

MEETING OF THE BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Jointly with the  
**PLANNING & OPERATIONS COMMITTEE**  
**AND**  
**ADMINISTRATION & FINANCE COMMITTEE (SPECIAL MEETING)**  
May 6, 2019, 8:30 a.m.  
Conference Room 101

**P&O Committee:**

Director Yoo Schneider, Chair  
Director Tamaribuchi  
Director Dick

Staff: R. Hunter, K. Seckel, J. Berg,  
H. De La Torre, K. Davanaugh

**A&F Committee:**

J. Thomas, Chair  
J. Finnegan  
Vacant

Ex Officio Member: Director Barbre

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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>.

**PLANNING & OPERATIONS COMMITTEE AGENDA ITEMS**

**ACTION ITEMS**

1. ADOPTION OF THE ONE WATER ONE WATERSHED PLAN UPDATE 2018
2. WATER EFFICIENT LANDSCAPE RESOURCES WEBSITE

3. **ENHANCEMENTS AND UPGRADES TO THE CALIFORNIA SPRINKLER  
ADJUSTMENT NOTIFICATION SYSTEM**

**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.)

4. **STATUS REPORTS**
- a. Ongoing MWDOC Reliability and Engineering/Planning Projects
  - b. WEROC
  - c. Water Use Efficiency Projects
  - d. Water Use Efficiency Programs Savings and Implementation Report
5. **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**

**ADMINISTRATIVE & FINANCE COMMITTEE AGENDA ITEMS**

**PROPOSED BOARD CONSENT CALENDAR ITEMS**

6. **TREASURER'S REPORT**
- a. Revenue/Cash Receipt Report – April 2019
  - b. Disbursement Approval Report for the month of May 2019
  - c. Disbursement Ratification Report for the month of April 2019
  - d. GM Approved Disbursement Report for the month of April 2019
  - e. Water Use Efficiency Projects Cash Flow – April 30, 2019
  - f. Consolidated Summary of Cash and Investment – March 2019
  - g. OPEB and Pension Trust Fund monthly statement
7. **FINANCIAL REPORT –**
- a. Combined Financial Statements and Budget Comparative for the Period ending March 31, 2019
  - b. Quarterly Budget Review

**ACTION ITEMS**

8. **ANNUAL REVIEW AND UPDATES TO THE INVESTMENT POLICY AND GUIDELINES**
9. **AMENDMENT TO ADMINISTRATIVE CODE RE INCOMPATIBILITY OF OFFICE**
10. **MEMBERSHIP IN THE INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS (IABC)**

11. MEMBERSHIP AND PARTICIPATION IN CALIFORNIA COUNCIL FOR ENVIRONMENTAL & ECONOMIC BALANCE (CCEEB) AND ASSOCIATION OF METROPOLITAN WATER AGENCIES (AMWA)
12. OFFICE IMPROVEMENTS - STATUS UPDATE & APPROVAL OF ADDITIONAL DESIGN SERVICES
13. AMENDMENT TO DISTRICT MONEY PURCHASE PENSION PLAN

**INFORMATION ITEMS** – (THE FOLLOWING ITEMS ARE FOR INFORMATIONAL PURPOSES ONLY – BACKGROUND INFORMATION IS INCLUDED IN THE PACKET. DISCUSSION IS NOT NECESSARY UNLESS REQUESTED BY A DIRECTOR.)

14. CONTRACT WITH MUNICIPAL RESOURCE GROUP (MRG) TO IMPLEMENT PERFORMANCE MANAGEMENT SYSTEM
15. DEPARTMENT ACTIVITIES REPORTS
  - a. Administration
  - b. Finance and Information Technology
16. MONTHLY WATER USAGE DATA, TIER 2 PROJECTION, AND WATER SUPPLY INFORMATION

#### **OTHER ITEMS**

17. REVIEW ISSUES REGARDING DISTRICT ORGANIZATION, PERSONNEL MATTERS, EMPLOYEE BENEFITS FINANCE AND INSURANCE

#### **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**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Planning & Operations Committee**  
(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter,  
General Manager

Staff Contact: J. Berg  
Director of Water Use Efficiency

**SUBJECT: Adoption of the One Water One Watershed Plan Update 2018**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors adopt the attached resolution adopting the Santa Ana River Watershed Project Authority One Water One Watershed Plan Update 2018, the Integrated Regional Water Management Plan for the Santa Ana River watershed.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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The Integrated Regional Water Management (IRWM) Grant Program is designed to encourage integrated regional strategies for management of water resources and to provide funding for programs and projects that support integrated water management planning and implementation. The Department of Water Resources is in the process of disbursing the - first round of implementation grant funding under the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1). The Santa Ana Watershed Project Authority (SAWPA) is lead agency seeking access to more than \$63 million in IRWM funds on behalf of the stakeholders in the Santa Ana River watershed.

The One Water One Watershed (OWOW) Steering Committee is in the process of reviewing project proposals for Proposition 1 funding consideration. MWDOC is a participant in the following two regional projects: (i) SAWPA Regional Comprehensive Landscape and Accelerated Leak Detection and Meter Testing Program, and (ii)

|  |                      |                 |                    |
|--|----------------------|-----------------|--------------------|
| Budgeted (Y/N): N/A                        | Budgeted amount: N/A | Core <u> X </u> | Choice <u>    </u> |
| Action item amount: N/A                    | Line item: N/A       |                 |                    |
| Fiscal Impact (explain if unbudgeted): N/A |                      |                 |                    |



Enhancements to Watershed-Wide Water Budget Decision Support Tool. Combined, MWDOC could benefit from more than \$1.8 million in funding.

