

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

Jointly with the
PLANNING & OPERATIONS COMMITTEE

February 1, 2021, 8:30 a.m.

Due to the spread of COVID-19 and as authorized by the Governor's Executive Order, MWDOC will be holding all upcoming Board and Committee meetings 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

Webinar ID: 882 866 5300#

P&O Committee:

Director Yoo Schneider, Chair

Director Nederhood

Director Seckel

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

H. De La Torre, T. Dubuque,

D. Micalizzi, H. Baez

Ex Officio Member: Director Tamaribuchi

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.

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>.

ACTION ITEM

1. CALL FOR NOMINATIONS - ACWA/JPIA EXECUTIVE COMMITTEE
2. CLINICAL AFFILIATION AGREEMENT WITH SOUTH ORANGE COUNTY COMMUNITY COLLEGE DISTRICT (SADDLEBACK COLLEGE SCHOOL OF NURSING) AND THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

3. ATTENDANCE AT CALDESAL ANNUAL VIRTUAL CONFERENCE, FEBRUARY 10-11, 2021

DISCUSSION ITEMS

4. UPDATE ON COVID-19 (ORAL REPORT)
5. DELTA STEWARDSHIP COUNCIL'S CLIMATE VULNERABILITY ASSESSMENT
6. UPDATE ON WEROC ASSESSMENT & BUDGET
7. UPDATE ON OC DEMAND FORECASTING/CDM SMITH STUDY (ORAL REPORT)

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

8. APPROVAL OF AMP CAPACITY FLOW EXCEEDANCE REQUEST – SOUTH COAST WD & THE CITY OF SAN CLEMENTE
9. STATUS REPORT ON DEVELOPING MWDOC's & RETAIL AGENCIES' 2020 URBAN WATER MANAGEMENT PLAN
10. WATER LOSS CONTROL SHARED SERVICES UPDATE
11. LOCAL LEGISLATIVE ACTIVITIES
 - a. County Legislative Report (Lewis)
 - b. Legal and Regulatory Report (Ackerman)
12. UPDATE/STATUS OF MWDOC BUILDING CONSTRUCTION
13. MWDOC CHOICE SCHOOL PROGRAMS UPDATE
14. 2021 OC WATER SUMMIT UPDATE
15. WATER POLICY FORUM SPEAKER SERIES
16. STATUS REPORTS
 - a. Ongoing MWDOC Reliability and Engineering/Planning Projects
 - b. WEROC
 - c. Water Use Efficiency Projects
 - d. Public and Government Affairs
17. 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.



ACTION ITEM
February 1, 2021

TO: Board of Directors

FROM: **Planning and Operations Committee**
(Directors Yoo Schneider, Nederhood and Seckel)

Robert Hunter
General Manager

Staff Contact: Heather Baez

SUBJECT: CALL FOR NOMINATIONS - ACWA/JPIA EXECUTIVE COMMITTEE

STAFF RECOMMENDATION

Staff recommends the Committee discuss whether a member of the MWDOC Board of Directors would like to be a candidate for the Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA) Executive Committee.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On May 3, there will be an Executive Committee election held during the JPIA's Board of Directors meeting.

This election will fill four (4) Executive Committee member positions, each for a four-year term. The incumbents are Tom Cuquet, South Sutter WD; David Drake, Rincon Del Diablo MWD; Melody McDonald, San Bernardino Valley WCD; and Randall Reed, Cucamonga Valley WD. At this time, MWDOC has not yet been notified directly if any or all incumbents intend to run for reelection.

Budgeted (Y/N): n/a	Budgeted amount: n/a	Core X	Choice __
Action item amount: None		Line item:	
Fiscal Impact (explain if unbudgeted):			

If a member of the MWDOC Board would like to run for a position on the ACWA/JPIA Executive Committee, the candidates' district must submit a nominating resolution and the candidates must also each receive concurring in nomination resolutions from three other JPIA members. Nominations and concurrent resolutions must be received by March 19, 2021.

BOARD OPTIONS

Option #1

- Discuss if a member of the MWDOC Board of Directors would like to run for the ACWA/JPIA Executive Committee

Fiscal Impact: None

Business Analysis: MWDOC would have a member of their Board of Directors serving in a leadership position for ACWA/JPIA.

Option #2

- Take no action

Fiscal Impact: None

Business Analysis: The ACWA/JPIA Executive Committee would continue to be served by Mesa Water District Board Member, Fred Bockmiller. (Note: Director Bockmiller is not up for reelection at this time.)

ATTACHED

- 2021 ACWA JPIA Executive Committee Nominating Procedures
- ACWA JPIA Sample Resolution
- ACWA JPIA Sample Concurring Resolution

RESOLUTION NO.: _____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE

(NAME OF MEMBER DISTRICT)

NOMINATING ITS JPIA BOARD MEMBER TO THE EXECUTIVE COMMITTEE

OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES
JOINT POWERS INSURANCE AUTHORITY ("JPIA")

WHEREAS, this district is a member district of the JPIA that participates in all four of its Programs: Liability, Property, Workers' Compensation, and Employee Benefits; and

WHEREAS, the Bylaws of the JPIA provide that in order for a nomination to be made to JPIA's **Executive Committee**, the member district must place into nomination its member of the JPIA Board of Directors for such open position;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the (NAME OF MEMBER DISTRICT) that its member of the JPIA Board of Directors, (NAME OF BOARD MEMBER) be nominated as a candidate for the **Executive Committee** for the election to be held during the JPIA's spring 2021 Board of Directors' meeting.

BE IT FURTHER RESOLVED that the JPIA staff is hereby requested, upon receipt of the formal concurrence of three other member districts to affect such nomination.

BE IT FURTHER RESOLVED that the District Secretary is hereby directed to transmit a certified copy of this resolution to the JPIA at P.O. Box 619082, Roseville, CA 95661-9082, forthwith.

ADOPTED this (DATE) day of (MONTH), 2021.

(SIGNATURE)
Board President

ATTEST:

(SIGNATURE)
Secretary

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE

(NAME OF MEMBER DISTRICT)

CONCURRING IN NOMINATION TO THE EXECUTIVE COMMITTEE

OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES
JOINT POWERS INSURANCE AUTHORITY ("JPIA")

WHEREAS, this district is a member district of the JPIA; and

WHEREAS, the Bylaws of the JPIA provide that in order for a nomination to be made to JPIA's **Executive Committee**, three member districts must concur with the nominating district, and

WHEREAS, another JPIA member district, the (NAME OF NOMINATING DISTRICT) has requested that this district concur in its nomination of its member of the JPIA Board of Directors to the **Executive Committee** of the JPIA;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the (NAME OF MEMBER DISTRICT) that this district concur with the nomination of (NAME OF NOMINEE) of (NAME OF NOMINATING DISTRICT) to the **Executive Committee** of the JPIA.

BE IT FURTHER RESOLVED that the District Secretary is hereby directed to transmit a certified copy of this resolution to the JPIA at P.O. Box 619082, Roseville, CA 95661-9082, forthwith.

ADOPTED this (DATE) day of (MONTH), 2021.

(SIGNATURE) _
Board President

ATTEST:

(SIGNATURE) _
Secretary

ACWA JPIA

Nomination Procedures for Executive Committee

Approximately 120 Days before Election (January 4, 2021)

All ACWA JPIA Directors and Member Districts are to be notified of:

- A) Date and place of Election;
- B) Executive Committee positions and terms of office to be filled by Election;
- C) Incumbent office holders; and
- D) Nomination Procedures.

120 to 45 Days before Election (January 4 – March 19, 2021)

- A) A district (that participates in all four of the JPIA's programs: Liability, Property, Workers' Compensation and Employee Benefits) may place into nomination its member of the Board of Directors of ACWA JPIA with the concurrence of three districts, then members of the ACWA JPIA, in addition to the nominating district.
- B) Sample resolutions are available on the ACWA JPIA website.
- C) The **district is solely responsible** for timely submission of the nominating resolution and the three additional concurring in nomination resolutions of its candidate for office.

45 Days before Election (March 19, 2021)

- A) Deadline and location for receiving the nominating and concurring in nomination resolutions in the ACWA JPIA office:

Friday – March 19, 2021 – 4:30 p.m.

Sylvia Robinson
Publications & Web Editor
(srobinson@acwajpia.com)
ACWA JPIA
P. O. Box 619082
Roseville, CA 95661-9082

- B) Candidates' statement of qualifications must be submitted, if desired, with the nominating resolutions. The statement of qualifications must be submitted on one side of an 8½ x 11" sheet of paper suitable for reproduction and distribution to all districts. (MSWord or PDF documents preferred).

14 Days before Election (April 19, 2021)

Final notice of the upcoming Election of Executive Committee members will be included as part of the Board of Directors' meeting packet. Final notice shall include:

- A) Date, Time, and Place of Election;
- B) Name and District of all qualified candidates;
- C) Candidate's statement of qualifications (if received); and
- D) Election Procedures and Rules.



ACTION ITEM
February 17, 2021

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Yoo Schneider, Nederhood, Seckel)

Robert Hunter, General Manager

Staff Contact: Vicki Osborn

SUBJECT: **Clinical Affiliation with the South Orange County Community College District (Saddleback School of Nursing) and the Municipal Water District of Orange County**

STAFF RECOMMENDATION

Staff recommends the Board of Directors approve the General Manager or Director of Emergency Management to execute the agreement.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On December 16th, the County of Orange Health Care Agency sent a letter to cities and businesses with Point of Dispensing (POD) Plans to begin preparing for activation of its plans to assist with the distribution of the COVID-19 vaccine. On this same day, the WEROC Director of Emergency Management connected with South Orange County Community College District, school of Nursing to partner with instructional staff and medical students to support the medical portion of the WEROC POD Plan and sent an official request letter.

Following the County POD planning conference call on December 20th, the County of Orange changed direction and assumed the responsibility to disperse the vaccine and all micro pods at the city level and business level were no longer being deployed. However, in case the needs change, and/or there is a different type of event in the future, WEROC is requesting to establish an affiliation with South Orange County Community College District

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

School of Nursing so a POD can be established to support the water and wastewater agencies immediately.

This agreement allows for the College to establish clinic hours application for the supervised medical students while performing certain duties at our facilities.

Attachment A: Program Clinical Facility Authorization Form

PROGRAM CLINICAL FACILITY AUTHORIZATION FORM
(Submit forms electronically)

Consistent with [CCR, title 16, section 1427](#) Clinical Facilities, (a) A nursing program shall not utilize any agency or facility for clinical experience without prior approval by the board. Each program must submit evidence that it has complied with the requirements of subdivisions (b), (c), and (d) of this section and the policies outlined by the board.

☒ Clinical Agency/Facility Cancellation (complete top two (2) sections only). Date: 1/7/2021

Nursing Program Name: Saddleback College	
Program Director/Designee: Dee Oliveri EdD RN	Phone: (949) 582-4792

Name of Clinical Facility: Water Emergency Response Organization of Orange County	
Name of Chief Nursing Officer/Designee: Vicki Osborn	Phone: (714) 593-5010
Email: vosborn@mwdoc.com	
Type of Clinical Facility: <input type="checkbox"/> Acute <input type="checkbox"/> Non-Acute <input type="checkbox"/> Long-Term Care <input type="checkbox"/> Clinic <input type="checkbox"/> Telehealth <input type="checkbox"/> Ambulatory Care <input checked="" type="checkbox"/> Non-Healthcare	
Clinical Facility Address: 18700 Ward Street, Fountain Valley, CA 92708	

CONTENT AREAS SUPPORTED

Place X in the appropriate area(s).

Medical Surgical: <input type="checkbox"/> Fundamentals-MS <input checked="" type="checkbox"/> Beginning-MS <input checked="" type="checkbox"/> Intermediate-MS <input checked="" type="checkbox"/> Advanced-MS <input type="checkbox"/> Obstetrics <input type="checkbox"/> Pediatrics <input type="checkbox"/> Psych/Mental Health <input type="checkbox"/> Geriatrics					
Number of student placements needed for Quarter/Semester per content area	MS	O	C	P/MH	G
44					
Total number of annual student clinical placement needs per content area	MS	O	C	P/MH	G

CLINICAL FACILITY INFORMATION List specific units in the rows below (eg.1 South, 2 South, Ortho, Rehab)		Number of Students on Unit	Days and Shifts Currently Available	Average RN Staffing	Average Daily Census	Annual Student Clinical Capacity per Unit
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

PROGRAM CLINICAL FACILITY AUTHORIZATION FORM
(Submit forms electronically)**VERIFICATION OF NONDISPLACEMENT OF OTHER PRE-LICENSURE PROGRAM STUDENTS**

Note: CCR, title 16, section 1427(d) states "In selecting a new clinical agency or facility for student placement, the program shall take into consideration the impact that an additional group of students would have on students of other nursing programs already assigned to the agency or facility."

Each signature below verifies that use of this clinical facility by the requesting nursing program **WILL NOT DISPLACE** students from other pre-licensure nursing programs.

Signature of Clinical Facility's Liaison to Nursing Program	Date
<i>Dee Oliveri EdD RN</i>	1/7/2021
Signature of Nursing Program Director/Designee	Date

VERIFICATION OF INFORMATION AND RESPONSIBILITIES

Checklist for starting in a new clinical facility: (Place an X next to completed requirements.)

- ☐ Assurance of the availability and appropriateness of the learning environment in relation to the program's written objectives;
- ☐ Provision for orientation of faculty and students;
- ☐ A specification of the responsibilities and authority of the facility's staff as related to the program and to the educational experience of the students;
- ☐ Assurance that staff is adequate in number and quality to ensure safe and continuous health care services to patients;
- ☐ Provisions for continuing communication between the facility and the program; and
- ☐ A description of the responsibilities of faculty assigned to the facility utilized by the program.
- ☐ Contract/Affiliation Agreement is established, signed, and filed.
- ☐ Plan for continued communication between school and facility approved and on file (i.e., Instructor/Faculty Staff Meeting, Agency/Faculty Student Meeting each semester, Annual Faculty/Facility Staff Meeting, Dean/Director Conference each semester).

The requested information on this form and requirements for starting in a new clinical facility are verified by the Nursing Program Director/Designee.

<i>Dee Oliveri EdD RN</i>	1/7/2021
Signature of Nursing Program Director/Designee	Date

For Board Use Only		
Approved <input type="checkbox"/>		
Not Approved <input type="checkbox"/>		
Cancelled <input type="checkbox"/>	NEC Signature	Date
Reason(s) for Non-Approval:		



ACTION ITEM
February 17, 2021

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Yoo Schneider, Nederhood, Seckel)

Robert Hunter, General Manager

SUBJECT: ATTENDANCE AT CALDESAL ANNUAL VIRTUAL CONFERENCE,
FEBRUARY 10-11, 2021

STAFF RECOMMENDATION

Staff recommends the Board of Directors: Ratify attendance by members of the Board at the CalDesal Annual Virtual Conference held February 10-11, 2021.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

CalDesal is hosting its annual conference, Virtual Passport to Desal, in two half day sessions on February 10 and 11, 2021. Topics for the conference are outlined in the attached agenda; please note that Congressman Levin is the keynote speaker on Thursday the 11th.

As this conference is not included in the approved list of conferences and is not budgeted, staff is seeking approval from the Board. Two Board members have expressed interest in attending, and due to the timing of the conference (prior to the Board meeting), it will be necessary for the Board to ratify attendance, if the Planning & Operations Committee expresses support. Cost for the conference is \$250 each.

Budgeted (Y/N): N	Budgeted amount:	Core __	Choice __
Action item amount: \$500*		Line item:	
Fiscal Impact (explain if unbudgeted): Although we have two Directors interested at a cost of \$250 each, this action would authorize any member of the Board to attend.			



Conference Preliminary Schedule - Virtual

- **Dates:** Wednesday February 10th and Thursday February 11th—two half-days of programming
- **Format:** Half-day Virtual Tour Wednesday afternoon with live Q&A
- **Theme:** Virtual Passport to the World of Desal

Wednesday February 10

12:00-12:10 p.m. – Welcome, thank sponsors and virtual housekeeping (Ridderbusch)

12:10-1:25 – **Session 1** (75 minutes)

- **What's the Deal with Desal?** What's the desalination situation? Everything you ever wanted to know and more about the people, places and processes related to desalination. Tune in to hear myths busted and the real facts about desal" – a brief overview of desal for newcomers as well as information for seasoned desal veterans.
 - Moderator Mike Lee, San Diego County Water Authority, and panelists

1:25-1:35 – Sponsors "slide show" with logos and web addresses scrolling during Break

1:35-2:55 – **Session 2** (75 minutes)

- **Emerging Technologies** – Panel discussing and considering feasibility of new technologies including artificial intelligence for desal. New program twist will be receiving input from attendees about what technologies they feel will make the biggest impact in real time from attendees virtually voting (using Slido).
 - Moderator Mark Donovan, GHD
 - Dr. Mike Dixon, Synauta – artificial intelligence
 - Chad Unrau, Magna Imperio Systems – advanced electro-dialysis reversal
 - Yoram Cohen, Noria Water Technologies – reverse osmosis membrane performance monitoring
 - Andrew Schevets, Amorphic Tech – energy recovery device

2:55-3:05 – Virtual Presentation thanking and recognizing the original CalDesal Founders

3:05-4:25 – **Session 3** (75 minutes)

- **The United States of Desal:** Policy and politics contrasted and compared between California, New Mexico, and Texas.

- Moderator Tom Pankratz
- Kyle Frazier, Texas Desal
- Mike Hightower, New Mexico Desalination
- Wendy Ridderbusch, CalDesal are the three panelists.

4:25-4:35 – Sponsors “slide show” with logos and web addresses scrolling during Break

4:35-5:25 – **Desal Around the World: Virtual Facilities Tour and Q&A** (80 minutes)

- Sit back and relax for a tour of two desalination facilities from the comfort of your own armchair! Moderator Joe Monaco, Dudek, Featuring plant operators for live Q and A from our audience.
 - Hadera Desalination Plant, Israel
 - Claude “Bud” Lewis Carlsbad Desalination Plant, United States, San Diego County

5:25-? – Wrap up and reminder of Thursday Start time at 9:00am.

Thursday February 11

9:00-9:05 – Welcome, again thank sponsors, housekeeping reminders

9:05-10:20 Session 4 (75 minutes): **Advanced Recovery: Research, Technologies, and Processes enhancing the efficiency of Reverse Osmosis.**

- Moderator Brent Alspach, Arcadis
- Michael Boyd, Regional Director at Desalitech
- Shane Walker, Associate Professor in Dept. of Civil Engineering, University of Texas and Director of the UTEP Center for Inland Desalination Systems
- Steve Wait, Director of Sales, IDE Americas

10:20-10:30 – Sponsors “slide show” with logos and web addresses scrolling during Break

10:30-11:00 – **Keynote Speaker: Congressman Mike Levin** (D-San Juan Capistrano). Representing the 49th Congressional District encompassing parts of southern Orange County and northern San Diego County which is home to both the Carlsbad Plant and a future Doheny facility. Freshly re-elected to a second term, Congressman Levin will discuss the new Administration in D.C., his efforts to obtain funding for desalination projects, and his interest in infrastructure among other timely issues. This program will be streamed live with an opportunity for questions and answers. Congressman Levin will be introduced by Keynote Speaker Sponsor.

11:00-11:10 – Sponsors “slide show” with logos and web addresses scrolling during Break

11:10-12:20 **Session 5** (70 minutes)

Emergency Response in the Era of Covid 19: Protocols and lessons learned during recent natural disasters including the current coronavirus pandemic. How have these events out of our control impacted operation and planning approaches to future emergency response for facilities?

- Moderator Jessica Jones, Poseidon Water
- Gilad Cohen, IDE Americas – Carlsbad and City of Santa Barbara Desal Plants during Covid-19

- Heidi Luckenbach, Deputy Director/Engineering Manager, City of Santa Cruz Department of Water – recent wildfires
- Dave Pederson, General Manager, Las Virgenes Municipal Water District – recent wildfires and mudslides (invited)
- Rich Svindland, President, California American Water – operational impacts of Covid-19 and other natural disasters

12:20 – Final Remarks and Close (Chair Mark Donovan)

12:30 Adjourn



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Alex Heide

**SUBJECT: DELTA STEWARDSHIP COUNCIL'S CLIMATE VULNERABILITY
ASSESSMENT**

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 January 15, the Delta Stewardship Council (Council) released a public review draft of their Sacramento-San Joaquin Delta Climate Change Vulnerability Assessment (Vulnerability Assessment) as part of their *Delta Adapts: Creating a Climate Resilient Future* (Delta Adapts) initiative. The overall goal of the Delta Adapts initiative is to build resilience to climate change. The Delta Adapts initiative is a two-phase effort, beginning with the Vulnerability Assessment and followed by the development of an Adaptation Strategy.

DETAILED REPORT

Background

The Council initiated the *Delta Adapts: Creating a Climate Resilient Future* in 2018 to improve the Council's understanding of regionally specific climate change vulnerabilities and risks and address how Delta communities, infrastructure, and ecosystems can adapt to future conditions. The Delta Adapts assessments utilize a planning horizon of 2100 while recognizing the 2050 planning horizon used for the Delta Plan and proposed amendments.

Overall the Delta Adapts initiative looks is to build resilience to climate change in the region by:

- Informing future work at the Council.
- Providing local governments with a toolkit of information to incorporate into their planning and regulatory documents.
- Integrating climate change into the state's prioritization of future actions and investments.
- Serving as a framework to be built upon by the Council and others in years to come.

The Delta Adapts initiative is a two-phase effort. The Climate Change Vulnerability Assessment (phase one) will improve the understanding of regional vulnerabilities in order to protect vital resources the Delta provides. The development of an Adaptation Strategy (phase two) detail strategies and tools that state, regional, and local governments can use to help communities and ecosystems thrive in the face of climate change, while protecting critical infrastructure and economic activities from damage and loss.

