BACKGROUND AND CONTEXT FOR THE TOP 10 QUESTIONS FROM THE INITIAL MEETING

Board Strategic Planning Meeting

APRIL 29, 2023

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MWDOC'S MISSION & ROLES

1. WHAT HAS MWDOC'S ROLE BEEN IN PROJECT DEVELOPMENT AND HOW HAS THAT CHANGED OVER THE YEARS?

Upon formation, MWDOC's initial role in project development focused on the construction of key imported water pipelines, feeders, and service connections. Regional studies and plans allowed MWDOC to advocate, at Metropolitan, for the location and capacity size of certain pipelines meeting the growing needs of Orange County (e.g., 2nd lower feeder). This led to further regional feasibility studies, such as the MWDOC South County Water Facilities Study, which sought to identify what type of water supply facilities were needed to meet the future needs of the southern portion of the County.

In the 1980s MWDOC expanded its role through the management and operation of the Allen-McColloch Pipeline (AMP), a 26-mile imported water feeder which brings blended treated State Water Project (SWP) and Colorado River water to the eastern and southern portions of the County. However, in 1995 MWDOC sold the AMP to Metropolitan, leaving the pipeline operations and maintenance business.

Concurrently at Metropolitan in the 1990s, MWDOC began assisting its member agencies in developing their own projects through the Local Resources Program (LRP) and advocating for further development of local projects within Metropolitan's Integrated Resources Plan (IRP). Following the sale of the AMP, MWDOC increased its focus on advocacy and the administration of Metropolitan funding. MWDOC served a key role in supporting the procurement of Metropolitan LRP funding and groundwater storage agreements for the first phase of the Orange County Water District's (OCWD) Groundwater Replenishment System (GWRS) and the OCWD, MWDOC, and Metropolitan Conjunctive Use Program (CUP) agreement. With continued growth and expansion of recycled water throughout the County, MWDOC's support and sponsorship of member agency LRP applications has remained a cornerstone function.

In recent years, **MWDOC has evolved into a facilitator for project development**. For example, MWDOC staff initiated and facilitated a workgroup of interested agencies, managed the financial and engineering consultants, and led the early preliminary design work in the planning and development of Ocean Desalination for the Huntington Beach and Doheny projects. Additionally, MWDOC assisted in the submission of the LRP applications for both projects.

MWDOC also currently plays an administrative role in shared Metropolitan service connections, joint capacity pipelines, and treatment plants. For example, MWDOC performs the billing for the agencies participating in IRWD's Baker Treatment Plant.

As part of the recent member agency facilitated process, the opinion was held that "MWDOC has a role in facilitating and collaborating on supply development within the service area," but "MWDOC should only participate in supply development projects if the direct beneficiaries pay."

2. WHAT BENEFITS CAN MWDOC ADD TO LOCAL PROJECT DEVELOPMENT THAT CANNOT BE OBTAINED BY OTHER MEANS?

A mix of water resources, including local supplies, helps to protect the region from the impacts of drought cycles, climate change and extreme weather. For most agencies, when embarking on local project development, securing funding is a prevailing need. Therefore, Metropolitan supports and incentivizes several programs and initiatives that help the region develop local supplies to reduce the burden on imported supplies. **MWDOC's knowledge of Metropolitan's incentive programs eligibility, implementation process, and policies provide a benefit not easily replicated.**

MWDOC has a long history of ensuring that an agency's LRP application is successful, and more importantly, that the agency receives the maximum amount of funding eligible through the various Metropolitan programs (e.g., leveraging both the LRP[1] and the On-Site Recycled Water Retrofit Program[2]).

Recently, the development of local projects and programs have become more complex and multidimensional (i.e. multi-agency involvement, transfers, exchanges, etc.). Consequently, MWDOC staffs' understanding of Metropolitan's policies, institutional conditions, and legal terms, become very important to the success of a project. For example, the potential involvement and financial contributions from outside-of-county water agency partnership(s) in the Doheny Desalination project require knowledge of Metropolitan politics, policy, and conditions. MWDOC has been well suited to provide guidance and advocacy for the creation of such an arrangement.