SAWPA Regional Comprehensive Landscape and Accelerated Leak Detection and Meter Testing Program has two components including rebate incentive for a variety of landscape water saving opportunities and funding for agencies to implement a variety of water loss control activities. The project focusing on Enhancements to Watershed-Wide Water Budget Decision Support Tool includes the acquisition of updated aerial imagery, landscape area measurements and data warehousing tool to assist water agencies throughout the watershed to comply with new water conservation requirements.

To be eligible for Proposition 1 funding, DWR requires each project proponent to adopt the One Water One Watershed Plan Update 2018 (OWOW Plan Update 2018) through a Board Resolution, which is provided as Attachment A. The detailed report below provides background information on the OWOW Plan Update 2018.

## **DETAILED REPORT**

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The Santa Ana Watershed Project Authority is the regional watershed planning organization for the Santa Ana River Watershed and has been facilitating efforts to develop a watershed planning framework to guide water resource managers. To date, this has resulted in the development of the *One Water One Watershed Plan*. This OWOW Plan originated in 2002 and has been updated in 2005, 2007, 2014 and, most recently, in 2018. The goal of this planning process is to develop the tools and strategies to work across the watershed to develop an integrated water resource plan where all types of water (local surface and groundwater, imported water, stormwater, and treated wastewater effluent) are viewed in a comprehensive, integrated manner as a single water resource.

### **OWOW Integrated Regional Water Management Plan Update 2018**

The OWOW process is led by a Steering Committee composed of public officials from counties and cities in the watershed, representatives from the environmental, regulatory, disadvantaged, and business communities, and representatives from the Santa Ana Watershed Authority (SAWPA). The Steering Committee was supported by numerous technical experts grouped into 10 disciplines (known as Pillars) such as water resource optimization, natural resource stewardship, water use efficiency, etc. Participants from numerous agencies and organizations have volunteered to serve on the Pillar groups and committees and have addressed every aspect of water management planning.

SAWPA acted as lead agency for the Regional Water Management Group (RWMG). While SAWPA facilitated the planning process and provided technical input and support through its staff and consultants, the development of the goals and strategies of the Plan and the decision making process were done by the Steering Committee with the support of the Pillars and with consideration to comments from the public at large.

The fundamental concept for this planning process was to pull parties together in every aspect of the water arena – those who provide water, those who use it, and those who manage it – in a way that has never been done before and in a way that goes beyond the interests of any one agency. This approach marked a major shift from previous IRWM

planning efforts by greatly expanding the number and type of agencies and organizations involved in the process.

In developing the OWOW Plan Update 2018, a “bottom up” approach for governance was envisioned. Unlike in previous SAWPA plans or other planning approaches across the state, every effort has been made to allow the key discussions of major water resource issues, concerns, problems, goals, and objectives, and potential solutions to originate and be first fully vetted at the stakeholder level. By expanding the involvement and collaboration to the *on the ground* level, greater buy-in and support was realized for this planning development process.

### **Pillar Groups**

In order to manage the planning work, the stakeholders were organized into 10 separate workgroups, or *Pillars*, centered around the following water resource management areas:

1. Beneficial Use Assurance
2. Disadvantaged and Tribal Communities
3. Climate Change Response
4. Land Use and Water Planning
5. Natural Resource Stewardship
6. Water Use Efficiency
7. Integrated Stormwater Management
8. Water Resources Optimization
9. Water Recycling
10. Data Management and Monitoring

The Pillar Groups consisted of approximately 10 to 60 volunteers, depending on the topic and interest level, and included participants from local agencies, special districts, non-profit organizations, universities, Native American tribes, and the public, each led by a volunteer chair having expertise in that specific water resource area. The Pillar Groups were tasked with the definition of the watershed problems for their respective discipline and the identification and development of potential solutions and strategies. While Pillar Groups were asked to focus on one specific discipline based on their technical expertise, they were also asked to step out of their role and view problems from the other Pillar Group perspectives. It was through this process that new synergies were developed and multi-benefit programs were formed.

Through participation in the OWOW process, MWDOC staff and other water, wastewater, city, and environmental organizations throughout the watershed provided input to SAWPA on the development of the OWOW Plan Update 2018.

### **Steering Committee**

The next level of governance up from the foundation of the Pillars was the OWOW Steering Committee, which consisted of 11 representatives from across the Santa Ana River Watershed. The Committee was convened by the SAWPA Commission, and included two representatives from the SAWPA Commission representing water agencies - who serve as Convener and Vice-Convener; three County Supervisors - one from each county; three county municipal representatives; a business representative from the development

community; and a representative from the environmental community. Steering Committee members representing Orange County include Supervisor Doug Chaffee, Municipal Representative Jose Solorio, Linda Ackerman from the Regional Water Quality Control Board, and Environmental Community Representative Garry Brown from the Orange County Coast Keeper. An additional Orange County Water District representative appointment is pending.

The Steering Committee's role was to serve as the developer of Plan goals and objectives for the Watershed, and to act as the oversight body that performs strategic decision making, crafts and adopts programmatic suites of project recommendations, and provides program advocacy necessary to optimize water resource protection for all.

