



**WEST VALLEY WATER DISTRICT
855 W. BASE LINE ROAD, RIALTO, CA 92376
PH: (909) 875-1804
WWW.WVWD.ORG**

**ENGINEERING, OPERATIONS AND PLANNING COMMITTEE MEETING
AGENDA**

Thursday, September 25, 2025, 6:00 PM

NOTICE IS HEREBY GIVEN that West Valley Water District has called a meeting of the Engineering, Operations and Planning Committee to meet in the Administrative Conference Room, 855 W. Base Line Road, Rialto, CA 92376.

BOARD OF DIRECTORS

**President Gregory Young
Director Estevan Bennett**

Members of the public may attend the meeting in person at 855 W. Base Line Road, Rialto, CA 92376, or you may join the meeting using Zoom by clicking this link: <https://us02web.zoom.us/j/8402937790>. Public comment may be submitted via Zoom, by telephone by calling the following number and access code: Dial: (888) 475-4499, Access Code: 840-293-7790, or via email to administration@wvwd.org.

If you require additional assistance, please contact administration@wvwd.org.

CALL TO ORDER

PUBLIC PARTICIPATION

Any person wishing to speak to the Board of Directors on matters listed or not listed on the agenda, within its jurisdiction, is asked to complete a Speaker Card and submit it to the Board Secretary, if you are attending in person. For anyone joining on Zoom, please wait for the Board President's instruction to indicate that you would like to speak. Each speaker is limited to three (3) minutes. Under the State of California Brown Act, the Board of Directors is prohibited from discussing or taking action on any item not listed on the posted agenda. Comments related to noticed Public Hearing(s) and Business Matters will be heard during the occurrence of the item.

Public communication is the time for anyone to address the Board on any agenda item or anything under the jurisdiction of the District. Also, please remember that no disruptions from the crowd will be tolerated. If someone disrupts the meeting, they will be removed.

DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee
2. July 24, 2025 Meeting Minutes PG. 5
3. New Caterpillar Backhoe Loader PG. 7
4. Amendment to the License Agreement with the San Bernardino County Flood Control District to Support Fluidized Bed Reactor Groundwater Treatment Plant PG. 19
5. Amendment to the Reimbursement Agreement with the San Bernardino Valley Municipal Water District PG 25
6. Task Order Amendment No. 1 with Engineering Resources of Southern California, Inc. for the Design of Reservoir R8-3 PG. 33
7. Professional Services Agreement with WSC for the Water Use Efficiency Master Plan PG. 63

ADJOURN

Please Note:

Material related to an item on this Agenda submitted to the Committee after distribution of the agenda packet are available for public inspection in the District's office located at 855 W. Baseline, Rialto, during normal business hours. Also, such documents are available on the District's website at www.wvwd.org subject to staff's ability to post the documents before the meeting.

Pursuant to Government Code Section 54954.2(a), any request for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in the above-agendized public meeting should be directed to the Acting Board Secretary, Paola Lara, at least 72 hours in advance of the meeting to ensure availability of the requested service or accommodation. Ms. Lara may be contacted by telephone at (909) 875-1804 ext. 702, or in writing at the West Valley Water District, P.O. Box 920, Rialto, CA 92377-0920.

DECLARATION OF POSTING:

I declare under penalty of perjury, that I am employed by the West Valley Water District and posted the foregoing Agenda at the District Offices on September 18, 2025.

Paola Lara

Paola Lara, Acting Board Secretary

Date Posted: September 18, 2025

MINUTES
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
MEETING

of the
WEST VALLEY WATER DISTRICT
July 24, 2025

I. CALL TO ORDER

Chair Young called the Engineering, Operations and Planning Committee meeting of the West Valley Water District to order at 6:00 p.m.

Attendee Name	Present	Absent	Late	Arrived
Gregory Young	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Estevan Bennett	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
John Thiel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Linda Jadeski	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rocky Welborn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Joanne Chan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

II. PUBLIC PARTICIPATION

Chair Young inquired if anyone from the public would like to speak. No requests were received, therefore Chair Young closed the public comment period.

III. DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee.

Director of Operations Chan provided updates on requirements for PFAS which will be released later this year, SCADA Masterplan site visits are underway, and Roemer GAC media will be replaced in the next few weeks.

Director of Engineering Welborn reported that last September the Board approved updates to the capacity charges which include annual indexed adjustments based on the Construction Cost Index. The Construct Cost Index show a 4.3% increase and staff will update the District's capacity charges accordingly. Mr. Welborn also provided an update on the Headquarters Facility Master Plan.

WVWD

Minutes: 7/24/25

Assistant General Manager Jadeski provided a presentation on the Rialto Colton Groundwater Basin.

2. June 25, 2025 Minutes

The committee approved the minutes.

3. Approve New Task Order Amendment for the Lord Ranch Facilities Project

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting.

RESULT:	REFERRED TO BOARD
Next: 8/7/2025 6:00 PM	

IV. ADJOURN

Chair Young adjourned the meeting at 6:52 p.m.

ATTEST

Paola Lara, Acting Board Secretary



STAFF REPORT

DATE: September 25, 2025
TO: Engineering, Operations and Planning Committee
FROM: Joanne Chan, Director of Operations
SUBJECT: New Caterpillar Backhoe Loader

STRATEGIC GOAL:

Strategic Goal 5 – Apply Sound Planning, Innovation, and Best Practices. Objective 5A - Increase Operational Efficiency, Resiliency, and Reliability

MEETING HISTORY:

N/A

BACKGROUND:

The West Valley Water District (District) has five (5) backhoe loaders ranging from 9 to 29 years old. The backhoe loader is one of the most utilized pieces of equipment for field staff and is essential to the Operations Department year-round. Additionally, it is used by multiple departments for various tasks such as excavation, asphalt and road repairs, sinkhole restorations, pulling services, loading road raw materials onto the dump truck and sludge handling at the Oliver P. Roemer Water Filtration (Roemer) Plant. District staff has identified the need to purchase a new backhoe loader for the Roemer Plant.

DISCUSSION:

District staff researched and found a contract awarded by the Sourcwell that would be in the best interest of the District to “piggyback” from. Sourcwell is a State local government unit and service cooperative created under the laws of the State of Minnesota that facilitates a competitive public solicitation and contract award process for the benefit of its 50,000+ participating entities across the United States and Canada.

Piggybacking is a term used when an agency uses an existing procurement contract from another agency as justification and documentation to form their own contract directly with the vendor to purchase the same or similar items or services. Under section 10: Exceptions to Competitive Sourcing of the District’s Purchasing/Procurement Policy, piggybacking is permitted as an exception to competitive sourcing thus not requiring the District to conduct formal solicitation. Sourcwell’s formal solicitation process is substantially similar to that of the District’s process and participation by the District is also permitted.

Sourcewell issued a Request for Proposals (RFP) for heavy construction equipment with related attachments and technology, including backhoe loaders on November 15, 2022 and final proposals were due on January 17, 2023. Eighteen firms submitted proposals for various heavy construction equipment. In evaluating the proposals, Sourcewell scored for categories including conformance to RFP Requirements, Pricing, Financial Viability and Marketplace Success, Ability to Sell and Deliver Service, Marketing Plan, Value added Attributes, Warranty, and Depth and Breadth of Offered Equipment, Products, or Services. Caterpillar, Inc. scored the highest overall. Sourcewell awarded a contract expires on April 14, 2027 for heavy construction equipment with related attachments and technology to Caterpillar, Inc. By piggybacking with Sourcewell's agreement, the District has realized savings of 24% (\$63,252.00) for a total of \$220,293.59 for a new 2025 Caterpillar Backhoe Loader or a total of \$214,526.48 for a new 2024 Caterpillar Backhoe Loader. There is only one 2024 model in stock and the offer is valid until sold. The quotes are attached as **Exhibit A**.

FISCAL IMPACT:

This item is included in the Fiscal Year 2025/26 Capital Budget and will be funded from project number W26022 title "Backhoe Loader for Roemer" with a budget of \$250,000.00.

REQUESTED ACTION:

Forward a recommendation to the Board of Directors to authorize participating in Sourcewell contract pricing with QUINN CAT in Riverside to purchase a new 2024 or 2025 Caterpillar Backhoe Loader in the amount not to exceed \$220,293.59.

Attachments

[Exhibit A - Quotes.pdf](#)

EXHIBIT A



176000-02

September 3, 2025

WEST VALLEY WATER DISTRICT
ATTENTION PURCHASING
PO BOX 920
RIALTO, California 92376-0920

Sourcewell member #144741

Attention: Bryan Grubert

Dear Sir,



We would like to thank you for your interest in our company and our products, and are pleased to quote the following for your consideration.

One (1) New Caterpillar Inc. Model: 920 Wheel Loader including standard and optional equipment as listed below.

STOCK NUMBER: **SERIAL NUMBER:** **YEAR:** 2024 **SMU:**

We wish to thank you for the opportunity of quoting on your equipment needs. **This quotation is valid for 60 days**, after which time we reserve the right to re-quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Jose Farias

Jose Farias
Machine Sales Representative
Phone 760.399.6404
Email jose.farias@quinncompany.com

One (1) New Caterpillar Inc. Model: 920 Wheel Loader including standard and optional equipment as listed below.

Standard Equipment

POWERTRAIN

Cat C3.6 Engine
 -Common rail fuel injection
 -U.S. EPA Tier 4 Final/ EU Stage V
 Caterpillar NOx Reduction System
 Fuel: Ultra Low Sulphur Diesel @ <15ppm
 Engine Oil: Cj-4
 Electric fuel pump with 4 micron filtration
 S.O.S port, transmission oil

Hydrostatic transmission
 Lube for life universal joints
 Forward - Neutral - Reverse on joystick
 100% locking differentials, on the fly activation
 Air cleaner, radial seal, dual filters
 Cooling fan, hydraulic
 Intergrated Cyclone pre-cleaner

HYDRAULICS

Two valve, single lever joystick
 Diagnostic pressure taps
 SOS port, hydraulic oil

Hydraulically demand driven cooling fan
 Hystat and variable displacement pump

ELECTRICAL

150 Amp alternator
 Rooding lights

12 volt direct electric starting
 Battery disconnect switch

OPERATOR ENVIRONMENT

Hydraulic control lever lockout
 Electrohydraulic implement controls
 Gauges
 - Engine coolant temperature
 - Hydraulic oil temperature
 - Fuel level
 - Speedometer
 - Digital Hour meter
 - DEF
 Operator warning system indicators:
 - Brake charge pressure low
 - Engine malfunction
 - Park brake applied
 - Electrical system voltage flow

- Hydraulic oil filter bypass
 - Action indicator
 Seat
 - adjustable height, backrest, armrest
 - Seat belt, retractable
 Heater/defroster
 Wiper/washer (front & rear)
 Tinted front glass,laminated
 Adjustable steering column
 Rear window defrost
 Lockable Storage box with cup holder
 Internal 12V power source
 External 12V power source

FLUIDS

Extended life coolant antifreeze
 Protected to -36C (-33F) hydraulic oil

Cat Advanced Hydo 10

OTHER STANDARD EQUIPMENT

Parallel lift, Optimised Z-Bar loader
 Fenders, front and rear
 Engine enclosure - lockable
 Recovery hitch
 Vandalism protection - locked service points
 REGIONAL STANDARDS(as required)

Chocks
 bucket tooth or edge guard
 Decals, roading speed
 Reflectors, roading
 Camara, rear view
 Beacon

MACHINE SPECIFICATIONS

920 14A WHEEL LOADER	538-6990
LANE 3 ORDER	0P-9003
ENGINE	541-0761
FAN, DEMAND	540-3811
POWERTRAIN, HI RIMPULL, 24MPH	538-7161
COUPLER, FUSION, STD LIFT	541-6332
HYDRAULICS, 2V, STD LIFT	538-7190
LIGHTS,ROADING,RH DIP,HAL-LED	571-2780
STEERING, STANDARD	538-7124
CAB, DELUXE, SINGLE BRAKE	542-9197
SEAT, DELUXE PLUS	552-3734
CAMERA, REAR VIEW	504-4835
SEAT BELT, RETRACTABLE 3"	236-8015
HEATER AND AIR CONDITIONER	538-7130
SECURITY SYSTEM, NONE	433-3258
TIRES, 17.5 R25, MX, L2 XTLA	385-5822
CTWT STANDARD, 2612 LBS	538-7162
FENDERS, STANDARD	469-5852
HYDRAULIC OIL, STANDARD	450-5405
RIDE CONTROL	541-2852
INSTRUCTIONS, ANSI	560-3441
SERIALIZED TECHNICAL MEDIA KIT	421-8926
STANDARD WEATHER PACKAGE	559-9898
ALARM, BACK-UP	543-4225
BEACON, MAGNET, LED, AMBER	561-0644
LIGHTS, STD, LED	561-3288
PRODUCT LINK, CELLULAR PL243	636-3590
STANDARD RADIO (12V)	541-4413
BLIND, REAR,PERFORATED	279-0643
TOOL BOX	471-6921
GUARD, CRANKCASE	548-7634
GUARD, POWERTRAIN	539-1318
BUCKET-GP, 2.4 YD3, FUS, BOCE	546-4014
PACK, ROLL ON/ROLL OFF BY SEA	0G-3117
RUST PREVENTATIVE APPLICATOR	0G-3273
CARRIAGE, PAL C3/4, 62", FUS WITH FORK TINES 53" LONG	532-8222

WARRANTY & COVERAGE

Standard Warranty: 12 MONTHS FULL MACHINE
Extended Coverage: 920-48 MO/2000 HR PREMIER, 920-12 MO/8760 HR PREMIER
CSA 12 MO / 500 HR PARTS, FLUID & LABOR QUINN CVA

SELL PRICE	\$257,750.00
SOURCEWELL DISCOUNT (24%)	(\$61,860.00)
Freight, Prep Machine	\$3,200.00
NET BALANCE DUE	\$199,090.00
TIRE FEE	\$7.00
SALES TAX (7.75%)	\$15,429.48
AFTER TAX BALANCE	\$214,526.48

2025 Sourcewell Heavy Equipment Contract#011723

Special pricing includes forks as an incentive for purchasing a 2024 model. Offer valid for 30 days or until the 2024 machine is sold, whichever occurs first.

PAYMENT TERMS

Cash Invoice Terms

CASH WITH ORDER
\$214,526.48

F.O.B/TERMS:

Accepted by _____ on _____

Signature



176000-01

September 3, 2025

WEST VALLEY WATER DISTRICT
ATTENTION PURCHASING
PO BOX 920
RIALTO, California 92376-0920

Sourcewell member #144741

Attention: Bryan Grubert

Dear Sir,



We would like to thank you for your interest in our company and our products, and are pleased to quote the following for your consideration.

One (1) New Caterpillar Inc. Model: 920 Wheel Loader including standard and optional equipment as listed below.

STOCK NUMBER: **SERIAL NUMBER:** **YEAR:** 2025 **SMU:**

We wish to thank you for the opportunity of quoting on your equipment needs. This quotation is valid for 60 days, after which time we reserve the right to re-quote. If there are any questions, please do not hesitate to contact me.

Sincerely,

Jose Farias

Jose Farias
Machine Sales Representative
Phone 760.399.6404
Email jose.farias@quinncompany.com

One (1) New Caterpillar Inc. Model: 920 Wheel Loader including standard and optional equipment as listed below.

Standard Equipment

POWERTRAIN

Cat C3.6 Engine
 -Common rail fuel injection
 -U.S. EPA Tier 4 Final/ EU Stage V
 Caterpillar NOx Reduction System
 Fuel: Ultra Low Sulphur Diesel @ <15ppm
 Engine Oil: Cj-4
 Electric fuel pump with 4 micron filtration
 S.O.S port, transmission oil

Hydrostatic transmission
 Lube for life universal joints
 Forward - Neutral - Reverse on joystick
 100% locking differentials, on the fly activation
 Air cleaner, radial seal, dual filters
 Cooling fan, hydraulic
 Intergrated Cyclone pre-cleaner

HYDRAULICS

Two valve, single lever joystick
 Diagnostic pressure taps
 SOS port, hydraulic oil

Hydraulically demand driven cooling fan
 Hystat and variable displacement pump

ELECTRICAL

150 Amp alternator
 Rooding lights

12 volt direct electric starting
 Battery disconnect switch

OPERATOR ENVIRONMENT

Hydraulic control lever lockout
 Electrohydraulic implement controls
 Gauges
 - Engine coolant temperature
 - Hydraulic oil temperature
 - Fuel level
 - Speedometer
 - Digital Hour meter
 - DEF
 Operator warning system indicators:
 - Brake charge pressure low
 - Engine malfunction
 - Park brake applied
 - Electrical system voltage flow

- Hydraulic oil filter bypass
 - Action indicator
 Seat
 - adjustable height, backrest, armrest
 - Seat belt, retractable
 Heater/defroster
 Wiper/washer (front & rear)
 Tinted front glass,laminated
 Adjustable steering column
 Rear window defrost
 Lockable Storage box with cup holder
 Internal 12V power source
 External 12V power source

FLUIDS

Extended life coolant antifreeze
 Protected to -36C (-33F) hydraulic oil

Cat Advanced Hydo 10

OTHER STANDARD EQUIPMENT

Parallel lift, Optimised Z-Bar loader
 Fenders, front and rear
 Engine enclosure - lockable
 Recovery hitch
 Vandalism protection - locked service points
 REGIONAL STANDARDS(as required)

Chocks
 bucket tooth or edge guard
 Decals, roading speed
 Reflectors, roading
 Camara, rear view
 Beacon

MACHINE SPECIFICATIONS

920 14A WHEEL LOADER	538-6990
LANE 3 ORDER	0P-9003
ENGINE	541-0761
FAN, DEMAND	540-3811
POWERTRAIN, HI RIMPULL, 24MPH	538-7161
COUPLER, FUSION, STD LIFT	541-6332
HYDRAULICS, 2V, STD LIFT	538-7190
LIGHTS,ROADING,RH DIP,HAL-LED	571-2780
STEERING, STANDARD	538-7124
CAB, DELUXE, SINGLE BRAKE	542-9197
SEAT, DELUXE PLUS	552-3734
CAMERA, REAR VIEW	504-4835
SEAT BELT, RETRACTABLE 3"	236-8015
HEATER AND AIR CONDITIONER	538-7130
SECURITY SYSTEM, NONE	433-3258
TIRES, 17.5 R25, MX, L2 XTLA	385-5822
CTWT STANDARD, 2612 LBS	538-7162
FENDERS, STANDARD	469-5852
HYDRAULIC OIL, STANDARD	450-5405
RIDE CONTROL	541-2852
INSTRUCTIONS, ANSI	560-3441
SERIALIZED TECHNICAL MEDIA KIT	421-8926
STANDARD WEATHER PACKAGE	559-9898
ALARM, BACK-UP	543-4225
BEACON, MAGNET, LED, AMBER	561-0644
LIGHTS, STD, LED	561-3288
PRODUCT LINK, CELLULAR PL243	636-3590
STANDARD RADIO (12V)	541-4413
BLIND, REAR,PERFORATED	279-0643
TOOL BOX	471-6921
GUARD, CRANKCASE	548-7634
GUARD, POWERTRAIN	539-1318
BUCKET-GP, 2.4 YD3, FUS, BOCE	546-4014
PACK, ROLL ON/ROLL OFF BY SEA	0G-3117
RUST PREVENTATIVE APPLICATOR	0G-3273
CARRIAGE, PAL C3/4, 62", FUS WITH FORK TINES 53" LONG	532-8222

WARRANTY & COVERAGE

Standard Warranty: 12 MONTHS FULL MACHINE
Extended Coverage: 920-48 MO/2000 HR PREMIER, 920-12 MO/8760 HR PREMIER
CSA 12 MO / 500 HR PARTS, FLUID & LABOR QUINN CVA

SELL PRICE	\$263,550.00
SOURCEWELL DISCOUNT (24%)	(\$63,252.00)
Freight, Prep Machine	\$3,200.00
NET BALANCE DUE	\$203,498.00
TIRE FEE	\$7.00
SALES TAX (7.75%)	\$16,788.59
AFTER TAX BALANCE	\$220,293.59

2025 Sourcewell Heavy Equipment Contract#011723

PAYMENT TERMS

Cash Invoice Terms

CASH WITH ORDER
\$220,293.59

F.O.B/TERMS:

Accepted by _____ on _____

Signature



STAFF REPORT

DATE: September 25, 2025

TO: Engineering, Operations and Planning Committee

FROM: Joanne Chan, Director of Operations

SUBJECT: Amendment to the License Agreement with the San Bernardino County Flood Control District to Support Fluidized Bed Reactor Groundwater Treatment Plant

STRATEGIC GOAL:

Strategic Goal 4 - Strengthen Partnerships with Outside Agencies. Objective 4A - Engage in Regional Projects, Advocacy, and Grant Pursuits

MEETING HISTORY:

N/A

BACKGROUND:

In May 2013, the West Valley Water District (District) and the San Bernardino County Flood Control District (SBCFCD) executed an agreement permitting the temporary use of SBCFCD right-of-way for Cactus Basin No. 2 located south of Baseline Road and west of Cactus Avenue in Rialto to install, operate and maintain three separate 16-inch waterlines and one 8-inch sewer line to support the demonstration phase of the Fluidized Bed Reactor Groundwater Treatment Plant. License Agreement, Contract No. 13-229, has since been amended, renewed two times.

Staff has worked diligently with SBCFCD staff to develop an amendment to renew the agreement attached as **Exhibit A**. The next renewal agreement will be required in December 2030.

FISCAL IMPACT:

This is a reimbursable cost. Raytheon Technologies will reimburse the District the full cost.

REQUESTED ACTION:

Forward a recommendation to the Board of Directors to adopt an amendment to the License Agreement issued by the San Bernardino County Flood Control District to support the Fluidized Bed Reactor Groundwater Treatment Plant.

Attachments

[Exhibit A - Amendment to the License Agreement.pdf](#)

EXHIBIT A



Contract Number

13-229 A3

SAP Number

San Bernardino County Flood Control District

**Department Contract Representative
Telephone Number**

Terry W. Thompson, Director
(909) 387-5000

Contractor

**Contractor Representative
Telephone Number
Contract Term
Original Contract Amount
Amendment Amount
Total Contract Amount
Cost Center
GRC/PROJ/JOB No.
Internal Order No.**

John Thiel
1/1/2026 – 12/31/30
\$98,860.00
\$76,767.00
\$175,627.00
1920002522
38002741

Grant Number (if applicable)

IT IS HEREBY AGREED AS FOLLOWS:

WHEREAS, the County of San Bernardino Flood Control District ("DISTRICT"), and West Valley Water District. ("LICENSEE") have previously entered into a License Agreement, Contract No. 13-229 dated May 7, 2013, and amended by the First Amendment dated March 7, 2017, and amended by the Second Amendment dated October 16, 2018 (collectively "the License") wherein the LICENSEE agreed to license certain real property from the DISTRICT; and,

WHEREAS, the DISTRICT and LICENSEE now desire to amend the License Agreement to reflect a permitted month-to-month holdover of a total of twenty-eight (28) months from September 1, 2023 through December 31, 2025, with DISTRICT's express consent, and following said holdover, to reflect LICENSEE's exercise of the first of two five-year options to extend the lease term until December 31, 2030 (the "Third Amendment");

NOW, THEREFORE, in consideration of mutual covenant and conditions, the parties hereto agree that License Agreement, Contract No. 13-229 is amended as follows:

1. Pursuant to **Paragraph 15, HOLDING OVER**, LICENSEE shall, with DISTRICT's express consent granted herein, use the Premises on a month-to-month holdover term for a total of twenty-eight (28) months from September 1, 2023 through December 31, 2025, at a monthly rental amount of \$1,049.98 per month.

2. Effective January 1, 2026, pursuant to LICENSEE's exercise of its option to extend in **Paragraph**

3, OPTION TO EXTEND TERM, DELETE in its entirety the existing **Paragraph 2, TERM**, and SUBSTITUTE therefore the following as a new **Paragraph 2, TERM**:

2. **TERM**: This License shall be extended for an additional period of five (5) years, from January 1, 2026 through December 31, 2030 unless earlier terminated in accordance with the terms of this Lease (the "Second Extended Term").

3. Effective January 1, 2026, DELETE in its entirety the existing **Paragraph 4, FEES**, and SUBSTITUTE therefore the following as a new **Paragraph 4, FEES**:

4. **FEES**:

A. LICENSEE shall pay to DISTRICT the following annual fees in advance on the first day of each year, beginning when the Second Extended Term commences and continuing through the Second Extended Term. The annual fee amount shall be subject to an annual adjustment on the anniversary of the Commencement Date and each year thereafter, based upon a four percent (4%) increase as reflected and provided below:

January 1, 2026 thru December 31, 2026- annual payment of \$14,173
January 1, 2027 thru December 31, 2027- annual payment of \$14,740
January 1, 2028 thru December 31, 2028- annual payment of \$15,330
January 1, 2029 thru December 31, 2029- annual payment of \$15,943
January 1, 2030 thru December 31, 2030- annual payment of \$16,581

B. If any fee is not paid when due and payable, LICENSEE shall pay to DISTRICT an additional Twenty-five and 00/100 Dollars (\$25.00) for each fee due as an administrative processing charge. The parties agree that this late charge represents a fair and reasonable estimate of the costs that DISTRICT will incur by reason of late payment by LICENSEE. Acceptance of any late charge shall not constitute a waiver of LICENSEE's default with respect to the overdue amount or prevent DISTRICT from exercising any of the other rights and remedies available to DISTRICT. Fees not paid when due shall bear simple interest from date due at the rate of one and one-half percent (1½%) per month.

4. This Third Amendment may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same Third Amendment. The parties shall be entitled to sign and transmit an electronic signature of this Third Amendment (whether by facsimile, PDF, or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Third Amendment upon request.

5. All other provisions and terms of the License shall remain the same and are hereby incorporated by reference. In the event of conflict between the License and this Third Amendment, the provisions and terms of this Third Amendment shall control.

[REMAINDER OF THIS PAGE LEFT BLANK INTENTIONALLY]

END OF THIRD AMENDMENT.

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

►

Dawn Rowe, Chair, Board of Supervisors

Dated: _____
SIGNED AND CERTIFIED THAT A COPY OF THIS
DOCUMENT HAS BEEN DELIVERED TO THE
CHAIRMAN OF THE BOARD

Lynna Monell
Clerk of the Board of Supervisors
of the County of San Bernardino

By _____
Deputy

WEST VALLEY WATER DISTRICT

(Print or type name of corporation, company, contractor, etc.)

By ►
(Authorized signature - sign in blue ink)

Name John Thiel
(Print or type name of person signing contract)

Title General Manager
(Print or Type)

Dated: _____

Address _____

FOR COUNTY USE ONLY

Approved as to Legal Form

►
John Tubbs II, Deputy County Counsel

Date _____

Reviewed for Contract Compliance

►

Date _____

Reviewed/Approved by Department

►
John Gomez, Real Property Manager, RESD

Date _____



STAFF REPORT

DATE: September 25, 2025

TO: Engineering, Operations and Planning Committee

FROM: Joanne Chan, Director of Operations

SUBJECT: Amendment to the Reimbursement Agreement with the San Bernardino Valley Municipal Water District

STRATEGIC GOAL:

Strategic Goal 4 - Strengthen Partnerships with Outside Agencies. Objective 4A - Engage in Regional Projects, Advocacy, and Grant Pursuits.

