MEETING OF THE BOARD OF DIRECTORS OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Jointly with the

PLANNING & OPERATIONS COMMITTEE

February 14, 2022, 8:30 a.m.

Due to the current state of emergency related to the spread of COVID-19 and pursuant to Government Code Section 54953(e), MWDOC will be holding this Board and Committee meeting by Zoom Webinar and will be available by either computer or telephone audio as follows:

Computer Audio: You can join the Zoom meeting by clicking on the following link:

https://zoom.us/j/8828665300

Telephone Audio: (669) 900 9128 fees may apply

(877) 853 5247 Toll-free

Staff: R. Hunter, J. Berg, V. Osborn,

H. De La Torre, T. Dubuque,

D. Micalizzi, H. Baez, T. Baca

Webinar ID: 882 866 5300#

P&O Committee:Director Tamaribuchi, Chair
Director McVicker

Director Nederhood

Ex Officio Member: Director Yoo Schneider

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

ROLL CALL

PUBLIC COMMENTS - Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - Determine there is a 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 a unanimous vote of the Committee)

ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING -- Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District's business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District's Internet Web site, accessible at http://www.mwdoc.com.

PRESENTATION ITEM

- 1. PRESENTATION BY SOUTH COAST WATER DISTRICT REGARDING THE DOHENY DESALINATION PROJECT
- 2. PRESENTATION REGARDING WUE STANDARDS COMPLIANCE BY FLUME SMART WATER AND SMWD

ACTION ITEMS

- 3. SOUTH COAST WATER DISTRICT USE OF THE ORANGE COUNTY HYDRAULIC MODEL
- 4. CONTINUATION OF TEMPORARY ACOUSTIC LEAK DETECTION SURVEYS AND STAFF TRAINING
- 5. LANDSCAPE DESIGN AND MAINTENANCE ASSISTANCE PROGRAMS

DISCUSSION ITEMS

6. UPDATE ON COVID-19 (ORAL REPORT)

INFORMATION ITEMS (The following items are for informational purposes only – background information is included in the packet. Discussion is not necessary unless requested by a Director.)

- 7. SOLE SOURCE CONTRACT WITH CLIMATEC REGARDING DOOR SECURITY SYSTEM
- 8. ADMINISTRATION BUILDING CONSTRUCTION FINAL UPDATE
- 9. WATER USAGE REPORT (PERFORMANCE UNDER THE GOVERNOR'S 15% VOLUNTARY REDUCTION)
- 10. FEBRUARY 23RD WATER POLICY DINNER FEATURING STATE WATER RESOURCES CONTROL BOARD CHAIR, JOAQUIN ESQUIVEL
- 11. STATUS REPORTS
 - a. Ongoing MWDOC Reliability and Engineering/Planning Projects
 - b. WEROC
 - c. Water Use Efficiency Projects
 - d. Public and Government Affairs
- 12. REVIEW OF ISSUES RELATED TO PLANNING OR ENGINEERING PROJECTS, WEROC, WATER USE EFFICIENCY, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, PUBLIC AFFAIRS PROGRAMS AND EVENTS, PUBLIC INFORMATION PROJECTS, PUBLIC INFORMATION CONSULTANTS, DISTRICT FACILITIES, and MEMBER-AGENCY RELATIONS

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process

includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.



PRESENTATION ITEM

February 14, 2022

TO: Planning & Operations Committee

(Directors Tamaribuchi, McVicker, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: J. Berg, Director of Water Use Efficiency

SUBJECT: Presentation Regarding WUE Standards Compliance by Flume Smart

Water and SMWD

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file this report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

The California Department of Water Resources and State Water Resources Control Board are nearing completion of the development of the Conservation as a California Way of Life water use efficiency standards called for in Senate Bill 606 and Assembly Bill 1668. In recent months, staff has provided several presentation to the Board describing the proposed standards.

The Board has expressed interest in the ability for water suppliers throughout Orange County to comply with the proposed standards.

DETAILED REPORT

Staff has arranged for two presentations at the February Planning & Operations Committee meeting. The first presentation will be provided by Flume Smart Water and will show preliminary results of the Residential End Uses of Water Study MWDOC commissioned and preliminary analysis of single-family home compliance with the proposed residential indoor and outdoor standards. Nate Adams, Director of Water Resiliency – Customer Relations at the Santa Margarita Water District, will provide the second presentation. Nate's presentation will show preliminary analysis of Santa Margarita's compliance with the overall standards framework including residential indoor and outdoor, dedicated irrigation, and distribution system water loss standards.



ACTION ITEM February 16, 2022

TO: Planning & Operations Committee

(Directors Tamaribuchi, McVicker, Nederhood)

FROM: Robert Hunter, General Manager

Staff Contact: Charles Busslinger

SUBJECT: South Coast Water District Use of the Orange County Hydraulic Model

STAFF RECOMMENDATION

Staff recommends the Board of Directors approve two agreements relating to MWDOC member agency use of the Orange County Regional Distribution System Hydraulic Model (OC Hydraulic Model):

- Approval of a consulting services agreement with Black & Veatch (B&V) through MWDOC's On-Call Technical Services slate in an amount not to exceed \$43,880 for services to complete the scope of work defined by South Coast Water District (SCWD) and B&V; and
- 2. Authorization for the General Manager to enter into a cost reimbursement agreement with SCWD to reimburse MWDOC for on-call technical services in conjunction with use of the OC Hydraulic Model in a total not to exceed amount of \$43,880 plus a 20% model usage fee of up to \$8,776. The final 20% model usage fee will be determined and billed upon completion of SCWD's use of the OC Hydraulic Model.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

Budgeted (Y/N): N/A	Budgeted amount:		Core	Choice X	
Action item amount:		Line item:			
Fiscal Impact (explain if unbudgeted): Consulting services costs not to exceed \$43,880 connected with MWDOC member agency use of the OC Hydraulic Model will be reimbursed					

connected with MWDOC member agency use of the OC Hydraulic Model will be reimbursed by the requesting agency. The OC Hydraulic Model has been paid for through MWDOC's general fund. Cost of creation of the hydraulic model will be reimbursed through a 20% usage fee billed at the end of the project.

On May 20, 2020, the MWDOC Board approved the creation of the OC Regional Distribution System Hydraulic Model (OC Hydraulic Model) at a total cost of \$188,500. The approval included a cost recovery aspect to repay MWDOC's general fund over time for the investment made. The cost recovery will be paid for by member agencies who use the hydraulic model through a 20% usage fee applied to the final cost of the selected consultant's actual fees for conducting analyses using the OC Hydraulic Model. The 20% usage fee will continue to be applied for use of the hydraulic model until the initial investment has been re-paid.

On May 19, 2021, The Board approved an On-Call Technical Services (On-Call Services) slate of consulting firms to support Reliability Planning, Engineering & Resource Development. The On-Call Services slate was established through a competitive process. The On-Call Services slate contains multiple consulting firms with requisite expertise in Innovyze's InfoWater modeling software (the software platform the OC Hydraulic Model is built on), and provides MWDOC member agencies a choice of consultants specializing in hydraulic modeling when they wish to use the OC Hydraulic Model. Use of MWDOC's On-Call Services slate through a reimbursement agreement, also provides for MWDOC to maintain and administer version control of the model so that conflicting versions of the model do not develop over time.

South Coast Water District (SCWD) has requested use the OC Hydraulic Model for the purposes of project planning including;

- Analysis of critical pipelines outages and mitigation of pipe break impacts on the Joint Regional Water Supply System (JRWSS), the Water Importation Pipeline (WIP), and portions of the South County Pipeline (SCP);
- Modeling of reverse flows through the WIP,
- Analysis of potential Doheny Ocean Desalination Project supplies to determine the areas and the extent that can be fed from a potential desal plant.

SCWD has informed MWDOC that they have selected the consultant B&V for the hydraulic modeling efforts from MWDOC's list of approved on-call consultants. SCWD and B&V have collaborated on and agreed to the scope of work to complete this effort.

Staff is recommending the Board enter into a standard consulting services agreement with Black & Veatch for the agreed upon scope of work between SCWD and B&V for a total not to exceed amount of \$43,880. Staff also recommends authorizing the General Manager to enter into a reimbursement agreement with SCWD to use the OC Hydraulic Model, reimburse MWDOC for the total cost of B&V's scope of work in a total not to exceed amount of \$43,880 plus a 20% model usage fee of up to \$8,776, and limit MWDOC's liability. The 20% usage fee will be paid upon completion of SCWD's use of the hydraulic model.

BOARD OPTIONS

Option #1

- Approval of a consulting services agreement with Black & Veatch (B&V) through MWDOC's On-Call Technical Services slate in an amount not to exceed \$43,880 for services to complete the scope of work defined by SCWD and B&V; and
- Authorization for the General Manager to enter into a cost reimbursement
 agreement with South Coast Water District (SCWD) to reimburse MWDOC for oncall technical services in conjunction with use of the OC Hydraulic Model in a total
 not to exceed amount of \$43,880 plus a 20% model usage fee of up to \$8,776. The
 final 20% model usage fee will be determined and billed upon completion of
 SCWD's use of the OC Hydraulic Model.

Fiscal Impact: Usage fee paid to MWDOC will begin to recover the cost of developing the OC Hydraulic Model.

Business Analysis: MWDOC staff continually seeks to improve the reliability of Orange County water resources. MWDOC created the OC Hydraulic Model as an important tool for improving our understanding of potential water quality and operational issues with the goal of avoiding unintended consequences.

Option #2

Do not approve the agreements

Fiscal Impact: None

Business Analysis: If the Board does not approve the agreements, SCWD will have to find other means to analyze critical distribution pipeline outage and mitigation analyses and cost recovery of the hydraulic model will be delayed.

STAFF RECOMMENDATION

Option #1

Attachments:

- SCWD Agreement Reimbursement of Consultant Costs Re Orange County Hydraulic Model
- MWDOC Agreement with Black & Veatch for Hydraulic Model Work for SCWD

AGREEMENT FOR REIMBURSEMENT OF CONSULTANT COSTS AND USE OF THE ORANGE COUNTY REGIONAL DISTRIBUTION SYSTEM HYDRAULIC MODEL

This Agreement for reimbursement of Consultant Costs and Use of the Orange County Regional Distribution System Hydraulic and Water Quality Model ("Agreement") is made and entered into by and between:

1. South Coast Water District

(collectively "Participating Agencies" and individually "Participating Agency") and Municipal Water District of Orange County ("MWDOC"). The Participating Agencies and MWDOC are also collectively referred to as "Parties."

RECITALS

WHEREAS, for the past several years, MWDOC has collaborated with several of the Participating Agencies and The Metropolitan Water District of Southern California ("Metropolitan") to evaluate new water supply integration into the Orange County regional distribution system ("Orange County Regional Distribution System").