The two phase process is guided by climate change Resilience Goals that were developed by the Council to provide a long-term outlook for Delta regional values and priorities. These Resilience Goals, built upon the Council's coequal goals, will be used to evaluate adaptation options, identify tradeoffs and synergies across goals, and ultimately prioritize adaptation actions that increase Delta assets' resilience to climate change.

The Resilience Goals relevant to MWD OC and its Member Agencies are the following:

- Promote statewide water conservation, water use efficiency, and sustainable water use.
- Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta.
- Improve the water conveyance system and expand statewide water storage.
- Restore the Delta ecosystem, including its fisheries and wildlife, as the heart of a healthy estuary and wetland ecosystem.
- Reduce risks to people, property, and state interests in the Delta by effective emergency preparedness, appropriate land uses, and investments in flood protection.

Climate Change Vulnerability Assessment Draft Report

On January 15 the Council released the public review draft of the Climate Change Vulnerability Assessment. In general, the Vulnerability Assessment will help to inform the Council's future actions and investments in the Delta, and provide climate information for local governments, and serve as a framework for future work.

There are several key findings that Council highlights in the Assessment that are of specific interest to MWD OC and its member agencies are:

1. Delta water exports will be less reliable in future years. Extreme drought will be between five to seven times more likely to occur by 2050 and will result in greater water shortages in all water year types. This will result in a 10 to 20 percent annual reduction in delta exports, with impacts seen the most in the driest years. The frequency of Delta exports falling below four million acre feet will increase from 12 percent of years, under today's conditions, to 25 percent of years by 2050. Delta

exports during a drought, similar to 2012-2016, would be approximately 20 percent less if that drought were to occur in 2050.

2. The existing water supply system does not have enough storage to capture the anticipated increases in runoff that will occur as a result of more extreme weather events. Increases in the variability of precipitation are expected to lead to lower end-of-April storage, particularly in reservoirs north of the Delta. Additionally, North of Delta end-of-September carryover storage is likely to decrease between 10 to 25 percent on average. Declines of over one million acre-feet of annual carryover storage are predicted to occur in all future years, with larger declines predicted during the driest years.
3. Delta system shortages are likely to occur more frequently and with more intensity by 2050. The most severe conditions expected under 2050 conditions shows that system shortages are projected to increase by 1200 percent in the driest two percent of years.
4. Water uses in the Delta will likely be threatened by episodic water quality declines, as a result of sea level rise in combination with droughts, allowing for saline water to penetrate further into the Delta.
5. Delta ecosystems are increasingly vulnerable to climate change. Rising sea levels will cause all critical tidal wetland ecosystems to transition to different plant communities or drown completely. Of the ecosystems currently protected by levees, 73 percent also at risk of flooding due to levee overtopping as a result of the combination of sea level rise and storm events.

Next Steps

After the Vulnerability Assessment is finalized, the Council will begin work on the adaptation strategy, which is the second phase of the Delta Adapts program. The adaptation strategy will provide a range of policy and management actions that could be taken to address the vulnerabilities within the Delta.

Attachments:

(1) Sacramento-San Joaquin Delta Climate Change Vulnerability Assessment Executive Summary

(2) Climate Vulnerability Assessment PowerPoint Presentation

(3) [Full Sacramento-San Joaquin Delta Climate Change Vulnerability Assessment Public Review Draft](#)



January 2021

Delta Adapts: Creating a Climate Resilient Future

Public Review Draft



**Delta
Stewardship
Council**

A CALIFORNIA STATE AGENCY
Page 20 of 106



EXECUTIVE SUMMARY

The time to act is now. Climate change is already altering the physical environment of the Sacramento-San Joaquin Delta and Suisun Marsh (Delta), and we will continue to experience its effects through hotter temperatures, more severe wildfires, and prolonged droughts. Over the long term, climate change in the Delta is expected to harm human health and safety, disrupt the economy, diminish water supply availability and usability, shift ecosystem function, compromise sensitive habitats, and increase the challenges of providing basic services. Many of these impacts will disproportionately affect vulnerable communities.

Although the exact future extent and timing of these impacts is uncertain, this vulnerability assessment phase of Delta Adapts will help the Delta Stewardship Council (Council) understand specific regional climate risks and vulnerabilities.

Regional, collaborative adaptation strategies rooted in science are more critical than ever. The next phase of Delta Adapts, preparing an Adaptation Strategy, will identify ways to address the risks and vulnerabilities.

We did not go at this alone. The Council conducted the climate change vulnerability assessment in coordination with a diverse group of stakeholders over the last two years. The Council worked with agency partners at the local, regional, State and federal levels to obtain data, expand upon existing technical work, and ensure that our climate studies complement other ongoing work. The Council also coordinated with stakeholders representing various Delta interests including community-based organizations, service providers, reclamation districts, water districts, and environmental groups to gather input, to verify results, and to structure the outreach program and technical materials to reach a wider audience.

Considers a broad range of climate futures. Delta Adapts aligns with state guidance and best practices, leverages best available data sources, and conducts targeted analyses to expand our knowledge of climate impacts in the Delta. This vulnerability assessment considers climate impacts at three planning horizons: 2030, 2050, and 2085. It also considers a broad range of potential hydrologic conditions including river inflows, sea level rise, storm surge, and tides.

The assessment considers climate stressors, or chronic changes in climate conditions that may stress Delta systems, including changing temperatures, precipitation and hydrologic patterns, and sea level rise. Climate hazards or acute events that may impact assets and resources include flooding, extreme heat, wildfire smoke, and drought.

Our analysis considers the most vulnerable populations. Delta Adapts defines vulnerability as the intersection of exposure to climate hazards, sensitivity to those hazards, and adaptive capacity, or the ability to recover from and adapt to climate hazards. Delta Adapts identifies the communities with the highest social vulnerability to climate hazards, meaning the communities with high sensitivity and low adaptive capacity to flooding, extreme heat, wildfire, and drought.

Key Takeaways

Flooding will continue to get worse. Flood risk is one of the most pressing threats to the Delta and will continue to worsen in the future with changes in sea levels, precipitation, hydrology, and temperatures. These impacts will continue to affect the central and southern Delta the most, with a concentration in the Stockton area. Flooding in the northern part of the Delta is not expected to be as great a concern due to the numerous investments that have already been made to the flood infrastructure system. Assuming Delta levees remain at current conditions (i.e., no improvement or degradation), by 2050, approximately 10% of the Delta population (including more than 42,000 residents who live in areas with high social vulnerability), 33% of Delta land, and 148,000 acres of agriculture could be exposed to flooding from levee overtopping during a 100-year event, totaling more than \$10 billion in exposed agricultural, residential, commercial, and infrastructure assets and nearly \$2 billion in economic activity. These figures will double by 2085, when approximately 21% of the Delta population (including 71,200 residents in areas with high social vulnerability) and 68% of Delta land totaling \$22 billion in assets and over \$5 billion in annual economic activity will be similarly exposed. Future flooding is also anticipated to expose life safety facilities (fire stations, police stations and hospitals), schools, water infrastructure, flood infrastructure and wastewater treatment facilities, as well as hundreds of miles of critical infrastructure supporting energy, utilities, and transportation, potentially resulting in economic disruption that would extend throughout and beyond the Delta. This anticipated flooding underscores the importance of continued, and potentially elevated, levels of investment in Delta levee maintenance and improvements.

Climate change will not impact Delta residents equally. Approximately 65% of the Delta's population could be exposed to the 100-year flood by 2050 resides in areas with high concentrations of socially vulnerable residents. Vulnerable residents may lack the resources to adequately prepare for flood events, lack a vehicle to evacuate during an emergency, or not be aware of flood risks due to linguistic isolation. The communities of Stockton, Pittsburg, Antioch, Isleton, Terminous, Thornton, and Walnut Grove will experience disproportionate impacts, as greater than 80% of the exposed population within these communities is located within highly socially vulnerable block groups.

Increases in the number of extreme heat days, due to climate change, will also disproportionately affect certain populations, such as outdoor workers and people experiencing homelessness, who are more exposed to heat effects. Older adults, young children, and infants are highly sensitive to extreme heat events, as well as individuals suffering from chronic illnesses. While people with greater exposure, heightened sensitivity, or reduced adaptive capacity to extreme heat live and work throughout the Delta, the communities identified as most vulnerable to extreme heat are located in the cities of Stockton and Tracy.

Delta water exports will be less reliable in the future. Climate change will reduce Delta exports in all year types, but impacts will be greater in dry years. Climate change will also reduce reservoir storage in all years, meaning less water can be carried over from one year to the next, increasing the water supply system's vulnerability to droughts and impacts when they occur. In addition, the type of extreme drought that California experienced in 2012-2016 will be five to seven times more likely to occur by 2050. All of this will result in greater water shortages, especially in dry



years, and generally, lower reliability of Delta water exports. Reduction in Delta exports will have far ranging consequences for municipal, industrial, and agricultural water users throughout the State. It is critical for Delta water users to continue planning for future drought conditions, because when Delta water is needed the most, it will likely be less available.

The existing water supply system does not provide enough storage to capture anticipated increases in runoff due to more variable precipitation. Among climate stressors, higher temperatures pose the greatest risk to water supply. More variable precipitation is especially impactful during dry periods, and sea level rise is of less concern for water supply relative to other factors. With higher temperatures, more precipitation will occur as rain and less as snow, which results in more runoff during core winter months when rain cannot be captured in reservoirs because of the need to provide flood protection. More variable precipitation means there will be more wet years, more dry years, and fewer average precipitation years. However, additional wet years do not provide much benefit with the system that exists today because additional runoff cannot be captured, and the additional dry years intensify and expand drought-like conditions. Adaptation of our existing water supply system will require significant modifications in order to accommodate the expected changing climate conditions while maintaining water supply reliability.

In-Delta water uses may be threatened by episodic water quality declines. Delta agriculture thrives on the rich organic soils of the Delta and a high quality, reliable water supply. Salt water from the San Francisco Bay is kept out of the Delta by high freshwater flows in winter and reservoir releases of stored water in the summer and fall, enforced through a number of water quality and flow regulations. Higher temperatures, changing precipitation and runoff patterns, and sea level rise all make maintaining Delta water quality more challenging. In general, even with up to two feet of sea level rise, water quality regulations will be able to be maintained in the Delta through 2050. However, during severe drought conditions, which are expected to become more frequent and more severe, water shortages will occur that require trade-offs. In the past, Delta water quality has been compromised during droughts, allowing salinity to penetrate further into the Delta. Future droughts may expose more acres of Delta agriculture to more saline water than has historically occurred.

Delta ecosystems are vulnerable to climate change. As the vast majority of Delta ecosystems have been lost over the previous two centuries, the ecological health of the Delta is already compromised. This reduces ecosystem resilience to climate change stressors and hazards. By 2085, rising sea levels will cause all critical remaining tidal wetland ecosystems in the Delta to transition to different plant communities or drown completely. Of the ecosystems currently protected by levees, 73% are at risk of flooding due to levee overtopping resulting from a combination of sea level rise and storm events. This risk is especially high in the Central Delta and Suisun Marsh. Projected reductions in spring and fall precipitation and increased inter-annual precipitation variability will stress Delta species, favor less diverse species assemblages, and lead to increased presence of non-native species. Increases in both average air temperatures and extreme heat days, especially when these occur sequentially, will stress Delta

plant and wildlife species and alter ecosystem dynamics. With intentional, extensive, and timely habitat restoration and management, we can increase nature’s resilience to climate change.

Agricultural production trends will shift with climate change. Agriculture is the prevailing land use in the Delta, serving as the cultural backbone and economic driver of the region. The majority of Delta crop yields are projected to decrease due to longer, hotter summers, and increases in the frequency and duration of extreme heat days may lead to additional crop losses. Warmer winters with fewer chilling hours will reduce yields of most fruit and nut trees in the Delta. However, the greater Central Valley is projected to be 2°F warmer than projections for the Delta, and as a result the Delta may serve as a thermal refuge for crops relative to the Central Valley.

By 2050, flooding due to sea level rise, changing Delta inflows, and storm events will expose 148,000 acres of agricultural lands (35% of land currently being farmed), \$72 million in agricultural assets, and \$79 million in annual agricultural economic activity. Agricultural operations in Sacramento and San Joaquin counties will be most vulnerable to flood risk. Approximately 257,000 acres (62%) of agricultural lands will be exposed by 2085, sending a strong signal that landowners, farmers, and the State will need to develop policy and adaptation strategies to address the threat of climate change to Delta agriculture.

Bringing it All Together

While many of these findings were expected, we now know where the greatest climate impacts will occur to people, places, recreation, agriculture, and infrastructure, and we understand the respective economic impacts. This underscores the importance of future levee investments targeted to protect communities and assets. We understand where the most socially vulnerable communities are located, and where future investments should be prioritized so that climate change adaptation is equitable.

This assessment provides the data and information from our modeling efforts and equity analysis to guide how we address these vulnerabilities in the important next step of Delta Adapts, preparation of an adaptation strategy. An effective plan for adaptation in the Delta will take teamwork and require input from a diverse range of stakeholders. We invite you to join us.



Delta Stewardship Council– Climate Vulnerability Assessment

Municipal Water District of Orange County

Planning and Operations Committee February 1, 2021



Delta Adapts: Creating a Climate Resilient Future Initiative

Initiative Goals:

1. **Inform future amendments** to the Delta Plan
2. **Provide local governments with a toolkit** to incorporate into planning and regulatory documents for climate change resilience
3. **Integrate climate change into the state's prioritization** of future actions and investments
4. **Serve as a framework** to be built upon by the Council in years to come.





Two Phase Approach

Phase I – Current Phase

Vulnerability Assessment: Improves the understanding and evaluates the risk of climate change vulnerabilities in the Delta related to ecosystems, infrastructure, and Delta communities.

Phase II – Future Phase

Adaptation Strategy: Provide the strategies and tools that governments can use to help communities, ecosystems, and infrastructure withstand damage and loss as a result of climate change.



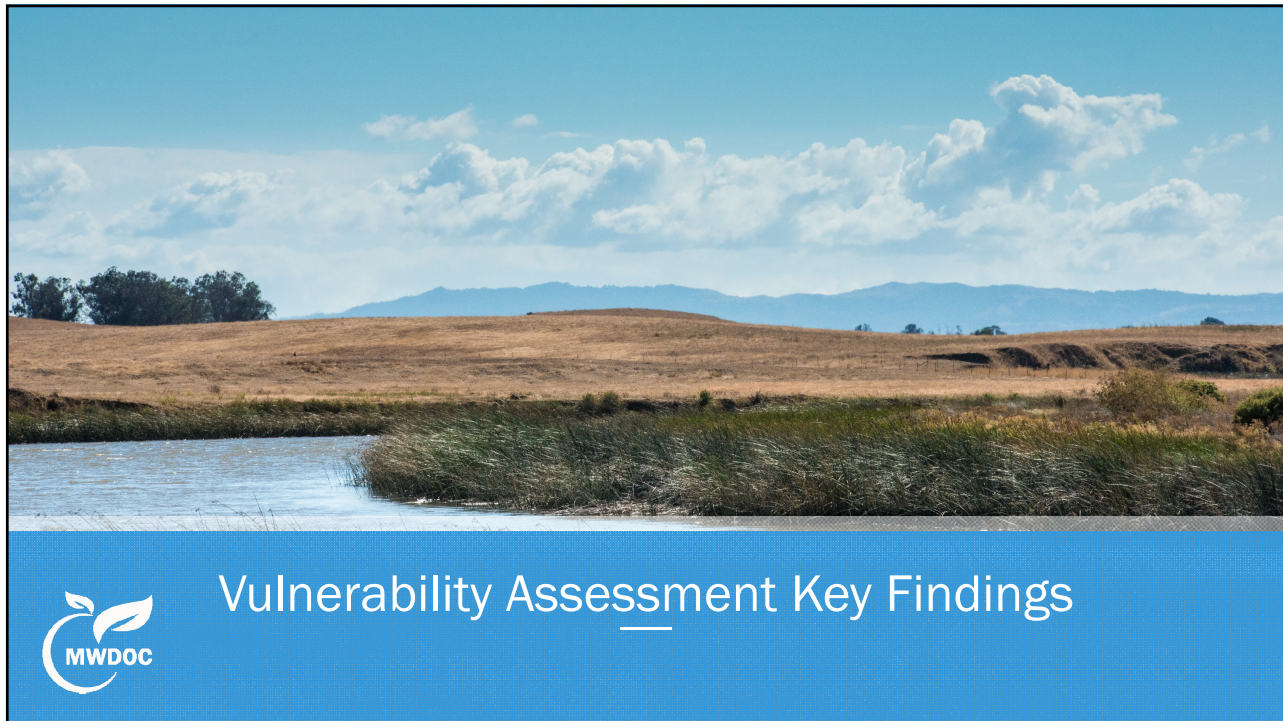
3

Resiliency Goals

- 1 Promote Statewide Water Use Efficiency
- 2 Improve Delta Water Quality
- 3 Improve the water conveyance system and expand statewide water storage
- 4 Restore the Delta ecosystem
- 5 Reduce risks to people, property, and state interests



4



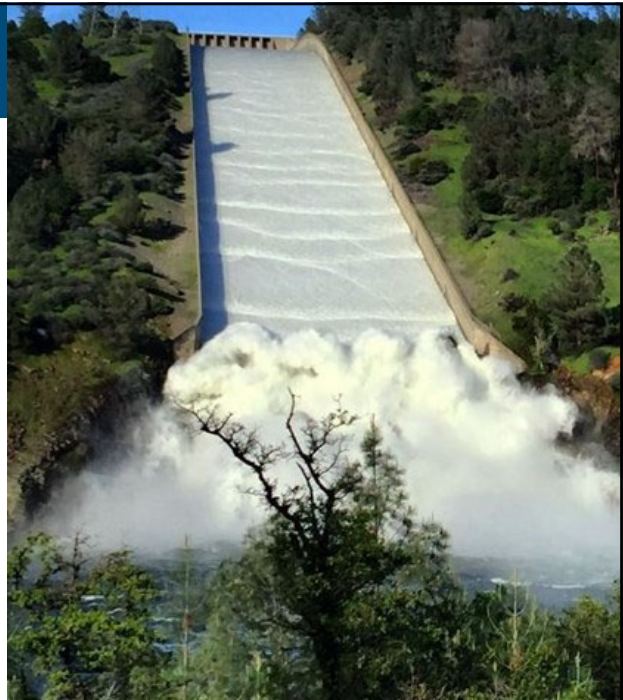
Delta Exports

- 💧 Extreme droughts will be five to seven times more likely by 2050.
- 💧 An annual reduction of Delta Exports expected by 10% to 20%.
- 💧 Exports falling below 4 MAF will happen in 25% of years by 2050.
- 💧 Greater water shortages are expected in all water year types.



System Storage

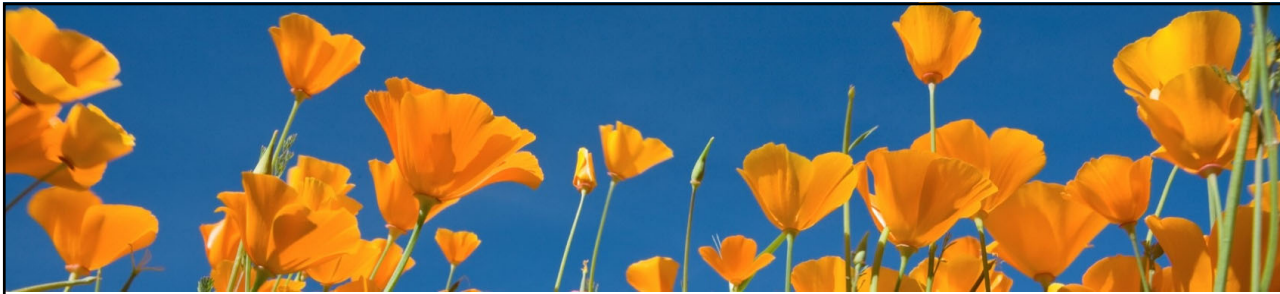
- 💧 The existing system does not have enough storage.
- 💧 Weather events will become more flashy with increased periods of intense runoff.
- 💧 Precipitation runoff will impact North of Delta end-of-April storage the most.
- 💧 North of Delta end-of-September carryover storage will decrease by 10-25% on average.
- 💧 All future water year types will see carryover storage decline by over 1 MAF.



Water Quality & Ecosystems

- 💧 Water quality in the Delta will face episodic declines.
- 💧 A combination of Sea level rise and droughts will push saline water further into the Delta.
- 💧 Tidal wetlands will either have to transition or drown.
- 💧 Ecosystems that are protected by levees are also at risk of flooding from overtopping.





Next Steps

- The Delta Stewardship Council will finalize the Climate Vulnerability Assessment in Spring of 2021
- Work will then begin on the Adaptation Strategy phase shortly thereafter



9

Questions?



January 2021

Delta Adapts:
Creating a Climate
Resilient Future





COMMITTEE DISCUSSION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Vicki Osborn

SUBJECT: Update on WEROC Assessment and Budget

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee to receive and file report and provide input as appropriate.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

DETAILED REPORT

Over the course of the past few months, the WEROC program assessment has been presented to the MWDOC Board of Directors, the WEROC funding agencies, and member agencies. As part of the assessment, certain areas of the WEROC program were identified as needing improvement. The WEROC team is committed to continuing with the exceptional program in place and making the enhancement to continue the support and foundation of the WEROC Program.

- The WEROC Emergency Operations Plan is 80% complete with the revisions of
- In relation to the WEROC Assessment Report, the Records and Data Management project is 75% completed.
- Training and Exercise Plan is 100% completed and has been implemented. Classes are already being offered to member agencies.

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

- Planning Maintenance and Recommendation Matrix is 30% completed as comparison of federal and state mandates in relationship to current planning continues to be placed on paper.