MEETING HISTORY:

N/A

BACKGROUND:

In May 2016, the West Valley Water District (District) and the San Bernardino County Flood Control District (SBCFCD) executed an agreement permitting the spreading of water in Cactus Basin 2 to support the District's Fluidized Bed Reactor (FBR) Groundwater Treatment project. The District is responsible for obtaining regulatory permits and performing all maintenance activities related to District's water spreading activities, including, but not limited to, controlling all vectors and vegetation that may occur either directly or indirectly due to the District's water spreading operation in Cactus Basin 2.

The executed Streambed Alteration Agreement between the California Department of Fish and Wildlife and the District requires compensatory mitigation to offset the loss of 12 acres of wetland and riparian habitat that has developed within Cactus Basin 2.

DISCUSSION:

The District and the San Bernardino Valley Municipal Water District (SBVMWD) partnered in October 2020 to coordinate the development and implementation of the mitigation project at Hidden Valley Wetlands in Riverside County. The SBVMWD serves as the lead agency for planning, CEQA, permitting, implementation and compliance reporting. The project consists of 85 acres. The District's mitigation requirements for the Cactus Basin 2 are 12 acres. The District's proportionate share of all mitigation costs at Hidden Valley shall be equal to the ratio that mitigation acreage requirements for the Cactus Basin 2 project bear to the total mitigation project acreage.

The District has no land acquisition costs associated with the mitigation and the cost of habitat management actions for the District's 12-acre site over the next 12 months is \$48,314.08 with a 10% contingency. SBVMWD staff will reassess towards the end of spring 2026 to see the level of effort needed for the following 12 months. District staff has worked diligently with SBVMWD staff to develop the Reimbursement Agreement between the parties attached as **Exhibit A**.

FISCAL IMPACT:

This is a reimbursable cost. Raytheon Technologies will reimburse the District the full cost. The mitigation project cost is currently estimated to be approximately \$48,314.00 with the addition of a 10% contingency to the reimbursement agreement for this fiscal year.

REQUESTED ACTION:

Forward a recommendation to the Board of Directors to adopt an amendment to the Reimbursement Agreement with the San Bernardino Valley Municipal Water District.

Attachments

[Exhibit A - Amendment to the Reimbursement Agreement.pdf](#)

EXHIBIT A

FIRST AMENDMENT TO REIMBURSEMENT AGREEMENT

THIS FIRST AMENDMENT TO REIMBURSEMENT AGREEMENT (“*First Amendment*”) is entered into and effective as of April 1, 2025 (“*First Amendment Effective Date*”), by and between WEST VALLEY WATER DISTRICT, a county water district organized and operating pursuant to California Water Code section 30000 *et seq.* (“*WVWD*”), and SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT, a municipal water district organized and operating pursuant to California Water Code section 71000 *et seq.* (“*SAN BERNARDINO VALLEY*”). WVWD and SAN BERNARDINO VALLEY are sometimes referred to herein individually as “*Party*” and collectively as “*Parties*”.

RECITALS

A. SAN BERNARDINO VALLEY and WVWD are parties to that certain Reimbursement Agreement, dated October 3, 2024 (“*Reimbursement Agreement*”), with respect to a framework to reimburse SAN BERNARDINO VALLEY for expenses incurred in implementing habitat management actions associated with the HMMP for the SAA at HVWA, as defined in the Reimbursement Agreement.

B. The term of the Reimbursement Agreement expired on March 31, 2025.

C. On September 3, 2025, SAN BERNARDINO VALLEY received a cost estimate from the Santa Ana Watershed Association (“*SAWA*”) for additional habitat management actions within WVWD’s 12-acre habitat management area at HVWA. The estimated cost of habitat management actions for WVWD’s 12-acre site through June 30, 2026, is Forty-Eight Thousand Three Hundred Fourteen Dollars and Eight Cents (\$48,314.08), as identified in the Cost Estimate for Lower Cactus Basin #2 Mitigation Area attached as *Exhibit 2* hereto and incorporated herein by reference.

D. SAN BERNARDINO VALLEY estimates heavy equipment rental and/or other costs, associated with the additional habitat management actions will be approximately Five Thousand Dollars (\$5,000.00).

E. WVWD wishes to establish and agree to a framework to reimburse SAN BERNARDINO VALLEY for expenses incurred in implementing the additional habitat management actions associated with the HMMP for the SAA at WVWD’s 12-acre mitigation area at HVWA through June 30, 2026, as identified in *Exhibit 3* attached hereto and incorporated herein by reference.

NOW THEREFORE, in consideration of the matters recited and the mutual promises, covenants, and conditions set forth in this First Amendment, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

OPERATIVE PROVISIONS

1. Incorporation of Recitals. Each and every one of the Recitals set forth above is a material part of this First Amendment and is hereby incorporated by reference into and made part of this First Amendment by this reference.

2. Definitions. Defined terms not otherwise defined in this First Amendment shall have the meanings ascribed thereto in the Reimbursement Agreement.

3. Reinstatement; Extension of Term. Notwithstanding the actual date of execution of this First Amendment, the Parties desire and intend to reinstate the Reimbursement Agreement in its entirety as of the First Amendment Effective Date as if it had never expired, subject to the terms, conditions, and modifications set forth in this First Amendment. The term of the Agreement is hereby extended through the earlier of: (a) June 30, 2026; or (b) SAN BERNARDINO VALLEY incurs total approved costs equaling the Maximum Reimbursement, as amended in this First Amendment.

4. Maximum Reimbursement Increase. The Parties hereby increase the Maximum Reimbursement for implementation of WVWD's habitat management actions through June 30, 2026, by Fifty-Three Thousand Three Hundred Fourteen Dollars and Eight Cents (\$53,314.08), for a total Maximum Reimbursement of Ninety-Five Thousand Eight Hundred Sixty-Two Dollars and Eighteen Cents (\$95,862.18).

5. HMMP Management and Implementation. The habitat management actions at WVWD's 12-acre mitigation area at HVWA to be managed and implemented by SAN BERNARDINO VALLEY pursuant to Section 2 of the Reimbursement Agreement are hereby deemed to include the additional habitat management actions identified in *Exhibit 2* and *Exhibit 3* attached to this First Amendment.

6. Miscellaneous.

a. *Ratification.* Except as expressly modified by this First Amendment, Parties acknowledge that the Reimbursement Agreement remains in full force and effect, enforceable in accordance with its terms.

b. *Conflicts.* To the extent that the Reimbursement Agreement conflicts with this First Amendment, this First Amendment shall prevail.

c. *Counterparts.* This First Amendment may be executed in any number of counterparts, each of which shall be deemed an original and all of which when taken together shall constitute one and the same instrument. Signatures may be delivered electronically and shall be binding upon the Parties as if they were originals.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed this First Amendment as of the First Amendment Effective Date.

**SAN BERNARDINO VALLEY
MUNICIPAL WATER DISTRICT**

By: _____
Heather P. Dyer
CEO/General Manager

WEST VALLEY WATER DISTRICT

By: _____
John Thiel
General Manager

EXHIBIT 2

SAWA COST ESTIMATE FOR LOWER CACTUS BASIN #2 MITIGATION AREA

EXHIBIT 3

**WVWD'S PROJECTED COSTS FOR IMPLEMENTATION OF HABITAT
MANAGEMENT ACTIONS IN THE HMMP THROUGH JUNE 30, 2026**



STAFF REPORT

DATE: September 25, 2025

TO: Engineering, Operations and Planning Committee

FROM: Rocky Welborn, Director of Engineering

SUBJECT: Task Order Amendment No. 1 with Engineering Resources of Southern California, Inc. for the Design of Reservoir R8-3

STRATEGIC GOAL:

Strategic Goal 1 - Manage and Deliver a Safe, Reliable, and Sustainable Water Supply. Objective 1A - Increase System Capacity for Anticipated Growth

Strategic Goal 5 – Apply Sound Planning, Innovation, and Best Practices. Objective 5A - Increase Operational Efficiency, Resiliency, and Reliability

MEETING HISTORY:

N/A

BACKGROUND:

The West Valley Water District ("District") service area is located in Southwestern San Bernardino County with a small part in Northern Riverside County. The District serves customers in the Cities of Rialto, Fontana, Colton, Jurupa Valley and unincorporated areas of San Bernardino County. The service area consists of eight (8) pressure zones: Zone 2, 3, 3A, 4, 5, 6, 7 and 8 and is divided into Northern and Southern systems by the central portion of the City of Rialto.

Pressure Zone 8 is the northernmost zone in the District's Northern System and is generally north of Glen Helen Parkway, with Sierra Avenue and Clearwater Parkway serving as the western and eastern boundaries respectively. Storage is provided by R8-1 and R8-2 Reservoirs.

The construction of new Zone 8-3 Reservoir ("R8-3") is required in order to provide additional capacity for buildout development within Pressure Zone 8 and is needed to supply water to the existing and anticipated development in the Lytle Creek area.

The District entered into a Professional Service Agreement (PSA) with Engineering Resources of Southern California Inc. ("ERSC"), which resulted in Task Order No. 3 to develop an engineering design to assist with environmental review and permitting of the project. Subsequent work identified in the preliminary analysis required additional analysis to address right of way evaluations, biological assessments, and seismic considerations, which resulted in subsequent change orders and amendments.

To inform the projects final anticipated environmental mitigation requirements, the District recently completed additional biological surveys for protected animal species. The biological surveys for the California Gnatcatcher bird and Crotch's bumble bee were completed in June and August 2025, respectively. Both endangered species were not found in the project site area.

DISCUSSION:

Staff requested ERSC to provide an updated cost proposal to complete the design in accordance with current codes, standards, and environmental considerations, confirm site conditions, and mobilize their team to continue design development. This new proposal also includes site investigation and improvements, site layout master planning, access road and water quality basin design, aerial and ground surveying, and the preparation of a Water Quality Management Plan.

The additional fee for the services proposed by ERSC to complete the project are \$235,667. This effort is expected to result in a bid package that can be advertised to construction in the following fiscal years.

Attached as **Exhibit A** is Task Order No. 3, Amendment No. 1, including the proposal from ERSC detailing the scope and cost of the additional work.

FISCAL IMPACT:

The cost proposed by ERSC to complete the design services is \$235,667. Currently, a balance of \$41,085.57 remains on Task No. 3. After applying this available balance, the additional funding required to complete the design of Reservoir R8-3 is \$194,581.43. This Project was included in the Fiscal Year 2025/2026 Capital Improvement Budget under Project No. W19008 Reservoir R8-3 Project.

REQUESTED ACTION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve New Task Order No. 3, Amendment No. 1 with Engineering Resources of Southern California, Inc. in the amount of \$235,667 for the design of the Reservoir R8-3 Project and;
2. Authorize the General Manager to execute all necessary documents.

Attachments

[EXHIBIT A - Amendment No. 1 to Task Order No. 3 - 09.16.2025.pdf](#)

Exhibit A

AMENDMENT NO. 1 TO TASK ORDER NO. 3

Development of Construction Bid Documents for the Modifications of Zone 8-3 Reservoir Project

This Task Order ("Task Order") is executed this ____ day of _____, 2025 by and between West Valley Water District, a public agency of the State of California ("District") and Engineering Resources of Southern California, Inc., a California Corporation ("Consultant").

RECITALS

- A. On or about December 17th, 2025 District and Consultant executed that certain Agreement for Professional Services ("Agreement").
- B. The Agreement provides that the District will issue Task Orders from time to time, for the provision of certain services provided by Consultant.
- C. Pursuant to the Agreement, District and Consultant desire to enter into this Task Order for the purpose of setting forth the terms and conditions upon which Consultant shall render certain services to the District.

NOW, THEREFORE, THE PARTIES HERETO HEREBY AGREE AS FOLLOWS:

- 1. Consultant agrees to perform the services set forth on Exhibit "1" attached hereto and by this reference incorporated herein.
- 2. Subject to any limitations in the Agreement and this Task Order, District shall pay to Consultant the amounts specified in Exhibit "2" attached hereto and by this reference incorporated herein. The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit "2," unless additional compensation is approved in writing by the District.
- 3. Consultant shall perform the services described in Exhibit "1" in accordance with the schedule set forth in Exhibit "3" attached hereto and by this reference incorporated herein. Consultant shall commence work immediately upon receipt of a notice to proceed from the District. District will have no obligation to pay for any services rendered by Consultant in advance of receipt of the notice to proceed, and Consultant acknowledges that any such services are at Consultant's own risk.
- 4. The provisions of the Agreement shall apply to this Task Order. As such, the terms and conditions of the Agreement are hereby incorporated herein by this reference.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused this Task Order to be executed effective as of the day and year first above written.

DISTRICT:

**WEST VALLEY WATER DISTRICT,
a public agency of the State of California**

By _____
John Thiel, General Manager

CONSULTANT:

**ENGINEERING RESOURCES OF
SOUTHERN CALIFORNIA, Inc.,
a California Corporation**

By _____

Name _____

Its _____

EXHIBIT “1”
TO
AMENDMENT NO. 1 TO TASK ORDER NO. 3
SCOPE OF SERVICES

Engineering Design Services for the Development of Construction Bid Documents for the Modifications of Zone 8-3 Reservoir Project proposal dated September 11, 2025.

September 11, 2025

West Valley Water District
ATTN: Leo Chan, P.E., Senior Engineer
855 W. Base Line Rd.
Rialto, CA 92376

RE: Proposal to Update Plans and Specifications for West Valley Water District's Reservoir 8-3 Site Grading and 1.0 MG Tank Design

Dear Mr. Chan,

Engineering Resources of Southern California, Inc. (ERSC) appreciates the opportunity to continue assisting West Valley Water District (WVWD or District) with engineering services. ERSC is proud to have the District as a client and has completed multiple similar projects for WVWD in previous years. The following is our proposal to provide engineering services for the subject project.

Project Understanding

The West Valley Water District is preparing to construct Reservoir 8-3, a 1.0-million-gallon welded steel reservoir on the District's existing property for Reservoir Nos. 8-1 and 8-2. These tanks are located in the northernmost portion of WVWD's service area. With a base elevation of 2,346 feet above sea level, the tanks in Zone 8 serve WVWD's highest pressure zone.

The grading plans need to be designed to avoid encroachment on sensitive habitat on California Department of Forestry lands adjacent to the project site. North of the project site, there is a natural drainage, which is tributary to Lytle Creek. Using new survey information, ERSC will strive to design the improvements in a manner that ensures the proposed project does not impact this stream. It would be prudent for the District to have its environmental consultant review ERSC's final drawings prior to advertising the project for receipt of bids.

Note: ERSC will design Reservoir 8-3 and associated improvements utilizing best management practices regarding environmental impacts. However, additional environmental investigations and/or analyses are not included in ERSC's proposed scope of work.

Initially, a Master Site Layout Plan will be developed to show the extent of grading required for two 1.0 MG reservoirs. The base pad may need to be enlarged to accommodate the two reservoirs. Existing Reservoir Nos. 8-1 and 8-2 would ultimately be removed. Reservoir 8-2 would be removed first to make room for the new Reservoir 8-3. Reservoir 8-1 would remain in place but would only be in operation during maintenance activities on Reservoir 8-3. In the future, Reservoir 8-1 would be removed to provide space for the construction of Reservoir 8-4. Design of the proposed Reservoir 8-3 would commence after the District has approved the Master Site Layout Plan.

The design will include minimal improvements to the existing dirt access road. Drainage improvements will be designed to convey stormwater from the site to two new water quality management basins adjacent to the stream bed at the bottom of the road through a combination of v-ditches, pipes, and culverts as appropriate.

The new welded steel tank will be designed in accordance with the American Water Works Association's standard D100-21. It will be 85 feet in diameter and have a height of 24 feet above the finished floor with a three (3) feet radius roof knuckle. The site grading will provide for the elevation of the finished pad to match that of Reservoir Nos. 8-1 and 8-2. Due to the proximity of seismic faults, the steel shell will be anchored to a reinforced concrete ringwall foundation, which will be designed to resist uplift and overturning moments. Other features of the tank will include a flexible expansion joint on the inlet/outlet pipe, an overflow weir and pipe, a spiral stairway, a fiberglass interior ladder with a safety climb device, a personnel roof fall restraint system, auxiliary roof vents, a flush cleanout manway, a passive cathodic protection system, and other miscellaneous appurtenances. The design will allow for the future addition of a mixing system and security systems by providing junction boxes near the bottom and at the roof of the reservoir.

Note: ERSC will design Reservoir 8-3 utilizing the Geotechnical Investigation report prepared by John R. Byerly dated June 14, 2022, the Ground-Motion Seismic Analysis by Terra Geosciences dated May 18, 2022, and the Engineering Geology Investigation Update by Gary R. Rasmussen & Associates, Inc. dated June 2, 2022. Additional geotechnical, geological, and seismic analyses are not included in ERSC's proposed scope of work.

Over the years, several documents related to the Reservoir 8-3 site have been produced and archived. ERSC will incorporate information from these documents into the design and endeavor to meet all current AWWA standards and Department of Health and Cal/OSHA standards. Following is a brief list of documents previously obtained or prepared:

- 2006 – Aerial Survey and Various Archived Files / Documents
- Geotech Investigation Report by John R Byerly, dated 6/14/22
- Ground Motion Seismic Analysis by Terra Geosciences, dated 5/18/22
- Engineering Geology Investigation by Gary R. Rasmussen & Associates, dated 6/2/22
- 2011 – PCR / Environmental Report Prepared for Initial Study/MND

Optional Scope of Work Items

This proposal includes the following three (3) optional items:

- Optional Task I -Site Electrical, Lighting, Security, and SCADA Plans
- Optional Task II – New Aerial and Ground Surveys and Base Maps
- Optional Task III - Prepare Water Quality Management Plan

Optional Task I includes the design of site electrical, lighting, security, and SCADA plans. It is ERSC's understanding that intrusion alarms and video files would be transmitted to WVWD's Headquarters or a third-party security company. Insert:Work under Optional Task I will be billed on a Time and Material Basis. If WVWD elects not to implement this optional work, ERSC will provide junction boxes and conduits at the District's direction for the addition of these systems at a future time.

Optional Task II provides for a new aerial survey and new base maps. On August 25, 2021, the South Fire burned the vegetation on the Reservoir 8 property and the surrounding area. The aerial survey for the prior design effort was conducted in 2006 (19 years ago). Changes in the topography have occurred in recent years as a result of erosion due to the lack of protective vegetative cover. Accordingly, ERSC recommends that a new aerial survey be performed and incorporated into the grading, drainage, and entrance road improvement plans.

Optional Task III is for ERSC to prepare a Water Quality Management Plan (WQMP) for the project site. NPDES Order No. R8-2010-0036 requires a WQMP for priority development projects that will add or replace 5,000 square feet or more of impervious surface on an existing developed site. If requested, ERSC will prepare a WQMP for the project site on the District's behalf

A detailed description of ERSC's Scope of Work is provided in the following pages.

ERSC Professionals

The strength behind ERSC is our qualified and experienced engineers, designers, construction observation personnel, and administrative support staff. We excel at matching the exceptional skills, technical abilities, character, and attitude of our team members to the needs of our clients. ERSC staff works daily to create client partnerships and transform projects from the broadest level of general scope to final planning, design, implementation, and construction resolution. Many ERSC professionals have experience as municipal and public agency employees and can approach your project with first-hand knowledge of agency culture and how any agency envisions the planning and processing of a well-executed project.

The organizational chart at right includes the team members assigned to this project, and their resumes are included in the appendix of this document.

Detailed Scope of Work

Task 1 - Contract Management, Meetings & Coordination

ERSC will reserve this task for project management-related tasks and general coordination, including kickoff meetings, progress meetings, and design review meetings.

Deliverables:

- Meeting agendas and minutes, if applicable (PDF and Word files)
- Monthly invoices (PDF and Word files)
- General correspondence (PDF and Word files)

Task 2 – Site Investigation, Data Collection

ERSC's team will visit the project site to determine the overall conditions, including changes that have occurred in recent years.

Deliverables:

- Site photos will be available upon request.

Task 3 – Access Easements, Legal Descriptions, and Plats

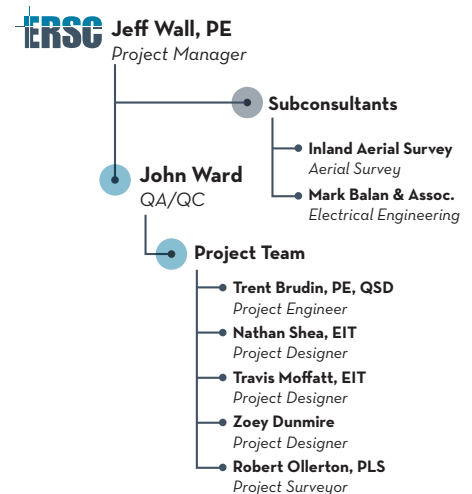
ERSC has previously prepared easements for four parcels, and our Professional Land Surveyor will review and modify these easements as directed by WVWD staff. The new plats and legal descriptions will be provided to WVWD staff for use by others in acquiring the easements.

Deliverables:

- Legal Plats and Descriptions for 4 Easements (PDF and dwg format)

Task 4 – Develop Master Site Layout

ERSC will prepare a Master Site Layout Plan for two new 1.0 MG reservoirs, which will entail the removal of Reservoir Nos. 8-1 and 8-2. The layout will clearly show the following site features: site grading, two 1.0 MG reservoirs, inlet and outlet piping, site drainage, low-voltage electrical power (120/240 VAC), site lighting, security systems (cameras and intrusion alarms), and the location of SCADA communications equipment. The Master Site Layout Plan will be provided early in the project's design phase. It will be separate from



the balance of the plans, resulting in two distinctly separate sets of deliverables.

Deliverables:

- 90% Master Site Layout Plan (PDF and dwg format)
- Final Master Site Layout Plan (PDF and dwg format)

Task 5 – Access Road and Water Quality Basin Plans

There is an ephemeral stream bed adjacent to the existing access road at the bottom of the hill, which is subject to environmental constraints. WVWD staff have indicated their desire to design the project to minimize construction impacts to this stream bed. They have also indicated the desire to avoid the added expense of a paved access road, so improvements to the road will be minimal. Accordingly, ERSC's team will develop grading plans for the access road and two new water quality basins adjacent to the stream bed for the purpose of directing stormwater runoff to the basins. Stormwater runoff and tank overflow water will be directed to the water quality basins, where it will percolate and evaporate within the confines of these basins to the extent possible, given the limited available footprint.

Deliverables:

- 60% Access Road & Water Quality Basin Plans (PDF and dwg format)
- 90% Access Road & Water Quality Basin Plans (PDF and dwg format)
- Final Access Road & Water Quality Basin Plans (PDF and dwg format)

Task 6 – Site Grading Plans

The existing site currently has two existing welded steel tanks (Reservoir B1 at 100,000 gallons and Reservoir B2 at 410,000 gallons). Utilizing the WVWD-approved Master Site Layout Plan noted above, ERSC's team will prepare grading plans that accommodate two (2) 1.0 MG welded steel reservoirs, piping, and appurtenances. The site drainage and tank overflow drains will discharge to the surface and be safely conveyed down the dirt access road (via the existing 11% grade and a v-ditch) before discharging into the water quality basin plans noted above.

Deliverables:

- 60% Site Grading Plans (PDF and dwg format)
- 90% Site Grading Plans (PDF and dwg format)
- Final Site Grading Plans (PDF and dwg format)

Task 7 – Welded Steel Tank and Tank Appurtenances Plans

ERSC's team will prepare plans, sections, and details for a new 1.0 MG welded steel tank/reservoir. The welded steel tank will be designed in accordance with the American Water Works Association's standard D100-21. It will be 85 feet in diameter and have a high water level of 24 feet above the finished floor. Due to the proximity of seismic faults, the steel shell will be anchored to a reinforced concrete ringwall foundation, which will be designed to resist uplift and overturning moments. A 16-inch inlet/outlet pipe will be designed to connect to the existing 8-inch and 16-inch water mains that currently supply water to the existing reservoirs. Other features of the tank will include a flexible expansion joint on the inlet/outlet pipe, an overflow weir and pipe, a spiral stairway, a fiberglass interior ladder with a safety climb device, a personnel roof fall restraint system, auxiliary roof vents, a flush cleanout manway, and provisions for adding an internal mixing system at a future date. ERSC will also design a passive cathodic protection (CP) system to protect the steel tank shell and coating. The CP system will include an array of anodes suspended from the reservoir's roof. Leads from the anode array will be terminated in an enclosure to facilitate potential/resistivity readings.

Deliverables:

- 60% Welded Steel Tank and Tank Appurtenances Plans (PDF and dwg format)
- 90% Welded Steel Tank and Tank Appurtenances Plans (PDF and dwg format)
- Final Welded Steel Tank and Tank Appurtenances Plans (PDF and dwg format)

Task 8 – Specifications

ERSC's team will prepare the project specifications for the additional work items noted above. Specifications will be built on the "Greenbook" Standard Specifications for Public Works Construction and the District's standard technical specifications. The District's standard template will be used for the Bid Documents and General Conditions.

Deliverables:

- 90% Complete Specifications (PDF and dwg format)
- Final Specifications (PDF and dwg format)

Task 9 – Engineer's Estimate of Probable Costs

ERSC will prepare an Engineer's Estimate of Probable Costs for the project. This estimate will include costs for all items/works depicted in the final plans and specifications. Costs will be based on recent similar projects constructed by WVWD and neighboring water districts and cities.

Deliverables:

- Engineer's Estimate of Probable Costs (PDF format)

Task 10 – Bidding Phase Assistance

Upon approval of the specification documents, ERSC will assist WVWD in the bid period for the project by providing the following services:

1. Furnish WVWD with a list of potential bidders, forward Notice of Inviting Bids to qualified contractors, and maintain a record of prospective bidders to whom the project documents have been issued.
2. Act as telephone liaison with potential bidders for matters concerning bidding of the project and prepare formal responses to RFI's and addenda as required to document design changes or clarifications.
3. Assist WVWD in facilitating the Pre-Bid Conference to ensure prospective bidders are totally aware of the scope of work and local conditions. ERSC will prepare the agenda and attendance sheet for the meeting.
4. Prepare minutes of the Pre-Bid Conference that cover all aspects of contractors' questions and clarifications regarding the project and submit to all attendees. The minutes will become a part of the project's documentation.
5. Perform bid analysis, including preparing a spreadsheet containing all numbers from bids received, performing a full evaluation of all bids received, verifying the contractor's license, conducting a background check of the lowest responsive bidder, and making a formal recommendation for award of the construction contract.

Deliverables:

- Notice Inviting Bids (PDF and Word format)
- Plan Holder's List (PDF and Excel format)
- Sign-in Sheet and Minutes from Pre-Bid Conference (PDF and Word format)
- List of Questions from Bidders and Answers (PDF and Word format)
- Addendum (PDF and Word format)

Optional Task I – Develop Site Electrical, Lighting, Security, and SCADA Plans

ERSC will contract with Mark Balan & Associates, Inc. to prepare Site Electrical, Lighting, Security, and SCADA Plans for Reservoir 8-3. The plans will provide for the installation of a 120 VAC electrical service from SCE, site lighting, security cameras and intrusion alarms, and SCADA communications. It is understood that security alarms and video footage will be relayed to the District's headquarters or WVWD's third-party security firm. Plans will be provided at the 60%, 90%, and Final submittals. The Master Site Layout Plan will be separate from the balance of the plans, resulting in two distinctly separate sets of deliverables.

