MEETING OF THE BOARD OF DIRECTORS OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Jointly with the

PLANNING & OPERATIONS COMMITTEE

Staff: R. Hunter, K. Seckel, J. Berg,

H. De La Torre, K. Davanaugh

June 3, 2019, 8:30 a.m. Board Room

P&O Committee:Director Yoo Schneider, Chair
Director Tamaribuchi
Director Dick

Ex Officio Member: Director Barbre

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 ITEMS

1. LANDSCAPE DESIGN AND MAINTENANCE ASSISTANCE PROGRAM

DISCUSSION ITEM

WEROC GIS DATA AND MAPPING UPDATE

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.)

- 3. STATUS REPORTS
 - a. Ongoing MWDOC Reliability and Engineering/Planning Projects
 - b. WEROC
 - c. Water Use Efficiency Projects
- 4. REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, WATER USE EFFICIENCY, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, 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

June 19, 2019

TO: Board of Directors

FROM: Planning & Operations Committee

(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter Staff Contact: J. Berg, Director of WUE General Manager R. Davis, WUE Analyst II

SUBJECT: Landscape Design and Maintenance Assistance Program

STAFF RECOMMENDATION

Staff requests the Board authorize the General Manager to enter into professional services agreements not to exceed \$160,000 with:

- 1. The Plant Nerd, Inc. and EcoTech Services to provide landscape design assistance,
- The Plant Nerd, Inc. and TerraWorks Studio to provide landscape maintenance assistance, and
- 3. Other firms (to be determined) who demonstrate they are qualified to do the work and agree to a competitive fee structure.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On March 15, 2017, the Municipal Water District of Orange County (MWDOC) Board of Directors approved funding for a landscape design assistance program. That program resulted in the creation of design templates for use on the MWDOC turf removal website and personalized landscape designs for Turf Removal Program participants. The landscape design assistance program helped boost participation in the Turf Removal Program and resulted in landscape conversions with greater aesthetic appeal.

Landscape water use accounts for approximately 50 percent of total water use in Orange County, and the water savings potential is relatively untapped. In 2004, the Municipal Water District of Orange County began offering a variety of landscape rebates, starting with

Budgeted (Y/N): Y	Budgeted amount: \$160,000	Core	Choice _X_

Action item amount: \$160,000 | Line item: Fund No.

Fiscal Impact (explain if unbudgeted): The proposed design and maintenance assistance will be funded through the Metropolitan Water District Member Agency Administered Program. This project was approved on Wednesday March 20, 2019 to receive \$160,000.

Smart Irrigation Timers to promote irrigation scheduling efficiency. This water savings opportunity was pioneered in Orange County and has resulted in quantifiable and reliable savings over time. Since then, we have expanded the opportunities to include low-volume sprinkler nozzles (2007), turf grass removal (2010), spray-to-drip conversions (2014), education, landscape design assistance pilot program (2017), and regulations such as landscape ordinances. These efforts focus on both residential and commercial landscapes. Ultimately, we are seeking to establish a transformation of urban landscapes to better match the water needs to our local climate and available water resources. That said, we are NOT advocating for the complete removal of turf grass; rather, we are advocating for functional turf areas that provide for recreation and other beneficial uses.

Staff is now proposing to reinstate landscape design assistance into our portfolio of landscape programs and to add a landscape maintenance component. Landscape design has been found to be one of the biggest barriers for homeowners to overcome when participating in our Turf Removal Rebate Program. Our intention is to break down barriers and help ensure aesthetically appealing landscapes that will be adopted/emulated by others. Providing participants with customized maintenance plans will help ensure that water efficient maintenance practices are used and that the landscapes retain their appeal over time. Maintenance is a growing area of concern as more lawn-alternative landscapes are installed. It is crucial that the landscapes are well maintained to ensure reduced water usage and remain aesthetically pleasing. The proposed Landscape Design and Maintenance Assistance Program will provide participants with customized landscape designs and maintenance plans to achieve maximum water savings and maintain aesthetically appealing landscapes over time.

