs to be replaced. Lumos will evaluate other treatment options, such as membranes, for the water treatment system. Finally, the current water storage tank is severely corroded on the interior that for fear of damaging the tank to such a degree, divers cannot enter the tank for inspection. On a good note, Calaveras County has funds to purchase a new water storage tank to give to CCWD, however CCWD does not have easement or ownership of land adjacent to the existing tank. With the new tank not being able to be placed next to the existing water storage tank without purchasing additional land or an easement. Lumos will need to evaluate the cost of purchasing the land or an easement next to the current storage tank and other options to determine the best location for the new tank. The size of the new tank will factor into the tank's location as well.

Given the relative proximity of Sheep Ranch to Ebbetts Pass Service Area, CCWD's largest water system, conveying either treated or raw water from Ebbetts Pass Service Area to Sheep Ranch may be a viable option for CCWD. The Hunters Treatment Plant, which treats water from the Stanislaus River for Ebbetts Pass Service Area, provides water for Timber Trails trailer park, which is located a few miles from Sheep Ranch along Avery Sheep Ranch Road. Lumos will evaluate an alignment that would run along Avery-Sheep Ranch road, providing treated water to Sheep Ranch. This would eliminate the need for a water treatment plant in Sheep Ranch. In the evaluation, Lumos will look at the cost of the piping from Timber Trails to Sheep Ranch, and ensure that the current alignment to Timber Trails trailer park is sufficient to convey additional water to Sheep Ranch. Lumos will also evaluate disinfection by products (DBPs) as the treated water would be conveyed over several miles and would be held in a storage tank for some time due to the small population in Sheep Ranch.

Lumos will also evaluate pumping raw water from Hunters Treatment Plant to an open field that is northwest of the Timber Trails trailer park. At this location, the raw water would be stored in a storage tank, possibly the tank provided by Calaveras County. From the tank, the raw water would flow by gravity to Sheep Ranch where it would be treated. While this option includes the cost of new conveyance system and a treatment plant at Sheep Ranch, the raw water can provide fire flow, which may lead to additional funding. Given that the community of Sheep Ranch is classified as a high risk community for damage from wildfire,





funding may be available through the National Fire Plan. To evaluate this option, Lumos would ensure that there is sufficient pressure in the pipe for fire flow but not so much that expensive fittings and piping are necessary. Lumos will also evaluate funding options, in addition to funding for fire flow, as well

To evaluate using groundwater as a water source for Sheep Ranch, Lumos proposes a two-step approach.

We will investigate the feasibility of using groundwater as the water source for Sheep Ranch as the first step to the master plan. To meet California regulations, a groundwater well must be sustainable - the well must be able to pump at a rate to meet water demand without drawdown. With this in mind, in the evaluation Lumos would verify if any sustainable wells near Sheep Ranch exist, and if so, contact the driller and/ or well owner for well information such as boring logs and other geology data. If sustainable wells within the vicinity of Sheep Ranch do not exist, Lumos will review the geology of other wells and investigate the old mine in Sheep Ranch as a source of groundwater. Due to the potential contamination of the groundwater in the mine, Lumos will also evaluate the feasibility of installing a well near the old mine so that it is under the influence of the groundwater in the mine but with less contamination. In the second phase, after completing the initial review of

potential groundwater sources, and if deemed feasible/cost effective, Lumos will oversee drilling of test holes at the most favorable locations to test of quality and quantity of the groundwater. Given that other wells in the area had sulfide odors, and higher iron and manganese concentrations, Lumos suspects that the new treatment plant at Sheep Ranch would need to be designed to address water quality issues if groundwater is used as the water supply.

To complete the Reliability Study and Facilities Master Plan for Sheep Ranch, Lumos will assess the existing data for Sheep Ranch and determine any data gaps to guide data collection efforts. The collected and existing data will be analyzed to determine an efficient and effective option to address the water supply issues present at Sheep Ranch.

Part of the analysis will include evaluating the current demand on the Sheep Ranch system using available bulk and service connection meter data. Additionally, given that Sheep Ranch is in a high fire hazard severity zone, Lumos will complete a thorough evaluation on fire demands with input from local fire agencies. While significant population growth in Sheep Ranch is unlikely, Lumos will develop population growth scenarios.

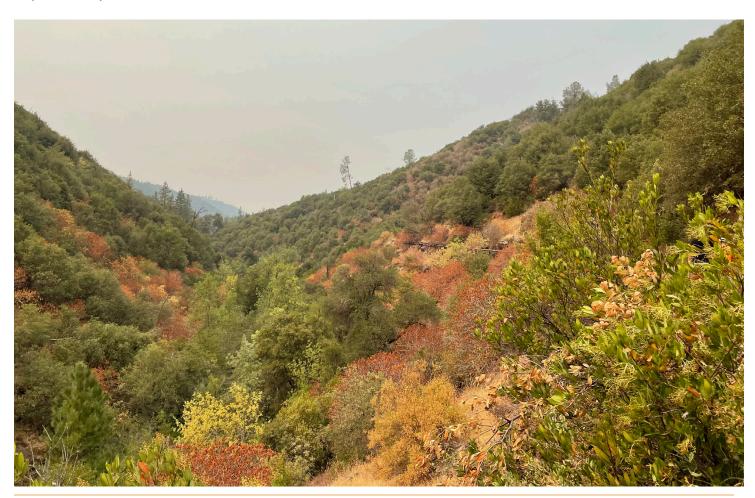


Lumos will also evaluate the current system by comparing the potable water demands developed through data collection to historical water usage trends, seasonal water usage trends, and leak/repair reports. Using the current system evaluation in conjunction with on-site condition assessment and operator interviews, Lumos will prepare (or update) an asset inventory to highlight system deficiencies, regulatory compliance issues, and critical infrastructure.

Additionally, we will create a GIS based water model that can be run to assess the fire flow capacity and transmission capabilities of the existing piping, tanks, and the alternative sources of supply. This model will help us to determine what other system improvements will be necessary in addition to source upgrades in order to ensure the system meets all local and state requirements for a water system and for fire protection.

Based on the projected water demands and current system assessment, Lumos will work with CCWD to prioritize system deficiencies that are critical to maintaining a necessary level of service in the Sheep Ranch water system. Lumos will focus on identifying cost-effective strategies to provide a reliable and sustainable water source for Sheep Ranch. The identified strategies will consider capital improvements, long-term operation and maintenance, financial impacts, and system deficiencies. For the three identified alternatives (rehabilitating the current system, connecting to the Hunters Treatment system, and developing a groundwater source), Lumos will complete a monetary and non-monetary assessment as well as concept drawings, operation and maintenance estimates, a potential environmental impacts, and a review of potential project stakeholders.

Throughout the development of the master plan and conduction of the reliability study, Lumos proposes holding frequent project team meetings to review progress and ensure that CCWD's objectives are being met. As necessary, Lumos will also coordinate with state and local regulatory agencies.



Sheep Ranch Water Supply Study and Facilities Master Plan





#### Firm Overview

Lumos has a passion for water and wastewater projects from planning, to design, to construction management. This passion is embodied by

our team of over 95 inspired problem solvers who work to build a legacy of excellence in the communities where we live and work.

Lumos fosters a work culture where problem solvers flourish, accomplishing their best work; the end result being a deliverable that exceeds established goals. Through engineering, structural engineering, surveying, geotechnical, construction management, and teaming partners, together with our clients, we bring our experience to bear to create new and innovative solutions for our clients.

We were established in 1978 in Nevada's capital, Carson City, with offices in Reno, Fallon, and iconic Lake Tahoe. We serve clients throughout California and Nevada, in both rural and urban settings. We want to improve tomorrow by designing enduring communities today.

With our team and their experience with water system planning, we are able to provide you the big firm expertise coupled with the level of service and relationships provided by the small firms.

We are located in Carson City a short trip away to meet your project needs as it relates to your Water Supply Study and Facilities Master Plan.