Deliverables:

- 60% Site Electrical, Lighting, Security, and SCADA Plans (PDF and dwg format)
- 90% Site Electrical, Lighting, Security, and SCADA Plans (PDF and dwg format)
- Final site Electrical, Lighting, Security, and SCADA Plans (PDF and dwg format)

Optional Task II – New Aerial and Ground Surveys and Base Maps

ERSC's team will perform a field survey to re-establish horizontal and vertical control and set markers on the property as needed. Subsequently, our sub-consultant, Inland Aerial Surveys, will complete an aerial survey encompassing the properties for the access road, existing 8-inch and 16-inch supply pipelines, and the proposed master-planned site for Reservoirs 8-3 and 8-4. This information will be utilized to prepare a new base map for the design. The base map will identify existing features, such as road edge conditions, driveways, sidewalks, existing right-of-way, drainage structures, valve cans, vaults, manholes, signs, fences/walls, and other improvements significant to the project. Other significant record information will be added to the base map upon availability. Supplementary topo shots for items that have a potential impact on the design will be pursued.

Deliverables:

- Base Map (PDF or dwg format)

Optional Task III – Prepare Water Quality Management Plan (WQMP)

The State of California requires a Water Quality Management Plan (WQMP) to be prepared for priority development projects that will add or replace 5,000 square feet (sq. ft.) or more of impervious surface on an already developed site subject to discretionary approval of the permitting jurisdiction. A WQMP is a document designed to manage and protect water quality over the life of a "project." They include best management practices (BMPs), which are designed to ensure long-term land treatment practices and management measures are implemented and maintained by the property owner after the project is constructed. If requested, ERSC's team will prepare a WQMP for the subject property in accordance with NPDES No. CAS618036, Order No. R8-2010-0036, following San Bernardino County's "Technical Guidance Document for Water Quality Plans."

Deliverables:

- Water Quality Management Plan (PDF files)

The following items are not included in our Scope of Work: environmental studies and surveys, CEQA-related services, water system hydraulic modeling, stormwater hydrology analyses, preparation of Stormwater Pollution Prevention Plans (SWPPPs), preparation of 401 permit applications and related coordination, and preparation of permit applications. However, ERSC will include mitigation measures

that are identified in these studies in the construction documents as necessary to ensure compliance with the recommendations contained therein

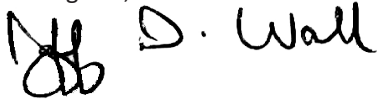
Project Schedule

The design is estimated to take approximately 150 working days to complete. Work will commence following the Notice-to-Proceed.

A schedule of ERSC's fees to complete the project, including the Optional Tasks, can be found on the attached Exhibit "A." ERSC's latest Schedule of Rates is provided as Exhibit "B."

Thank you for the opportunity to provide this proposal. Should you have any questions, please call me at 909-890-1255 or email me at jwall@erscinc.com.

Best regards,

A handwritten signature in black ink that reads "Jeff D. Wall". The signature is written in a cursive, flowing style.

Jeff D. Wall, PE
Sr. Principal Engineer

Attachments:

- Exhibit "A" – Fee Estimate
- Exhibit "B" – ERSC's Schedule of Rates
- Exhibit "C" – ERSC Team Resumes

JDW/jdw

EXHIBIT “2”
TO
AMENDMENT NO. 1 TO TASK ORDER NO. 3
COMPENSATION

The fee estimated for Development of Construction Bid Documents for the Modifications of Zone 8-3 Reservoir project per the attached proposal dated September 11, 2025.

Exhibit A

Exhibit A – Fee Estimate

West Valley water District - 9/11/2025

West Valley Water District

9/11/2025

RESERVOIR 8-3 SITE GRADING AND RESERVOIR DESIGN

TASK NO.	DESCRIPTION	ERSC	ELECTRICAL SUBCONSULTANT (Mark Balan & Assoc)	AERIAL SURVEY (Inland Aerial Surveys, Inc.)	ESTIMATED TOTAL COST
1	Contract Management, Meetings & Coordination	\$ 7,560	\$ -	\$ -	\$ 7,560
2	Site Investigation & Data Collection	\$ 2,680	\$ -	\$ -	\$ 2,680
3	Access Easements Legals and Plats	\$ 900	\$ -	\$ -	\$ 900
4	Master Site Layout Plan	\$ 12,180	\$ -	\$ -	\$ 12,180
5	Access Road & Water Quality Basin Plans	\$ 25,980	\$ -	\$ -	\$ 25,980
6	Site Grading Plans	\$ 18,380	\$ -	\$ -	\$ 18,380
7	Welded Steel Tank Plans	\$ 38,200	\$ -	\$ -	\$ 38,200
8	Specifications	\$ 11,780	\$ -	\$ -	\$ 11,780
9	Cost Estimate	\$ 3,580	\$ -	\$ -	\$ 3,580
10	Bid Phase Support	\$ 7,960	\$ -	\$ -	\$ 7,960
SUBTOTAL		\$ 129,200	\$ -	\$ -	\$ 129,200.00

REIMBURSABLES

i	Mileage	\$ 500	\$ -	\$ -	\$ 500
ii	Reimbursables, Reproduction, etc.	\$ 400	\$ -	\$ -	\$ 400
SUBTOTAL					\$ 900

TOTAL ESTIMATED FEE (Tasks 1 - 10)

\$ 130,100

OPTIONAL TASK I - DEVELOP SITE ELECTRICAL, LIGHTING, SECURITY, AND SCADA PLANS*

TASK NO.	DESCRIPTION	ERSC	ELECTRICAL SUBCONSULTANT (Mark Balan & Assoc)	AERIAL SURVEY (Inland Aerial Surveys, Inc.)	ESTIMATED TOTAL COST
1	Contract Management, Meetings & Coordination	\$ 2,060	\$ 6,676	\$ -	\$ 8,736
2	SCE Coordination	\$ 990	\$ 3,912	\$ -	\$ 4,902
3	Electrical, Security & Lighting PS&E	\$ 990	\$ 50,589	\$ -	\$ 51,579
4	Remote Communications/SCADA PS&E	\$ 990	\$ 10,041	\$ -	\$ 11,031
SUBTOTAL		\$ 5,030	\$ 71,217	\$ -	\$ 76,247

REIMBURSABLES

i	Mileage	\$ -	\$ 400	\$ -	\$ 400
ii	Reimbursables, Reproduction, etc.	\$ 300	\$ -	\$ 0	\$ 300
SUBTOTAL					\$ 700

TOTAL ESTIMATED FEE

\$ 76,947

* Work for Optional Task I will be billed on a Time and Material Basis

Exhibit A – Fee Estimate

West Valley water District - 9/11/2025

OPTIONAL TASK II - NEW AERIAL SURVEY, GROUND SURVEY, AND BASE MAPS						
TASK NO.	DESCRIPTION	ERSC	ELECTRICAL SUBCONSULTANT (Mark Balan & Assoc)	AERIAL SURVEY (Inland Aerial Surveys, Inc.)	ESTIMATED TOTAL COST	
1	Contract Management, Meetings & Coordination	\$ 3,240	\$ -	\$ -	\$	3,240
2	Horizontal and Vertical Control Survey	\$ 5,345	\$ -	\$ -	\$	5,345
3	Aerial Survey	\$ 2,785	\$ -	\$ 3,700	\$	6,485
4	Prepare New Base Map	\$ 450	\$ -	\$ -	\$	450
SUBTOTAL		\$ 11,820	\$ -	\$ 3,700	\$	15,520
REIMBURSABLES						
i	Mileage	\$ 200	\$ -	\$ -	\$	200
ii	Reimbursables, Reproduction, etc.	\$ 300	\$ -	\$ 0	\$	300
SUBTOTAL					\$	500
TOTAL ESTIMATED FEE					\$	16,020

OPTIONAL TASK III - PREPARE WATER QUALITY MANAGEMENT PLAN						
TASK NO.	DESCRIPTION	ERSC	ELECTRICAL SUBCONSULTANT (Mark Balan & Assoc)	AERIAL SURVEY (Inland Aerial Surveys, Inc.)	ESTIMATED TOTAL COST	
1	Data Collection	\$ 1,100	\$ -	\$ -	\$	1,100
2	Prepare WQMP	\$ 11,200	\$ -	\$ -	\$	11,200
SUBTOTAL		\$ 12,300	\$ -	\$ -	\$	12,300
REIMBURSABLES						
i	Mileage	\$ -	\$ -	\$ -	\$	-
ii	Reimbursables, Reproduction, etc.	\$ 300	\$ -	\$ 0	\$	300
SUBTOTAL					\$	300
TOTAL ESTIMATED FEE					\$	12,600

Exhibit B

Professional Staff

President	\$320.00
Vice President.....	\$275.00
Sr. Principal Engineer.....	\$270.00
Principal Engineer.....	\$240.00
Assistant Principal Engineer	\$225.00
Engineer V	\$205.00
Engineer IV	\$185.00
Engineer III	\$170.00
Engineer II	\$155.00
Engineer I	\$135.00

Engineering Staff

Principal Engineering Associate.....	\$220.00
Senior Engineering Associate	\$200.00
Engineering Associate V	\$175.00
Engineering Associate IV	\$150.00
Engineering Associate III.....	\$140.00
Engineering Associate II.....	\$125.00
Engineering Associate I.....	\$120.00
Engineering Aide II	\$70.00
Engineering Aide I	\$65.00

Survey Staff and Services

Principal Surveyor.....	\$225.00
Senior Surveyor	\$185.00
Surveyor III	\$150.00
Surveyor II	\$130.00
Surveyor I	\$110.00
2-Man Survey Crew (Std Equipment/Truck)	\$320.00
1-Man Survey Crew (Std Equipment/Truck)	\$250.00
3rd Man on Survey Crew	\$140.00

Construction Support Staff

Construction Manager.....	\$225.00
Chief Construction Inspector	\$175.00
Sr. Construction Inspector	\$165.00
Construction Inspector	\$150.00
Inspector Overtime (Hours 8-12/Saturdays)	\$200.00
Inspector Overtime (Hours 12+/Sundays)	\$235.00

Administrative Staff

Operations Manager	\$125.00
Operations Specialist.....	\$105.00
Administrative Assistant II.....	\$95.00
Administrative Assistant I	\$85.00

Other Direct Expenses

Vehicle Mileage	\$0.70/Mile
Subconsultant.....	Cost + 20%
Reimbursable Expenses/Charges	Cost + 15%
Forensic Analysis	Standard Rate X 2
Expert Witness	Standard Rate X 3

NOTE: All rates hereon are subject to automatic increase upon July 1st of each year. Rates will be adjusted by the percent increase in California Consumer Price Index-All Urban Consumers for the twelve-month period ending February as calculated by the California Department of Industrial Relations (CADIR) California Consumer Price Index Calculator. Prevailing Wage Rates are dictated by the CADIR. All classifications which are subject to Prevailing Wages will be adjusted when revised determinations are published by the CADIR.

Unless otherwise established by contractual agreement, payment is due and payable upon receipt. Payment is considered delinquent if not paid within 30 days of invoice date. If payment is not completed within agreed terms, Client agrees to pay a service charge on the amount past due at the rate of 1.5% per month (18% per annum).

Exhibit C

Jeff D. Wall, PE | Sr. Principal Engineer

CA, Civil Engineer No. C51914

Education

Masters Degree in Public Administration;
California State University, San Bernardino
B.S. Electrical Engineering Technology;
LeTourneau College, Longview, TX

Affiliations

American Public Works Association

Mr. Wall joined the ERSC team as an accomplished, results oriented manager with 14 years of proven success directing engineering, operations, and maintenance staffs in both large and medium size municipal water districts through innovation, optimization, performance management, and leadership. His experience includes developing and managing multi million dollar budgets for multiple water district operations and maintenance departments, implementing tiered water rates, automated meter reading, on-line bill payment, and asset databases, and managing pipe replacement bond programs, and wastewater capital improvement programs.

Similar Project Experience:

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Reservoirs B1 and B2 Rehabilitation and Recoating, Bighorn-Desert View Water Agency, Yucca Valley, CA – Project Manager responsible for the team in the preparation of plans and specifications to rehabilitate two welded steel water reservoirs and construct modifications needed to bring them into compliance current OSHA and California's State Water Resources Control Board Division of Drinking Water standards. The project is funded through Proposition 1 and administered through the State Water Resources Control Board.

Zone 8-3 2.0 Million Gallon Reservoir, West Valley Water District, Rialto, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. As a part of ERSC's On-Call Engineering services contract with the District, the firm provided engineering design and construction management services for a 2.0 Million Gallon Reservoir.

Lord Ranch 1.0 Million Gallon Steel Welded Reservoir, West Valley Water District, Rialto, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC designed a 1.0 MG Steel Welded Reservoir in Zone 3, allowing the District to utilize additional capacity through the Baseline Feeder (BLF) transmission pipeline, the source of which is currently purchased groundwater from the San Bernardino Valley Municipal Water District (Valley District). ERSC designed the reservoir for placement on 14-acre existing Lord Ranch Facility to provide storage capacity for the pressure zone.

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits. Updates to the reservoirs are a result of structural/seismic evaluations carried out to identify areas of concern during seismic events.

Assistant General Manager of Operations and Maintenance, Eastern Municipal Water District - Executive responsible for the operation and maintenance of the District's potable water, wastewater, and recycled water facilities. Actively managed a \$203 million operating budget with a staff of 288 employees to achieve the District's strategic objectives. Potable water facilities included: two water filtration plants, two brackish groundwater desalination plants, 87 pump stations, 79 storage tanks, 26 groundwater wells, and 2,442 miles of pipelines. Wastewater facilities included: four water reclamation plants, 55 sewage pump stations, and 1,840 miles of sewer pipelines. Recycled water facilities included: 7,600 acre-feet of seasonal storage, four storage tanks, 14 pump stations, and 225 miles of recycled water pipelines.

Director of Water Reclamation, Eastern Municipal Water District - Department executive responsible for the operation and maintenance of four water reclamation plants producing 46 million gallons per day of Title 22 tertiary recycled water for beneficial reuse. Actively managed a \$26 million operating budget with a staff of 87 employees to achieve the District's strategic objectives. Accomplishments included: an 18 percent reduction in chemical costs, a five percent reduction in chlorine costs, a 35 percent reduction in overtime, and significant improvements in both recycled water production reliability and water quality.

Assistant General Manager/Chief Engineer, Lake Hemet Municipal Water District - Managed a \$12 million operating budget and directed a staff of 66 employees comprising

the Administration, Finance, Engineering, Operations and Maintenance departments, as well as, the Lake Hemet Campground. Developed and managed the District's capital improvement program including construction of the District's new Administrative and Operations Center. Devised innovative programs including the implementation of: an automated meter reading system, tiered water rates, on-line and automatic account withdrawal bill payment systems, and an electronic asset database. During this time, conservative fiscal policies and unity with the Board of Directors and General Manager resulted in a 44 percent increase in the District's capital reserves in spite of the economic recession.

Senior Civil Engineer, Eastern Municipal Water District - Directed all aspects of the agency's \$250 million wastewater capital improvement program including the planning and design of capital improvement projects for wastewater treatment plants, sewer pumping facilities, sewer pipelines and forcemains. Responsibilities included: supervision of Engineering Department staff and consultant engineers, Board presentations, serving as the main liaison between Engineering and Operations Departments, project management, performing long-term planning, conducting engineering studies, preparing written reports, performing quality control review of plans and specifications, and preparing contract documents.

Civil Engineer (Registered), Eastern Municipal Water District - Served as Project Engineer on numerous water and wastewater capital improvement projects including potable water tanks, pump stations, sewage lift stations, waterlines, sewerlines, sewer forcemains, and roadways. Served as District's liaison with consultant's electrical engineering staff to facilitate standardization of electrical and instrumentation system designs.

Civil Engineering, Eastern Municipal Water District - Began career as a plan checker in the Engineering Department and quickly advanced to the Planning Department. Shortly thereafter, accepted another promotion in the Engineering Department to serve as a project engineer on capital projects in the Engineering Department. Served as District's liaison with consultant's electrical engineers on pump station, lift station, and treatment plant projects to facilitate standardization of electrical and instrumentation system designs.

Bloomington Business Park Lift Station and Forcemain, City of Rialto, CA - Plan Reviewer responsible for review of plans, maps, special studies, and similar documents for conformance to engineering practice, city standards, and applicable codes. ERSC's team provided plan checking and construction inspection services during the permitting and construction of the sewer improvements for the Bloomington Business Park. The new industrial facility was required to construct sewer improvements including a new lift station, 6,000LF of gravity sewer, and 2,300LF of Sewer Force Main. ERSC plan check staff reviewed all plans specifications and supporting information related to the project's sewer and lift station improvements.



CA, Professional Engineer No.90924
AZ, Professional Engineer No. 73812
QSD No. C90924

Education

BS, Civil Engineering, Loyola Marymount
University, Los Angeles, CA

Areas of Expertise

Water System Modeling
Site Layout & Geometrics
Hydrology & Drainage
AutoCAD Civil 3D
Traffic and Transportation
Water and Wastewater
WQMP Preparation
SWPPP Compliance
SWPPP Development

Mr. Brudin is a Registered Civil Engineer in the states of California and Arizona. He was introduced to the industry in 2012 as an intern at Lake Hemet Municipal Water District. Since then, he has held positions as Project Engineer at C.W. Driver, and Associate Civil Engineer at Parsons Corporation. Trent joined ERSC in early 2016.

Trent is a highly skilled engineer assisting in the management of a wide variety of projects at ERSC. Trent regularly performs complex design level tasks on water resources, civil site design, and transportation related projects included hydrology studies, drainage design, site grading, geometric site layout, WQMP and SWPPP documentation, intersection improvements, traffic signal modifications, water and wastewater pipeline design, and water feasibility studies

Trent Brudin, PE, QSD | Engineering Manager

Similar Project Experience:

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Technical Advisor responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Hydraulic Modeling Updates, City of Redlands, CA - Senior Modeler responsible for concept development, design recommendations, and special study drafting throughout the assignment. Under an on-call agreement, ERSC was contracted to update the City's water and sewer models. The new hydraulic models accurately represent the water distribution and wastewater collection systems and produce reliable results suitable for engineering and operations decision-making related to capacity and performance with respect to established hydraulic design criteria.

Quail Valley Subarea 4 Sewerage Feasibility Study and Preliminary Design, Eastern Municipal Water District, Quail Valley, CA - Assistant Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to conduct a feasibility study for sewer service in Sub-Areas 4 and 9, which was required to lift the 2006 Regional Water Quality Control Board and County of Riverside moratoriums on septic tanks in Quail Valley. The study evaluated multiple alternatives that would satisfy the requirements of property owners, the District, and the funding sources/agencies. The new system included a combination of packaged lift stations, vacuum sewer systems, regional lift stations, and sewer conveyance gravity/force mains.

CSA70J H2ONet Analysis, San Bernardino County Office of Special Districts – Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC evaluated the H2ONet Map analysis for Zone J. Staff assisted the District with the evaluation of options including line extensions or looping the new system to meet new demands.

CSA 70J Muscatel Street and Aster Road 1,500-foot Line Extension, San Bernardino County Office of Special Districts – Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC provided design services for an approximately 1,500 feet CSA 70J line extension from the intersection of Muscatel Street and Aster Road.

Sewer Structural Rehabilitation, City of Victorville, CA – Project Engineer during the replacement of existing sewer main in-kind. Removal and replacement of approx. 12,000 feet of 8-12" Vitrified Clay Pipe (VCP) Sewer mainline. Sewer rehabilitation was completed in numerous locations of the City. Majority of locations were within the Public ROW, but certain reaches required close coordination with property owners including private landowners and the San Bernardino County Flood Control District were pipe was designed in Easements or within the requirements of an encroachment permit.

Sewer Capacity Improvement Project C-1, City of Victorville, CA – Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 3,022 feet to 15-inch pipe from existing 10-inch pipe. The project intends to allow additional capacity to the sewer system to allow and account for increased commercial and industrial development in this part of the City. The project is generally located in an industrial area around Hesperia Road and Nisqualli Road and generally has impacts on several distribution sites as well as some retail/gas stations.

Sewer Capacity Improvement Project C-2, City of Victorville, CA – Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 1,748 feet to 12-inch pipe from existing 8-inch pipe. The project is generally located in a residential area and crosses an existing golf course. The project is also contiguous to City sewer project C3 as well as several Structural Sewer Replacement Lines. This was important to note because turned

out to be beneficial to include both items of work in the same project/contract. This work generally took place in easements, and only has impacts on a small segment of Public La Paz Drive as well as Arrowhead Drive.

[Sewer Capacity Improvement Project C-3, City of Victorville, CA](#) – Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 6,550 of 18-inch pipe upgraded from 12-inch pipe. The project is generally located in residential areas and crosses a park in an easement. The City of Victorville has identified the potential to construct a new sewer main in the San Bernardino County Flood Control District's (SBFCD) access road, next to the Oro Grande Wash from Austin Road to Seneca Road. This relocation eliminates a series of existing lines that traverse several properties, which requires the abandonment of any existing easements. This requires coordination with several residences, and the new alignment will require coordination with SBFCD and their approval. It is assumed that this has been discussed with SBFCD but will require appropriate reviews and permitting.

[Canyon Lake S. Blackhorse Driveway Improvement, Elsinore Valley Municipal Water District, CA](#) - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the design of driveway improvements necessary to allow adequate access to the Canyon Lake South 1MG Reservoir Site by District staff, cell phone companies, and inhabitants of an adjoining single-family residence. The design replaced the driveway due to deterioration from heavy service-vehicle traffic and an 8-inch ductile iron pipe beneath it. Work included project management, design survey, structural calculations, PS&E preparation, bidding support, and construction administration.

John Ward | Sr. Engineering Associate

Education

Bachelor of Science, Information Systems
- Systems Engineering, California Baptist
University, Riverside, CA

AS Degree, Engineering, Mt. San Jacinto
College, San Jacinto, CA

Affiliations

Microsoft Certified Professional MCP #277993
Windows NT Workstation Windows NT Server

Mr. Ward joined ERSC following a 35-year career of successful programs, projects, and process improvements for a local water district, successfully pursuing hundreds of millions in grants and loans, managing the capital improvement program with an average annual budget of \$105M, and successfully acquiring 220 acres of fee-owned property in support of the Capital Improvement Program. His leadership skills directing, organizing, and motivating staff contribute to his identifying, pursuing, and administering external funding opportunities in support of capital, technology, and conservation programs.

Mr. Ward demonstrates an ability to design and implement effective project controls to manage scope, schedule, and budget of robust capital programs. He brings an ability to manage all facets of Real Property including acquisition, management, and disposition of fee-title property and easements.

Similar Project Experience:

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District, Highland, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits.

Reservoirs B1 and B2 Rehabilitation and Recoating, Bighorn-Desert View Water Agency, Yucca Valley, CA – Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services for the rehabilitation of two welded steel water reservoirs and construct modifications needed to bring them into compliance with current OSHA and California's State Water Resources Control Board Division of Drinking Water standards. The project is funded through Proposition 1 and administered through the State Water Resources Control Board.

Construction Management and Inspection Services, 1.6MG Reservoir, City of Loma Linda, CA - Construction support responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC's team provided inspection services during the construction of a new 1.6 million-gallon welded steel reservoir that provides additional supply to the City's 1A, 2, and 2A pressure zones in the event that the existing reservoirs are taken offline for repairs or maintenance. ERSC inspectors were present for observation of the tank construction and also access road improvements, various site improvements, storm drain improvements, SWPPP compliance, SCADA, and electrical component installation as well as coordination of geotechnical and coating inspections.

Director of Engineering Services, Eastern Municipal Water District, Perris, CA - Served in executive level leadership for more than 10 years, managing more than 30 employees. Duties included:

- Grant Pursuit and Post Award Administration
- Capital Project Controls systems and performance monitoring
- Real Property acquisition, management, and disposition
- GIS management of EMWD facilities and land-base
- Facility Locations in support of construction
- Enterprise Performance Metrics

Engineering Program Manager, Manager, Improvement Program Manager, Eastern Municipal Water District, Perris, CA - In service of the Engineering Services Department, Mr. Ward managed the development of Enterprise Performance Measures and acted as Grant Administrator of Awarded Grants – Responsible for \$360 Mil since.

Senior Engineering Systems Analyst, Eastern Municipal Water District, Perris, CA - While assigned to the Engineering Admin Department, Mr. Ward's duties included:

- Managed the Engineering Systems Management Division
- Systems Development – Implemented Project Cost Tracking System
- Project Management and Control System –
- Technology Systems Management for Engineering Branch
- Quality Control for select water and sewer facilities

Civil Engineering Associate II, Computer Systems Manager, Eastern Municipal Water District, Perris, CA - This assignment with the Engineering Department included producing Engineering plans for construction of District projects with a focus on potable water tanks and recycled storage ponds.

Civil Engineering Assistant, Eastern Municipal Water District, Perris, CA - This assignment with the Engineering Department included:

- Civil Engineering Design including forty-five acre Constructed Wetlands
- Computer System Management and Support of 60 users
- Plan check Developer plans for conformance to District standards



Engineer in Training

Education

California Baptist University, Civil Engineering

Areas of Expertise

Civil 3D
AutoCAD
Surveying
Adobe Photoshop
Microsoft Office
Excel

Mr. Shea joined ERSC, bringing an acumen for civil design, consulting, and client service. His duties on our team include applying engineering judgment to design solutions for various public works projects. He is also tasked with interacting with clients as the point of contact for various projects. Nathan also creates legal documents for right of way dedications and land easements.

In previous assignments he drafted conceptual grading plans for industrial projects using Civil 3D, wrote drainage reports using FEMA and survey data for submittal to clients, and drafted lot exhibits for residential land development projects.

Nathan Shea, EIT | Engineer II

Similar Project Experience:

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District, Highland, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits.

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Hydraulic Modeling Updates, City of Redlands, CA - Assistant Modeler responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to update the City's water and sewer models. The new hydraulic models accurately represent the water distribution and wastewater collection systems and produce reliable results suitable for engineering and operations decision-making related to capacity and performance with respect to established hydraulic design criteria.

R2-3 Tank Rehabilitation Project, West Valley Water District, Rialto, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. As a part of a development proposal in the area, the project's proponent was required to rehabilitate and upsize a 4MG capacity tank that was constructed in 1991 on a 2.281 acres site shared with another Tank, 2-2. ERSC provided design for the rehabilitation of the tank's structure, coating, floors, and site improvements including site and transmission piping. CM staff coordinated and inspected structural rehabilitation during all site and pipeline construction, internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

Tank 10 Inspection and Cleaning, Bighorn-Desert View Water Agency, Yucca Valley, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted for the cleaning and condition summary of a 10,000 gallon, 12' x 12', potable water storage tank. Services included cleaning the interior bottom surfaces, evaluating the interior surfaces to determine the condition of the existing coating system, and repairing the float/target system for Tank level monitoring.

Alamitos Reservoir Potable Tank No. 7 & Recycled Tank No. 22 Rehabilitation, Long Beach Water Department, City of Long Beach, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. Work includes preparing two construction bid packages and providing construction management & inspection services for the rehabilitation of two 3.3 million gallon water tanks at LBWD's Alamitos Reservoir. ERSC prepared one set of construction documents for each tank including cost estimates and provide bid phase services for the Projects.