WHEREAS, multiple water supply projects are proposed or ongoing, that could result in unintended water quality consequences to the Orange County Regional Distribution System from the simultaneous introduction of multiple sources of water including: desalinated water, pumping water into regional pipelines during emergency events, percolation of treated recycled water, and capture of stormwater into groundwater basins for subsequent pumping and treatment.

WHEREAS, on May 20, 2020, MWDOC's Board of Directors approved entering a professional services agreement with Black & Veatch Corporation ("Black & Veatch") at a cost of \$188,500 to build and calibrate an Orange County Regional Distribution System Hydraulic Model (the "Model") that will be used for hydraulic and water quality analyses and operational planning going forward.

WHEREAS, Black and Veatch has completed the Model, which is developed in a way that additional water quality modules can be added, if and when needed.

WHEREAS, MWDOC has approved a list of on-call consultants it has authorized to use the Model, and MWDOC intends to maintain control of the Model.

WHEREAS, the Participating Agencies share many water supply characteristics, including water sources, regional water management agencies, location, climate history, and demographics.

WHEREAS, the Participating Agencies and MWDOC desire to cooperate with each other to effectively operate and plan for the Orange County Regional Distribution System, and to achieve economies of scale and thereby reduce costs for each of the Participating Agencies in planning for water supply integration through this Agreement.

WHEREAS, MWDOC and its staff are willing to coordinate this process, including the preparation and administration of a professional services agreement with the selected consultant; and the administration of the cost reimbursement provisions of this Agreement.

WHEREAS, the Participating Agencies and MWDOC intend to agree to a method by which MWDOC, as custodian of the Model, shall make it available to Participating Agencies for their use, at their cost plus a 20% markup until the cost of creating the Model is recovered, by selecting a consultant and by agreeing to repay MWDOC for actual costs of the consultant and for the investment made in developing the Model.

WHEREAS, the Participating Agencies may choose a consultant from MWDOC's approved list of on-call consultants, or another consultant which has been reviewed through MWDOC's Request for Proposals ("RFP") process for purposes of this Agreement.

NOW, THEREFORE, in consideration of the payment of money as set forth between and the mutual promises of the Parties hereto, it is agreed:

1. Engagement of Consultant and Administration of Consultant Agreement

- 1.1 The Participating Agency shall choose a consultant (the "Consultant") either from the list of on-call consultants MWDOC has approved for use of the Model or another consultant which has been reviewed through MWDOC's RFP process, and shall notify MWDOC in writing of the Participating Agency's selection.
- 1.2 MWDOC shall issue a task order to the Consultant selected by the Participating Agency to begin working with the Participating Agency to develop a scope of work and cost estimate for purposes of executing a consultant agreement ("Consultant Agreement") with the Participating Agency and with MWDOC.
- 1.3 The Participating Agency agrees to and shall reimburse MWDOC for (i) all of the Consultant's actual costs of work, and (ii) an additional fee of 20% of the Consultant's actual costs upon completion of the project, charged up until the time MWDOC is fully reimbursed for its costs of \$188,500 in preparing the Model as set forth in Section 2.3 herein.
- 1.4 The Participating Agency agrees to and shall sign Metropolitan's Non-Disclosure Agreement kept on file with MWDOC regarding use of the Model.
- 1.5 MWDOC shall require the Consultant to initiate program controls to maintain one "baseline" Model for version control purposes. Scenario models shall be handled through version control protocols set up with Black & Veatch.
- 1.6 Participating Agencies agree that ownership of the model is retained by MWDOC, but all information is available to each Participating Agency as needed for purposes of the Consultant Agreement.

- 1.7 MWDOC shall coordinate all aspects of the proposed work with Consultant and communicate with each Participating Agency, regularly and upon request of the Participating Agency, regarding the status and substance of the use of the Model.
- 1.8 Each Participating Agency shall provide all documents, information and assistance requested by Consultant during the performance of the Consultant Agreement.
- 1.9 Upon approval of MWDOC's General Manager of the Consultant's scope of work and execution of the Consultant Agreement, MWDOC shall review and execute a task order authorizing the Consultant to proceed with its work using the Model.

2. Cost Reimbursement by Participating Agencies

2.1 The actual costs of work shall be determined by the development of the Consultant's scope of work, which can but is not required to include a not to exceed amount.

2.2 MWDOC shall:

- 2.2.1 Collect from each Participating Agency upon execution of this Agreement or at other times as agreed upon between MWDOC and the Participating Agency the total amount of the scope of work cost estimate.
- 2.2.2 Inform each Participating Agency of any proposed extra work under the Consultant Agreement and that would result in an increase in that Participating Agency's payment under this Agreement. MWDOC and the affected Participating Agency must both approve such extra work before MWDOC will notify Consultant to proceed with the work.
- 2.2.3 Be responsible for making progress payments directly to Consultant from funds paid to MWDOC by Participating Agencies (see Section 2.3).
- 2.2.4 Prepare a final accounting as determined by the actual work completed, plus the additional fee of 20% of the Consultant's actual costs, and either distribute any remaining funds collected from the Participating Agencies back to the Participating Agencies or issue a final bill to Participating Agencies where there are funds due.

2.3 Each Participating Agency shall:

2.3.1 Pay to MWDOC upon execution of this Agreement or at other times as agreed upon between MWDOC and the Participating Agency the total amount of the scope of work cost estimate that will total the portion of the total cost allocated to that Participating Agency in the Consultant Agreement.

- 2.3.2 Pay to MWDOC, upon prior written approval of any extra work under the Consultant Agreement, the full amount owed for the approved work. Each Participating Agency shall bear all costs associated with extra work it approves.
- 2.3.3 Note that as Participating Agencies decide to participate or not to participate in the Consultant Agreement, the reimbursement of costs among the Participating Agencies for the Consultant and MWDOC's model recovery costs may vary somewhat from agency to agency. Information relative to adjustments in costs among Participating Agencies shall be shared on a periodic basis as decisions are being made by the various Participating Agencies.
- 2.3.4 Upon completion of the project, pay MWDOC an additional fee of 20% of the Consultant's actual costs, as set forth in Section 1.3 herein.

3. Accounting

Upon request of any Participating Agency, MWDOC will provide copies of the selected Consultant's invoices and MWDOC's payment records.

4. <u>Independent Contractor</u>

Any Consultant engaged by MWDOC on behalf of the Participating Agencies as contemplated in this Agreement will not be a party to this Agreement and will not be an employee or agent of MWDOC or any of the Participating Agencies, either as a result of this Agreement or as a result of the professional services agreement between MWDOC, the Participating Agency, and the Consultant. Any Consultant engaged as contemplated in this Agreement will be an independent contractor to MWDOC and the Participating Agency.

5. Warranty, Indemnification and Defense

MWDOC shall use its best efforts in administering the Consultant Agreement, but makes no representations, guarantees or warranties to the Participating Agencies as to the quality or timeliness of work product provided by Consultant pursuant to the Consultant Agreement. The Participating Agencies, and each of them, shall indemnify MWDOC, its directors, officers, employees and agents against, and will hold and save them harmless from, any and all actions, claims, penalties, obligations or liabilities, in law or in equity, of every kind or nature whatsoever, that may be asserted or claimed by any person, firm, entity, corporation, political subdivision or other organization arising out of or in any manner directly or indirectly connected with the Consultant Agreement and/or any other work contemplated by this Agreement. In the event MWDOC, its directors, officers, employees and agents are made a party to any action or proceeding filed in connection with a challenge to any work prepared pursuant to the Consultant Agreement and/or any other work contemplated in this Agreement, the Participating Agency whose work is challenged shall provide a complete defense to MWDOC, its directors, officers,

employees and agents and shall reimburse MWDOC for all costs and expenses incurred as a result of the action or proceeding, including reasonable attorney's fees.

6. Amendment

This Agreement may be amended at any time by mutual written agreement of the Parties.

7. Notice

Any notice or communication required to be given under this Agreement shall be in writing and effective when deposited, first class postage prepaid, with the United States Postal Service addressed to the Parties as follows:

- Municipal Water District of Orange County Robert J. Hunter, General Manager 18700 Ward St. P.O. Box 20895 Fountain Valley, CA 92728
- 2. South Coast Water District Rick Shintaku, General Manager 31592 West St. Laguna Beach, CA 92651

8. Jurisdiction and Venue

In all matters concerning the validity, interpretation, performance, or effect of this Agreement, the laws of the State of California shall govern and be applicable. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California and that venue of any action brought hereunder shall be in Orange County, California.

9. Counterparts and Facsimile

This Agreement may be executed by the Parties in counterparts, which counterparts shall be construed together and have the same effect as if all the Parties had executed the same instrument. Counterpart signatures may be transmitted by facsimile, email, or other electronic means and have the same force and effect as if they were original signatures. All parties have participated in the drafting of this Agreement.

10. Severability

If any provision of this Agreement shall be held illegal, invalid, or unenforceable, in whole or in part, the legality, validity, and enforceability of the remaining provisions shall not be affected thereby.

11. <u>Term</u>

This Agreement shall commence upon the date of the earliest execution by any Participating Agency below and shall extend thereafter through the completion of all work product generated by the Consultant and delivered to MWDOC and to each Participating Agency. MWDOC shall issue a Notice of Completion to all Participating Agencies upon close-out of the Consultant Agreement. Notwithstanding anything to the contrary in this Section 11, this Agreement may be terminated earlier by MWDOC in its discretion upon or after termination of the Consultant Agreement.

12. Entire Agreement

This Agreement contains the entire agreement of the Parties relating to the subject matter hereof; and the Parties have made no agreements, representations, or warranties, either written or oral, relating to the subject matter hereof that are not set forth herein. Except as provided herein, this Agreement may not be modified or altered without prior written approval from both parties.

SOUTH COAST WATER DISTRICT

IN WITNESS THEREOF, the parties have executed this Agreement on the dates set forth below.

	SOCIII CONST WITHER DISTRICT
Dated:	By: General Manager
	Typed Name
	MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Dated:	By:
	Robert J. Hunter Typed Name
	MWDOC GENERAL COUNSEL

Attachment: Black & Veatch JRWSS Scope of Work



January 24, 2022

Kyle Gough Transmission Main Manager South Coast Water District Joint Regional Water Supply System

Charles Busslinger
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708

Subject: JRWSS Modeling Scenario Proposal

Dear Mr. Busslinger:

Black & Veatch (BV) is pleased to provide Municipal Water District of Orange County (MWDOC) with this proposal to perform additional hydraulic modeling work on the JWRSS pipeline in support of MWDOC's efforts toward water resiliency in southern California.