#### **Our Capabilities**

#### Water & Wastewater Infrastructure

#### **Planning**

- Master planning
- Preliminary engineering reports
- ► Facility analysis studies
- Rate Studies Asset Management

#### **▼** Potable Water

- Distribution and transmission
- Pump stations
- Water treatment
- Hydraulic modeling

#### **Wastewater & Effluent**

- Collection and transmission
- Lift stations
- Wastewater treatment
- Storage (Tanks)
- Well Design
- Well Rehabilitation

#### Wastewater reuse and disposal

Hydraulic modeling

#### **Geographic Information Systems (GIS)**

#### **Funding Assistance**

#### **▼** Permitting

- Federal, State, and local construction permitting
- Operation permits and renewals (i.e. Wastewater discharge permit)
- **Water Rights**
- **Hydrology Studies & Analysis**
- **Regional Groundwater Studies**
- **Geophysical Prospecting & Analysis**
- **Groundwater Exploration & Modeling**
- **Aquifer Testing & Analysis**
- **Water Quality Analysis**
- **Expert Witness Services**



#### **Project Experience**

#### Big Basin Water Company Water Supply Study

Boulder Creek, California

In 2020 the Big Basin water system was severely damaged by the CZU complex wildland fire that ravaged the Santa Cruz mountains. The system's water treatment plant and water system records (paper and electronic) were destroyed in the fire. In addition, the fire destroyed or damaged distribution piping, water tanks, and a wastewater treatment plant in the Big Basin service area. Since that time, the water system has been relying on a single groundwater well to provide water service to customers. Historically, this well was used only during high demand periods to augment the surface water supply from the water treatment plant.

Due to the current limited water supply and a lack of redundancy, both short-term and long-term water supply solutions need to be evaluated and promptly implemented.

In April 2021, the State Water Resources Control Board – Division of Drinking Water (DDW), issued a compliance order for Big Basin identifying several compliance deficiencies for the water system, many of which were identified in a 2018 DDW sanitary survey prior to the CZU fire. DDW required a compliance plan and schedule for review and approval by June 10, 2021, and more urgently, a contingency plan for the water system had to be submitted to DDW by May 10, 2021.

Lumos is providing a Short- and Long-term Water Supply Study. The short-term water supply solution will focus on designing and installing an emergency water treatment plant that will treat a portion of the surface water supply that was used prior to destruction of the water treatment plant. The long-term water supply alternatives will identify a cost-effective solution to restore water supply capacity in the Big Basin water system. Surface water treatment design criteria will be established based on raw water laboratory data and water system demand estimates. Using this design criteria Lumos will develop up to three conceptual surface water treatment alternatives that could be used in the Big Basin water system.

In order to address the compliance issues with DDW, Lumos assisted TRA Water Operations preparing the required responses addressing the Contingency Plan, Compliance Action Plan, and Compliance Schedule.

#### Amador Water Agency, Pioneer Water Rehabilitation Project, Phase 2

Pioneer, California

Lumos is providing Construction Management and Inspection services for the Amador Water Agency (AWA) on Phase 2 of the three phased Pioneer Water Rehabilitation project.

As the project Construction Management team, Lumos & Associates provided construction management and inspection services for the duration of the project construction. The construction included: 7,400-feet of new 12-inch ductile iron water main, appurtenances, and surface repair along Buckhorn Ridge Road from Deadwood Ct to Prospect Place; four new PRV stations; new booster pump station; demolition of the existing booster pump station; demolition of a redwood tank; and numerous connections to existing distribution/ transmission mains. The project required frequent interaction with the public and coordination with CalTrans, Amador County, and PG&E.

#### Lukins Brothers Water Company, Water System Improvements

South Lake Tahoe, California

The Lukins Brothers Water Company (Lukins) is a Community Water System located in South Lake Tahoe, California. Founded in 1947, Lukins currently services 3,000 residents with 960 service connections. Most connections are single-family residential connections (approximately 85%) with the balance being multi-family, commercial and industrial service connections. The Lukins service area falls between the South Tahoe Public Utility District (STPUD) and the Tahoe Keys Property Owners Association (TKPOA) service area.

In 2014, water quality samples from two wells exceeded the MCL for tetrachloroethylene (PCE). Both wells were taken out of service and emergency interties with STPUD were activated, leaving Lukins with a single operational well. In late 2014, the California Water Resources Control Board Division of Drinking Water (DDW) issued a Compliance Order requiring water quality improvements in the Lukins system to address the MCL exceedance. Lumos staff completed a preliminary engineering report (PER) to define the project and select a basis of design treatment technology in coordination with the DDW requirements. Following completion of the PER, Lumos completed the design of a 650 gallon per minute (GPM) granular activated carbon (GAC) water treatment system, a new building to house a new GAC treatment process, a 98,000-gallon capacity water tank, a booster pump station, well rehabilitation improvements, and associated







appurtenances and site improvements. This project is presently under construction with Lumos providing construction management, inspection, and construction observation services.

This project demonstrates Lumos' experience with a significant retrofit project that also required selection, and procurement of specialty water treatment equipment. The project design and construction was complicated operationally by the reduction of source water capacity to a single well. The project design and construction was a highly collaborative process between Lukins Brothers Water Company and Lumos & Associates, highlighting the type of partnership that Lumos provides to clients.

#### Carson City Public Works, Marlette/Hobart Water System Demand Study

Carson City, Nevada

Carson City uses a combination of ground and surface water sources to meet municipal water demand. One source of surface water is the historic Marlette-Hobart Water System, which is owned by the State of Nevada. Currently, the MHWS supplies water from Marlette Lake, Hobart Reservoir, and east slope springs to Virginia City and Carson City. Other water entities have recently expressed interest in the surplus water available through the MHWS. In response, Carson City needed to quantify their current and future water demands from the MHWS so that this water can be reserved for Carson City. To quantify these needs, it was proposed that a water system demand evaluation be completed.

Lumos was retained to study and complete the MHWS Water System Demand Study to help Carson City quantify their claims and future use of the water resource. The analysis considered future demands and water supply scenarios to meet these demands. Scenarios where

developed based on existing and planned water supplies as well as supply capacity during dry, average, and wet precipitation years (from the MHWS). Based on these water supply scenarios, Lumos determined the feasible demand required/available from the MHWS during dry, average, and wet years. Seasonality of demand and the MHWS supply was also be considered. With all of this data/analysis, Lumos was able to produce a final product that provided the City with the knowledge to justify their claims and needs from the MHWS now and into the future.

### Gardnerville Ranchos General Improvement District Water Master Plan

Gardnerville, Nevada

Building upon a Water Resource Plan Lumos completed which evaluated the long term viability of water resources available to the Gardnerville Ranchos, the Gardnerville Ranchos General Improvement District (GRGID) commissioned Lumos to develop a water master plan for its water system which consists of two pressure zones with 58 miles of distribution piping, seven groundwater wells, two storage tanks, and a booster pumping station. The purpose of the water master plan was to develop comprehensive water system maps, assess the condition of existing facilities, prioritize life cycle infrastructure replacements, determine capacity upgrades required to accommodate future growth, evaluate future water supply strategies, and develop a short-term and long-term capital improvement plan over a 20 year planning period.

As part of the master planning efforts, water demand factors were developed based on metered usage records by land use type. Future water demands were estimated by assessing potential growth areas that could be served by the GRGID water system (including infill areas, undeveloped land within GRGID boundaries, and land



with potential for annexation into the District) along with County zoning and land use densities. The GRGID water system was evaluated against existing and future water demands in accordance with Nevada Administrative Code (NAC) requirements for water storage, supply, and distribution using hydraulic modeling software (Bentley WaterCAD). The master plan also provided initial alternative analysis related to future water resources that may be available to GRGID to supply future growth or replace other dwindling/contaminated supplies.

#### **Amador Water Agency, Wastewater Master Plan** Sutter Creek, California

Lumos was recently awarded a contract with the Amador Water Agency (AWA) to complete a wastewater master plan. AWA operates numerous wastewater systems located from Pioneer to the north shore of Lake Camanche. The condition, effectiveness, and compliance of these system varies greatly. The master plan will develop a cost-effective CIP that addresses infiltration and inflow (I&I) issues, nitrogen removal in STEP systems, inadequate capacity and capability of a treatment plant, inadequate disposal capacity, etc. The Master Plan will focus on identifying cost effective solution and phasing strategies to ensure that the Master Plan can actually be implemented. To do this Lumos has included a financial consultant and an operations consultant to help ensure that the proposed CIP is appropriate, cost effective, and can be implemented by the Agency. This Master Planning

project is further complicated by a short schedule to provide adequate time to implement new rate schedules (if required).