[1] Metropolitan's Local Resources Program (LRP) accelerates the development of local projects by incentivizing agencies to construct recycled water, groundwater recovery, and seawater desalination projects.

[2] Metropolitan's On-site Retrofit Program provides financial incentives directly to public or private properties for costs associated with recycled water conversion from imported water irrigation or industrial systems.

REPRESENTATION AT METROPOLITAN

3. HOW DO MWDOC-MET DIRECTORS REACH AGREEMENT ON CRITICAL VOTES? ARE MEMBER AGENCIES CONSULTED? DO THE MWDOC-MET DIRECTORS CONSULT WITH DIRECTORS FROM THE THREE CITIES?

A core function of MWDOC is to be the representative of the ratepayers and member agencies of our service area at Metropolitan. We strive to ensure we properly advocate for the needs and services of all our member agencies at Metropolitan. Accordingly, there has always been an understanding that issues acted upon by the MWDOC-Metropolitan Board members must be evaluated and examined considering the unique needs of all Orange County's water agencies.

To best serve the entire region, we host a number of monthly meetings to **communicate the issues, actions, and upcoming activities at Metropolitan in order to receive feedback and direction from both our Directors and member agency representatives**.

The monthly meetings hosted by MWDOC include:

- Joint MWDOC-MET Board Workshop – attended by the MWDOC Board, MWDOC-MET Directors, member agency Directors and staff. Additionally, other Metropolitan Board members, such as those from the three cities, are always welcome to participate. This is a public meeting at which Metropolitan staff are often invited to present.
- MWDOC Member Agency Meeting – attended by member agency general managers and/or senior staff.
- OC MET Managers Meeting – attended by senior staff for MWDOC, OCWD, Santa Ana, Anaheim, and Fullerton.

The MWDOC-MET Directors also participate in the monthly Metropolitan Inland Caucus meeting. The purpose and intent of this meeting is for the Metropolitan Directors, representing several Inland as well as Orange County Metropolitan member agencies, to directly discuss and ask questions to Metropolitan senior management on the upcoming Metropolitan Board and committee discussion and action items. On critical votes, the MWDOC-MET Directors will also confer, within the parameters of the Brown Act, with other Metropolitan Directors with both aligned and opposing positions to yield a broader understanding of areas of concern.

That said, when a MWDOC member agency sees other opportunities for MWDOC to improve our communication with our member agencies on Metropolitan issues, we welcome their suggestions. Our goal is to improve our working relationship with our member agencies and ensure they receive the best representation at Metropolitan. For example, cooperatively with OCWD, we recently requested that Metropolitan establish a storage advisory committee comprised of senior staff from the region's groundwater management agencies, watermasters, reservoir managers, and their associated Metropolitan member agencies.

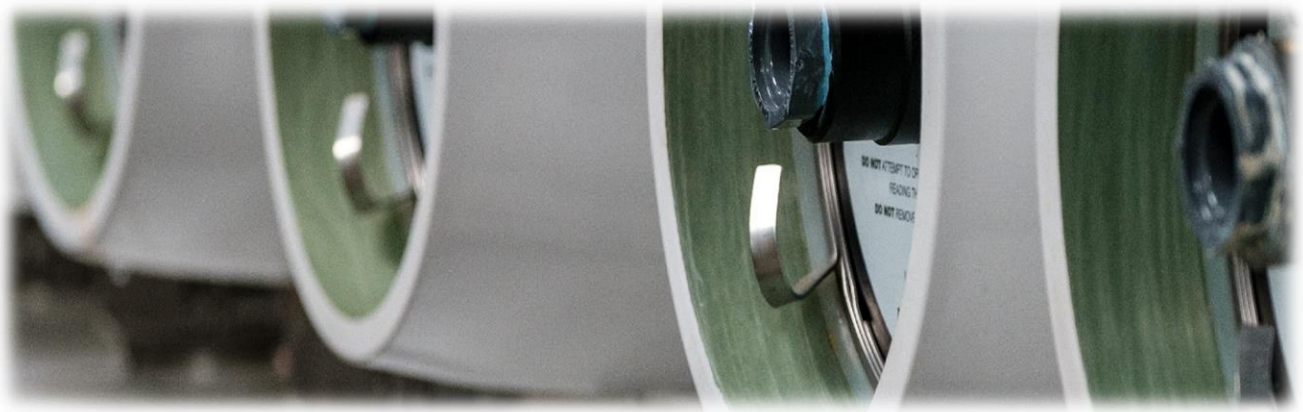
4. WHAT IS THE HISTORY OF THE LOCAL RESOURCE PROGRAM (LRP) AND HOW HAS IT HELPED ORANGE COUNTY? WHAT IS THE PRESENT STATUS OF THE LRP?