The MWDOC hydraulic model has been calibrated for the portion of the transmission system that include the conveyance network downstream of CM-10 including the Joint Transmission Main (JTM), the Eastern Transmission Main, the Water Importation Pipeline (WIP), and the Local Transmission Main (LTM). The conveyance network from the South County Pump Station and the Baker Treatment Plant down to the interconnection at the WIP is also included the in the MWDOC model. The model also includes the conveyance network from Diemer and Weymouth Treatment Plants, including the Allen-McColloch Pipeline (AMP), the East Orange County Feeder (EOCF), and the West Orange County Feeder (WOCF). The purpose of this study is to perform modeling evaluations of several scenarios with the MWDOC model within the Joint Regional areas of the model and the sections in the model hydraulically upstream of CM-10 and the South County Pump Station will be excluded from the modeling scenarios to simplify the scenarios and the needed input. The subsection of the model that will be used in these evaluations relative to the entire model is shown in Figure 1 and the sections in red will be included in the evaluations and the sections in blue will be excluded. The portion of the model that will be used in these evaluations will be referred to as the "JRWSS sub-system".





Figure 1 MWDOC Model and JRWSS Sub-system



In general, the overall modeling effort is separated into four general tasks:

- Task 1 Project Administration
- Task 2 Data Validation and Hydraulic Criteria
- Task 3 JRWSS Sub-system Hydraulic Conveyance Evaluations
 - Reverse Flow through WIP
 - Critical outage of pipe downstream of CM-10
 - Critical outage of pipe in South County
 - Critical outage of both JTM and SCP
- Task 4 Addition of Doheny Desal (SCWD)
- Task 5 Documentation of Results and Findings
- Task 6 Contingency

INTRODUCTION

Task 1: Project Administration

Task 101 – Project Administration

Provide management and administration of the project including progress reporting, schedule, and invoicing.

Task 102 – Meetings

The scope includes for up to six meetings (web-based) with JRWSS:

- A project initiation meeting to perform introductions, review the scope, understand JRWSS goals for hydraulic performance, and review the demand (take-out) conditions to be used as model input
- Up to four intermittent meetings to discuss progress and findings to date
- A meeting to review the draft TM and findings

Deliverables:

- Meeting agendas and minutes
- Project progress reports and invoicing



Task 2: Data Validation and Hydraulic Criteria

Black & Veatch will review the existing model and prepare and submit a list of take-out locations that are located within the sections shown in Figure 1 and provide to JRWSS for review. In collaboration with JRWSS staff, the demand and the hydraulic criteria (in terms of the necessary minimum HGL) will be determined for each take-out. In addition to the take-outs, each scenario will need to have criteria defined for the hydraulic control points at the boundary conditions. For example, it will be necessary to determine the magnitude of flow coming in from both CM-10 and South County for each scenario, as well as the incoming hydraulic grade lines at the boundary conditions between the JRWSS sub-system and the portions of the model that will be excluded from the evaluations.

Deliverables:

- JRWSS sub-system take-out locations, demands, and hydraulic criteria
- Boundary conditions for incoming supply and hydraulic grade line
- Pressure Control Structure settings

Task 3: JRWSS Sub-system Hydraulic Conveyance Evaluations

The calibrated hydraulic model will be used for all evaluations. From the previous task, Black & Veatch will work with JRWSS to establish appropriate demands, boundary conditions, and settings for pressure control within the JRWSS sub-system for each scenario. The model will be run in steady state mode for the capacity evaluations. The following four major scenarios will be evaluated, each major scenario may have up to two sub-scenarios developed for evaluation, except for the Critical Outage of Pipe Downstream of CM-10, which has three identified sub-scenarios.

Task 301 - Reverse Flow through WIP

This scenario will evaluate an upsized interconnection between the WIP and the JTM/LTM at Stonehill Drive and Del Obispo Street which will allow water to flow in reverse from normal operations through the WIP. The extent of acceptable service based on the hydraulic grade line criteria will be assessed, primarily for the take-outs located along Avenida Pico.

Task 302 - Critical Outage of Pipe Downstream of CM-10

This scenario will evaluate a pipe break downstream of CM-10 in the JRWSS sub-system and how water can be moved around to mitigate the impact of a pipe break. Following scenarios shall be evaluated:

1. The Sand Canyon interconnection between the JTM and the Aufdenkamp Transmission Main (ATM) may be utilized,



- 2. For a break downstream of the Sand Canyon intertie, a new intertie at the last section where the ATM and the JTM run parallel will be evaluated.
- 3. For a break downstream of Wye Vault (MNWD ETM connection), alternatives of water delivery for Member Agencies will be evaluated.

Task 303 – Critical Outage of Pipe within South County

This scenario will evaluate a pipe break that occurs within the South County conveyance network, cutting off the feed into the WIP from South County. In this scenario, all take-outs in the JRWSS sub-system will be fed by supply from CM-10 and the extent at which this water can be moved through the LTM and the WIP to feed the take-outs along Avenida Pico will be assessed.

Task 304 – Critical Outage of within both JTM and SCP

This scenario will evaluate a pipe break that occurs both within the JTM and the South County conveyance network, cutting off the feed into the WIP from South County. In this scenario, water supply from the alternatives evaluated in Task 302 and 303 will be used to assess the extent to which water is available to the take-outs.

Task 4: Doheny Desal (SCWD)

This scenario will evaluate the addition of a 2 mgd, and 5 mgd desalination plant near the Doheny State Beach to determine the areas and the extent that can be fed from the desal plant. Pumping conditions for head and flow from the desal plant will be documented from this scenario.

Task 5: JRWSS Conveyance Evaluation Documentation

Black & Veatch will document assumptions, model scenarios, evaluation, and results and findings in a brief draft technical memorandum (TM). TM will include any recommendations for additional evaluations. An electronic (PDF) copy of the complete draft TM will be provided.

Following a web-based meeting with JRWSS staff to discuss the draft TM, Black & Veatch will incorporate comments from the meeting and update the TM to address these comments. An electronic copy (PDF) of the final Technical Memorandum will be provided.

Deliverables and Meetings:

Draft and Final Technical Memorandum



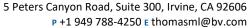
Task 6: Contingency

Hours to cover two additional scenarios, one each for JRWSS and SCWD, were included to be used if needed.

BUDGET

The budget estimate, which reflects our approach and proposed scope of work for completing these tasks is \$43,880, broken down following. Note that this budget includes \$4,890 for contingency but does not include the 20% add-on for model development recovery by MWDOC.

TASK NO.	TASK NAME/ DESCRIPTION	PRINCIPLA/PROJECT MANAGER	PLANNING DIRECTION/QC	SR. PLANNING ENGINEER	PROJECT CONTROLS	CLERICAL/ADMIN	TOTAL PROJECT HOURS	TOTAL
		\$315	\$275	\$215	\$125	\$110	1	7
Task 1: Pi	roject Administration	8		8	8	8	32	\$ 6,120
Task 2: Data Validation and Hydraulic Criteria		-		36			36	\$ 7,740
Task 3: JRWSS Sub-System Hydraulic Conveyance Evaluations		2	4	54				\$ 13,340
Task 4: D	oheny Desal (SCWD)	1	1	18				\$ 4,460
Task 5: JR Documer	RWSS Conveyance Evaluations	2	4	24		4		\$ 7,330
Task 6: Co	ontingency	1	1	20			1	\$ 4,890
	TOTAL	14	10	160	8	12	69	\$ 43,880





If this proposal meets with your approval, please provide written authorization to that effect. If you have any questions or need anything else, please do not hesitate to contact me at (949) 788-4250 or thomasml@bv.com.

Thank you once again for allowing us the opportunity to provide this proposal and to be of service to MWDOC.

Very truly yours,

Black & Veatch Corporation

Matthew L. Thomas, P.E. Associate Vice President

cc: pw, dk



ACTION ITEM

February 16, 2022

TO: Board of Directors

FROM: Planning & Operations Committee

(Directors Tamaribuchi, McVicker, Nederhood)

Robert Hunter, Staff Contact: J. Berg,

General Manager Director of Water Use Efficiency

SUBJECT: Continuation of Temporary Acoustic Leak Detection Surveys and Staff

Training

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to increase the agreement with Utility Services Associates, LLC. by \$157,000 to perform temporary acoustic leak detection surveys and provide leak detection training for MWDOC's Water Loss Control staff at a total cost not to exceed \$251,200.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

In October 2021, based on the staff report provided below, the Board authorized the General Manager to enter into a professional services agreement with Utility Services Associates, LLC. to perform 300 miles of acoustic leak detection and to provide leak detection training for MWDOC's new Water Loss Control staff at a total cost not to exceed \$94,200.

While progress has been made to hire and train new Water Loss Control staff and complete the 300 miles of leak detection the Board authorized in October, staff has concluded that additional support from Utility Services Associates, LLC. (USA) is needed to complete the 900 miles of leak detection member agencies have elected this fiscal year. As a result, staff

Budgeted (Y/N): Yes Budgeted amount: \$251,200 Core __ Choice _x_

Action item amount: \$251,200 Line item: 34-7040

Fiscal Impact (explain if unbudgeted): The acoustic leak detection survey and training will be paid for through member agency shared services elections at \$144/mile and Metropolitan Water District funding at \$170/mile.

is seeking Board authorization for up to 500 additional miles of leak detection and staff training support from USA. This would bring the total USA contract amount to \$251,200.

October 2021 Staff Report:

MWDOC member agencies have elected to complete 900 miles of acoustic leak detection surveys in FY21-22. Staff generally performs these surveys "in-house" but, due to staffing turnover, the Board authorized temporary assistance from a contractor for 300 miles of leak detection and staff training. This temporary contract will allow us to meet our leak detection obligations to the member agencies, as well as train our new staff, to ensure the continued smooth operation of the Water Loss Control Shared Services Program.

DETAILED REPORT

MWDOC provides acoustic leak detection surveys to the member agencies through the Water Loss Control Shared Services Program. Due to recent staffing turnover, MWDOC staff feels it is necessary to bring on a temporary contractor to survey 300 miles of main and to train two new MWDOC staff members, currently in the process of being hired. MWDOC member agencies have elected 900 miles of leak detection surveys during FY 21-22. This is a 260-mile increase over FY20-21 elections, and a 330-mile increase over FY19-20 elections.

In order to support the growing program and meet our obligations to the member agencies as timely as possible, on September 23, 2021, staff released an RFQ seeking quotes for Acoustic Leak Detection services for 300 miles and leak detection staff training. The RFQ was sent to seven companies known to provide these services. Two responses to the RFQ were received by the September 28, 2021 deadline. Respondents included Water Systems Optimization (WSO) and Utility Services Associates, LLC. (USA). Both companies were found to be capable of providing the defined leak detection services. WSO was unable to meet the scheduled start date of November 30 and offered a less competitive price. USA was able to meet our start date, provide staff training and offer a competitive price of \$314 per mile. While USA is based in Montana, their lead leak detection technician is located in Riverside County, reducing the travel fees and overall project costs.