Collaboration with Funding Agencies and Budget Presentation

On January 27th, WEROC is meeting with its funding agencies to present accomplishments in 2020, goals for the remainder of the FY 20/21 budget and present the draft FY21/22 budget. At the time of this report, that meeting has not occurred yet, so a verbal update will be provided to the committee regarding the discussion and outcomes.

Program Management and Administration Recommendations

Focusing on the three-six month projects and the larger projects involving fiscal impacts outlined in the WEROC Assessment Report, the following items are for discussion with the P&O Committee for action within the General Manager's authority.

Obtain and assign a US Bank Government Cal Card to the WEROC program:

By obtaining an Integrated Card combining capabilities of purchase, travel and fleet programs into a single solution. This card would have a procedure and process in place for its use for both non-emergency and emergency event.

WEROC Coordinator Position:

Based on the outcome of the WEROC funding agency meeting, the Senior Staff Assistant may be reclassified as a WEROC Coordinator. Fiscal impact to the WEROC budget from the projected FY 20/21 actual cost budget and the proposed FY 21/22 budget is an increase of \$27,000 which includes wages and benefits. As a reminder, MWDOC provides 50% funding of the WEROC budget, so the cost share of this change \$13,500.

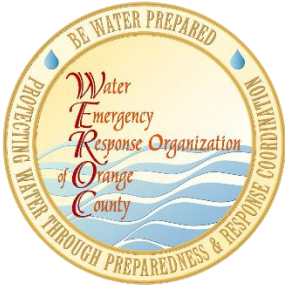
South Emergency Operations Center:

The South EOC facility was constructed in 1982 and has undergone minor renovations in the intervening years. A facility assessment study conducted in 2016, revealed critical defects requiring further renovation to bring this building up to safety standards.

El Toro Water District over the years has partnered with WEROC to allow for the existence of Emergency Operations Center. El Toro Water District is working on moving this project forward as the overall project involves their infrastructure as well. They need to know the intentions of WEROC regarding the South Emergency Operations Center as it impacts the ETWD project and schedule moving forward. Below are the options for discussion.

- Option 1 – Build a New EOC
 - Cost – New Building \$480,000 – \$780,000 (structure)
 - There is a possibility that MWDOC can partner with another of the WEROC funding agencies to split the costs for this project
- Option 2 – Repurpose existing structure
 - Based on studies and past project planning
 - Top 4 - Seismic, roof replacement, generator, electrical
 - WEROC/MWDOC Capitol Project Only
 - Costs:
 - Design and Engineering \$ 52,000 – \$63,000
 - Construction Estimate \$ 542,225 – \$642,225

Attachment A: 2021 WEROC Funding Agency Letter and Draft WEROC Budget



Vicki Osborn

Director of Emergency Management

**Municipal Water District
of Orange County**

Street Address:

18700 Ward Street

Fountain Valley, California 92708

Mailing Address:

P.O. Box 20895

Fountain Valley, CA 92728-0895

Office: (714) 593-5010

Cell: (714) 746-4808

Fax: (714) 964-9389

Email: vosborn@mwdoc.com

MEMBER AGENCIES

City of Anaheim

City of Brea

City of Buena Park

Costa Mesa Sanitary District

East Orange County Water District

El Toro Water District

Emerald Bay Service District

City of Fountain Valley

City of Fullerton

City of Garden Grove

Golden State Water Company

City of Huntington Beach

Irvine Ranch Water District

City of La Habra

City of La Palma

City of Laguna Beach

Laguna Beach County Water District

Mesa Water District

Midway City Sanitary District

Moulton Niguel Water District

Municipal Water District of Orange County

City of Newport Beach

City of Orange

Orange County Sanitation District

Orange County Water District

City of San Clemente

City of San Juan Capistrano

City of Santa Ana

Santa Margarita Water District

City of Seal Beach

Serrano Water District

South Coast Water District

South Orange County Wastewater Authority

Trabuco Canyon Water District

City of Tustin

City of Westminster

Yorba Linda Water District

To: Michael Moore, Craig Parker - City of Anaheim
Betty Burnett - South Orange County Wastewater Authority
Meg McWade, John Orndorff - City of Fullerton
Jim Herberg - Orange County Sanitation District
Mike Markus - Orange County Water District
Nabil Saba - City of Santa Ana
Rob Hunter - Municipal Water District of Orange County

From: Vicki Osborn, WEROC Director of Emergency Management

Date: January 11, 2021

Subject: Water Emergency Response Organization of Orange County (WEROC)
Program Accomplishments, Goals and Funding for FY 2021- 2022

The purpose of the Water Emergency Response Organization of Orange County (WEROC) is to protect water and wastewater services through preparedness and response coordination. The services and support provided by WEROC are intended to be an extension of Member Agency staffing in their preparedness efforts, and a resource during emergencies to ensure representation and recovery. In order to build the relationships needed for effective response, WEROC works with its member agencies, Metropolitan Water District of Southern California (MET), the County Operational Area, the State Office of Emergency Services and other emergency response partners throughout the year to educate, network and collaborate.

WEROC staff works with its member agencies on emergency plans and standard operating procedure development and review; state and federal required trainings for grant eligibility and disaster readiness; disaster exercise development; grant identification and application; and response and recovery coordination. Lastly, WEROC maintains two emergency operation centers, its own response plans and trained staff. In providing these services, WEROC continues to be a strong leader for regional water and wastewater emergency coordination and response.

The WEROC program took on some unexpected efforts as 2020 has been like no other. All the while continued to move projects forward while supporting water and wastewater agencies. Below are some of our accomplishments to date, what we expect to accomplish the remainder of this fiscal year along with next year's goals.

Activities and Accomplishments for 2020 to date:

Since the onset of the COVID-19 pandemic, WEROC has been providing the following on-going support to all agencies:

- WEROC continues to monitor the state and county for changing information and is sharing information with agencies as it becomes available.
- WEROC conducts bi-weekly conference calls with member agencies to report on federal, state and county changes, and facilitate and answer questions regarding changes regulations by providing guidance to the agencies.
- WEROC continues to support logistic requests from agencies supporting the accusation of scare resources and development of a vetted vendors list. WEROC has been a Point of Distribution for donation resources received from CalWarn and others such as face coverings and thermometers made available to water and wastewater agencies. WEROC has procured, transported, warehoused and distributed over 110,000 various pieces of personal protective equipment and sanitizing products. These supplies have been and will continue to be made available to all WEROC member agencies in times of need.
- WEROC monitors changing Cal OSHA regulations and distributes information with member agencies.

WEROC is coordinating with member agencies to ensure compliance with America's Water Infrastructure Act (AWIA). WEROC and its consultant, Herndon Solutions Group (HSG) are continuing 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.
- All agencies participating has met compliance on schedule with the EPA.

Tier 1 - 100% completed

Tier 2 - 50% completed (100% Completion Due Date 6/2021)

Tier 3 - 0% completed (Set to begin 1/2021)

Completion of the WEROC Program Strategic Assessment Plan. The assessment was a comprehensive review of the current WEROC program, what the future holds and identification for areas collaboratively can make WEROC a stronger organization over the coming years to benefit all members.

WEROC finalized the documentation FEMA required for approval of the Orange County Regional Water and Wastewater Multijurisdictional Hazard Mitigation Plan on behalf of the 17 agencies. On March 9th, 2020, WEROC received written approval from FEMA.

Development of a new long term 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.

Creation and delivery of certified virtual ICS training conducted in house approved by the State using the State and Federal standards and incorporating water and wastewater specific applications.

In partnership with the OCIAC, Cyber Security emergency notification secondary and tertiary communication paths for IT personal was created and implemented.

WEROC is proud of the advocacy we routinely engage in on behalf of the water and wastewater sector and specifically for our member agencies. This year on September 26, 2020, the Operational Area Agreement went into effect and with that WEROC is representing the agencies on the Operational Area Executive Board.

Developed and implemented the WEROC Standard Operating Procedures to protect our member agency staff and infrastructure for the Public Safety Power Shut Off program and for Smoke Advisories in correlation to OSHA regulations.

The staff continued to actively partake in discussions regarding the repercussions of the Public Safety Power Shutoff (PSPS) program. WEROC staff continues to work with the County, Southern California Edison and San Diego Gas and Electric specifically, to update and coordinate notification and receipt of vital power grid outage information in support of our member agencies. WEROC will continue its coordination efforts with both SCE and SDG&E utilities to improve the overall communications for power outages and priority restoration as required.

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.

In addition to COVID-19, WEROC staff activated to support member agencies with communication, coordination, and resource needs for the following events in 2020:

- Demonstrations and Protests in Orange County. Beginning in June, numerous demonstrations were scheduled in different member agency service areas. Open source information was shared with the member agencies on these events in order to brief field operations and employees where these locations are for safety reasons.
- August Heat Event and CalSO Stage 3 Power Emergency (Rolling Blackouts). WEROC coordinated with agencies and provided support as needed.

- Public Safety Power Shut Off Events. For both the events on October 23rd and December 2nd WEROC PSPS Standard Operating Procedure was implemented. WEROC sent information out to agencies on the weather and Southern California Edison and San Diego Gas and Electric potential circuits identified for shut off based on the Red Flag Warning and predicted Santa Ana Event. Mutual Aid was supported during these events.
- Silverado, Blue Ridge and Bond Fires. Below outlines WEROC involvement and actions:
 - WEROC coordinated with impacted agencies throughout the events and provided updates to all member agencies.
 - WEROC did logistical coordination between agencies for mutual aid needs for generators.
 - WEROC maintained coordination as a liaison with the OA EOC and as a agency representative at the Incident Command Posts.
 - WEROC engaged and coordinated with Southern California Edison in support of any agency with needs.
 - WEROC participated in the Operational Area After Action Meeting.
 - WEROC participated in Debris Flow Planning

Project goals for the remainder of Fiscal Year 20-21:

- Completion of the WEROC Emergency Operations/Response Plan including the updates of internal forms and documents.
- Implementation of a WEROC Strategic Assessment Plan by following the timelines for items without additional funding requirements in order to bring the program up to date. Items requiring additional funding will be discussed in detail with the funding agencies moving forward.
- Full implementation of the new long term Exercise and Training Program Plan including conducting 14 ICS and EOC trainings, a Regional Tabletop Exercise virtually on Water Loss/Quality.
- Continue discussion with the WEROC Funding agencies regarding the South Emergency Operations Center.
- Continue advocacy for water and wastewater at all levels.
- Staff will continue to work with on implementing non-structural seismic and safety improvements at the South EOC to continue to provide two EOCs.
- Completion of the AWIA Tier III agencies RRAs are due in June 2021. Timelines and meetings are being developed and will be launched with the five agencies in the beginning of the year.
- WEROC will develop a current project and program work plan listing all the program/planning areas.

- Continue to advocate and participate in meetings with South Coast AQMD regarding the potential regulatory solution that would provide water agencies with more flexibility to operate their emergency generators during PSPS events and for routine maintenance and testing.

Some of WEROC's goals for fiscal year 2021-2022:

- Maintain WEROC and OC water and wastewater agencies in a state of readiness to respond to emergency situations. Key aspects include staffing, training, exercises, updating plans and procedures.
- Development and implementation of the Regional Cyber Security Coordination Annex as part the WEROC Emergency Operations Plan.
- Continue implementation of the WEROC Assessment Plan
- Completion of the AWIA compliance project and conduct a closeout audit and meeting with participating agencies.
- Continue to build upon the lessons learned from various training, exercises and real events.
- Full implementation of the plan revision schedule.
- Develop, obtain, and implement a new WEROC platform to meet specific needs of the member agencies to securely store, maintain, and disseminate files and information.
- Develop a Logistics Plan that will incorporate how personnel, supplies, and equipment are requested, procured, tracked, and supported within the WEROC Organization.
- Creation of a GIS dashboard allowing for visibility of information in a none-linear form using open source information and current in house mapping information.
- Work with ETWD regarding opportunities for upgrading the South EOC facilities.
- Revision of the Business Continuity Plan to ensure commonality with the WEROC Emergency Operations/Response Plan

MWDOC contribution accounts for 50% of the WEROC operational budget. In addition, MWDOC will continue to provide:

- Daily administration, including the WEROC staff's work area, day-to-day management, technical support, and accounting services.
- Each fiscal year, MWDOC staff spend an estimated 800+ hours participating in WEROC training, exercises, and programs. This type of commitment is expected of MWDOC staff annually and is included as part of MWDOC's core budget.
- MWDOC's Engineering Department staff will continue to support technical projects and planning as it relates to WEROC and emergency planning.
- MWDOC Member Agencies contribute to the program by providing technical support throughout the year for items such as generator maintenance, technical expertise for a request for proposals development, exercise staffing assistance, and more.

Respectfully, each of the WEROC funding agencies is being asked to renew their continued support for the WEROC program again for the 2020-2021 fiscal year. Included in the budget is the reclassification of the Senior Administrative Assistant to the WEROC Coordinator position as this

will fulfill a gap identified in the WEROC Assessment Report allowing for the continued support of all WEROC programs and emergency management functions associated with the programs and projects.

If you would like WEROC to provide a specialized service, please let me know so that I can assist your agency with its needs. If you have any questions about the WEROC budget, programming, or would like to have further discussions, please contact me at (714) 593-5010 or by email at vosborn@mwdoc.com.

WEROC FY 20-21 Draft Budget

Budget Review

Code	Expense Name	FY 20/21 Budgeted	Actuals (4 months)	Projected 20/21 Annual	Proposed FY 21/22	Comments
6000	Salaries & Wages	\$318,348	\$91,039.94	\$330,561	\$348,353	Director (Osborn), Specialist (Harrison), WEROC Coord (Schunk)
6100	Benefits	\$105,792	\$37,516	\$118,287	\$127,748	
	Salary & Benefits Sub-Total	\$424,140	\$128,556	\$448,848	\$476,101	
6205	Training	\$8,226	\$0	\$8,110	\$8,200	Skills Training CSTI,NDTC, ICS Virtual Costs; Janine Grants course and certifications (In House Training Certification with State and FEMA on Classes and Material Costs)
7020	Legal	\$0	\$0	\$0	\$0	
7040	Professional Svc.	\$0	\$0	\$0	\$0	
7110	Conferences*	\$3,800	\$0	\$1,800	\$3,800	Registration CESA, IAEM, AWWA
7150	Travel & Accommodations*	\$4,750	\$0	\$0	\$4,750	Includes Training & Conference Travel (FY 21/22 CESA, IAEM, TEEX **note may be reallocated to virtual training offerings due to COVID) Includes TEEX or EMI
7210	Memberships	\$1,105	\$0	\$810	\$850	CESA, IAEM
7330	Supplies (Office)	\$1,800	\$396	\$1,500	\$1,500	
7360	Reproduction	\$1,000	\$0	\$450	\$1,000	WEROC Atlas 2021/ EOC Materials
7410	Computer & Peripherals Maint	\$5,080	\$0	\$5,080	\$5,080	Computer & printer
7430	Software Purchase	\$0	\$200	\$700	\$800	GIS/ESRI Licenses,web-cc solution
7440	Software Support	\$9,491	\$8,363	\$8,363	\$8,500	Safety Center- assumes 5% increase (Safety Center did a 20% increase from last year ** need new solution),
7510	EOC Site Cleaning	\$900	\$0	\$600	\$700	
7580	Maintenance Expense (misc/ Gen)	\$1,000	\$0	\$980	\$1,000	maintenance & fuel
7581	Maintenance, Communications-ra	\$2,000	\$395	\$1,580	\$2,000	OC Comm maintenance, license and agreements
7582	Maintenance/Equip, EOCs	\$2,000	\$100	\$1,850	\$2,000	All Safety Concepts; Sat Phone & Security purchases; UPS
7610	Auto Mileage	\$3,000	\$252	\$600	\$2,000	
7615	Toll Road Charges	\$200	\$0	\$40	\$50	
7620	Insurance (exercises)	\$0	\$0	\$0	\$0	
7640	Utilities - Telephone	\$10,000	\$2,905	\$9,614	\$10,000	Cell & Landline Phones, Internet, Satellite, & Cable; CalNET Landline Plan
7670	Miscellaneous (EOC Expenses)	\$1,000	\$348	\$825	\$1,000	
7671	Miscellaneous (Training)	\$3,000	\$0	\$0	\$3,000	
	Programs Sub-Total	\$58,332	\$12,959	\$42,682	\$56,210	
	Operations Expenditures	\$ 482,472	\$ 141,515	\$ 491,530	\$ 532,311	
	Contribution to Operating Reserves	\$ -	\$ -	\$ -	\$ -	
	Total Operations Budget	\$ 482,472	\$ 141,515	\$ 491,530	\$ 532,311	** Situational Dashboard and Safety Center replacement development will be pulled from Operating Reserves
	Capital Expenditures					
	TOTAL Expenditures	\$ 482,472	\$ 141,515	\$ 491,530	\$ 532,311	

Operational Revenue Share	FY19/20 Budgeted	Actuals (4 months)	Est 19/20 Annual	Proposed FY20/21	Op. Budget Share (%)
Anaheim	\$ 18,333.94	\$ 18,334	\$ 18,334	\$ 20,227.82	3.8%
Fullerton	\$ 18,333.94	\$ 18,334	\$ 18,334	\$ 20,227.82	3.8%
Santa Ana	\$ 18,333.94	\$ 18,334	\$ 18,334	\$ 20,227.82	3.8%
SOCWA	\$ 18,333.94	\$ 18,334	\$ 18,334	\$ 20,227.82	3.8%
OCSD	\$ 47,282.26	\$ 47,282	\$ 47,282	\$ 52,166.48	9.8%
OCWD	\$ 120,618	\$ 120,618	\$ 120,618	\$ 133,077.75	25.0%
MWDOC	\$ 241,236	\$ 47,845	\$ 241,236	\$ 266,155.50	50.0%
Grants Rcvd & Outside Rev*	\$ -	\$ -	\$ -	\$ -	
Operational Revenue	\$ 482,472	\$ 289,081	\$ 482,472	\$ 532,311	



COMMITTEE DISCUSSION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Harvey De La Torre/Charles Busslinger

SUBJECT: UPDATE ON OC DEMAND FORECASTING/CDM SMITH STUDY (Oral Report)

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

Since the 2016 Orange County Water Reliability Study, demand projections for Orange County have differed significantly from actual water use over the past five years. In fact, demands throughout southern California have been trending lower than expected for a number of years since the drought of 2014 & 2015. In an effort to better align demands to current conditions and update our demand projections for various planning efforts within the County, such as MET's Integrated Resource Plan (IRP), MWD OC & Retail Agencies' Urban Water Management Plans, and OCWD's Groundwater Reliability Plan, MWD OC and OCWD have partnered in hiring CDM Smith to update our retail agencies' demand forecasts from 2020 to 2050.

To provide a status report on the progress of developing these revised demand projections, MWD OC staff and CDM Smith will give the Committee a brief overview of our meetings with the retail agencies, outline our methodology & approach, and schedule.

Staff plans to present the revised demand projections at next month's Committee meeting.

Budgeted (Y/N): Yes	Budgeted amount: \$38,000	Core <u>X</u>	
Action item amount: n/a		Line item: 21-7010	
Fiscal Impact (explain if unbudgeted):			

Orange County Water Demand Forecast

Methodology, Assumptions and Agency Comments

February 1, 2021



**CDM
Smith**

MWDOC Planning & Operation Committee

Purpose

- To develop regional water demand forecasts for MWDOC and OCWD for their respective 2020 UWMPs and reliability planning.
- Regional demands will be build from individual agencies using a common methodology. But agencies can choose to use their own forecast or make modification to the regional forecast assumptions and use this method.

Water Demand Forecast Methodology Overview

- Regional Forecast is built-up from forecasts of all individual water agencies in Orange County
- Forecast is from 2020 to 2050
- Base-year is average of FY2018 (wet year) and FY2019 (dry year) water data
- FY 2020 (wet year) will be used to determine impacts from COVID-19
- Demographic data (historical and projected) from Center for Demographic Research (CDR) will drive the forecast
- Major focus on single-family (SF) and multifamily (MF) residential demands, since commercial/institutional/industrial (CII) water use has been fairly stable in recent years

3

Data Sources

- OC Water Agency Survey (Oct 2020)
 - Water demand by sector and number of accounts
 - Total water production
- Water Research Foundation Residential End-Use Study
 - Per capita water use by indoor end-uses (toilet flushing, showers, clothes washing, etc)
- Center for Demographic Research (CDR), UC Fullerton
 - Population, housing and persons per household data by water agency
 - Historical and projected
- CA DWR
 - MWELO calculator

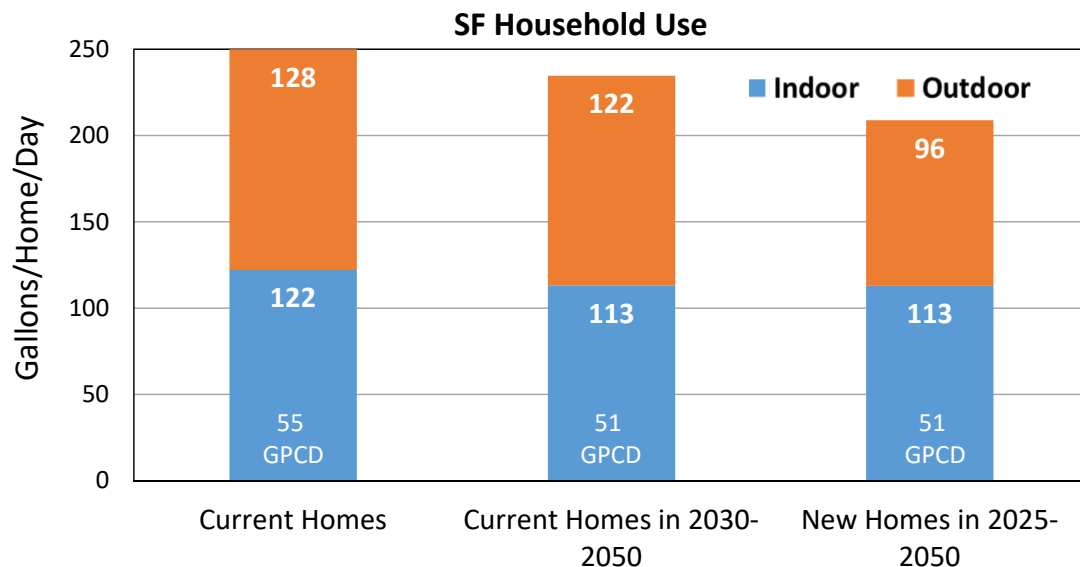
4

Key Assumptions – SF & MF

- Indoor Residential Use for Single & Multi Family Homes
 - Current Efficiency Level - 54.9 GPCD Based on ratio of 2010 to 2020 homes and Member Agency feedback
 - 2018 Efficiency Level – 51.1 GPCD Based on CA codes for new homes
- Outdoor Residential Use for Single & Multi Family Homes
 - Existing Customers – Slight reduction of 5% from 2020 to 2030
 - New Customers – Apply a MWEL0 (25% reduction) starting 2025

5

Example for SF Residential for SCWD



6

Key Assumptions - CII Water Demands

- CII unit use (gal/account/day) for FY 2020 (with COVID impacts) used for years 2020 and 2025
- CII unit use average for FY 2018 and 2019 used for years 2030-2050
- Growth in CII accounts:
 - Scenario 1 – no growth
 - Scenario 2 – 0.5% annual growth
 - Scenario 3 – 1.5% annual growth

7

Key Assumptions - Non-Revenue Water

- Non-revenue water (NRW) represents system losses, meter error and non-billed water (e.g., fire protection).
- NRW is estimated as a percent of total water production, based on difference between total water production less billed water consumption.