### **Resource Management Strategies**

The OWOW 2.0 Plan encourages the development and implementation of multi-benefit projects and programs that are linked together for improved synergy. Examples include:

- Proactive, innovative, and sustainable solutions
- Integrated regional solutions supporting local reliability and local prioritization
- Watershed-based projects and programs that effectively leverage limited resources, promote trust and produce a greater bang for the buck
- Integration of water supply, water quality, recycled water, stormwater management, water use efficiency, land use, energy, climate change, habitat, and disadvantaged communities and tribes
- Coordination of resources so that water is used multiple times
- Management of stormwater for drinking water
- Treatment of wastewater for irrigation and groundwater replenishment
- Building or modifying of parks to support water efficiency, ecosystem habitat, and stormwater capture
- Improvement of water quality and pollution prevention
- Addressing the energy and water nexus

For brevity, the Executive Summary of the OWOW Plan Update 2018 is provided as Attachment B. If you would like to view the full One Water One Watershed Plan Update 2018 for the Santa Ana watershed go to: <http://www.sawpa.org/owow-plan-update-2018/>

### **Summary**

SAWPA is considering Proposition 1 funding for two regional proposals that MWDOC is a participant in – (i) SAWPA Regional Comprehensive Landscape Rebate and Accelerated Leak Detection and Meter Testing Program and (ii) Enhancements to Watershed-Wide Water Budget Decision Support Tool. Combined, MWDOC could benefit from more than \$1.8 million in grant funding for these projects. To be eligible for funding, DWR requires each project proponent to adopt the OWOW Plan Update 2018 through a Board Resolution. Staff recommends the Board of Directors adopt the attached resolution approving the Santa Ana River Watershed Project Authority OWOW Plan Update 2018.

**Attachments**

Attachments include:

- Attachment A – Resolution Adopting the SAWPA OWOW Plan Update 2018
- Attachment B – One Water One Watershed Integrated Regional Water Management Plan Executive Summary

## Attachment A

## RESOLUTION NO. \_\_\_\_

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
ADOPTING THE SANTA ANA WATERSHED PROJECT AUTHORITY  
ONE WATER ONE WATERSHED PLAN UPDATE 2018, THE  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN FOR THE SANTA ANA  
RIVER WATERSHED**

WHEREAS, on February 19, 2019, the Santa Ana Watershed Project Authority (SAWPA) Board of Commissioners adopted the One Water One Watershed (OWOW) Plan Update 2019, the Integrated Regional Water Management Plan for the Santa Ana River Watershed, as a planning document outlining a sustainable water future for the region; and

WHEREAS, on June 4, 2019, the SAWPA Board of Commissioners will consider projects for funding under SAWPA's Round One funding allocation of Water Quality, Supply and Infrastructure Improvement Act of 2014 (Proposition 1), in which MWDOC is a participant for the (i) Regional Comprehensive Landscape Rebate Program and Accelerated Leak Detection and Meter Testing, and (ii) Enhancements to Watershed-Wide Water Budget Decision Support Tool; and

WHEREAS, as a condition of the grant funding for projects MWDOC is a recipient to, DWR and SAWPA require that all project sponsors also adopt the OWOW Plan Update 2018.

NOW, THEREFORE, the Board of Directors of the Municipal Water District of Orange County does hereby acknowledge the OWOW Plan and, as a required condition of receiving grant funding under the Plan, adopts the current Santa Ana Watershed Project Authority One Water One Watershed Plan Update 2019 Integrated Regional Water Management Plan.

Adopted at the regular meeting of the Board of Directors held May 15, 2019, by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

I hereby certify the foregoing is a full, true and correct copy of Resolution No. \_\_\_\_\_, adopted by the Board of Directors of Municipal Water District of Orange County at its meeting held on May 15, 2019.

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Maribeth Goldsby, Secretary  
Municipal Water District of Orange County

## EXECUTIVE SUMMARY

This One Water One Watershed (OWOW) Plan Update 2018 is the Integrated Regional Water Management (IRWM) Plan for the Santa Ana River Watershed (watershed). The OWOW Plan Update 2018 was written by and for stakeholders throughout the watershed. This plan considers the challenges and opportunities facing the entire watershed area of the Santa Ana Funding Region within the California IRWM Program. By inviting together stakeholders from all subregions, political jurisdictions, water agencies, non-governmental organizations, businesses, and the public, this OWOW Plan Update 2018 addresses all types of water as a single resource, inextricably linked to people, the land, and nature.

The One Water One Watershed Plan Update 2018 describes how collaborative watershed planning, water and land management, and project implementation supports improved sustainability, resilience, and quality of life throughout the Santa Ana River Watershed through 2040.

This plan is built on the strong foundations laid by the OWOW Plan, adopted in 2010, and the OWOW 2.0 Plan, adopted in 2014. These two earlier efforts were lauded within the watershed, across California, and the country. The OWOW 2.0 Plan received awards from planners, engineers, and business leaders for its good governance and stakeholder-led process.

The OWOW Plan Update 2018 was begun in July 2016 with a meeting of the OWOW Steering Committee. At that meeting, the Committee approved efforts to secure a planning grant from the state in support of the update process and adopted a policy document that described how projects can be included in the OWOW Program and made eligible for the expected implementation grants.

In the 28 months that followed, the OWOW 2.0 Plan was reconsidered in light of the significant changes impacting the watershed since early 2014. In those years the fiscal recovery began to be felt in portions of the watershed, and the State of California went through one of its most severe droughts on record. The communities of the watershed made strides to support conservation as a way of life in California, implementing widespread landscape retrofits and other conservation programs. Other significant investments were made throughout the watershed by agencies, cities, counties, and community members alike to make the watershed more resilient in response to uncertainty and more sustainable over the long term.

The OWOW Plan Update 2018 is subtitled “Moving Forward Together” to mirror the earlier plans, which focused on movement toward goals. Working together has been fundamental to the OWOW Program (and SAWPA) since the program’s inception, and the OWOW Plan Update 2018 is built by the stakeholders for the stakeholders. “Moving Forward Together” also reflects the OWOW Program’s commitment to ensuring that no one is left behind as progress is made, and that progress somewhere in the watershed does not cause any undue burden elsewhere in the watershed.