Acoustic Leak Detection Surveys

The surveys will require the contractor to walk the designated mileage and use noise amplifying listening equipment to listen to all available fittings on main lines and service connections in the survey area including, but not limited to, angle meter stops, backflows, air release valves, and fire hydrants. When suspected leaks are identified, they will be noted and then revisited on a different day to validate that the leak noise is still present. Once a leak sound is detected, the technician uses a ground microphone and/or acoustic correlators to pinpoint the location of the leak, when possible. Validated leaks are recorded in an electronic GIS based system that captures key information about the leak. A final report detailing the confirmed leaks and the key information will be presented to MWDOC and each participating water retailer.

Comprehensive acoustic leak detection requires more time than a general leak survey where a technician listens only to accessible valves and hydrants. A general survey often fails to detect the majority of distribution system leakage, especially in Southern California where the majority of distribution system leakage tends to occur at low flow rates on meter and service connections. Only quotes for comprehensive acoustic leak detection surveys were considered.

Leak Detection Training

This project also includes the training of two new MWDOC staff members that are currently in the process of being hired. While it is expected that these staff members will have at least one year of water distribution system experience, it is unlikely that they will be familiar with acoustic leak detection because it is such a highly specialized field. They will need to be trained on the use of noise amplifying listening equipment and acoustic correlators, as well asbasic leak investigation including acoustic leak detection theory, pumping out meter boxes, using probe rods, and visual inspection techniques. Following this training, their primary function will be performing leak detection surveys. The training will be mostly field-based, with supplemental classroom instruction.

While progress has been made to hire and train new Leak Detection field crews and complete the 300 miles of leak detection the Board authorized in October, staff has concluded that additional support from USA is needed to complete the 900 miles of leak detection member agencies have elected this fiscal year. As a result, staff is seeking Board authorization for up to 500 additional miles of leak detection and staff training support from USA. This would bring the total USA contract amount to \$251,200.

BOARD OPTIONS

Option #1: Staff recommends the Board of Directors authorize the General Manager to enter into a professional services agreement, with Utility Services Associates, LLC. to perform acoustic leak detection surveys temporarily and to provide leak detection training for MWDOC's Water Loss Control staff at a total cost not to exceed \$94,200.

Fiscal Impact: Status quo, costs are covered by Choice contributions from Member agencies and leak detection incentives from Metropolitan.

Business Analysis: Honors MWDOC's obligations to provide leak detection services to member agencies and provides for training of new staff.

Option #2: The Board does not approve the contract for temporary leak detections and staff training services.

Fiscal Impact: Funding on account from member agencies would be refunded and an opportunity to access Metropolitan funding would be missed.

Business Analysis: MWDOC would be unable to honor obligations to provide leak detection services to member agencies, negatively affecting our relations.



ACTION ITEM

February 16, 2022

TO: Board of Directors

FROM: Planning & Operations Committee

(Directors Tamaribuchi, McVicker & Nederhood)

Robert Hunter Staff Contact: J. Berg, Director of WUE

General Manager

SUBJECT: Landscape Design and Maintenance Assistance Programs

STAFF RECOMMENDATION

Staff requests the Board authorize the General Manager to extend the term of the agreements for the Landscape Design and Landscape Maintenance Assistance Programs to a five-year term ending June 30, 2024, using a combination of state and federal grant awards, Metropolitan Member Agency Administered funding, and member agency contributions.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On June 19, 2019, the Municipal Water District of Orange County (MWDOC) Board of Directors approved continued implementation of the Landscape Design Assistance Program and the addition of a landscape maintenance component, now known as the Landscape Maintenance Assistance Program. Landscape design is one of the biggest barriers for homeowners to overcome when participating in MWDOC's Turf Removal Rebate Program (Turf Program). Our intention is to break down barriers and help ensure aesthetically appealing landscapes that will be adopted by others. The Landscape Design and Landscape Maintenance Assistance Programs provide participants with customized landscape designs and maintenance plans to achieve maximum water savings and maintain aesthetically appealing landscapes over time. The Programs are a growing part of

Budgeted (Y/N): Y	Budgeted amount:		Core	Choice _X_		
Action item amount:		Line item: Fund No.				
Fiscal Impact (explain if unbudgeted): The proposed design and maintenance assist will be funded through a combination of state and federal grant awards, Metropolitan						
Member Agency Administered funding, and member agency contributions.						

our Turf Program and consistently serve over half of the Turf Program participants since its beginning in 2019.

Landscape water use accounts for approximately 50 percent of total water use in Orange County. As a result, MWDOC offers a variety of landscape education and incentive programs to assist consumers to use irrigation water efficiently. In 2004, MWDOC began offering a variety of landscape rebates, starting with Smart Irrigation Timers to promote irrigation scheduling efficiency. This water savings opportunity, pioneered in Orange County, has resulted in quantifiable and reliable savings over time. Since then, we have expanded the opportunities to include low-volume sprinkler nozzles (2007), turf grass removal (2010), spray-to-drip conversions (2014), education, landscape design assistance pilot program (2017), the OC Water Smart Gardens website (2019), and regulations such as landscape ordinances (2005 & 2015). These efforts focus on both residential and commercial landscapes. Ultimately, we are seeking to establish a transformation of urban landscapes that will better match the water needs to our local climate and available water resources. That said, we are NOT advocating for the complete removal of turf grass; rather, we are advocating for functional turf areas that provide for recreation and other beneficial uses.

DETAILED REPORT

The Landscape Design and Landscape Maintenance Assistance Programs (Programs) provide one-on-one landscape design and/or maintenance plan assistance to residential property owners. The one-on-one design assistance includes consultation with the homeowner, a planting plan, an irrigation design plan, and a product materials list. The maintenance consultation includes a consultation with the property owner and a personalized maintenance guide for the existing plant materials for each landscape.

A Request for Proposals (RFP) process was conducted in the spring of 2019, through which three landscape firms were selected to provide designs and/or maintenance proposals for the Programs: EcoTech Service, Inc., The Plant Nerd, Inc., and TerraWorks Studio. The Board authorized the General Manager to enter into professional services agreements with those three landscape firms, as well as any other firms (to be determined) that demonstrate they are qualified to do the work and agree to a competitive fee structure. The average cost for a design package and onsite consultation is \$1,150, while the average cost for a maintenance package and onsite consultation is \$712. Should other firms be contracted with, staff will inform the Board via the monthly Water Use Efficiency Projects Status report contained in the Planning and Operations Committee packet. Per the Administrative Code requirement for competitive bidding every five years, once the current professional services agreements expire, should the programs continue beyond that date, a new competitive RFP process will be initiated.

In June 2019, the MWDOC Board approved \$160,000 in funding for these Programs through the Metropolitan Member Agency Administered (MAA) funding allocated to MWDOC. Then, in June 2020, the MWDOC Board approved an additional \$420,000 in funding for the continuation of these programs (consisting of \$165,000 through Metropolitan's FYs 20-22 MAA funding and \$255,000 in grant funding secured by MWDOC from Proposition 1 DWR Grants). Due to the success of the program, this funding authorization will be exhausted in February 2022. MWDOC will be requesting additional

funding through future grant applications, Metropolitan MAA funding program, and contributions from member agencies.

The Programs are a valuable addition to our Turf Program. Since the relaunch of the Landscape Design and the addition of the Landscape Maintenance component in August 2019, approximately 525 participants have signed up for these Programs, with over 380 receiving their design/maintenance packages and the remaining 145 still in progress.

Contracting with three landscape firms gives consumers a choice of contractors for their design or maintenance plans and maximizes the availability of design and maintenance services. Because staff does not have a firm quantity of participants over the next 28 months, a "not to exceed" amount is not included in the proposed Board authorization. Rather, staff is requesting authorization for a term of five-years for these services, which is consistent with the contracting requirements contained in the District's Administrative Code.

Staff requests the Board of Directors authorize the General Manager to extend the term of the agreements for the Landscape Design and Landscape Maintenance Assistance Programs to a five-year term ending June 30, 2024 (one more year from the current Board authorization of June 30, 2023). A combination of state and federal grant awards, Metropolitan MAA funding and member agency contributions will be used to fund this work. Should all sources of available funding be exhausted, staff will pause implementation of the program until funding can be replaced.

BOARD OPTIONS

Option #1: The Board of Directors authorizes the General Manager to extend the term of the agreements for the Landscape Design and Landscape Maintenance Assistance Programs to a five-year term ending June 30, 2024, using a combination of state and federal grant awards, Metropolitan Member Agency Administered funding, and member agency contributions.

Fiscal Impact: None, staff is proposing to use pass-through funding from Metropolitan and grant awards.

Business Analysis: Landscape design is one of the biggest barriers for homeowners to overcome when participating in MWDOC's Turf Removal Rebate Program. The Landscape Design and Landscape Maintenance Assistance Programs break down these barriers and help ensure aesthetically appealing landscapes that will be adopted/emulated by others. Participants have received and can continue to receive customized landscape designs and maintenance plans to achieve maximum water savings and maintain aesthetically appealing landscapes over time.

Option #2: No Action.

Fiscal Impact: None to MWDOC.

Business Analysis: MWDOC ends agreement with Landscape Design and Landscape Maintenance Assistance Programs contractors. Re-establishes a barrier to participation in the Turf Removal Rebate Program.

STAFF RECOMMENDATION

Option #1

Item No. 7

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Fiscal Year 2021-22

Sole Source Procurement Justification for Projects under \$25,000*



- A. Supplier Information/Name of Company and Prime Contact at the Supplier and at MWDOC: Climatec – Bob Ward (818) 397-6835
- B. Contract awards to Supplier over prior 36-months: N/A
- C. Product(s) or Service(s) to be provided and Deliverables: Integration of new MWDOC lobby doors into the campus security system including all parts and installation of security card reader.
- D. Justification Definition –
 Special expertise as Climatec is the current consultant for the campus security system.
- E. Narrative Explanation: Climatec will be integrating MWDOC's new lobby doors into the existing security system installed on campus. They will be providing and installing a security card reader and all related components necessary to integrate the lobby doors.
- F. Budget Line Item Reference & Amount: 19-8811

Contract amount: \$5,332.30

- G. Core or Choice designation: Core
- H. Signature/Approvals:

Chris Lingad (Dec 21, 2021 11:59 PST)	12/16/21	
Requestor	Date	
Pobert J. Hunter	12/16/2021 4:23 PM PST	
General Manager	Date	

^{*} Projects over \$25,000 must go to a Committee of the Board.

^{**} Possible justifications include but are not limited to: Only qualified bidder; Proprietary item; Urgent necessity; Bid process did not produce competitors; Governmental agency, association or Utility; Prior phase of professional services contract completed successfully by same Consultant; and Special technical expertise by Consultant for tasks desired.