### **Great Basin Water Co. Consolidated Integrated Resource Plans**

Statewide, Nevada

The Great Basin Water Co. (GBWC) contracted with Lumos & Associates to develop Consolidated Integrated Resource Plans (IRP) of all four of their utility business divisions in Nevada. These divisions include the Cold Springs Division (Water System Only), Spanish Springs Division (Water System Only), Spring Creek Division (Water & Wastewater Systems), and Pahrump Division (Water & Wastewater Systems). An IRP is similar to a utility master plan and is required by the Public Utility Commission of Nevada (PUCN) every three years for private utilities with annual revenues over \$1 million. Lumos has developed the IRPs for GBWC, since 2016.

Tasks in developing the IRP include condition assessments of existing infrastructure, a review of the historical water meter and sewer flow data for creating water demand and sewer flow forecasts, evaluation of the water and sewer systems for capacity to meet existing and future demands, hydraulic modeling of existing and proposed conditions, and development of near-term action plans (3-year timeline) and long- term preferred plans (20-year timeline) identifying critical projects to address insufficiencies and aging infrastructure. Other tasks included assistance



**Sheep Ranch Water Supply Study and Facilities Master Plan** 





in preparing written testimony for public hearings with the PUCN and Bureau of Consumer Protection (BCP) and responding to data requests from both agencies for technical information.

#### StoneGate Master Infrastructure Master Planning

Cold Springs, Nevada

Lumos was retained by Heinz Ranch Land Company, LLC, to perform master planning of a backbone water distribution system including tanks, transmission mains, booster stations, wells, and hydraulic modeling for the StoneGate Master Planned Community in North Reno, Nevada. All of the planning and design are conducted hand in hand with Truckee Meadows Water Authority (in some cases contracted by them in lieu of StoneGate). The development consists of 5,000 residential lots, two elementary schools, one high school, and commercial areas, to be developed in six phases.

Lumos' role in the project includes civil and structural engineering, landscape architecture, and land surveying.

Master planning of the water system included layout, hydraulic modeling, and design of 6 miles of 16-inch water transmission main, design of a phased regional booster station to accommodate flows from initial homes to full build-out of 2500 gpm, design of well capacity for full average day demand, and water tanks considing of 3

million gallons in storage across 4 tanks and 4 pressure zones. The phased nature of the project necessitated careful analysis of the timing and phasing of water improvements to ensure operational and fire storage was maintained throughout the project.

#### Carson Water Subconservancy District (CSWD) Carson River Water Marketing/Master Planning

Carson City, Nevada

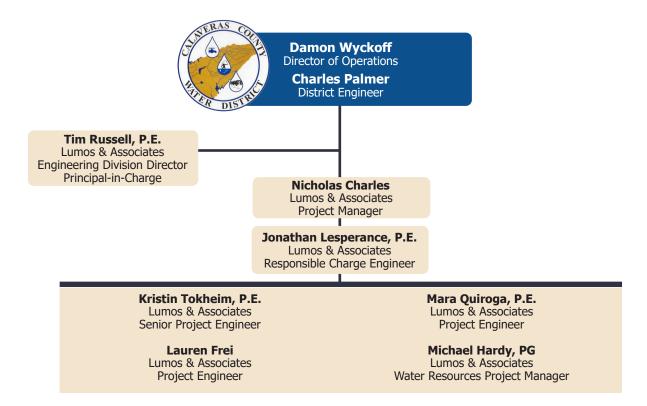
The Carson Water Subconservancy District is charged with facilitating the management and cooperative use of the Carson River by the users of the River's Resource, many with diverging interests and needs. Efforts included coordination with the State Engineer's Office, Federal Water Master, public utilities along the Carson River, ranchers, TCID, Bureau of Reclamation, and USGS.

This project was completed to assist the CWSD with the development of a Water Marketing Study along the Carson River. The Water Marketing Study funded through the Bureau of Reclamation (BOR) will be a tool to enhance the reliability of water within the entire water shed. The study and strategy development will explore partnerships and the feasibility of exchanging water amongst the various stakeholders along the River.



#### **Project Team**

The organizational chart below represents the selected team members specifically performing services on the Master Plan. In addition to our proposed team, our in-house including our Surveying, Structural Engineering, and Construction Services are additional resources with the capacity to support your project needs and goals. Brief resumes for our key personnel are on the pages following this organizational chart.



#### **Key Personnel**

#### **Qualifications and Key Experience Highlights**



**Tim Russell, P.E.**Engineering
Division Director

Tim has nearly 20 years of engineering experience, with a focus in water resources and water system planning. A member of the Lumos Team since 2014, Tim and his team have quickly established themselves as one of the leading water system engineering teams in the northern Nevada area through the design of multiple booster stations, tanks, wells and miles of pipeline. Tim's background includes multiple major water system planning and design efforts for the Town of Minden, Topaz Ranch Estates GID, Carson City, and Indian Hills GID in Nevada. As Engineering Division Director and mentor, Tim provides Quality Control and Assurance on our projects. He is responsible for contractual agreements and overall client satisfaction.

Industry Experience 19 years | Lumos Tenure 7 years

- ✓ Education: MS, Civil Engineering, Auburn University, 2003 | BS, Chemical Engineering, Auburn University, 2001
- ✓ Licenses/Certifications: Professional Engineer (Civil) in CA and NV



#### **Key Personnel**

#### **Qualifications and Key Experience Highlights**



Nicholas (Nick) Charles Project Manager

Nick's Public Works career has focused on providing engineering and operational support to water and sewer utilities. Nick has worked in engineering consulting and as a utility engineer for municipal water and wastewater utility. Through this experience he has been involved in daily operations (he's not afraid to get his hands dirty), managed numerous capital projects, and was a design team member on various projects. Nick's project management experience ranges from small projects to \$12+ million treatment processes. Nick is the primary contact for day-to-day project matters for this project.

Industry Experience 15 years | Lumos Tenure 2 years

- Education: MBA with emphasis in Data Analytics, 2020, Louisiana State University Shreveport; Certificate in Project Management Essentials, University of Nevada Reno, 2014; MS, Environmental Engineering, University of Wyoming, 2007; BS, Mathematics Education, Brigham Young University – Idaho, 2004
- ✓ Licenses/Certifications: Professional Engineer (Civil) in AZ, ID, NV, and WY



Jonathan Lesperance, P.E. Responsible Charge Engineer

Jonathan is our Engineering Group Manager and the Responsible Charge Engineer for this project. He brings extensive design experience in municipal infrastructure projects including site design, water and wastewater design (including tanks, booster stations, lift stations, reuse, and treatment), and agency permitting. Additionally, Jonathan provides project management for both public and private clients. This includes planning and feasibility studies, alternatives analysis, permitting and entitlements, bid solicitation, and engineering services during construction. His attention to detail makes him a skilled technical writer and he commonly prepares complete bid packages including construction specifications and contract documents, master plans, feasibility studies, and Preliminary Engineering Reports (PER).

Industry Experience 12 years | Lumos Tenure 2 years

- ✓ Education: BS, Civil Engineering, Arizona State University, 2009
- ✓ Licenses/Certifications: Professional Engineer (Civil) CA and NV



**Kristin Tokheim, P.E.**Senior Project
Engineer

Since joining Lumos in 2016, Kristin has completed a variety of projects including water and sewer master plans for the Gardnerville Ranchos General Improvement District, the design of a sludge removal and pond relining project for the City of Fernley WWTP, and the planning and design of phased water and sewer infrastructure for the StoneGate Development (to serve 5,000 residential units and other land uses). In addition, Kristin has been a part of the ongoing Consolidated Integrated Resource Plans for Great Basin Water Co.

Industry Experience 15 years | Lumos Tenure 5 years

- ✓ Education: BS, Civil Engineering, University of the Pacific Stockton, California, 2005
- ✓ Licenses/Certifications: Professional Engineer (Civil) CA and NV; LEED Green Associate



#### **Key Personnel**

#### **Qualifications and Key Experience Highlights**



**Lauren Frei** Project Engineer

Lauren joined the Lumos Team in July and brings with her 6 years of civil engineering experience specifically related to Water and Wastewater Projects. Lauren's project knowledge includes Hydrologic and hydraulic watershed studies, Flood Insurance Study (FIS) report development and internal review, Hydraulic modeling and internal review, Wastewater disinfectant research, Wastewater bench scale testing, Conveyance analysis, and Inflow & infiltration field studies. Lauren is the project engineer for the Amador Water Sewer Master Plan and the Big Basin Water Company Short- and Long-term Water Supply Study.