The Santa Ana Watershed Project Authority (SAWPA) is once again proud to facilitate the OWOW Program on behalf of all communities, waters, and lands across the watershed, and to present this OWOW Plan Update 2018.

## OVERVIEW

The Santa Ana River Watershed faces enormous challenges adapting to changing conditions, many of which are at an unprecedented scale in its modern history. The watershed's population, already one of the most densely populated in the State, continues to grow and urbanize, increasing demands on water supply, water quality, and flood management. Climate change, population growth, the aging of infrastructure, and new awareness of environmental degradation affect how we manage water for the future.

Most agree that the water management approaches of the past fifty years are no longer sustainable in today's environment and economic climate. And most also agree that a more integrated and collaborative approach to water resource management shows tremendous promise for achieving sustainable water management everywhere. In the Santa Ana River Watershed, this approach is not new; it has been our practice and legacy since the first integrated plan was approved by the SAWPA Commission in 1998.

The goal of yesteryear was affordable water for a growing economy. Over time, the goal has changed to the complicated balancing act of environmental sustainability, quality of life and, economic growth in a changing environment dominated by water and financial scarcity. The strategy to achieve this goal is integrated water management. This means the various silos of water supply, flood management, water quality, ecosystem restoration, and recreation are brought together as one.

This approach ensures better coordination across functions that are often managed separately and across a broader geographic scale larger than the boundaries of individual agencies. Through integration at the watershed scale, economic and environmental performance is more effectively balanced. This water resource planning approach based on a watershed scale has even been recognized by independent review by objective and nonpartisan research organizations such as the Public Policy Institute of California, which cited SAWPA as an excellent example of integrated water management in the state.

*SAWPA's approach—coordination, cooperation, and integration of water agencies to pool resources and manage water at the basin scale—is one of California's best models for integrated water management.*

—Public Policy Institute of California  
2011, "[Managing California's Water – From Conflict to Reconciliation](#)"

## VISION

To guide the development of the initial OWOW Plan, stakeholders in 2007 established a vision, goals, and objectives for the watershed. In those first planning sessions, a shared purpose was formed that underlies the rest of the plan and the projects and programs that are prioritized for implementation. This initial vision has been adjusted over time with each successive OWOW Plan.

Today, the vision of the OWOW Program is a watershed that:

- Is sustainable, droughtproof, and salt balanced by 2040
- Avoids and removes interruptions to natural hydrology, protecting water resources for all
- Uses water efficiently, supporting economic and environmental vitality
- Is adapted to acute and chronic climate risk and reduces carbon emissions
- Works to diminish environmental injustices
- Encourages a watershed ethic at the institutional and personal level

The OWOW Program, and the OWOW Plan Update 2018, serve all people and communities in the watershed. The plan itself is developed by stakeholders drawn from across the diversity of communities and interests in the watershed. Gathered in workgroups called “Pillars,” these stakeholders lead development of the goals and objectives of the plan, and then the recommended strategies for how to achieve those goals. The Pillars are the most important innovation of the OWOW Program and are the source of the OWOW Program’s strength.

The OWOW Steering Committee, formed with the development of the original OWOW Plan, are the representative decision makers for the OWOW Program. Working under a delegated authority of the SAWPA Commission, the OWOW Steering Committee listens and reviews the various stakeholder interests, driving consensus where possible, seeking compromise when needed, allocating resources, and prioritizing strategies and projects for implementation.

The SAWPA Commission, constituted of one elected director from the five member agencies of SAWPA, is the approved Regional Water Management Group (RWMG) for the Santa Ana Funding Area, and therefore is ultimately responsible for the OWOW Plan Update 2018.

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### OWOW Guiding Principles



#### **Create Anew**

A shared vision of a healthy productive watershed



#### **Collaboration Across Boundaries**

Citizens of the watershed, finding multi-jurisdictional solutions



#### **Adopt Systems Approach**

Problems are interrelated, seek synergies, create catalysts

Source: One Water One Watershed & Santa Ana Watershed Project Authority



## PRINCIPLES FOR WATERSHED PLANNING

Watershed planning is well established in the United States and around the world. The watershed has benefitted from watershed planning since SAWPA was formed in the early 1970s. The OWOW Program follows these watershed planning principles:

- Planning must be watershed-wide and bottom-up in order to allow for a holistic and systematic approach to watershed management.
- Involving stakeholders is fundamental, and must include those representing counties, cities, and water districts, as well as the private sector and the regulatory, environmental, and environmental justice communities. The active participation of a diversity of voices and interests ensures the integration of different interests in the watershed beyond political boundaries.
- Developing the plan must not be linked directly to any particular source of implementation funding. All opportunities, challenges, goals, and strategies must be considered in an integrated way to provide the most effective plan, and the most effective change in the watershed.
- Developing and implementing the plan must result in new agreements and partnerships, and no effort at improvement somewhere in the watershed can be at the unreasonable expense of another.
- Achieving sustainable water management that equitably balances competing interests to ensure long-term health and prosperity for society and nature is at the core of watershed planning.

## OWOW PROGRAM GOVERNANCE

For the OWOW Program, the term “governance” describes the formal and informal collaborative decision-making that sits at the core of the bottom-up approach. Goals are set, strategies considered and recommended, and partnerships are built by those who step forward to participate in the program. In addition, explicit efforts which were initiated in the OWOW 2.0 Plan are continued in OWOW Plan Update 2018 to ensure that community expertise is sought from members of communities who have historically been underrepresented in integrated water management planning. Leadership and coordination of the OWOW Program occurs at several levels:

- The watershed community at large is involved through the 10 Pillar workgroups (called Pillars because together they carry the load of decision-making), representing different watershed issues. The Pillars identify issues, recommend solutions, and write the OWOW Plans.
- The OWOW Steering Committee is a representative decision-making body composed of elected officials and representatives from the Counties of Orange, Riverside, and San Bernardino; municipalities; water districts; the private sector; and the environmental and regulatory communities. The OWOW Steering Committee develops the goals and objectives of the OWOW Plans, makes strategic decisions, prioritizes project tasks, and issues recommendations.
- The SAWPA Commission has five members, each an elected leader from one of the member agencies of SAWPA. The SAWPA Commission provides final direction, review, and approval.