DETAILED REPORT

The proposed Landscape Design and Maintenance Assistance Program (Program) will provide one-on-one landscape design and maintenance plan assistance to approximately 100 residential property owners. The one-on-one design assistance will include consultation, a planting plan, irrigation design plan and materials list. The maintenance consultation will include consultation, an irrigation water budget, and a personalized maintenance guide for the plant materials selected for each landscape.

Participants in the Program will be asked to select plants they like from a designated list of plants that are well adapted to Orange County's climate. Plant selection is a critical component of the program and is designed to create ownership in developing and maintaining the participant's landscape. The use of designs produced through this effort will extend beyond the individual receiving the one-on-one assistance; the best and most adaptable designs will become templates posted on MWDOC's website that can be used by other residents, thereby greatly expanding the usefulness of each design.

Landscape design packages will be developed to meet the architectural requirements of Homeowner Associations to streamline the HOA approval process. This has been successfully accomplished by Santa Margarita Water District's (SMWD) SustainaBlue landscape design assistance program (http://www.smwd.com/conservation/landscape/); MWDOC will model SMWDs approach and will include Metropolitan Water District of Southern California (Metropolitan) approved storm-water capture features.

Request for Proposals Process

Staff composed and distributed a Request for Proposals (RFP) outlining the desired services and schedule for the MWDOC Landscape Design and Maintenance Assistance Program. On March 25, 2019, the RFP was distributed to more than 30 landscape design and maintenance firms thought to be capable of providing the needed services. On April 2, 2019, staff held a meeting to review the RFP with potential respondents and give them an opportunity to ask questions of clarification regarding the desired work to be performed. Three organizations attended this meeting. The RFP required proposals to be submitted to MWDOC on April 11, 2019. Five landscape firms submitted proposals for the design portion of the Program: Artscape Gardens, Creations Landscape Design, EcoTech Services, Inc., The Plant Nerd Inc., and TerraWorks Studio. Three landscape Gardens, The Plant Nerd, Inc., and TerraWorks Studio.

Staff convened a review panel to evaluate and score proposals and recommend firm(s) for MWDOC Board Consideration. The review panel consisted of six representatives from five agencies including MWDOC, Irvine Ranch Water District, Mesa Water District, Santa Margarita Water District, and the City of San Clemente.

The review panel ranked the firms based on five factors: their scope of work and methodology, team experience and capabilities, quality of work, ability to staff and complete all work, and their pricing. The review panel felt that more than one design assistance firm was needed to meet coverage throughout Orange County, Program demand and schedule. Table 1 outlines the fee structure for the two most highly ranked design firms, and Table 2 outlines the fee structure for the two most highly ranked maintenance firms.

Table 1 <u>Landscape Design</u> Assistance Fee Structure				
Consultant Design Packages With Onsite Consultations				
The Plant Nerd, Inc.	\$1,130 (North OC) \$1,155 (South OC)			
EcoTech Services, Inc.	\$1,125 (North OC) \$1,175 (South OC)			

Table 2 <u>Landscape Maintenance</u> Assistance Fee Structure				
Consultant	Maintenance Packages With Onsite Consultations			
The Plant Nerd, Inc.	\$450 (North OC) \$810 (South OC)			
TerraWorks Studio	\$875 (North and South OC)			

Metropolitan has approved \$160,000 through the Metropolitan-Funded, Member Agency-Administered funding allocated to MWDOC. Staff requests the Board authorize the General Manager to enter into professional services agreements not to exceed \$160,000 with:

- 1. The Plant Nerd, Inc. and EcoTech Services to provide landscape design assistance,
- 2. The Plant Nerd, Inc. and TerraWorks Studio to provide landscape maintenance assistance, and
- 3. Other firms (to be determined) who demonstrate they are qualified to do the work and agree to a competitive fee structure.

Should other firms be contracted with, staff will inform the Board via the monthly Water Use Efficiency Projects Status report contained in the Planning and Operations Committee packet.