Industry Experience 6 years | Lumos Tenure 1 month

- ✓ Education: MS, Environmental Engineering, Duke University | BS, Civil Engineering: Environmental Engineering/Water Resources Bucknell University
- ✓ Licenses/Certifications: Professional Engineer (Civil) NV



**Mara Quiroga, P.E.** Project Engineer

Mara is currently modeling the water and sewer/plan review system for the StoneGate Development (to serve 5,000 residential units and other land uses). In addition, Mara has provided design services on over 15 Lift Station designs, in the past 3 years. As Project Engineer, Mara will complete much of the background research, data analysis, condition and criticality assessment, and capital improvements conceptual design required to complete a comprehensive Master Plan.

Industry Experience 6 years | Lumos Tenure 5 years

- ✓ Education: BS, Civil Engineering, University of Nevada, Reno, 2015
- ✓ Licenses/Certifications: Professional Engineer (Civil) CA and NV



Michael Hardy, PG Project Manager: Water Resources

Michael has over 30 years of experience in water resources, with emphasis in regional aquifer analysis, exploration and production drilling, water resource management, well field management, water facility improvements, water quality projects, and utility planning documents. Michael provides hydrogeological review and analysis for Great Basin Water Co.

Industry Experience 32 years | Lumos Tenure 18 years

- ✓ Education: BS, Geology, Bemidji State University, 1984
- ✓ Graduate Studies in Geology, Idaho State University, ID, 1985-1988
- ✓ Licenses/Certifications: Professional Engineer (Civil) in AZ and NV; Professional Geologist in CA; Water Rights Surveyor in NV



#### **Work Plan and Tasks**

Lumos proposes the following activities and tasks to complete the CCWD Sheep Ranch Water Supply Reliability Study and Facilities Master Plan.

#### TASK 1

Project Management To support the development of the Master Plan, Lumos proposes holding frequent, collaborative update meetings with the project team. These regular project meetings will provide collaborative opportunities to review project progress and to confirm that the Water Supply Reliability Study and Facilities Master plan is consistent with CCWD's goals and responsive to its objectives.

The project manager will provide coordination of regular progress meetings, and preparation of all agendas and minutes. As needed, the project manager will also provide coordination and consultation with appropriate local and state regulatory agencies. Other duties will include preparation of schedules and regular schedule updates, along with preparation and submission of monthly progress reports to be included with monthly invoices. The project manager will also ensure adherence to Lumos' Quality Assurance/ Quality Control Program and be responsible for overseeing project correspondence and file maintenance throughout the preparation of the master plan.

#### **Deliverables:**

#### **Anticipated Meetings and Workshops:**

- Monthly progress reports
- Project closeout files

None

#### TASK 2

Data Collection and Review

This task includes data collection and review. The goal of this effort is to assess the existing data available for the Sheep Ranch water system and compile that data into a comprehensive and usable database(s). Collected data may include existing system mapping, as-builts, asset management / inventory data, water quality data, water usage data, existing inspection reports, existing models, etc. Using this data, Lumos will identify data gaps that will help guide the collection of additional data in a targeted, efficient manner. Lumos will append existing data with new data as it is collected. Data collected in the task will be analyzed and used in subsequent tasks to help ensure that the effective, creative, and efficient decisions can be made.

#### **Deliverables:**

#### **Anticipated Meetings and Workshops:**

- Reguests for information
- Updated asset inventory files/databases

None

#### TASK 3

System
Demand,
Condition
Assessment,
and Objectives
Development

This task includes three primary subtasks, system demand, condition assessment, and the development of system objectives.

**Subtask 3A | System Demand Evaluation.** Using data collected in Task 2, Lumos will evaluate current system usage using available bulk and service connection meter data to determine the average day demand, maximum day demand, and peak hour demand. Although significant growth in Sheep Ranch is unlikely, Lumos will develop population growths scenarios resulting from population growth and potential expansion of the service area. Water demand estimates will be developed based on the population growth scenarios.

Based on the fire hazards that exists in and around Sheep Ranch, Lumos will complete a thorough evaluation of fire demands. This evaluation will include coordination with other stakeholders, which may include the Central Calaveras Fire Protection District, Cal Fire, Calaveras County Office of Emergency Services, etc.

Multiple scenarios may be developed that consider the varied capacity potential of different improvement alternatives. Through this collaborative approach, Lumos, in conjunction with CCWD will develop realistic objectives related to providing water for fire suppression in the planning area.



#### TASK 3

System
Demand,
Condition
Assessment,
and Objectives
Development
continued

**Subtask 3B | Condition Assessment.** Potable water demands developed in the previous subtask will be compared to historical water usage trends, seasonal water usage trends, and leak/repair reports to better understand the condition and reliability of the existing infrastructure. In addition, Lumos will complete a water balance and water audit to identify water loss and non-revenue water within the system. Based on this evaluation, an in-depth on-site condition assessment, and operator interviews, Lumos will prepare (or update) an asset inventory. This inventory will document the highlighted system deficiencies, regulatory compliance issues, and critical infrastructure.

**Subtask 3C | Objectives Development.** Based on the findings of subtask 3A and 3B, Lumos will work collaboratively with CCWD to prioritize system deficiencies and identify deficiencies that are critical to maintain a minimum level of service in the Sheep Ranch water system. A formal priority and criticality list will be developed that can be used as the basis of alternative development and evaluation that will occur in subsequent tasks. In addition, improvement objectives will be developed that establish criteria and goals for improvements developed in Task 4 and 5.

#### **Deliverables:**

- Meeting/Workshop agendas, materials, and meeting minutes
- System condition memorandum
- Démand and objectives memorandum

#### **Anticipated Meetings and Workshops:**

- Master Plan demand and objectives workshop
- Onsite condition assessment investigation
- As needed Teams/Zoom coordination meetings

#### TASK 4

Water Supply Infrastructure Improvements Task 4 will focus on identifying cost-effective strategies to establish a reliable and sustainable source of water for CCWD customers in Sheep Ranch and other water customers that use the existing system (i.e. Rite of Passage). Improvement strategies will consider capital improvements, long-term operations and maintenance requirements, financial impacts, phasing, system deficiencies, and the goals objectives identified in Task 3. Three preliminary alternatives have been identified: rehabilitating existing infrastructure, intertie with an other water system, and developing a groundwater source.

For each alternative, improvement descriptions and concept drawings / diagrams will be developed for collaborative evaluation and review. Based on this collaborative review, the improvement descriptions and concept drawings / diagrams will be refined and modified. Lumos will then develop Class 5 Engineer's opinion of probable cost, operations and maintenance estimates, project phasing strategies, implementation schedules, a review of landowner impacts, a review of potential environmental impacts, and a review of potential project stakeholders so that the improvements can be compared and evaluated against the other alternatives.

Lumos will complete a monetary and non-monetary evaluation of each alternative. The monetary evaluation will consider capital expenses, long-term operations and maintenance costs, staffing requirements, and repair and replacement costs. The non-monetary evaluation will consider the alternatives reliability, constructability, funding opportunities, partnering opportunities, etc.

The following is a brief description of each alternative:

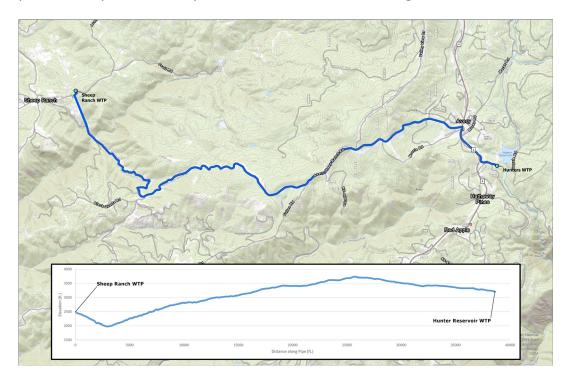
**Rehabilitation of Existing Infrastructure.** This alternative may include improvements at the White Pines Reservoir, the San Antonio Creek diversion dam, in the raw water transmission piping system, and in the raw water pumping system. Additionally, this alternative may consider raw water storage to improve the day-to-day reliability of the water system. This alternative would result in the Sheep Ranch source water system largely operating as it does today. The scope of this alternative would likely be limited to the extent of the existing system with limited fire demand or expansion capacity.