- SAWPA administration and staff facilitate the OWOW Program on behalf of all watershed stakeholders under the standards and authority of the California IRWM Program.



## GOALS

The OWOW Plan Update 2018 has six goals, shown below. The goals are evolved from the earlier OWOW Plans. This evolution can be attributed to the changing understanding about the opportunities and challenges facing the watershed, as well as the lessons learned, and accomplishments achieved during implementation of the earlier plans.

The six goals of the OWOW Plan Update 2018 are to:

- Achieve resilient water resources through innovation and optimization.
- Ensure high-quality water for all people and the environment.
- Preserve and enhance recreational areas, open space, habitat, and natural hydrologic function.
- Engage with members of disadvantaged communities and associated supporting organizations to diminish environmental injustices and their impacts on the watershed.
- Educate and build trust between people and organizations.
- Improve data integration, tracking, and reporting to strengthen decision making.

## PLANNING TARGETS

The OWOW Plan Update 2018 holds the vision as the target—that is, a sustainable watershed. Planning to achieve that vision comes from this entire document, focused on the six goals. By striving toward those goals, the watershed will move toward achievement of the vision. The vision is an “infinite game,” in that the effort necessary to achieve and then remain within the vision can never end. Sustainability, as it is used in the OWOW Program, is not a destination, it is a process.

These goals will not be achieved by just building projects using general-obligation bond money. These goals reflect the broad view that the OWOW Program holds, and the systems thinking that

comes from the stakeholders and Steering Committee, all of which bring deep wells of individual expertise to the collaboration. Pooling these resources ensures that the planning targets and indicators of progress toward goals are equally broad, selected for their ease of measurement and clear meaning that can be understood by all participants.

For the OWOW Plan Update 2018, planning targets are drawn from an assessment tool developed in partnership with California Department of Water Resources. The tool uses two measurable indicators for each of the six goals. When completed annually, the tool will reflect progress towards the goals, helping all stakeholders and decision makers to revise management strategies when needed. In this way, the target is progress, which will be assessed annually.

### RECOMMENDATIONS

Ten Pillar workgroups submitted Recommended Management Strategies and Policy Strategies, which are key to developing the correct suite of implementation efforts. There is only a fuzzy distinction between the two types of recommendations, and the workgroups were encouraged to consider first what strategies can be implemented by people, organizations, or agencies given current rules, technology, budgets, and authorities. These are the management strategies. Policy strategies, on the other hand, are those things that require the action of elected members of government, the development of new funding sources, or implementation of new technology. Again, the distinction between the two strategy types is loose, and often progress will require approaches that integrate both.

Below is a selection of recommendations from the Pillar chapters, selected to display the diversity of ideas and breadth of innovative thinking contributed by these workgroups:

#### WATER RESOURCE OPTIMIZATION PILLAR

*Purchase MS4 credits.*

The Municipal Separate Storm Sewer System (MS4) permit process is intended, among other things, to increase the amount of stormwater captured and recharged in the watershed. These permits require the owner to construct their project in such a way as to recharge stormwater on their site. However, in some cases it may be more ideal from a water management perspective to recharge the stormwater somewhere upstream. One way to introduce flexibility into this process would be to allow owners to purchase MS4 credits, which could be applied to recharge projects in other locations. There may also be an opportunity to allow these credits to be used throughout the watershed. For example, a project in Orange County could purchase credits that could be used for a project in the upper watershed.

#### RECYCLED WATER PILLAR

*Facilitate recycled water exchange.*

Nearly all wastewater treated above Prado Dam is currently discharged into the Santa Ana River. The lower watershed uses the effluent to recharge its groundwater basin and reduce the need for

imported water. In the proposed exchange, the upper watershed would continue to deliver treated wastewater to the lower watershed via the Santa Ana River instead of developing recycled water programs. The lower watershed would change the place of delivery for some of the water they plan to import to the upper watershed, which would replace the treated wastewater. Because recycled water is 100% reliable and imported water is about 60% reliable, storing imported water in the upper watershed (or other water bank) during wet years for use in dry years would mitigate the lower reliability of imported water.

## DISADVANTAGED COMMUNITIES AND TRIBAL COMMUNITIES PILLAR

*Manage plant palettes.*

Long-term management plans should be developed, with input from California Native Americans, to increase the success of native plants and minimize health risks in the landscape. Incorporating traditional gathering and tending practices into management plans is becoming more common on both private and public lands. It is also important to recognize that native plants are very dependent on the correct water structure (amount, flow rate, and mineral content) being available at a specific location to help these plants and the communities that rely on them survive climate changes and different weather patterns.

*Focus on critical infrastructure.*

It is recommended that critical infrastructure, which supports a resilient water supply, effective sanitation, and sufficient flood protection, be prioritized in communities where it is deficient or threatened. Projects that achieve this recommendation should be prioritized for implementation and funding requests. In particular, the transition from insufficient septic to sanitary sewer is a high priority, as is the need to overcome localized flooding that impacts pedestrians. Small agencies require technical assistance and outside funding to support these transformations.

