

AGENDA  
WATER ISSUES COMMITTEE MEETING  
WITH BOARD OF DIRECTORS \*  
ORANGE COUNTY WATER DISTRICT  
18700 Ward Street, Fountain Valley, CA 92708  
**Wednesday, November 8, 2023 12:00 p.m., Boardroom**

\*The OCWD Water Issues Committee meeting is noticed as a joint meeting with the Board of Directors for the purpose of strict compliance with the Brown Act and it provides an opportunity for all Directors to hear presentations and participate in discussions. Directors receive no additional compensation or stipend as a result of simultaneously convening this meeting. Items recommended for approval at this meeting will be placed on the **November 15, 2023** Board meeting Agenda for approval.

This meeting will be held in person. As a convenience for the public, the meeting may also be accessed by Zoom Webinar and will be available by either computer or telephone audio as indicated below. Because this is an in-person meeting and the Zoom component is not required, but rather is being offered as a convenience, if there are any technical issues during the meeting, this meeting will continue and will not be suspended.

**Computer Audio: Join the Zoom Webinar by clicking on the following link:**

<https://ocwd.zoom.us/j/98592928069>

**Webinar ID: 985 9292 8069**

**Telephone Audio: (213) 338 8477**

Teleconference Sites:

10382 Bonnie Drive, Garden Grove  
20 Civic Center Plaza, Room 813, Santa Ana  
100 S. Main Street, Los Angeles  
8856 Citrus Avenue, Westminster

\* Members of the public may attend and participate at all locations.

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

RECOMMENDATION: Adopt resolution determining need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda (requires two-thirds vote of the Board members present, or, if less than two-thirds of the members are present, a unanimous vote of those members present.)

**VISITOR PARTICIPATION**

Time has been reserved at this point in the agenda for persons wishing to comment for up to three minutes to the Board of Directors on any item that is not listed on the agenda, but within the subject matter jurisdiction of the District. By law, the Board of Directors is prohibited from taking action on such public comments. As appropriate, matters raised in these public comments will be referred to District staff or placed on the agenda of an upcoming Board meeting.

At this time, members of the public may also offer public comment for up to three minutes on any item on the Consent Calendar. While members of the public may not remove an item from the Consent Calendar for separate discussion, a Director may do so at the request of a member of the public.

## **CONSENT CALENDAR (ITEMS NO. 1 – 4)**

All matters on the Consent Calendar are to be approved by one motion, without separate discussion on these items, unless a Board member or District staff request that specific items be removed from the Consent Calendar for separate consideration.

1. **MINUTES OF WATER ISSUES COMMITTEE MEETING HELD OCTOBER 11, 2023**

RECOMMENDATION: Approve minutes as presented

2. **PURCHASE ORDER TO KDC SYSTEMS FOR REPLACEMENT OF PHOENIX SUBNET CONTROLLERS WITH DELTA V CHARMS FOR THE GWRS PIPELINE**

RECOMMENDATION: Agendize for November 15 Board Meeting: Authorize issuance of Purchase Order to KDC Systems in the amount of \$152,070 for services and hardware to replace existing Phoenix subnet controllers at five locations along the GWRS pipeline with native Delta V Charms controllers

3. **COST SHARE WITH CITY OF TUSTIN FOR WELL PUMPS REMOVAL TO ACCOMMODATE PFAS SAMPLING**

RECOMMENDATION: Agendize for November 15 Board meeting: Upon receipt of an invoice from the city of Tustin, authorize payment to the city of Tustin in an amount not to exceed \$40,000 for 50% of the costs to video and remove the pumps from 17th Street Well #1, 17th Street Well #2, and Yorba Well

4. **SANTA ANA RIVER CONSERVATION AND CONJUNCTIVE USE PROGRAM (SARCCUP) EXTRAORDINARY SUPPLY AGREEMENT**

RECOMMENDATION: Agendize for November 15 Board meeting: Authorize the General Manager to execute an agreement with the Metropolitan Water District of Southern California, Municipal Water District of Orange County, Orange County Water District, city of Anaheim, city of Fullerton, and the city of Santa Ana regarding the assignment of extraordinary supply credit from the Santa Ana River Conservation and Conjunctive Use Program

## **END OF CONSENT CALENDAR**

## **MATTER FOR CONSIDERATION**

5. **CONTRACT NO. GG-2020-1: AUTHORIZE NOTICE OF COMPLETION, RATIFY AND APPROVE CHANGE ORDERS, AND INCREASE BUDGET**

RECOMMENDATION: Agendize for November 15 Board meeting:

- 1) Ratify issuance of Change Order Nos. 1 – 15 to Pacific Hydrotech for a total amount of \$642,200; and;
- 2) Authorize Change Order No 16 to Pacific Hydrotech for a total amount of \$141,600; and

- 3) Increase project budget by \$1,163,042 for a total project budget of \$23,843,700; and
- 4) Accept completion of work and authorize filing a Notice of Completion for Contract No. GG-2020-1: city of Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants; and
- 5) Authorize the General Manager to transfer the city of Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants to the city of Garden Grove effective the date of filing the Notice of Completion and quitclaim any property rights obtained for the project

**CHAIR DIRECTION AS TO ITEMS IF ANY TO BE AGENDIZED AS MATTERS FOR CONSIDERATION AT THE NOVEMBER 15 BOARD MEETING**

**DIRECTORS' ANNOUNCEMENTS/REPORTS**

**GENERAL MANAGER'S ANNOUNCEMENTS/REPORTS**

**ADJOURNMENT**

## WATER ISSUES COMMITTEE MEMBERS

### Committee Members

Bruce Whitaker - Chair  
Dina Nguyen - Vice Chair  
Roger Yoh  
Van Tran  
Kelly Rowe

### Alternates

Denis Bilodeau  
Steve Sheldon  
Natalie Meeks  
Valerie Amezcua  
Cathy Green

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted at the guard shack entrance and in the main lobby of the Orange County Water District, 18700 Ward Street, Fountain Valley, CA and on the OCWD website not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the District Secretary. Backup material for the Agenda is available at the District offices for public review and can be viewed online at the District's website: [www.ocwd.com](http://www.ocwd.com)

Pursuant to the Americans with Disabilities Act, persons with a disability who require a disability-related modification or accommodation in order to participate in a meeting, including auxiliary aids or services, may request such modification or accommodation from the District Secretary at (714) 378-3234, by email at [cfuller@ocwd.com](mailto:cfuller@ocwd.com) by fax at (714) 378-3373. Notification 24 hours prior to the meeting will enable District staff to make reasonable arrangements to assure accessibility to the meeting.

As a general rule, agenda reports or other written documentation has been prepared or organized with respect to each item of business listed on the agenda, and can be reviewed at [www.ocwd.com](http://www.ocwd.com). Copies of these materials and other disclosable public records distributed to all or a majority of the members of the Board of Directors in connection with an open session agenda item are also on file with and available for inspection at the Office of the District Secretary, 18700 Ward Street, Fountain Valley, California, during regular business hours, 8:00 am to 5:00 pm, Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Orange County Water District office.



MINUTES OF BOARD OF DIRECTORS MEETING  
WATER ISSUES COMMITTEE  
ORANGE COUNTY WATER DISTRICT  
October 11, 2023, @ 12:00 p.m.

Director Whitaker called the Water Issues Committee meeting to order at 12:00 p.m. in the District Boardroom. Public access was also provided via Zoom webinar. The Secretary called the roll and reported a quorum as follows:

Committee Members

Bruce Whitaker  
Dina Nguyen Arrived 12:09 p.m.  
Roger Yoh  
Van Tran  
Kelly Rowe

OCWD

Mike Markus – General Manager  
John Kennedy – Executive Director  
Leticia Villarreal – Assistant District Secretary  
Jeremy Jungreis – General Counsel

Alternates

Denis Bilodeau Participated as  
member of the public  
Steve Sheldon (absent)  
Valeria Amezcua  
Natalie Meeks (absent)  
Cathy Green

**CONSENT CALENDAR**

The Consent Calendar was approved upon motion by Director Rowe, seconded by Director Bilodeau and carried [4-0], as follows:

**Ayes: *Whitaker, Yoh, Amezcua, Green***

1. Minutes of Water Issues Committee Meeting

**The Minutes of the Water Issues Committee meeting held September 13, 2023, were approved as presented.**

2. Operational Efficiency Study

**Recommended for approval at October 18 Board meeting: Authorize issuance of Agreement to Booky Oren Global Water Technologies Ltd. in an amount not to exceed \$90,000 in accordance with its proposal dated October 1, 2023.**

3. Installation of Shallow Aquifer Monitoring Wells for Annual Water Level Maps and Storage Calculation

**Recommended for approval at October 18 Board meeting: 1) Authorize filing of a Categorical Exemption for the construction of three Shallow aquifer piezometers in compliance with CEQA guidelines; 2) Authorize construction of piezometers AM-62, IDM-5, and IDM-6; 3) Establish a project budget of \$150,000; and 4) Authorize Notice Inviting Bids for piezometer construction.**