8

Key Assumptions - Recycled Water

- Current non-potable recycled water is based on agency surveys
- Projections of non-potable recycled water are required to be provided by agencies
- Water demand forecast will be presented for total water demands (inclusive of recycled water) and potable water demands (less recycled water)

9

Next Steps

- Receiving feedback and data from the retail agencies
- Finalizing the agencies' Demand projections
- Develop Regional Demand Projections for MWDOC & OCWD
- Present these Regional Demand Projections to the MWDOC P&O in March

10



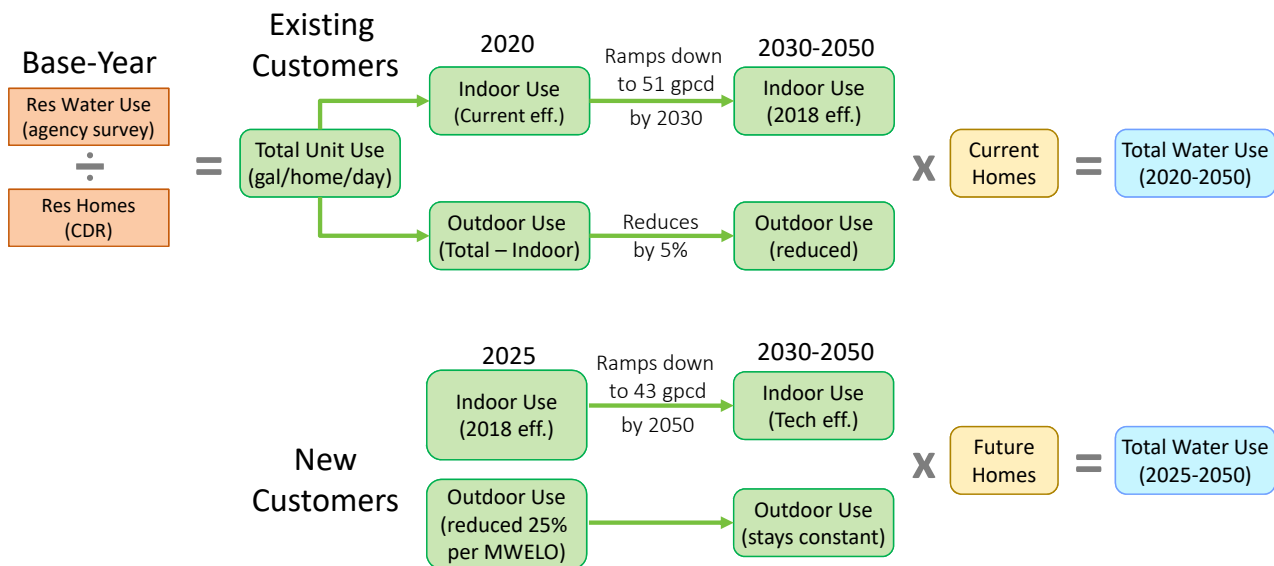
Questions

11



Backup Slides

Residential Demand Method (SF and MF)



13

Current Assumptions of Indoor Residential Use

	Based on ratio of 2010 to 2020 homes			Based on CA codes for new homes			Based on best available technology		
	↓			↓			↓		
Residential Indoor Use	Current Efficiency Level			2018 Efficiency Level			Technical Efficiency Level		
	Flow Rate	PP Use Rate	GPCD	Flow Rate	PP Use Rate	GPCD	Flow Rate	PP Use Rate	GPCD
Toilet (gal/flush)	1.40	5.0	7.0	1.28	5.0	6.4	1.10	5.0	5.5
Shower (gmp)	2.5	5.1	12.7	1.8	5.1	9.2	1.5	5.1	7.7
Bathroom Faucet (gpm)	2.2	4.2	9.2	1.2	4.2	5.0	1.1	4.2	4.6
Kitchen Faucet (gpm)	2.2	6.2	13.6	1.8	6.2	11.2	1.5	6.2	9.3
Dishwashing (gal/load)	8.5	0.1	0.9	8.5	0.1	0.9	3.5	0.1	0.4
Clotheswashing (gal/load)	28.2	0.3	8.5	28.2	0.3	8.5	22.4	0.3	6.7
All Others (gal/day)	3.2	1.0	3.2	3.2	1.0	3.2	2.9	1.0	2.9
Leaks (gal/day)	6.8	1.0	6.8	6.8	1.0	6.8	5.4	1.0	5.4
	Total GPCD = 61.9			Total GPCD = 51.1			Total GPCD = 42.5		

14

Proposed Changes to Indoor Residential Use

Based on ratio of 2010 to 2020 homes,
plus % of 2010 homes assumed to have
 participated in agency rebates and remodeling

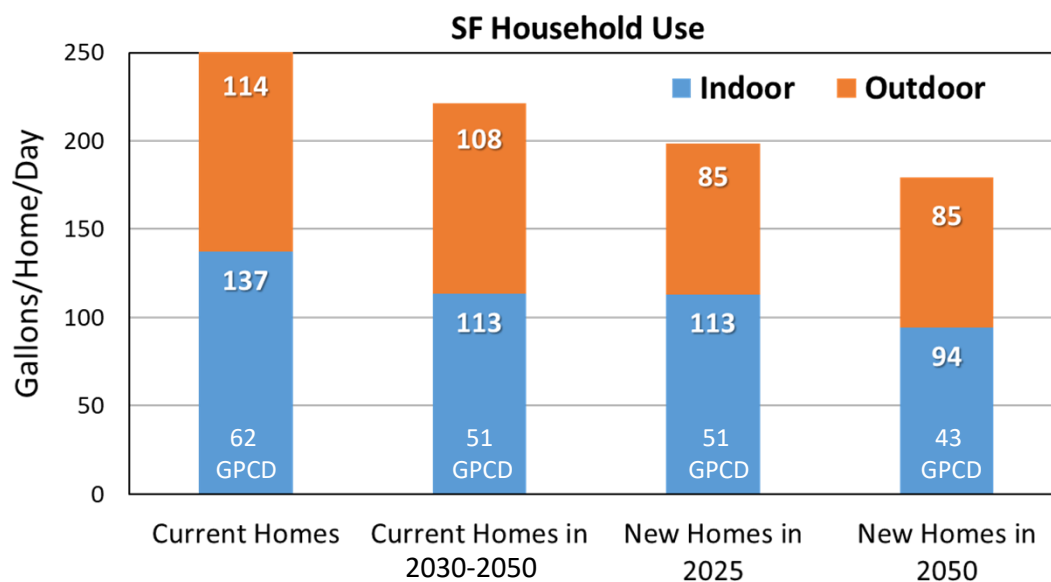


Residential Indoor Use	Current Efficiency Level			2018 Efficiency Level			Technical Efficiency Level		
	Flow Rate	PP Use Rate	GPCD	Flow Rate	PP Use Rate	GPCD	Flow Rate	PP Use Rate	GPCD
Toilet (gal/flush)	1.35	5.0	6.8	1.28	5.0	6.4	1.10	5.0	5.5
Shower (gmp)	1.9	5.1	9.7	1.8	5.1	9.2	1.5	5.1	7.7
Bathroom Faucet (gpm)	1.5	4.2	6.3	1.2	4.2	5.0	1.1	4.2	4.6
Kitchen Faucet (gpm)	1.9	6.2	11.8	1.8	6.2	11.2	1.5	6.2	9.3
Dishwashing (gal/load)	9.0	0.1	0.9	8.5	0.1	0.9	3.5	0.1	0.4
Clotheswashing (gal/load)	30.0	0.3	9.0	28.2	0.3	8.5	22.4	0.3	6.7
All Others (gal/day)	3.5	1.0	3.5	3.2	1.0	3.2	2.9	1.0	2.9
Leaks (gal/day)	7.0	1.0	7.0	6.8	1.0	6.8	5.4	1.0	5.4
	Total GPCD = 54.9			Total GPCD = 51.1			Total GPCD = 42.5		

No longer used

15

Example for SF Residential for SCWD



16



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Charles Busslinger

SUBJECT: Approval of AMP Capacity flow exceedance request – South Coast WD & the City of San Clemente

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

MWD OC has the obligation to enforce both the Allen McColloch Pipeline (AMP) Sales Agreement and the AMP Proceeds Agreement; these two separate agreements designated the terms and conditions for the transfer/sale of the AMP from the local agencies to MET in 1995.

One of the provisions of the Proceeds Agreement is for MWD OC and the AMP Participants to limit the capacity usage on the AMP by each participant to the capacity they held in the AMP at the time of transfer of the facility to MET.

On Dec 16, 2020, the Board delegated authority to the General Manager to make determinations concerning certain AMP capacity flow exceedance requests ('waivers') that meet the criteria indicated in the AMP Proceeds Agreement. Those conditions are for MWD OC to not consider peak flows resulting from:

- emergency situations,

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

- inadvertent flow changes, or
- operational adjustments required by Metropolitan or other agencies

Requests which the General Manager determines do not meet this criteria will continue to be brought to the Board for consideration, but the agency will be notified that the request requires additional consideration, so the requesting agency can prepare accordingly.

MWDOC received a request from South Coast Water District on January 20, 2021 for a capacity flow exceedance request ('waiver') from January 20, 2021 - January 27, 2021 as an extension of the previous request for the pending shutdown of the Joint Transmission Main (JTM) which is necessitated by the CM-10 Vault Rehabilitation Project.

DETAILED REPORT

MWDOC has the obligation to enforce both the Allen McColloch Pipeline (AMP) Sales Agreement and the AMP Proceeds Agreement; these two separate agreements designated the terms and conditions for the transfer/sale of the AMP from the local agencies to MET in 1995.

One of the provisions of the Proceeds Agreement (excerpt below) was for MWDOC and the AMP Participants to limit the capacity usage on the AMP by each participant to the capacity they held in the AMP at the time of transfer of the facility to MET.

One of the provisions of the Proceeds Agreement (excerpt below) was for MWDOC and the AMP Participants to limit the capacity usage on the AMP by each participant to the capacity they held in the AMP at the time of transfer of the facility to MET. Below are the capacities from Exhibit B of the AMP Proceeds Agreement, reorganized for agency consolidations that have occurred since that time.

AMP Participant Agency	Reach D1
YLWD	30.04
Anaheim	28.72
Orange	22.74
EOCWD	9.57
IRWD	70.67
MNWD	83.77
ETWD	26.33
SMWD	124.46
TCWD	4.01
San Juan Capistrano	4.91
San Clemente	6.87
SCWD	3.90
	415.99

Section 3.06 (starting on page 20 of the AMP Proceeds Agreement) explains the financial implications for exceeding peak day usage on the AMP, and includes a provision allowing MWDOC to **“not consider peak flows resulting from emergency situations.”**

inadvertent flow changes or operational adjustments required by Metropolitan or other agencies” (see below).

Since 1995, MWDOC has provided approximately 18 “waivers” for agencies who exceeded their peak AMP capacity or who might exceed their AMP capacity if a situation was known in advance. This has primarily occurred when local facilities were; out of operation due to an emergency, construction work impacting facilities, or due to planned shutdowns. Some waivers have been requested in advance and then were subsequently not needed.

MWDOC received a request from South Coast Water District (SCWD) on January 20, 2021 for a capacity flow exceedance request (‘waiver’) from January 20, 2021 until January 27, 2021. SCWD is in the middle of their CM-10 rehab project and they currently do not have power at the station. Changing flows at CM-10 currently requires manual operation and due to the recent Santa Ana winds event, SCWD needed to expedite water into their system through their SC-5B connection.

The General Manager has determined this request meets the conditions specified in the AMP Proceeds Agreement to not consider peak flows from:

- Emergency Situations

and the waiver has been granted.

From the AMP Proceeds Agreement:

section 3.06. Readjustment of Capacities.

During the term of this Agreement and until such time as Metropolitan augments the capacity of the AMP in any manner, including, but not limited to, construction of the Diemer Pump Station or other capital facility, MWDOC shall monitor each

20

Participant's and Leasing Agency's usage. At any time prior to augmentation of capacity in the AMP by Metropolitan, any Participant or Leasing Agency whose peak day flow exceeds its Adjusted Capacity, shall be required to pay for an additional full cubic foot per second (cfs) of capacity for the amount by which it exceeded its Adjusted Capacity rounded to the nearest cfs.

For purposes of determining whether a Participant or Leasing Agency has exceeded its capacity, MWDOC shall not consider peak flows resulting from emergency situations, inadvertent flow changes or operational adjustments required by Metropolitan or other agencies. The Peak Flow shall be defined as the most recent three-year moving average peak day flow in each reach of the AMP.

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



AMP FLOW WAIVER REQUEST DETERMINATION

January 20, 2021

REQUESTING AGENCY: South Coast WD & City of San Clemente

AGENCY AMP CAPACITY OWNERSHIP 10.77 **cfs**

REQUESTED FLOW: 18 **cfs**

REQUESTED DATES OF WAIVER: January 20, 2021 **TO** January 27, 2021

WAIVER JUSTIFICATION:

☒ EMERGENCY SITUATION

☐ INADVERTENT FLOW CHANGE

☐ OPERATIONAL ADJUSTMENT REQUIRED BY METROPOLITAN OR OTHER AGENCY

☐ OTHER (TO BE REFERRED TO MWDOC BOARD FOR CONSIDERATION)

EXPLANATION:

MWDOC received a request from South Coast Water District (SCWD) on January 20, 2021 for a capacity flow exceedance request ('waiver') from January 20, 2021 until January 27, 2021. SCWD is in the middle of their CM-10 rehab project and they currently do not have power at the station. Changing flows at CM-10 currently requires manual operation and due to the Santa Ana winds, SCWD needs to expedite water into their system through their SC-5B connection.

Prepared by: Chris Lingad

☒ Approved

General Manager Signature  Date: January 20, 2021

Date of MWDOC Board notification: _____

P&O Committee information item date: _____

Date AMP Participants notified: _____



INFORMATION ITEM
(February 1, 2021)

TO: **Planning & Operations Committee**
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: **Robert Hunter, General Manager**

Staff Contact: Harvey De La Torre
Alex Heide

SUBJECT: STATUS REPORT ON DEVELOPING MWDOC's & RETAIL AGENCIES'
2020 URBAN WATER MANAGEMENT PLAN

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

MWDOC adopts an Urban Water Management Plan (UWMP) every five years as required by State law. As done in previous UWMP planning cycles, MWDOC is functioning as the project manager and coordinator for both the MWDOC's UWMP and 21 Orange County participating retail agencies' UWMPs. The purpose of this report is to provide the Committee with a brief introduction of the new requirements for the 2020 UWMP, a status update on the work-to-date for MWDOC's and retail agencies' UWMPs, and proposed schedule for Board approval and submittal.

REPORT

In 1983, the California Legislature enacted the Urban Water Management Planning Act. The law required an urban water supplier, providing water for municipal purposes to

Budgeted (Y/N): Y	Budgeted amount:	Core <u>_X_</u>	Choice <u>__</u>
Action item amount:	Line item:		
Fiscal Impact (explain if unbudgeted):			

more than 3,000 customers or serving more than 3,000 acre-feet annually, to adopt an Urban Water Management Plan (UWMP) every five years demonstrating water supply reliability in normal, single dry, and multiple dry years. UWMPs support long-term water resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The effort also assists with forecasting water supply demands and identifying conservation needs that align with the latest State requirements.

During both of the preceding UWMP cycles, MWDOC has been the project manager and coordinator for the UWMP efforts for MWDOC's and Orange County participating retail agencies' UWMPs. This has provided an economies of scale cost-savings to the retail agencies, and helped to coordinate consistency between the Metropolitan, MWDOC, and local UWMPs. For the 2020 UWMP cycle, 21 retail agencies have joined this cost-sharing agreement with MWDOC, whereby Arcadis Inc., prepares the UWMPs for submittal by July 1, 2021.

As a result of the 2014-2015 statewide drought, several new requirements were added by the California Legislature into the 2020 UWMP. These included adoption of a new Water Shortage Contingency Plan (WSCP), the inclusion of a five-year drought risk assessment, communications protocols, and additional monitoring and reporting requirements. Since the fall 2020, MWDOC staff have been working with Arcadis to ensure that these new requirements are incorporated into the UWMPs. Additionally, MWDOC staff have created a regional workgroup of retail agency staff for the creation of a model drought ordinance to align the new WSCPs requirements with every agency's code and ordinance.

Thus far Arcadis and MWDOC staff has met with each participating agency individually to review data, exchange key information, identify any changes from their previous UWMP, and coordinate timeline for completion. All the meetings have been very productive and provided the consultant with the information on what the agencies identified as needed changes from their 2015 UWMP.

Below is a table illustrating the "percent of completion" of all of the participating agencies as of January 2021:

Participating Agency	Percent Completed
City of Brea	43%
City of Buena Park	51%
East Orange County Water District	51%
El Toro Water District	43%
City of Fountain Valley	56%
City of Fullerton	47%
City of Garden Grove	51%
City of La Habra	43%
City of Huntington Beach	51%
City of La Palma	52%
Mesa Water	43%

City of Newport Beach	47%
City of Orange	47%
City of San Clemente	43%
City of Santa Ana	47%
City of Seal Beach	50%
South Coast Water District	43%
Trabuco Canyon Water District	43%
City of Tustin	51%
Yorba Linda Water District	43%
City of Westminster	51%

We anticipate that drafts for all the participating agencies are expected to be available by the end April. It is important to note, that a number of factors influence their progress such as available staff, complexity of the water agency's system, the exchange of key information with the consultant, and retail agency review turnaround. Additionally, as of preparation date of this report, the Department of Water Resources (DWR) has not released their final guidance on the 2020 planning cycle requirements, which is required for finalization of the UWMPs.

As for the MWDOC 2020 UWMP, **currently the draft is 43% complete**. MWDOC staff are currently working with CDM Smith and the retail agencies to refine and finalize the demand projections, which will provide the basis for the MWDOC regional demand projections, as well as the drought assessments. Staff plans to incorporate these projections and methodology into the Draft UWMP later this month. The Draft UWMP is on-track to be released in early March for member agency review.

Below is MWDOC's proposed schedule for completing the 2020 UWMP:

Early March – Letters notifying all stakeholders of the 60-day notice of preparation of MWDOC's intent to publish, circulate and hold a public hearing prior to its adoption of its 2020 UWMP.

March– MWDOC Draft 2020 UWMP released for Member Agency review.

April – Release of the MWDOC Draft 2020 UWMP for MWDOC Board, member agency, and public review. As well set the public hearing for May.

May – Recommend the Board open the public hearing at the May Board meeting and seek Board adoption of the 2020 MWDOC UMWP as well as Board Resolutions.

June – *(If necessary) Seek Board adoption of the 2020 MWDOC UMWP at the June Board meeting.*

July 1, 2021 – Submit the Final MWDOC 2020 UWMP to the California Department of Water Resources.



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

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

SUBJECT: Water Loss Control Shared Services Update

STAFF RECOMMENDATION

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

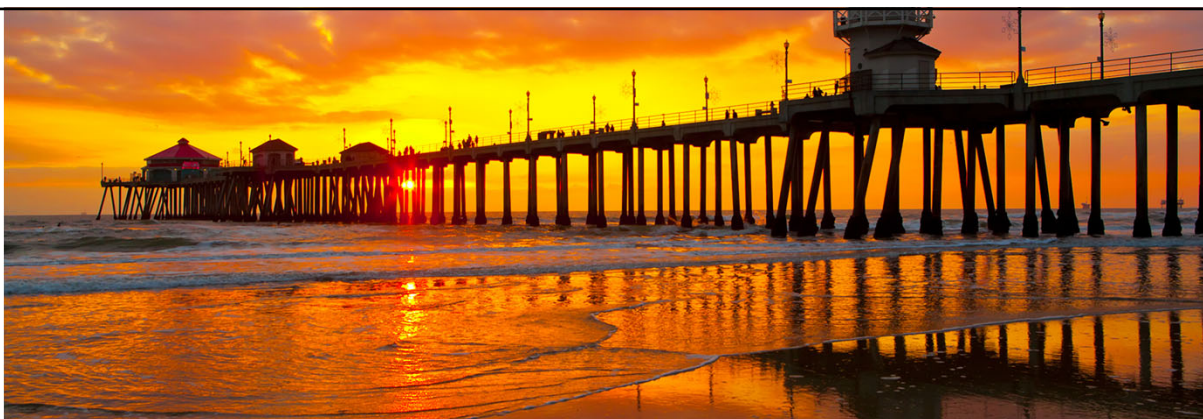
COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

At the December 2020 Board Meeting, Board members requested staff provide an update on the MWDOC Water Loss Control Shared Services Program. Staff will provide the attached presentation as an information item at the February 2021 Planning & Operations Committee Meeting along with an opportunity for questions and answers regarding the Shared Services Program.