INFORMATION ITEM

February 14, 2022

TO: Planning & Operations Committee

(Directors Tamaribuchi, McVicker, Nederhood)

FROM: Robert Hunter, General Manager

Staff Contact: Charles Busslinger

SUBJECT: Administration Building Construction - Final Update

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file this report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On October 21, 2020, the Board authorized the award of a construction contract with Optima RPM, Inc. for the MWDOC Administration Building Seismic Retrofit and Remodel Project. The Contractor mobilized to the site on November 16, 2020. The City of Fountain Valley Planning & Building Department completed final inspection and sign off of the project on January 10, 2022. The building is now certified for use and occupancy.

Staff is finalizing project closeout activities and obtaining all final documents (As-builts, test reports, unconditional releases for all sub-contractors and vendors, turnover of all warranty information and maintenance manuals, and final accounting for release of retention).

Major items completed during construction include:

- Seismic and structural improvements
- Electrical improvements
- Floor plan efficiency improvements

Budgeted (Y/N):	Budgeted amount:		Core	Choice
Action item amount:		Line item:		
Fiscal Impact (explain if unbudgeted):				

- Bringing the building up to current Americans with Disabilities Act (ADA) and fire code compliance
- New ergonomic furniture
- HVAC improvements to address COVID-19

A summary of all construction related costs is shown in the table below.

	Total Construction Related Costs	
Α	Original Construction Contract Scope	\$ 1,606,878
В	Initial Construction Contingency	\$ 321,266
С	Additional Construction Contingency (July 21, 2021)	\$ 161,214
D	Construction Management, Design Support, Inspections, Monitoring,	
	Move Management	\$ 700,542
	Total Costs	\$ 2,789,900
	Revised Budget Total (as of July 21, 2021)	\$ 2,800,829
	Remaining Budget	\$ 10,929

*Note that the contingency fund above was utilized for all additional construction related costs not included in the original bid. These costs include items due to unforeseen site conditions, ADA/Fire code compliant lobby doors, and additional construction management, design support, inspections, and monitoring services.

Item D Construction Management, Design Support, Inspections & Monitoring					
Owner's Representative Services (ABS Consulting)	\$	385,031			
Architectural, Interior Design and Engineering Support Services (IDS Group)	\$	239,769			
Construction Related HVAC Support (ACCO)	\$	17,729			
Asbestos Monitoring and Reporting Services (Pacific Environmental Co.)	\$	22,320			
Building Management Support Services (Sunbelt Controls)	\$	6,449			
Deputy Inspector Services (Fenagh Engineering & Testing)	\$	10,294			
Fire Alarm Support Services (New Line Fire)	\$	18,950			
	\$	700,542			

Attachment: City of Fountain Valley Planning & Building Department Inspection Job Card



Fountain Valley Planning & Building Department Inspection Job Card Request online before 3 p.m. Monday - Thursday for next day inspections Inspection Request: https://fountainvalley.cts.city

	inspe	ection Reques	t: https://fountainvalley.cts.city		
Permit #:2019-140)9	ls	ssue Date:11/18/2020		
Permittee: OPTIMA RPM, INC		P	ermit Use: COMMERCIAL		
Location: 18700 WARD ST	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Project: TENANT IMPROVEMEN	NTT	
"INSPECTION INFORMATION: Post job care	d at job site in a	safe, conspicuous	place. When calling for inspection, provide	permit number,	job address and
type of inspection you are requesting. Have issued shall become invalid unless the work	approved plans	on job at times of	inspection. No work shall be concealed with	out prior approv	val. Every permit
on the site by such permit is suspended or at	on the site authorized for a	period of 180 days	after the time the work is commenced.	suarice, or it tile	WOIN AUTHORIZED
INSPECTION	DATE	INSPECTOR	INSPECTION	DATE	INSPECTOR
	DATE	INSPECTOR	POOL AND SPA INS		INOI EUTOR
Temporary electrical service or pole Soil pipe - Ground plumbing				FLOTIONS	
			34. Pool and equipment location		
3. Water pipe - Underground / Underslab			35. Steel reinforcement 36. Electrical bonding		
4. Property sewer / House connection			37. Rough plumbing and pressure test		
5. Electrical underground / Conduit					
6. Gas line test - Underground (10 lbs)			Approval to cover steel Sectrical conduit - Underground		
7. Footings and steel Ufer				 	
8. Foundation - Slab on grade					
9. Pregrout Drainage Drainage			41. Backwash lines, p-trap - Underground		
10. Rough plumbing / Top out / Shower pan			42. Pre-deck		
11. Rough electrical			43. Fencing and access approval		
12. Rough heating and Air-conditioning			44. Approval for plastering		
13. Rough factory fireplace			45. Mechanical final		
14. Ducts / Ventilating / Fire dampers			46. Plumbing system final		
15. Floor sheathing / Floor insulation			47. Electrical final		
16 Rough framing / Interior shear walls			48. Energy final / Solar cover		
17. Roof framing / Roof sheathing			49. POOL & SPA SYSTEM FINAL	1	
18. Interior moisture control			FINAL INSPEC	TIONS	7
19. Exterior shear			50. Final Electrical	116 1/	11/
20. Insulation			51. Final Mechanical	1117	W
21. Interior lath			52. Final Plumbing		
22. Exterior lath			53. Electric Meter Release		
23. Drywall nailing			54. Gas Meter Release		
T-BAR INSPEC	TIONS		55. HVAC Final	1	
24. T-Bar electrical			56. Final Water Heater	1	
25. T-Bar mechanical			57. Re-Roof Final	++-	
26. T-Bar plumbing			58. Photovoltaic / Solar Final		
27. T-Bar ceiling			59. Retaining Wall Final	- IF	
FIRE DEPARTMENT IN	ISPECTIONS		60. Business License Final	1/6/22	16
28. Underground hydro	PHASE	10-90-21	61. Engineering Final		
29. Mechanical hood fire system	PHASE	9-14-21	62. Planning / Zoning Final	0.0	ad -Idelan
30. Underground flush PILASE	PHEL		6 Fire Department Final	ケーラール	PA TURBUR
31. Fire sprinkler rough / Hydro ペート	420	打造引	64 - Health Department Final	1024	111
32. Fire sprinkler final	11-16-20	71 TIETUR	65. Certificate of Use and Occupancy	111	W
33. Fire alarm / Monitoring final	Wx12-	14-21 11	66. BUILDING & STRUCTURE FINAL	/	
Notes: 12/30/20 Vadrago	well con	list 6	rid line C botwom?	3\$7,0	Kay
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6/6/21 (Ne) 51				Page 30 c	f 52



INFORMATION ITEM

February 14, 2021

TO: Planning & Operations Committee

(Directors Tamaribuchi, McVicker, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Harvey De La Torre

Alex Heide Kevin Hostert

SUBJECT: Water Usage Report (Performance under the Governor's 15% voluntary

Reduction)

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file this report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

Background

On July 8, 2021, Governor Newsom issued Executive Order N-10-21, declaring the majority of the counties in California to be in a drought emergency and calling upon local agencies to voluntarily reduce their water use by 15% from 2020 levels. In addition, on October 19, 2021, Governor Newsom issued a Proclamation of a State of Emergency further expanding the pre-existing drought declaration to cover the remaining eight counties in the state, including Orange County, that were not previously in a declared drought. Included in the Proclamation was for local water suppliers to execute their Water Shortage Contingency Plans (WSCPs) at a level appropriate to local conditions, as well as the continued call for local agencies to voluntarily reduce their water use by 15%. In November of 2021, the

Budgeted (Y/N):	Budgeted amount:		Core	Choice
Action item amount:		Line item:		
Fiscal Impact (explain if unbudgeted):				

MWDOC Board activated its Water Shortage Contingency Plan to a Level 2, supporting the Governor's voluntary reduction target.

Orange County Water Usage

MWDOC staff tracks county-wide performance of water use through reports filed with the state. Each month urban retail water suppliers are required to report their water use to the State Water Resources Control Board (SWRCB). Due to the timing of when the information is reported to the SWRCB and their ability to turn the reports out to their public portal, the monthly water use information generally lags by about two months. Below is a summary of Orange County's water use since the start of the Governor's call for a 15% voluntary reduction from the 2020 baseline along with monthly rainfall and average high temperature.

O.C. Water Usage Since Executive Order N-10-21						
Month	Rainfall (inches)	Average High Temp	Actual Reduction			
July	0.05	84.94	-0.35%			
August	0.00	85.55	1.97%			
September	0.03	84.00	3.49%			
October	1.14	79.29	11.42%			
November	0	78.17	-2.13%			
December	5.06	64.55	15.69%			
Cum	Cumulative Savings Compared to 2020 4.76%					
Cum	ulative Savings Com	pared to 2013	12.19%			

It is important to note that outdoor water use is a major component of overall water use, comprising about 50% of M&I water use in Orange County, and is highly dependent on precipitation and temperature. As noted in the table above, in months with measurable precipitation and lower temperatures overall water use generally falls below 2020 levels. Based on these factors, cumulative water use for Orange County is 4.76% lower than 2020 water use levels. However, it should be acknowledged that since July the cumulative water use is 12.19% lower than the 2013 baseline that was used during the last drought.

While MWDOC and its member agencies continue to target savings consistent with the Governor's executive order, Orange County's significant investments in water use efficiency, has led to a further hardening of water use demands. The potable water gallons per-capita per day (GPCD) usage within Orange County has fallen from nearly 240 in 1990 to 140 in 2020, which is approximately a 41% drop in GPCD. Within the same three-decade time-frame, Orange County has developed the nation's largest indirect potable reuse water purification system, the Groundwater Replenishment System (GWRS), and increased water recycling three fold.

MWDOC staff will continue to track county-wide performance of water use relative to the Governor's call for a voluntary 15% reduction from 2020 water use levels.



INFORMATION ITEM

February 14, 2022

TO: Planning & Operations Committee

(Directors Tamaribuchi, Nederhood, McVicker)

FROM: Robert Hunter, General Manager

Staff Contact: Damon Micalizzi

SUBJECT: February 23rd Water Policy Dinner Featuring State Water Resources

Control Board Chair, Joaquin Esquivel

STAFF RECOMMENDATION

Staff recommends the Public Affairs & Legislation Committee: Receive and file the report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

DETAILED REPORT

At the time of this report, 121 have registered for MWDOC's upcoming Water Policy Dinner, held at the Westin Hotel in Costa Mesa on Wednesday, February 23rd. Joaquin Esquivel, Chair of the State Water Resources Control Board, will be featured as the evening's keynote speaker.

This event is especially timely as the state is coping yet again with drought conditions. Additionally, the State Board is currently considering permanent long-term water use efficiency standards to reduce demands and stretch supplies for the future.

Esquivel was appointed to the State Water Resources Control Board by Governor Jerry Brown in March 2017 and designated as chair by Governor Gavin Newsom in February 2019. Previously, he served as assistant secretary for federal water policy at the California Natural Resources Agency in the governor's Washington, D.C. office. For more than eight years before that, Esquivel worked for U.S. Senator Barbara Boxer of California, most recently as her legislative assistant covering agriculture, water, oceans, and nutrition. He also served as the director of information and technology.