4. Professional Services Agreement to Tetra Tech for Design Services for the Talbert Barrier Injection Wells I-24 and I-25 Flow Control Valve Project

**Recommended for approval at October 18 Board meeting: Authorize issuance of a Professional Services Agreement to Tetra Tech for design services for the for the Talbert Barrier Injection Wells I-24 And I-25 Flow Control Valve Project for an amount not to exceed \$224,000.**

5. Contract No. ORA-2021-1: Authorize Notice of Completion

**Recommended for approval at October 18 Board meeting: 1) Accept completion of work and authorize filing a Notice of Completion for Contract No. ORA-2021-1: City of Orange Wells 9, 19, 23 & 24 PFAS Treatment Systems; and 2) Authorize the General Manager to transfer the City of Orange Wells 9, 19, 23 & 24 PFAS Treatment Systems to the City of Orange effective the date of filing the Notice of Completion and quitclaim any property rights obtained for the project.**

6. Professional Services Agreement to Engeo for Bond Basin Slope Repair Design

**Recommended for approval at October 18 Board meeting: Authorize issuance of a Professional Services Agreement to ENGEO for design services for the permanent Bond Basin slope repair and storm drain extension for an amount not to exceed \$46,800.**

7. Purchase Order to VWR for One Hatch TL2350 Turbidimeter for the Philip L. Anthony Water Quality Laboratory

**Recommended for approval at October 18 Board meeting: Authorize issuance of Purchase Order to VWR in the amount of \$6,369 for the purchase of one Hach TL2350 Series Benchtop Turbidimeter.**

8. Purchase Order to Waters Technologies for One High Pressure Liquid Chromatograph (HPLC) for the Philip L. Anthony Water Quality Laboratory

**Recommended for approval at October 18 Board meeting: Authorize issuance of a Purchase Order to Waters Technologies for the total amount of \$124,581 for one Waters High Pressure Liquid Chromatograph coupled with a post-column reaction module, fluorescence detector, and photodiode array detector.**

## **INFORMATIONAL**

9. Evaluation of Underflow Across the Los Angeles County – Orange County Line

Principal Hydrogeologist Bill Leever recalled that starting in 2019, the District embarked on a study to compare Los Angeles and Orange County under flow over a set time period to see how the models compared and see what was actually occurring. He advised that the study was completed by Intera, Inc. under a cooperative agreement between OCWD and the Water Replenishment District of Southern California (WRD). He stated that Intera's study objectives were to review the two models and assess their similarities and differences, understand the basis for differences in underflows calculated by each model, assess the plausibility and uncertainty of model results and provide recommendations for reducing uncertainties and reconciling the differences between each model. The evaluation found that both models show net outflow from the OC Basin to the Central Basin, both models show net outflow increasing over the evaluation period (2000-2015), OCWD's model always shows higher outflow than the LA County model, OCWD model outflow average 10,300 acre-feet/year average, LA County model outflow averages 5,600 acre-feet/year average. He shared recommendations for the Orange County Basin Model and LA County Basin models, including improving calibration, extending calibration beyond 2015 using new data from OCWD and WRD, and conducting sensitivity analysis to evaluate which model inputs have the greatest effect on underflow

calculations. He stated that the next steps for OCWD would be to update and improve the OC model and continue collaboration with WRD.

**CHAIR DIRECTION AS TO ITEMS IF ANY TO BE AGENDIZED AS MATTERS FOR CONSIDERATION AT THE OCTOBER 18 BOARD MEETING**

It was agreed to place all items on the Consent Calendar at the October 18 Board meeting.

**ADJOURNMENT**

There being no further business, the meeting was adjourned at 12:38 p.m.

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Bruce Whitaker, Chair





## AGENDA ITEM SUBMITTAL

**Meeting Date:** November 8, 2023

**To:** Water Issues Committee  
Board of Directors

**From:** Mike Markus

**Staff Contact:** M. Patel / R. Raley

**Budgeted:** Yes

**Budgeted Amount:** \$100,000

**Cost Estimate:** \$152,070

**Funding Source:** R23012

**Program/ Line Item No.:**

**General Counsel Approval:** N/A

**Engineers/Feasibility Report:** N/A

**CEQA Compliance:** N/A

**Subject: PURCHASE ORDER TO KDC SYSTEMS FOR REPLACEMENT OF PHOENIX SUBNET CONTROLLERS WITH DELTA V CHARMS FOR THE GWRS PIPELINE**

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### SUMMARY

The District operates the Groundwater Replenishment System (GWRS) Advanced Water Purification Facility (AWPF) using a Process Control System (PCS) supplied by Emerson/Caltrol known as Delta V. A key component of the GWRS is a series of digital controllers allowing the PCS to communicate with field equipment including those located at remote locations such as along the GWRS pipeline. The controllers located along the GWRS pipeline are now obsolete and require replacement.

Attachment(s): KDC Systems Quotation dated October 3, 2023

### RECOMMENDATION

Agendize for November 15 Board meeting: Authorize issuance of Purchase Order to KDC Systems in the amount of \$152,070 for services and hardware to replace existing Phoenix subnet controllers at five locations along the GWRS pipeline with native Delta V Charms controllers.

### BACKGROUND/ANALYSIS

The district operates the GWRS AWPF using a sophisticated Supervisory Control and Data Acquisition (SCADA) computer system referred to as a PCS. The GWRS was designed to be controlled by the PCS using a software and hardware system supplied by Emerson known as Delta V.

The existing GWRS pipeline conveys water from the AWPF to mid-basin injection wells as well as to dedicated recharge basins Miller, Kraemer, La Palma, and Miraloma. Along the pipeline alignment are located three individual valve vaults containing large butterfly style isolation valves and associated PCS hardware. The valve vaults allow for isolation of portions of the GWRS pipeline for maintenance or possible pipeline leak repairs. The GWRS pipeline also contains valves at each end point discharge to recharge basins. These valves are controlled by the PCS and the communication to these components via a

fiber optic cable pathway that was installed along the GWRS pipeline alignment from the AWPf location in Fountain Valley all the way up to Anaheim at the final termination point at the Miller and Kraemer Basins. The three valve vaults (known as valve vaults 1,2,3) and the valve controls at Kraemer/ Miller are currently equipped with Phoenix Contact subnet controllers that are now obsolete and need replacing. These controllers monitor and protect the pipeline by providing real time feedback of the conditions such as pressures, valve positions, sump level alarms and power status. These locations currently operate on a fiber optic ring sub network that is not native to Delta V and require a virtual interface module (VIM) card on the Delta V backplane that adds complexity to networking and programming. Programmers and technical staff are not able to natively view control and device diagnostics in the Delta V environment, requiring a laptop at specific locations along the network using 3<sup>rd</sup> party software interface.

In order to mitigate current and future issues including the obsolescence of the existing Phoenix Contact subnet controllers, we recommend replacement with native Delta V Charms controllers. The native Delta V Charms controllers have already been used for the new Centennial Mid Basin Injection five well site project, which was built several years after the original GWRS.

The addition of this native Emerson Delta V solution will reduce down time due to replacement availability and complexity. This will also increase the availability for expansion on the network for future projects and locations along the pipeline. Control outages due to lack of redundancy will be eliminated. The replacement of the Phoenix Contact controllers to Delta V Charms would allow for redundant A and B Delta V control networks over existing single mode fiber which will be re-purposed for this application. This increases reliability and visibility on the native Delta V network that would greatly simplify the need for external software, laptops and programming as the new controllers could be managed and monitored through existing Delta V Explorer and Emersons Smart Switch Control Center applications. There is also a significant Cybersecurity benefit with this new architecture and equipment allowing us to close several offsite threat surfaces, utilizing Delta V smart ethernet switches that can be managed centrally by the PCS programmers. This allows us to lock down all unused ports and receive threat detection diagnostics that are critical to maintaining a cybersecure control system.

At the time when the original GWRS project was engineered these technologies were not in place and the subnet topology was probably the best choice, but with advancements in Emerson controls and new solutions for remote I/O this will keep all of these locations far more secure and allow for more seamless programming and operation. In order to execute this project to replace existing Phoenix subnet controllers with a Delta V Charms based solution the services of an integration firm is required. Due to the proprietary nature of this work and the fact that they were the original installers of the PCS the work can be done most effectively by KDC Systems. KDC Systems was the integrator for the original GWRS PCS as well as for both the GWRS Initial and Final Expansion projects. Staff could not find other integration firms to perform this work solely on their own and would require using KDC Systems as a subcontractor. The proposal by KDC Systems for this work is attached. The scope includes not only procurement and installation of the new controllers/associated hardware but also software integration, commissioning, existing panel modifications, and updating existing drawings to reflect architectural changes. This effort has been budgeted

in the fiscal year 2023-2024 Refurbishment and Replacement projects as R23012 in the amount of \$100,000. The actual cost of this project is \$152,070. Pricing has come in higher than anticipated due to increases in hardware costs between when budgets were set in January 2023 and October 2023 when the work is able to start.