DISCUSSION ITEM June 3, 2019

TO: Planning & Operations Committee

(Directors Yoo Schneider, Dick, Tamaribuchi)

FROM: Robert Hunter, General Manager

Staff Contact: Kelly Hubbard, Director of Emergency Programs

SUBJECT: WEROC GIS Data and Mapping Update

STAFF RECOMMENDATION

Staff recommends that the Planning & Operations Committee receives and files the report and provides input as appropriate.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

The WEROC mapping program supports not only WEROC's response coordination, but also day-to-day projects for WEROC, MWDOC and its member agencies. These maps serve as the basis of MWDOC's and WEROC's mapping efforts and are updated and maintained by the Center for Demographic Research (CDR). Sharing and utilizing the maps for collaborative planning processes benefits MWDOC, our Member Agencies and outside coordination agencies (when appropriate) through enhanced information sharing, situational awareness and ongoing partnerships.

The maps include agency boundaries (political or service territory), regional pipelines and the location of key local agency facilities. The sharing or use of the maps has historically been through a paper copy or at times a PDF of a specified area of service related to a project or event. With advances in the use of technology and increased use of GIS at all levels, the requests for maps, and specifically the electronic GIS data, is increasing. Also, we are finding more and more uses for the maps to fulfill project requirements.

Budgeted (Y/N): N	Budgeted a	amount: \$0	Core X	Choice	
Action item amount: \$1	9,643	Line item: 5010-25-7040 Other Professional Fees			
Fiscal Impact (explain if unbudgeted): Costs would come from WEROC Operational Reserves					

The current format of the WEROC mapping files (commonly referred to as datasets) was developed and adapted over time as technology and software changed and advanced, and as the various formats of data provided by member agencies also changed and advanced. The current configuration of the underlying datasets have not undergone a "scrubbing" of the datasets in some time, creating inefficiencies in the time needed to complete projects and impacting the accuracy of the maps. This is resulting in additional time being incurred for projects both now and into the future if the datasets are not improved. This project now being implemented will enhance the accuracy of the datasets for our use and for sharing with others, and should reduce overall mapping costs and turn-around time per project, through efficiencies in utilizing the improved data moving forward.

DETAILED REPORT

History of the WEROC Mapping Program

Back in 2000, the WEROC Program, with support from MWDOC Engineering staff, started an effort to create standardized maps of the WEROC member agencies' systems to be used in the WEROC EOCs. At that time, very few of the utilities had electronic mapping capabilities, and many of the maps were hand-digitized by CDR when first added to the GIS database. Since this original effort, WEROC Staff, MWDOC Engineering Staff and CDR have worked together to accomplish several goals and tasks in order to keep these maps current:

- Approximately every 3 years, WEROC works with Member Agencies to review and update the maps for changes in boundaries and facilities labeling and locations (last update completed in 2018);
- MWDOC staff share changes and updates with CDR on a regular basis as changes are identified. Some of these changes come from LAFCO when boundaries are adjusted and some come from our agencies as they review and utilize the maps;
- Map updates have also been triggered by advancements in software and technology to keep the datasets current with the latest versions of GIS software being utilized, e.g. moving from ESRI's ArcView to ArcMap;
- In 2006, WEROC requested and added mapping for the WEROC wastewater utilities: and
- In 2009, WEROC worked with CDR to develop the WEROC Water and Wastewater Atlas Maps that could be utilized at the EOC's and in the field at incident command locations to identify and protect key facilities. These were updated during the 2018 update.
- One of the newer uses for the maps is associated with AlertOC (Orange County's reverse emergency notification system) in being able to download the agency service territory for direct notification of consumers if and when needed;

Historically, as these projects were pursued, CDR and MWDOC have not provided time or funding to standardize, scrub and audit the entire underlying datasets. Our projects have largely focused on corrections and updates needed to obtain a visual map for printing or use in a PDF format. Since the underlying infrastructure datasets originated from multiple sources in several different formats at different times over the years, work on the datasets to aggregate them, process, clean, and standardize them has never been a top priority (e.g., remove obsolete infrastructure, eliminate extraneous nodes created from merging years of various data sources & formats). At this time, we are embarking on this effort with CDR before we use the datasets for additional projects or share them with others where the location of key facilities may be critical (i.e., the OC Fire Authority). Overall this effort

should improve the efficiencies for both MWDOC and CDR for our own projects and ensure an improved accuracy as the data is shared with and used by other agencies, in a GIS format. The work being undertaken includes the following:

1. Restructuring of the Datasets -

In the past as projects progressed, new maps were built from previous mapping versions or from multiple data sources using specific attributes (colors, titling, boundaries, etc.) desired for that **specific** set of maps. What we have found is that working in this manner was efficient for getting our projects completed initially. However, when updates were required, it required CDR to update all prior mapping versions in the event they were used again. As our library of maps has increased over the years, this process has become more time intensive requiring a GIS technician to manually identify and modify each data point within multiple datasets to keep maps current. Reorganization of the multiple datasets can allow for the creation of new maps utilizing a single dataset, in which only specific pieces of infrastructure or attributes are selected to be included or not included for any one project, while keeping all attributes in the dataset. Working from a single dataset will improve overall efficiencies.

2. Accuracy of the Dataset -

The WEROC maps are accurate for the scale for which they were designed and for the attributes selected to be included in the end-product mapping (previously only print or PDF versions), based on the projects' purpose. Because of the scale and the types of attributes selected certain infrastructure locations and labels were adjusted so that it can be clearly displayed on our printed or PDF maps. A common example is multiple pipelines running in the same street. For display purposes, some of the pipelines are given "offsets" to move them over a bit to avoid layering of the facilities on top of one another. When sharing the GIS data with another agency, CDR will need to audit and scrub the underlying data to ensure the receiving agency can identify the actual location of the pipelines from the display location of the pipelines.

Additionally, some GIS layers have extra records or extra fields of data that relate to older software formats (e.g. CAD data imported into GIS). During the updating process with CDR, these data will be scrubbed to ensure the integrity of the database. This is not a simple or inexpensive process, but will provide a more complete and accurate database for use on all future projects.

OCFA Collaboration

One of the recent requests for the GIS data is for the location of key water facilities in coordinating response efforts with the OCFA. During previous fires, WEROC staff has shared printed or PDF maps with various fire agencies to coordinate access to or the protection of critical water and wastewater facilities, as well as to enhance coordination of resources and support between response agencies. Over the years OCFA staff has expressed an interest in receiving the underlying WEROC GIS data for their use prior to an event. The goal in sharing this information is to enhance firefighter awareness of critical water and wastewater facilities for access and protection during response efforts. We believe the sharing of data will enhance the situation awareness to improve response coordination in the field during an urban or wildland fire. Mapping information would be incorporated directly into tools used by dispatch, Fire Apparatus Engineers, and at Incident Command Posts during larger events.

Following California's historic fire season in 2018, WEROC and OCFA staff recently refocused on reviewing how water and fire agencies can collaborate and share GIS mapping data to enhance response efforts. The GIS database improvements discussed should be completed prior to the sharing of the database with OCFA. MWDOC, working with legal counsel, has signed a non-disclosure agreement with OCFA, protecting the data from being further shared by OCFA without MWDOC/WEROC consent.

Estimated Costs

The current Scope of Work includes two phases:

Phase 1 - The initial effort needed to collect, organize, and standardize the WEROC GIS data to address the concerns and needs identified above for all WEROC and MWDOC mapping projects moving forward. Cost: \$15,301

Phase 2 – Export a subset of data within OCFA's service area into a GIS geodatabase with only the specific datasets approved by the WEROC Program Director for OCFA use. Cost: \$4,314

This project was not specifically budgeted for this year or next, although we have had several on-going discussions with CDR regarding the best way to improve the database and efficiencies of using the database for our mapping needs. The request to share data with OCFA, we believe, is reason to move ahead at this time as heightened concerns for wildland fires, especially given the anticipated growth of wildland vegetation due to the availability of water this year. This project has large benefits that will accrue to MWDOC and our agencies in improving our coordination with OCFA.

Staff inquired as to whether Homeland Security grant funding in Orange County could be made available for any component of the project costs, but was informed that current grant funds had already been allocated.

COMMITTEE OPTIONS

Option #1: This item is for discussion with the P&O Committee with the only action requested being to receive and file the report. The Project is within the General Managers authority. The Committee can provide input and suggestions to staff as this project moves forward. The estimated cost of the work by CDR is \$19,643 with the funding coming from the operational reserves of WEROC.