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



Water Loss Control Shared Services Program Update



Joe Berg, Director of Water Use Efficiency
Municipal Water District of Orange County

Presentation to: Water Advisory Committee of Orange County, March 6, 2020

Discussion Topics

- 1 Background on MWD OCs Water Loss Control Program
- 2 Summary of Water Loss Control Shared Services and agency participation
- 3 Year I Revenue and Expenditures





Background on MWD OCs Water Loss Control Program

Components of Water Loss Legislation

- 💧 **SB 555** – submit annual validated audits to DWR by October 1 of each year
 - 💧 *Must include documentation and certification*
 - 💧 SWRCB to assign volumetric water loss objectives to retail agencies by July 2020
 - 💧 Technical advisory process happening now to develop a proposed framework
 - 💧 Public comment period officially opened in 2019

- 💧 **AB 1668 and SB 606** – established new “efficiency” based urban water use framework to replace the existing 20% by 2020 framework



Takeaway: retail urban suppliers will be required to reduce leakage

Where We Started – Water Loss Control Program

Started in 2015 to empower Orange County agencies to:

- 🔥 Comply with state water loss regulations
- 🔥 Achieve cost-justified distribution efficiency
- 🔥 Develop fluency in water loss analysis and management



Primary Components:

Workgroup Meetings

- Topics Covered
 - Real Loss Component Analysis
 - District Metered Areas
 - AMI
 - Customer Meter Testing
 - Pressure Management and Logging
 - Leak Detection
 - Agency Case Studies

One-on-One Technical Assistance

Water Loss Control Shared Services

- 💧 Agencies were surveyed to gauge interest in potential new water loss control services
- 💧 Survey provided guidance on service offerings and support for the development of a broader regional water loss program
- 💧 Business plan for shared services was approved in 2019, resulting in:
 - 🔥 Hiring of two staff members
 - 🌱 0.5 FTE is Core funded by MWDOC
 - 🌱 1.5 FTE is Choice funded by participating agencies



Regional Interest:

- 💧 **Water Audit Validation** - 28 agencies
- 💧 **Customer Meter Accuracy Testing** – 3,100 to 4,300 meters per year
- 💧 **Leak Detection** - 500 to 550 miles of mains per year
- 💧 **Pressure Survey** - 10 agencies
- 💧 **No Discharge Flushing** - 600 miles of mains per year

On-going Technical Assistance vs New Shared Services

WSO Technical Assistance (Initiated in 2016)

- Water Balance Compilation
- ~~Water Balance Validation~~
- Component Analysis of Real and Apparent Losses
- ~~Pressure Surveys~~
- ~~Leak Detection~~
- Source/Production Meter Accuracy Testing
- Billing Data Chain Assessment
- Internal Water Loss Committee Plan

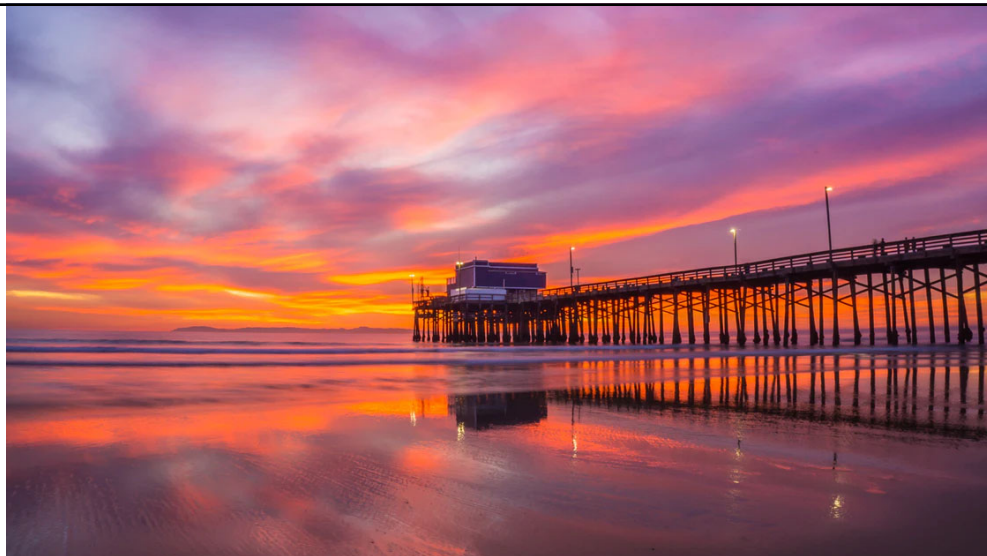


MWDOC Shared Services (Initiated FY 2019-20)

- Water Balance Validation
- Customer Meter Accuracy Testing
 - Contract out to McCall's and Westerly
- Distribution System Pressure Surveys
- Distribution System Leak Detection
- Distribution System Flushing
 - Contract out to FlushTek Utility Services & Reliable Water Solutions



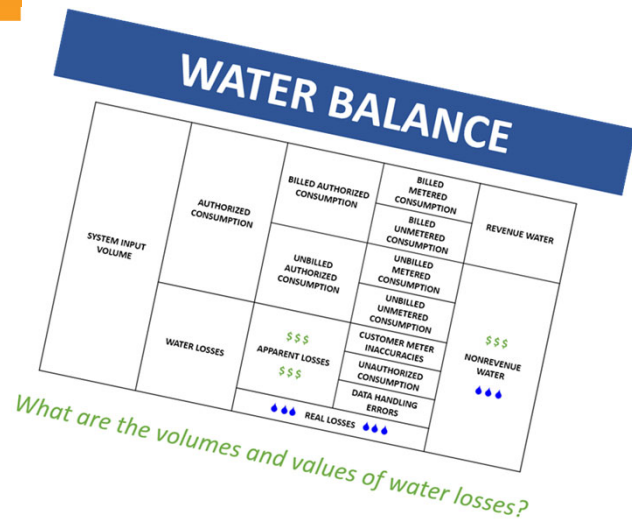
7



Summary of Water Loss Control Shared Services

Shared Service: Water Balance Validation

- SB 555 requires urban water suppliers to submit independently Validated Water Balances by October 1st each year
- MWDOC provides validation as a core service at no cost to all its member agencies
 - Fee for Service to 3-cities
- Water Balance indicates volumes of Apparent and Real Losses



9

Shared Service: Customer Meter Testing

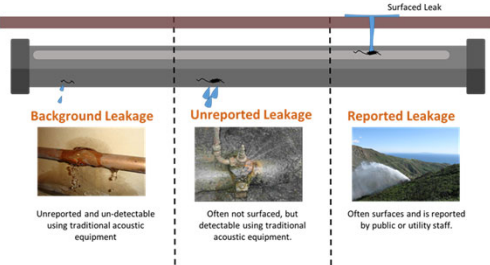
- MWDOC coordinates two contractors who provide testing services
 - One RFP process
 - Common fee structure
- An Apparent Loss with potential for revenue recovery



Agencies Participating in Meter Accuracy Testing		
Retail Agency:	Year I	Year II
East Orange CWD	X	C
Fountain Valley	X	C
La Habra	X	C
La Palma	X	X
Mesa Water	X	X
Newport Beach	X	C
South Coast WD	X	X
Trabuco Canyon WD	X	X
Westminster	X	C
X = Planned or Completed		
C = Carried over from previous year		



Shared Service: System Pressure Survey



Agencies Participating in Distribution System Pressure Survey		
Retail Agency:	Year I	Year II
East Orange CWD	X	X
Mesa Water	X	X
Trabuco Canyon WD	X	

X = Planned or Completed
C = Carried over from pervious year

- 💧 MWDOC staff performs pressure surveys
 - 🟡 Average Zonal Pressure
 - 🟡 Pressure Transient Survey
 - 🟡 Calibration of Hydrologic Model
- 💧 Each survey includes 8 pressure loggers; agencies contract for multiple surveys
- 💧 A Real Loss with potential for Background Leakage recovery
 - 🟡 Higher pressure = higher losses

Shared Service: NO-DES System Flushing

- 💧 MWDOC coordinates a contractor who provide flushing services
- 💧 Westminster flushed four days in Year I recovering more than 680,000 gallons of flush water
- 💧 Metropolitan funding offsets retail agency cost
- 💧 Benefits: Flush water recovery, avoided negative public perception & improved water quality



Shared Service: Distribution System Leak Detection

- 💧 Acoustic Leak Survey supplemented with Correlation to pinpoint leak location
- 💧 Retail agencies contract with MWDOC for leak detection services
 - 💧 Ten systems per year
 - 💧 ≈ 600 miles each year
- 💧 MWDOC staff performs leak detection
 - 💧 Comprehensive system-wide survey
 - 💧 Suspected leak investigation



13

Shared Service: Distribution System Leak Detection

- 💧 Retail agency staff repair leaks
- 💧 Metropolitan funding offsets retail agency cost
- 💧 Equipment Lending Library
- 💧 A Real Loss with potential for water loss recovery



Agencies Participating in Distribution System Leak Detection (Miles)		
Retail Agency:	Year I	Year II
Anaheim		X
East Orange CWD	X	X
Huntington Beach	X	
La Habra	X	C
La Palma		X
Mesa Water	X	X
Newport Beach		X
Orange	X	X
San Clemente	X	C
Seal Beach	X	
Tustin	X	X
Trabuco Canyon WD	X	
Yorba Linda WD	X	X
X = Planned or Completed		
C = Carried over from pervious year		



Lessons Learned

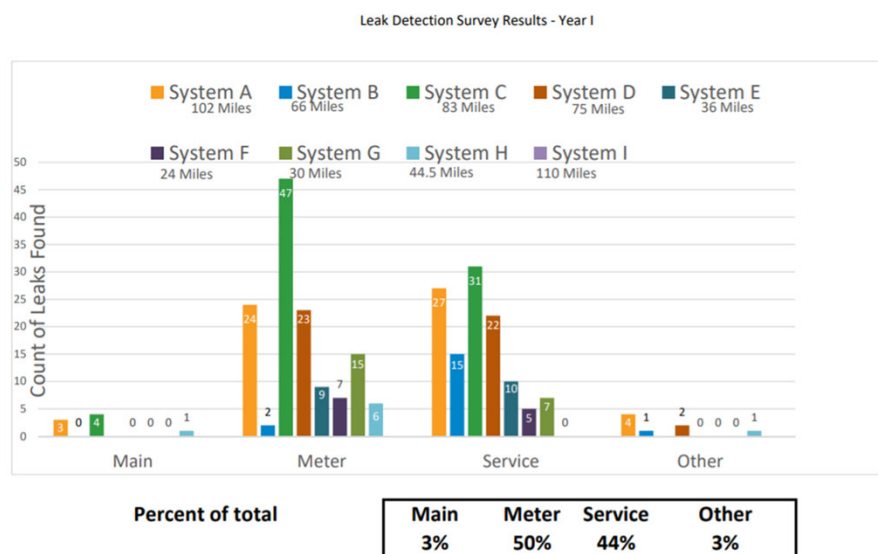
- 💧 Methods to repair leaks differ from agency to agency
 - 🔥 Saddle clamp vs service replacement
- 💧 Pipe materials differ from agency to agency
- 💧 It's really difficult to MEASURE the GPM of leaks
 - 🔥 New creative techniques are needed
- 💧 Available staff and financial resources vary from agency to agency



System-Wide Leak Survey: Results to Date

- 💧 256 Leaks Found
- 💧 231 AF/Year Leakage Volume
- 💧 \$242,118/year Savings*

*Assuming Metropolitan Water District
CY2019 import rate of \$1,050





Year I Revenue and Expenditures

Water Loss Control Shared Services Year I Outcome



Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
For Cost Center 70 - Water Loss Control / Fund 2000 - General Fund
From July 2019 thru June 2020

		Year to Date			
	REVENUES				
4215	CHOICE REVENUE	102,964.29			
4305	REVENUE FROM MWD	80,344.40			
	Total Revenue:	183,308.69			
	EXPENSE				
6010	SALARIES AND WAGES - ADMIN	83,516.29			
6013	SALARIES - RECOVERY	(14,674.95)			
6105	BENEFITS-ADMIN	16,532.35			
6108	BENEFIT - RECOVERY	(4,744.15)			
6111	OVERHEAD REIMBURSEMENT	43,933.44			
7040	PROFESSIONAL SERVICES	33,435.00			
7332	SUPPLIES - WATER LOSS CONTROL	6,276.91			
7612	VEHICLE EXPENSE	3,796.15			
7615	TOLL ROAD CHARGES	100.00			
7640	UTILITIES-TELEPHONE	980.00			
7670	MISCELLANEOUS EXPENSE	478.59			
	Total Expense:	169,629.63			
	Net Total:	13,679.06			

Thank you for your attention.
Please **let us know** if you have questions.

Joseph M. Berg

Director of Water Use Efficiency

(714) 593-5008

jberg@mwdoc.com



physical address

18700 Ward Street, Fountain Valley CA 92708



mail address

P.O. Box 20895, Fountain Valley CA 92728



website

www.mwdoc.com



main office

(714) 963-3058



MWD OC MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

The County of Orange Report

Prepared for the MWD OC P&O Committee

January 26, 2021

by Lewis Consulting Group



Update

Supervisors Hold Organizational Meeting

The Board of Supervisors kicked off the New Year with the January 12th meeting. The first order of business for the currently short-handed Board was to elect new officers. Elected unanimously was Andrew Do to serve as Chairman and Doug Chaffee to serve as Vice Chairman.

New Chairman Do announced the special election date to fill Michelle Steel's 2nd District vacancy will be held on March 9, 2021. The filing to fill the 2nd District seat opened on January 5 and closed on January 25. This is a "winner take all" election, there will be no run-off election.

The highlight of the meeting was an update from Dr. Clayton Chau, the Orange County Health Care Agency Director stating that Orange County has less than 6% of ICU beds available. Once the 10% availability figures were breeched, it triggered the Crisis Care Plan for hospitals. 72% of the ICU beds are filled with patients over the age of 60.

The good news is that following the CDC's advice, the County moved residents over the age of 65 to Phase 1A, joining those over the age of 75 and health care workers for immediate COVID-19 vaccine eligibility. However, the system has been overwhelmed by not enough vaccines, a shortage of dispensing stations and an appointment process that is difficult to access.

On January 26th, the Board held it's second meeting of the month, though it was a bit on the short side by Board standards. The brevity was due to an agenda devoid of controversy, so all Board votes were unanimous.

Once again the highlight of the meeting was the briefing by the County Health Department relative to the COVID-19 virus. Much of the discussion center on the deficiencies in the County's appointment calendar, Othena.

Supervisor Wagner succinctly summarized the criticisms by saying "Othena SUCKS". Dr. Clayton Chau responded by saying that the County was going to hire more people to man a hotline, but so far the hotline has been criticized as well. One piece of potential good news is the future utilization of local pharmacies for vaccinations.

Orange County COVID-19 Stats

ORANGE COUNTY COVID-19 STATS	AS OF 1/26/2021	AS OF 12/28/2020
CUMULATIVE CASES TO DATE	225,983	149,607
CUMULATIVE DEATHS TO DATE	2,768	1,846
DEATHS REPORTED TODAY	64	0
CUMULATIVE TESTS TO DATE	2,587,867	1,996,251
TESTS REPORTED TODAY	13,849	20,307
CASES CURRENTLY HOSPITALIZED	1,677 *	2,031*
CASES CURRENTLY IN ICU	437	453
CUMULATIVE RECOVERED TO DATE	163,200 *	82,710*

* = INCLUDES *ICU* CASES

Where Orange County Ranks [as of 1/26/2021]

LOCATION	POPULATION	CONFIRMED CASES	DEATHS
CALIFORNIA	40,129,160	3,136,158	37,118
LOS ANGELES COUNTY	10,247,557	1,048,757	15,260
RIVERSIDE COUNTY	2,468,145	256,767	2,777
ORANGE COUNTY	3,228,519	225,983	2,768
SAN DIEGO COUNTY	3,370,418	227,193	2,375
SAN BERNARDINO COUNTY	2,217,398	262,370	1,667

It is suggested that those who want to be vaccinated, should attempt to make an appointment through www.othena.com.





Field Set for 2nd District Supervisor Race

On March 9, 2021 a “winner-take-all” special election will be held to fill the vacancy created by Michelle Steel’s election to Congress. Filing for the 2nd district Supervisor’s seat ended January 25, 2021.

The candidates who appear on the ballot are:

KATRINA FOLEY - MAYOR OF COSTA MESA / ORANGE COUNTY BUSINESS OWNER
JOHN MOORLACH - CALIFORNIA STATE SENATOR
KEVIN MULDOON - COUNCILMEN / SMALL BUSINESSMAN
JANET RAPPAPORT - TAX ATTORNEY
MICHAEL VO - MAYOR / BUSINESS OWNER

All of the candidates except Katrina Foley are Republicans. The Democratic Party has endorsed Foley and the Republican Party has endorsed Moorlach. Because of her partisan advantage and rumored Union funding, Katrina Foley seems to have the advantage in this election.

Census Shifts Political Power Among States

National Census numbers should be released late January, but the winners and losers have already been projected.

California is one of ten states predicted to lose one Congressional seat and one Presidential Electoral vote. Joining California with one seat losses are: Alabama, Illinois, Michigan, Minnesota, New York, Ohio, Pennsylvania, Rhode Island and West Virginia. Depending on the exact final numbers, Alabama might be spared the loss, in which case New York would lose two seats.

Winners in the re-allocation include: Texas with three additional seats and Florida with two additional seats. Also, Arizona, Colorado, Montana, North Carolina and Oregon each picked up an additional seat.



First Meeting of the Year

Orange County LAFCO held its first meeting of 2021 on January 13th. Of note, posted on the Consent Calendar is a timetable set up for appointment or re-appointment of the Public Member alternate LAFCO seat. The alternate for Special Districts, Katherine Freshley, has already been selected. The new City alternate, Peggy Huang, was appointed on January 14th and the County alternate, Don Wagner will probably retain his post. Below is the Public Member time line:

<i>Appointment Process Schedule for OC LAFCO Alternate Public Member Seat</i>	
ACTION	DATE
Announcement of Alternate Public Member Seat vacancy distributed to city clerks, special district board secretaries, clerk of the BOS, OC libraries and published in the <i>OC Register</i>	April 1, 2021
Application submittal period for Alternate Public Member Seat vacancy	April 1, 2021 – April 30, 2021
Application Screening Process conducted by the Commission's Executive Committee	May 10, 2021 – May 21, 2021
Commission interviews and appointment of Alternate Public Member	June 9, 2021
Oath of Office Administered and Member Seated	July 14, 2021

Also discussed was the mid-year update of the 2020-2021 Work Plan. Subjects included in the update are Project Applications; the 4th Cycle of Sphere of Influence Reviews and Updates & Municipal Service Reviews; the Unincorporated Areas Program; South Orange County Future Governance; and Outreach and External Relations; as well as administrative projects. The chart below is the list of current and anticipated OCLAFCO applications:

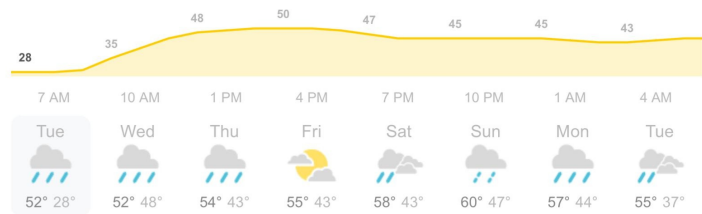
Table A: OC LAFCO Applications			
Project	Type	Status	Anticipated Commission Hearing
Anaheim/Orange Reorganization	City detachment/annexation and concurrent sphere changes	Not filed.	June 2021
Costa Mesa SD Annexations	District annexations	Not filed.	July 2021
Givens Property Detachment from City of Orange	City detachment and concurrent sphere change	Filed October 2020; Annexation proceedings underway.	March 2021
Laguna Woods/Laguna Hills Reorganization	City detachment/annexation and concurrent sphere changes	Not filed.	July 2021
Newport Beach Harbor Patrol MSR	MSR focused on harbor patrol services	Filed December 2020.	July 2021
Orange County SD Annexations	District annexations	Not filed.	May 2021
Pomeroy Detachment from City of Tustin	City detachment and concurrent sphere change	Filed December 2020	May 2021
San Juan Capistrano Water/Wastewater Annexation	District annexation and concurrent sphere change	Filed December 2020.	May 2021