**PRIOR RELEVANT BOARD ACTION (S)**

# PROPOSAL

October 3, 2023

**CUSTOMER:** Orange County Water District  
**ADDRESS:** 18700 Ward Street  
 P.O. Box 8300  
 Fountain Valley, CA 92728  
**ATTENTION:** Robert Raley  
**E-MAIL:** [rraley@ocwd.com](mailto:rraley@ocwd.com)  
**PHONE:** 714-378-8214  
**SUBJECT:** Pipeline CHARMs Retrofit  
**REFERENCE DOCS:** Pipeline Charms Retrofit RFP rev1.pdf

## Estimate #: 2-23-0227 R0

### SCOPE:

KDC Systems is pleased to provide the control system integration support for the above referenced project in two phases as follows:

#### Phase 1: CHARMs Retrofit System Design & Procurement

1. Coordinate with OCWD PCS group on design and installation of new network peripherals and controllers to ensure continuity of control and when devices can be de-energized, footprint compatibility and meeting electrical requirements of existing control cabinets.
2. Provide updated drawings to reflect architectural changes and control panel modifications, adding side panels as needed for added equipment, for the following panels:
  - a. 540-FPW-CPC-0005
  - b. 850-CPC-0001 (Vault 1)
  - c. 850-CPC-0002 (Vault 2)
  - d. 850-CPC-0003 (Vault 3)
  - e. 850-CPC-0004 (Kraemer/Miller)
  - f. WL\_MBI
3. Procure and receive equipment
4. Preliminary list of DeltaV hardware to be confirmed is as follows:

Item	Description	Model	Quantity per Location					Total Qty
			Vault 1	Vault 2	Vault 3	K/M	WL_MBI	
1	Redundant CIOC2	SE6505T01	1	1	1	1	-	4
2	CHARMs Baseplate Assembly	SE6401T07	1	1	1	1	-	4

Item	Description	Model	Quantity per Location					Total
3	CHARMS Baseplate Terminator	SE4604T04	1	1	1	1	-	4
4	DI 24V DC Isolated	SE4301T07	2	4	2	2	-	10
5	DO 24V DC High-Side	SE4302T01	-	1	-	-	-	1
6	AI 4-20 mA HART	SE4303T01	2	2	2	4	-	10
7	AO 4-20 mA HART	SE4304T01	1	1	1	2	-	5
8	CHARMs Baseplate Extender, Top	SE4603T05	1	1	1	1	-	4
9	CHARMs Baseplate Extender, Bottom	SE4603T06	1	1	1	1	-	4
10	CHARMs Baseplate Cables, 1m cables	SE4605T03	1	1	1	1	-	4
11	8-ports switch - (6) 10/100 Mbps copper and (2) 100 Mbps single-mode fiber	VE6041F06 C2	2	2	2	-	-	6
12	24-port switch - each port is 10/100/1000 Mbps copper and it includes four 10/100/1000 Mbps copper / SFP combo ports	VE6053P1	-	-	-	2	2	4
13	Transceiver module for Smart Switches: 100 Mbps Ethernet; single-mode	VE6056T06	-	-	-	6	6	12

**Phase 2: Build, Install, and Commission**


1. Provide all labor and materials to field install new equipment (side panels, switches, CHARMS CIOC, baseplate, modules, patch cables, etc.).
2. Remove and dispose of all elements of the equipment being replaced.
3. Commission switches and CHARMs and check for proper communication with DeltaV system on primary and secondary networks.
4. Re-terminate from existing Phoenix Contact I/O to CHARMs I/O (one site at a time and in coordination with OCWD)
5. Re-assign DeltaV control module references from Phoenix Contact I/O to CHARMs I/O
6. On-site functional testing to confirm installation meets the control requirements.
7. Update control panel drawings as needed to as-built condition.

**CLARIFICATIONS:**

1. The Owner shall provide KDC Systems with the latest revisions of electronic control panel \*.dwg files to serve as the basis for As-Built drawings. If these electronic drawings are not available/provided, hand-marked, redline hard copies will serve as the As-Built drawings.
2. This proposal is based on a project start date as shown below. Any delays/extensions to this time frame may result in additional charges.
3. The DeltaV material pricing in this proposal is only valid for 30 days.
4. No UL508 recertification.
5. Please see attached General Conditions.

**EXCLUSIONS:**

1. DeltaV software licenses.
2. Fiber optic cabling and terminations.

KDC PROPOSES TO FURNISH ALL MATERIAL AND LABOR AS SPECIFIED ABOVE, FOR THE SUM OF:	
<b>TOTAL PRICE:</b>	
<b><u>Phase 1:</u></b>	
<b>ONE HUNDRED THIRTY-SIX THOUSAND FIVE HUNDRED THIRTY DOLLARS</b>	
<b>\$136,530.00</b>	
<b><u>Phase 2:</u></b>	
<b>FIFTEEN THOUSAND FIVE HUNDRED FORTY DOLLARS</b>	
<b>\$15,540.00</b>	
PAYMENT TO BE MADE AS FOLLOWS:	
<b>MONTHLY PROGRESSIVE PAYMENTS, 100% UPON COMPLETION</b>	
TERMS:	
<b>NET 30 DAYS</b>	
PROJECT WINDOW:	
ANY DELAYS/EXTENSIONS TO THE PROJECT WINDOW, AS DEFINED BY THE PROJECT START AND END DATE/DURATION BELOW, ARE SUBJECT TO ADDITIONAL CHARGES	
PROJECT START DATE:	PROJECT END DATE/DURATION:
<b>11/01/23</b>	<b>90 Working days</b>
<p><b>THIS PROPOSAL MAY BE WITHDRAWN BY KDC IF NOT ACCEPTED WITHIN 30 DAYS</b></p>	<p style="text-align: center;">AUTHORIZED SIGNATURE</p> <div style="text-align: center; margin: 10px 0;">  </div> <hr style="border: 0.5px solid black;"/> <p style="text-align: center;">Lukasz Niedojadlo Project Manager</p>
<p><small>ANY ALTERATION OR DEVIATION FROM THE ABOVE SPECIFICATIONS INVOLVING EXTRA COSTS WILL BECOME AN EXTRA CHARGE OVER AND ABOVE THIS PROPOSAL. ALL AGREEMENTS CONTINGENT UPON STRIKES, ACCIDENTS, WEATHER OR OTHER DELAYS BEYOND OUR CONTROL. OUR WORKERS ARE FULLY COVERED BY WORKMEN'S COMPENSATION INSURANCE.</small></p>	



## GENERAL CONDITIONS

- 1. Work.** KDC Inc. shall perform and furnish all labor, supervision, materials, and equipment necessary to prosecute and complete the Work described above. The work shall be performed by the KDC Inc. in a good and workmanlike manner. Unless otherwise indicated above, work to be done during regular business hours (M-F 7am to 4pm) and pricing does not include overtime, shift or off hours work. Overtime rates apply to work outside of regular business hours, all time in excess of 8 hours, but less than 12 hours during the week, the first 8 hours on Saturday. Double time rates apply to work outside of regular business hours in excess of 12 hours, all time in excess of 8 hours on Saturday and all time on Sunday and Holidays.
- 2. Non-Solicitation/Contractor Employees.** For the term of this Agreement and for the period of twelve (12) months thereafter, without the prior written consent of the other party, neither party shall either directly or indirectly solicit or entice away (or seek or attempt to entice away) from the employment of the other party any person employed (or any person who has been so employed in the preceding six (6) months) by such other party in the provision or receipt of the Services. In the event of Customer's breach of this provision, Contractor may proceed by way of injunction or otherwise to restrain or prevent the continuance of such breach. Moreover, in respect of each such breach (each occurrence or repetition thereof constituting a separate breach event), Customer shall pay on demand to Contractor an amount equal to the solicited employee's prior year's compensation as a genuine pre-estimate of damages and not as a penalty, the whole without prejudice to Contractor's right to claim, institute legal proceedings for and collect such greater amount of damages as may be sustained by Contractor. It is understood and agreed between the parties that this provision is reasonable and necessary for the protection of Contractor's business and this is an essential to the formation of this Contract.
- 3. Progress Payments.** On or before each Monthly Billing date, KDC Inc. shall submit to Owner / Contractor a progress payment application showing the value of the Work installed ("Completed Work"). Within 60 days Owner / Contractor shall make a progress payment to KDC Inc. equal to the value of the Completed Work as of the corresponding Monthly Billing date.
- 4. Final Payment.** A final payment, consisting of the unpaid balance of the Price, shall be made within 60 days after the last of the following to occur: (a) completion of the Work by the KDC Inc., (b) furnishing of evidence satisfactory to Owner / Contractor that there are no claims, obligations, liens outstanding or unsatisfied for labor, services, materials, equipment, taxes or other items performed, furnished or incurred in connection with the Work, (c) delivery general release, in a form satisfactory to the Owner / Contractor, executed by KDC Inc. running to and in favor of Owner / Contractor and Owner.
- 5. Change Orders.** Owner / Contractor may from time to time, by written order ("Change Order") to KDC Inc., make changes in the Work; and KDC Inc. shall there upon perform the changed Work in accordance with the terms of the Work Order. The Contract Price shall be adjusted by the net amount of any direct savings or direct cost attributable to the Change Order.
- 6. Proposal.** This proposal and pricing are good for thirty days from the date of this proposal unless specified otherwise above. Proposal shall become a part of any contract or purchase order issued whether so indicated therein or not. Proposal must be accepted prior to starting the work described herein. Notice to proceed is acceptance of this proposal.
- 7. Documents.** Proposal is based on the documents listed. We cannot agree to be bound by the terms of any document not furnished to us prior to bid. Costs associated with documents that are not listed or not provided prior to the date above are not included in the price above.
- 8. Limits of Liability.** KDC Inc. shall not be liable for any delay in furnishing or failure to furnish service due to fire, flood, strike, lockout, dispute with workmen, inability to obtain material or any cause beyond reasonable control.