TELD-4 Storage Forebay Reservoirs Condition Assessment, Coachella Valley Water District, Palm Desert, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. Services consisted of evaluating the exterior and interior surfaces to determine the condition of the existing coating systems, structural integrity, and to evaluate the reservoir for Cal/OSHA requirements, SWRCB compliance, and AWWA D100 regulations.

Washwater Tank No.2 Rehabilitation, City of Poway, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide construction management and inspection services during the rehabilitation of the Washwater 2 tank at the City's Wastewater Treatment Plant. CM staff coordinated and inspected structural rehabilitation during internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.



EIT #174538

Education

California Baptist University, Civil Engineering

Affiliations

AutoCAD
CIVILD
GeoHEC-RAS
HEC-RAS

Travis Moffatt first joined ERSC as an intern during his collegiate journey. He is now a permanent member of our design team, having earned his EIT. Travis continues to expand his engineering toolkit by performing various engineering tasks such as AutoCAD drafting, hydrology calculations with CIVILD, analysis using GeoHEC-RAS and HEC-RAS, Excel calculations and spreadsheets, surveying and project coordination for plan checks.

Travis Moffatt, EIT | Engineer II

Similar Project Experience:

Madison Avenue Waterline Project, Rancho California Water District, Murrieta, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services for the design and construction of 700± linear feet (LF) of 16-inch replacement waterline in the City of Murrieta. Due to numerous recent leaks, the existing 16-inch cement mortar-lined and coated (CML&C) waterline required decommissioning, while maintaining domestic service to numerous commercial businesses and associated fire protection devices.

Pepperleaf Potable Water Pipeline Replacement, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services for the replacement of a portion of the previously abandoned Pepperleaf 8-inch potable water pipeline. Work included the preparation of bid-ready construction documents for a 100± LF pipeline replacement reach by crossing over the RCB culvert with minimal cover and using welded steel pipe.

Annual Condition Evaluation of Water Storage Reservoirs, Coachella Valley Water District, Coachella Valley, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to perform annual inspections of water storage reservoirs within its system. The annual inspections allow CVWD to meet the requirements of the health department as well as keep apprised of the reservoir's condition to determine when maintenance is required.

Multi-Family Residential Project, Ave H at 3rd Street, Borden Construction, Inc., Yucaipa, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the modification of a previously prepared Water Quality Management Plan (WQMP). The updated plan provides site information, site utilization, discussion of drainage management areas, feasibility and implementation of the LID BMPs, alternative compliance, source control BMPs and operations, maintenance, and funding.

Calvary Chapel Beaumont Redevelopment, Matlock Design Build, Beaumont, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services for a site development project affecting a mixture of existing structures and site features, as well as off-site improvements imposed as part of the project entitlements and conditions of approval. Work included precise grading, on-site utilities, off-site street improvements, WQMP, and hydrology and hydraulics reports.

Zoey Dunmire | Engineer I

Education

MS, Mechanical Engineering, University of California San Diego
BS, Environmental Engineering, University of California San Diego

Areas of Expertise

MATLAB
Autodesk Fusion 360
SolidWorks
Civil 3D
WQMP
SWPPP

Zoey joined ERSC in 2023 after a collegiate tenure in which she earned both undergraduate and graduate engineering degrees. She is now a part of our design team, expand her engineering toolkit by performing various engineering tasks such as AutoCAD drafting and design, utility calculations, Excel calculations, and spreadsheets.

Similar Project Experience:

Nitrate Treatment Facility, Riverside Highland Water Company, Grand Terrace, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services required to provide civil site improvements, design of wet utilities, and entitlements for a Nitrate Treatment Facility. The PS&E provided for connection of raw water to the treatment facility and potable water to the RHWC system. The inlet piping was 18" in diameter, approximately 860' from Well RN6 to the treatment facility. Outlet piping was 18" in diameter, 480' from the treatment facility to RHWC distribution system in Michigan Ave.

PS&E for Sewer Collection System and Lift Stations, Soboba Band of Luiseño Indians, San Jacinto, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to prepare plans, specifications, and cost estimates (PS&E) for the gravity sewer system and lift stations within the Soboba Band of Luiseño Indians (SBLI) Reservation. Our work focused on developing alignment and preparing construction plans for an alternative that collects the wastewater flows from the reservation to be conveyed to the EMWD sewer system for treatment.

RV Booster Station Rehabilitation, Pechanga Band of Indians, Temecula, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide professional engineering services for upgrading a booster station that was originally constructed in 2000 at an RV resort. The design will include replacing pumps, motors, valves, and electronic equipment and relocating the electrical equipment to the adjacent electrical room. Our work includes project management and coordination, research and preliminary layout, specifications and plans, and bidding phase assistance.

New Metal Building for Fire Station No. 75, STK Architecture, San Bernardino County, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC provided professional engineering services required to complete contract documents for the new construction of an approximately 5,000 SF metal building located at the rear of the existing Fire Station No. 75, located in the Community of Muscoy. The scope includes precise grading and drainage, hydrology, and WQMP.

Parking Lot at Library Street, City of Lake Elsinore, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to design and prepare supporting documents for the City Park parking lot that increased public parking capacity for the historic downtown Main Street area and constructed a parking lot on City-owned property adjacent to City Park. Work included the preparation of construction documents, demolition plan, erosion control plan, engineer's cost estimate, hydrology report, and a Water Quality Management Plan.

Fire Station No. 227, STK Architecture, City of San Bernardino, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide design and construction services related to the development of a new fire station located on the south end of Arrowhead Elementary School, on the northwest corner of West 38th Street and Genevieve Street North in the City of San Bernardino. The scope includes engineering services during the Pre-Design Phase, Design Development Phase, and during the preparation of final plans, specifications, and estimates during the Construction Documents Phase.

Public Works Yard Restroom, City of Chino Hills, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide engineering services for the preparation of construction drawings related to installation of a new staff restroom building at the City Yard Facility. Improvements include the installation of a prefabricated restroom adjacent to an existing storage building, necessary utility connections including water, sewer and electricity, construction of a concrete pad to house the restroom, and necessary asphalt pavement reconstruction to meet ADA requirements.

Robert Ollerton, PLS | Principal Surveyor

CA, Land Surveyor No. 7731

Education

Civil Engineering & Land Surveying
Coursework, University of California at
Riverside, Riverside, CA

Areas of Expertise

Civil3D
MicroStation
ArcGIS
Boundary Surveying
Right-Of-Way & Easements
Construction Surveying
Topographic Mapping
Consulting Surveyor to Municipal Agencies
Land Development and Entitlements

Robert has over 39 years of professional experience in land surveying for municipal agencies. He has managed a wide variety of land survey projects including surveys for topographic mapping, geodetic control, right of-way, boundary, construction projects, and public utility.

Most recently, Robert's responsibilities as the Principal Surveyor include the management and coordination of construction staking contracts for civil engineering projects, boundary surveys, title analysis, topographic mapping, detailed design surveys, ALTA Surveys and mapping. Since joining ERSC, Robert's wide range of skills and background have enabled ERSC to provide clients with localized and personalized service, keeping true to ERSC's philosophy of dedication to customer service and satisfaction.

Similar Project Experience:

Construction Phase Services, MDP Line J and J-1- Phase I Soboba Band of Luiseño Indians, San Jacinto, CA - Principal Surveyor responsible for oversight of review of survey documents throughout the assignment. ERSC was contracted to provide construction staking and inspection for Phase I of the Soboba MDP Line J. The Soboba MDP Lines J and J-1 will intercept upstream flows and convey south under Castile Canyon Road to Poppet Creek Channel. Phase I consists of construction of approximately 390' of 8'W x 7'H RCB, one manhole, a collection basin, and a transition structure at the junction with MDP Line J-1.

Riverside County Surveyor - Under direction of the County Surveyor, checked tract maps for conformance with the Subdivision Map Act, County ordinances, and development standards. Reviewed records of surveys and corner records for conformance with the Land Surveyor's Act. Managed on-call field surveying services for aerial mapping, control, topographic and construction surveys.

City Surveyor Services - Currently the acting City Surveyor for the Cities of Rialto, Lake Elsinore and Colton. Supervises the review of subdivision maps, parcel mergers, lot line adjustments, dedications and easements.

Survey for Traffic Signal Design Services for Rubidoux Blvd at 24th St and Wineville Rd at Riverside Dr, STC Traffic, Inc., Jurupa Valley, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC's team provides support to the STC Traffic, Inc. team for the completion of improvement plans for the HSIP and local funded projects in the City of Jurupa Valley. The planned improvements include traffic signals and upgraded curb ramps to comply with ADA at two intersections. ERSC provides field and office support to STC's team in mapping existing right-of-way, existing topography, and contours at each site.

Survey Services, Fire Station No. 3, City of Palm Springs, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional surveying services related to the development of a Boundary, Topographic, and Utility AsBuilt Survey for Fire Station #3 in the City of Palm Springs. More specifically, the site-in-question is located at the northwest corner of Via Miraleste and Raquet Club.

Reservoir Site Survey, Riverside Highland Water Company - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC provided surveying services at the RHWCR Spring Mountain Ranch reservoir site. ERSC survey crews located existing monumentation for the site and searched for existing monuments. It was found that monuments were destroyed by construction of the Site's wall and ERSC provided services to replace damaged or missing monuments.

Street Improvements, City of Temecula - Managed and performed construction surveying for street improvements along Jefferson Street and Winchester Road.

County of Riverside Winchester Road (Highway 79) Widening - Survey manager for control and topographic surveying of over eight miles of Highway 79/Winchester Road for ultimate widening to six lanes from Domenigoni Parkway to Benton Road.

Widening and signalization of State Highway 79 at Auld Road - Performed construction surveying for the widening of State Highway 79 and extending improvements towards the Temecula Valley Airport.

Cucamonga Valley Water District, La Senda Road - Preparation and delivery of a 1,500-lineal foot topographic survey map. Map included found monuments, street centerline, right-of-way, property lines, and location of wet and dry utilities.

Limonite Avenue Phase IV Widening Project, Riverside County Economic Development Agency, in conjunction with the Riverside County Transportation Department - Managed topographic and construction surveying services for widening of Limonite Avenue to four lanes.

Highway 111 Widening from Jefferson Street to Madison Street, City of Indio - Managed the construction surveying for the widening of Highway 111 which included new street curbs, sidewalks and medians and over one mile of 48" storm drain.

Highway 111 Bridge over the La Quinta Channel, City of Indio - Managed construction

staking for the bridge, underground utilities and a commercial parking lot.

Monroe Street Widening, City of Indio - Managed control, topographic and construction staking for the widening of Monroe Street between Avenue 52 and Avenue 49. The project included the undergrounding of over a mile of electrical transmission lines and street improvements.

City of Hemet Public Works Department, Hemet, CA - Designed and implemented the City of Hemet's PMS/GIS link project. The project involved linking the city's pavement management tabular database with a street centerline shapefile developed by the Thomas Bros. Map Company. The data was used with ArcView to produce a graphical street network depicting the pavement condition of each city street. The PMS/GIS link provided a better method for city staff to evaluate the condition of the streets and analyze the best cost benefits of street maintenance and rehabilitation programs.

San Bernardino Valley Water Conservation District, Redlands, CA - Performed surveys using differential GPS (DGPS) and conventional methods to locate district facilities including canals, headworks, monitoring wells and recharge basins. Develop GIS graphic and tabular database to map district facilities, regional water facilities, wells and groundwater plumes. Data was used for the analysis of water quality and water availability for the district's annual Engineering Investigation.

San Bernardino Valley Water Conservation District, Redlands, CA - At the direction of the district biologist, performed DGPS field surveys to locate protected plant species areas for the Santa Ana Woolly Star and Stephens' Kangaroo Rat. The data was used in ArcView to determine suitable areas for the district's sand and gravel mining operations in the Santa Ana River Wash.

City of Indio Storm Drain System, Indio, CA - Oversaw field surveys to locate all city storm drain facilities that outlet into the Whitewater River Channel. The survey utilized RTK GPS methods to locate the storm drain networks and outfalls to the river channel. Using ArcGIS, the data was used to develop a map atlas for public works crews.

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

EXHIBIT “3”
TO
AMENDMENT NO. 1 TO TASK ORDER NO. 3
SCHEDULE

Schedule to be determined by District staff.



STAFF REPORT

DATE: September 25, 2025

TO: Engineering, Operations and Planning Committee

FROM: Rocky Welborn, Director of Engineering

SUBJECT: Professional Services Agreement with WSC for the Water Use Efficiency Master Plan

STRATEGIC GOAL:

Strategic Goal 5 – Apply Sound Planning, Innovation, and Best Practices. Objective 5B - Explore Innovative Solutions and Implement When Feasible and Cost-Effective; 5C - Prioritize Long-Term Financial Stability; and 5E - Define, Develop, and Implement Best Practices.

Strategic Goal 7 – Realize Health, Safety, and Regulatory Compliance. Objective 7A - Prepare for and Comply with Evolving Water Regulations; and 7D - Meet Water Use Efficiency Objectives

MEETING HISTORY:

N/A

BACKGROUND:

In 2018, the California State Legislature enacted Senate Bill (SB) 606 and Assembly Bill (AB) 1668 (together these are referred to as 2018 conservation legislation) to establish a new foundation for improvements in water conservation and drought planning to adapt to climate change and long-term aridification. Water Code section 10609.2 directs the State Water Resources Control Board (State Water Board) to adopt long-term standards for the efficient use of water, variances for unique uses that can have a material effect on urban water use, and guidelines and methodologies pertaining to the calculation of an urban water use objective (objective). Water Code section 10609.10(d) directs the State Water Board to adopt performance measures for Commercial, Industrial, and Institutional (CII) water use. Water Code sections 10609.22 and 10609.24 direct each Urban Retail Water Supplier (supplier) to annually calculate its objective and provide a report pertaining to the objective and implementation of the CII performance measures.

On July 3, 2024, the State Water Board adopted the Making Conservation a California Way of Life regulation, which established methodologies and guidelines to calculate the objectives; standards for efficient residential outdoor water use and efficient use of water on CII landscapes with Dedicated Irrigation Meters (DIMs); CII performance measures; and annual reporting requirements.

DISCUSSION:

Staff identified a need to perform detailed analysis of conservation activities to develop new reporting procedures, collect additional data, create new reporting templates, as well as identify long-term compliance pathways for the new regulations. Staff issued a Request for Proposals (“RFP”) to prepare a comprehensive Water Use Efficiency Master Plan (WUEMP) for the current and future District needs that was posted on PlanetBids. The District received proposals from two (2) Consulting firms – Eagle Ariel Solutions (“Eagle Ariel”), and Water Systems Consulting (“WSC”).

To determine the best value for the District, staff ensured that both proposals received met the minimum requirements. The Proposal Evaluation Committee evaluated and scored the proposals based on the scoring criteria described in the RFP. The Proposal Evaluation Committee determined that WSC would provide the best value to the District, then entered into negotiations with WSC to refine the scope of work and the anticipated level of effort.

Staff began negotiations with WSC to develop a draft Professional Services Agreement and enhance the proposed scope of work to include additional site condition assessment activities. Attached as Exhibit A is the draft District Professional Services Agreement and Task Order with Water Systems Consulting (WSC).

FISCAL IMPACT:

The cost to perform the proposed services for the Water Use Efficiency Master Plan as proposed by WSC is \$199,004.00. This item is included in the Fiscal Year 2024/25 Operating Budget under Engineering Departments, Professional Services Line Item (Account: 100-5630-540-5340). Staff is looking into funding assistance from SBWMWD.

REQUESTED ACTION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve New Professional Services Agreement and Task Order No. 1 with Water Systems Consulting in the amount up to \$199,004.00 for the development of the Water Use Efficiency Master Plan and;
2. Authorize the General Manager to execute all necessary documents.

Attachments

[Exhibit A - PSA and Task Order No. 1.pdf](#)

EXHIBIT A



West Valley Water District

AGREEMENT FOR PROFESSIONAL SERVICES

With

Water Systems Consulting, Inc. (WSC)

TABLE OF CONTENTS

	Page
Section 1. Term of Agreement	1
Section 2. Scope and Performance of Services	1
Section 3. Additional Services and Changes in Services	3
Section 4. Familiarity with Services and Site	3
Section 5. Compensation and Payment	4
Section 6. Required Documentation prior to Performance	5
Section 7. Project Documents	5
Section 8. Consultant's Books and Records	5
Section 9. Status of Consultant	6
Section 10. Compliance with Applicable Laws	7
Section 11. Conflicts of Interest.....	8
Section 12. Confidential Information; Release of Information.....	8
Section 13. Indemnification	9
Section 14. Insurance.....	10
Section 15. Assignment.....	10
Section 16. Termination of Agreement.....	11
Section 17. Notices	11
Section 18. General Provisions	12
Exhibit "A" Task Order	
Exhibit "B" Key Personnel	
Exhibit "C" Insurance	

AGREEMENT FOR PROFESSIONAL SERVICES

This AGREEMENT FOR PROFESSIONAL SERVICES ("Agreement") effective as of this _____ day of _____, 2025 ("Effective Date") is by and between West Valley Water District ("District") and Water Systems Consulting, Inc. (WSC) ("Consultant"). The District and Consultant may be collectively referred to as the "Parties" and individually as a "Party."

RECITALS

A. The Parties desire to enter into this Agreement for the purpose of setting forth the terms and conditions upon which Consultant shall provide certain services to District.

NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

Section 1. Term of Agreement.

(a) Subject to subsection (b) below, the term of this Agreement will be for a period of one (1) year commencing on the Effective Date and terminating one (1) year after the Effective Date.

(b) This Agreement shall renew automatically for continuous one (1) year periods for no more than two (2) additional years, unless either Party, prior to the end of the existing one (1) year period, delivers written notice to the other Party, that the Agreement shall not be extended.

(c) If a Task Order (as defined herein) is in effect at the expiration of the term of this Agreement, the term of this Agreement will automatically extend until Consultant completes the services under said Task Order, or until the Agreement is otherwise terminated, as set forth herein.

Section 2. Scope and Performance of Services.

2.1 (a) District may, from time to time, by written instructions from the District's General Manager or Assistant General Manager, or their designee, ("Authorized Representative") issue task orders ("Task Orders") to the Consultant. The Task Order shall be in such form and content as shall be set forth on Exhibit "A" attached hereto and by this reference incorporated herein. The Task Order shall set forth: (1) the scope of services to be performed by Consultant; (2) the compensation to be paid to Consultant; and (3) the time to complete the Task Order. The provisions of this Agreement shall apply to all such Task Orders.

(b) For each Task Order, Consultant shall confer, as requested, with District representatives to review progress of work elements, adherence to work schedule, coordination of work, scheduling of review and resolution of problems which may develop.

- 2.2** Consultant will furnish all of the labor, technical, administrative, professional and other personnel, all supplies and materials, equipment, printing, vehicles, transportation, office space and facilities, and all tests, testing and analyses, calculation, and all other means whatsoever, except as otherwise expressly specified in this Agreement, necessary or proper to perform and complete the services required of Consultant under this Agreement.
- 2.3** Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are listed in Exhibit "B" attached hereto and by this reference incorporated herein ("Key Personnel"). Consultant shall not substitute or remove Key Personnel without the prior written consent of District.
- 2.4** Consultant represents and warrants that it has the qualifications, experience, and facilities necessary to properly perform the services required under this Agreement in a thorough, competent, and professional manner. Notwithstanding Section 3 below, in the event Consultant utilizes the services of subcontractors or sub-consultants, Consultant assumes sole and complete responsibility for the performance of the subcontractor or sub-consultant to the specifications provided hereunder for Consultant's work, and no adjustment will be made to Consultant's requirements under this Agreement for timely completion of services, complete performance of services, or delivery of products or deliverables in a timely fashion, and no adjustment will be made to performance deadlines, or compensation due to Consultant, due to or arising from issues Consultant may have with any subcontractor or sub-consultant. Consultant will at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described in this Agreement. In meeting its obligations under this Agreement, Consultant shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement.

Consultant warrants it will perform its services, as more particularly described in this Agreement and each Task Order in accordance with generally accepted professional practices and current standards of care and diligence normally practiced by members of the profession currently practicing under conditions of a similar nature. Consultant shall perform, at its own cost and expense and without reimbursement from the District, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein.

- 2.5** Neither District nor Consultant shall be considered in default of this Agreement for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this Agreement, such circumstances include a Force Majeure Event. A Force

Majeure Event shall mean an event that materially affects the Consultant's performance and is one or more of the following: (1) Acts of God or other natural disasters occurring at the project site; (2) terrorism or other acts of a public enemy; (3) orders of governmental authorities (including, without limitation, unreasonable and unforeseeable delay in the issuance of permits or approvals by governmental authorities that are required for the services); and (4) pandemics, epidemics or quarantine restrictions. For purposes of this section, "orders of governmental authorities," includes ordinances, emergency proclamations and orders, rules to protect the public health, welfare and safety. Should such a Force Majeure Event occur, the non-performing party shall, within a reasonable time of being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement. Delays shall not entitle Consultant to any additional compensation regardless of the Party responsible for the delay. Notwithstanding the foregoing, District may still terminate this Agreement in accordance with the termination provisions of this Agreement.

Section 3. Additional Services and Changes in Services

- 3.1** Consultant will not be compensated for any services rendered in connection with its performance of this Agreement that are in addition to or outside of those set forth in the Task Orders unless such additional services are authorized in advance and in writing by District.
- 3.2** If Consultant believes that additional services are needed to complete a Task Order, Consultant will provide the Authorized Representative with written notification describing the proposed additional services, the reasons for such services, and a detailed proposal regarding cost.
- 3.3** District may order changes to a Task Order, consisting of additions, deletions, or other revisions, and the compensation to be paid Consultant will be adjusted accordingly. All such changes must be authorized in writing and executed by Consultant and District. The cost or credit to District resulting from changes in a Task Order will be determined by the written agreement between the Parties.

Section 4. Familiarity with Services and Site.

- 4.1** By executing this Agreement, Consultant warrants that Consultant shall, prior to undertaking a Task Order:
 - (a) investigate and consider the services to be performed;
 - (b) carefully consider how and within what time frame the services should be performed;

- (c) understand the facilities, difficulties, and restrictions attending performance of the services under a Task Order; and
- (d) possesses all licenses required under local, state or federal law to perform the services contemplated by a Task Order and maintain all required licenses during the performance of such Task Order.

4.2 If services involve work upon any site, Consultant warrants that Consultant has or will investigate the site and will be fully acquainted with the conditions there existing, before commencing its services under a Task Order. Should Consultant discover any latent or unknown conditions that may materially affect the performance of services, Consultant will immediately inform District of such fact and will not proceed except at Consultant's own risk until written instructions are received from the District.

Section 5. Compensation and Payment.

- 5.1** In no event shall the total amount paid for services rendered by Consultant under this Agreement and all Task Orders issued hereunder exceed the sum of the Task Orders. Subject to any limitations set forth in this Agreement, District agrees to pay Consultant the amounts shown in a Task Order.
- 5.2** Consultant shall furnish District monthly with an original invoice for all services performed and expenses incurred under a Task Order during the preceding month in accordance with the fee schedule set forth in the Task Order. The invoice must detail charges by the following categories: labor (by subcategory), reimbursable costs, subcontractor contracts and miscellaneous expenses. The invoice must list, as applicable, the hours worked and hourly rates for each personnel category, the tasks performed, the percentage of the task completed during the billing period, the cumulative percentage completed for each task, and the total cost of the services.
- 5.3** District will independently review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement and the Task Order. In the event that no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by District, the original invoice will be returned by District to Consultant for correction and resubmission.
- 5.4** Except as to any charges for work performed or expenses incurred by Consultant that are disputed by District, District will use its best efforts to cause Consultant to be paid within thirty (30) days of receipt of Consultant's invoice.

- 5.5 No payment or partial payment to Consultant shall constitute acceptance of any work completed by Consultant or waive any claims by the District for any reason whatsoever.

Section 6. Required Documentation Prior to Performance.

- 6.1 Consultant will not perform any services under this Agreement until:
- (a) Consultant furnishes proof of insurance ("Insurance") as required under Exhibit "C" attached hereto and by this reference incorporated herein; and
 - (b) Consultant provides District with a Taxpayer Identification Number.
- 6.2 The District will have no obligation to pay for any services rendered by Consultant in advance of receiving written authorization to proceed for each Task Order, and Consultant acknowledges that any such services are at Consultant's own risk.

Section 7. Project Documents.

- 7.1 All original maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer programs, files and other documents (collectively, "Project Documents") prepared, developed or discovered by Consultant in the course of providing services under this Agreement will become the sole property of District and may be used, reused or otherwise disposed of by District without the permission of Consultant. Consultant will take such steps as are necessary to perfect or protect the ownership interest of District in such Project Documents. Upon completion, expiration or termination of this Agreement, Consultant shall turn over to District all such original Project Documents in its possession; provided, however, that Consultant may retain copies of Project Documents.
- 7.2 Except as necessary for the performance of services under this Agreement, no Project Documents prepared under this Agreement, will be released by Consultant to any other person or entity without District's prior written approval. All press releases, including graphic display information to be published, must be approved and distributed solely by District, unless otherwise agreed to in writing by District.

Section 8. Consultant's Books and Records.

- 8.1 Consultant shall maintain any and all documents and records demonstrating or relating to Consultant's performance of services under this Agreement. Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, or other documents or

records evidencing or relating to work, services, expenditures and disbursements charged to District under this Agreement. Any and all such documents or records must be maintained in accordance with generally accepted accounting principles and must be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Consultant under this Agreement. Any and all such documents or records must be maintained for three (3) years following the final payment for each Task Order.

- 8.2** Any and all records or documents required to be maintained by this section must be made available for inspection, audit and copying, at any time during regular business hours, upon written request by District or its designated representatives. Copies of such documents or records must be provided directly to District for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed upon, such documents and records must be made available at Consultant's address indicated for receipt of notices in this Agreement.
- 8.3** Where District has reason to believe that any of the documents or records required to be maintained by this section may be lost or discarded due to dissolution or termination of Consultant's business, District may, by written request, require that custody of such documents or records be given to a person or entity mutually agreed upon and that such documents and records thereafter be maintained by such person or entity at Consultant's expense. Access to such documents and records shall be granted to District, as well as to its successors-in-interest and authorized representatives.

Section 9. Status of Consultant.

- 9.1** Consultant is and will at all times remain a wholly independent contractor and not an officer or employee of District. Consultant has no authority to bind District in any manner, or to incur any obligation, debt or liability of any kind on behalf of or against District, whether by contract or otherwise, unless such authority is expressly conferred under this Agreement or is otherwise expressly conferred in writing by District.
- 9.2** The personnel performing the services under this Agreement on behalf of Consultant will at all times be under Consultant's exclusive direction and control. Neither District, nor any elected or appointed boards, officers, officials, employees or agents of District, will have control over the conduct of Consultant or any of Consultant's officers, subcontractors or sub-consultants, employees or agents, except as provided in this Agreement. Consultant warrants that it will not at any time or in any manner represent that Consultant or any of Consultant's officers, employees or agents are in

any manner officials, officers, employees or agents of District.

- 9.3** Neither Consultant, nor any of Consultant's officers, employees or agents, will obtain any rights to retirement, health care or any other benefits which may otherwise accrue to District's employees. Consultant expressly waives any claim to any such rights or benefits.