Fiscal Impact: Reduces the operational reserves of WEROC.

Business Analysis: Results in future improved efficiencies for all mapping projects by MWDOC and WEROC. The cost of providing the data to OCFA is a very reasonable level of expenditure to improve coordination and response during fire events in OC.

STAFF RECOMMENDATION

Option #1 is the recommended option.

ENGINEERING & PLANNING

South Orange County Emergency Service Program

MWDOC, IRWD, and Dudek have completed the initial draft 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.

A meeting was held on April 11, 2019 with IRWD and South OC agencies to discuss the findings of the draft Planning Level Reliability Alternatives Analysis Report and set follow-up actions agreed to by the group.

This is a starting point of a discussion on cost-sharing facilities and operations that will ultimately involve negotiations directly between SOC Agencies and IRWD. These discussions could also involve discussions and negotiations between SOC and other groundwater producers as well.

One of the summary conclusions of the study is that there are options available to secure emergency supplies for the SOC agencies either:

- From IRWD without using the EOCF#2 or
- From IRWD, or other groundwater producers, by using the EOCF#2.

Follow-up Recommendations

- 1. It was noted that one of the operational improvements that would help IRWD get more water to SOC would be to add Variable Frequency Drives (VFD's) on the pumps at the Zone 1 pump station and the costs appear reasonable to do so. Dudek and IRWD staff met on May 6, 2019 to determine the scope of work for these improvements and will be bringing their findings back to the full group soon.
- 2. The ability of the SOC agencies to handle variable flows was also discussed. MWDOC suggested that a working group comprised of MWDOC, Dudek, MNWD and SCWD get together to discuss the operational issues associated with variable flows and report back to the main group. A meeting is being scheduled in June 2019 for the workgroup to discuss details.
- 3. Agencies were asked to think about next steps and a follow-up meeting is being scheduled in June 2019 to get back with the full group.

Strand Ranch Project

MWDOC is using the modeling from the Orange County Reliability Study to evaluate how "extraordinary supplies" from the Strand Ranch Project can be utilized by the MWDOC agencies to provide drought protection over the next 7 to 11 years or longer. MWDOC's initial response to the IRWD proposal was transmitted to IRWD staff for review and comments. The MWDOC response

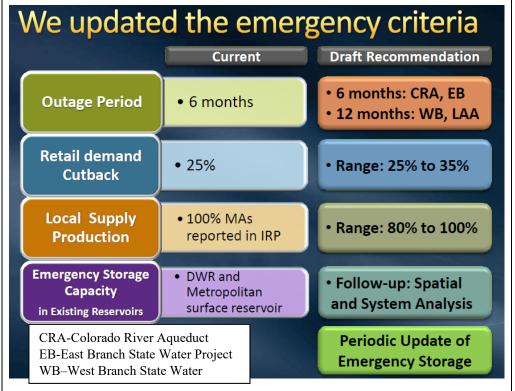
did not have explicit proposal changes but suggested areas for follow-up by IRWD. Staff anticipates it will take a month or so for IRWD to review, analyze and provide a reaction and response to MWDOC. Staff believes that entering into an arrangement with IRWD to have the ability to call on the extraordinary supplies on an "as-needed" basis could prove to be beneficial, if the terms and conditions can be worked out.

MET Evaluation of Regional Storage Portfolio (ERSP)

MET's emergency water storage objective is based on the potential for major earthquake damage to the State Water Project and Colorado River aqueducts that transport imported water supplies to Southern California (following a San Andreas M7.8 'Great ShakeOut' scenario event developed by the US Geological Survey).

MWDOC staff participated in 4 Member Agency Workgroup sessions to provide input on updating MET's emergency storage objective.

MET staff presented an update to the evaluation of emergency storage criteria at the May 13, 2019 Water Planning and Stewardship Committee, which included a presentation and a White Paper attachment.



The MET staff recommendation is to increase MET's emergency storage objective from 630,000 AF to 750,000 AF (19% increase) and to periodically revisit the objective. MET staff is currently reviewing and incorporating feedback to finalize the White Paper and then beginning a similar type of evaluation for dry year storage.