9. **Material Pricing Volatility/Delivery Delays.** If, during the performance of this contract, material pricing significantly increases, through no fault of KDC Inc., the proposal price shall be equitably adjusted by an amount reasonably necessary to cover any such significant price increases. As used herein, a significant price increase shall mean any increase in price exceeding 3% as experienced by KDC Inc. from the date of the contract signing. Such price increases shall be documented through quotes, invoices, or receipts. Where the delivery of material is delayed, through no fault of subcontractor, due to shortages or unavailability of materials, KDC Inc. shall not be liable for any additional costs or damages associated with such delay(s).

The parties understand and agree that (i) there are current issues with the manufacture and supply of various materials and equipment (all, collectively, "Goods"), which issues generally are referred to as "supply chain disruption" ("Disruption"), (ii) the Disruption arises from a variety of global, national, and local factors, all of which are beyond the control of KDC Systems, and (iii) the Disruption has impacted suppliers ability to provide goods by dates certain, in the quantities ordered, and/or for the specified price.

10. **Guarantees.** KDC Inc. warrants and guarantees the Work for one year from the time of acceptance of the Project by the Owner.



## AGENDA ITEM SUBMITTAL

**Meeting Date:** November 8, 2023

**Budgeted:** No

**To:** Water Issues Committee  
Board of Directors

**Budgeted Amount:** \$0

**Funding Source:** General Fund

**Program/Line Item No.:** 1075.51112.1914

**Cost Estimate:** \$40,000

**From:** Mike Markus

**General Counsel Approval:** N/A

**Engineers/Feasibility Report:** N/A

**Staff Contact:** R. Herndon/J. Kennedy

**CEQA Compliance:** N/A

**Subject: COST SHARE WITH CITY OF TUSTIN FOR WELL PUMPS REMOVAL  
TO ACCOMMODATE PFAS SAMPLING**

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### SUMMARY

The city of Tustin owns three production wells that have inoperable pumps that must be removed to allow a test pump to be installed to collect water samples for PFAS testing. Tustin and OCWD are coordinating the PFAS testing as a mutually beneficial activity in terms of data collection and potential settlement proceeds. As such, staff is proposing a 50/50 sharing of costs between the city of Tustin and OCWD for the pumps removal which is estimated not to exceed \$80,000.

### RECOMMENDATION

Agendize for November 15 Board meeting: Upon receipt of an invoice from the city of Tustin, authorize payment to the city of Tustin in an amount not to exceed \$40,000 for 50% of the costs to video and remove the pumps from 17<sup>th</sup> Street Well #1, 17<sup>th</sup> Street Well #2, and Yorba Well.

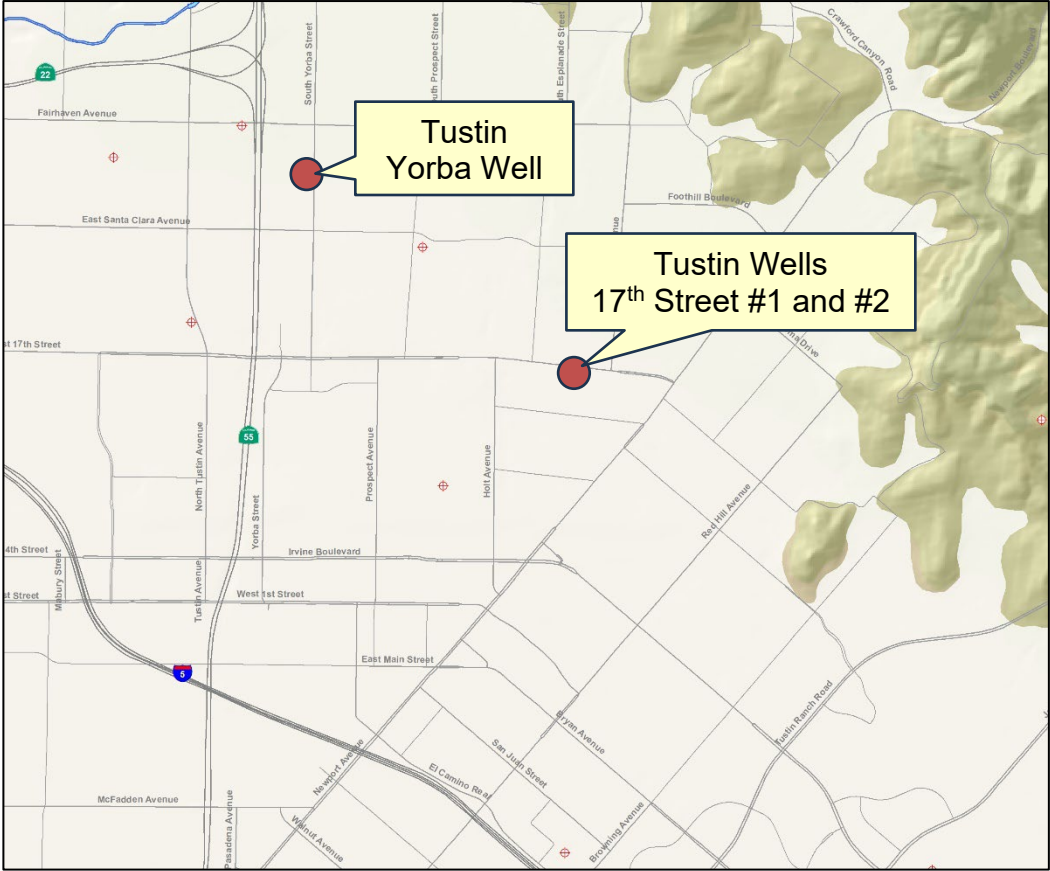
### BACKGROUND/ANALYSIS

OCWD is coordinating and facilitating PFAS sampling with groundwater producers with wells that have not been tested or for updated testing. Besides providing data on the occurrence of PFAS in the basin, the PFAS testing results also allow for potential cost recovery via proposed settlements with 3M and Dupont.

Three city of Tustin wells (Figure 1) have not been sampled for PFAS because they have inoperable pumps that must be removed, which will be performed by a city of Tustin contractor. Once the pumps are removed, OCWD will install a test pump and conduct the sampling and PFAS analysis. The costs of the pump removals and down-hole videos are estimated to not exceed \$80,000. As the pump removals and resultant PFAS test data benefit OCWD and the city of Tustin, staff recommends that the costs be shared equally between the two agencies.

**PRIOR RELEVANT BOARD ACTIONS:** None

Figure 1. Well Location Map





## AGENDA ITEM SUBMITTAL

**Meeting Date:** November 8, 2023

**To:** Water Issues Committee  
Board of Directors

**From:** Mike Markus

**Staff Contact:** A. Hutchinson/J. Kennedy

**Budgeted:** N/A

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**Funding Source:** N/A

**Program/Line Item No.** 1080.57016

**General Counsel Approval:** Yes

**Engineers/Feasibility Report:** N/A

**CEQA Compliance:** Yes

**Subject: SANTA ANA RIVER CONSERVATION AND CONJUNCTIVE USE  
PROGRAM (SARCCUP) EXTRAORDINARY SUPPLY AGREEMENT**

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### SUMMARY

The Santa Ana River Conservation and Conjunctive Use Program (SARCCUP) is a multi-faceted project involving OCWD and the other four Santa Ana Watershed Project Authority (SAWPA) member agencies. An agreement is required with the Metropolitan Water District of Southern California (MWD) and other MWD member agencies to assign extraordinary supply credit for water withdrawn from Orange County Groundwater Basin SARCCUP water bank.

Attachment: Agreement

### RECOMMENDATION

Agendize for November 15 Board meeting: Authorize the General Manager to execute an agreement with the Metropolitan Water District of Southern California, Municipal Water District of Orange County, Orange County Water District, city of Anaheim, city of Fullerton, and the city of Santa Ana regarding the assignment of extraordinary supply credit from the Santa Ana River Conservation and Conjunctive Use Program

### BACKGROUND/ANALYSIS

In May 2015, the Board authorized participation with the San Bernardino Valley Municipal Water District (Valley District), Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), and Western Municipal Water District (WMWD) (collectively "Agencies") in planning the watershed-scale Santa Ana River Conservation and Conjunctive Use Program (SARCCUP), which is being partially funded by a \$55 million Proposition 84 grant. SARCCUP provides multiple, regional benefits to the Santa Ana River Watershed and is made up of three elements:

1. A large-scale, conjunctive use element that utilizes storage space in the watershed's groundwater basins allowing the banking of wet year supplies for use in dry years, facilitating the augmentation of drought and emergency water supplies.
2. Removal of a non-native plant *Arundo Donax* and habitat restoration for the Santa Ana Sucker fish. The *Arundo* removal will recover approximately 2,400 acre-feet per year of water that is currently consumed by *Arundo*.