ENGINEERING & PLANNING

East Orange County Feeder No. 2 (EOCF#2) Emergency Pilot Program

Staff and Means Consulting continue to work with Metropolitan (MET) on defining and phasing a scope of work for emergency pump-in of local water supplies into EOCF #2 under MET Admin Code 4519: Emergency Deliveries of Member Agency Water Supplies in Metropolitan's System. The program is intended to enhance water supply reliability in the event of a prolonged emergency. As indicated previously, this is a multi-year effort. The intended outcome of this effort is a set of guidelines for MET member agencies to use to establish their own emergency pump-in programs to MET's system. Hazen & Sawyer is also providing technical assistance for this effort.

Economic Benefit Studies and Modeling Work to Quantify the Benefits of Local Projects in the Context of MET's 2020 Integrated Resources Plan (IRP) MWDOC staff continues working with the Brattle Group and CDM Smith on the Economic Benefits Studies. The studies will be useful in helping MWDOC and our agencies better understand the reliability benefits provided by potential supply investments at both the MET level and at the Orange County level by quantifying their economic benefits. The studies are looking at two main sectors of the economy: Residential and Business sectors. The benefits are being quantified by looking at the 'avoided costs' of water shortages to both of these sectors of the economy.

Wallace Walrod, economist for Orange County Business Council and subconsultant for the Brattle Group, is leading the business portion of the economic benefit studies and is surveying the business community to determine how they might be impacted by both emergency water shortages (i.e. earthquakes) which are severe shorter-term shortages; and by longer-term and less severe shortages (i.e. droughts).

Cal State University, Fullerton's Social Science Research Center (CSUF) has completed surveys of over 400 Orange County businesses. Dr. Walrod and Dr. Boarnet are currently analyzing the data and preparing a report. A presentation of business survey results is anticipated at P&O Committee once the data has been analyzed.

The residential impact analysis is being conducted by David Sunding of the Brattle Group, using available residential information.

Reliability Study Update

Staff are working with CDM Smith on an update to the reliability study. The update will look at a total of 5 scenarios that include recent information including uncertainty about the Delta Conveyance Project and more recent Climate Change impact information. The update will incorporate the latest demand forecasts from the 2020 Urban Water Management Planning efforts, update project cost information, and include updated information from MET's 2020 IRP process. Staff participated in a meeting with MET staff and CDM Smith on September 25, 2021 to discuss supply projections for the State Water Project and the Colorado River Aqueduct as they relate to the reliability study update.

Reliability Study	Staff anticipates the update to be completed in the next few months. Staff will
Update -	then bring the study results to the Board for discussion.
continued	
Doheny Ocean	South Coast Water District (SCWD) continues to develop the Doheny Ocean
Desalination	Desalination Project. SCWD is currently working through multiple due
Project	diligence items to move the project forward including; permitting, plant sizing and siting, financing, and project delivery method. SCWD anticipates having all necessary permits by the end of the 1st Quarter of 2022 and estimates an on-line date of early 2026, if approved by the SCWD Board.
	On July 22, 2021, SCWD conducted its 7 th workshop on the SCWD Integrated Water Resources Plan (IWRP). Included in that plan was consideration of a strategy for various options for the Doheny Ocean Desalination Project. The SCWD Board approved an adaptive management strategy which includes proceeding with efforts to secure partners for a 5 MGD Doheny Ocean Desalination Project. If SCWD is unsuccessful in securing partners SCWD will proceed with construction of a smaller 2 MGD project that does not have future expansion capabilities.
	SCWD held a Special Board Meeting on September 2, 2021 to discuss the financial implications of the project. Clean Energy Capital (CEC) presented a water cost analysis for the project where CEC presented cost projections for a 2 MGD project with an estimated 1 st year water cost of \$1,928/AF in 2021\$, and a 5 MGD project with an estimated 1 st year water cost of \$1,479/AF in 2021\$. The SCWD Board actions included accepting the water cost analysis; initiating a Public Outreach Program supporting the implementation of the project; re-engaging with task-related consultants for the development of necessary contract activities; and authorizing the SCWD General Manager to develop a partnership education plan to pursue and secure partnerships with local agencies to realize the cost savings a 5 MGD project provides.
	The third party hydrogeology study of the San Juan Basin has been extended and is including work on how to optimize the north and south portions of the basin.
Poseidon	On April 29, 2021, the Santa Ana Regional Water Quality Control Board
Resources	(SARWQCB) conditionally renewed Poseidon's permit governing the seawater
Huntington	intake and waste discharges.
Beach Ocean	The next step for Poseidon is to seek a Coastal Development Permit (CDP) from
Desalination	the California Coastal Commission (CCC). Coastal Commission staff have
Project	informed Poseidon that the Facility's CDP will be considered by the
	Commission during its upcoming March hearing.

Shutdowns

Diemer Water Treatment Plant

MET is planning to repair a chlorine diffuser pipe at the Diemer WTP which will require a seven-day full-plant shutdown. A meeting was held on February 3rd to inform MET of the agencies' local supply conditions for this calendar year. Shutdown dates are being reevaluated by MET staff at this time.

Orange County Feeder

MET is planning to reline and replace valves in a section of the Orange County Feeder from Bristol Ave to Corona Del Mar – this is the last section of this 80-year-old pipeline to be lined.

MET has delayed the relining project and has proposed new shutdown dates of September 15, 2022 through June 15, 2023.

Orange County Feeder Extension

MET is planning to reline 300-linear feet of the OC Feeder extension affecting the City of Newport Beach, IRWD and LBCWD. MWDOC and the City are meeting with MET staff to review details of the Traffic Control Plan.

MET has delayed the relining project by one year and has proposed new shutdown dates of June 16, 2023 through July 10, 2023.

Orange County Reservoir (OC Feeder)

The decommissioning of the Orange County Reservoir has been rescheduled to March 20, 2022 through March 25, 2022. This work will affect the cities of Brea and La Habra.

Lake Mathews Facility Shutdown

MET is planning rehabilitation work on Lake Mathews facilities from March 14, 2022 through March 25, 2022. Work on Lake Mathews will affect downstream untreated lines. The following agencies will be affected during the shutdown: OCWD, YLWD, Serrano WD, IRWD, TCWD, ETWD, SMWD, MNWD, and the City of San Clemente.

Allen-McColloch Pipeline

MET has completed 50% of the preliminary design of the AMP PCCP rehabilitation and is expected to be complete with the design by 2023. Preliminary design work currently underway includes identifying priority reaches, developing access locations, conducting geotechnical assessments, modeling a surge analysis, conducting real property assessments, identify permitting requirements and development of a feeder isolation plan. A draft project schedule will be developed at the completion of preliminary design. Rehabilitation of individual reaches will be based on the ongoing condition assessments, priorities, and shutdown scheduling.

MET plans to inspect additional sections of the AMP PCCP in FY 23-24.

Mostings	MWDOC staff continue to lead working group meetings with the impacted AMP agencies to discuss options that may reduce the number of shutdowns needed while also helping to increase reliability for future shutdowns. Potential sites are being looked for their potential to extend shutdown durations and provide additional long term reliability benefits.
Meetings	Charles Busslinger and Chris Lingad and several potentially impacted agency staffs participated in a meeting with MET staff of February 3, 2022 to discuss planning for repairs to a chlorine diffuser pipe at the Diemer WTP which will require a 7-day full plant shutdown.
	MWDOC staff along with ABS Consulting, IDS Group and Optima RPM participated in construction progress meetings in the month of January regarding the admin building seismic retrofit and remodel. Meetings concerning close-out and final punch list items are being held.
	Charles Busslinger and Chris Lingad held a meeting with Ed Means on January 4, 2022 to discuss EOCF#2 Emergency Pilot Program.
	Charles Busslinger and Chris Lingad held a meeting with MET and CDM Smith to discuss IRP scenarios and the OC Reliability Study update on January 12, 2022.
	Charles Busslinger, Vicki Osborn, and Chris Lingad attended a meeting on January 11, 2022 with ETWD and Brady to discuss specific needs for the Primary Emergency Operations Center.
	Charles Busslinger and Chris Lingad met with Dan Rodrigo on January 19, 2022 to discuss the status of the OC Reliability Study update.
	Charles Busslinger and Chris Lingad attended a meeting with MNWD and MET on January 20, 2022 to discuss MNWD's interest in Direct Potable Reuse and a potential project they are working on. MET provided a status update on their progress on the Regional Recycled Water Project.
	Charles Busslinger and Chris Lingad held a meeting with the impacted agencies of the AMP PCCP rehabilitation project on January 24, 2022. The group discussed options that could allow additional shutdown flexibility. A follow up meeting with the group will be held on February 24, 2022.
	Charles Busslinger and Chris Lingad held a meeting with Ed Means and MET on January 25, 2022 to discuss the initial scope of work for the EOCF#2 Emergency Pilot Project.

General Manager Report WEROC Status Report

January 2022

COVID-19 (CORONA VIRUS) COORDINATION

- As of the date of this Report 2/8, COVID-19 cases and the rate of community transmission have steadily decreased statewide since early January, and hospitalizations are either plateauing or declining in most regions of the state. Since California's peak during the Omicron surge, the state has experienced a 65% decrease in case rates. As COVID-19 conditions continue to improve across California and the Omicron surge subsides, temporary measures the state had put in place will expire in the coming weeks.
- The same decline is occurring here in Orange County. Providing accurate statistics now with this event is challenging with the at home rapid test kits, as a person Is not required to report their results. However, using the available data from reported cases thru testing sites or health care providers, the decline within the County is evident. As of 1/4 there was a single day reporting of 11, 227 positive cases in comparison to a month later on 2/4 there was 229 positive cases. Hospitalization case of those with COVID symptoms has also seen a decreasing trend. On 1/18, Orange County had 1,232, and on 2/6 decreased by 50% to 620. Unvaccinated population still account for nearly 88% of the hospitalizations.
- On 2/7, it was confirmed the indoor masking requirement will expire after February 15
 reverting to the previous guidance which requires masking for unvaccinated individuals
 in all indoor public settings and required masking for all individuals regardless of
 vaccination status in higher risk settings like public transit and congregate living.
- On 2/1, Gov. Gavin Newsom eluded to his administration releasing an "endemic plan" for the state's COVID-19 response within "the next couple weeks."
 - For those not familiar with the endemic term: A disease is considered endemic when infection totals are relatively stable and follow established patterns, as opposed to major outbreaks continuing and prompting emergency response as has happened throughout the pandemic phase. Seasonal influenza is an example of an endemic disease.
- WEROC shared with agencies the following on what this likely means for water and wastewater agencies:

- Governor Executive Orders will have a termination date and the State
 Gubernatorial Proclamation of Emergency will most likely be terminated
 - For those agencies implementing the AB 361 Open meetings: state and local agencies: teleconferences will be ending.
 - Agencies should be developing strategies for the return of in-person and/or hybrid meeting based on your agency procedures
- The trigger for the County Proclamation for cover to end is tied to when the State Gubernatorial Proclamation ends.
- It is unknown with the Federal Declaration will end, but we will be tracking as the termination of that Declaration will start the time clock for those who have FEMA Public Assistance (PA) claims pending.
- The COVID ETS should adjust to the new endemic requirements that will be presented by the State and CDPH. We will track to be sure this occurs and you all are aware of changes.
- WEROC continues to hold bi-weekly conference calls on Tuesdays with member agencies, as requested by the agencies to continue to support the sharing of information.
- WEROC continues to support agencies with COVID-19 related questions and guidance needs. For example, changes to the quarantine and isolation guidance changes between fully vaccinated, boosted and unvaccinated. An agency inquired about the regulations with the disposal of rapid tests kits. Vicki reached out to the County and Deputy County Health Officer to inquire since Orange County has its own regulatory authorities within California. Dr. CK, Deputy Health Officer appreciated the inquiry and provided the answer which was shared with the agencies. WEROC has also assisted agencies with reporting requirements under the CalOSHA law for work illness and injury compliance. WEROC will continue to monitor additional changing regulations and provide guidance as required.
- In January, a second round order of Rapid Antigen Testing Kits was placed at the request of member agencies. 26 of the 36 WEROC agencies participated in the logistics request. Daniel led this process coordinating with the agencies, and both Daniel and Janine coordinated with the agencies the distribution of the kits once received.