Since 1982, Metropolitan has invested in local regional water supply reliability projects through the Local Resources Program. The Local Resources Program (LRP) accelerates the development of local projects by incentivizing agencies within Metropolitan's service area to construct recycled water, groundwater recovery, and seawater desalination projects. Today, LRP projects support nearly half the recycled water and groundwater recovery production in the Metropolitan's service area. To date, Metropolitan has provided financial assistance to more than 116 projects across Southern California, producing over 1.3 trillion gallons of recycled water and recovered groundwater. Specifically, **within Orange County, the LRP program is responsible for the production of 1.3 MAF of water and has provided over $200 million of incentive funding to MWDOC member agencies**.

Today, the LRP program has the following benefits:

- Demand management programs, including the LRP, decrease and avoid operating and capital maintenance and improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities.
- The LRP results in available capacity in Metropolitan's system to convey both Metropolitan water and water from other non-Metropolitan sources.
- Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

Policy direction will define Metropolitan's continuing role in the development of local resources and promotion of water use efficiency and ensure that Metropolitan participates in an effective manner. Metropolitan's goals for reliability, resiliency, financial sustainability, and affordability will also provide clarity in water supply planning processes and establish the basis for Metropolitan/member agency roles and partnerships. The evaluation of Metropolitan's Business Model will provide the potential opportunities for change as a producer or partner in local projects, where local supply could even become part of Metropolitan's core supply.



RELIABILITY PLANNING AND ENGINEERING

5. WHAT ARE THE KEY FINDINGS OF THE CURRENT RELIABILITY STUDY, INCLUDING EXPECTED DEMANDS AND FUTURE SUPPLY?

The 2023 Orange County Reliability Study (OC Study) developed five water reliability planning scenarios which were added to the 2018 OC Study scenarios (See Attachment 1). These new scenarios use a 2050 planning horizon to analyze future water shortages for Metropolitan and Orange County based on updated information. Each of the five scenarios are deemed fully plausible and follow the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report and International Energy Agency forecasts of likely future global temperature conditions.

The following assumptions and considerations were included in these scenarios:

- Average demands similar to the average of Metropolitan's 2020 IRP demands
- IPCC and International Energy Agency forecasts of likely climate change futures
- Inclusion of new Metropolitan water supply projects

Note, none of the new scenarios are considered "Black Swan" or extreme scenarios, as absolute worst-case events were not assumed to occur. An absolute worst-case (or Black Swan) scenario would include:

- Very high projections of regional water demand
- A worst-case climate change forecast
- No implementation of new Metropolitan water supply projects

For each of the five new scenarios, water supply shortages were estimated in terms of magnitude and probability for the forecast period between now and 2050. *Table 1* presents the Metropolitan regional water demands and supplies for Scenario 4, which is the worst-case hydrology of the five plausible scenarios. *Table 2* presents total water demand and supplies for Scenario 4 for all of Orange County (for additional details see the 2023 OC Study).

Table 1. Metropolitan Region Water Demands & Supplies for Scenario 4 under Worst-Case Hydrology

Demand and Supplies (AFY)	2030	2050
Regional Water Demands (no restrictions)	3,559,000	4,108,000
Regional Local Water Supplies	2,173,371	2,313,837
Metropolitan SWP Supply	80,000	70,000
Metropolitan CRA Supply	550,000	470,000
Metropolitan Other Supplies*	270,629	169,163
Maximum Water Shortage	485,000	1,085,000
* Pure Water Southern California, storage, and transfers.		