Section 10. Compliance with Applicable Laws and California Labor Code.

- 10.1** Consultant shall keep itself informed of and comply with all applicable federal, state and local laws, statutes, codes, ordinances, regulations and rules in effect during the term of this Agreement.
- 10.2** Consultant is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects ("Prevailing Wage Laws"). If the services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. Consultant shall defend, indemnify and hold the District, its officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. It shall be mandatory upon the Consultant and all subconsultants to comply with all California Labor Code provisions, which include but are not limited to prevailing wages (Labor Code Sections 1771, 1774 and 1775), employment of apprentices (Labor Code Section 1777.5), certified payroll records (Labor Code Sections 1771.4 and 1776), hours of labor (Labor Code Sections 1813 and 1815) and debarment of contractors and subcontractors (Labor Code Section 1777.1). The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.
- 10.3** If the services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants performing such services must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Agreement and require the same of any subconsultants, as applicable. This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.
- 10.4** This Agreement may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance

requirements. Any stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor that affect Consultant's performance of services, including any delay, shall be Consultant's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Consultant caused delay and shall not be compensable by the District. Consultant shall defend, indemnify and hold the District, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Consultant or any subcontractor.

Section 11. Conflicts of Interest.

Consultant covenants that neither Consultant, nor any officer, principal nor employee of its firm, has or will acquire any interest, directly or indirectly, that would conflict in any manner with the interests of District or that would in any way hinder Consultant's performance of services under this Agreement. Consultant further covenants that neither Consultant, nor any officer, principal or employee of its firm will make, participate in the making, or in any way attempt to use the position of Consultant to influence any decision of the District in which Consultant knows or has reason to know that Consultant, or any officer, principal or employee of Consultant has a financial interest as defined in Government Code section 87103.

Section 12. Confidential Information; Release of Information.

- 12.1** All information gained or work product produced by Consultant in performance of this Agreement will be considered confidential to the full extent permitted by law, unless such information is in the public domain or already known to Consultant. Consultant shall not release or disclose any such information or work product to persons or entities other than District without prior written authorization from an Authorized Representative, except as may be required by law.
- 12.2** Consultant, its officers, employees, or agents, shall not, without prior written authorization from an Authorized Representative or unless requested by the District counsel, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement. Response to a subpoena or court order will not be considered "voluntary" provided Consultant gives District notice of such court order or subpoena.
- 12.3** If Consultant, or any officer, employee, or agent of Consultant, provides any information or work product (including Project Documents) in violation of this Agreement, then District shall have the right to reimbursement and indemnity from Consultant for any damages, costs and fees, including attorneys' fees related to any unauthorized disclosure by consultant or, caused by or incurred as a result of Consultant's conduct.
- 12.4** Consultant shall promptly notify District should, Consultant, its officers, employees, or agents be served with any summons, complaint, subpoena,

notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. District retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with District and to provide District with the opportunity to review any response to discovery requests provided by Consultant. However, this right to review any such response does not imply or mean the right by District to control, direct, or rewrite such response.

Section 13. Indemnification.

13.1 Consultant covenants and agrees that, during the term of this Agreement, any injury suffered as a result of Consultant's services shall be the sole responsibility of Consultant and its successors and assigns and District shall not be liable to Consultant, or any other person or persons whatsoever for any such injury, loss or damage to persons or property unless caused by the sole negligence or intentional acts of District or its Representatives (as solely defined below).

13.2 To the fullest extent permitted by law, Consultant shall defend, indemnify and hold District, its officers, directors and Representatives ("District Indemnitees") harmless from and against any and all claims, costs, liabilities, debts, demands, suits, actions, causes of action, obligations, proceedings, damages, judgments, liens and expenses of whatever nature, including attorneys' fees and disbursements (collectively, "Claims") which may be made against the District Indemnitees arising out of or in connection with (a) the retention by District of Consultant's services; (b) the performance of or failure to perform, the services covered by this Agreement which is caused or occasioned by any act, action, neglect on the part of Consultant, or its Representatives, in the performance of this Agreement and the services provided under this Agreement; (c) the death and/or injury to any person or damage to any property (real or personal) and/or economic loss which may be caused or is claimed to have been caused, by the negligence, act or omission of Consultant or its Representatives ; (d) any violation or alleged violation by Consultant of any law or regulation now or hereafter enacted; and (e) any breach by Consultant of its obligations under this Agreement. The foregoing indemnity shall not apply to the extent any such Claims are ultimately established by a court of competent jurisdiction to have been caused by the sole negligence or willful misconduct of the District Indemnitees or any of them. District shall make all decisions with respect to its representation in any legal proceeding concerning this section. If Consultant fails to do so, District shall have the right, but not the obligation, to defend the Claim and charge all of the direct or incidental costs of such defense, including attorneys' fees and costs, to Consultant and to recover the same from Consultant. The term "Representatives" shall mean employees, representatives, agents, contractors, subcontractors or any other persons directly or indirectly employed by any one of the foregoing or reasonably under the control of any of the foregoing or for whose acts any of the foregoing may be liable.

13.3 If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance of "design professional" services (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Section 14. Insurance.

Consultant agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance coverages listed in Exhibit "C." All insurance policies shall be subject to approval by District as to form and content. These requirements are subject to amendment or waiver if so approved in writing by an Authorized Representative.

Section 15. Assignment.

15.1 The expertise and experience of Consultant are material considerations for this Agreement. District has an interest in the qualifications of and capability of the persons and entities that will fulfill the duties and obligations imposed upon Consultant under this Agreement. Consultant may not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Consultant's duties or obligations under this Agreement without the prior written consent of District. The District can withhold its approval/consent in its sole and absolute discretion. Any attempted assignment will be null and void, and will constitute a material breach of this Agreement entitling District to any and all remedies at law or in equity, including summary termination of this Agreement.

15.2 Consultant must obtain District's prior written approval before utilizing any subcontractors to perform any services under this Agreement, which said approval may be withheld in District's sole and absolute discretion. This written approval must include the identity of the subcontractor and the terms of compensation. Approval by District does not imply any agreement to or endorsement by the District as to the competency or capability of any proposed subcontractor or sub-consultant, and District reserves any and all rights against both Consultant and such subcontractor or sub-consultant, for any failure to perform or other breach of any of the provisions of this Agreement, or the standards of performance defined herein, and no waiver is intended or to be implied by District's approval of any subcontractor or sub-consultant.

Section 16. Termination of Agreement.

- 16.1** District may terminate this Agreement, with or without cause, at any time by giving ten (10) calendar days written notice of termination to Consultant. In the event such notice is given, Consultant shall cease immediately all work in progress.
- 16.2** Upon termination of this Agreement, all property belonging exclusively to District which is in Consultant's possession, including, but not limited to, Project Documents must be returned to District immediately. Consultant shall promptly deliver to District a final invoice for all outstanding services performed and expenses incurred by Consultant as of the date of termination. If said termination occurs prior to completion of any Task Order for which a payment request has not been received, the charge for services performed during such task shall be the reasonable value of such services, based on an amount mutually agreed to by District and Consultant of the portion of such Task Order completed but not paid prior to said termination.
- 16.3** Consultant acknowledges District's right to terminate this Agreement as provided in this section, and hereby waives any and all claims for damages that might otherwise arise from District's termination of this Agreement. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Consultant shall not be entitled to payment for unperformed services, and shall not be entitled to damages or compensation for termination of work.

Section 17. Notices.

- 17.1** All written notices required or permitted to be given under this Agreement will be deemed made when received by the other Party at its respective address as follows:

To District: West Valley Water District
 855 West Base Line Road
 P. O. Box 920
 Rialto, CA 92377
 Attention: General Manager
 (Tel.) 909-875-1804

To Consultant: Water Systems Consulting, Inc. (WSC)
 Attention: Laine Carlson
 Address: 2602 Inland Empire Blvd., Suite C 230
 Ontario, CA 91764
 Phone Number: (805) 457-8833

**** Please send all invoices by:**

Email: apinvoices@wvwd.org

or

Mail: West Valley Water District
Accounts Payable
P.O. Box 190
Rialto, CA 92377

- 17.2** Notice will be deemed effective on the date personally delivered or transmitted by facsimile. If the notice is mailed, notice will be deemed given three (3) days after deposit of the same in the custody of the United States Postal Service, postage prepaid, for first class delivery, or upon delivery if using a major courier service with tracking capabilities.
- 17.3** Any Party may change its notice information by giving notice to the other Party in compliance with this section.

Section 18. General Provisions.

- 18.1 Authority to Execute.** Each Party represents and warrants that all necessary action has been taken by such Party to authorize the undersigned to execute this Agreement and to bind it to the performance of its obligations hereunder.
- 18.2 Binding Effect.** Subject to Section 15, this Agreement is binding upon the heirs, executors, administrators, successors and assigns of the Parties, including any subcontractors or sub-consultants of Consultant.
- 18.3 Entire Agreement.** This Agreement and all attachments contain the entire, complete, final and exclusive agreement and understanding of the Parties with respect to the matters addressed in this Agreement and supersedes all other agreements or understandings, whether oral or written, between Consultant and District prior to the execution of this Agreement.
- 18.4 Modification of Agreement.** No amendment to or modification of this Agreement will be valid unless made in writing and approved by Consultant and approved in writing by the Board of Directors of the District, or in writing by the General Manager, if such power has been delegated to General Manager. The Parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.
- 18.5 Facsimile Signatures.** Amendments to this Agreement will be considered executed when the signature of a Party is delivered by facsimile

transmission. Such facsimile signature will have the same effect as an original signature.

- 18.6 Waiver.** Waiver by any Party to this Agreement of any term, condition, or covenant of this Agreement will not constitute a waiver of any other term, condition, or covenant. Waiver by any Party of any breach of the provisions of this Agreement will not constitute a waiver of any other provision, or a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by District of any services by Consultant will not constitute a waiver of any of the provisions of this Agreement.
- 18.7 Interpretation.** This Agreement will be interpreted, construed and governed according to the laws of the State of California. Each Party has had the opportunity to review this Agreement with legal counsel. The Agreement will be construed simply, as a whole, and in accordance with its fair meaning, and without resort to rules regarding draftsmanship. It will not be interpreted strictly for or against either Party.
- 18.8 Severability.** If any provision of this Agreement shall be ruled invalid, illegal or unenforceable, the Parties shall: (a) promptly negotiate a substitute for the provisions which shall to the greatest extent legally permissible, effect the intent of the Parties in the invalid, illegal or unenforceable provision, and (b) negotiate such changes in, substitutions for or additions to the remaining provisions of this Agreement as may be necessary in addition to and in conjunction with subsection (a) above to give effect to the intent of the Parties without the invalid, illegal or unenforceable provision. To the extent the Parties are unable to negotiate such changes, substitutions or additions as set forth in the preceding sentence, and the intent of the Parties with respect to the essential terms of the Agreement may be carried out without the invalid, illegal or unenforceable provisions, the balance of this Agreement shall not be affected, and this Agreement shall be construed and enforced as if the invalid, illegal or unenforceable provisions did not exist.
- 18.9 Venue.** The Parties agree any action or proceeding to enforce or relating to this Agreement shall be brought exclusively in the federal court located in Riverside County, California or state court located in San Bernardino County, California and the Parties hereto consent to the exercise of personal jurisdiction over them by such courts for purposes of any such action or proceeding.
- 18.10 Disputes.** If any disputes should arise between the Parties concerning the work to be done under this Agreement, the payments to be made, or the manner of accomplishment of the work, Consultant shall nevertheless proceed to perform the work as directed by District pending settlement of the dispute.

- 18.11 Cooperation.** Consultant shall cooperate in the performance of work with District and all other agents.
- 18.12 Time of Essence.** Time shall be of the essence as to all dates and times of performance contained in this Agreement.
- 18.13 Counterparts.** This Agreement may be signed and delivered in any number of counter parts, each of which, when signed and delivered, shall be an original, but all of which shall together constitute one and the same Agreement.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

**SIGNATURE PAGE FOR AGREEMENT FOR PROFESSIONAL SERVICES
BETWEEN THE WEST VALLEY WATER DISTRICT
AND WATER SYSTEMS CONSULTING, INC.**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed effective as of the day and year first above written.

DISTRICT:

**WEST VALLEY WATER DISTRICT,
a public agency of the State of California**

By _____
John Thiel, General Manager

CONSULTANT:

WATER SYSTEMS CONSULTING, INC. (WSC)

By _____

Name _____

Its _____

EXHIBIT A
TASK ORDER

SAMPLE

TASK ORDER NO. 1

This Task Order ("Task Order") is executed this _____ day of _____, 2023 by and between West Valley Water District, a public agency of the State of California ("District") and _____ ("Consultant").

RECITALS

- A. On or about _____, 2023 District and Consultant executed that certain Agreement for Professional Services ("Agreement").
- B. The Agreement provides that the District will issue Task Orders from time to time, for the provision of certain services by Consultant.
- C. Pursuant to the Agreement, District and Consultant desire to enter into this Task Order for the purpose of setting forth the terms and conditions upon which Consultant shall render certain services to the District.

NOW, THEREFORE, THE PARTIES HERETO HEREBY AGREE AS FOLLOWS:

- 1. Consultant agrees to perform the services set forth on Exhibit "1" attached hereto and by this reference incorporated herein.
- 2. Subject to any limitations in the Agreement, District shall pay to Consultant the amounts specified in Exhibit "2" attached hereto and by this reference incorporated herein. The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit "2," unless additional compensation is approved in writing by the District.
- 3. Consultant shall perform the services described in Exhibit "1" in accordance with the schedule set forth in Exhibit "3" attached hereto and by this reference incorporated herein. Consultant shall commence work immediately upon receipt of a notice to proceed from the District. District will have no obligation to pay for any services rendered by Consultant in advance of receipt of the notice to proceed, and Consultant acknowledges that any such services are at Consultant's own risk.
- 4. The provisions of the Agreement shall apply to this Task Order. As such, the terms and conditions of the Agreement are hereby incorporated herein by this reference.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused this Task Order to be executed effective as of the day and year first above written.

DISTRICT:

**WEST VALLEY WATER DISTRICT,
a public agency of the State of California**

John Thiel, General Manager

Board Secretary

CONSULTANT:

Vendor Name Here_____

By_____

Name_____

Its_____

EXHIBIT “1”
TO
TASK ORDER NO. 1
SCOPE OF SERVICES

SAMPLE

EXHIBIT “2”

TO

TASK ORDER NO. 1

COMPENSATION

SAMPLE

EXHIBIT “3”
TO
TASK ORDER NO. 1
SCHEDULE

SAMPLE

EXHIBIT B
KEY PERSONNEL

Consultant's designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are:

Laine Carlson, Principal in Charge

Spencer Waterman, Project Manager

EXHIBIT C
INSURANCE

INSURANCE

- A. **General Requirements.** Before commencing the performance of services under this Agreement, and at all other times this Agreement is effective, Consultant must procure and maintain the following types of insurance with coverage limits complying, at a minimum, with the limits set forth below:

<u>Type of Insurance</u>	<u>Limits (combined single)</u>
Commercial General Liability:	\$1,000,000
Business Automobile Liability	\$1,000,000
Professional Liability	\$1,000,000
Workers Compensation	Statutory Requirement

- B. **Commercial General Liability Insurance.** The amount of insurance set forth above must be a combined single limit per occurrence for bodily injury, personal injury, and property damage for the policy coverage. The insurance must be on an “occurrence” not a “claims made” basis.
- C. **Business Automobile Insurance.** Automobile coverage must be written on forms subject to the written approval of District.
- D. **Professional Liability Insurance.** This coverage must be on an “occurrence” basis, including coverage for contractual liability. The Professional Liability Insurance required by this Agreement must be endorsed to be applicable to claims based upon, arising out of or related to services performed under this Agreement.
- E. **Workers Compensation.** Consultant must have a State of California approved policy form providing the statutory benefits required by law with employer’s liability limits of no less than \$1,000,000 per accident for all covered losses, or Consultant must provide evidence of an approved self-insurance program.
- F. **Additional Insureds.** Each Commercial General Liability Insurance policy and Business Auto Insurance policy must provide that the District, its officials, officers, employees, agents and volunteers are “additional insureds” under the terms of the policy, and must provide that an act or omission of one the insureds will not reduce or avoid coverage to the other insureds.
- G. **Deductibles and Self-Insured Retention.** Any deductibles or self-insured retentions applicable to the insurance policies required under this Agreement must be declared to and approved by District. In no event may any required insurance policy have a deductible, self-insured retention or other similar policy provision in excess of \$50,000 without prior written approval by District in its sole discretion. At the option of District, either the insurer will reduce or eliminate such deductibles or self-insured retentions with respect to the District’s additional insureds or Consultant will procure a bond guaranteeing payment of any losses, damages,

expenses, costs or settlements up to the amount of such deductibles or self-insured retentions.

- H. **Primary Insurance.** Each of the insurance policies maintained by Consultant under this Agreement must state that such insurance will be deemed “primary” so that any insurance that may be carried by District will be deemed excess to that of Consultant. This endorsement must be reflected on forms as determined by District.
- I. **Certificates of Insurance and Endorsements.** Prior to commencing any services under this Agreement, Consultant must file with the District certificates of insurance and endorsements evidencing the existence of all insurance required by this Agreement, along with such other evidence of insurance or copies of policies as may reasonably be required by District. These certificates of insurance and endorsements must be in a form approved by the Legal Counsel. Consultant must maintain current certificates and endorsements on file with District during the term of this Agreement reflecting the existence of all required insurance. Each of the certificates must expressly provide that no material change in the policy, or termination thereof, will be effective except upon 30 days’ prior written notice to District by certified mail, return receipt requested. The delivery to District of any certificates of insurance or endorsements that do not comply with the requirements of this Agreement will not waive the District’s right to require compliance.
- J. **Insurance Rating.** All insurance required to be maintained by Consultant under this Agreement must be issued by companies licensed by or admitted to conduct insurance business in the State of California by the California Department of Insurance and must have a rating of A or better and Class VII or better by the latest edition of A.M. Best’s Key Rating Guide.
- K. **Aggregate Limits.** The aggregate limits for each insurance policy required under this Agreement must apply separately and solely to the services performed under this Agreement. If the required policies do not have an endorsement providing that the aggregate limit applies separately to the services being performed, or if defense costs are included in the aggregate limit, then the required aggregate limits must be increased to an amount satisfactory to District.
- L. **Waiver of Subrogation Rights.** Consultant and each insurer providing any insurance required by this Agreement must waive all rights of subrogation against District, its officials, officers, employees, agents and volunteers, and each insurer must issue a certificate to the District evidencing this waiver of subrogation rights.
- M. **Failure to Maintain Required Insurance.** If Consultant, for any reason, fails to obtain and maintain the insurance required by this Agreement, District may obtain such coverage at Consultant’s expense and deduct the cost of such insurance from payments due to Consultant under this Agreement or may terminate the Agreement.

- N. **Effect of Coverage.** The existence of the required insurance coverage under this Agreement shall not be deemed to satisfy or limit Consultant's indemnity obligations under this Agreement. Consultant acknowledges that the insurance coverage and policy limits set forth in this Agreement constitute the minimum coverage and policy limits required. Any insurance proceeds available to District in excess of the limits and coverage required by this Agreement, and which is applicable to a given loss, must be made available to District to compensate it for such losses.

TASK ORDER NO. 1

Professional Services for Water Use Efficiency Master Plan

This Task Order ("Task Order") is executed this _____ day of _____, 2025 by and between West Valley Water District, a public agency of the State of California ("District") and Water Systems Consulting, Inc., (WSC) ("Consultant").

RECITALS

- A. On or about _____, 2025 District and Consultant executed that certain Agreement for Professional Services ("Agreement").
- B. The Agreement provides that the District will issue Task Orders from time to time, for the provision of certain services provided by Consultant.
- C. Pursuant to the Agreement, District and Consultant desire to enter into this Task Order for the purpose of setting forth the terms and conditions upon which Consultant shall render certain services to the District.

NOW, THEREFORE, THE PARTIES HERETO HEREBY AGREE AS FOLLOWS:

- 1. Consultant agrees to perform the services set forth on Exhibit "1" attached hereto and by this reference incorporated herein.
- 2. Subject to any limitations in the Agreement and this Task Order, District shall pay to Consultant the amounts specified in Exhibit "2" attached hereto and by this reference incorporated herein. The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit "2," unless additional compensation is approved in writing by the District.
- 3. Consultant shall perform the services described in Exhibit "1" in accordance with the schedule set forth in Exhibit "3" attached hereto and by this reference incorporated herein. Consultant shall commence work immediately upon receipt of a notice to proceed from the District. District will have no obligation to pay for any services rendered by Consultant in advance of receipt of the notice to proceed, and Consultant acknowledges that any such services are at Consultant's own risk.
- 4. The provisions of the Agreement shall apply to this Task Order. As such, the terms and conditions of the Agreement are hereby incorporated herein by this reference.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused this Task Order to be executed effective as of the day and year first above written.

DISTRICT:

**WEST VALLEY WATER DISTRICT,
a public agency of the State of California**

By _____
John Thiel, General Manager

CONSULTANT:

WATER SYSTEMS CONSULTING, INC. (WSC)

By _____

Name _____

Its _____

EXHIBIT “1”
TO
TASK ORDER NO. 1
SCOPE OF SERVICES

The purpose of the scope of services is to outline the tasks that are necessary to complete Water Use Efficiency Master Plan for West Valley Water District (District) per the attached proposal from WSC dated August 28, 2025.



Water Use Efficiency Master Plan

AUGUST 2025

WEST VALLEY WATER DISTRICT





August 28, 2025

West Valley Water District

Melissa Blount
P: 909.875.1804
855 W. Base Line Road
Rialto, CA 92376

Water Systems Consulting, Inc.

3602 Inland Empire Blvd
Suite C 230
Ontario, CA 91764
P: 805.457.8833
F: 805.888.2764

Laine Carlson

Principal in Charge
3602 Inland Empire Blvd
Suite C 230
Ontario, CA 91764
P: 909.483.3200 ext 201
E: lcarlson@wsc-inc.com

Spencer Waterman

Project Manager
805 Aerovista Place
Suite 201
San Luis Obispo, CA 93401
P: 805.457.8883 ext. 102
E: swaternan@wsc-inc.com

WSC understands the project and the services required. We have read and are complying with the terms and conditions of the RFP.

Proposal for Water Use Efficiency Master Plan

Dear Melissa Blount,

Water Systems Consulting, Inc. (WSC) is pleased to present this proposal to provide services to prepare a Water Use Efficiency Master Plan (WUE MP) for West Valley Water District (District). This project supports compliance with California's "Making Conservation a California Way of Life" (CWOL) Regulation, encompassing annual reporting, data identification and management, and programmatic planning, with a focus on compliance, data integration, tool development, and long-term conservation strategies. The District faces a formidable challenge to meet near-term reporting requirements and develop programs to meet a long-term urban water use objective (UWUO) reduction target of at least 30%. A trusted partner is needed to help tackle the challenges of CWOL Regulations compliance. **By partnering with WSC, WVWD will receive:**

Proven Experience. We have been supporting clients across California with work directly relevant to this Project, including the City of Folsom's Water Conservation Needs Assessment, which includes CII Performance Measures (PM) for classification, dedicated irrigation meters (DIMs) and mixed-use meters (MUMs) identification, and Best Management Practices (BMPs) development. This leading-edge project was seen by the State as a model for CWOL Regulation compliance. Additionally, WSC's team has developed CWOL Regulation compliance roadmaps for over a dozen agencies, including WVWD, and continues to provide related follow-up services for some agencies to plan and implement CWOL compliance initiatives. We will leverage insight from this relevant work to create defensible, transparent approaches, tools, and deliverables for this Project.

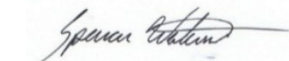
Turnkey Delivery. WSC's team has multi-disciplinary staff with expertise in CWOL Regulation, water-use efficiency, strategic communications, data management, GIS, coding, and utility management systems. Members of our team formerly worked as public utilities conservation and asset management staff, including as a member in the Basin Technical Advisory Committee (BTAC) Conservation Subcommittee, working alongside WVWD staff. We have participated in the State's CWOL Regulation and tools development process as well as California Water Efficiency Partnership (CalWEP) CWOL support initiatives, and we have successfully leveraged that Statewide experience to support our clients with compliance. Our comprehensive understanding and perspectives inform our pragmatic and balanced approach to providing practical deliverables. We will combine Statewide and regional experience with defensible technical analysis and WVWD staff collaboration so that future work can build on the success of this effort.

Trusted Partnership. We have worked with the District on projects that directly inform the WUE MP, including three Urban Water Management Plans, five Water Supply Assessments (WSA), the 2025 Annual UWUO Water Use Report (AWUR), and the Recycled Water Master Plan, amongst other work. Additionally, Madeline Blua and Mary Jo Hartley of the District co-chaired the 2024 Inland Solar Challenge event. Madeline is also the Vice President of the Inland Empire Chapter of WaterReuse. Madeline and Rocky Welborn have served on the board together to inform local agencies on regulations, projects, and provide a forum for collaboration. WSC values its trusted partnership with the District and is committed to supporting the District in navigating the evolving regulatory landscape. We understand the urgency of meeting CWOL requirements and are prepared to mobilize quickly to deliver a comprehensive, compliant, and forward-looking WUE MP.

We appreciate the opportunity to continue working with you. Please let us know if you need additional information or have any questions.

Sincerely,

Water Systems Consulting, Inc.



Spencer Waterman
Project Manager



Laine Carlson
Principal in Charge

WSC Firm Background

WSC's team has been at the forefront of CWOL Regulation development and compliance since its inception. We are a skilled partner that thrives on helping clients navigate CWOL Regulation compliance planning and implementation.

Our multi-disciplinary team, including Blua Consulting LLC, brings together conservation specialists, engineers, planners, analysts, and strategic communicators with a proven track record of delivering turnkey water use efficiency solutions for agencies like the District. Our team's Statewide, regional, and District experience will inform a comprehensive approach for this project aligned with the District's specific needs and positioned for future compliance.

Demonstrated Expertise, Proven Statewide CWOL Qualifications

WSC has developed AWURs and CWOL Regulation Compliance Roadmaps and support for more than a dozen agencies and continues to provide as-needed services for CWOL compliance planning and implementation. AWURs, Roadmaps, and compliance support require collaboration across departments to build a shared understanding of requirements, available or needed data, recommended compliance pathways, budgets, and an actionable plan with schedule, tasks, and milestones. These projects yielded our team's in-depth knowledge of UWUO and CII PM development approaches. Furthermore, WSC team members have extensive water use efficiency planning and implementation experience as former employees of municipal water utilities.

District and Regional Experience

WSC's collaboration with the District on key planning initiatives—including the CWOL Roadmap and AWUR, UWMPs, WSAs, Recycled Water Master Plan, and Strategic Plan—informs our deep understanding of the District's conditions, goals, and regulatory landscape. Additionally, members of our team formerly worked in the region as employees of Yucaipa Valley Water District and Big Bear Lake Department of Water and Power, including serving as a member of the Basin Technical Advisory Committee (BTAC) Conservation Subcommittee, working alongside District staff.