Poseidon	Poseidan continues to work with the Santa Ana Regional Water Quality Control			
Resources	Poseidon continues to work with the Santa Ana Regional Water Quality Control Board (SARWQCB) on renewal of the NPDES Permit for the HB Desalination Project. Prior to issuing the permit, the Regional Board must make a determination that the project uses 'the best available site, design, technology (with a strong preference for sub-surface intakes), and mitigation measures feasible' as required by the Ocean Plan Amendment.			
	The Regional Board schedule for the permit is:			
	Draft Permit July 2019, followed by a 30-day comment period.			
	Public Workshop August 2, 2019			
	Board Hearing October 25, 2019			
	Assuming success, Poseidon would then seek a permit from the California Coastal Commission. The next meeting of the Santa Ana Regional Water Quality Control Board will be held on June 14 and an anticipated Poseidon update is expected for the agenda.			
SMWD Rubber	SMWD has completed the necessary technical studies and will be issuing the			
Dams Project	response to comments on the Draft Environmental Impact Report (DEIR) soon			
(San Juan	and hope to be in front of their Board in June 2019.			
Watershed Project)				
Doheny Ocean	South Coast WD released the Doheny Ocean Desalination Project Draft			
Desalination	Environmental Impact Report (EIR) on May 17, 2018 and the EIR public			
Project	comment period closed on August 6, 2018. Consultant GHD has finished the additional technical studies needed to address the comments received. South Coast WD anticipates bringing the Final EIR to their Board for certification in late June 2019.			
	South Coast WD staff submitted a grant application for up to \$20 million for project construction through Bureau of Reclamation 'Water SMART: Desalination Construction Projects under the WIIN Act'. South Coast has been notified that they are in line to receive \$8.3 M in funding. Even though the federal funds for these grants were appropriated in prior years, under the 2016 WIIN Act, the law requires that the E&W Appropriations Subcommittee list the projects for which the Secretary of Interior intends to award grants. Congressman Levin is acting as the lead office on this request in the House.			
Water Quality and Other Integration Issues for Water	The MWDOC Board authorized staff to award contracts to both Hazen Sawyer and Black & Veatch to conduct review into existing research for integration of water supply projects into existing water systems. MWDOC is interested in anticipating issues associated with integrating water with various qualities. The pH, alkalinity, TOC, bromide, chloramine residual, and other water quality			

Supply Projects in OC	characteristics may vary among these water sources on a daily, monthly and seasonal basis. Planning needs to account for the water quality and operational considerations or risk unintended consequences. Our goal is to understand the issues prior to any of these projects going on-line. Both consultants provided their initial drafts to staff for comments. The final papers are anticipated to be released in June along with recommendations made by both consultants.
Phase 1 – Investigation Phase for a Hydraulic Model	MWDOC has initiated the Phase 1 "Investigation Phase" to develop a specification and recommendations for development of a hydraulic model of the regional pipeline system in OC, including water quality modules. The Investigation Phase includes developing scopes of work required for successful model implementation and recommendations on software selection. Key aspects of the Investigative Phase include meetings with our agencies and MET water quality staff.
Meetings	Karl Seckel participated in a joint Vital Link/Santiago Canyon College Career Day aimed a linking students taking water courses with potential employers/mentors to provide job search and interviewing skills. Vital Link is a non-profit organization dedicated to preparing students for their future careers through experiential learning opportunities. This is the second year MWDOC participated. About 7 of our member agencies or other local agencies participated with about 30 students taking part in the half-day event.
	Karl Seckel participated in the May San Juan Basin Authority meeting. The bulk of the discussions centered on the 2019 Adaptive Pumping Management (APM) Plan and how basin operations occur in the two basin zones, the Stonehill Management Zone and the Inland Management Zone, divided by the recently investigated bedrock high area. Further monitoring of flows through the bedrock high are part of the monitoring for the 2019 APM Plan.
	Charles Busslinger participated, as a member of the South OC Watershed Management Area Prop 1 ad-hoc committee, in an inter-regional coordination meeting on May 16, 2019 of the Tri- County Funding Area Coordinating Committee (Tri-FACC) for the San Diego IRWM funding area. The three entities discussed coordination of their actions relating to upcoming Prop 1, Round 1 IRWM grant funding.