What We've Been Waiting For

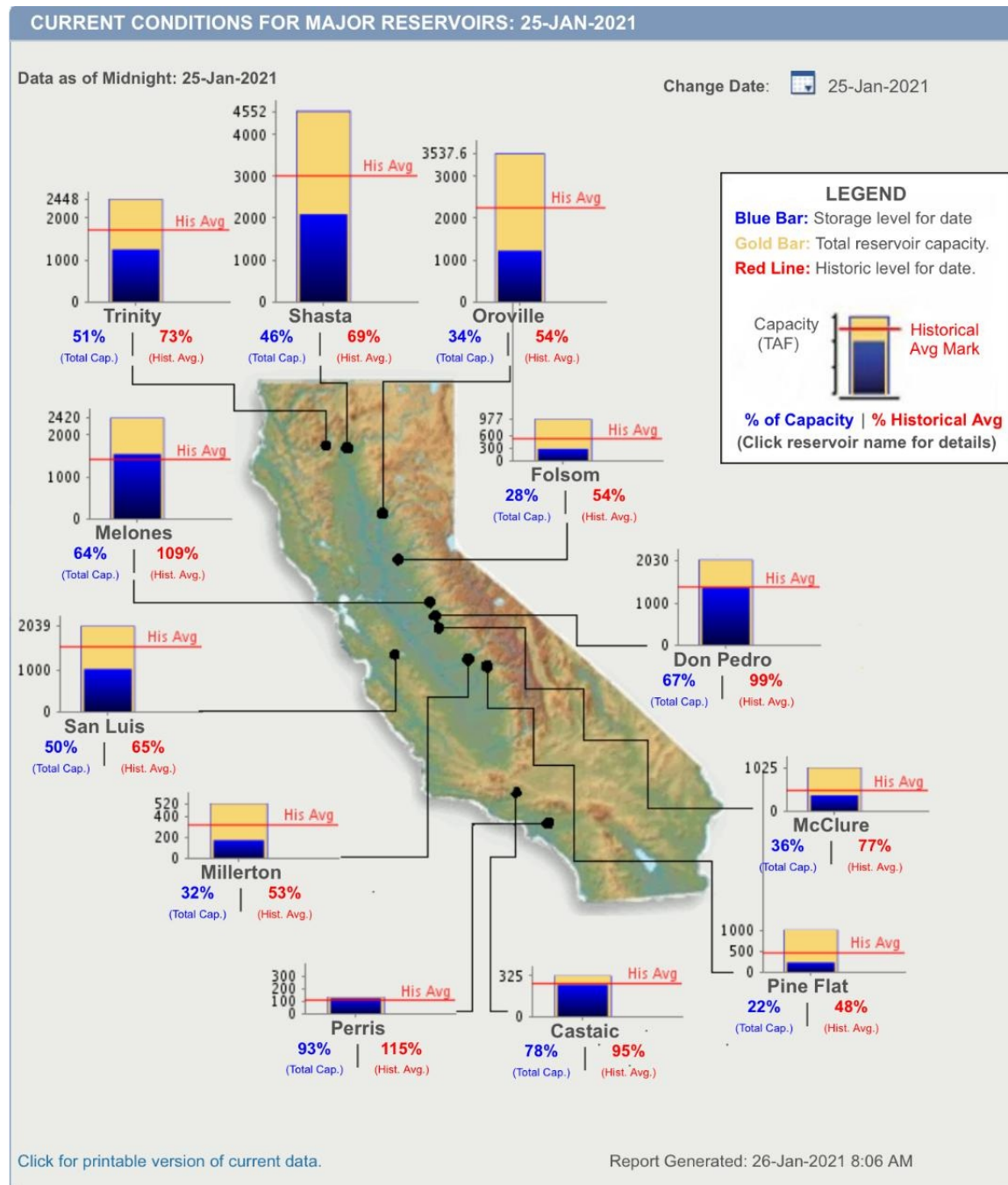
28 °F | °C Precipitation: 2%
Humidity: 90%
Wind: 4 mph

Sacramento, CA
Tuesday 6:00 AM
Clear

Temperature | Precipitation | Wind



How Much Will It Help???



Legal and Regulatory

February 1, 2021

1. **Water Futures:** As preciously reported, California water futures are now being traded on Wall Street. While the action has been very limited (two trades plus or minus), the event has drawn critics from all sides. Reactions from some have suggested that tribal battles will be encouraged all over the world. Representatives from the United Nations are worried about human rights. They believe that treating water as a commodity will create war time situations over a reduced supply of water in certain parts of the world. Other financial experts say this is nonsense. This particular market is aimed primarily at California which has a combination of factors not present in other parts of the globe. A billion dollar agricultural industry, expanding residential growth, industrial demand, environmental requirements and water supply added to questionable governmental approaches makes California a unique area. Add to that the fact that water is heavy and difficult to move around, and California's historic and complicated water law, truly make our state very unusual.
2. **More Desal Discovery:** The University of Texas along with Penn State have discovered new desal facts. Reverse osmosis is the basic desal process. This involves membranes which have evolved over time and testing. The conventional thought is that the thinner the better for these membranes as less energy is required to push the water through it. Research as to how the water actually travels through the membrane has not improved much in the last 40 years. These studies are now showing that thicker membranes are actually better and more permeable. Electron microscopes can actually trace how the water travels and how much energy is needed to complete the task. Leave it to UT to show that skinnier is not always better!
3. **Early Snowpack Dry:** California's snow season thus far contains less water than normal. Looking at our 260 snow sensors in the Sierras show average water content to be about 50% of normal. This means less overall water being stored in our mountain water banks. It should be noted however that two thirds of our wet months are yet to come, January and February. It only takes a few good storms to get our snow bank back to normal. During this writing, we may be experiencing the return to wetness. Scorched earth from our many wildfires can alter the water cycle, speeding up snowmelt and reducing percolation into the ground with faster runoff.
4. **Extreme Wildfire Emissions:** The wildfires in 2020 burning over 4 million acres in California generated over 112 million metric tons of carbon dioxide. This equals the greenhouse gas emissions of over 24 million passenger cars driving in one year. This figure may actually increase as further studies are being done on the 9600 fires that burned in our state. Conventional controlled burns, clearcutting, harvesting and other forest management would have generated about 14 million metric tons of CO2. Many of these techniques have been opposed by environmental groups and elected officials. The good news is that these actions are being considered as the numbers are quite convincing. Another factor that has not received much attention is the over 100 other chemicals which are associated with cancer, produced from wildfires. This is in addition to the thousands of components impacting air quality also produced from wildfires. UC Berkeley is currently studying these wildfire impacts for the State.

5. **Mudslide Space Study:** UC San Diego is presently studying mudslide impact and prediction along with prevention. They are using satellite data from the International Space Station and conducting experiments on low gravity mudslides. Gravity has an important part in mudslides. Wildfires produce a wax type coating for the soil that alters the ability of soil to absorb water. Thus, runoff is enhanced carrying soil particles and other stuff creating the mudslides we experience on a regular basis. Researchers are examining a Xanthan gum that can form a protective layer in critical areas. This allows the water to runoff without picking up the soil creating a more manageable situation. It is environmentally safe and temporary in duration. The gravity angle is very important as that determines the speed of the water coming down the slopes and generating the mudslides we experience.
6. **Drought Suffering Population Increases:** Michigan State University has studied 27 climate change models covering 125 years done by experts all over the world. Their conclusion was that global population suffering would double from 3% to almost 8% by the end of this century. These folks live in areas which experience severe droughts on a more regular basis. Parts of the Southern Hemisphere will be hardest hit. Water scarcity will impact food production and ultimately human migration. They also predict a reduction in water storage, both natural and man made, due to climate change and drought factors. At least, we live in the right Hemisphere.
7. **Court Rejects SWRCB:** A Superior Court in Sacramento has stopped the State Water Resources Control Board from trying to control water quality in waters not covered by the Clean Water Act. The Court said the SWRCB can not attempt to control water beyond the jurisdiction of the Act. That limit is navigable waters of the US. The Court did further opine that the Regional Water Quality Control Boards could regulate water quality control plans within their jurisdiction. Thus, the place where the discharger is located may be a controlling issue. While the SWRCB is limited by Federal law, the regional control boards are governed by state law, the Porter-Cologne act.
8. **Atmospheric Rivers Fire Up:** We have been hearing about atmospheric rivers (AR) more and more of late. Now we may be experiencing a strong one at this very moment. An ultra strong jet stream is pushing AR into California with heavy rain and snow. Almost overnight we go from very dry to very wet. This also brings the problems of mudslides and avalanches. Predictions are that we would see an increase in the frequency of the type of weather pattern. These AR push a large amount of moisture in a 36-48 hour time period, which can repeat itself during the jet stream run. We have discussed the prior dry rain this year. This event produces very heavy, wet rain known as "Sierra cement". Good news for snowpack. Downside risk is when the melt begins, water flow will be more and faster. This is not good for areas hit by wildfires and may result in flooding and mudslides.
9. **Aquifer Collapse Around the World:** Many of the aquifers in California are in trouble. Fortunately, Orange County and other areas in southern California have managed their aquifers better and also benefit from good soil conditions. However, many areas around the world are experiencing significant subsidence. Netherlands, Indonesian, Mexico City to name a few. It is estimated that 1.6 billion folks around the world will be impacted in the next twenty years and will experience trillions of dollars in damage. Soil condition is a big factor. If you are in sand and gravel for your aquifer, you will probably be ok. If you are in clay, you will have larger problems. Jakarta in Indonesia is sinking about 10 inches per year and its water supply is in grave danger. Worldwide much of the populations is concentrated in big cities in coastal areas with clay soils subject to subsidence. Cities build on landfills are also at risk. Most of the subsidence can not be repaired or recharged.



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Charles Busslinger, Chris Lingad

SUBJECT: Update /Status of MWDOC Building Construction

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 MWDOC Administration Building Seismic Retrofit and Remodel Project is currently in the first of three phases of construction which have been planned to allow for continued operations during construction while minimizing the overall construction period. This report is to update the Board on construction progress.

DETAILED REPORT

On October 21, 2020, the Board of Directors authorized the award of a construction contract with Optima RPM, Inc. for the MWDOC Administration Building Seismic Retrofit and Remodel Project. The approval excluded a proposed storage room expansion for Conference Room 101. The approved contract amount was \$1,606,878.00 with a 20% contingency of \$321,375.40 for a total of \$1,928,144.40.

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

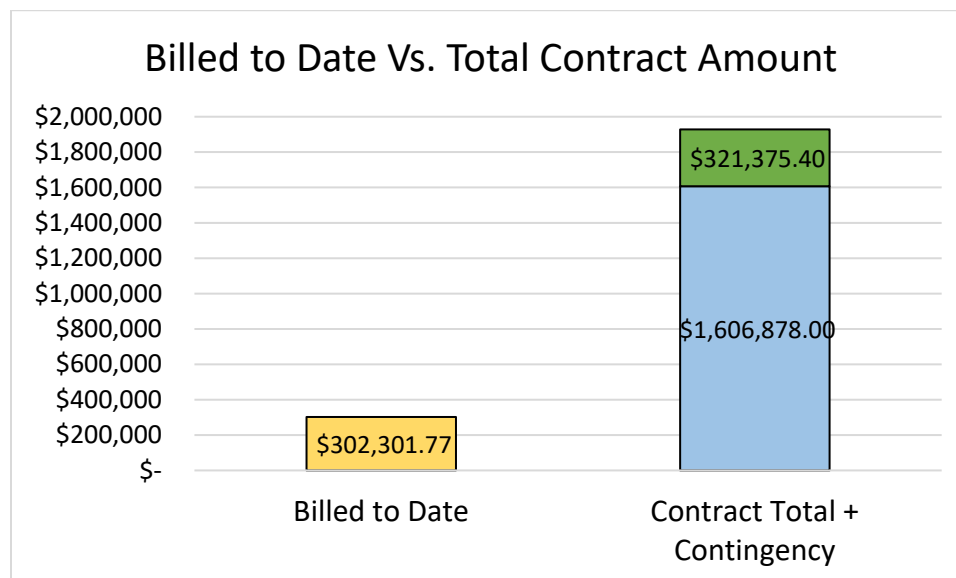
The project involves seismic improvements and remodeling of the administration building including improvements to Conference Room 101 to serve as a backup WEROC emergency operations center. The remodel will also address current space inefficiencies with the existing floor plan that will provide additional workspaces within the building. The project is phased to allow for continued use of the building during construction. The Construction Contract was signed on October 28, 2020. A Pre-construction meeting was held on November 4, 2020 during which a Notice to Proceed with Construction was issued to Optima RPM, Inc. The Contractor mobilized and began demolition on November 18, 2020.

The Project is currently in the first of three phases of construction with Phase 1 completion anticipated in June 2021. Phase 1 is the largest and most complicated of the three phases. The entire project is anticipated to be completed in November 2021.

During Phase 1 a number of items were identified that are being handled through Change Orders and the project contingency budget. Some of these Change Orders were anticipated by staff as the items were known but had not been included in the bid documents (for example the exact number, location, and specifications for backup batteries for the main entry doors ADA power assist system, or the exact cost of the City Building permit). Other items were discovered during demolition and constitute Differing Site Conditions which need to be addressed.

Project Budget & Cost Tracking

The following chart provides an update of the amount billed to date for construction against the total contract amount plus the 20% contingency. Not included in the chart are credits the contractor will provide for the deletion of the storage room and other anticipated credits due to Change Orders. Staff negotiates these credits as they arise.



The following tables provide a summary of current and estimated costs that will be applied towards the contingency budget for all three phases of construction.

Billed Change Order Costs Towards Contingency Budget

Cost Description	Cost
Building Permit	\$ 11,754.88
Additional Vault/Copier Room Electrical Work	\$ 6,008.00
Billed Change Orders Balance	\$ 17,762.88

Estimated Future Change Order Costs Toward Contingency Budget

Cost Description	Cost
New Main Entry Doors & Battery Backup	\$ 47,500.00
Additional Electrical & Lighting Modifications	\$ 65,124.52
Structural/Seismic Related Work	\$155,517.00
Soundproofing	\$ 30,000.00
Estimated Change Orders Balance	\$298,141.52
Total Billed & Estimated Change Orders	\$315,904.40
Contingency Budget	\$321,375.40

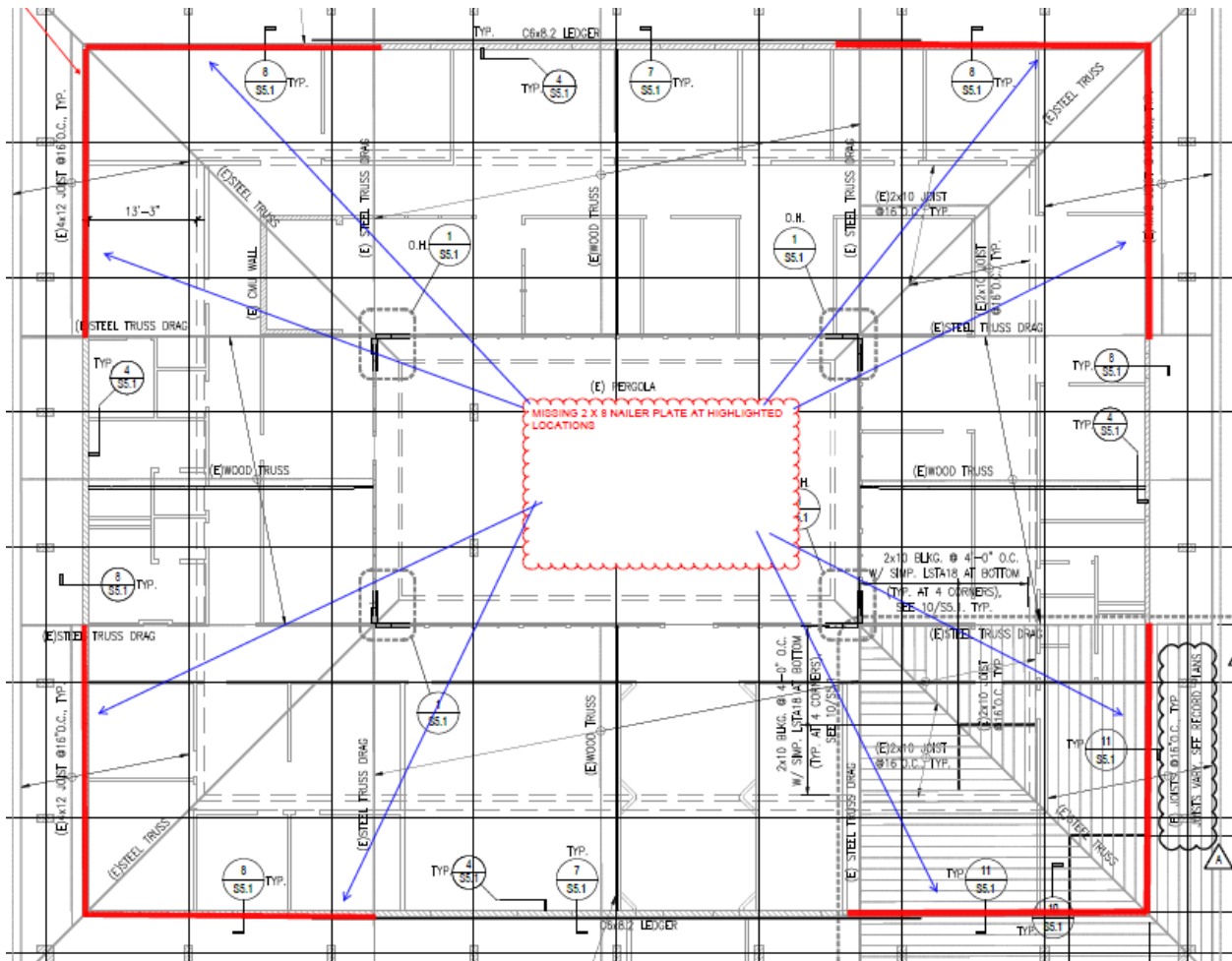
Currently the contingency budget is sufficient to cover the identified Change Orders. Note that credits back from the Contractor are not included in this accounting. Phase 1 is the largest and most complicated part of the project and most of the identified Change Orders apply to the entire project, not just Phase 1. However, should additional unforeseen items be identified, the contingency budget may be exceeded, and staff would then need to return to the Board for authorization for those items.

Structural/Seismic Related Change Orders (Differing Site Conditions)

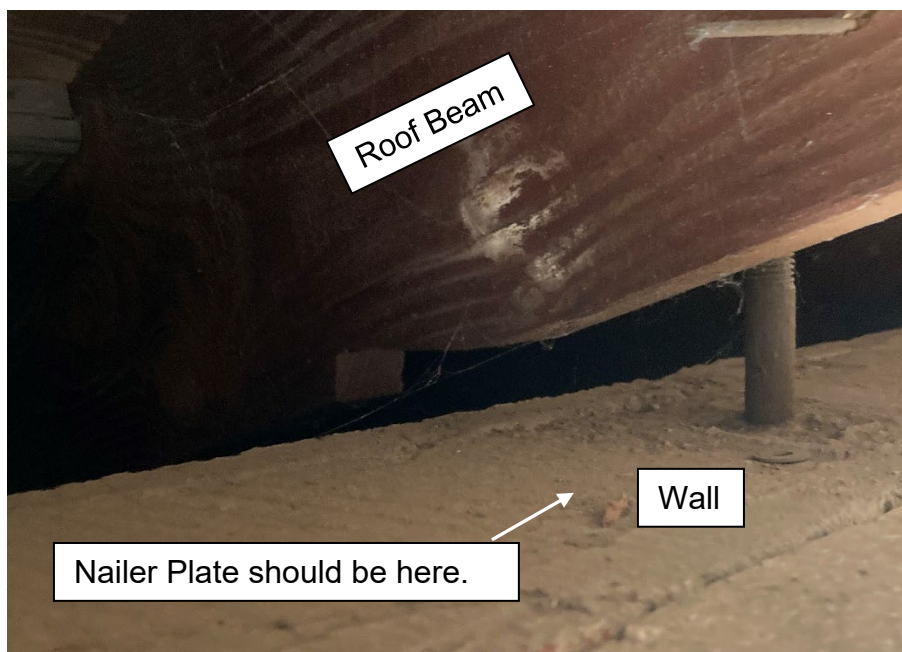
The largest Change Order category in the above charts is Structural/Seismic Related Work which were unforeseen. Staff anticipate the structural/seismic related work Change Orders over the course of the project will consume nearly half of the contingency budget. The original site investigation prior to design did not discover these missing structural/seismic elements as they were not easily observable until the ceilings were removed. These Differing Site Conditions are made up of two parts; missing structural elements consisting of in-plane connections (missing nailer plates), and out-of-plane connections (brackets that tie the roof to the walls).

The diagrams and pictures below provide examples of the additional seismic work needed.

Missing In-Plane Connections - It was found that nailer plates were missing in all four corners of the building which provide protection against shear stress. These nailer plates sit on top of the walls and are an essential element of the structural/seismic bracing system.