3. Water use efficiency (WUE) measures to lower water demands in the watershed. The WUE element includes extending the Proposition 84 2014 Drought Round WUE program for technical support for conservation programs and public outreach.

## **Water Bank**

SARCCUP includes establishing water banks in multiple locations in the Santa Ana River Watershed, including the Orange County Groundwater Basin (Basin). Storing water in the Basin has several advantages in that the water is recharged by OCWD, the water is stored locally, and is immediately available when needed in dry years. OCWD's water bank includes 36,000 acre-feet of storage in the Basin and represents 100 percent of OCWD's share of the SARCCUP water bank.

The Orange County SARCCUP bank will be filled with imported water, including, when available, surplus State Water Project (SWP) from Valley District. The banked surplus SWP water has additional value in that it can be used during dry periods when the Metropolitan Water District of Southern California (MWD) declares an allocation and reduces imported supplies. When MWD declares an allocation, the banked surplus SWP water, which can be certified by MWD as Extraordinary Supply, can be used to offset some or all of the reduced imported supplies to OCWD's service area.

## **Assignment of Extraordinary Supply Water**

To guide water allocation decisions during a drought MWD developed a Water Supply Allocation Plan (WASP). Using MWD's WASP as the basis, the Metropolitan Water District of Orange County (MWDOC) developed its own WASP tailored to the MWDOC service area for its retail member agencies, including OCWD. The WASP describes the process of certifying water as Extraordinary Supply when it is banked and how it can be used when pumped during an allocation.

The purpose of the Agreement is to provide the mechanism for MWDOC, on behalf of OCWD and the groundwater pumpers, to receive Extraordinary Supply credits. The cities of Anaheim, Fullerton and Santa Ana are identified separately because they are MWD member agencies and are not represented by MWDOC.

## **Extraordinary Supply Assignment Process**

As described in the attached agreement, the assignment of Extraordinary Supply credits would follow this process:

1. MWD puts the WASP into effect ("Declares an Allocation").
2. OCWD confers with the groundwater producers to determine how much stored Extraordinary Supply water, if any, will be produced from the SARCCUP bank in response to the allocation.
3. OCWD raises the Basin Production Percentage (BPP) or takes other measures as appropriate to facilitate the extraction of the stored SARCCUP water.
4. During the allocation period, OCWD may consult with MWDOC and the groundwater producers regarding those agencies' consumption of imported water relative to the allocation, and further adjust the BPP or take other actions to modify the pumping of SARCCUP water.



5. On a monthly basis, and upon completion of the allocation, OCWD will work with MWDOC, Anaheim, Fullerton, and Santa Ana, to provide any relevant documentation required, including the amount of SARCCUP water that the groundwater producers each pumped from the Basin.
6. MWDOC, Anaheim, Fullerton, and Santa Ana will review and incorporate the documentation provided by OCWD and submit to MWD in compliance with the WSAP.
7. If MWD determines that certifications and other supporting documentation submitted by MWDOC, Anaheim, Fullerton, and Santa Ana are in accordance with the applicable requirements of the WSAP, MWD will qualify the water as Extraordinary Supply and will assign the benefit accordingly to MWDOC, Anaheim, Fullerton, and Santa Ana. Benefits assigned to MWDOC would be exclusively granted to those groundwater producers in the MWDOC service area that pumped the SARCCUP water.

### **PRIOR RELEVANT BOARD ACTION(S)**

8/18/21, R21-8-119- Authorize the General Manager to execute Second Amended OCWD-SAWPA Subgrantee Agreement; and Integrated Regional Water Management 2015 Round implementation Grant Funding Assignment Agreement Between OCWD and MWDOC.

7/21/21, R21-7-112 - Authorize execution of agreement with Metropolitan Water District of Southern California and other parties for the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP) and agreement with MWDOC and other parties for the sale of excess SARCCUP water.

4/21/21, R21-4-66 - Considering East Orange County Water District Mitigated Negative Declaration for the Vanderwerff Well Project and approving agreement to provide grant funding for the East Orange County Water District Vanderwerff Well Project

3/17/21, R21-3-42 - Considering City of Fullerton Categorical Exemption Declaration for City of Fullerton Well 7A Replacement Project and approving agreement to provide grant funding for Well 7A.

3/17/21, R21-3-43 - Considering City of Orange Categorical Exemption Declaration for City of Orange Well 29 and approving agreement to provide grant funding for Well 29.

3/17/21, R21-3-44 - Considering City of Tustin Categorical Exemption Declaration for City of Tustin Beneta Well and approving agreement to provide grant funding for the Beneta Well.

3/17/21, R21-3-45 - Considering Mesa Water Mitigated Negative Declaration for the Mesa Water wells No. 12 and 14 and Pipeline Project and approving agreement to provide grant funding for Mesa Water wells No. 12 and 14 and Pipeline Project.

9/16/20, R20-9-124 - Authorize the General Manager to execute amended OCWD-SAWPA Subgrantee Agreement and authorize staff to file a Notice of Determination.

12/18/19, M19-154 - Authorizing negotiation of agreements with Cities of Fullerton, Tustin, Orange , East Orange County Water District and Mesa Water for Santa Ana River Conservation and Conjunctive Use Program: Orange County Extraction Wells.

4/17/19, R19-4-57 -Considering the Final Environmental Impact Report (State Clearinghouse No. 2016101079) for the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP), Approve OCWD-SAWPA Subgrantee Agreement, Establish Project Budget and Associated Actions.

12/5/18, R18-12-166 - Approve and authorize execution of amendment to Cost Share Letter Agreement for the SARCCUP Environmental Impact Report to increase OCWD's share by \$26,920 and authorize payment to the Inland Empire Utilities Agency for an amount not to exceed \$26,920.

4/19/17, R17-4-55 - Approve SARCCUP Cost share for Program Management.

6/15/16, R16-6-83 - Approve and authorize execution of the SARCCUP Memorandum of Understanding for Program Implementation subject to approval as to form by the District's legal counsel; Approve and authorize execution of Santa Ana Watershed Project Authority Project Agreement 23 (PA23) subject to approval as to form by the District's legal counsel; and, Approve and authorize Cost Share Letter Agreement for the SARCCUP Program Environmental Impact Report subject to approval as to form by the District's legal counsel and authorize payment to the Inland Empire Utilities Agency for an amount not to exceed \$68,080.

2/17/16, M16-23 - Authorize payment to San Bernardino Valley Municipal Water District for cost share for support model for the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP).

5/20/2015, R15-5-68 - Approve and authorize execution of Memorandum of Understanding for the Santa Ana River Conjunctive Use Project, subject to approval as to form by District legal counsel; and authorize payment of \$17,830 to the San Bernardino Valley Municipal Water District for the District's cost share in the Santa Ana River Watermaster Action Team evaluation of watershed-scale conjunctive use projects and water use efficiency and preparation of Proposition 84 grant funding submittal, bringing the District's total contribution to \$67,120.

3/19/2014, M14-49 - Authorize payment of \$36,238 to the San Bernardino Valley Municipal Water District for the District's cost share in the Santa Ana River Watermaster Action Team evaluation of watershed-scale conjunctive use projects and water use efficiency

7/24/2013, M13-102 - Authorize payment of \$13,052 to the San Bernardino Valley Municipal Water District for the District's cost share in the Santa Ana River Watermaster Action Team evaluation.

**Agreement Among The Metropolitan Water District of Southern California, Municipal Water District of Orange County, Orange County Water District, City of Anaheim, City of Fullerton, and the City of Santa Ana**  
**Regarding the Assignment of Extraordinary Supply from the Santa Ana River Conservation and Conjunctive Use Program**

This Agreement among The Metropolitan Water District of Southern California (Metropolitan), Municipal Water District of Orange County (MWDOC), the Orange County Water District (OCWD), the City of Anaheim (Anaheim), the City of Fullerton (Fullerton), and the City of Santa Ana (Santa Ana) regarding the assignment of Extraordinary Supply from the Santa Ana River Conservation and Conjunctive Use Program (hereinafter "Agreement") is hereby entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2023. Metropolitan, MWDOC, OCWD, Anaheim, Fullerton, and Santa Ana are collectively referred to as "Parties" and individually as a "Party" herein.

**RECITALS**

A. Metropolitan is a metropolitan water district organized under the Metropolitan Water District Act, codified at section 109-1, et seq. of West's Appendix to the California Water Code, and is engaged in developing, storing, and distributing water in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. Metropolitan has a long-term contract with the California Department of Water Resources (DWR) which sets forth the terms and conditions of Metropolitan's participation in the State Water Project (SWP).