Table 2. Total Orange County Water Demands & Supplies for Scenario 4 under Worst-Case Hydrology

Demand and Supplies (AFY)	2030	2050
Total Water Demand (no restrictions)	550,000	578,000
Local Supplies	306,000	285,005
Metropolitan Supply	139,000	103,995
Maximum Water Shortage	105,000	189,000

Table 3 presents the maximum water shortage without mandatory water demand restrictions and the probabilities that any sized shortage will occur for each scenario. The probabilities illustrate that by 2050, without the Delta Conveyance Project or some other additional water supply project delivering an equivalent amount of water to the Metropolitan region, Metropolitan and OC will be in some sort of water shortage condition approximately once every five years (Scenarios 2 & 4).

Assuming mandatory water restrictions are enforced during critical droughts, the net water shortages are presented in *Table 4* for each scenario.

Table 3. Water Shortages without Mandatory Water Demand Restrictions

Max Water Shortage w/o Water Demand Restrictions (TAF)

Region	Max Shortage (TAF) in 2030					Max Shortage (TAF) in 2050				
	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5
MET Service Area	209	508	508	485	485	0	1,100	927	1,085	718
OC Basin	24	66	66	70	70	0	153	122	130	86
South Orange County	10	30	30	31	31	0	57	47	52	35
Brea/La Habra	1	3	3	4	4	0	6	5	7	5

Probability of Any Shortage Occurring (%)

Region	Probability of Any Shortage (%) in 2030					Probability of Any Shortage (%) in 2050				
	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5
MET Service Area	3	4	4	4	4	0	20	10	20	9
OC Basin	3	4	4	4	4	0	19	10	20	9
South Orange County	3	4	4	4	4	0	19	10	20	9
Brea/La Habra	3	4	4	4	4	0	18	10	20	9

Table 4. Water Shortages with Mandatory Water Demand Restrictions

Max Water Shortage with 15% Water Use Restrictions in Place (TAF)

Region	Max Shortage (TAF) in 2030					Max Shortage (TAF) in 2050				
	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5	Sc 1	Sc 2	Sc 3	Sc 4	Sc 5
MET Service Area	0	33	33	15	15	0	535	362	538	171
OC Basin	0	6	6	9	9	0	87	59	67	23
South Orange County	0	10	10	11	11	0	37	27	32	15
Brea/La Habra	0	0	0	1	1	0	3	2	4	2

The following are Key Findings from the 2023 OC Study:

Key Finding 1. Under a hot/dry climate future coupled with 15% mandatory water demand restrictions and the most optimistic future water supply assumptions (i.e., maximum levels of local and regional reuse, increased water use efficiency, new Metropolitan transfers and storage, and implementation of Delta Conveyance Project), regional and Orange County water shortages can still occur. The maximum shortage in 2050 under these future conditions (Scenario 5) is 171 TAF for Metropolitan and 40 TAF for all of Orange County.

Key Finding 2. The value of the Delta Conveyance Project coupled with 250 TAF of increased regional storage in 2050 to the Metropolitan Region is 367 TAF, while the value to all of Orange County is 63 TAF.

The value of the DCP can also be seen in *Table 3* under the probability of any shortage occurring (i.e., ~10% reduction in the probability of a shortage between Scenarios 2 vs. 3, and 4 vs. 5) or a doubling of the time between shortage conditions from once every 5 years to once a decade.

Key Finding 3. Based on MWDOC's Economic Impacts of Water Shortages in Orange County report (July 2022), the present value (PV) cumulative benefit of reducing the water shortages in the 2023 OC Study is $3.9 billion or $2,540/AF when expressed as a unit benefit. In comparison, the PV unit costs of various proposed water supply projects in Orange County range from $1,950 to $2,350/AF[3]. In other words, projects with a total cost of less than $2,540/AF, which help to reduce the above referenced 40 TAF of shortages in OC, represent a net benefit to OC.

[3] Note that when calculating PV unit cost, both costs and AF water are discounted, which makes the PV unit cost appear greater than a simple unit cost where costs and water are not discounted.