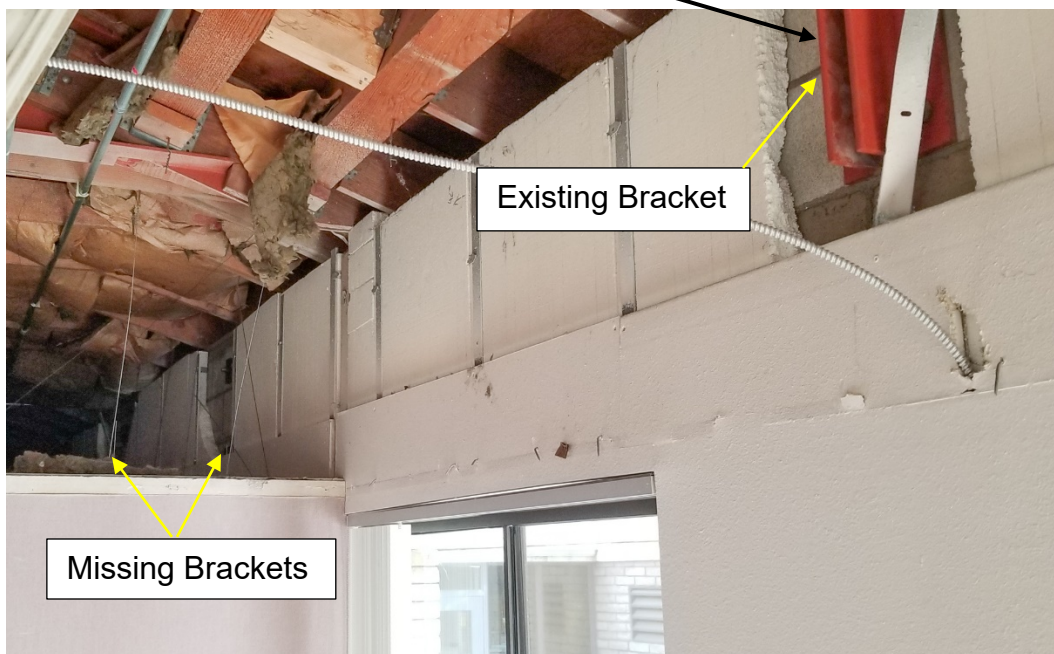
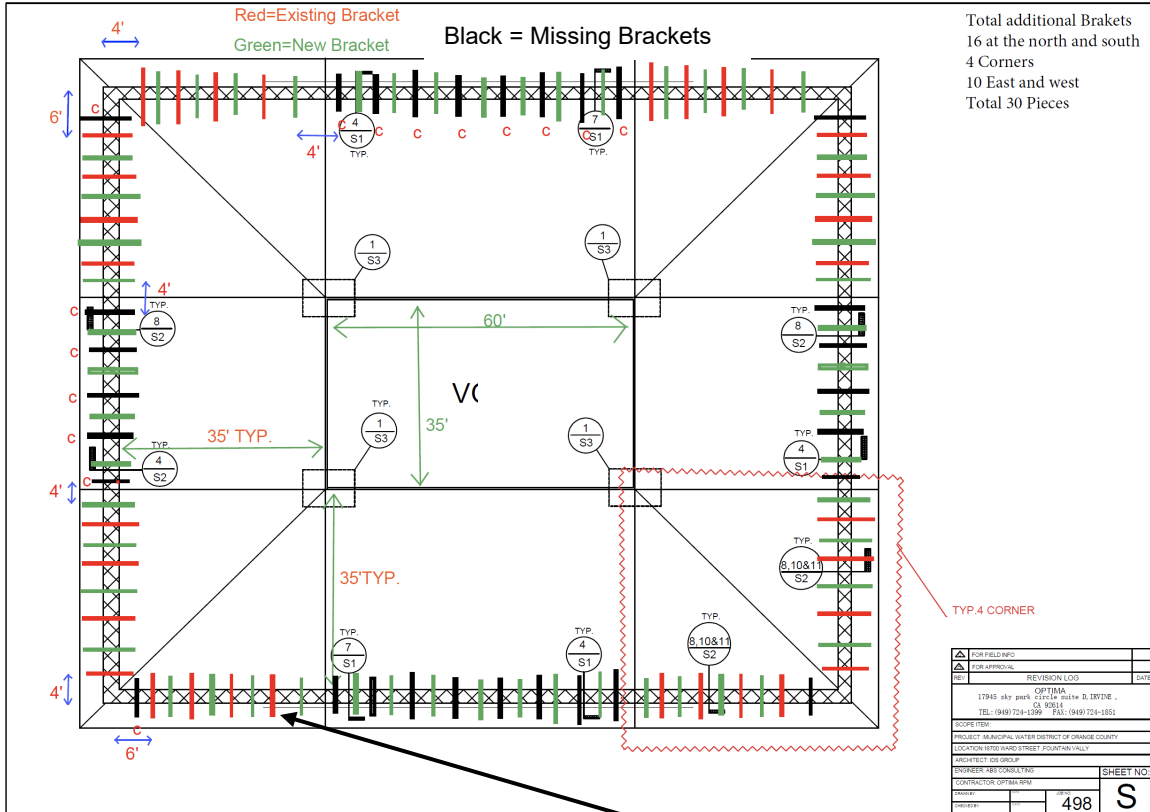


Missing Nailer Plate Locations



Example of Missing Nailer Plate

Missing Out of Plane Connections – these brackets tie the roof to the walls. The bid package included a number of additional new brackets to provide additional seismic resiliency (the diagram below shows existing brackets in red and new brackets in green). However, following demolition it was discovered that several brackets that should have been in the original design were missing (shown in the diagram below in black).



Anticipated Change Orders

Entry Door Replacement and ADA Compliance - The existing entry doors between the MWDOC building and the reception desk need to be replaced as they do not meet ADA requirements and are difficult to find replacement parts for. Additionally, the two sets of vestibule doors leading from outside of the building into the main lobby, also likely require modification to meet more recent ADA compliance requirements. All three sets of doors will need a backup battery system to allow the doors to cycle a minimum number of times during a power failure per ADA requirements. IDS Group is currently working with door manufacturer ASSA ABLOY on the final details of these required design changes.

Electrical & Lighting Modifications – Some of the lighting fixtures for Conference Room 101 were not called out on the plans and so were not priced in the original bid. Additionally, some of the circuits within the building are fully loaded and will be split up to better balance the electrical load throughout the building.

Soundproofing – selected walls within the building (particularly the conference rooms, and the HR office) will have additional soundproofing installed to address sound transmission issues.

Construction Progress Photos



Northwest Offices (formerly CR 102) Framing – December 17, 2021



Open Office Area (North side of Atrium) with Framing for Small Conference Rooms (former vault)— January 15, 2021



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Sarah Wilson

SUBJECT: MWDOC Choice School Programs 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

Despite limiting conditions created by the COVID-19 pandemic, Municipal Water District of Orange County (MWDOC) Public Affairs staff has worked closely with K-12 Choice School Program contractors—Shows That Teach, Discovery Cube Orange County, and Bolsa Chica Conservancy—to provide Orange County students with safe, structured, interactive water lessons that guide them to identify local water supply sources, explore the challenges faced by Orange County water providers to deliver safe, clean water to homes and businesses, and discover the importance of using water wisely.

As virtual sessions are confirmed with Orange County schools, MWDOC Choice School Program contractors update the shared Google Calendar so that participating member agencies are able to view the booking schedule for their service area. Included in this report is a preview of scheduled visits for the months of February and March 2021. Please note that the shared Google Calendar is updated frequently, and will always have the most accurate information. Visits are subject to change due to school and teacher availability. Login information for the shared Google Calendar is available upon request.

Budgeted (Y/N): Y	Budgeted amount: \$401,729	Core <u> </u>	Choice <u>X</u>
Action item amount:	Line item: 63-7040		
Fiscal Impact (explain if unbudgeted):			

DETAILED REPORT

MWDOC Choice School Program contractors continue their efforts to book live, interactive virtual water lessons that can be accessed at home or in the classroom by Orange County K-12 teachers and students for the 2020/21 school year. These virtual sessions include pre- and post-program activities that provide students with hands-on learning experiences that guide them to think deeply about their connection to the local environment and surrounding communities, and enhance their understanding of how water is connected to every part of life.

The current MWDOC Choice School Program goals can be accessed [here](#).

SHOWS THAT TEACH – ELEMENTARY SCHOOL (K-2)

To date, Shows That Teach has hosted 36 live, virtual assemblies reaching more than 5,200 elementary school students through the MWDOC Choice Elementary School Program (grades K-2). At the time of this report, 9 additional presentations and just over 1,100 students have been booked to receive the program through the remainder of the 2020/21 school year so far.

“Loved how you made such an important message clear, easy to learn and fun. I enjoyed watching my students engaged with smiles and laughter. In our class zoom meeting we shared what they learned through discussion. They created mini posters of how they will conserve water. I was delighted with their interest and responses.” – Second Grade Teacher, Zeyen Elementary School, Garden Grove

“I thought the virtual assembly was great and age-appropriate for primary students. I also thought the songs, photos, diagrams, and having the actors act out the lesson was very helpful for students to understand the concept of matter. Lastly, I liked how the students were able to interact using movement during the assembly.” – Second Grade Teacher, Malcom Elementary School, Moulton Niguel Water District

DISCOVERY CUBE OC – ELEMENTARY (3-6) AND MIDDLE SCHOOL (7-8)

To date, Discovery Cube OC has hosted 46 live, virtual assemblies reaching more than 2,080 elementary school students through the MWDOC Choice Elementary School Program (grades 3-6). At the time of this report, 21 additional presentations and approximately 1,030 students have been booked to receive the program through the remainder of the 2020/21 school year so far.

“[Discovery Cube OC staff] are fanstastically engaging and the kids loved it! I invited our principal in to see how creative and purposeful the experience was - she was so excited as well. Thank you again for this opportunity!” – Third Grade Teacher, Del Obispo Elementary School, San Juan Capistrano

“Thank you for the best smart day ever! I learned that not all plants need water. You also taught me to save water. I’m going to tell my family [to] save water and be in the shower for 5 minutes.” – Third Grade Student, Del Obispo Elementary School, San Juan Capistrano

DCOC is continuing weekly outreach to Orange County middle schools, and is pursuing leads to book schools for the MWDOC Choice Middle School Program (grades 7-8).

BOLSA CHICA CONSERVANCY – HIGH SCHOOL (9-12)

To date, the Bolsa Chica Conservancy has hosted 6 live, virtual classroom presentations reaching roughly 190 high school students at El Toro High School and Santa Ana High School. At the time of this report, 11 additional classrooms at Edison High School and Brea Olinda High School have been booked to receive the MWDOC Choice High School Program (grades 9-12) through the remainder of the 2020/21 school year so far.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
				3-6 SANTA ANA	3-6 FULLERTON	
7	8	9	10	11	12	13
	3-6 SANTA ANA	3-6 SANTA ANA		3-6 FULLERTON	3-6 FULLERTON	
14	15	16	17	18	19	20
		3-6 SAN CLEMENTE				
21	22	23	24	25	26	27
		K-2 ORANGE La Veta	K-2 BREA Olinda K-2 BREA Olinda	3-6 ANAHEIM	3-6 ANAHEIM	
28	1	2	3	4	5	6
					3-6 ETWD Del Cerro	

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	1	2	3	4	5	6
					3-6 ETWD Del Cerro	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
				9-12 SANTA ANA	9-12 SANTA ANA	
28	29	30	31	1	2	3



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Damon Micalizzi

SUBJECT: 2021 OC Water Summit Update

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

Staff continues to secure speakers for the 2021 OCWater Summit, scheduled for June 4, 2021 at the Disney Grand Californian Hotel. As the event draws near it is becoming more likely that state guidelines will preclude the event from taking place at the Grand Californian Hotel and Spa. As such, staff is exploring options such as an outdoor venue under a large, open tent or hosting the conference using a virtual platform.

All confirmed presenters have agreed to participate in person and/or virtually if needed. The event will include sessions on water supply, Contaminants of Emerging Concern (CECs), technological advancements in weather forecasting, and local resources. Fritz Coleman is back to serve as Master of Ceremonies and moderator.

The next meeting of the OC Water Summit Ad Hoc Committee will be February 22, 2021.



INFORMATION ITEM

February 1, 2021

TO: Planning & Operations Committee
(Directors Yoo Schneider, Nederhood, Seckel)

FROM: Robert Hunter, General Manager

Staff Contact: Damon Micalizzi

SUBJECT: Water Policy Forum Speaker Series

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

Nancy Vogel, Director of the Governor's Water Portfolio Program and Susan Tatayon, Chair of the Delta Stewardship Council have agreed to present at MWDOC's upcoming *virtual* Water Policy Forum (WPF) on Wednesday February 24th at 10:30 a.m. The event will take a closer look at the Governor's plan for long-term water resilience, and discuss how the Delta Plan aims to achieve the state's coequal goals of sustainable water supplies, reaching environmental harmony. The WPF will be hosted online, via the Zoom platform.

Vice President Yoo Schneider, has agreed to host the event and moderate questions and answers.

More than 200 attended MWDOC's first virtual WPF featuring Delta Watermaster Michael George held in September.

ENGINEERING & PLANNING	
Economic Benefit Studies and Modeling Work to Quantify the Benefits of Local Projects in the Context of MET's 2020 Integrated Resources Plan (IRP)	<p>MWDOC staff is working with the Brattle Group and CDM Smith on the Economic Benefits Studies and modeling work. In this process, the consulting team will be working with MWDOC and the member agencies regarding the survey of businesses in Orange County.</p> <p>CDM Smith has completed initial modeling work for a water demand analysis and presented preliminary results to MWDOC's member agencies at the Managers Meeting on January 21, 2021. This analysis will serve to support the Urban Water Management Plans and provide information for the Economic Benefits study.</p> <p>Wallace Walrod, economist for Orange County Business Council and sub-consultant for the Brattle Group, is putting together the business survey portion of the studies. Dr. Walrod will provide information on the business survey in February to allow MWDOC member agencies to provide input to the business survey.</p>
OC-70 Meter Testing Update	<p>MWDOC, MET and EOCWD agreed to a reference standard for testing at OC-70 using a calibrated mag meter as a reference for testing the billing meter which will be installed upstream of the OC-70 facility to compare to the existing venturi meter.</p> <p>EOCWD provided use of a new magnetic flow meter to MET for this testing. MET has completed manufacturing of new stainless steel pipe spools for the mag meter installation. The meter and piping are all currently at Utah Water Research Lab for calibration. MET has planned a 4-day shutdown beginning February 16, 2021 to install the mag meter in preparation for the meter testing at OC-70 at the end of February. Final meter evaluation is anticipated in March 2021.</p>
OC Hydraulic Model	<p>Black & Veatch has completed the first two project tasks and constructed the hydraulic model using Innovyze's InfoWater modeling platform. B&V is currently calibrating the model in preparation for use of the model in early 2021. Staff and B&V are currently working with member agencies to define potential project scopes of work. More information will be presented as they develop.</p>
Doheny Ocean Desalination Project	<p>South Coast Water District (SCWD) continues working on the project:</p> <ul style="list-style-type: none"> • In 2019, SCWD was awarded an \$8.3 million award from the Water Infrastructure Improvements for the Nation Act of 2016 (WIIN). In December 2020, the Interior Department notified SCWD that the project was selected for an additional \$11.7 million for the project for FY 21 for a cumulative total of \$20 million which is the existing maximum for WIIN Act Desalination Program funding. • SCWD received an extension on filing a Water Infrastructure Finance and Innovation Act (WIFIA) loan application until June 30, 2021. • SCWD submitted their NPDES permit application on March 13, 2020. Regional Board comments were received in September 2020. SCWD

	<p>will re-submit in January 2021 and anticipates a Board hearing on the NPDES permit in Summer 2021.</p> <ul style="list-style-type: none"> • A draft Coastal Development Permit has been submitted to Coastal Commission on 11/23/20 and the Commission staff have provided comments. Resubmission of the permit application is anticipated in March 2021. • Work is progressing on an Alternative Energy Study by Burns & McDonnell for the project. A draft report is under review by SCWD. • Work is also progressing on the Financial Analysis for a 2 mgd and 5 mgd scenario through Clean Energy Capital. Work is on hold pending input from the Alternative Energy Study. • Also making progress is a third-party hydrogeologic review of San Juan Creek to determine if and to what extent near shore pumping may have on inland groundwater wells. Additional geophysical field work has been completed and a technical working group meeting was held on December 7, 2020 to review the results. The geology in the vicinity of Stonehill Drive is extremely complex but testing shows that there is a subsurface barrier which impedes groundwater flows between the upper and lower portions of the creek in the vicinity of Stonehill Drive. The hydrogeologists are now modeling the test findings to determine the extent of hydrogeologic flows between the upper and lower portions of the creek and should have 3D modeling results in February/March 2021. • A draft report on a Doheny/GRF Hybrid Option Study has been submitted to SCWD for review in January 2021. <p>On June 25, 2020 the SCWD Board approved an amendment to the Clean Energy Capital Financial Analysis to evaluate alternative project options that meet reliability benefits for SCWD similar to the Doheny Desalination Project, along with reducing overall life-cycle costs in light of the uncertain economic situation moving forward due to the COVID-19 pandemic.</p> <p>The Doheny Desalination Project is currently sized at a capacity of up to 5 MGD, which exceeds SCWD's average potable water demand expected during emergency situations. SCWD has only received interest from SMWD for about 1 mgd of supply from Doheny. This leaves South Coast with potential capacity for others in a 5 MGD facility. Based on this, along with regional financial hardships caused by the COVID-19 pandemic and potential economic recession, SCWD believes that it is necessary to consider alternative, and potentially lower cost project options, to utilize and potentially expand existing assets as a means to meet their reliability needs.</p> <p>This amended study is reviewing design parameters and existing conditions at SCWD's existing Groundwater Recovery Facility (GRF), to obtain a comprehensive understanding of actual production capacity of the GRF and current limitations and reliability concerns. A range of additional water production volumes needed to maintain emergency reliability for SCWD will be</p>
--	--

	<p>developed. Current estimates are that 1.2 to 2.2 mgd of additional reliability will be needed for SCWD based on a GRF production volume of 0.8 mgd.</p>
SMWD San Juan Watershed Project	<p>Santa Margarita WD continues to focus on diversifying its water supply portfolio toward obtaining a goal of 30% local supplies. The San Juan Watershed Project is one project SMWD is working on toward that goal.</p> <p>The original project was envisioned to have three Phases; Phase 1 included three rubber dams along San Juan Creek to recover about 700 Acre-Feet-per Year (AFY); Phase 2 added up to 8 additional rubber dams and the introduction of recycled water into the creek to improve replenishment of the basin to recover up to 6,120 AFY, and Phase 3 added more recycled water topping out at approximately 9,480 AFY. Under this arrangement, most or all of the production and treatment involved the existing San Juan Groundwater Desalter with expansions scheduled along the way to increase production beyond 5 mgd. Fish passage and regulatory hurdles to satisfy subsurface travel time requirements continue to be addressed.</p> <p>SMWD has since modified the project. Currently SMWD is working with the Ranch on the next phase of development within SMWD's service area and also working on access to riparian groundwater from the Ranch in the upper portions of the San Juan Creek watershed. SMWD plans to construct a water filtration plant to treat this additional water, which currently has the working title of 'The Ranch Water Filtration Plant' (RWFP). The draft CEQA documentation for the RWFP is going to the SMWD E&O Committee for review in February 2021. SMWD anticipates that the RWFP plant will begin operation in the 1st quarter of 2022. This new first phase will treat approximately 1,000 AFY of non-potable water to produce 800 – 900 AFY of potable water, which will then be put directly into the SMWD water system. The RWFP treatment system will consist of Microfiltration or Ultrafiltration, Reverse Osmosis and Chloramines.</p> <p>SMWD also continues to work with the California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS) on steelhead trout regulations for any work occurring within San Juan Creek stream. This new RWFP 1st phase is 'off-stream' which is allowing the project to move forward.</p> <p>A new 2nd phase of the project will look to use infiltration basins (stormwater/flood) that will be constructed as part of the Ranch's next phase of development. SMWD is looking to fill these new basins with recycled water in the summer when the basins are empty and then take it back out. By doing this SMWD anticipates being able to increase the source water supplies for the RWFP to approximately 5,000 AFY. Both State and US Bureau of Reclamation grants are being pursued for this project.</p> <p>SMWD has discovered that the local geology has high vertical percolation rates and sufficient groundwater basin travel time (lower horizontal conductivity) to potentially allow percolation of treated recycled water with an ability to meet</p>

	<p>the required travel time regulations. SMWD is of the opinion that permitting for percolation augmentation using recycled water from the nearby Trampas reservoir can be added as permitting allows. SMWD believes the new project may be able to ultimately produce 4,000 to 5,000 AFY; they believe the original project will continue to be developed for production out of the wells and treatment provided by San Juan Capistrano as the two agencies merge. Ultimate production out of the basin could exceed 10,000 AFY if all goes well.</p>
South Orange County Emergency Service Program	<p>MWDOC, IRWD, and Dudek have completed the study to determine if the existing IRWD South Orange County Interconnection capacity for providing emergency water to South Orange County can be expanded and/or extended beyond its current time horizon of 2030.</p> <p>Dudek participated in the November 6, 2019 SOC workshop to re-engage with the SOC agencies on this project. Support from the agencies was expressed to take a small next step to install Variable Frequency Drives at a pump station within IRWD which would be paid for by SOC to help move water from the IRWD system to SOC in an emergency. The Variable Frequency Drives will provide more flexibility to the IRWD operations staff to allow additional water to be sent to SOC while meeting all of the IRWD needs.</p>
Strand Ranch Project	<p>MWDOC and IRWD are continuing to exchange ideas on how to implement the program to capture the benefits that can be provided by the development of “extraordinary supplies” from the Strand Ranch Project. Staff from MWDOC and IRWD met in August 2020 and have been reaching out to other agencies to determine the level of interest in the project.</p>
Poseidon Resources Huntington Beach Ocean Desalination Project	<p>The Santa Ana Regional Water Quality Control Board (SARWQCB) continues to work with Poseidon on renewal of the National Pollutant Discharge Elimination System (NPDES) Permit for the proposed HB Desalination Project.</p> <p>The renewal of the NPDES permit for the proposed desalination facility requires a California Water Code section 13142.5(b) determination in accordance with the State’s Ocean Plan (a.k.a. the Desalination Amendment). To make a consistency determination with the Desalination Amendment, the Regional Board is required to analyze the project using a two-step process:</p> <ol style="list-style-type: none"> 1. Analyze separately as independent considerations, a range of feasible alternatives for the best available alternative to minimize intake and mortality of all forms of marine life: <ol style="list-style-type: none"> a. Site b. Design c. Technology d. Mitigation Measures 2. Then consider all four factors collectively and determine the best combination of feasible alternatives.

Regional Board staff reviewed hundreds of documents and input from both an independent reviewer and a neutral 3rd party reviewer to develop Tentative Order R8-2020-0005.

The key areas required by the Ocean Plan on which the Santa Ana Water Board is required to make a determination, includes:

- Facility onshore location;
- Intake considerations including subsurface and surface intake systems;
- **Identified need for the desalinated water;**
- Concentrated brine discharge considerations;
- Calculation of the marine life impacts; and
- Determination of the best feasible mitigation project available.