## CLIMATE RISK AND RESILIENCE PILLAR

*Address and mitigate public health risks.*

Climate change will result in increased health risks through more extreme and persistent weather events, increased temperatures, and decreased water supply reliability. Members of disadvantaged communities, particularly individuals experiencing homelessness, are disproportionately at risk. Consideration and mitigation of public health risks, particularly for members of the most vulnerable communities, will be an important component of climate adaptation. It is recommended that efforts protect public health in the context of climate change by providing targeted education, developing programs that ensure the human right to water, and working with public health agencies to align programming and communication.

## INTEGRATED STORMWATER MANAGEMENT PILLAR

*Identify floodplains for habitat and infiltration.*

Well-functioning floodplains provide habitat for a significant variety of plant and wildlife species and provides for natural reduction of flood flows. Flooding can recharge groundwater basins, improve water quality, and control erosion. Development in floodplains can permanently alter natural floodplain functions, destroy habitat of sensitive species, and reduce the beneficial connections between different types of habitat and adjacent floodway corridors. Identification of floodplains that are still in their natural state could directly preserve areas for open space, habitat, and natural hydraulic function.

## LAND USE AND WATER PLANNING

*Work with planning organizations and councils of government.*

Collaborative effort should be undertaken to develop a checklist of land use planning tools that will increase groundwater recharge and that can be incorporated into local ordinances, an incentives-based program to encourage private property stormwater capture or hydrologic connectivity, and private property invasive weed management. Model ordinances and policies must be collaboratively developed related to complete streets, connectivity of trail systems and parks, tree planting and care, and early interaction with water agencies when making land-use decisions.

## NATURAL RESOURCES STEWARDSHIP PILLAR

*Provide sustainable funding for ongoing maintenance.*

Over the past few decades, development interests, regulators, and environmental groups have worked together to encourage habitat conservation and enhancement while allowing for reasonable land development. Such efforts include natural community conservation plans and habitat conservation plans. These programs have provided large conservation areas to accommodate large developments but have taken years and large financial commitments to develop and implement. Sustainable funding sources for the maintenance of conservation areas can come from cooperative agreements between public landowners and organizations that conduct long-term stewardship of habitat and conservation areas.

## WATER QUALITY PILLAR

*Protect ocean water quality.*

The primary emphasis with ocean water is maintaining water quality in order to protect marine resources and public health. Ocean water quality is evaluated using a number of different parameters and constituents related to beneficial uses. In the Regional Board's water quality control plan (Basin Plan), one of the key beneficial uses is REC-1 (full body contact recreation). In addition to recreation, the ocean waters also support important habitat areas, including two Areas of Special Biological Significance and their related onshore Critical Coastal Areas. Important coastal areas within the watershed include the Newport Beach Marine Life Refuge and the Irvine Coast Marine Life Refuge.

Implementing projects that manage urban wet- and dry-weather runoff throughout the watershed can benefit ocean water quality. Recommended are constructed wetlands, local urban runoff treatment systems, surface water diversions to publicly owned treatment works, source controls, and public education.

### WATER USE EFFICIENCY PILLAR

*Encourage implementation of advanced metering infrastructure.*

Most customers in the Santa Ana River Watershed are metered, but there are still opportunities for advanced metering infrastructure (AMI) or automatic meter reading (AMR). Implementation of these technologies provides information that can detect leaks and help water agencies target water use efficiency programs. Frequent monitoring of use patterns allows water retailers to determine if customers are observing water use regulations. These include local day and time prohibitions as well as those rules imposed by the state, such as the prohibition against outdoor irrigation within 48 hours of measurable precipitation. In conjunction with the meters themselves, there is a growing market for customer portals, giving customers additional data about their own water use.

### DATA MANAGEMENT AND MONITORING PILLAR

*Develop a trust framework for data sharing.*

The development of a regional trust framework is needed to establish trust between agencies as well as trust in the functionality of a regional data management system. Developing this agreed-on intent at the regional level will facilitate the establishment of a data management framework that can answer critical regional questions and inform water resource decision makers. Sharing of information and associated privacy considerations will be a critical policy consideration. Appropriate sharing of information will be key to extending this trust framework to individual water resource decision makers who participate as members of the public. The trust framework will also facilitate professional decision making and allow for a proactive, coordinated approach to compliance with state requirements.

## WHAT'S INCLUDED IN THE OWOW PLAN UPDATE 2018

The OWOW Plan Update 2018 is available as PDF files that are available on the SAWPA website and elsewhere. The first PDF is the main body, consisting of nine chapters of material. The second PDF is the collected appendices.

The first chapter introduces the OWOW Program, the earlier OWOW Plans, and the watershed planning and management that preceded the OWOW Program—the Santa Ana River has benefitted from nearly 50 years of watershed planning.

Chapter 2 describes in depth the stakeholder processes, the governance model, and how the work of so many is integrated into the OWOW Plan Update 2018. The vision, goals, objectives, and planning targets, described briefly above, are the focus of Chapter 3, which also shares how the OWOW Program will assess its progress toward the goals.

Chapter 4 describes the Santa Ana River watershed in its dimensions as a physical and social space, and shares water and land management realities today. Chapter 5 contains the deep work completed by the Pillar workgroups. Included are the nearly 200 recommended management and policy strategies that, once taken up throughout the watershed, will help achieve the goals of the OWOW Plan Update 2018.

The remaining chapters share additional information that contextualizes the earlier chapters. Chapter 6 describes the process developed during the OWOW Plan Update 2018 process to carry out calls for projects, and then to prioritize activities in the watershed. Chapter 7 contains more information about integrated and sustainable water management and how those practices can yield benefits and other rewards. Chapter 8 has been only slightly updated from the OWOW 2.0 Plan, as its material about the challenges and opportunities to finance this work is still relevant. Chapter 9 describes how the OWOW Program manages the data of the program and reveals a series of data management and analysis tools that have been developed by SAWPA and others that can benefit those implementing IRWM programs and projects.