ATTACHMENT 1 - PLANNING SCENARIOS FOR 2023 OC STUDY

Scenario Name	Climate Change Future*	Retail Water Demands for MET and OC	OC GW Basin Assumptions	Increased Local Water Supplies in MET Region	New MET Water Transfers and Storage	MET Pure Water So. Cal	Delta Conveyance Project (DCP)
1. Low Stress without Delta Conveyance	Warm/Wet	Med forecast with current water use efficiency	• BPP Target of 82% • Med SAR baseflows	• 110 TAF GW • 420 TAF Reuse	• 100 TAF CRA Transfers (2030)	102 TAF (2030)	Not implemented
2. Moderate Stress without Delta Conveyance	Warm/Dry	Med forecast with current water use efficiency	• BPP Target of 82% • Med SAR baseflows	• 60 TAF GW • 420 TAF Reuse	• 100 TAF CRA Transfers (2030)	102 TAF (2030)	Not implemented
3. Moderate Stress with Delta Conveyance	Warm/Dry	Med forecast with current water use efficiency	• BPP Target of 82% • Med SAR baseflows	• 60 TAF GW • 420 TAF Reuse	• 100 TAF CRA Transfers (2030) • 250 TAF MET Local Storage (2035)	102 TAF (2030)	Implemented (2040)
4. Significant Stress without Delta Conveyance	Hot/Dry	Med forecast with increased water use efficiency (280 TAF for MET, 45 TAF for OC)	• BPP Target of 82% • Low SAR baseflows	• 40 TAF GW • 420 TAF Reuse	• 100 TAF CRA Transfers (2030)	168 TAF (2035)	Not implemented
5. Significant Stress with Delta Conveyance	Hot/Dry	Med forecast with increased water use efficiency (280 TAF for MET, 45 TAF for OC)	• BPP Target of 82% • Low SAR baseflows	• 40 TAF GW • 420 TAF Reuse	• 100 TAF CRA Transfers (2030) • 250 TAF MET Local Storage (2035)	168 TAF (2035)	Implemented (2040)

Notes: Modeled impacts of climate change on future retail water demands, local groundwater and surface water, and imported water from State Water Project (SWP) and Colorado River (CRA).

GW = Groundwater
TAF = thousand acre-feet
SAR = Santa Ana River
BPP = OCWD Basin Pumping Percentage

Online dates for new MET projects and DCP shown in parentheses.

6. WHAT ARE THE WORST-CASE IMPLICATIONS OF VOLATILITY AND HYDROLOGIC EXTREMES ON THE SWP AND COLORADO RIVER WATER? WHAT CAN BE DONE ABOUT IT?

The 2023 OC Water Reliability Study examined the hydrology of the Metropolitan's SWP and Colorado River Aqueduct (CRA) deliveries under three climate change futures: (1) warm/wet; (2) warm/dry; and (3) hot/dry. These climate scenarios[4] were based on a subset of 16 global climate models that were downscaled to the appropriate regional watersheds.

Table 5 shows the change in temperature and precipitation from historical conditions that were used for the climate scenarios. These scenarios were chosen as they represent similar temperature and precipitation assumptions to, those forecasted in the IPCC 6th Assessment Report and International Energy Agency forecasts, where global temperatures are likely headed based on current and anticipated climate change (Greenhouse Gas emission reduction) efforts.

Table 5. Change in Future Climate in 2050 from Historical

2023 OC Study Climate Scenarios	Change in Temperature (°C) by 2050	Change in Precipitation (%) by 2050
Warm/Wet	1.0 - 1.8 increase	10 - 12% increase
Warm/Dry	1.5 - 2.0 increase	5 - 10% decrease
Hot/Dry	2.5 - 3.5 increase	5 - 10% decrease

These changed climate conditions were modeled for the SWP and CRA deliveries to Metropolitan using the US Bureau of Reclamation's hybrid-delta method. *Table 6* indicates the 2050 imported water deliveries for Metropolitan under the three climate scenarios without significant future improvements (e.g., Delta Conveyance Project). Under the plausible hot/dry climate future scenario, Metropolitan's imported SWP and CRA deliveries in 2050 are projected to be 1.60 MAF in an average hydrologic year and 0.54 MAF in a critically dry year.