#### TASK 4

Water Supply Infrastructure Improvements continued Intertie. This alternative includes improvements that would intertie the Sheep Ranch water system to the Ebbetts Pass water system located along Highway 4 approximately 7.5 miles away. The Ebbetts Pass water system uses water from the Stanislaus River, a much larger water source than the existing water source on San Antonio Creek. Not only would this alternative connect Sheep Ranch to a larger water source, it could also provide significant fire capacity in Sheep Ranch and along the pipeline route, providing regional benefits. This alternative would require extensive collaboration with other entities, including, Cal Fire, the US Forest Service, Calaveras County, and possibly private landowners near the pipeline route. This collaboration could provide additional access to grant funding that may not normally be available to water agencies. In addition, creative funding strategies may be available for this alternative. For example, installing conduit adjacent to the pipeline could make the project eligible for grants for expanding broadband access in rural areas. Or, high head conditions may allow for installation of turbines to generate electrical power.

In development of this alternative, Lumos will consider water age, hydraulic conditions, whether the pipeline should be potable or raw water and the impacts of this decision. For example, a raw water pipeline would require a water treatment plant in Sheep Ranch but a potable water line could lead to significant DBP issues.



#### **Deliverables:**

- 1% conceptual design and layouts for each alternative
- Meeting/Workshop agendas, materials, and meeting minutes

#### **Anticipated Meetings and Workshops:**

- Stakeholder meetings
- Water Supply alternative improvements workshop
- As needed Teams/Zoom coordination meetings



#### TASK 4

Water Supply Infrastructure Improvements continued **Groundwater Wells.** This alternative would include the installation of at least two groundwater wells, equipping these wells, and installation of piping to connect the wells to the distribution system. There is limited data available for existing groundwater wells in the Sheep Ranch area and much of the geology is assumed to be fractured rock formations. For this alternative, Lumos' hydrogeologist, **Michael Hardy, PG**, would review existing information and make recommendations on whether this alternative should be pursued. Our hydrogeologist would also consider the potential impact the abandoned mine may have on the capacity and quality of water available.

If the available data indicates that groundwater wells may be feasible, it is likely that a test well program would be recommended as part of the alternative implementation. Site identification, easement/access negotiations, and test drilling would occur outside of the scope of this project.

#### **Deliverables:**

- 1% conceptual design and layouts for each alternative
- Meeting/Workshop agendas, materials, and meeting minutes

#### **Anticipated Meetings and Workshops:**

- Stakeholder meetings
- Water Supply alternative improvements workshop
- As needed Teams/Zoom coordination meetings

#### TASK 5

Water
Treatment and
Distribution
Infrastructure
Improvements

This task will focus on required improvements at the water treatment plant and distribution system. Water treatment and distribution improvements are highly dependent on the water supply improvements evaluated in Task 4. As a result, the findings and recommendations from Task 4 will impact water treatment requirements, storage requirements, and distribution system sizing.

Based on the findings and recommendations of Task 5, Lumos will develop water treatment, storage, and distribution system improvement recommendations that focus on priority deficiencies identified in Task 3. If water treatment is required, Lumos will complete an alternative evaluation on two treatment technologies. Distribution system and storage improvements will consider fire flow capacity available in the system (as a result of Task 4). Lumos will develop a GIS based hydraulic water model to help evaluate priority distribution system improvements.

#### **Deliverables:**

- 1% conceptual design and layouts for proposed improvements
- Meeting/Workshop agendas, materials, and meeting minutes

#### **Anticipated Meetings and Workshops:**

- Treatment & distribution alternative improvements workshop
- As needed Teams/Zoom coordination meetings

#### TASK 6

Reliability Study and Master Plan

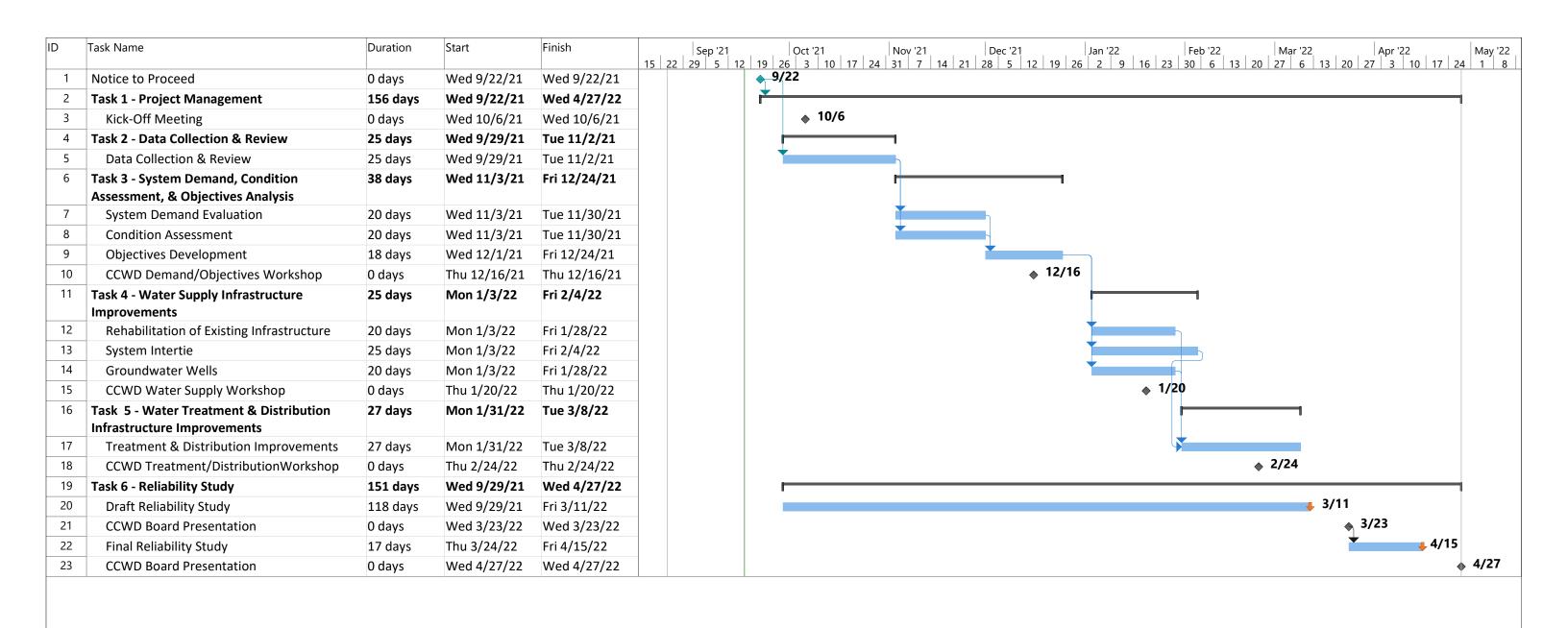
Under this task, Lumos will prepare a report that documents the data, analysis, alternatives, and recommendations developed in Task 2 through 5. The report will focus on identifying critical infrastructure; asset management strategies to help ensure long-term, reliable system operations; and a capital improvements plan (CIP) that lays out both short- and long-term improvement recommendations. Lumos' Quality Assurance/Quality Control staff will review the draft report prior to submittal to CCWD for review. Lumos will submit a final report, stamped by an Engineer licensed in California that incorporates CCWD's comments and that includes an executive summary, and appendices.