B. MWDOC is a municipal water district formed and existing under the California Municipal Water District Act of 1911, Sections 71000 et seq. of the California Water Code, for purposes that include providing its 28 member agencies in Orange County, with reliable, high quality supplies from Metropolitan and other sources to meet present and future needs, at an

equitable and economic cost, and to promote water use efficiency for all of Orange County.

MWDOC is a member agency of Metropolitan.

C. OCWD undertakes responsibilities associated with actively managing the Coastal Plain of Orange County Groundwater Basin (hereinafter “Orange County Groundwater Basin”). OCWD was formed by an act of the California State Legislature in 1933 for the purpose of protecting and managing the Orange County Groundwater Basin. OCWD is a member agency of MWDOC, and purchases imported water for replenishment purposes from MWDOC.

D. Anaheim is a California municipal corporation and a member public agency of Metropolitan. The city is located in northern and northeastern Orange County with its jurisdictional area overlying the Orange County Groundwater Basin. Anaheim is a member agency of OCWD.

E. Fullerton is a California municipal corporation and a member public agency of Metropolitan. The city is located in northern and northeastern Orange County with its jurisdictional area overlying the Orange County Groundwater Basin. Fullerton is a member agency of OCWD.

F. Santa Ana is a California municipal corporation and a member public agency of Metropolitan. The city is located in northern Orange County with its jurisdictional area overlying the Orange County Groundwater Basin. Santa Ana is a member agency of OCWD.

G. The Santa Ana River Conservation and Conjunctive Use Program (SARCCUP) is a multi-agency, watershed-wide groundwater storage and recovery project involving multiple basins in the Santa Ana River Watershed. The goal is to store available water during wet years in local groundwater basins throughout the watershed and extract the stored water during dry years to reduce the impacts from single and multi-year droughts.

H. The SARCCUP includes four water banking sites. Three of the sites are located within Metropolitan's service area. More specifically, the three aforementioned sites are in the Metropolitan member agency service areas of Eastern Municipal Water District (EMWD), Western Municipal Water District (WMWD), and MWDOC. The water banking facilities within MWDOC's service area are located within, owned, and operated, exclusively by OCWD. The fourth water banking site is within San Bernardino Valley Municipal Water District (Valley District)'s service area in the San Bernardino Basin Area (SBBA), which is located outside of Metropolitan's service area. The SARCCUP includes water delivery interconnections between SBBA and SARCCUP facilities in the Metropolitan service area.

I. OCWD undertakes all responsibilities associated with actively managing the SARCCUP banking program in the Orange County Groundwater Basin. A portion of MWDOC's service area overlies the Orange County Groundwater Basin and MWDOC's member agencies in this portion of its service area along with Anaheim, Fullerton, and Santa Ana pump groundwater from the Orange County Groundwater Basin in accordance with the Orange County Water District Act.

J. On June 15, 2021, Valley District and Metropolitan entered into a Coordinated Operating and Surplus Water Agreement whereby Valley District may offer to sell to Metropolitan, and Metropolitan may purchase from Valley District, surplus SWP water.

K. On November 9, 2021, Metropolitan, EMWD, WMWD, MWDOC, Inland Empire Utilities Agency (IEUA), and OCWD entered into an agreement (hereinafter "November 2021 SARCCUP Agreement") regarding SARCCUP. Under the November 2021 SARCCUP Agreement, Metropolitan agreed to "equally offer to WMWD, EMWD, and MWDOC for purchase an amount of water equivalent to 50% of the amount that Metropolitan purchases from

Valley District during a calendar year for delivery to the SARCCUP water banking facilities” (hereinafter, “SARCCUP Water”).

L. On December 9, 2021, EMWD, WMWD, MWDOC, OCWD and IEUA entered into an additional SARCCUP agreement (hereinafter “December 2021 SARCCUP Agreement”) governing MWDOC’s access to SARCCUP Water (which is referred to in the December 2021 SARCCUP Agreement as “Allocated Water”) for its own water supply purposes and prescribing the priority and process for the parties to the agreement to access SARCCUP Water and placing conditions on how, when, and where MWDOC may use SARCCUP Water.

M. Under Section 1.B of the November 2021 SARCCUP Agreement, MWDOC will purchase SARCCUP Water offered by Metropolitan on behalf of, and whenever requested by, OCWD for the SARCCUP water banking program. Also under Section 1.B of the November 2021 SARCCUP Agreement, as the owners and operators of the SARCCUP water banking facilities, WMWD, EMWD, and OCWD will determine the delivery amounts to the SARCCUP water banking sites and may designate deliveries to IEUA or MWDOC on their behalf. Under Section 4 of the November 2021 SARCCUP Agreement, if SARCCUP Water purchased and stored within the Santa Ana River Watershed during the same calendar year otherwise complies with Metropolitan’s Water Supply Allocation Plan last revised in December 2014 (or as any successor to such plan), then it will qualify as extraordinary local supply production (hereinafter: “Extraordinary Supply”).

N. As a wholesale member agency of Metropolitan, MWDOC has developed and adopted its own Water Supply Allocation Plan (hereinafter “MWDOC WSAP”) for its retail member agencies, including OCWD. The plan largely reflects the implementation terms and conditions of Metropolitan’s Water Supply Allocation Plan but is tailored to the MWDOC

service area. Notably, MWDOC's WSAP tracks individual retail agency supplies and demands but utilizes an aggregate approach whereby credits and adjustments are prorated to best match MWDOC's allocation from Metropolitan. MWDOC's current policy under the MWDOC WSAP is not to subject its member agencies to allocation surcharges if its member agencies' combined imported water usage by the end of the Allocation Period is below the allocation established by Metropolitan for MWDOC's service area.

O. MWDOC acknowledges that under the MWDOC WSAP, the SARCCUP Water MWDOC purchases on behalf of OCWD, that is stored and pumped from the Orange County Groundwater Basin, and approved by Metropolitan as certified Extraordinary Supply, shall be exclusively allocated to MWDOC's member retail water agencies that produced the SARCCUP Water from the Orange County Groundwater Basin.

P. Under Section 5 of the November 2021 SARCCUP Agreement, Metropolitan agreed to assign any Extraordinary Supply benefit that would accrue to MWDOC as a result of actions taken by OCWD in accordance with a separate written agreement among Metropolitan, MWDOC, OCWD, Anaheim, Fullerton, and Santa Ana. Accordingly, the purpose of this Agreement is to provide the mechanism for MWDOC, on behalf of its member retail water agencies that pump water from the Orange County Groundwater Basin, and for Anaheim, Fullerton, and Santa Ana (which also overlie and pump water from the Orange County Groundwater Basin), to receive Extraordinary Supply credits from Metropolitan under Metropolitan's adopted Water Supply Allocation Plan where SARCCUP Water is pumped and used as extraordinary local supply during a Metropolitan declared allocation.

## **AGREEMENT**

NOW, THEREFORE, in consideration of the foregoing recitals and the representations, warranties, covenants, and agreements contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties hereby agree to the following terms and conditions.

### **1. Declaration of a Metropolitan Allocation**

Should Metropolitan's Board of Directors take action to declare an allocation and set an allocation amount to be in effect ("Allocation Period") under its Water Supply Allocation Plan, OCWD and MWDOC will confer with MWDOC's member retail water agencies that pump water from the Orange County Groundwater Basin, and Anaheim, Fullerton, and Santa Ana (hereinafter the "Groundwater Producers"). The purpose of this consultation will be, among other things, for OCWD to discuss the amount of SARCCUP Water it has in storage and to obtain information regarding the Groundwater Producers' need for Extraordinary Supply from the SARCCUP program to comply with Metropolitan's imported water allocation.

### **2. Pumping of Stored SARCCUP Water**

A. Based upon the consultation with the Groundwater Producers and MWDOC, and prior to the commencement of Metropolitan's Allocation Period, OCWD may act to incrementally increase its groundwater Basin Production Percentage (hereinafter "BPP") to incentivize the pumping of SARCCUP Water in storage by the Groundwater Producers. OCWD may also incentivize additional pumping of SARCCUP Water by the Groundwater Producers through other basin management tools authorized under the OCWD Act, including, but not limited to, the use of the Basin Equity Assessment, production limitations, and surcharges.



Additional pumping of SARCCUP Water in storage undertaken by the Groundwater Producers would be above the planned local supply production baseline amount for the Metropolitan Allocation Period.

B. During Metropolitan's Allocation Period, OCWD may consult with MWDOC and the Groundwater Producers regarding those agencies' consumption of imported water relative to their Metropolitan allocation amount, and further adjust the BPP or take other actions as it deems necessary to modify the pumping of SARCCUP water in storage by those agencies.

**3. Documentation of SARCCUP Water Produced**

On a monthly basis, and upon completion of Metropolitan's Allocation Period, OCWD will work with MWDOC, Anaheim, Fullerton, and Santa Ana, to provide any relevant documentation required. OCWD will provide to MWDOC the amount of SARCCUP Water that the Groundwater Producers each pump from storage from the Orange County Groundwater Basin, including :

A. The quantity of SARCCUP Water produced by the Groundwater Producers in excess of each Groundwater Producer's originally planned local supply production amount.