In evaluating the proposed project, Santa Ana Regional Board staff interpreted “the identified need for the desalinated water” as whether or not the project is included in local area water planning documents, rather than a reliability need as analyzed in the OC Water Reliability Study. The Regional Board staff referenced several water planning documents; Municipal Water District of Orange County’s (MWDOC) 2015 Urban Water Management Plan (UWMP), the OC Water Reliability Study, OCWD’s Long Term Facilities Plan, and other OCWD planning documents in their evaluation of Identified Need.

On December 6, 2019, SARWQCB, Regional Board staff conducted a workshop in Huntington Beach that was heavily attended with a considerable range of views expressed at the meeting.

On May 15, 2020, SARWQB held a second workshop, which focused on the identified need for the desalinated water and marine life mitigation requirements. Karl Seckel presented to the Regional Board on a number of topics including: MWDOC’s role in Orange County, alternative definitions of “need” for a water supply project and the role of water agencies, Urban Water Management Plans, non-mandated planning documents, and what was and was NOT in the 2018 OC Water Reliability Study.

On September 15, 2020, the Regional Board postponed action on the waste discharge permit renewal at the request of Poseidon. Poseidon requested additional time to address concerns raised in three days of public hearings, among them: the need and cost of desalinated water; OCWD’s commitment to purchase the supply; the harm to marine life caused by the facility’s intake process; and whether the Bolsa Chica wetlands Marine Life Mitigation Plan satisfies the state’s Ocean Plan requirements for seawater desalination plants. Poseidon informed the Regional Board that it plans to evaluate the mitigation recommendations, work with resource agency and board staffs, and expects to complete the process within 45-60 days. Poseidon is currently working with the

	<p>Regional Board on the next meeting date which appears that it may occur in February/March 2021.</p> <p>Assuming success at the Regional Board, Poseidon would then seek its final permits from the California Coastal Commission (CCC). The CCC has committed to reviewing the permit within 90 days of the SARWQCB NPDES permit issuance.</p>
Trampas Canyon Dam and Reservoir	<p>Trampas Canyon Reservoir and Dam (Trampas Reservoir) is a seasonal recycled water storage reservoir, with a total capacity of 5,000 AF, of which 2,500 AF is available to meet Santa Margarita Water District's projected base recycled water demands, and 2,500 AF to meet future water supply needs. When completed, the Trampas Reservoir will allow SMWD to store recycled water in the winter and draw on that water during the peak summer months.</p> <p>The construction of the Trampas Canyon Recycled Water Seasonal Storage Reservoir consists of three main components:</p> <ol style="list-style-type: none"> 1. Trampas Canyon Dam (Dam) 2. Conveyance facilities to transport recycled water into and out of the Reservoir (Pipelines) 3. Trampas Canyon Pump Station (Pump Station) <p>The construction of the facilities is being completed in three phases:</p> <ol style="list-style-type: none"> 1. Preconstruction/Site Preparation for the Dam and Pump Station Construction <p>Project Status - Complete</p> 2. Dam and Pipelines <p>Project Status – A Dedication Ceremony was held on October 9, 2020.</p> <p>SMWD and the Contractor are still working through a few issues that require resolution before the Division of Safety of Dams (DSOD) permit to fill the Reservoir can be obtained:</p> <ul style="list-style-type: none"> • Potential for the need to replace structural slurry in the cut off wall of the West Dam. 3. Pump Station <p>Project Status – Construction for the Pump Station is scheduled to be substantially complete by late-January. The final pump control valve that had been a procurement problem was delivered and installed in early December.</p> <p>Startup and testing of the Pump Station is currently scheduled to occur during the period of January 18-29, 2021.</p>

	<p>AECOM and SMWD submitted the Emergency Action Plan (EAP) for Trampas Dam in mid-December to CalOES for review and approval. The approval of this Plan is prerequisite to DSOD issuing a permit to operate Trampas Dam.</p>
<p>AMP Shutdown in 2021 to Replace PCCP Sections</p>	<p>In 2016, MET initiated a Prestressed Concrete Cylinder Pipe (PCCP) rehabilitation program to install 100 miles of steel liner throughout the MET system to address structural issues associated with prestressed steel wire failures in PCCP. As part of the program, MET monitors PCCP for wire breaks on a regular basis.</p> <p>MWDOC staff was notified that an internal inspection of the AMP revealed two pipe segments with increased wire breaks within the PCCP portion south of OC-70. Metropolitan Engineering considers this section of the pipeline to be at high-risk due to pipe segments that have 20 or more wire breaks. The minimum relining length needed is approximately 1,000 feet and requires a minimum 37-day shutdown for the portion of the AMP south of OC-70. MET had originally scheduled the AMP PCCP relining to begin in about 5 years, but based on the survey, MET does not recommend that repairs to these segments wait until Fall 2021.</p> <p>Two MWDOC member agency projects are also scheduled around the same time as the pending AMP shutdown; a South Coast Water District vault rehabilitation on the JTM that was previously postponed due to the previous Diemer shutdown, and Santa Margarita Water District relocation of a portion of the Aufdenkamp Connection Transmission Main (ACTM) to accommodate the I-5 widening project. The South Coast project is scheduled for completion by the beginning of February 2021.</p> <p>MWDOC staff coordinated meetings with all affected AMP participants to discuss expediting the ACTM work. The agencies agreed to share \$35,000 in additional costs to accelerate the return of the ACTM to service. SMWD staff report that the ACTM project is moving forward on schedule and anticipate being back in service prior to the AMP shutdown.</p> <p>The AMP shutdown is planned for April 3, 2021 through May 9, 2021.</p> <p>Staff is continuing to work with affected agencies and will keep both the Board and the AMP Participants informed as more information becomes available.</p>
<p>Other Shutdowns</p>	<p>Orange County Feeder</p> <p>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.</p> <p>Due to CIP budgeting changes, MET has proposed new shutdown dates of September 15, 2021 through June 15, 2022. MET will be re-evaluating this Orange County Feeder relining project in the June 2021 budget review.</p>

	<p>Joint Transmission Main</p> <p>SCWD is planning a rehabilitation project of their CM-10 vault in early 2021 on the Joint Transmission Main (JTM) which will include replacement of existing valves. MWDOC is coordinating this work with MET and SCWD, so the above referenced AMP shutdown and this project do not overlap.</p> <p>Aufdenkamp Connection Transmission Main</p> <p>SMWD is currently working on a relocation of the ACTM pipeline for the I-5 widening project. We are also coordinating with MET and SMWD, so the above referenced AMP shutdown and this project do not overlap.</p> <p>OC Feeder extension</p> <p>MET is planning to reline 300-linear feet of the OC Feeder extension affecting the City of Newport Beach. Due to CIP budgeting changes, MET has proposed revised shutdown dates of June 16, 2022 through July 10, 2022. MET will be re-evaluating this Orange County Feeder relining project in the June 2021 budget review.</p> <p>Lake Mathews Forebay</p> <p>MET is also planning a shutdown of the Lake Mathews Forebay for maintenance and repair work which will affect the Santiago Lateral from March 1-14, 2021. Staff is currently coordinating with MET and IRWD & Trabuco Canyon WD on this shutdown.</p>
Meetings	
	MWDOC staff along with ABS Consulting, IDS Group and Optima RPM participated in several construction progress meetings in the month of January regarding the admin building seismic retrofit and remodel. Weekly progress meetings will continue through the completion of the project.
	Charles Busslinger and Chris Lingad attended a meeting with MNWD on January 7, 2021 to discuss and review information provided at the previous AMP participants meeting.
	Charles Busslinger and Chris Lingad attended a meeting with EOCWD on January 12, 2021 to discuss issues concerning OC-70.
	Charles Busslinger and Chris Lingad attended a meeting with ABS Group and PBS Engineering on January 21, 2021 to discuss potential enhancements to the HVAC system.
	Charles Busslinger and Chris Lingad attended a meeting on January 22, 2021 with MET and SMWD to discuss technical issues regarding the South County Pipeline.

Planning and Operations Committee Item No. 16b

WEROC Status Report

January 2021

COVID-19 (CORONA VIRUS) COORDINATION

- WEROC continues to monitor the State and County for changing information and is sharing information with agencies as it becomes available.
- WEROC is participating in the weekly Operational Area Conference calls.
- WEROC continues to hold bi-weekly conference calls on Tuesdays with member agencies to report on Federal, State, and County changes. Calls continue to support the sharing of information between agencies.
- Vicki continues to support agencies daily with COVID-19 related questions and guidance needs.
- Daniel continues to assist agencies with logistical needs and support. WEROC is assisting an agency with a critical supply chain impact due to the COVID-19 event. Daniel is working with different vendors and the agency to fill the gap.
- On 12/22/20, WEROC conducted a meeting with the water and wastewater general and utility managers in regards to vaccine and Point of Dispensing (POD) planning.
- On 12/30/20, WEROC participated on the Orange County Health Care Agency POD webinar.
- On 1/4/21, WEROC conducted a second meeting with the agencies utility managers to provide updates on the meeting with the Deputy Health Officer, and Vaccine Task Force requests from our sector to be included in the phase 1 tier. A presentation was created and provided to the Orange County Health Care Agency.
- On 1/5/21, the County of Orange pivoted and took on the responsibility of dispensing the vaccine and micro PODs orders at the city and business (WEROC) level was retracted by the County. WEROC has a POD plan in place in case this course of action changes in the future.
- On 1/6/21, the State of California released their vaccine priorities which included water and wastewater on the Phase 1C tier.
- WEROC had a CalOSHA representative on the bi-weekly call on 1/19 to assist agencies with questions regarding meeting the COVID-19 Emergency Temporary Standard regulations 3205.

- On 1/25/21, the State lifted the Regional Stay at home order issued in December and counties were returned to the California 4-tier system. Orange County remains in the most restrictive Purple Tier. In the same announcement, the State advised there would be changes to the vaccine distribution plan. At the time of this report, those guidelines have not been released. An update will be provided orally at the P&O Committee meeting.

JANUARY INCIDENTS/EVENTS

(PUBLIC SAFETY POWER SHUTOFFS, DEMONSTRATIONS)

- There was one Public Safety Power Shut off events in January. The WEROC PSPS Standard Operating Procedure was implemented. WEROC sent information out to agencies on the weather and Southern California Edison and San Diego Gas and Electric potential circuits identified for shut off based on the Red Flag Warning and predicted weather events.
- WEROC provided demonstration information in January to agencies for staff safety.

COORDINATION/PARTICIPATION WITH MEMBER AGENCIES AND OUTSIDE AGENCIES

- On January 7th, Vicki attended the Orange County Emergency Management Organization (OCEMO) meeting. The focus at this meeting was establishing the goals for the monthly meetings based on the current climate we are in. OCEMO is focused are provided training opportunities and topics at each meeting that can reach to all participant levels.
- On January 14th, Vicki at the request of EPA, presented about the WEROC program, the partnership between water utilities in OC and how that helps individual member utilities during a Public Safety Power Shutoff event and with the collaboration with the Orange County Emergency Management Division, electrical utilities, and the path moving forward.
- WEROC is participating with the OC Post Fire Debris Flow Taskforce Meeting for the Silverado, Blue Ridge, and Bond Fire conducted by the Operational Area.
- Daniel is providing important cyber security information to the member agencies. The Cyber Communications group is being used to disseminate this information.

- WEROC is assisting the County/Operational Area Emergency Management Division with getting the water and wastewater Special Districts signed Operational Area Agreements completed. The new Operational Area agreement went into effect in September 2020. At this time there is still 6 special district water agencies that have not submitted their completed agreements.
- Vicki is working with Government Affairs on a response regarding the federal government making changes to the Disaster Declaration Process and the ability to access public assistance funding. The federal proposal is looking at cost of assistance estimates being added to the process. If this moves forward, this will have a significant impact on the state of California and Special Districts' ability to access funding.
- Vicki has been appointed as the CalWARN Region I Co-Chair.

WEROC ASSESSMENT IMPLEMENTATION AND PLANNING EFFORTS

- Daniel is 80% complete with the revisions of the WEROC Emergency Operations Plan.
 - In relation to the WEROC Assessment Report, the Records and Data Management project is 75% completed.
 - Training and Exercise Plan is 100% completed and has been implemented (refer to training and exercise section below for further update).
 - WEROC Public Safety Power Shutoff Standard Operating Procedure has been updated based on coordination and communication with Southern California Edison representatives over the past few months. WEROC has improved communication, and notification processes with SCE in this important partnership to ensure any preplanning to support agencies occurs before an event.
-

AMERICA'S WATER INFRASTRUCTURE ACT (AWIA)

- WEROC and its consultant, Herndon Solutions Group (HSG) continues to work with WEROC agencies to achieve compliance with America's Water Infrastructure Act (AWIA).
- Tier II agencies successfully completed their RRA submittals by the December 31, 2020 deadline. The Emergency Response Plan phase will be due in June, 2021. Tier II agencies began their Emergency Response Plan meetings at the end of January.

- Tier III agency Initial Workshops are being conducted and the Tier III agencies RRA is due June 30, 2021.
 - Vicki coordinated with the Orange County Certified Unified Program Agency (CUPA) on behalf of all water agencies participating in the AWIA project. HSG is preparing a letter of certification to provide to the OC CUPA in order to meet the Local Emergency Planning Committee requirement set forth within AWIA 2018.
-

EMERGENCY OPERATIONS CENTER READINESS AND SYSTEMS

- Daniel is working on maintaining the operational function for the South EOC. He is focused on the projects areas with the generator and IT systems.
 - There is no update from the County on the status of the WebEOC Resource Management and Resource Request board issues or timeline when the issues will be resolved.
-

TRAINING AND EXERCISES

- ICS 300 – Intermediate Incident Command was conducted by WEROC for the member agencies on January 18-22nd.
- A Standardized Emergency Management (SEMS) Course has been scheduled for member agencies to attend February 16th.
- An ICS 400 – Advanced ICS Command and General Staff Course has been scheduled for member agencies, February 23 – 26th.
- All of these courses are being taught in house by Vicki.
- Daniel is scheduling 800 MHz radio training, Specific dates will be sent to the agencies once finalized.

**Status of Water Use Efficiency Projects
January 2021**

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	In December 2020, 418 smart timers were installed in Orange County. To date, 29,177 smart timers have been installed through this program.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	In December 2020, 74 rotating nozzles were installed in Orange County. To date, 571,581 rotating nozzles have been installed through this program.
SoCal WaterSmart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In December 2020, 301 high efficiency clothes washers and 23 premium high efficiency toilets were installed in Orange County. To date, 122,881 high efficiency clothes washers and 60,659 high efficiency toilets have been installed through this program.
SoCal WaterSmart Commercial Rebate Program	MWDSC	Ongoing	Ongoing	In December 2020, 43 plumbing flow control valves, 143 laminar flow restrictors, and 1 ice making machine were installed in Orange County. To date, 110,695 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.

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Industrial Process/ Water Savings Incentive Program (WSIP) cont.				Total water savings to date for the entire program is 1,284 AFY and 5,684 AF cumulatively.
Turf Removal Program	MWDOC	Ongoing	Ongoing	In December 2020, 11 rebates were paid, representing \$41,529 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 23 million square feet of turf.
Spray to Drip Rebate Program	MWDOC	Ongoing	Ongoing	This is a rebate program designed to encourage residential and commercial property owners to convert their existing conventional spray heads to low-volume, low-precipitation drip technology. To date, the Spray to Drip Rebate Program has converted approximately 1,062,444 square feet of area irrigated by conventional spray heads 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, 167 sites, irrigating a total of 1,601 acres of landscape, have been converted. The total potable water savings achieved by these projects is 3,498 AFY and 14,913 AF cumulatively.

Public & Governmental Affairs Activities Report
December 29, 2020 – January 26, 2021

Member Agency Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Designed and ordered spring bill inserts for MWDOC member agencies • Created an annual MWDOC Water Awareness Poster Contest promotional flyer for member agency and education partner distribution • Updated a Pressure Regulating Valve promotional flyer for Irvine Ranch Water District • Prepared and distributed an invitation to MWDOC member agencies for the bi-monthly Public Affairs Workgroup meeting • Drafted amendment to extend contract with Stetson Engineering for Consumer Confidence Reporting <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> • Distributed the Grants Tracking and Acquisition monthly report to member agencies • Sent out funding opportunity alerts for the WaterSMART program and Prop 1 Watershed Restoration Grant Program • Shared an update to the SWRCB's COVID-19 financial survey results
Community Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Reviewed and provided input on a Metropolitan Water District of Southern California's (Metropolitan) community handout for the Allen-McColloch Pipeline relining project, and provided contact information for Irvine Ranch Water District's General Manager and Public Affairs Manager <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> • Attended the ACC-OC Energy, Environment and Water Committee meeting
Education	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Provided Director Nederhood with information regarding program participation in the MWDOC Choice School Programs and Scouts Programs • Provided Director Nederhood with an outline of the MWDOC Choice School Program 3rd grade lesson • Provided City of Santa Ana, Moulton Niguel Water District, City of San Clemente, and City of San Juan Capistrano with information regarding MWDOC Choice School Programs • Provided information and resources to three (3) Orange County teachers interested in MWDOC education offerings • Posted an RFP for Design and Implementation of Choice Water Education School Program Services • Attended the live, virtual sessions for Santa Ana High School and Malcom Elementary School

	<ul style="list-style-type: none"> • Participated as a primary presenter at the Metropolitan Water District of Southern California (Metropolitan) Education Coordinator's Meeting • Attended the Department of Water Resources Water Education Committee Meeting • Met with Metropolitan, Los Angeles Department of Water and Power, and California Environmental Education Foundation to discuss speakers and logistics for the Water Energy Education Alliance (WEEA) Leadership Roundtable Meeting #7 • Met with Emily Courtney, Strategic Energy Solutions, and human resources professionals from Metropolitan, MWDOC, Moulton Niguel Water District, and Riverside Unified School District to identify challenges faced at the hiring source to recruit and retain skilled technical workers • Confirmed new WEEA Sponsor, Western Municipal Water District • Secured four Regional Leads for WEEA, to represent the service areas of Orange County, Los Angeles, Inland Empire, and San Diego • Prepared, hosted, and led the WEEA Leadership Roundtable Meeting #7 • Participated in a Ten Strands working group whose aim is to examine integrating environmental literacy into Career Technical Education programs • Participated in workforce development initiative working group through Orange County Community Foundation and Orange County Business Council • Met with OC STEM, Alison Loukeh, Rowland Water District, and OC Pathways to discuss CTE classes and opportunities for WEEA • Met with Centers of Excellence for Labor Market Research Statewide Director and Regional Director Orange County to discuss data needed for the Southern California water industry
Media Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Began preparing for a spring water insert in the Orange County Register • Participated in numerous County PIO COVID19 conference calls • Prepared and distributed content for social media

Special Projects	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Participated in the Orange County Water Summit Committee Meeting with Orange County Water District and MWDOC Directors Yoo Schneider, Thomas, • Developed a list of keywords and queries to analyze and amend for the mwdoc.com Search Engine Optimization effort • Published several website updates • Coordinated outreach efforts for the 2021 Water Awareness Poster Contest with Orange County school districts, teachers, MWDOC school program contractors, special education groups, Girl Scouts, and Boy Scouts • Initiated preparations and logistics for the February 24th Virtual Water Policy Forum • Developed promotional resources for MWDOC and UC Master Gardeners partnership • Launched MWDOC COVID-19 video • Participated in a meeting with the P&O Committee discussing the MWDOC Communications Program and Plan • Completed a grant writing class through Grant Writing USA • Participated in a phone interview with Ralph Anderson & Associates to discuss current department job descriptions • Met with Municipal Resource Group to provide input on performance management strategies • Met with Western Municipal Water District to provide recommendations on hosting virtual education events <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> • Staffed the ISDOC Executive Committee Meeting • Circulated the 2021 ISDOC Meeting Calendar to all members • Reviewed content to both the WACO and ISDOC webpages for updates • Provided information and background on WACO to the City of Tustin • Staffed the monthly WACO meeting featuring speaker Mike Gunson of JPL • Responded to numerous calls and emails regarding the ISDOC 3rd Vice President vacancy • Staffed the WACO Planning meeting
-------------------------	--

Legislative Affairs	<p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> • Prepared the Quarterly State Lobbying Report • Participated in the Southern California Water Committee Legislative Task Force's 2021 planning meeting • Attended CMUA's Non-Payment due to COVID-19 working group meeting • Along with staff from CSDA, OCWD, OCSD and OCCD, met with Congressman Lou Correa's District Director, Claudio Gallegos • Participated in the CMUA Regulatory and Legislative Committee meetings • Met with MWDOC's federal lobbying team to discuss priority issues and future planning • Attended the ACWA COVID Relief Funding/LIRA Working Group meeting • Participated in CMUA's CEC Working Group meeting • Participated in the ACWA Region 10 State Legislative Committee prep meeting • Met with MWD's Kathy Viatella, re: SB 230 (Portantino), legislation co-sponsored by CMUA and MWD • Attended the ACWA State Legislation Committee meeting • Participated in the CMUA Capitol Days. The program included a panel on California's Economic Recovery with speakers Senators Hertzberg and Bradford and Assembly Members Irwin and Ting. Speakers included Congressman Josh Harder; Kip Lipper, Chief Policy Advisor on Energy and Environment to Senate President Pro Tem Toni Atkins; Senator John Laird; Senator Josh Becker; Congressman Mike Levin; Sandra Berg, Vice Chair of the California Air Resources Board; Secretary Wade Crowfoot. And a Panel on Drinking Water Affordability with speakers Senator Dodd, SWRCB Member Laurel Firestone, and CPUC Commissioner Martha Guzman Aceves • Sent out a coalition letter signatory opportunity requesting support for a Budget Change Proposal that would appropriate \$125 million to implement the Voluntary Agreements
----------------------------	--