Table 6. Metropolitan Imported Water in 2050 Under Climate Scenarios without Improvements

Metropolitan Imported Water w/o Future Improvements	Warm/Wet Future in 2050 (MAF)	Warm/Dry Future in 2050 (MAF)	Hot/Dry Future in 2050 (MAF)
SWP – Average Year	1.10	1.00	0.80
SWP – Wet Year	1.73	1.65	1.40
SWP – Critically Dry Year	0.09	0.08	0.07
CRA – Average Year	1.10	0.90	0.80
CRA – Wet Year	1.18	0.97	0.93
CRA – Dry Critically Year	0.85	0.57	0.47

[4] None of the new scenarios are considered "Black Swan" or absolute worse-case events (see question above for examples of extreme scenarios).

The following are recommendations from the 2023 OC Study:

- Orange County water agencies should continue to make investments in water reuse, water use efficiency, water transfers and banking, groundwater/surface water conjunctive use, and desalination.
- Orange County officials should advocate for a regional portfolio of water supplies for Metropolitan that includes: (a) investments in regional water reuse, (b) implementation of the Delta Conveyance Project, (d) new regional storage, and (d) exploration of regional, permittable seawater desalination.
- Orange County and Metropolitan should continue to study the evolving science of climate change and its impacts on water demands and supplies and develop adaptive management strategies to mitigate climate impacts.

In short, there are no "silver bullets" that will provide water reliability for Metropolitan and OC. The above information justifies an 'all of the above strategy' for water reliability.

RELATIONSHIP WITH MEMBER AGENCIES AND PARTNERSHIPS

7. WHAT WERE THE KEY TAKE-AWAYS FROM THE FACILITATED DISCUSSIONS WITH MEMBER AGENCIES PROCESS? WHAT ARE WE DOING IN RESPONSE?

The MWDOC Member Agency Facilitated Discussions were conducted in two phases. The first phase focused on collecting the views and opinions from all member agencies on MWDOC's performance and services, through a comprehensive interview process (a total of 37 interviews with water managers and elected officials in the MWDOC service area were conducted).

Key takeaways from the Phase I interviews:

- Common denominators among most respondents include an acknowledgment of MWDOC's foundational role as a Metropolitan member agency, an appreciation of the dedication and accessibility of MWDOC's staff (frequently mentioned), and praise for MWDOC's effectiveness in implementing demand management and public education programs.
- At the same time, many respondents believe MWDOC can improve responsiveness to its member agencies' needs and clarify the boundaries of its influence over decisions made by its member agencies.

Phase II sought further feedback through several member agency workshops to identify ways to improve MWDOC's services and advocacy and further define MWDOC's role and responsibility in Orange County and among the member agencies. Through a prioritization of issues, the workgroup was able to develop a consensus on the member agencies' and MWDOC's needs and expectations in three key categories: (1) Water Supply Planning; (2) Water Supply Development; and (3) Metropolitan Representation. Key takeaways in each of the three categories of discussion are identified in Table 7.

Table 7. Key takeaways from the discussion categories identified through the MWDOC Member Agency Facilitated Discussion Phase II.

Water Supply Planning	Water Supply Development	Metropolitan Representation
MWDOC and Member Agencies should share responsibility for water supply reliability planning.	MWDOC has a role in facilitating and collaborating on supply development within its service area.	Metropolitan Directors are expected to be as transparent as possible regarding the policy positions, intentions, actions, and reasons informing their votes.
MWDOC's planning role should focus primarily on imported supply reliability under varied conditions.	MWDOC should only participate in supply development projects if the direct beneficiaries pay.	Member agencies expect increased OCWD involvement in policy positions at Metropolitan, especially those impacting groundwater.
MWDOC should integrate member agency perspectives into its planning efforts.	New water supply opportunities outside MWDOC's service area should be driven primarily by Member Agencies.	
MWDOC should facilitate dialogue and collaboration on infrastructure, resources planning, and development.	There is a widely shared need for an improved decision-making process, greater collaboration, and more transparency in water supply development activities.	There is an expectation that member agencies play a role in the development of MWDOC policy positions, helping balance OC interests and broader regional needs.