Based on local experience and knowledge combined with our team's statewide experience and industry organizations engagement, our team is uniquely positioned to deliver analysis and materials that are aligned with current requirements and tailored for the District's unique conditions. Additional details about our team's experience are included in Section 7 of our proposal, including an organizational chart, detailed project experience, and bios for our key team members.

About WSC

Years in Business: 17 years

Location of Offices: Ontario | San Luis Obispo
| Folsom | Laguna Hills | San Diego | Portland

Size of Company: 67 employees

Owner: Jeff Szytel

Principal in Charge: Laine Carlson



WSC's team members have helped each of these clients address CWOL Regulation challenges in the past and continues to support most of the agencies.

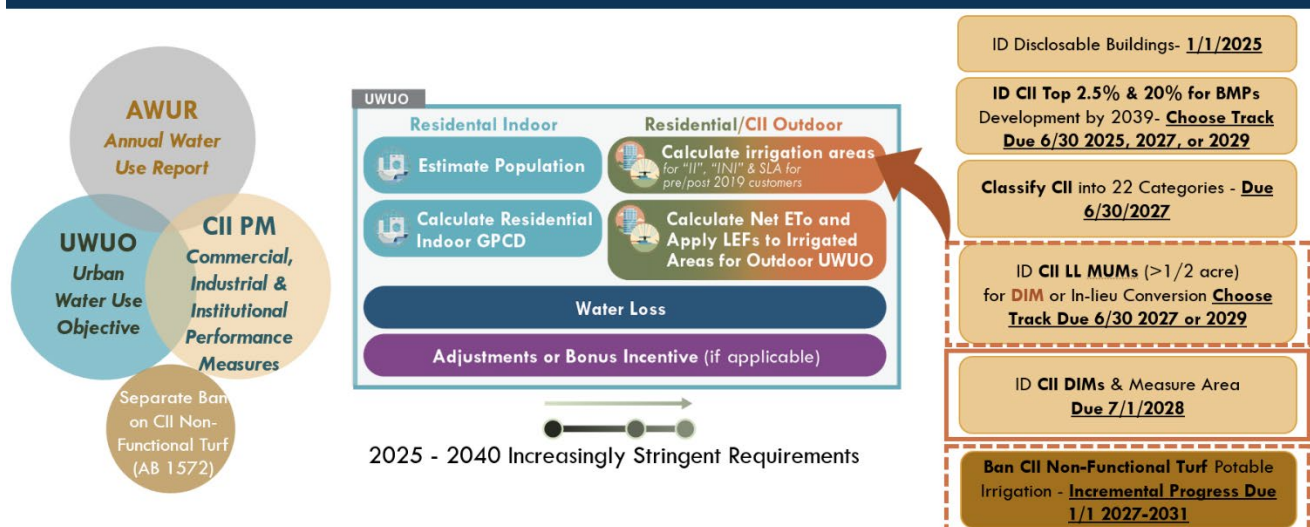
Project Understanding

California's CWOL Regulation mandates that water suppliers conduct a self-assessment and annual reporting of their UWUO and CII PMs, which include CII classification, DIMs and large landscape MUMs (>1/2 acre) identification, top CII users identification, BMPs development, and other PMs (as summarized in the graphic below). This necessitates the development of programs tailored to meet water use efficiency (WUE) objectives and help WVWD achieve an estimated UWUO reduction of at least 30% by 2040. WVWD seeks to develop a WUE MP to define an actionable phased plan to address the unique challenges presented by the CWOL Regulation.

The CWOL Regulation requirements are extremely complex with dynamic analysis, implementation, and compliance milestones. The WUE MP will require effective summaries of complex requirements, reporting, analysis results, and underlying data for ongoing, adaptive compliance. **WSC understands the CWOL Regulation in detail and has successfully communicated its complexities to diverse teams within water agencies using graphics and materials like the one shown below, which was used to guide conversations in CWOL Regulation Roadmap workshops for multiple clients, including WVWD.**

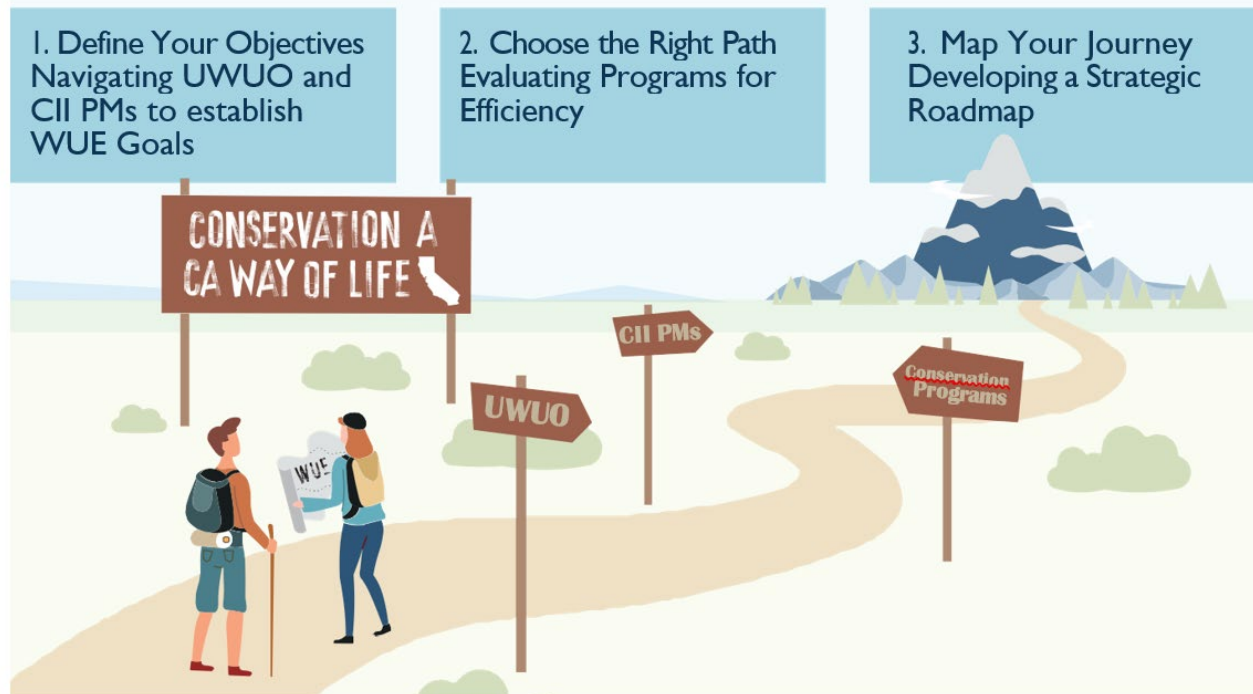
LEF= Landscape Efficiency Factor
II= Irrigable Irrigated
INI= Irrigable Not Irrigated
SLA= Special Landscape Area
MUM= Mixed-use Meter
DIM= Dedicated Irrigation Meter

Summary of Components & Actions to Meet Regulations



The WUE MP effort will include Annual Reporting and Data Identification analysis for establishing and complying with various objectives shown in the table below. To meet these objectives, WVWD needs a Data Management System to aid ongoing analysis, reporting, and Programmatic Planning for the ultimate objective of reducing water use by 30% by 2040.

Short-Term Objectives: Annual Reporting	Mid-Term Objectives: Data Identification & Management System	Long-Term Objectives: Programmatic Planning
<ul style="list-style-type: none"> Annual UWUO Report Water Loss Audit UWUO Optimization Recommendations 	<ul style="list-style-type: none"> CII classification Large landscape MUMs (>1/2 acre) identification DIMs identification Top CII users identification CII PMs Management & Optimization with UWUO 	<ul style="list-style-type: none"> Water savings target & conservation implementation plan Compliance gaps and Standard Operating Procedures (SOP) to meet requirements



Based on our comprehensive understanding of the State’s requirements and the District’s objectives, we have developed an approach to the WUE MP that will tackle the challenges ahead through **three key steps**:

1. Define Your Objectives — Navigating UWUO and CII PMs to establish WUE Goals

It will be critical to conduct thorough investigations to set optimal WUE goals tailored to the District. The State’s regulations have multiple components that each have multiple assessment options and permutations. Our expertise will guide the District in identifying the most appropriate compliance targets for the District, considering options within the State’s guidelines. This foundational step sets a target for WUE objectives in a way that can be dynamically adjusted with new information at key milestones through 2040.

2. Choose the Right Path — Evaluating Programs for Efficiency

Our team will work with the District to assess a broad range of programs — UWUO optimization options, water loss optimization, CII PMs optimization and compliance path options, BMPs/conservation initiatives, policies, staffing, and cost/benefit — to determine the most

effective strategies to achieve the District's WUE objectives. Our analysis will help narrow in on a right-sized menu of options and programs to build a custom and adaptable compliance plan.

3. Map Your Journey — Developing a Strategic Roadmap

Together, we will create a clear roadmap for compliance, outlining short-term and long-term actions to meet WUE objectives. This plan includes flexibility for incorporating new information, regulatory updates, periodic re-evaluation, and adaptive management to ensure continued progress towards your goals.

Project Approach

The District needs a trusted and experienced partner that can address a wide range of CWOL compliance needs, including data identification, reporting, a data management system for ongoing data and reporting updates, and programmatic planning with a focus on progressive compliance and tracking, as well as long-term conservation strategies. WSC's multi-disciplinary team is here to guide you through this complex landscape. To progress through the three key steps, the WSC team will apply our District-specific, regional, and Statewide experience to:

1. **Leverage previous work** to efficiently define and optimize annual reporting objectives by:
 - a. Conducting a thorough assessment of UWUO.
 - b. Evaluating ways to optimize the UWUO.
2. **Apply CWOL Regulation experience** to effectively perform data identification analysis and programmatic planning to reduce water use by:
 - a. Conducting a thorough assessment of CII PMs.
 - b. Evaluating alternative compliance pathways.
 - c. Establishing dynamic tools that track and adapt to evolving data and regulatory milestones as well as inform programmatic planning.
 - d. Assessing existing and potential new programs to reduce water use.
3. **Create an adaptable roadmap for implementation** that includes:
 - a. Practical budgeting and staff planning
 - b. Adaptive implementation steps and procedures

1. Leverage Previous Work

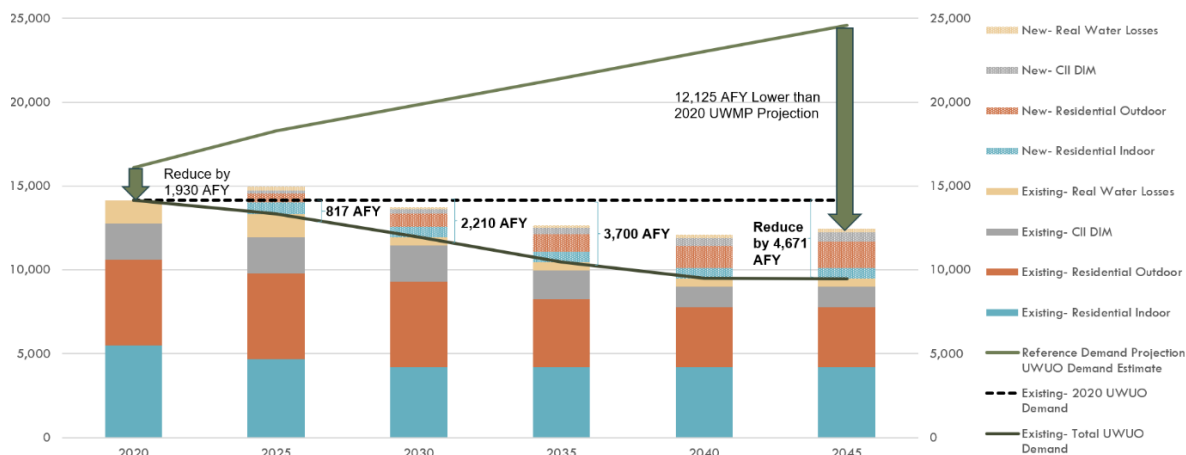
UWUO Approach

Drawing on our familiarity with the District's water use patterns and data resources from previous work, we will efficiently assess and incorporate new information and refine the UWUO. **Preliminary estimates shown in the table below suggest a necessary reduction in water use by at least 30%, subject to further refinement as new CII DIM data is integrated and assumptions are confirmed. Reductions are expected to be largest for outdoor water use, although indoor use and water loss will also require significant reductions.**

	2020	2045	Reduction	Reduction %
Existing- Residential Indoor	5,504	4,192	-1,313	-24%
Existing- Residential Outdoor	5,096	3,580	-1,516	-30%
Existing- CII DIM	2,161	1,215	-945	-44%
Existing- Real Water Losses	1,391	493	-898	-65%
Existing- Total UWUO Demand	14,152	9,480	-4,671	-33%
Existing- Remaining Residential Above UWUO	1,930	0	-1,930	-100%
Total 2020 Actual Demand & Reduction	16,082	9,480	-6,601	-41%

Based on our WVWD CWOL Compliance Roadmap analysis excerpts shown below, the District faces a significant challenge to meet near-term reporting requirements and develop programs to meet a long-term water use reduction target. **The WUE MP must identify multiple approaches to make UWUO compliance more achievable. WSC will build on previous recommendations for UWUO optimization, an alternative compliance pathway of 2% gpcd reduction per year, and exploration of other variances/alternative data. The WUE MP will also further explore realistic conservation programs or other methods such as potential recycled water demand offset.**

UWUO Status Refinement & Projection



Blua Consulting will perform the water loss audit validation and provide recommended improvements as well as the required report for the State. District standards to meet are 19.0 gallons/connection/day (gcd) for real loss and 17.7 gcd for apparent loss. The latest audit report showed 50.2 gcd for real and 15.1 gcd for apparent. Although the deadline for standard adjustment has passed, in special circumstances the State may allow recalculation of standards, which may be worth exploring. This process will entail coordination with District staff to determine potential data discrepancies, known issues, or other potential opportunities to reduce water loss.

A critical component for UWUO optimization is the inclusion of irrigable-non-irrigated (INI) landscape areas, which comprise about 36% of the total potentially irrigated area. The State's

proposal allows up to 20% INI allowance until updated imagery data is available, affecting the UWUO by approximately 494 AFY. If the District can document INI as irrigable-irrigated (II) area this could impact the UWUO by up to 2,470 AFY.

Another key opportunity to increase the UWUO is inclusion of estimated landscape area for new development since 2019. Incorporating this data will require coordination with overlying land use agencies and obtaining their MWELO reporting data.

2. Apply CWOL Regulation Experience

Investigate UWUO & CII PMs Optimization & Compliance Pathways

We will vet multiple data points and assumptions, such as INI issues, using existing tools and new data. This process will identify, calculate, and categorize areas according to their appropriate designation and efficiency standards, maximizing outdoor water use budgets and CII PM implementation track options.

We will use industry resources and our insight to efficiently evaluate the various options to optimize the UWUO. We will assess eligibility and viability of variances, temporary provisions, and potable reuse bonus to recommend which initiatives to pursue to optimize the UWUO. The California Data Collaborative's (CaDC) variance modeling tool can be used to efficiently assess viability of variances. Not all data adjustments or variances yield significant changes to the UWUO and CII PMs, so each component needs to be assessed with sensitivity to the effort it takes for analysis and implementation versus the anticipated benefits.

GIS-based CII classification performed in parallel to MUM and DIM investigation reduces duplicative efforts and offers opportunities to simultaneously identify Special Landscape Areas (SLAs) and NFT. The District's billing and land use data can be leveraged with NAICS or other data sources to categorize and measure landscapes to maximize the UWUO.

A key opportunity for UWUO maximization and CII DIM identification is using new CII and multi-family residential parkways landscape area measurement (LAM) data from the State. This new data can be used to enhance existing residential LAM data to identify more residential landscaped area and SLAs for recreational and common areas.

SLAs receive a more favorable efficiency standard and thus a higher UWUO budget and can be readily identified with a targeted action plan. This effort can happen simultaneously with identifying NFT and CII large landscapes that may require a DIM and water use budget or an in-lieu approach with BMPs. The in-lieu approach could be much more effective and feasible than MUM to DIM conversion considering the District's use of AMI, water budgets, and BMPs. This could also alleviate potential UWUO impacts if the CII DIMs were to be added to the UWUO.

The team will explore CII BMPs and conservation programs to help understand barriers to program participation, including lack of expertise, complex decision-making processes, and limited financial resources. The potential programs can be evaluated using available resources from CalWEP, such as the AWE Water Conservation Tracking Tool, and included as part of the portfolio of programs as discussed in the "Develop New Programs" section. All of these considerations will be taken into

account when evaluating the UWUO and CII PM with consideration of implications for developing conservation programs, which is discussed in the following WUE section.

Depending on how the UWUO is calculated, the District may be eligible for an “alternative compliance pathway” rather than the typical UWUO. Suppliers with a median household income (MHI) that is less than the State MHI and a reduction over 20% to achieve their 2040 UWUO qualify for an alternative compliance pathway. As such, the supplier must demonstrate at least 1% annual per capita reduction (15% from 2025-2040) and develop an implementation plan to do so. Suppliers who have a higher MHI that must reduce usage by over 30% can also pursue an alternative compliance pathway. They would need to demonstrate at least 2% annual per capita reductions in usage (30% from 2025-2040), adhere to AWWA’s G480 standard, develop an implementation plan, and support disadvantaged communities, offering support for the installation and maintenance of climate-ready landscapes, and prioritization of tree health. Considering the District’s required reduction of over 20% or possibly over 30% (depending on UWUO calculation assumptions), the District could be eligible for an alternative pathway. The State would need to be consulted for the applicability of portions of service areas to meet the alternative compliance pathway criteria. Furthermore, the supplementary requirements would need to be investigated to determine if the alternative pathway is more feasible or efficient than the typical pathway.

GIS Based CII Classification, DIMS & MUMs Identification, & Data Management System:

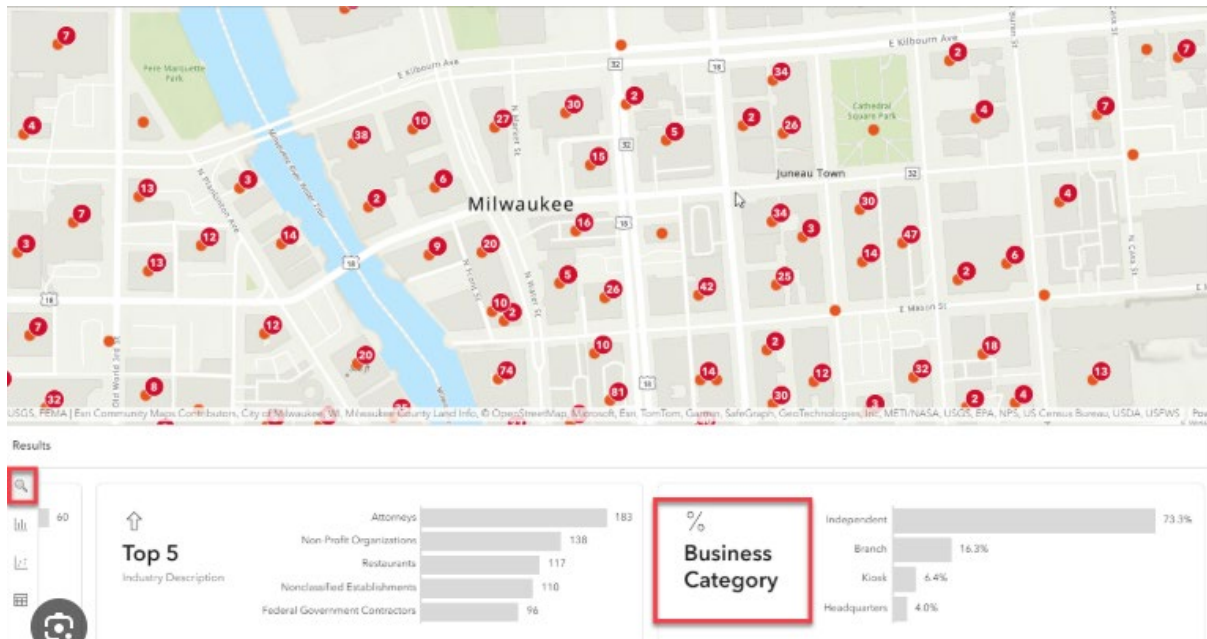
Based on our experience with many agencies’ CWOL Regulations planning and compliance efforts, we understand that while there are industry tools (WaterView, Wavelet, etc.) available to aid in CWOL Regulation compliance, each supplier’s situation is unique and there is often a gap between the industry tool and the actual needs of a given supplier. We have developed custom tools and leveraged existing industry tools to fill that gap and streamline compliance efforts for clients. Based on that experience, we will collaborate with the District to understand needs and constraints so that we can flexibly assess and implement a right-sized toolset. Based on experience working with these resources and through District collaboration, we can use and recommend appropriate tools to develop the WUE MP and for future efforts. **WSC’s proposed custom tools and approach options are described in the following sections for context on our proposed turnkey delivery approach, but we can compare other options with the District to determine the best path forward.**

CII Classification Identification

Classification helps with understanding the demand patterns of various user types to benchmark their potential for making water use more efficient through BMPs. WSC’s approach to CII classification and data identification begins with a clear understanding of regulatory requirements and the need for accurate, defensible data to support the District’s ongoing conservation efforts.

Our methodology utilizes a GIS-based approach that aligns with the District’s existing parcel datasets while maximizing compatibility with future efforts linking billing and meter data to parcels. The classification process involves spatially combining parcel data with the Data-Axle

dataset provided by ESRI using a traceable methodology that allows for delivery of all businesses matching each parcel.



This image above displays Data-Axle CII customer data available through ESRI. Brendan Hamilton performed a similar classification analysis for the City of Arlington, TX as described in the Project Experience section.

NAICS codes for each parcel and CII business match can be cross-walked to the relevant CII classification system categories required for regulatory reporting based on CalWEP's NAICS & EnergyStar Portfolio Manager Crosswalk. The team will compare lower scoring location match confidence parcels with the District's current datasets to streamline the quality control process and enable cost-effective verification.

The Data-Axle dataset with NAICS data, provided by ESRI, has well-documented source data and a transparent, traceable methodology. This proven approach is included as a case study for Moulton Niguel Water District in CalWEP's *A Practical Guide to Classifying CII Water Users in California*. The approach delivers results that include all businesses and NAICS codes matching each parcel, which proves critical for both single-business properties and multi-tenant locations.

Compared with alternative approaches, WSC's proposed methodology provides several distinct advantages:

- Transparency on how classifications are derived with full documentation trails
- Documentation of other potential NAICS match possibilities for comprehensive coverage
- Match confidence scores for each classification to guide quality control efforts
- Ability to update or add new classifications without requiring external tools or services
- GIS dataset deliverables that can be updated and maintained by District staff

WSC implements a traceable process that maintains clear connections between source data and final classifications. This enables the District to verify and explain classification decisions, match to meter data when available, and update the classifications as the customer base evolves.

Quality control is integrated throughout the process. The team will compare parcels with low match confidence scores with the District's current datasets to streamline verification, allowing focus of manual quality control efforts on matches that have greater uncertainty. The team works efficiently by adjusting quality control intensity based on data quality and match confidence scores, providing the District with a defensible classification system that meets regulatory requirements.

DIMs and MUMs Identification

WSC's approach to DIM and MUM identification addresses the challenge of accurately connecting the District's 541 dedicated irrigation meters and potential MUMs over ½ acre with their corresponding landscape areas.

This process transforms billing data, parcel information, and irrigable land datasets into geolocated information that support both regulatory reporting and operational decision-making. The identification methodology begins by creating Meter Service Areas (MSA) using ArcGIS automation scripts that merge adjacent parcels from both state and other land use agencies parcel datasets.

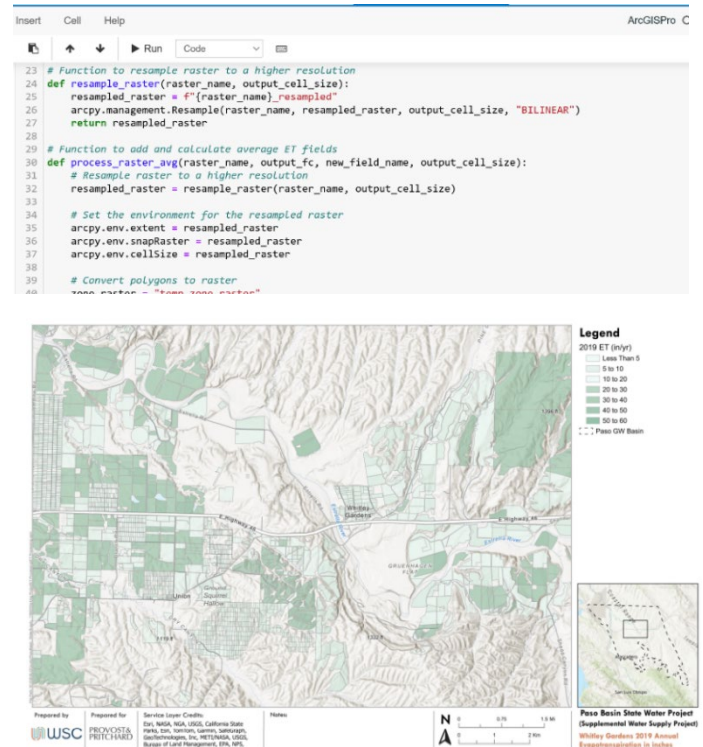
The merging process applies specific attribute selection criteria and spatial analysis to group related properties that share common irrigation systems or landscape area. When both state and land use agencies parcel data are available, the process compares merged datasets to produce high certainty matches and low certainty matches, enabling efficient targeted quality control efforts on areas requiring manual verification.

Meter assignment involves spatially joining meter locations to the derived MSA polygon layer, connecting each meter with its corresponding service area. This step utilizes meter coordinates obtained from GIS or AMI data and applies selection methodologies that account for complex meter-to-property relationships including shared irrigation systems and multi-parcel commercial properties.

The process integrates MSAs with state-provided irrigable land polygons, or Landscape Area Measurement (LAM)/ Land Use Classification Dataset (LUCD) data, based on irrigable land type rules that distinguish between different landscape categories such as turf, trees, and other irrigated vegetation. This integration creates the foundation for calculating irrigation demand estimates and identifying meters that serve landscape areas requiring a DIM classification or large landscape MUM evaluation.

MUM analysis employs billing data examination to verify if meter usage patterns align with an estimated potential budget demand using irrigated area, evapotranspiration, and other factors over specified periods. This analysis provides confidence levels for determining whether meters could be irrigating their associated landscape areas, and if the estimated demand meets the threshold for a typical 1/2 acre or other size area, thereby supporting regulatory classification decisions for which MUMs may be serving large landscapes.

WSC performed a similar GIS-based water demand and budget analysis for County of San Luis Obispo, described in the Project Experience section. The County's process was more complex than the CII DIMs/MUMs identification and database proposed here, but can be tailored to the District's needs if more complex than basic CWOL Regulation compliance.



This graphic from the District's CWOL Roadmap shows conceptual considerations of how billing and GIS data are associated with different irrigated areas and parcel data to determine which areas are associated with DIMs or MUMs

Optionally, since the District has hourly meter data available, WSC can implement enhanced MUM identification approaches that provide higher confidence in irrigation determination by using either a programmatic filter or machine learning model to identify MUM meters with irrigation usage. This effort is not included in the scope but could be added if desired by the District.