B. An accounting of the change in storage and storage balance of SARCCUP Water in the Orange County Groundwater Basin during the Allocation Period.

C. Other documentation as needed by MWDOC, Anaheim, Fullerton, and Santa Ana to comply with the applicable requirements of Metropolitan's Water Supply Allocation Plan and to certify the eligible Extraordinary Supply amounts.

**4. Extraordinary Supply Certification and Crediting**

A. MWDOC, Anaheim, Fullerton, and Santa Ana shall review and incorporate the documentation provided by OCWD as specified in Section 3 into any submitted certifications of Extraordinary Supply and other submissions to Metropolitan for compliance with Metropolitan's Water Supply Allocation Plan. If Metropolitan determines that certifications and other supporting documentation submitted by MWDOC, Anaheim, Fullerton, and Santa Ana are in accordance with the applicable requirements of Metropolitan's Water Supply Allocation Plan for such certifications, Metropolitan will qualify the water as Extraordinary Supply and will assign the benefit accordingly to MWDOC, Anaheim, Fullerton, and Santa Ana.

B. Under MWDOC's WSAP, SARCCUP Water that is pumped by MWDOC's retail member agencies in the Orange County Groundwater Basin, and is certified by Metropolitan as Extraordinary Supply, shall be proportionally credited exclusively to those MWDOC retail member agencies that pumped the SARCCUP Water. MWDOC shall base such crediting upon documentation submitted by OCWD and MWDOC's retail member agencies in the Orange County Groundwater Basin.

**5. Records and Inspection**

Metropolitan, MWDOC, OCWD, Anaheim, Fullerton, and Santa Ana will keep records of SARCCUP Water storage and production pursuant to this Agreement. The SARCCUP Water storage and production records of each agency will be open to inspection by the other agencies upon reasonable notice. The agencies will cooperate to develop coordinated administrative procedures for the tracking required under this Agreement.

**6. Changes to Metropolitan's Water Supply Allocation Plan**

Metropolitan, MWDOC, OCWD, Anaheim, Fullerton, and Santa Ana acknowledge that Metropolitan's Water Supply Allocation Plan is established by Metropolitan's Board of Directors and is subject to change. Should Metropolitan's Board of Directors take actions to change the Water Supply Allocation Plan in a manner that materially affects the terms of the Agreement, the Parties will work together in good faith to develop procedures to fulfill the intent of this Agreement in a manner that is consistent with any changes to Metropolitan's Water Supply Allocation Plan.

**7. Severability**

In the event that a court of competent jurisdiction determines that a provision included in this Agreement is legally invalid or unenforceable and such decision becomes final, the Parties to this Agreement shall use their best efforts to (i) within thirty (30) days of the date of such final decision, identify by mutual agreement the provisions of this Agreement which must be revised, and (ii) within three (3) months thereafter promptly agree on the appropriate revision(s). The time periods specified above may be extended by mutual agreement of the Parties. Pending the completion of the actions designated above, to the extent it is reasonably practical and can be done without violating any applicable provisions of law, the provisions of this Agreement, which were not found to be legally invalid or unenforceable in the final decision, shall continue in effect. If the Parties cannot agree on appropriate revisions, this Agreement shall be terminated.

**8. Further Assurances**

Each Party hereto, upon the request of the other, agrees to perform such further acts and to execute and deliver such other documents as are reasonably necessary to carry out the

provisions of this Agreement. The Parties agree to perform such further acts timely when performing all obligations under this Agreement.

**9. Counterparts**

This Agreement may be executed in two or more counterparts, each of which, when executed and delivered, shall be an original and all of which together shall constitute one instrument, with the same force and effect as though all signatures appeared on a single document.

**10. Dispute Resolution**

In the event of a dispute between the Parties regarding this Agreement, the Parties may attempt to resolve the dispute by using the services of a mutually acceptable mediator before a third-party neutral prior to initiating litigation in court. If the Parties decide to use a mediator, they will equally share the mediator's fees and expenses.

**11. Successors and Assigns**

This Agreement shall bind and inure to the benefit of the successors and assigns of the Parties; provided, however, no Party shall assign any of its rights or obligations under this Agreement without the prior written consent of the other Parties. Nothing in this Agreement is intended to confer any right or remedy under this Agreement on any person other than the Parties to this Agreement and their respective successors and permitted assigns, or to relieve or discharge any obligation or liability of any person to any Party to this Agreement, or to give any person any right of subrogation or action over or against any Party to this Agreement.

**12. Waiver/Cure of Defaults**

The failure of any Party to enforce against another Party a provision of this Agreement shall not constitute a waiver of that Party's right to enforce such a provision at a later time. No Party shall be deemed to be in default of any provision of this Agreement unless the other Party

has given written notice specifically stating the alleged default and the Party in default fails to cure the default within sixty (60) days of receipt of such written notice.

**13. No Obligation to Third Parties**

The approval, execution and performance of this Agreement does not confer any rights upon any person or entity other than the Parties to this Agreement.

**14. Termination**

This Agreement will terminate on December 31, 2085.

**15. Late Arising Claims**

If a claim arising under or with respect to one or more terms of this Agreement has not been resolved when such term terminates, or if such a claim is brought after this Agreement has terminated, but within the period of time for bringing such a claim under California law (Late Arising Claim), the provisions of this Agreement shall continue in full force and effect for such additional period of time as is necessary to resolve such claims and to satisfy the rights and obligations of the Parties hereto with respect thereto.

**16. Entire Agreement**

This Agreement constitutes the final, complete and exclusive statement of the terms of the agreement among the Parties pertaining to the matters provided herein during the term and supersedes all prior and contemporaneous understandings or agreements of the Parties related thereto. No Party has been induced to enter into this Agreement by, nor is any Party relying on, any representation or warranty outside those expressly set forth in this Agreement.

**17. Notices**

All notices, requests, and demands hereunder (Notices) shall be in writing, including electronic communications, and shall be deemed to have been duly given when delivered (or, if

mailed, postage prepaid, on the third business day after mailing, if that date is earlier than actual delivery). Notices shall be sent to a Party at the address of that Party set forth below or, if such Party has furnished notice of a change of that address as herein provided, to the address of that Party most recently so furnished.

Metropolitan Water District of Southern California  
Attention: General Manager  
P.O. Box 54153  
Los Angeles, CA 90054-0153

Municipal Water District of Orange County  
Attention: General Manager  
P.O. Box 20895  
Fountain Valley, CA 92708

Orange County Water District  
Attention: General Manager  
18700 Ward St  
Fountain Valley, CA 92708

City of Anaheim  
Public Utilities Department  
201 S. Anaheim Blvd., ite 1101  
Anaheim, CA 92805

City of Fullerton  
Attention: Public Works Director  
303 W. Commonwealth Avenue  
Fullerton, CA 92832

City of Santa Ana  
Attention: City Manager  
220 S, Daisy Avenue, M-85  
Santa Ana, CA 92703

**18. Governing Law**

The validity, construction, and enforceability of this Agreement shall be governed in all respects by the laws of the State of California.

**19. Electronic Signatures**

Any Party may execute this Agreement using an “electronic signature,” as that term is defined in California Civil Code Section 1633.2, or a “digital signature,” as defined by California Government Code Section 16.5. An electronic or digital signature will have full legal effect and enforceability.

**[Signatures on Following Page]**

In WITNESS WHEREOF, the Parties have caused this Agreement to be executed by the following duly authorized representatives.

**THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA**

By: \_\_\_\_\_  
Adel Hagekhalil  
General Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Marcia L. Scully  
General Counsel

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

By: \_\_\_\_\_  
Harvey De La Torre  
Interim General Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

Best, Best & Krieger

By: \_\_\_\_\_  
Joseph Byrne



**ORANGE COUNTY WATER DISTRICT**

By: \_\_\_\_\_  
Mike Markus  
General Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

Rutan & Tucker LLP

By: \_\_\_\_\_  
Jeremy Jungreis

**CITY OF ANAHEIM**

By: \_\_\_\_\_  
Dukku Lee  
Public Utilities General Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

Office of City Attorney

By: \_\_\_\_\_  
Alison M. Kott  
Assistant City Attorney

**CITY OF FULLERTON**

By: \_\_\_\_\_  
XXXXX  
City Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

XXXXX

By: \_\_\_\_\_  
XXXXX

**CITY OF SANTA ANA**

By: \_\_\_\_\_  
XXXXX  
City Manager

\_\_\_\_\_ Dated

APPROVED AS TO FORM:

XXXXX

By: \_\_\_\_\_  
XXXXX



## AGENDA ITEM SUBMITTAL

**Meeting Date:** November 8, 2023

**To:** Water Issues Committee  
Board of Directors

**From:** Mike Markus

**Staff Contact:** C. Olsen / R. Bouley

**Budgeted:** Yes

**Contract Amount:** \$12,812,800

**Final Cost:** \$13,596,600

**Funding Source:** CIP

**Program/Line Item No.:** C19013

**General Counsel Approval:** Yes

**Engineers Report:** Completed

**CEQA Compliance:** Cat. Ex.

**Subject: CONTRACT NO. GG-2020-1: AUTHORIZE NOTICE OF COMPLETION, RATIFY AND APPROVE CHANGE ORDERS, AND INCREASE BUDGET**

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### SUMMARY

Construction of the city of Garden Grove (City) Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants by Pacific Hydrotech was completed in October 2023. Staff recommends filing a Notice of Completion, ratifying change orders, and approving a budget increase for Contract GG-2020-1.