Status of Ongoing WEROC Projects May 2019

Description	Comments
Coordination	Ongoing: WEROC, with Michael Baker as the lead consultant, is facilitating 19
with WEROC	agencies through the process of updating the Orange County Water and
Member	Wastewater Multi-Jurisdictional Hazard Mitigation Plan. Update: The Hazard
Agencies	Mitigation Plan was approved by California Office of Emergency Services
	(CalOES). Staff received "required revisions" from FEMA (very common for a
	first submittal) and is working with participating agencies to provide the
	additional information requested both during a working lunch and through
	emails. A major area of concern in FEMA's review is their initial refusal to
	recognize our city partners within this plan. This issue was identified in the 2012
	update and we believe that we met the expectations that were communicated to
	us at that time. Kelly Hubbard is working with the city participants, the
	consultant, CalOES and FEMA to resolve this issue. The plan with revisions and
	a letter addressing FEMA's concern with the City Departments was resubmitted
	to FEMA on May 1, 2019.
	Ongoing: Kelly launched an effort to facilitate a joint RFP and contract with
	participating WEROC member agencies to address the new requirements of the
	America's Water Infrastructure Act (AWIA). On October 23, 2018, Congress
	signed into law the American Water Infrastructure Act (AWIA) (S.3021, Law
	115-270). Per Section 2013 of Title II, the AWIA requires utilities to conduct a
	Risk and Resilience Assessment (RRA) of their community water systems and
	develop a corresponding Emergency Response Plan (ERP). March 31, 2020 for
	systems serving population of 100,000 or more. New actions: The RFP was
	posted to the MWDOC website and shared via Linkedin and multiple social
	media websites on May 15, 2019. There is a mandatory pre-meeting on June 4 th
	and Proposals are due by June 13 th at 4:00pm. Participating Agencies have been

asked to start gathering the documents needed for the first step of the process, which is to complete a compliance crosswalk.

The WEROC Quarterly Coordination meeting was held on May 2. The meeting covered updates on various planning efforts, legislation impacting emergency management, a five-year training and exercise discussion, and a review of the draft AWIA RFP.

Janine Schunk arranged for a thank you lunch for the operations crews from El Toro Water District. These crews assist WEROC staff on a regular basis with maintenance and generator support at the WEROC South EOC.

Kelly met with both Moulton Niguel Water District and Orange County Water District on separate occasions to provide information and review of emergency planning efforts.

Training and Programs

Kelly participated in a planning conference call with EPA to facilitate an EPA hosted tabletop exercise in August. The exercise scenario will be focused on a power outage.

Kelly with support from Bryan Lopez, City of Santa Ana Water Division, hosted the Orange County Water Association (OCWA) 11th Annual Safety Fest. Approximately 100 staff from OC water and wastewater utilities attended this full day of training which includes contact hours.

Coordination with the County of Orange

Kelly attended the May OCEMO meeting in Newport Beach. She provided a presentation on Lessons Learned for Joint Information Management from the Camp Fire. Delcie Hynes of Orange County Social Services Agency also presented on Lessons Learned regarding Shelter Response during the Camp Fire.

Kelly attended the OC Urban Area Working Group meeting on May 8 which allocates and approves grant funding within OC. She spoke with several individuals on the Working Group to build support for potential future projects for water and wastewater agencies.

Kelly attended the OC Operational Area Executive Board on May 8 as the voting representative of ISDOC. Of significance was an update on a request for a Presidential Declaration for the February 14, 2019 flood event. OC was turned down for the Presidential, but will receive CA Disaster Assistance funding for eligible expenses. Several WEROC agencies had significant damages and will be eligible for reimbursement. Additionally, the Executive Board and OC Emergency Management Council approved the joint body to be the new approval body for the County's newly formed OA Alert & Warning Advisory Committee.

Ongoing: OC OA Alert and Warning Working Group is a new committee to develop county-wide public Alert and Warning policies, procedures and tools such as request and approval forms. This will be a 6 month planning effort.