Data Management System

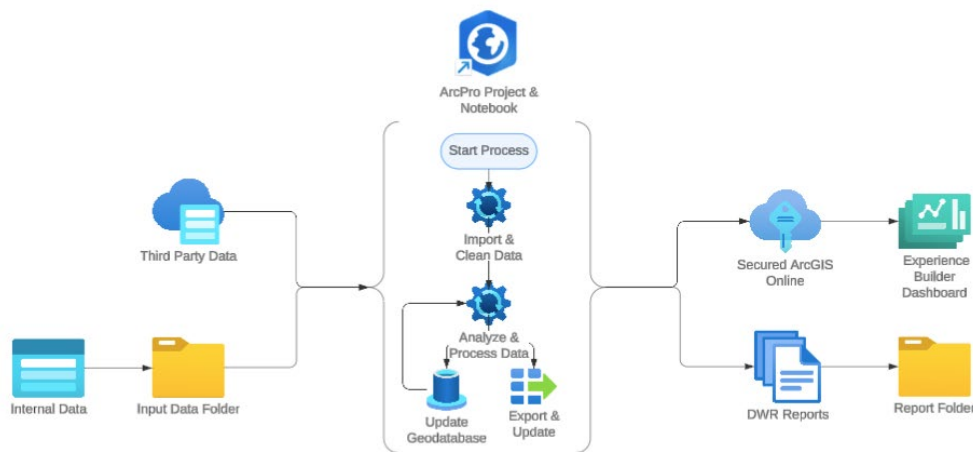
As mentioned previously, WSC's proposed custom tools and approach options are described in the following sections for context. However, we can compare other options with the District to determine

the best path forward. WSC's approach to developing a data management system addresses the challenge of collecting raw information from multiple sources and transforming it into actionable information that will help the District access key insights for enhanced decision making.

The District possesses datasets from billing systems, GIS infrastructure, conservation program tracking, and regulatory reporting that currently exist as separate information silos. Our tailored approach provides West Valley with greater value and a more nuanced understanding of this information while creating an integrated system that is easier to update than complicated software solutions.

WSC's proposed data management framework utilizes the District's existing ArcGIS infrastructure to create GIS automation scripts within ArcGIS Pro Notebooks that automatically import data from specified locations. These locations include the District's dedicated irrigation meter datasets, billing system outputs, conservation program tracking spreadsheets, and third-party data sources (e.g., the State's Open Data Portal tied to their AWUR tool template) including ET and demographic information.

Built-in data cleaning algorithms identify and resolve common data quality issues before analysis begins, creating transparent audit trails that support State reporting requirements. The processing framework generates standardized DWR-compliant reports and tables in Excel format at target output locations specified by District staff.



This graphic displays the proposed ArcPro based data management process.

A customized ESRI Experience Builder application serves as the primary interface, providing conservation professionals with an intuitive web-based dashboard that requires no GIS expertise to operate effectively. The interactive dashboard provides insights into customer efficiency trends and conservation program effectiveness that support data-driven decisions about program modifications and resource allocation. The data is secured by ESRI.

The modular architecture accommodates future regulatory changes and program expansions while integration capabilities support additional data sources and analytical models as requirements evolve.

The WSC team will develop Standard Operating Procedures for the Data Management System that allow District staff to update internal and third-party data sources, refresh analyzed

datasets, generate new State reports, and update the Experience Builder application. These procedures will provide easy to understand step-by-step guidance for incorporating new customer data, updating conservation program participant lists, and generating updated regulatory reports as requirements evolve.

Analyze Existing and New WUE Programs

The first step will be to meet with the District to gain information on both the service area and existing conservation programs. The WSC team will examine WUE programs performance, budgets, and staff or consultant resource requirements, as well as customer feedback, response, and barriers. We will assess which existing programs meet CII BMP requirements and where gaps need to be filled. The team will examine water use data by sector, housing, socio-demographic, and land use data for the District's service area to determine saturated, efficient areas or customer types and those that have potential for further water use reductions. These characteristics will directly inform conservation program analysis and recommendations.

The team will work with the District to identify partnership opportunities that can further the implementation of cost-effective conservation programs. These opportunities include state programs, energy efficiency programs, and regional water agency collaborations, such as with the Basin Technical Advisory Committee (BTAC) Conservation Subcommittee.

Screening criteria for programs will be developed with the District to consider a broad range of factors and potential viability of programs. Potential criteria include:

- Total budget
- Fit with District's overall goals and plans
- Market opportunity
- Cost-effectiveness
- Available resources to implement
- Customer receptivity
- Certainty of water savings
- CII BMP overlap
- Ease of operation
- Drives market transformation or social response
- Potential partnerships and outside funding availability
- Additional benefits (i.e. watershed improvements)
- Compliance with the UWUO

Existing and potential programs will be rated for each program's ability to deliver desired outcomes. The end goal will be to determine 1) specific market opportunities, 2) successful existing program delivery mechanisms, 3) available resources, and 4) potential partnerships.

The next step involves the identification of potential new conservation measures, including CII BMPs and NFT replacement. We will evaluate overlap with CII BMPs and opportunities to achieve CII PMs compliance efficiently along with other conservation programs. Potential measures will be screened for applicability to the District's service area based on knowledge of customer water demand, market readiness, cost-effectiveness, potential vendor outreach, and input from the District.

The programs could be evaluated using the Alliance for Water Efficiency's Water Conservation Tracking Tool (AWE Tracking Tool) to perform the benefit-cost analyses of all programs under consideration. Using key drivers from the District's service area, the model quickly estimates annual

total water savings and costs by season, as well as economic benefits, unit costs, benefit-cost ratios, and water bill impacts for individual programs or groups of programs. The model also allows easy comparison of the savings and cost impacts of multiple water use reduction scenarios.

The full set of programs, existing and new, will then be systematically screened and ranked using evaluation criteria established with the District. The final list of programs will include programs with maximum opportunity for savings, high cost-benefit, and UWUO compliance. In addition, successful education, information, and customer outreach/engagement programs will be identified.

The team's next task is to design a model of selected programs to achieve the reduction goals, specifically to meet the UWUO. This will include the known residential reduction requirement and a modeled CII DIM reduction. The team will conduct an analysis that includes the selected programs, forecasted annual activity, and the estimated costs to achieve the required water savings. The model will also assess the cost-effectiveness of individual measures and the overall portfolio.

The deliverable will be a user-friendly tool and brief set of findings that can be used by District staff to understand highest-priority next steps to prepare for compliance and communication. The team will also support District staff in sharing the findings with a priority stakeholder group, such as District management or the Board.

3. Create an Adaptable Roadmap for Implementation

Practical Budget and Staff Planning

The WSC team will collaborate closely with District staff to thoroughly evaluate resources necessary to successfully comply with the CWOL Regulation, NFT requirements, and implementing conservation programs to achieve the UWUO. Our comprehensive approach includes assessing staff time, costs, coordination with other agencies, financial incentives, and barriers to implementing CWOL Regulation components and related actions.

Adaptive Implementation Steps and Procedures

We will develop a comprehensive adaptive implementation plan to guide the District in executing the recommended conservation programs and ensuring compliance with the State's dynamic CWOL Regulation. This plan will outline clear, actionable pathways to implement the preferred UWUO and CII PMs actions, as well as WUE programs to achieve the District's established goals. The plan will be structured to include both short-term and long-term guidelines, making sure immediate steps are taken to begin the conservation journey while setting the stage for sustained efforts over time. The plan and its associated toolset will be flexible, allowing the District to incorporate updated information, periodic re-evaluation, and adaptive management. This adaptability will enable the District to respond effectively to new data, regulatory changes, and evolving conservation needs, leading to continued progress and compliance in the face of dynamic conditions.

By leveraging our expertise and flexible toolset, WSC will guide the District in meeting its WUE and conservation goals confidently and efficiently.

WSC substantially concurs with the Scope of Work from the RFP, however suggested modifications and assumptions (in blue text) for the proposed tasks are provided below based on experience performing similar tasks. Proposed reorganization of tasks while maintaining RFP scope content is shown in green text.

Task 1: Project Management

This task is expected to last the duration of the project and will be completed by June 2026 from the date of the executed Notice to Proceed document. The following shall be incorporated into this task:

- Upon receipt of a written Notice from AGENCY, the Consultant will schedule an in-person project kickoff meeting with AGENCY's staff to present their understanding of the scope of the project, anticipated project schedule, and deliverables. The project schedule shall include each task, subtasks, milestones, critical path designation, and a schedule for holding progress meetings.
- The Consultant shall coordinate and lead a monthly meeting/workshop to review project progress, discuss project challenges, manage expectations, and answer questions from AGENCY staff. Consultant is responsible for organizing these meetings, either via teleconference or in-person, including preparing an agenda, compiling meeting minutes, and distributing the minutes to all attendees as required. These meetings can be held through a virtual meeting platform.
- The Consultant will prepare monthly progress reports and invoices.

Assumptions:

- Project duration is nine months.
- If additional coordination or meetings are needed, they will be performed under the budget for Task 5 as General Technical Support.

Deliverables

- ☐ Initial and regularly updated Project Schedule
- ☐ Kick-off and Biweekly Monthly Meeting Agenda and Meeting Minutes
- ☐ Monthly Project Status Reports and Invoices

Task 2: Annual Reporting

This task involves completing this years (FY 24/25) Urban Water Use Objective (UWUO) reports.

- Develop basic annual calculation of supplier objective for annual reporting for comparison to supplier objective related data.

- This task includes residential outdoor and indoor water use, dedicated irrigation meter connection water use and system “real” water loss. Variances, potable reuse bonus and temporary provisions are included in a subsequent task. ~~Additionally, a supplier may also require the consultant calculate objective related supplier data and water loss audit data for comparison.~~
- Additionally, the Consultant will perform a Level 1 Water Loss Audit Validation report for calendar year 2024 with two weeks minimum for AGENCY staff review.
- Evaluate eligibility ~~and prepare submission documentation~~ for variances, temporary provisions and potable reuse bonus.
 - AGENCY To Do: List of potential options a supplier is interested in pursuing and why. ~~Potential options could include the following:~~
 - Interest in updating datasets, such as LAM and other datasets, due to growth and other factors and obtaining potential variances.
 - Potential temporary provisions include: Negative impacts to wastewater collection, treatment, and reuse systems, Planting of new, climate-ready trees, and Establishment of qualifying landscapes (temporary irrigation for low-impact development, ecological restoration and mined-land reclamation projects)
 - Potential variances include: Significant use of evaporative coolers, populations of horses and other livestock, Controlling dust on horse corrals or other animal exercise arenas, Irrigating agricultural landscapes that are within residential areas but have not been classified as irrigable irrigated by the Department, Responding to emergency events, not including drought, Supplementing ponds and lakes to sustain wildlife as required by existing regulations or local ordinances and Irrigating existing residential and CII landscapes with DIMs trees.
 - Potable reuse bonus includes: suppliers that deliver water from groundwater basin, reservoir or other source that is augmented by potable reuse water. The bonus is capped at 15% or 10% depending on the facility.
 - ~~CONSULTANT To Do: Assess eligibility and viability of variances, temporary provisions and potable reuse bonus. Additionally, assess other potential ways to optimize the UWUO. Provide recommendations on which initiatives to pursue to optimize the UWUO. Identify key gaps in the current data sets and recommend methods to fill gaps and integrate data in the future.~~
- Develop and submit annual Urban Water Use Objective Report.

Information Required:

Supplier Provided Data	Data Created by Consultant
Service Area Population	Studies/Surveys related to Variance calculations (AGENCY provides a list of data that AGENCY does not have) UWUO Optimization Recommendations
Residential Landscape Area Measurement (identify source – DWR or alternative data)	
Effective Precipitation (identify source – DWR or alternative data)	
Evapotranspiration (identify source – DWR or alternative data)	
Water loss audit data	
Specialized landscape area information and measurements	
Dedicated irrigation meter (DIM) accounts number	
Dedicated irrigation meter (DIM) landscape area (include SLA areas) and/or estimated average landscape area (identify source – DWR or alternative data)	
Standard calculations from the CWOL regulation and water loss standards from the State Water Board water loss webpage	
Supplier meter data	
Past annual objective reports	
Disclosable buildings	
CII BMP program descriptions	

Deliverables

- ☐ Draft annual Urban Water Use Objective Report with two weeks minimum
- ☐ for AGENCY staff review.
- ☐ Annual Urban Water Use Objective Report that meets the requirements of the regulation and is formally approved by DWR/SWB.

- ☒ ~~As applicable: Documentation meeting all regulation requirements and is formally approved supporting Alternative Data; Documentation supporting variances, temporary provisions, and potable reuse bonus.~~
- ☐ UWUO Optimization Recommendations

Task 3: Data Identification

The following shall be incorporated into this task:

- Classification of all CII accounts by the Energy Star Portfolio Manager categories plus landscape with Dedicated Irrigation Meters (DIMs), laundries, water recreation and car wash
 - If classified by another method, describe the method and provide information to help with cross walking.
 - If accounts are partially categorized, provide information on number of classified accounts versus non classified accounts.
 - Include any other available information like private business classification data that may have been purchased to assist with this task.
 - Utilize GIS to link billing and meter data to parcels and business data categorized by North American Industry Classification System (NAICS) codes.
 - Spatially combine the NAICS dataset with each parcel and meter.
 - Provide NAICS codes for each parcel, meter, and CII business point(s) match, which can be cross-walked to the relevant CII classification system categories required for regulatory compliance based on California Water Efficiency Partnership's (CalWEP's) NAICS & ESPM Crosswalk (CII Crosswalk).
- Develop Landscape area measurement for CII dedicated irrigation meters (DIMs) and identification of CII mixed-use meters (MUMs) with landscape area over 0.5 acre
 - Review and interpret the State's CII landscape area measurement (LAM) and land use classification data (LUCD) including identification of potential nonfunctional turf (NFT) areas
 - Create Meter Service Areas (MSAs)
 - Spatially group nearby parcels using parcel data from the state, county, and City based on a subset of parcel table attributes and spatial selection criteria.
 - Link Meters to MSAs
 - Match water meters to these service areas based on location.
 - Combine MSAs with State's LAM/LUCD Irrigable Land Data
 - Connect the service areas to known irrigable land areas.
 - Analyze Mixed-Use Meters

- Use water use and land data to check if meters are likely used for irrigation based on actual use versus a calculated water use budget.
 - Filter and Finalize Results
 - Remove meters not used for irrigation and identify heavy water users.
 - Assess and recommend potential ways to optimize the UWUO, CII Performance Measures (PM), and NFT compliance based on CII classification and DIMs/MUMs identification.
 - Identification of residential special landscapes and landscape area measurement for those areas that can be assigned an LEF of 1.0.
 - Identify all (potential) CII/HOA/Community nonfunctional turf ~~and evaluate implementation of removal/replacement.~~
 - This task includes using aerial imagery ~~from the State~~ and other supplier provided information to identify nonfunctional turf (NFT) landscapes in a supplier's service area. NFT is defined by and applies to properties identified in Assembly Bill 1572 (which is also included as a requirement in the regulation), which bans the irrigation of NFT with potable water starting in 2027 for some property types and expands to other property types at later dates.
- ~~AGENCY To Do:~~
- Summarize Standard Operating Procedures for future identification of CII DIMs, MUMs, SLAs, and NFT

The Consultant shall also provide the raw data files for all data collected in a format compatible with Esri ArcGIS and Excel. The Consultant shall provide AGENCY with post-processed data. The Consultant shall provide all collected data following completion of data cleansing, accuracy validation, and quality checking to AGENCY in an Esri ArcGIS file geodatabase complete with all attributes and metadata in accordance with AGENCY's Standards.

Information Required:

Supplier Provided Data	Data Conducted by Consultant
List and/or total number of DIM landscape accounts from billing system	Identify DIMs
Water use data for each DIM account for at least 3 years	Estimating DIMs landscape area in square feet
DWR data (CII DIM, Pool landscape area)	Identifying any special landscape areas in square feet
Any additional location data besides publicly available county or city provided parcel data	Documentation of Additional imagery data used for analysis (<Info needed: Resolution preference, time of year and

	year flown>) & deliverable categories (<Info needed: irrigable, irrigated, both>)
Any additional imagery data besides publicly available data from DWR.	Info Needed: Online task (only use digital resources) or mixed online/ground truth task (digital and on the ground resources)
Staff available to ground truth and/or investigate	Assist with identification of SLA areas, such as slopes, natural ponds or lakes, edible gardens
List and/or location of cemeteries, botanical gardens/arboretums, public and private parks/sports fields and public pools within the service area.	Potential CII/ HOA/ Community nonfunctional turf areas
Number, location, customer name of all CII connections (organized by DIM, SLA, MUM, recycled water connections, and any existing CII classifications) and supplier system map.	

Assumptions:

CII Classification

- Approximately 1,746 CII connections will be analyzed and classified.
- Because data quality of the specific parcels and meter data and potential matches to NAICS information are unknown until reviewed and processed, it is assumed that 20% of connections (349 of 1,746 total connections) will require manual confirmation via assessment of parcel attribute data, internet search, internet mapping, aerial, and/or street view services as well as coordination with the District. Estimates are based on unknown data conditions and corresponding ability to create automated links between customer, NAICS, and parcel data. Poor data condition may require more as-needed coordination
- California Water Efficiency Partnership's NAICS & ESPM Crosswalk will be used to assign classification categories per CCR § 972 categories.
- The budget includes expenses for Data-Axle dataset with NAICS data, provided by ESRI.
- If additional coordination or meetings are needed, they will be performed under the budget for Task 5 as General Technical Support.

DIMs, MUMs, SLAs, & NFT Identification

- Approximately 1,746 CII connections' water billing and location data will be provided with readily used meter location data in a standardized format and quality that doesn't require manually adjusting address names, spelling, punctuation, abbreviations, or syntax.
- State-provided LAM/LUCD data will be provided and utilized. Alternative imagery or geoprocessing of imagery will not be developed as part of this scope of work. For irrigated areas with tree canopy coverage, the canopy

area will be used and further adjustments for actual irrigated areas below the canopy will not be developed.

- Because data quality of the specific parcels, meter data, and State-provided LAM/LUCD data are unknown until reviewed and processed, it is assumed that 20% of CII DIMs (108 of 541 DIMs) and 20% of CII MUM connections (241 of 1,205 MUM connections) that could be large landscapes (>1/2-acre), will require manual confirmation via assessment of parcel attribute data, internet search, internet mapping, aerial, and/or street view services as well as coordination with the District for ground truthing. Estimates are based on unknown data conditions and corresponding ability to create automated links between customer, NAICS, and parcel data. Poor data condition may require more as-needed coordination.
- If additional coordination or meetings are needed, they will be performed under the budget for Task 5 as General Technical Support.

Deliverables

- ☐ Classified customers, DIMs, and MUMs supporting data in GIS and Excel workbook files will be provided per State submittal requirements.
- ☐ SLA Landscape Area data in raw files, post-processed GIS shapefiles, and excel (includes aerial imagery, landscape area data) defined at the Meter/Premise level.
- ☐ CII Non-Functional Turf customer accounts and square footage data in raw files, post-processed GIS shapefiles, and excel (includes aerial imagery, landscape area polygon data) defined at the Meter level. If aerial imagery is available from the Agency or the State, that data will be provided.
- ☐ CII Optimization Recommendations
- ☐ Standard Operating Procedures for future processes to streamline new customers (in defining landscape area, SLA, CII Classification)

Task 4: Data Management System.

Agency recognizes that the datasets already possessed by the Agency, in addition to those obtained by the Agency pursuant to this proposal and/or obtained from third party sources must be capable of being stored, managed, analyzed and combined in ways so as to provide useful information, not just raw data. Otherwise, the data procured hereunder will be of limited value and usefulness in supporting the Agency's goal of complying with the mandates of California's Conservation as a Way of Life regulatory framework. This task involves the provision or creation of a software or electronic system that:

- The GIS based data management system will allow for simple cleaning and processing of data using automations that only require simple inputs from District staff.
- Assists in the creation of reports required to be provided to the State.

- Corrects as necessary, and prepares for integration, multiple datasets that are provided by the Agency, and that are developed hereunder and obtained from other sources, including, for example ET and demographic data.
- Stores these datasets in a file geodatabase located on the District's secured network and integrated with the District's secured AGO instance and integrates them with calculation and analytic capabilities to dynamically monitor water use efficiency over time for the agency, for specified groups and for each individual customer. This information allows an understanding of EFFICIENCY and not just QUANTITY used, thereby providing a means to accomplish conservation objectives established hereunder in the most targeted, cost-effective manner with a minimum of revenue loss and cost incurred per water conservation quantity achieved.
- Allows the tracking of conservation programs and individual cohorts of program participants over time to determine the effectiveness of individual conservation efforts.

Assumptions:

- If additional coordination or meetings are needed, they will be performed under the budget for Task 5 as General Technical Support.

Data and Reports

- Raw data to be used as input will maintain the current format.
- Raw data quality is sufficient to support cleaning algorithms.
- The District will provide file paths to input and output file locations.
- Third party data required for ongoing updates will be retrieved by the District and placed in a folder for tool consumption.
- DWR tables will match the current format.

Experience Builder

- The District will allow WSC access to one ESRI AGO account so that the Dashboard can be constructed within the District's AGO directly. Other methods for access can also be discussed with the District.
- The Experience Builder Dashboard will contain no more than 2 pages.
- Staff trigger the update automation and publish the resulting features to AGO as needed and as laid out in the step-by-step SOP

Deliverables

- ☐ ESRI file geodatabase containing all compiled data including raw, cleaned, and processed.
- ☐ ArcGIS Pro Notebook or Toolbox
- ☐ that performs data cleaning and processing.
- ☐ ESRI Experience Builder Dashboard up to 2 pages.
- ☐ Step-by-Step standard operating procedures.

Task 5: Programmatic Planning

The following shall be incorporated into this task:

- Estimate water savings needed to comply with objective at major regulation milestones including 2040.
 - Analysis of a supplier's compliance status at major regulation milestones (2025, 2028, 2035, 2040, etc.) based on currently available data like meter data and projected data like future weather, future population trends, future customer demand, future customer participation in programs, etc. Activities can include efficiency programs, customer outreach, marketing strategies, customer information services, leak detection and repair, etc.
 - Identify potential but currently unused variances, temporary provisions or bonus incentives.
- Identify projected overall CWOL regulation compliance gaps and recommend activities to achieve compliance.
 - Include suggestions for conservation and water use efficiency budgeting for long-term compliance
- MUM implementation evaluation – DIM versus in lieu technology plus BMPs.
 - This task assumes MUM landscape areas over 0.5 acres have already been identified and moves forward to evaluate if a supplier should install new dedicated irrigation meters or implement in lieu technology plus BMPs as outlined in the regulation.
- ~~• Identify all (potential) CII/HOA/Community nonfunctional turf and evaluate implementation of removal/replacement.~~
 - ~~○ This task includes using aerial imagery and other supplier provided information to identify nonfunctional turf (NFT) landscapes in a supplier's service area. NFT is defined by and applies to properties identified in Assembly Bill 1572 (which is also included as a requirement in the regulation), which bans the irrigation of NFT with potable water starting in 2027 for some property types and expands to other property types at later dates.~~
- Building on Task 3, evaluate compliance with Assembly Bil 1572 and potential impacts from implementation of nonfunctional turf removal/replacement.
- 54 hours of Ggeneral technical support for various related tasks.

Information Required: (Additional information required, not listed in Task 2 and 3):

Supplier Provided Data	Data Conducted by Consultant
------------------------	------------------------------

Service area population projections out until desired analysis date	Assist in defining evaluation criteria for MUM to DIM implementation
Projected estimates of real water loss out until desired analysis date	Identify in-lieu options available to AGENCY
CII DIM landscape area measurement data (if available)	Identify already offered BMP options for the in-lieu option
Baseline establishment demand to anchor water savings estimates	Identify timeline considerations of when to start to meet 2039 deadline
Average weather estimates for effective precipitation and evapotranspiration	
MUM to DIM estimated costs	References for water savings of various rebate programs (published studies, etc)
Top CII account classifications based on preferred implementation track.	Assist in defining compliance goals by objective component and overall compliance.
Currently offered rebate and other programs (supplier, regional, statewide)	Draft resolution and/or ordinance for AGENCY to adopt to stop new installations of Non-Functional Turf on CII customers comply with AB 1572
Current outreach, education, and/or technical assistance efforts provided by the supplier to CII customers	Aerial imagery for non-functional turf analysis if available from the Agency or the State. Potential nonfunctional turf areas.
Previous evaluation of rebate programs in terms of participation, rebate amounts, water savings, saturation studies, etc (providing insights on unsuccessful activities)	
Conservation and water use efficiency implementation budget (near term and long term)	
Number of customers in each of the 22 CII account classifications	

Deliverables

- ☐ Technical Memo estimating long-term compliance to conservation regulation, overall conservation regulation compliance gaps, and recommend activities to achieve compliance

- ❑ ~~Business Case~~ Evaluation and recommendations for MUM implementation (DIM vs In-Lieu), including a proposed implementation schedule
- ❑ ~~CII Non-Functional Turf customer accounts and square footage data in raw files, post-processed GIS shapefiles, and excel (includes aerial imagery, landscape area data) defined at the Meter level.~~
- ❑ Recommendations and supporting data for compliance with Assembly Bil 1572 and potential impacts from implementation of nonfunctional turf removal/replacement.

1.1.1.1.1 PROPOSER IDENTIFICATION FORM

1. Legal name of Proposer: Water Systems Consulting, Inc.
2. Proposer's Street Address: 3602 Inland Empire Blvd, Suite C 230, Ontario, 91764
3. Proposer's Mailing Address: 3602 Inland Empire Blvd, Suite C 230, Ontario, 91764
4. Proposer's Business Telephone: 805.457.8833
5. Proposer's Fax Number: 805.888.2764
6. Proposer's E-mail Address [All requests will be sent to this location]: lcarlson@wsc-inc.com
7. Type of Proposer:
☐ Sole Proprietor ☐ Partnership ☒ Corporation* ☐ Other
If corporation, indicate State where incorporated: WSC is an S-Corporation incorporated in the State of California
8. Proposer Federal Tax Identification Number: 26-1507694
9. Proposer's Project Manager: Spencer Waterman

* If the Proposer is a corporation, enter state or country of incorporation in addition to the business address and include an incumbency certificate executed by a Secretary thereof in the form set forth on the following page listing each officer with signing authority and its corresponding office. If the Proposer is a partnership or joint venture, attach full names and addresses of all partners or joint venturers, as well as incumbency certificates for each general partner and joint venturer. If the Proposer is a joint venture or general partnership, furnish a letter from each general partner or joint venturer stating that the respective partner or joint venturer agrees to be held jointly and severally liable for any and all of the duties and obligations of the Proposer under the Proposal and under any contract arising therefrom. Include evidence of signature authority in the Proposal.

PROPOSER'S REFERENCES

COMPANY	ADDRESS	TELEPHONE	CONTACT	TYPE OF WORK
City of Folsom	50 Natoma Street, Folsom, CA 95630	(916) 461-6161	Marcus Yasutake	Water Conservation Needs Assessment (Spencer Waterman)
Bay Area Water Supply and Conservation Agency	155 Bovet Road, Suite 650, San Mateo, CA 94402	(650) 349-3000	Danielle McPherson	CWOL CII BMP Outreach (Sierra Orr)
City of Oxnard	251 South Hayes Avenue, Oxnard, California 93030	(805) 200-5375	Abraham Maldonado	Water Conservation, Regulatory, & Technical Assistance Services (Spencer Waterman)
Yucaipa Valley Water District	12770 Second Street, Yucaipa, CA 92399	(909) 790-3301	Jennifer Ares	Urban Water Use Objectives Reporting (Madeline Blua)

LIST OF SUBCONTRACTORS

Name of Proposer: Water Systems Consulting, Inc.