JANUARY INCIDENTS/EVENTS (NON-COVID)

- **The following events in which WEROC provided information and/or coordination
- Tsunami Advisory 1/15/22
- Agency Mutual Assistance Request for Supply Chain Issue (equipment)

Vicki can provide an additional oral update to WEROC activities specific to the event as required/requested.

COORDINATION/PARTICIPATION WITH MEMBER AGENCIES AND OUTSIDE AGENCIES MEETINGS OUTSIDE OF PROGRAMS AREAS

- On 1/4 and 2/1, Vicki attended the ISDOC Executive Meeting and provided an update on the Operational Area activities.
- On 1/4, Vicki attended the State Emergency Management Mutual Aid (EMMA)
 Quarterly Meeting. This meeting covered final changes made to the plan before it
 goes the State Standardized Emergency Management System (SEMS) Advisory
 Board for approval.
- On 1/6, the WEROC team attended the Orange County Emergency Management Organization (OCEMO) meeting. Meeting consisted of working group reports highlighting their goals and objectives for 2022. Two presentations were made, one of the request to create a Large Animal Evacuation and Sheltering Sub Committee under the OCEMO structure and the second was an overview on the Orange County Sheriff's Department Emergency Management Division. At the 2/3 meeting, regular committee reports were presented and a presentation was made by Vicki to the group title Emergency Management 101, essential items you should know.
- On 1/6 and 2/3, Vicki attended the OCEMO Exercise Design Meeting. This group is focused on the Public Information Seminar being offered in March. The planning team is working on the final portions of the speakers, and logistics for this training session for the Operational Area partners.
- On 1/7 and 2/4, Vicki attended the WACO meeting and provided an update on the Operational Area activities.
- On 1/11 and 1/25, Vicki attended the California Emergency Services Association (CESA) working group establishing the California Emergency Management Professional Certification Program. This project is important to the establishing the baseline standards of an emergency management professional qualifications in the field of emergency management.
- On 1/18, Vicki attended the CalWarn Board Meeting. The meeting focused on current activities throughout the state and looking at the objectives for the group for 2022.
- On 1/18, Vicki and Daniel met with CSDA to discuss what WEROC has been doing with its member agencies in regards to Cyber Security, this meeting was prompted

following the ISDOC meeting and CSDA hearing the OA report out. WEROC provided the different areas of the WEROC Cyber Program established in 2021 including the Cyber Security Working Group to share best practices, on-going communications and coordination with the Orange County Intelligence Assessment Center (OCIAC) and the future of the Regional Cyber Plan.

- On 1/19, Vicki attended the FEMA Alert & Warning Webinar covering the changes to the Integrated Public Alert and Warning system.
- On 1/20, Vicki attended the MWDOC Managers Meeting and gave a briefing WEROC activities including coordination of information with OCFA.
- On 1/26, Vicki attended the Orange County Disabilities and Access and Functional Needs (DAFN) Working Group. The group has been dormant during COVID, so this meeting focused on re-acclimating the group and discussing objectives moving forward. This group will be significant to WEROC and its member agencies as we build out distribution plans and communications efforts addressing the whole community.
- On 1/27, Vicki attended the Mutual Aid Regional Advisory Committee (MARAC). Vicki is the Region I – Public Utility representative/Special District. Items discussed included earthquake/tsunami presentation, Safety Assessment Program, High Frequency Radio Program and a presentation on the California Emergency Service Association.
- On 1/27, Vicki attended the Orange County Tsunami Working Group Meeting. This a
 coordination meeting that meets annually in order to update procedures. There was
 brief discussion regarding the 1/15 Tsunami Advisory which will be followed up with a
 after action meeting. This will then result in changes to WEROC Tsunami procedures
 in relation to our member agencies.
- On 1/28, Vicki attended the CESA Legislative Committee. This committee tracks legislation and requirements being passed specific to emergency management activities. The group is tracking all bills introduced with the nexus prior to the February 18th deadline for new bills to be introduced. Important items related to emergency management activities with a water nexus will be shared with the member agencies as required.
- On 1/31, Vicki attended the Operational Area Executive Board Training and Overview presented by the Orange County Sheriff's Department Emergency Management Division.
- On 1/31, Vicki and Janine had a zoom meeting with IRWD's new Safety and Security Director Steve Choi to discuss WEROC and welcome him to Orange County.

 On 2/2, Vicki has a coordination meeting with the County Emergency Manager in regards to the re-establishment of the County Drought Task Force. More information on this topic will be provided in the March WEROC Report.

PLANNING AND PROGRAM EFFORTS

As part of the annual WEROC Budget Process, WEROC presents to its funding agencies a letter containing program accomplishments, goals and a budget request for FY 22/23. Below contains some of the accomplishments achieve over the course of the past year that was presented at the MET Managers/WEROC Funding Agency Meeting on 1/26.

In 2021, the WEROC program continued to provide unexpected support and efforts to its agencies in result to the ongoing pandemic, while continuing to move projects forward. Below are some of our accomplishments to date for 2021/2022 outside of COVID Response.

America's Water Infrastructure Act (AWIA)

- As part of the choice program, WEROC and its consultant, Herndon Solutions Group (HSG) continued to work with WEROC agencies to achieve compliance with America's Water Infrastructure Act (AWIA).
- The modified AWIA Scope of Work reflected changes to the project to accommodate COVID19 and the virtual meeting changes, but the end deliverables remained the same in order for agencies to meet the AWIA standard. There were 18 agencies (both Tier I & II) working concurrently on their AWIA requirements. There were 52 virtual meetings scheduled and conducted just in the months of June and July.
- WEROC submitted and received approval for the Risk and Resiliency Assessment Workshops from the State Water Board as contact hours and continuing education credits.
- The 24 agencies participating met compliance on schedule with the EPA.
- WEROC provided to the Orange County Certified Unified Program Agency (CUPA) a letter of certification of the AWIA Process.
- Provided agency training on maintaining the RRA and their ERP.

Training and Exercises

- In 2021, WEROC implemented the Five Year Exercise and Training Program Plan integrating new requirements including AWIA, on-going ICS trainings offerings (in house), water specific trainings, and development of a long term repeating exercise program incorporating water specific areas.
- Delivery of certified virtual and in-person ICS and G-Series Emergency Operations
 Center Section Specific training. Training was conducted in-house by WEROC who is
 an approved State and Federal instructor. Courses followed the State and Federal
 standards while incorporating water and wastewater specific applications.
- Six of these courses were conducted saving over \$120,000, which would have been the cost to hire a consultant/contractor to conduct these trainings.
- Other trainings provided to agencies included Cyber Security Training, WEROC EOPS and Annexes coordination training, Fire Awareness and Safety Training, 800 MHz Radio Training, and WebEOC training.
- WEROC conducted one Tabletop Exercise this year with the WEROC EOC staff.
- WEROC supported member agencies with their exercises conducted this past year.
- The first virtual WEROC Symposium conducted in September had over 100 attendees. AWWA was one of the presenters.

Other Planning Areas

- In partnership with the OCIAC, the Water and Wastewater Cyber Security Working Group was created and began meeting in 2021. WEROC continues to send cyber security information out to the agency points of contacts and WEROC provided cybersecurity training to agency IT professionals.
- The WEROC Emergency Operations/Response Plan including the updates of internal forms and documents was completed and training on this documents and supporting documents was conducted with member agencies.
- WEROC continues to maintain the member agency phone directory and AlertOC contacts list by ensuring the proper contact information was entered into the system for all 37 agencies. This effort will allow WEROC to distribute timely information to our member agencies during emergencies.

- Safety Center, which is the coordination and documentation library WEROC uses in conjunction with member agencies, has received update of almost all documents.
 This including a Safety Center training for member agencies.
- Other Procedural Documents Updated:
 - AlertOC Water Agency Procedures and Notification Templates
 - Disaster Finance Documents
 - WEROC Radio System SOP and Radio Protocols
 - Requesting Activation of the WEROC EOC
 - Requesting Mutual Aid
 - Suspicious Activity Reporting Forms
 - Water Liaison to an ICP

Advocacy

 WEROC continue to advocate and participate in meetings at all levels of government and with private partners including but limited to: County Government (County Executive Office, Health Care Agency, OC Public Works, Emergency Management Division); Operational Area Partners (Cities, Private Sector Partners); Orange County Intelligence Assessment Center (OCIAC); South Coast AQMD; California Office of Emergency Services (CalOES); Department of Water Resources (DWR); CalOSHA; Federal Emergency Management Agency (FEMA); Federal Department of Homeland Security (DHS) and Environmental Protection Agency (EPA) and the White House Intergovernmental Affairs Office.

Activation/Incident Activities

In addition to COVID-19, WEROC staff activated to support member agencies with communication, coordination, and resource needs for the following 24 events in 2021/2022:

- Chlorine and Sodium Hypochlorite Shortage (1 Event)
- Cyber Incident/Vulnerability (7 Events)
- December Rain Events/Bond Fire Debris Flow (5 Events)
- Fires (1 Event)
- Heat Event/ CAISO Flex Notification (1 Event)
- Oil Spill Pipeline P00547 Incident
- Public Safety Power Shutoff (3 Events)
- Suspicious Activity (3 Events)
- Water Main Break and Logistics Request (1 Event)

WEROC Emergency Operations Center Project/Funding -

WEROC Emergency Operations Center Funding continues to be pursued by WEROC Staff. This includes the submission of the project for Federal grants and appropriation opportunities. WEROC and MWDOC staff have met with the County Leadership and will continue to meet with the County Board of Supervisors others in regards to this project. Phase 1 design of the EOC project did begin at the end of December. WEROC will present this information to agencies as phase 1 concludes.