A number of important appendices follow the main body of the OWOW Plan Update 2018. Deeper analyses of the water supply portfolio, the condition of water quality, and habitat are there. Also included is an updated climate change analysis produced by the U.S. Department of the Interior Bureau of Reclamation (Reclamation), working in partnership with SAWPA. This analysis supported spatial prioritization of climate vulnerabilities for the OWOW Plan Update 2018. Reclamation is a valuable partner in the watershed.

Another significant partnership resulted in one of the appendices. Working with Environmental Science Associates and the Bay Institute, contracted by the California Department of Water Resources (DWR) to support the California Water Plan Update 2018, SAWPA produced an updated watershed assessment tool. Building on the OWOW 2.0 Plan, this tool aligns with the Sustainability Outlook, a critical section of the California Water Plan Update 2018. SAWPA and the stakeholders of the OWOW Program appreciate DWR's commitment to supporting the OWOW Plan Update 2018.

## CONCLUSION

Benefits resulting from the implementation of the OWOW Plan Update 2018, and from the planning process itself, will materialize at different time horizons and will have very different characteristics. While some specific projects will be operational within a couple of years, other more ambitious efforts, such as those requiring significant investment, technological development, or new mindsets and behaviors, could take years or decades to be fully realized. Similarly, some infrastructural projects will provide immediate tangible benefits, while education and engagement programs will result in benefits that are less easily measured, but no less significant.

The development, adoption, and future implementation of the OWOW Plan Update 2018 has yielded and will yield these benefits in the watershed:



- Adoption of a collaboratively developed vision, goals, objectives, and strategies for the watershed to achieve sustainable water management by 2040
- Prioritization of multi-benefit projects – projects that provide benefits to more than one user or subregion of the watershed and that address more than one opportunity or challenge
- Recognition that society, the environment, and the economy are inextricably interdependent, and pursuing improvements in one cannot result in harm or neglect of another
- Consideration of implementable projects and programs that will:
  - Increase the reliability of water supplies
  - Improve water quality
  - Enhance habitat and open space
  - Increase recreational opportunities
  - Prepare for climate impacts and reduce carbon emissions

The OWOW Plan Update 2018 is aligned with the earlier OWOW Plans and continues a legacy of stakeholder-led planning for the watershed. Compliant with the 2016 IRWM Plan Standards, the OWOW Plan Update 2018 will support progress toward sustainable water management through collaborative action, grant-funded implementation, and programs of research and education. Acting together to implement the OWOW Plan Update 2018 will support economic prosperity, social health and equity, and a thriving environment.

The OWOW Plan Update 2018 exists because of the tremendous amount of work that was contributed by the staff of many agencies, non-profit workers, students, consultants, and volunteers of all kinds. The process of crafting it is nearly as important as the OWOW Plan itself will be once it is implemented. Collaborative planning yields partnerships, builds trust, and creates the conditions for the success of sustainable water management and healthy watersheds. Resting on this strong foundation, the OWOW Plan Update 2018 joins its earlier versions as emblematic of collaborative watershed planning.





**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Planning & Operations Committee**  
(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter, General Manager  
Staff Contact: J. Berg, Director of Water Use Efficiency

**SUBJECT: Water Efficient Landscape Resources Website**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into an annual contract with GardenSoft Corp for the next five years for the Water Efficient Landscape Resources Website at an initial startup cost of \$19,500 plus annual licensing fees of \$4,000 per year, for a total cost not exceed \$40,000.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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The Municipal Water District of Orange County's (MWD OC) Turf Removal Rebate Program (TRRP) has operated since 2007 and has facilitated the removal of over 22.8 million square feet of turf in Orange County. In spite of its success, staff has found that one of the major hurdles to participating in the TRRP is a lack of access to design ideas and plant knowledge. As a result, staff is proposing the development of the Water Efficient Landscape Resources Website (Landscape Website) to help minimize this barrier to participation and provide an invaluable practical and educational resource to not only TRRP participants, but

|  |                           |               |                  |
|--|---------------------------|---------------|------------------|
| <b>Budgeted (Y/N): Yes</b>   | Budgeted amount: \$40,000 | Core <u>X</u> | Choice <u>  </u> |
| <b>Action item amount: \$40,000</b>  |                           | Line item:    |                  |
| <b>Fiscal Impact (explain if unbudgeted):</b> The start-up cost and annual license fee for years one and two are \$27,500 and have been secured through the Metropolitan-Funded, Member Agency-Administered Funding Program. Annual license fees of \$4,000 per year will be budgeted for years three through five through MAA Funding Program or through MWD OC's Core WUE Program. |                           |               |                  |

also anyone in Orange County interested in learning about plants that are appropriate to our local climate.

On February 22<sup>nd</sup>, staff released a Request for Proposals (RFP) to three companies and posted the RFP on the MWDOC website to begin the process of selecting a contractor to develop the Landscape Website. The MWDOC website distributed the RFP to an additional 23 companies that have signed up for automated notice with RFPs are posted. The RFP closed on March 4<sup>th</sup>, with one response from GardenSoft Corp.

## **DETAILED REPORT**

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Staff convened an RFP review panel consisting of MWDOC staff and staff from the City of San Clemente, Yorba Linda Water District, and Mesa Water District to consider the GardenSoft Corp proposal. All panel members concluded that GardenSoft has the experience and skill set needed to provide a comprehensive and attractive Landscape Website at a reasonable cost.