Proposer shall use this sheet to list those subcontractors who shall perform work on the Project that are required to be listed by Public Contract Code Section 22160, et seq., and the “Subletting and Subcontracting Fair Practice Act” set forth in Public Contract Code Section 4100, et seq. All subcontractors not listed below shall be awarded by the Proposer in accordance with the process set forth in the Agreement.

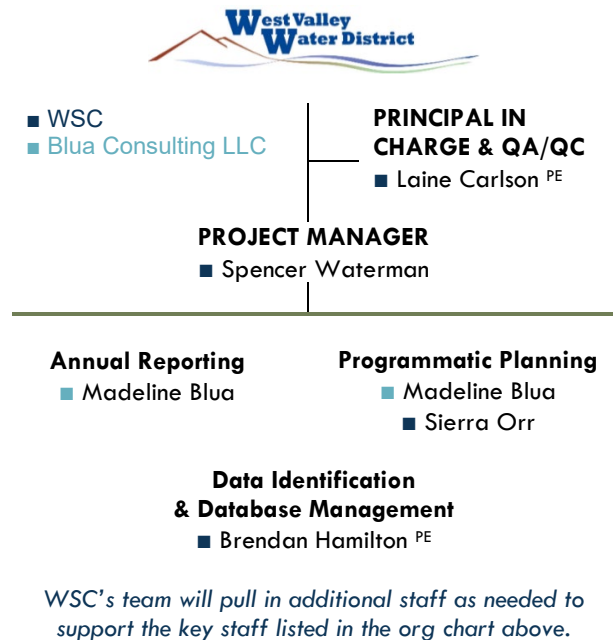
Subcontractors Name	Address of Main Office	Description of Work	CA License No.	DIR No.
Blua Consulting LLC	301 9th St, Suite 100-145, Redlands, CA 92374	Blua Consulting specializes in supporting the technical and regulatory needs of the water agencies. We provide comprehensive services from water loss audits and project management to complex compliance reporting, delivering precise, actionable results that empower your utility to thrive.	202462614233	N/A

Meet our Team

WSC's team members are experts in water use efficiency planning that align with state regulations and standards.

Our team is organized to work collaboratively with the District to apply proven approaches, state-of-the-art tools, and knowledge-driven innovation to deliver outstanding results.

Our team has been at the forefront of the CWOL Regulation framework. We have developed custom tools and leveraged tools and resources from Esri, California Data Collaborative, CalWEP, AWE, and others to streamline compliance efforts for clients. Based on experience working with these resources and through District collaboration, we can use and recommend appropriate tools to develop the WUE MP and for future efforts.



Spencer Waterman | San Luis Obispo, CA

WSC's proposed Project Manager is Spencer Waterman. Spencer has 15 years of experience in water resources planning, bringing expertise in CWOL Regulation and related regulatory reporting compliance. Spencer has participated in the State's development of CWOL Regulations and reporting tools and leveraged his insight to support clients' compliance efforts throughout the State. Additionally, he has worked with the District on several projects including your UWMPs, WSAs, Recycled Water Master Plan, AWUR, and CWOL Roadmap. His CWOL expertise and District knowledge

allow him to efficiently guide and deliver a successful project.



Laine Carlson ^{PE} | Ontario, CA

WSC's Principal in Charge is Laine Carlson, who has experience specializing in recycled water and water resources planning. She has worked with the District on several projects including your UWMPs, WSAs, Recycled Water Master Plan, AWUR, and CWOL Roadmap. Laine will leverage her District knowledge and proven project delivery expertise to guide this project in close collaboration with the district to deliver an actionable WUE Master Plan.



Brendan Hamilton^{PE, PWAM} | Ontario, CA

Our proposed Data Identification and Database Manager, Brendan Hamilton, is a former public utility employee with a decade of experience in water data management. He developed the City of Arlington, TX CII Water Usage Classification System and categorization process. It was there he developed the process to keep CII categories updated in the billing database and developed and implemented processes to use AMI, billing, and CII classifications for hydraulic modeling and CII demand estimation purposes. Brendan's public utility engineering experience is complemented by technical expertise with GIS, coding, utility asset management systems, and data analytics, which will result in robust and valuable CII classification and DIMs/MUMs identification as well as a data-driven toolset for future reporting.



Sierra Orr | Ontario, CA

Sierra Orr has 25 years of communications experience including 11 years in the water industry. She has developed and implemented water conservation management plans and programs and provided strategic communications support to clients throughout the State. Her experience working for a public water agency means that she has been involved in BMP evaluation, design, and program implementation from nearly every perspective. Sierra will leverage her unique insight to provide programmatic planning deliverables that are actionable and positioned for adaptability.



Madeline Blua | Redlands, CA

Madeline Blua is an experienced water resource consultant with a decade in the public sector and six years' experience in water resources. Five of those years Madeline worked at Yucaipa Valley Water District where she led the District's AWUR among many other projects. She specializes in strategic water project planning, technical analysis, and engaging stakeholders. With a deep understanding of state regulations and formerly working for a public water agency, Madeline is skilled at helping agencies navigate the challenges of water resource management, from integrated planning to conservation and drought preparedness. Her expertise includes preparing and validating key regulatory reports such as Water Loss Water Audits, UWUO, AWURs, UWMPs, Annual Water Supply and Demand Assessments, and SAFER Drinking Water reports. Madeline is also a current participant of the CalWEP, CII Task Force.

Resumes for key staff are included at the end of our proposal.

Project Experience

WSC's team members have comprehensive experience and expertise to analyze and implement water conservation.

Water Conservation Needs Assessment

City of Folsom

Folsom's Water Conservation Needs Assessment assesses its UWUO and CII PMs to inform development of locally appropriate programs to achieve water-use efficiency goals and provide an adaptive plan for implementation initiatives. The project includes coordination with DWR staff as a project stakeholder and includes a comprehensive assessment of Folsom's water consumption patterns, identifying inefficiencies and proposing tailored strategies to align with the stipulations outlined in AB1668, SB606, and CWOL Regulation. In addition, the project evaluates a customized approach to replace all non-functional turf to comply with AB1572.

The project includes a similar scope to the District's, including a beginning-to-end process addressing all aspects of the CWOL Regulation and continued compliance maintenance. One deliverable for future City staff data collection and reporting includes an Excel-based tool with standard operating procedure (SOP) guidance to update the UWUO and AWUR each year and track performance over the years. This project experience gives WSC insight into what deliverables will be the most helpful for the District to build on. WSC collaborated with Folsom on their initial effort to manually conduct CII classification, which resulted in a shift to using a partnering consultant's AI-driven tool. Based on this process, we defined different CII classification and BMP development methods and then developed our own differentiated and transparent approach and tools tailored for this Project, which will aid in future compliance efforts. Additionally, we worked closely with the City's partners, Eagle Aerial and Waterfluence, to identify DIMs, MUMs, and SLAs, which has also resulted in a GIS-based approach and tools tailored for this Project

Staff: Spencer Waterman (QA/QC & Technical Lead)

Water Regulations Compliance and Water-Use Efficiency Technical Assistance Services

City of Camarillo, CA | City of Oxnard, CA | City of Victorville, CA

WSC has supported the successful delivery of numerous key projects for Camarillo since we began providing staff augmentation services in 2014, beginning with the 2015 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP). Since then, WSC has provided as-needed regulatory and conservation support services, including conservation program and rebates facilitation and development of the 2020 & 2025 UWMP and WSCP, AWSDAs, and AWURs. WSC has been working with Camarillo to comply with, and plan for, all aspects of the CWOL Regulation framework, including assessing their UWUO and potential

ways to achieve compliance and providing updates to inform Camarillo of implications of new regulations development. WSC is now working with the City on CII PMs compliance.

WSC has been working with Oxnard and Victorville since 2020 to plan for, and comply with, all aspects of the CWOL Regulation framework including providing as-needed services to assess their UWUO, CII PMs, potential DMMs and BMPs to achieve compliance, water loss, and providing updates on new regulations' development implications. WSC developed the 2020 UWMP and WSCP, AWSDAs, and the AWURs for each City to align with the upcoming CWOL requirements. WSC also facilitated a UWUO Roadmap workshop and developed a UWUO Roadmap for each city. The roadmap effort was similar to what is described for the City of Rialto and East Valley Water District below.

For each city, WSC regularly performs GIS analysis and review of landscape area measurement, customer billing, infrastructure, and land-use data in conjunction with use of Eagle Aerial's WaterView to support compliance efforts. WSC is now working with Oxnard on CII PMs compliance.

Staff: Spencer Waterman (Project Manager and Demand and Conservation Technical Lead), Laine Carlson (Principal in Charge), Sierra Orr (Advisor)

Conservation Regulations Compliance Support, Roadmap, and Tools for Drought Contingency Plans

City of Rialto and East Valley Water District

WSC developed clear and concise Drought Contingency Plans (DCPs) aligned with requirements from the U.S. Bureau of Reclamation for each water agency. Each DCP systematically outlines drought monitoring, vulnerability assessment, CWOL regulations, mitigation actions, and a framework for response actions. WSC performed GIS analysis and review of landscape area measurement, customer billing, infrastructure, and land-use data in conjunction with use of Eagle Aerial's WaterView to support CWOL Regulation compliance efforts.

WSC developed an UWUO Roadmap in collaboration with staff as part of the DCP development process. Workshop discussions were adapted to create an actionable UWUO Roadmap and WSC developed a DCP supply and demand forecasting tool in Excel to inform and guide staff towards UWUO and CII PM compliance. The UWUO Roadmap provides supplementary detail for each of the required components on one-page summaries of UWUO and CII PM actions. The UWUO Roadmap includes a set of Preliminary Action Plans for each action that will be needed to comply with the CWOL Regulation. It provides the purpose of each action, as well as considerations and options for staff to inform future decisions. Each page summarizes the timeline and priority of the action and the specific steps that various parties will take to help complete this action.

Achieving UWUO standards will support long-term drought mitigation through demand reduction. The DCP Mitigation Actions will build from the UWUO Roadmap and DCP Tool to develop implementation and enforcement tools to achieve required demand reductions. Both water agencies were awarded grant funding from the USBR WaterSMART program to develop

their DCP in collaboration with local water partners and stakeholders. The USBR grant program may be used in the future for additional funding for implementation and project development.

Staff: Spencer Waterman (Demand and Conservation Technical Lead), Laine Carlson (Project Manager)

2020 UWMP, AWSDAs, CWOL Regulation Support

West Basin Municipal Water District, CA

WSC has been providing water resources planning support to WBMWD since 2020. Many of the efforts required compilation of a broad range of water planning and conservation information in an easily understandable story that conveyed West Basin's plans. The projects also required coordinating and sharing data with the District's retailers who relied on the data to prepare their own reports. WSC also facilitated workshops with the District and their retailers to promote cohesiveness between their respective reports. Because the reports were developed for WBMWD, WSC provided support to facilitate UWUO education through a workshop and follow-up coordination with customer agencies.

Staff: Spencer Waterman (2020 UWMP Demand Lead; Project Manager for AWSDAs, CWOL), Sierra Orr (CWOL UWUO fact sheet and CII Pilot Program Communications Strategy with another consultant)

CII Water Usage Classification System

City of Arlington, TX

In a former role with the City of Arlington, WSC's Data Identification and Database Manager, Brendan Hamilton, developed a system to convert the NAICS codes of all CII entities into 63 water usage related categories. The project included programmatically combining NAICS data from three sources to verify the accuracy of customer NAICS information; using hourly AMI meter data to develop normalized usage profiles for each category for customers that was used in the hydraulic water model; generating similar usage profiles for single and multi-family residential customers; and generating a table that converts the normalized usage profiles into individual profiles based on the size of proposed CII customers for the purpose of categorizing and estimating demands for incoming CII customers.

Staff: Brendan Hamilton (Project Manager and Technical Lead)

Paso Basin State Water Project Supplemental Water Supply Project

County of San Luis Obispo, CA

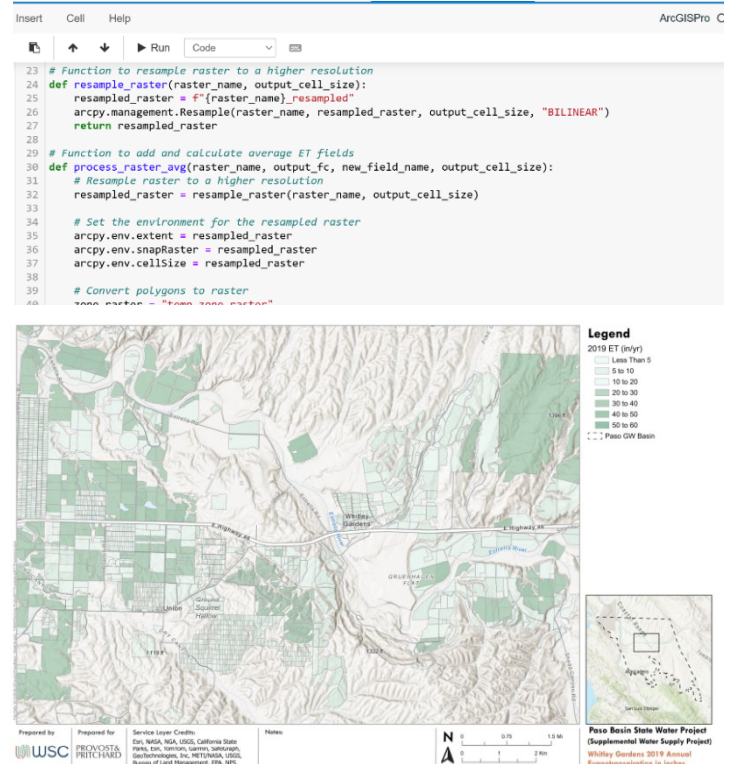
WSC developed comprehensive ESRI ArcPro automated workflows to process multi-year evapotranspiration data for agricultural water demand assessment. The project required processing five years of monthly and annual ET raster datasets (2017-2021) across thousands of agricultural parcels to determine crop-specific water demands and identify peak usage periods for water supply planning. This GIS-based process is more complex than the CII

DIMs/MUMs identification and database proposed for the District's WUE MP but indicates the ability to tailor to the District's needs should they be more complex than basic CWOL Regulation compliance.

Custom Python scripts automated complex geospatial processing including spatial union operations between DWR commissioned crop mapping layers and SLO County parcels, zonal statistics calculations, and sophisticated data filtering by crop codes and area thresholds.

Advanced automation included dynamic raster resampling, temporal aggregation of ET values, and statistical analysis to identify peak summer irrigation requirements. The automated system reduced processing time from weeks to hours while delivering precise agricultural water demand data including crop-specific ET rates, seasonal demand patterns, and peak usage scenarios for water supply infrastructure planning.

Staff: Brendan Hamilton (GIS Analysis Lead, Python Automation Development)



Urban Water Use Objectives Reporting and Conservation Projects

Yucaipa Valley Water District, CA

Madeline served as the Lead Author for the District's AWUR, the regulatory assessment that compares the District's actual water usage to its urban water use objective (UWUO). This involved calculating the UWUO based on four key efficiency standards (indoor and outdoor residential use, water loss, and large commercial landscapes) and comparing to the actual use for fiscal year 2022/2023.

In a former role for Yucaipa, Madeline served as the Program Administrator on multiple projects that supported CWOL, water-use efficiency, and various related CII engagement efforts:

- Yucaipa Valley Landscape Contest
- Water Conservation Rebate Program
- Basin Technical Advisory Committee (BTAC), Conservation Subcommittee
- Inland Solar Challenge (now SoCal STEAM)
- Residential Landscape Water Conservation Workshops
- Nonfunctional Turf Identification
- Residential Recycled Water User Training
- Level 1 Water Loss Audit Validation
- 2020 Urban Water Management Plan

Staff: Madeline Blua (Project Manager/Lead Author)

Water Conservation Management Plan

City of Big Bear Lake Department of Water and Power, CA

As Water Conservation and Public Information Supervisor for the City of Big Bear Lake Department of Water and Power, Sierra Orr directed the development of a 25+ year Water Conservation Management Plan (WCMP). The WCMP process involved data collection, analyzing historical water use, conservation activity, and existing conservation measures to reduce future water demand. The process also entailed a measure screening of more than 126 potential new measures, culminating in a reduction to just over 25 for full evaluation. In this role she was also responsible for evaluating and implementing all ongoing water-use efficiency regulations and conducting audits for both residential and commercial customers in the service area.

In a former role, Sierra served on multiple projects that supported CWOL, water-use efficiency, and various related CII engagement efforts:

- **CII Water Use-Efficiency Rebates Pilot Program, West Basin Municipal Water District, CA.** Determined methods of outreach for CII owners and managers, developed scripts for customer contacts, and drafted language for a newsletter.
- **CWOL CII BMP Outreach, Bay Area Water Supply & Conservation Agency, CA.** Designed and developed content for retailer outreach materials including fact sheets on the CWOL Regulations, specifically as they relate to required best management practices for CII users.
- **Water Conservation California Legislation Webinar Series, San Diego County Water Authority, CA.** This webinar series supported information sharing and open dialogue about the impact of the water conservation legislation on SDCWA retailers. Topics include providing regulatory updates on the water-use efficiency standards, breaking down the UWUOs, and mapping out what agencies should do to prepare for future requirements. The webinars were well-attended with over 100 individuals participating in the series.
- **WaterSmart Guidebook for Businesses Update, East Bay Municipal Utilities District, CA.** Led a team of staff and experts who reviewed the document and revised or rewrote each chapter to update the guidebook in alignment with industry standards and water using technologies. Sierra was the primary author to address the cannabis industry and contributed content for chapters on data, landscape water-use efficiency, metering, and restrooms.
- **CWOL Presentations, CalWEP Peer to Peer Conference, CA.** As an industry-recognized expert, Sierra presented “What’s Going on with the Framework Rulemaking? A Refresher” at the May 2023 CalWEP Peer to Peer Conference in Long Beach, California. Response was positive and she was invited back the following year, in May 2024, to again present on the UWUOs.

Staff: Sierra Orr (Water Conservation and Public Information Supervisor)

EXHIBIT “2”
TO
TASK ORDER NO. 1

COMPENSATION

Task	Description	Cost
1	Project Management	\$33,233.00
2	Annual Reporting	\$18,346.00
3	Data Identification	\$39,749.00
4	Data Management System	\$49,956.00
5	Programming Planning	\$57,721.00
Grand Total		\$199,004.00

A copy of the fees estimate is attached to the proposal dated August 28, 2025.

Task No. Task Description	WSC							Blua Consulting		ALL FIRMS			
	Principal in Charge & QA/QC	Project Manager	Data Identification & Database Management	Programmatic Planning	Assistant Engineer	Admin/ Clerical	WSC Labor Fee	Labor Hours	Labor Fee	Total Labor Hours	Total Labor Fee	Expenses	Total Fee
	Laine Carlson	Spencer Waterman	Brendan Hamilton	Sierra Orr									
Billing rates, \$/hr	\$366	\$267	\$279	\$275	\$170	\$186							
1 Project Management													
1.1 Kickoff Meeting	3	8	8	4			\$ 6,566	4	\$ 966	27	\$ 7,532	\$ 400	\$ 7,932
1.2 Monthly Meetings	9	18	9	9	9		\$ 14,616	14	\$ 3,381	68	\$ 17,997	\$ -	\$ 17,997
1.3 Project Administration	2	7				11	\$ 4,647	11	\$ 2,657	31	\$ 7,304	\$ -	\$ 7,304
SUBTOTAL	14	33	17	13	9	11	\$ 25,829	29	\$ 7,004	126	\$ 32,833	\$ 400	\$ 33,233
2 Annual Reporting													
2.1 Annual UWUO Report	1	4	1				\$ 1,713	24	\$ 5,796	30	\$ 7,509	\$ -	\$ 7,509
2.2 Water Loss Audit Validation		2					\$ 534	16	\$ 3,864	18	\$ 4,398	\$ -	\$ 4,398
2.3 UWUO Optimization Recommendations	2	8	1		8		\$ 4,507	8	\$ 1,932	27	\$ 6,439	\$ -	\$ 6,439
SUBTOTAL	3	14	2	0	8	0	\$ 6,754	48	\$ 11,592	75	\$ 18,346	\$ -	\$ 18,346
3 Data Identification													
3.1 CII Customer Classification		1	6		33		\$ 7,551	2	\$ 483	42	\$ 8,034	\$ 1,861	\$ 9,895
3.2 CII DIM & MUM Identification		1	13		37		\$ 10,184	4	\$ 966	55	\$ 11,150	\$ -	\$ 11,150
3.3 NFT Identification		1	3		9		\$ 2,634	1	\$ 242	14	\$ 2,876	\$ -	\$ 2,876
3.4 SLA Identification		1	3		9		\$ 2,634	1	\$ 242	14	\$ 2,876	\$ -	\$ 2,876
3.5 CII Optimization Recommendations	2	8	3		9		\$ 5,235	2	\$ 483	24	\$ 5,718	\$ -	\$ 5,718
3.6 Standard Operating Procedures	2	4	8		16		\$ 6,752	2	\$ 483	32	\$ 7,235	\$ -	\$ 7,235
SUBTOTAL	4	16	36	0	113	0	\$ 34,990	12	\$ 2,898	181	\$ 37,888	\$ 1,861	\$ 39,749
4 Data Management System													
4.1 Database Tool	8	16	40		80		\$ 31,960	16	\$ 3,864	160	\$ 35,824	\$ -	\$ 35,824
4.2 Experience Builder Dashboard	2	4	20				\$ 7,380			26	\$ 7,380	\$ -	\$ 7,380
4.3 DM Standard Operating Procedures	2	4	8		16		\$ 6,752			30	\$ 6,752	\$ -	\$ 6,752
SUBTOTAL	12	24	68	0	96	0	\$ 46,092	16	\$ 3,864	216	\$ 49,956	\$ -	\$ 49,956
5 Programmatic Planning													
5.1 Programmatic Planning TM	8	16	8	40	80		\$ 34,032	16	\$ 3,864	168	\$ 37,896	\$ -	\$ 37,896
5.2 MUM Implementation Recommendations		2	4		8		\$ 3,010	0	\$ -	14	\$ 3,010	\$ -	\$ 3,010
5.3 NFT Compliance Recommendations		2	4		8		\$ 3,010	2	\$ 483	16	\$ 3,493	\$ -	\$ 3,493
5.4 General Technical Support	2	12	12	4	12		\$ 10,424	12	\$ 2,898	54	\$ 13,322	\$ -	\$ 13,322
SUBTOTAL	10	32	28	44	108	0	\$ 50,476	30	\$ 7,245	252	\$ 57,721	\$ -	\$ 57,721
COLUMN TOTALS	43	119	151	57	334	11	\$ 164,141	135	\$ 32,603	850	\$ 196,744	\$ 2,261	\$ 199,004

10% mark-up on direct expenses; 15% mark-up for sub-contracted services

Mileage will be reimbursed at the prevailing federal mileage reimbursement rate in effect at the time of travel

Rates are subject to revision as of January 1 each year.

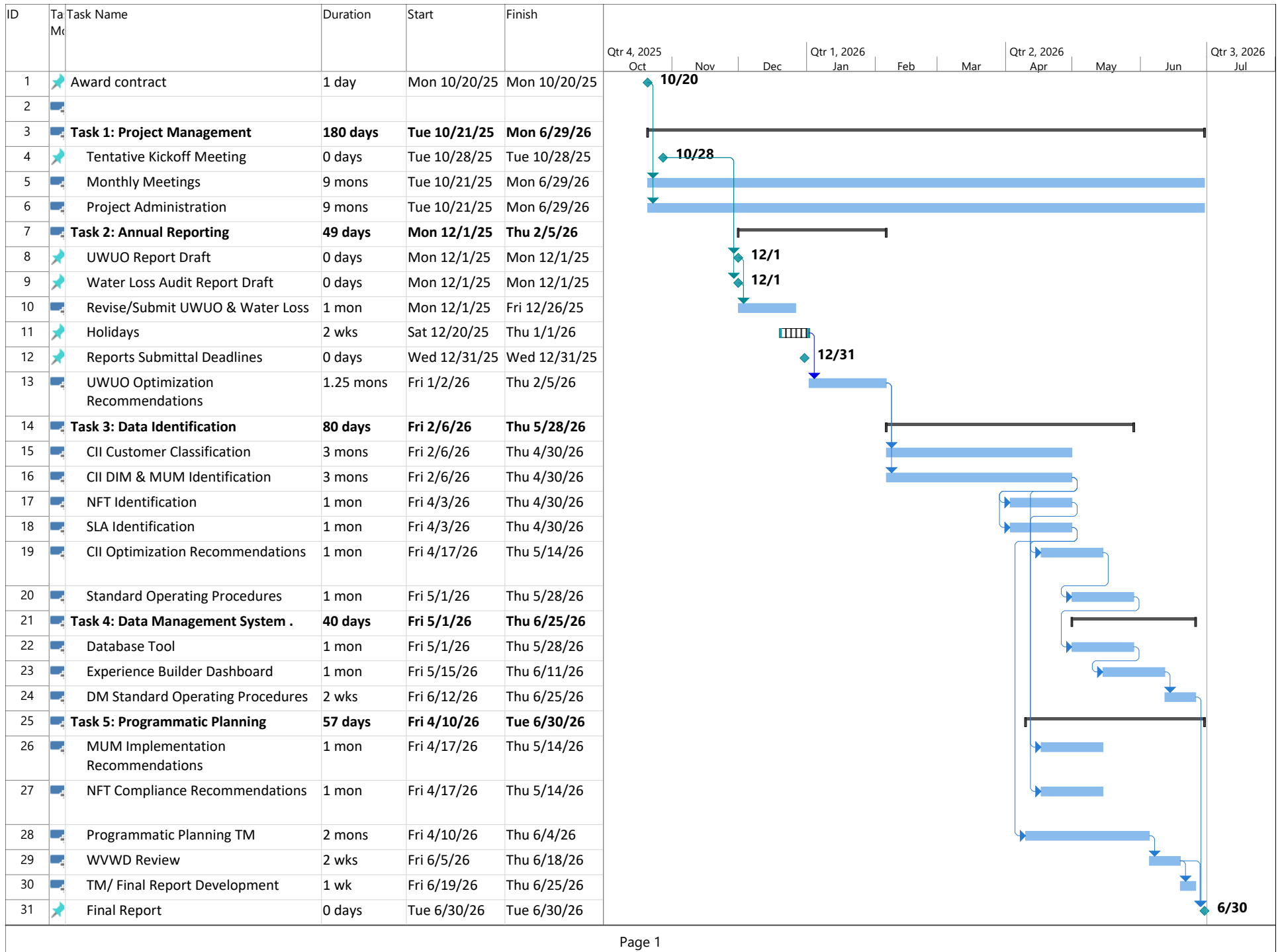


EXHIBIT “3”
TO
TASK ORDER NO. 1
SCHEDULE

Schedule to be determined by District staff.