From these facilitated discussions, there is a general belief that MWDOC and member agencies can work together in a collaborative manner. However, there needs to be greater involvement and integration of the member agencies in MWDOC's planning process. For example, member agencies believe that MWDOC should avoid setting up a process that is perceived as "telling agencies what is needed" and instead seek out what the agencies want and need MWDOC to provide for them. This will display an improved method of communication in how MWDOC will proceed with a program, study, or action.

The future responsibility of MWDOC is to demonstrate our commitment through our actions and how we plan to address the needs and expectations of the member agencies. Below are a few examples where staff illustrated such actions:

- Recent workgroup meetings on refining MWDOC's Reserve Policy are an example of working with the member agencies to develop a consensus-based recommendation to the MWDOC Board.
- MWDOC has committed to involve OCWD in Metropolitan issues and program development, as it relates to groundwater integration. To demonstrate this commitment, MWDOC included OCWD staff in the April 6 Metropolitan groundwater and reservoir storage workshop. MWDOC also requested an ongoing discussion platform between basin managers, member agencies, and Metropolitan.
- Lastly, acting on a recent request from our member agencies to see how MWDOC could aid in a shared service program on the EPA's lead and copper pipeline inventory requirement for retail agencies is another example of identifying a regional service need from MWDOC.

WATER USE EFFICIENCY

8. WHAT ARE THE FUTURE OPPORTUNITIES FOR INCREASED WUE? WHERE CAN MWDOC HAVE THE MOST IMPACT?

There are two areas that MWDOC should focus on that will have the most impact and increase water savings. Firstly, MWDOC can assist our member agencies in preparation for compliance with the *Conservation as a California Way of Life* water use efficiency standards framework. Secondly, MWDOC should continue to develop, implement, and evaluate a broad variety of water use efficiency programs targeting all consumer groups.

ASSISTING AGENCIES TO PREPARE FOR CONSERVATION AS A CALIFORNIA WAY OF LIFE

The *Conservation as a California Way of Life* framework is vastly more complex than the 2009 SBx7-7 framework, known as the 20% by 2020 framework. Assisting member agencies via Choice-based services for achieving compliance with the evolving *Conservation as a California Way of Life* standards includes:

- Commercial, Industrial, and Institutional (CII) Performance Measures (planned for FY 23-24) including CII Customer Classifications, CII BMP Implementation Plans, and Implementation of BMP Plans.
- Landscape area measurements, including Residential landscape area measurement refinements (ongoing) and Dedicated Irrigation Meter Area Measurements through NV5 (under way).
- Distribution system water loss (SB 555 -ongoing) Shared Services and Technical Assistance.
- General Support for Compliance with Standards (ongoing).

DEVELOP, IMPLEMENT, AND EVALUATE WUE PROGRAMS

MWDOC should continue to develop, implement, and evaluate a broad menu of water use efficiency programs on behalf of its member agencies. These programs will focus on all customer classes and types of water use. Because we are already highly saturated by water efficient fixtures in single-family homes, **the emphasis should be on landscape water saving opportunities**; approximately 50% of total water use in OC is applied to landscaping. Staff will continue to maximize grant funding to minimize local funding needs.

WEROC

9. HOW DOES WEROC SUPPORT MWDOC'S MISSION? WHAT IS ITS GREATEST VALUE?

The Water Emergency Response Organization of Orange County (WEROC) Emergency Management Program is charged with supporting the resiliency of Orange County's water and wastewater agencies and the community it serves. We can achieve this by working with these agencies and the County to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from threatened or actual natural disasters, acts of terrorism, or other man-made disasters.