Coordination with Outside Agencies

On-going: California Public Utilities Commission (PUC) proceedings regarding the Impacts from De-Energization with a Focus on First Responders and Local Government. MWDOC has received party status to these proceedings. Party Status ensures that we receive all communications regarding the proceedings and that our comments are included officially for consideration. Previous Actions Reported:

- February 7, 2019 MWDOC submitted comments to the PUC from 19 OC participating water and wastewater agencies.
- February 19, 2019 Kelly represented MWDOC and the 19 agencies at the pre-conference hearing in Sacramento to provide support to the comments submitted and answer questions from the PUC.

- March 25, 2009 MWDOC Comments to Phase 1 Scope and PUC Energy Division Staff Response.
- April 2, 2019 Joint Reply Comments of Municipal Water District of Orange County, Valley Center Municipal Water District and Padre Dam Municipal Water District.

On May 15, 2019 BBK filed Joint Reply Comments on the Proposed Decision on behalf of MWDOC, Valley Center Municipal Water District and Padre Dam Municipal Water District. This was the final opportunity to provide input on the Proposed Decision. The Proposed Decision included many of the recommendations that MWDOC had requested to be incorporated. Staff believes that the decision will strengthen current Power Utility notification and coordination practices with Water Utilities to prepare their operations and facilities for a de-energization event. The joint comments addressed a few areas of technical clean-up of the language for clarity and believed intent. Once the Decision is formally adopted, staff can provide a more detailed report on impacts and next steps.

Kelly attended the County hosted Southern California Edison PSPS meeting. Edison is adapting their plan to meet the soon to be adopted PUC ruling.

EOC Readiness

Janine participated in the OA and MET radio tests and WebEOC tests. She also facilitated the WEROC monthly radio test.

Janine arranged for the cleaning of both the North and South EOC.

Janine worked with AT&T to install additional phone lines at the South EOC. Functional exercises over the last couple of years have shown the need for more phone lines. Since moving the phone accounts to a new government rate program, this is a manageable cost. The install took multiple appointments in order for AT&T to add lines coming into the property, as well as the building.

Status of Water Use Efficiency Projects

June 2019

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	In April 2019, 117 smart timers were installed in Orange County. To date, 24,951 smart timers have been installed through this program.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	In April 2019, 65 rotating nozzles were installed in Orange County. To date, 567,367 rotating nozzles have been installed through this program.
SoCal Water\$mart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In April 2019, 118 high efficiency clothes washers and 11 premium high efficiency toilets were installed through this program. To date, 118,782 high efficiency clothes washers and 60,321 high efficiency toilets have been installed through this program.
SoCal Water\$mart Commercial Rebate Program	MWDSC	Ongoing	Ongoing	In April 2019, 296 commercial premium high efficiency toilets, 8 residential premium high efficiency toilets, and 17 plumbing control valves were installed through this program. To date, 104,492 commercial devices have been installed through this program.
Industrial Process/ Water Savings Incentive Program (WSIP) Industrial Process/ Water	MWDSC	75%	July 2020	This program is designed for non-residential customers to improve their water efficiency through upgraded equipment or services that do not qualify for standard rebates. Incentives are based on the amount of water customers save and allows for customers to implement custom water-saving projects. This fiscal year, three projects have been completed, which will save over 145 AFY.

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Savings Incentive Program (WSIP) (cont.)				Total water savings to date for the entire program is 913 AFY and 3,689 AF cumulatively.
Turf Removal Program	MWDOC	Ongoing	Ongoing	In May 2019, 31 rebates were paid, representing \$282,658 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 22.2 million square feet of turf.
Spray to Drip Conversion Program	MWDOC	Ongoing	Ongoing	This is a rebate program designed to encourage residential and commercial sites to convert their existing conventional spray heads to low-volume, low-precipitation drip technology. To date, 247 residential sites and 69 commercial sites have completed spray to drip conversion projects.
Recycled Water Retrofit Program	MWDSC	100%	September 2018	This program provides incentives for commercial sites to convert dedicated irrigation meters to recycled water. To date, Metropolitan has provided a total of \$545,868.18 in funding to 33 sites irrigating 113 acres of landscape, and MWDOC has paid a total of \$56,950.00 in grant funding to 20 of those sites. The total potable water savings achieved by these projects is 331 AFY.