In addition to County leadership, Vicki has also done the following:

- EOC Project submitted on 1/21 to CalOES under the Hazard Mitigation Funding Notice of Interest application.
- Spoke to DWR about funding options
- Researched the Prepare California Grant just launched on 1/27 which is making 100 million available, unfortunately, construction is not an eligible cost.
- Other Coordination topics discussed and planning efforts outside of COVID conducted on the Bi-Weekly coordination calls during January included:
 - OCIAC Suspicious Activity
 - Weather/Wind Advisories/Warning
 - Training Calendar for 2022
 - Supply Chain Impacts

Status of Water Use Efficiency Projects January 2022

Description	Lead	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	In December 2021, 118 residential and 20 commercial smart timers were installed in Orange County. To date, 32,330 smart timers have been installed through this program.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	In December 2021, 146 rotating nozzles were installed in Orange County. To date, 571,862 rotating nozzles have been installed through this program.
SoCal Water\$mart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In December 2021, 263 high efficiency clothes washers and 8 premium high efficiency toilets were installed in Orange County. To date, 125,483 high efficiency clothes washers and 60,803 high efficiency toilets have been installed through this program.
SoCal Water\$mart Commercial Rebate Program	MWDSC	Ongoing	Ongoing	In December 2021, 1 ice making machine was installed in Orange County. To date, 111,403 commercial devices have been installed through this program.
Industrial Process/ Water Savings Incentive Program (WSIP)	MWDSC	Ongoing	Ongoing	This program is designed to improve water efficiency for commercial customers through upgraded equipment or services that do not qualify for standard rebates. Incentives are based on the amount of water customers save and allow for customers to implement custom water-saving projects. Total water savings to date for the entire program is 1,291 AFY and 6,342 AF cumulatively.

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Turf Removal Program	MWDOC	Ongoing	Ongoing	In December 2021, 19 rebates were paid, representing \$54,778.18 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 23.7 million square feet of turf.
Spray to Drip Rebate Program	MWDOC	Ongoing	Ongoing	In December 2021, 6 rebates were paid, representing \$6,031.50 in rebates paid this month in Orange County. To date, the Spray to Drip Program has converted approximately 1.5 million square feet of standard spray irrigation to drip irrigation.
Recycled Water Retrofit Program	MWDSC	Ongoing	Ongoing	This program provides incentives to commercial sites for converting dedicated irrigation meters to recycled water. To date, 182 sites, irrigating a total of 1,672 acres of landscape, have been converted. The total potable water savings achieved by these projects is 3,687 AFY and 18,868 AF cumulatively.

Public & Governmental Affairs Activities Report December 28, 2021 – February 8, 2022

	December 28, 2021 – February 8, 2022
Member Agency	Public Affairs Staff:
Relations	 Coordinating the kickoff meeting for 2022 Consumer Confidence Reports
	 Producing member agency bill inserts to highlight rebates and Fix- a-Leak week
	 Sent an email and began following up one-by-one with MWDOC member agencies to gauge their interest in participating in the 2022 Earth Month Streams of Hope campaign Sent an email to MWDOC member agency Human Resource managers to solicit their input for a statewide water and wastewater workforce needs assessment project with the Centers
	of Excellence initiated by the Water Energy Education Alliance (WEEA)
	Confirmed staff participation at a Jog-a-Thon community event tabled by the South Coast Water District
	Government Affairs Staff:
	 Coordinated with the City of Buena Park on notifications to customers who received arrearage payments from the State Worked with BB&K to draft template letters for the California
	Arrearage Payment Program (CAPP) and distributed it to all member agencies
	 Responded to a water shutoffs moratorium question to the City of Fullerton
	 Distributed the monthly Grants Tracking and Acquisition report to the member agencies
	Circulated a CAPP fact sheet to all member agencies
	Hosted a Grants Tracking and Acquisition update meeting for member agencies.
Community Deletions	member agencies Public Affairs Staff:
Community Relations	Met with the president of the Wyland Foundation (WYFO) to
	discuss hosting the 2022 National Mayor's Challenge in Orange County
	 Met with WYFO, Disneyland Resorts, Orange County Conservation Corps, and the County of Orange to outline a partnership for the Streams of Hope (SoH) campaign
	 Met with the Orange County Department of Education to discuss their role in partnership with MWDOC on the SoH campaign Met with the Metropolitan Water District of Southern California to discuss their participation in the SoH campaign
	 Visited and met with Friends of Shipley Nature Center to discuss hosting the MWDOC Water Awareness Poster Contest award ceremony at their facility
	 Contacted the Master Gardeners of Orange County to submit a Top Tips for waterwise spring gardening article for the February edition of MWDOC eCurrents newsletter Governmental Affairs Staff:
	Participated in the ACC-OC Legislative Committee meeting
	- Tarticipated in the Acc Oc Legislative committee meeting

Education

Public Affairs Staff

- Prepared and distributed a MWDOC Choice School Programs commitment form to all MWDOC member agencies and the Three Cities for school year 2022-2023
- Collected MWDOC Choice School Program commitments from Orange County water providers for school year 2022-2023
- Updated MWDOC Choice School Programs language for the Three Cities master agreements
- Participated in the bi-weekly California Environmental Literacy Initiative (CAELI) Green Career Innovation Hub
- Participated in the CAELI Leadership Council's quarterly meeting
- Participated in the monthly Metropolitan Water District of Southern California's (Metropolitan) Education Coordinator's meetings
- Attended 21st Century CTE Careers Symposium hosted by Los Angeles County Office of Education
- Coordinated a second round of filming with Hashtag Pinpoint for water education videos in partnership with the Orange County Department of Education and Metropolitan
- Speaker's Bureau: Prepared, hosted, and lead the Water Energy Education Alliance (WEEA) Leadership Roundtable #10 with 96 registrants and representatives participating from 57 organizations
- Met with Metropolitan, Los Angeles Department of Water and Power, California Environmental Education Foundation, and the Centers of Excellence to discuss logistics for the WEEA Leadership Roundtable Meeting #10
- Participated in the California Department of Water Resources
 Water Education Committee Meeting
- Met with Orange County Department of Education to discuss an upcoming teachers workshop presented by the Department of Water Resources Save Our Water and the Water Education Foundation's Project WET
- Met with Big Picture Learning to discuss water workshops for teachers through WEEA
- Continued coordinating with Solar Cup competition participants within our service area
- Assisted Moulton Niguel Water District with access to the MWDOC Choice School Programs shared Google calendar and confirmed lesson plans for the 2022-2023 school year
- Provided Yorba Linda Water District a comprehensive overview of the MWDOC Choice School Programs
- Notified Golden State Water Company about a school program request in their service area
- Provided the City of Fountain Valley current MWDOC Choice
 School Program participation and budget numbers

	Discussed upcoming teacher trainings agenda and plan through
	Project WET with the Moulton Niguel Water District
Media Relations	 Public Affairs Staff Prepared and distributed the February issue of MWDOC eCurrents newsletter Prepared and distributed content for social media Attended a Department of Water Resources workshop on engaging social media and increasing reach Prepared and submitted two articles to the Association of California Water agencies for consideration: https://www.acwa.com/news/mwdoc-alliance-leads-industry-workforce-needs-assessment/ https://www.acwa.com/news/mwdocs-annual-water-awareness-poster-contest/
Special Projects	 Public Affairs Staff: Attended the Orange County Business Council's Workforce Development Committee meeting Met with the California Association of Public Information Officials to discuss facilitating a panel on diversity, equity, and inclusion as it relates to community engagement and partnerships Met with VitalLink to discuss panelist opportunities for their workforce symposium Met with Baywork, IEWorks, Metropolitan, and Cuyamaca College to discuss their participation in an upcoming water and wastewater workforce needs assessment project with the Centers of Excellence (COE) initiated by the Water Energy Education Alliance (WEEA) Met with the COE to discuss the upcoming workforce needs assessment project and roles Invited and confirmed Joaquin Esquivel, to serve as keynote speaker for February 23, 2022 Water Policy Forum Filmed a promotional video for the Water Awareness Poster Contest with Hashtag Pinpoint Coordinated event logistics with The Westin South Coast Plaza Hotel for the MWDOC Water Policy Dinner Prepared and distributed the second invite for the MWDOC Water Policy Dinner Prepared a comprehensive list of Speakers Bureau events from the 2021 calendar year Participated in a Supervisors Academy training presented by The Centre for Organization Effectiveness Governmental Affairs Staff: Attended the ACWA Region 10 meeting where they selected a new Chair Staffed the January WACO meeting

Attended a meeting with Charles Busslinger and Deborah Diep of CDR to review redistricting updates Followed up with Supervisor Don Wagner's office regarding MWDOC's WEROC EOC funding request Completed MWDOC's Q4 state lobbying activity report for transmittal Staffed the WACO Planning meeting Coordinated with the February WACO speaker, providing background, potential topics and questions Attended a training class on cyber security Sent out reminders for the ISDOC Quarterly Luncheon meeting Drafted and submitted an application for Director McVicker for the ACWA Region 10 Board vacancy Staffed the ISDOC Quarterly Luncheon meeting featuring speaker Carolyn Emery of OC LAFCO Staffed the ISDOC Executive Committee meeting Staffed the February WACO meeting **Legislative Affairs** Governmental Affairs Staff: Participated in the ACWA Indoor Water Use working group meeting Distributed a SB 230 (Portantino) coalition letter to member agencies on behalf of Metropolitan Participated in the Southern California Water Coalition Legislative Task Force meeting Attended the ACWA Region 10 State Legislative Committee prep Attended a meeting hosted by Metropolitan Water District of Southern California GM to discuss federal and state infrastructure funding and priorities for Southern California projects Participated in the ACWA State Legislative Committee meeting Circulated a letter to the Orange County Congressional delegation regarding PFAS – an action taken by the Board of Directors Attended the ACWA Turf Working Group meeting Attended the CA Natural Resources Agency Stakeholder's Webinar on proposed water investments in the state budget Participated in the ACWA AB 1434 (Friedman) Working Group meeting Participated in the Metropolitan Legislative Update meeting Participated in CSDA's ad hoc committee meeting on Brown Act updates Attended the CA Natural Resources Agency webinar outlining their priorities for 2022 Sent out requests and compiled data to build an infrastructure "shovel worthy" project list for Orange County. 17 member agencies plus MWDOC have projects on the list, which was shared with Metropolitan, per their request Met with Senator Feinstein's Appropriations Committee staff to discuss next steps for a funding request for the WEROC EOC

 Attended the ACWA State Legislative Committee meeting Participated in the Southern California Water Coalition Legislative Task Force