Created in 1983[5] (37 years ago), WEROC's primary mission was originally to coordinate and support preparedness activities. Over the years, additional core functions were added to build a strong and resilient program supporting the 36 contributing WEROC agencies during the response and recovery to a major emergency or disaster. The foundation of WEROC's value focus on the core functions and capabilities including:

- Prepare, update, and test a countywide emergency response plan, and provide assistance, as requested, for agencies to prepare and test their plans.
- Organize emergency preparedness and response training among the water and wastewater agencies in Orange County.
- Attend and advocate at local and regional meetings regarding emergency preparedness and response issues on behalf of the Orange County water utilities.
- Serve as the water/wastewater mutual aid coordinator as an integral member of the County's Operational Area
- Maintain the dedicated emergency radio system exclusively for the water utilities used by Orange County water utilities during any emergency or disaster response with required updates and enhancements.
- Maintain an Emergency Operations Center (EOC) in a state of readiness that will be staffed by trained water industry professionals.

WEROC supports the mission of MWDOC by its commitment to its stakeholders/member agencies through **development of preparedness, response, and recovery strategies** so agencies can continue to provide essential services to the Orange County community.

[5] Original Volunteer Emergency Preparedness Organization Agreement, dated 1983.

OUTREACH, ADVOCACY AND EDUCATION

10. WHAT IS MWDOC DOING/PLANNING TO MAXIMIZE THE IMPACT OF PUBLIC OUTREACH AND EDUCATION CAMPAIGNS? HOW DO WE MEASURE SUCCESS?

MWDOC currently develops, plans, and provides a wide range of programs and services aimed at increasing stakeholders' knowledge of water policy, efficient water use, and the District's role in promoting sound policy and investments in water reliability that are in Orange County's best interests.

The mission of the MWDOC Public Affairs Department (Department) is to increase public understanding, garner support, and **build trust in the District as Orange County's wholesale water supplier and agency for water resource planning**. Transparency is paramount. These commitments support not only the MWDOC mission but also an ongoing districtwide initiative to be a leading voice for water issues and policy in the region.

With so many tools and programs, from social media to special events, the Public Affairs Team routinely evaluates the value and effectiveness of all the Department's efforts based on a number Key Performance Indicators and reach analytics (listed below). The Department has developed a Programs and Responsibility flowchart which breaks down the Department's primary roles and assignments by team members. Additionally, the MWDOC Public Affairs Department has developed a series of logistical checklists to efficiently plan, implement, and control the flow of information for each program and activity. Furthermore, the Department uses robust program management software tools such as Asana and Co-Schedule to stay in touch with impending deadlines and to keep everything, including the Editorial Calendar, assignments, and checklists, organized and in one place.

The effectiveness of these programs depends on a large variety of factors, including technological advancements or changes, the rise and fall of audience engagement, current news or media concentration, political changes in leadership and focus, and even the weather.

There are a number of Key Performance Indicators, metrics, and measurements that the Department uses to measure success, including:

- Constant Contact activity reports- email marketing for surveys, events, newsletters, and news release distribution (results per activity)
    - Open rate
    - Click rate
    - Registration rate
        - Includes financial indicators
    - Responses
- Website (Google) Analytics
    - Return Visitor and First Visitor metric
    - Web traffic, including landing pages and time spent on specific pages
    - Click through rate
    - Page views per session
    - Referral traffic
    - Content downloads
    - Use of forms such as newsletters, interest lists, and mailing list sign-ups
- Social Media Dashboard Analytics (Facebook, Twitter, Instagram)
    - Followers
    - Likes/Fans
    - Post engagements
    - Content sharing
    - Sentiments
    - Link clicks
    - Inbound messages
    - Ad campaign performance
    - Ranking
- Verbal and Written Feedback
    - Phone calls
    - Email and written correspondence
    - Public comment at meetings

MWDOC CURRENTS NEWSLETTER
Average Open Rate: 56%
(5,560 opens)
Industry Average:28%

CAMPAIGN SPOTLIGHT: STREAMS OF HOPE
25 Statuettes Completed and Placed in Orange County
26 Artists | 11 OC Water Providers | 25 Classrooms
JW Airport | 2 Public Parks | HB Pier | Library | OCDE HQ
Extensive Media Coverage (Mentions)
12 Television | 26 Radio | 63 Online and Print
With a reach of 45 M
Estimated publicity value $3.3 M

Program and activity evaluation is constant, and through this evaluation process, the District's messaging and activities continue to be shaped and refined.