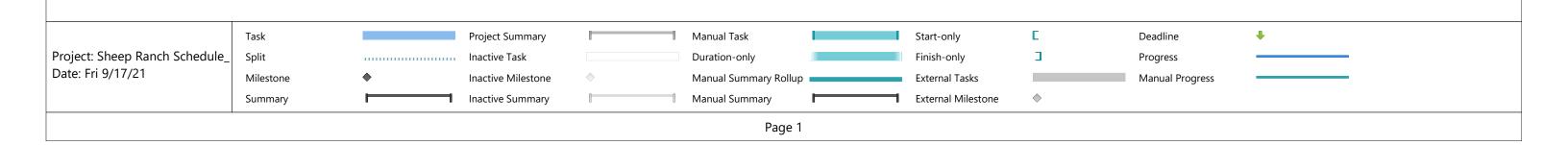
#### **Deliverables:**

- Draft Reliability Study and Facilities Master Plan
- Draft Reliability Study and Facilities Master Plan

#### **Anticipated Meetings and Workshops:**

- Preliminary findings presentation to CCWD Board of Directors
- Final findings presentation to CCWD Board of Directors







#### CALAVERAS COUNTY WATER DISTRICT SHEEP RANCH WATER SUPPLY REALIABILITY STUDY AND FACILITIES MASTER PLAN

#### **COST PROPOSAL**

JOB#: LA21.723 DATE: 9/2/2021

72,970.00

<u>Task</u>							
1	Project Management						
_	Personnel		Rate	Hours		Amount	
	Group Manager	\$	225.00	5.	00 \$	1,125.00	
	Project Manager	\$	195.00	15.	00 \$	2,925.00	
	<u> </u>				\$	4,050.00	
<u>2</u>	<u>Data Collection &amp; Review</u>						
	Personnel		Rate	Hours		Amount	
	Project Manager	\$	195.00	4.	00 \$	780.00	
	Sr. Engineer	\$	165.00	8.	00 \$	1,320.00	
	Project Engineer	\$	155.00	20.	00 \$	3,100.00	
	Engineering Technician	\$	105.00	4.	00 \$	420.00	
					\$	5,620.00	
<u>3</u>	System Demand, Condition Assessment, & Objectives Development						
	Personnel		Rate	Hours		Amount	
	Group Manager	\$	225.00	4.	00 \$	900.00	
	Project Manager	\$	195.00	18.	00 \$	3,510.00	
	Sr. Engineer	\$	165.00	26.	00 \$	4,290.00	
	Project Engineer	\$	155.00	20.	00 \$	3,100.00	
	Engineering Technician	\$	105.00	16.	00   \$	1,680.00	
					\$	13,480.00	
<u>4</u>	Water Supply Infrastructure Improvements						
	Personnel		Rate	Hours		Amount	
	Group Manager	\$	225.00		00   \$		
	Project Manager	\$	195.00		00   \$	4,680.00	
	Sr. Engineer	\$	165.00	28.		4,620.00	
	Project Enginer	\$	155.00	32.		4,960.00	
	Engineering Technician	\$	105.00	24.	<u>_</u>	2,520.00	
					\$	18,130.00	
<u>5</u>	Water Treatment and Distribution Infrastru	cture Improvements					
	Personnel		Rate	Hours		Amount	
	Group Manager	\$	225.00		00 \$	1,350.00	
	Project Manager	\$	195.00	20.		3,900.00	
	Sr. Engineer	\$	165.00	24.			
	Project Engineer	\$	155.00	24.		3,720.00	
	Engineering Technician	į \$	105.00	20.		2,100.00	
					\$	15,030.00	
<u>6</u>	Reliability Study and Master Plan						
	Personnel		Rate	Hours		Amount	
	Group Manager	\$	225.00	10.		2,250.00	
	Project Manager	\$	195.00	24.		4,680.00	
	Sr. Engineer	\$	165.00	30.		4,950.00	
	Project Engineer	\$	155.00	20.		3,100.00	
	Engineering Technician	\$	105.00	16.		1,680.00	
					\$	16,660.00	
				Grand Total	<u>11</u>		

#### Assumptions:

- -Kick-off meeting will be held via Zoom/Teams or combined with an onsite/CCWD Office meeting budgeted in Task 3
- -Task 3 includes budget for 1 onsite/CCWD Office workshop and one full day onsite to complete a detailed condition assessment
- -Task 4 includes budget for 1 onsite/CCWD Office workshop and one stakeholder meeting/workshop
- -Task 5 includes budget for 2 onsite/CCWD Office workshops
- -Task 5 assumes that water treatment and fire flow improvements will be required in the existing Sheep Ranch system
- -Task 6 includes budget to attend 2 CCWD Board Meetings or Workshops to present draft and final recommendations to the CCWD Board.

## Agenda Item

DATE: September 22, 2021

TO: Board of Directors

FROM: Damon Wyckoff, Director of Operations

SUBJECT: Discussion/Action Regarding the Acceptance of an Easement and Related

Agreement for the Sheep Ranch Water System's Fire protection Tank

#### **RECOMMENDED ACTION:**

Motion: \_\_\_\_\_/\_\_\_ adopting Resolution No. 2021 - \_\_ accepting an Easement and related agreement for the Sheep Ranch Water System's Fire Protection Tank

#### **SUMMARY:**

The Calaveras County Water District (CCWD) and Calaveras County (County) are collaborating to erect a one-hundred-forty-thousand-gallon non-potable water tank to be used for fire protection in the community of Sheep Ranch. CCWD is providing the tank, associated material (piping, the hydrant, etc) and property for the work effort and the County is paying for the site-work and tank assembly.

Upon completion of the site survey, it was discovered that the parcel maps of record are approximately one-hundred feet off from the actual property markers. As a result, the desired location of the tank will straddle the property line with the neighbor. Staff determined that the most efficient and cost-effective resolution for this matter was to negotiate an easement with the neighboring property owner to obtain the additional property necessary for the fire-protection tank installation. CCWD already has an easement for site access with the neighbor. The additional easement will be provided for the fire-protection tank.

CCWD and the neighboring property owner have come to an agreement for the easement. The property owner will allow CCWD to install the fire-protection tank for a payment of twelve-thousand dollars.

#### FINANCIAL CONSIDERATIONS:

The approved Fiscal Year 2020-21 includes \$175,000 for Sheep Ranch Water System Storage Tank improvements which will cover the cost of the easement.

Attachments: Mock-up for the fire-protection tank and Resolution No. 2021-\_\_ Authorizing Easement

#### **RESOLUTION NO. 2021-**

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

## AUTHORIZING THE GENERAL MANAGER TO ACCEPT A PUBLIC UTILITY EASEMENT ON PARCEL 036-014-061-000 IN THE COMMUNITY OF SHEEP RANCH

**WHEREAS**, the Board of Directors of CALAVERAS COUNTY WATER DISTRICT (CCWD) and Steve Pogoler entered into a Purchase and Release Agreement ("Agreement"),