Attachment: Presentation

### RECOMMENDATION

Agendize for November 15 Board meeting:

1. Ratify issuance of Change Order Nos. 1 – 15 to Pacific Hydrotech for a total amount of \$642,200; and
2. Authorize Change Order No 16 to Pacific Hydrotech for a total amount of \$141,600; and
3. Increase project budget by \$1,163,042 for a total project budget of \$23,843,700; and
4. Accept completion of work and authorize filing a Notice of Completion for Contract No. GG-2020-1: city of Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants; and
5. Authorize the General Manager to transfer the city of Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants to the city of Garden Grove effective the date of filing the Notice of Completion and quitclaim any property rights obtained for the project.

### BACKGROUND/ANALYSIS

Construction of the PFAS water treatment plants at the city of Garden Grove Wells 21, 23, 28, 29, and 30 was completed in October 2023. Figure 1, below, shows the city of Garden Grove well sites that received wellhead PFAS treatment as part of this project.

Pacific Hydrotech endeavored to complete this project as quickly as possible. However, there were substantial delays to their work due to pandemic related material shortages, Southern California Gas Co and Edison related utility service construction delays, and

City delays to the schedule to maximize pumping from well sites and avoid purchasing imported water. There were also many changes to the plans due to unknown utilities, obsolete equipment, and operational modifications that were not accounted for with the original design.

**Figure 1: GG Well Sites**



Change Order Nos. 1-15 were executed under the General Manager's signing authority and include several changes in each as summarized below:

- CCO No 1: Revise pipe thickness for a net credit of (\$2,169.69). Add 12 Calendar Days.
- CCO No 2: Upgrades to SCADA equipment at multiple sites due to hardware obsolescence incompatibilities for a net total of \$25,202.94.
- CCO No 3: Additional work to re-route water lines and electrical conduits due to existing utility conflicts at Well 29 for a net total of \$12,986.73.
- CCO No 4: Design changes at Well 21 consisting of adding permanent flushing lines, revising curb and paving at the media loading pull-out area, and additional water quality sample ports for a net total of \$92,523.90.
- CCO No 5: Non-compensable time extension due to Pandemic related material supply chain delays – no additional cost. Add 89 Calendar Days.
- CCO No 6: Design changes at Well 29 consisting of adding a permanent flushing line, adding additional conduit for SCE power feed, demolition of buried concrete not shown on the plans, and additional pipe routing modifications for a net total of \$62,255.48.
- CCO No 7: Non-compensable time extension due to Pandemic related material supply chain delays – no additional cost. Add 51 Calendar Days.
- CCO No 8: Design changes at Well 29 consisting of revisions to the access gates for media delivery, replace gas supply piping not shown on plans, well pump cooling line modifications, and AQMD permitting for new generator for a net total of \$56,12.66.

- CCO No 9: Design changes at Well 30 consisting of demolition of buried concrete not shown on the plans, adding a permanent flushing line, additional water quality sample ports, relocating well pump pre-lube piping, relocating roof access ladder, vessel anti-graffiti coating, and additional lighting in the well station for a net total of \$107,413.84. Add 55 Calendar Days.
- CCO No 10: Enlarge the SCADA control panel enclosures at each site for \$18,470.95.
- CCO No 11: Design changes at Lampson Reservoir (Wells 23 and 28) consisting of adding a permanent flushing line, raising the anti-siphon loop, replacing damaged equipment on owner supplied vessels, additional air-vac down drain piping, additional water quality sampling ports, additional piping for chemical feed, and SCADA historian computer upgrades for a net total of \$112,792.18. Add 61 Calendar Days.
- CCO No 12: Non-compensable time extension due to Pandemic related material supply chain delays – no additional cost. Add 92 Calendar Days.
- CCO No 13: Non-compensable time extension due to Pandemic related material supply chain delays – no additional cost. Add 46 Calendar Days.
- CCO No 14: Additional changes consisting of extra work to install and setup a new natural gas regulator to replace the regulator, So Cal Gas removed at Well 29, install flexible couplings for booster pumps at Wells 30 and 29, revise cable tray at Well 29 to conduit, and upgrade SCADA HMI at Well 30 due to hardware obsolescence for a net total of \$88,001.07. Add 30 Calendar Days.
- CCO No 15: Final operational modifications at all sites consisting of adding screens to all flushing outlets at all sites; modifying electric duct bank, adding safety bollards, repairing damage to subgrade caused by City forces, modifying SCADA for revised well operation without nitrate blending at Lampson; and modifying booster pump station door lock hardware and rerouting air vac drains outside the pump station building at Well 29 for a net total of \$68,709.49.
- CCO No 16: This project consisted of four individual well sites. The project was originally specified to be constructed in two phases – Well 21 first and then construct the remaining three sites concurrently. However, the City needed to keep the wells in service as long as possible, requiring the contractor to build the sites individually to avoid additional costs of purchasing imported water. Pacific Hydrotech worked diligently to minimize additional management costs. However, due to re-phasing the work to accommodate additional groundwater pumping and other delays from SoCal Gas and SCE, Pacific Hydrotech incurred increased management labor costs of \$141,600. Staff recommends authorizing Change Order No. 16 to Pacific Hydrotech in the amount of \$141,600.

The net total of Change Order Nos. 1–15 is \$642,200. With the addition of Change Order No. 16, the construction change order percentage for this contract is 6.1%. The budget summary for this project is summarized below in Table 1.

The PFAS Treatment Facilities and Program Agreement executed between the District and the city of Garden Grove requires OCWD to transfer the Treatment Systems to the City upon filing of the construction contract Notice of Completion. It is recommended that the General Manager be authorized to transfer the Treatment System to the City.

**Table 1: GG PFAS Water Treatment Plant Budget Summary**

Description	Budget	Final Cost
<b>Design, Construction Management, Permitting</b>		
CDM Smith Work Order No. 2 (GG Well Design)	\$ 1,568,213	\$ 1,568,213
CDM Smith Work Order No. 2A (GG CM)	\$ 543,365	\$ 543,365
<i>CDM Smith Work Order No. 2B (GG CM)</i>	\$ 0	\$ 60,700
<i>CDM Smith Work Order No. 2C (GG CM)</i>	\$ 0	\$ 228,100
<i>CDM Smith Work Order No. 2D (GG CM)</i>	<u>\$ 0</u>	<u>\$ 244,722</u>
Engineering Sub-Total	\$2,111,578	\$2,645,100
<b>Construction</b>		
Contract GG-2020-1 (Wells 21, 23, 28, 29, 30)	\$ 12,812,800	\$ 12,812,800
<i>Contract GG-2020-1 (CCO's 1-15)</i>	\$ 0	\$ 642,200
<i>Contract GG-2020-1 (CCO 16)</i>	\$ 0	\$ 141,600
<i>GG Wells Treatment Vessels</i>	\$ 4,272,324	\$ 4,491,000
<i>GG Wells IX Resin</i>	\$ 2,820,598	\$ 2,991,000
<i>Project Administrative Costs</i>	<u>\$ 0</u>	<u>\$ 120,000</u>
<i>Construction Sub-Total</i>	\$ 19,905,722	\$ 21,198,600
<b>Project Contingency</b>	<u>\$ 663,358</u>	<u>\$ 0</u>
<b>Project Budget</b>	\$ 22,680,658	\$ 23,843,700

**PRIOR RELEVANT BOARD ACTION(S)**

6/2/21, R21-6-85: Approve Agreement to Evoqua Water Technologies, LLC For Ion-Exchange Resin Media and Installation at Garden Grove PFAS Treatment Plant Project (Wells 21, 23, 28, 29, and 30)

2/17/21, R21-2-32: Award Contract No. GG-2020-1, Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants, to Pacific Hydrotech Corporation

12/2/20, R20-12-160: Receive and file the Engineer's Report for the Garden Grove Wells 19, 21, 23, 28, 29, and 30 PFAS Water Treatment Plants and determine the project feasible, necessary and beneficial to the lands of the District; Authorize filing of a Categorical Exemption in compliance with the California Environmental Quality Act (CEQA) guidelines; Authorize publication of a Request for Proposals to Procure and Install Ion Exchange Resin Media for the Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants; and Authorize publication of Notice Inviting Bids for Contract No. GG-2020-1, Garden Grove Wells 21, 23, 28, 29, and 30 PFAS Water Treatment Plants.

1/22/20, R20-1-13: Issuance of a Request for Quotes to pre-purchase up to 150 PFAS treatment vessels; Issuance of a Request for Proposals for on-call consultants to prepare PFAS Treatment System designs; Execution of PFAS treatment system professional services agreements for design services with the highest ranked consultants; and Establishment of a project design budget of \$10,000,000.