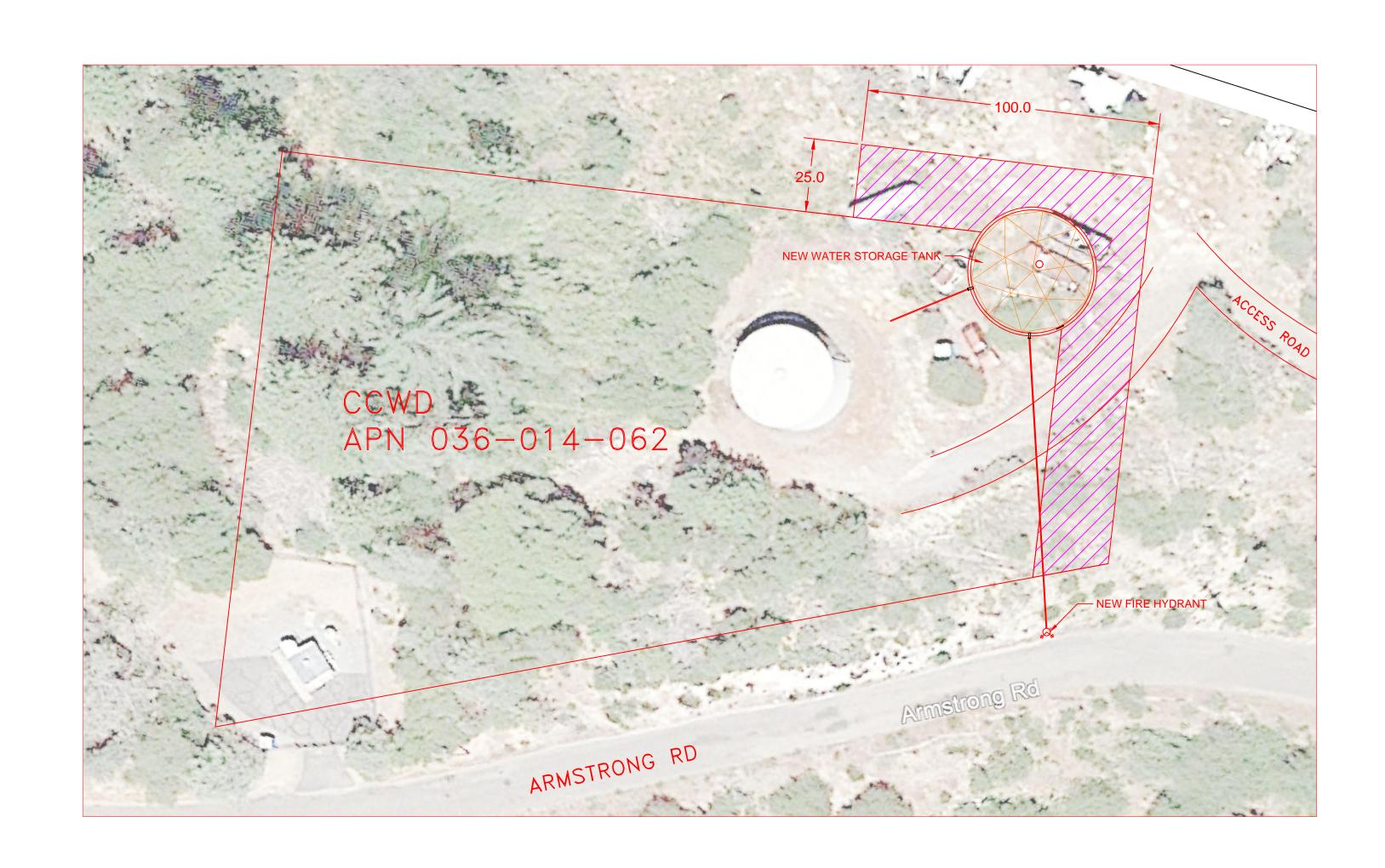
**WHEREAS**, pursuant to the Agreement Steve Pogoler granted CCWD an easement for utility purposes ("Easement") on their Property located at 11818 Armstrong Road, in Sheep Ranch, California, also referred to as assessor's parcel lot number 036-014-061-000 (the "Property")

**WHEREAS**, the Easement is needed for the purpose of augmenting the existing public utility easement on the Property and expanding it to allow for the operation of CCWD's facilities on the Property.

**BE IT RESOLVED**, the CALAVERAS COUNTY WATER DISTRICT Board of Directors hereby accepts the Easement and herby authorizes the General Manager to record the Easement, with the Calaveras County Recorder's office.

**PASSED AND ADOPTED** this 22<sup>nd</sup> day of September 2021 by the following vote:

AYES: NOES: ABSTAIN: ABSENT:	
	CALAVERAS COUNTY WATER DISTRICT
	Jeff Davidson, President Board of Directors
ATTEST:	Board of Directors
Rebecca Hitchcock Clerk to the Board	



## Agenda Item

DATE: September 22, 2021

TO: Michael Minkler

FROM: Jessica Self, External Affairs Manager

SUBJECT: Discussion/Action Regarding the Acceptance of the Memorandum of

Understanding between County of Calaveras and Calaveras County

Water District concerning the Relocation of a Water Tank in Sheep Ranch,

California.

#### RECOMMENDED ACTION:

Motion: \_\_\_\_\_/\_\_\_ accepting a Memorandum of Understanding (MOU) regarding the relocation of a water tank in Sheep Ranch, California between County of Calaveras and Calaveras County Water District.

#### SUMMARY:

The Calaveras County Water District (CCWD) and Calaveras County (County) are collaborating to erect a one-hundred-forty-thousand-gallon non-potable water tank, owned by CCWD, to be used for fire protection in the community of Sheep Ranch. CCWD will relocate and install the tank on CCWD property located in Sheep Ranch. Water will be used by the County and/or its fire prevention partners during emergencies.

The cost for transport, construction and connection of the tank will cost \$136,500. The County will provide the funding to cover the cost of this project, including site improvements as well as tank installation and reassembly costs.

#### FINANCIAL CONSIDERATIONS:

No additional financial costs

Attachments: Memorandum of Understanding for the water tank relocation project in Sheep Ranch, CA.

# MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY OF CALAVERAS AND CALAVERAS COUNTY WATER DISTRICT REGARDING THE LOCATION OF A WATER TANK IN SHEEP RANCH CALIFORNIA

THIS MEMORANDUM OF UNDERSTANDING ("MOU") is dated September 28, 2021 and made between the COUNTY OF CALAVERAS ("COUNTY") and the CALAVERAS COUNTY WATER DISTRICT ("CCWD"). This MOU is made in reference to the following facts:

#### **RECITALS:**

- (a) During the 2015 Butte Fire, CCWD's existing water tank in Sheep Ranch, CA, which provided and still provides both community and firefighting water, ran dry, creating a very serious situation for the residents of Sheep Ranch and for the firefighters operating out of Sheep Ranch.
- (b) When there is a major fire event in Calaveras County the Sheep Ranch fire station protects more than the Sheep Ranch community. It has historically served as a staging area for fire vehicles from multiple jurisdictions. Due to Sheep Ranch's geographic position as a strong defense of Sheep Ranch, it can prevent a fire from proceeding to other areas, such as the Highway 4 corridor. On April 19, 2019, following the County's Butte Fire settlement with PG&E, the Board of Supervisors authorized the use of \$50,000 for fire protection in Sheep Ranch.
- (c) Construction and connection of a 140,000 gallon water tank for fire suppression, will be installed by CCWD at its Sheep Ranch facilities located at: APN# 036-014-026, 11719 Armstrong Rd., and APN# 036-014-062, 11763 Armstrong Rd., Sheep Ranch, CA 95249.
- (d) The cost for the addition of this 140,000 gallon water tank for fire suppression is \$136,500 and will greatly increase the fire security of Sheep Ranch and surrounding areas. The Sheep Ranch community fully supports the addition of this new fire suppression water tank.
- (f) On June 22, 2021 the Board of Supervisors adopted the FY 2021-22 recommended budget which authorized \$86,500 be allocated to fire protection of the Sheep Ranch Fire Station (budget unit 11301760 County Fire Function Public Protection Activity Fire Protection 4721).
- (e) COUNTY desires to support CCWD in the relocation of the water tank for fire suppression and protection in Calaveras County.

#### THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. <u>Recitals Incorporated</u>. The above recitals are true and correct, and are hereby incorporated into this MOU.

- 2. <u>Authority.</u> This MOU is authorized by Government Code sections 23004 and 25207 and.
- 3. Responsibilities of CCWD. CCWD shall relocate and install a 140,000-gallon, elastomeric coated bolted steel water tank. This tank is owned by CCWD and will be installed on CCWD property located in Sheep Ranch, CA. Water stored in the tank will be available for use in an emergency by the COUNTY and/or its fire prevention partners. To the extent that the California Environmental Quality Act (CEQA) applies to the project, CCWD shall be the lead agency and shall file any applicable Notice of Exemption.
- 4. Responsibilities of County. COUNTY will provide the funding in the amount of \$136,500 for the relocation and installation of the CCWD water tank. Presented below is a breakdown of the total project costs:

Site improvement costs: \$58,000

Tank Installation Cost (reassembly of CCWD owned tank): \$78,500

Total project cost: \$136,500

- 5. COUNTY will utilize interagency funds transfer/chargeback to CCWD in the amount of \$136,500 for the CCWD water tank in Sheep Ranch, CA.
- 6. <u>Term.</u> This MOU shall become effective as of the date signed by both parties, and shall remain in effect until completion of the project.
- 7. <u>Compliance with Law.</u> COUNTY and CCWD shall perform all functions related to the services or activities described herein in accordance with all applicable federal, state, county, district, and municipal laws, ordinances, regulations, and rules, and in accordance with the terms of the aforementioned grants.
- 8. Independent Contractor. CCWD shall, during the entire term of this MOU, be construed to be an independent contractor and nothing in this MOU is intended nor shall be construed to create an employer-employee relationship, a joint venture relationship, or to allow COUNTY to exercise discretion or control over the professional manner in which CCWD performs the services which are the subject matter of this agreement. CCWD staff performing services under this MOU shall at all times remain employees of CCWD, and shall not be deemed employees of COUNTY for any purpose. CCWD shall be solely responsible for any and all compensation, payroll taxes, withholdings, workers' compensation and any other insurance or benefits of any kind for any CCWD employee or contractors providing services under this MOU.
- 9. <u>Mutual Indemnification</u>. In lieu of and notwithstanding the pro rata risk allocation which might otherwise be imposed between the parties hereto pursuant to Government Code section 895.6, the parties agree that all losses or liabilities incurred by a party shall not be shared pro rata but instead the parties agree, pursuant to Government Code section 895.4, as follows:
  - A. CCWD shall hold harmless, defend, and indemnify COUNTY, its agents, officers, and employees, against all claims, suits, actions, costs, expenses (including but not limited to reasonable attorney's fees, expert

fees, litigation costs, and investigation costs), damages, judgments or decrees by reason of any person's or persons' bodily injury, including death, or property (including property of County) being damaged by the negligent acts, willful acts, or errors or omissions of CCWD, or any person employed by or under CCWD in any capacity, during the provision of services provided for herein, except when the injury or loss is caused by the sole negligence or intentional wrongdoing of County. CCWD shall also indemnify County and hold it harmless for any and all claims that the approval of this MOU violates CEQA.

- B. COUNTY shall hold harmless, defend, and indemnify CCWD, its agents, officers, and employees, against all claims, suits, actions, costs, expenses (including but not limited to reasonable attorney's fees, expert fees, litigation costs, and investigation costs), damages, judgments or decrees by reason of any person's or persons' bodily injury, including death, or property (including property of CCWD) being damaged by the negligent acts, willful acts, or errors or omissions of County, or any person employed by or under County in any capacity, during the provision of services provided for herein, except when the injury or loss is caused by the sole negligence or intentional wrongdoing of CCWD.
- 10. <u>Insurance</u>. CCWD and COUNTY shall each secure and maintain in full force and effect during the full term of this agreement commercial general liability insurance or participation in a self-insurance program, including coverage for owned and non-owned automobiles and other insurance necessary to protect the public, with limits of liability of not less than \$1 million combined single limit bodily injury and property damage. Policies shall be written by carriers reasonably satisfactory to each party. On request, a certificate evidencing the insurance requirements of this paragraph shall be provided.
- 11. <u>No Third-Party Beneficiary</u>. Nothing in this Agreement shall be construed to create any rights of any kind or nature in any other party not a named party to this Agreement.
- 12. <u>Authorization</u>. Each party executing this MOU and each person executing this MOU in any representative capacity, hereby fully and completely warrants to all other parties that he or she has full and complete authority to bind the person or entity on whose behalf the signing party is purporting to act.
- 13. <u>Entire Agreement/Amendments</u>. This MOU supersedes all previous agreements or understandings, and constitutes the entire understanding between the parties with respect to the above referenced services, terms of compensation, and otherwise. This MOU shall not be amended, except in a writing that is executed by authorized representatives of both parties.
- 14. Governing Law and Venue. This agreement shall be deemed to be made in, and shall be governed by and construed in accordance with the laws of the State of California (excepting any conflict of laws provisions which would serve to defeat application of California substantive law). Venue for any action arising from this agreement shall be in Calaveras County, California.

#### Remainder of page left intentionally blank.

**IN WITNESS WHEREOF**, COUNTY and CCWD have executed this Memorandum of Understanding on the day and year set forth below.

Date:	COUNTY OF CALAVERAS
	By Benjamin Stopper, Chair
Date:	CALAVERAS COUNTY WATER DISTRICT
	By:  Michael Minkler, General Manager
APPROVED AS TO FO	RM:
County Counsel	CCWD General Counsel

## Agenda Item

DATE: September 22, 2021

TO: Michael Minkler, General Manager

FROM: Rebecca Callen, Director of Administrative Services

SUBJECT: Update regarding the Tyler Software Conversion

#### **Discussion Only (No Action)**

#### SUMMARY:

Converting from Springbrook to Tyler Incode has been actively progressing since December 2020. During this time, staff have taken time to evaluate current processes and procedures, review policies, and review data. With this review, significant changes in the Rules and Regulations Article III occurred, changes in fee structures, process changes, and data cleanup has all occurred to ensure that conversion from Springbrook to Tyler Incode is made with the intent of making the result a better solution for staff and the customer.

As with any conversion and implementation, there are obstacles and staff have taken all of that in stride and maintained a positive outlook, identifying the benefits that will immediately and over time.

In anticipation of these changes, the District has changed to Lockbox services with CPI, allowing most check payments and all home banking to reside with CPI. This has almost eliminated inhouse check scanning and frustrations by customers relying on home banking shortfalls we were experiencing. With this change staff have gained critical time to work on other tasks that will result in a better experience for the customer.

Evaluation of all processes and third-party vendors has resulted in what will soon be a reduced cost for printing and mailing the utility bills and a reduction in postage costs for reminder notices.

With the new platform, that is slated to Go Live this week, customers and staff will now have real time access to customer balance information, ability to correct bills immediately, full integration of online payment solutions, consumption activity (upon the AMI implementation), direct access for service orders between the Operations Department

and Office staff, in addition to easy access and reporting capability of data for ongoing external reporting.

The new system will allow for ALL payment methods, including Visa, Mastercard, Discover, American Express, Apple Pay, Samsung Pay, and Google Pay.

#### **Outreach Efforts**

The District has updated the website, is including the attached billing stuffers in the latest bills, making public service notifications in various outlets, including Facebook, email, text, and phone calls, newspapers, and other web postings.

#### **Next Steps**

Once the District has made the change to the new platform, new IVR capability will be available making continued outreach efforts easier and more effective. This is not just for billing and reminder information. This can be used for boil water notification, planned and unplanned service disruptions and can all be based on geographical information, in addition to account parameters.

Continued work on documenting processes and procedures, to make additional areas more effective will continue and then staff will be moving toward the Finance Implementation and the Human Resources and Payroll Implementations to create the next phase of integration.

#### FINANCIAL CONSIDERATIONS:

None at this time.

Attachments: IVR and Website Bill stuffers and posters

Save time – pay by phone!

Calaveras County Water District gives you access to your account 24 hours a day, 365 days a year. It's a convenient way to pay your bills on your own time — with no waiting!

- Save postage by paying your bill by phone.
- Access your updated account instantly.
- Hear real-time balances, payment amounts, and due dates.
- Enter your information securely through an automated system.

Call 888-291-1761 today to make your payment over the phone!



## Save time – pay by phone!

Calaveras County Water District gives you access to your account 24 hours a day, 365 days a year. It's a convenient way to pay your bills on your own time — with no waiting!

- Save postage by paying your bill by phone.
- Access your updated account instantly.
- Hear real-time balances, payment amounts, and due dates.
- Enter your information securely through an automated system.

Call 888-291-1761 today to make your payment over the phone!



## Save time – pay by phone!

Calaveras County Water District gives you access to your account 24 hours a day, 365 days a year. It's a convenient way to pay your bills on your own time — with no waiting!

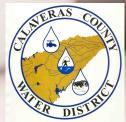
- Save postage by paying your bill by phone.
- Access your updated account instantly.
- Hear real-time balances, payment amounts, and due dates.
- Enter your information securely through an automated system.

Call 888-291-1761 today to make your payment over the phone!











Please visit our website to pay your bills from the comfort of your home.

- Pay with your mobile device 24/7/365
- Access real-time account balances, payment amounts, and due dates
- Enter your information securely



#### Pay Online at

https://www.municipalonlinepayments.com/calaverascountywaterca





Please visit our website to pay your bills from the comfort of your home.

- Pay with your mobile device 24/7/365
- Access real-time account balances, payment amounts, and due dates
- Enter your information securely



#### Pay Online at

https://www.municipalonlinepayments.com/calaverascountywaterca





Please visit our website to pay your bills from the comfort of your home.

- Pay with your mobile device 24/7/365
- Access real-time account balances, payment amounts, and due dates
- Enter your information securely



#### Pay Online at

aterca