The GardenSoft Corp Landscape Website is a web-based system designed to make it easy for visitors to find a broad variety of solutions for their landscape needs. Website features will included:

- Photo and/or video-based garden tours with multiple viewpoints and images.
- Plant database with the ability to search plants by botanical name, common name, or via guided plant search with a series of questions to build a query.
- Garden gallery with images organized into helpful landscape categories such as back yards, hillsides, full sun, and/or shade, with each image containing a hotlink that directs the user to detailed plant information pages for more information on the selected plant.
- Ability to select and store plants in a list that the user can print for use when shopping at their favorite nursery.
- Ability for MWDOC to have a photo shoot performed locally to further brand the images to Orange County.
- A watering calculator calibrated for local evapotranspiration numbers.
- A garden resources section with fact sheets on sustainable landscape fundamentals, water and soil management, composting, solving run-off, and other appropriate topics.
- Ability to tailor messaging and announcements with MWDOC branding.
- Branding consistent with branding contained on MWDOC's main website

GardenSoft Corp provides custom water wise/water smart websites for more than 40 organizations throughout California and the United States, including four in Orange County: City of Huntington Beach, Irvine Ranch Water District, Santa Margarita Water District, and South Coast Water District. These agencies could choose to utilize the MWDOC Landscape Website to avoid associated costs or continue to fund their own sites. To view a selection of these websites, visit <http://www.watersmartgardening.com/>.

GardenSoft Corp's Landscape Website is a hosted, license-fee-based tool that includes on-going technical support and upgrades as they become available. Annual license fees include web-based hosting, monthly website tracking/hits usage reports, maintenance, minor updates and changes, and a unique URL address. As shown in Table 1, Year 1 costs

will include start-up costs to customize branding of the Landscape Website for MWDOC and an annual license fee. The total Year 1 cost of \$23,500 (\$19,500 for development and \$4,000 for license fee) is being funded by Metropolitan Water District of Southern California (Metropolitan) through its Metropolitan-Funded, Member Agency-Administered Funding Program. The Year 2 license fee of \$4,000 is also funded through Metropolitan's Member Agency-Administered Funding Program. Funding for Years 3 through 5 license fees may also be funded through Metropolitan's Member Agency-Administered Funding Program, if available, or staff will budget for those costs in future "core" budget cycles. While staff is requesting Board Authorization to utilize GardenSoft Corp for the next five years, we will only make commitments to GardenSoft Corp in one-year increments.

| <b>Table 1</b><br><b>GardenSoft Corp</b><br><b>Water Efficient Landscape Resources Website</b> |                              |                               |                 |                       |
|--|------------------------------|-------------------------------|-----------------|-----------------------|
|  | <b>One-Time<br/>Start-Up</b> | <b>Annual<br/>License Fee</b> | <b>Total</b>    | <b>Funding Source</b> |
| <b>Year 1</b>  | \$19,500                     | \$4,000                       | \$23,500        | MWD                   |
| <b>Year 2</b>  |                              | \$4,000                       | \$4,000         | MWD                   |
| <b>Year 3</b>  |                              | \$4,000                       | \$4,000         | MWD or MWDOC, TBD     |
| <b>Year 4</b>  |                              | \$4,000                       | \$4,000         | MWD or MWDOC, TBD     |
| <b>Year 5</b>  |                              | \$4,000                       | \$4,000         | MWD or MWDOC, TBD     |
| <b>Grand Total</b>   |                              |                               | <b>\$39,500</b> |                       |



**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Planning & Operations Committee**  
(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter, General Manager  
Staff Contact: J. Berg, Director of Water Use Efficiency

**SUBJECT: Enhancements and Upgrades to the California Sprinkler Adjustment Notification System**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into a professional services contract with Enterprise Information Systems, Inc. for enhancements and upgrades to the California Sprinkler Adjustment Notification System at a cost not to exceed \$25,000.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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In October 2012, the Board authorized staff to develop and implement the California Sprinkler Adjustment Notification System (CSANS), which was then developed in partnership with the California Department of Water Resources (DWR). CSANS allows urban irrigators to voluntarily register to receive regular emails containing an updated irrigation index factor specific to their property location. The factor is used to make global irrigation scheduling adjustments on irrigation timers that have a percent adjustment feature. Essentially, CSANS allows property owners to turn their “dumb” irrigation timers into smart timers at no cost.

In addition to the irrigation index factor, in Orange County both the Municipal Water District of Orange County (MWD OC) and Irvine Ranch Water District provide customized email messages, such as seasonally appropriate gardening suggestions, California Friendly plant spotlights, rebate program information, water supply updates, upcoming events, etc. Each CSANS email contains a minimum of three customized messages, and MWD OC currently has over 170 messages that can be sent to CSANS subscribers. New messages are created on a weekly basis.

|   |                           |                   |                  |
|---|---------------------------|-------------------|------------------|
| <b>Budgeted (Y/N): Yes</b>                    | Budgeted amount: \$25,000 | Core <u>  X  </u> | Choice <u>  </u> |
| <b>Action item amount: \$25,000</b>           | Line item:                |                   |                  |
| <b>Fiscal Impact (explain if unbudgeted):</b> |                           |                   |                  |

Staff has been administering CSANS since late 2014 and, after five years of consistent implementation, it is time to consider making enhancements and upgrades to CSANS. The purpose of this staff report is to request Board authorization for the General Manager to enter into a professional services contract with Enterprise Information Systems, Inc. for one year for development and implementation of enhancements and upgrades to the California Sprinkler Adjustment Notification System at a cost not to exceed \$25,000. Metropolitan Water District of Southern California (Metropolitan) has approved this funding through the Metropolitan-Funded, Member Agency-Administered funding allocated to MWDOC.

## **DETAILED REPORT**

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Staff has been administering CSANS since late 2014 and, currently, there are more than 570 CSANS subscribers in Orange County. However, several enhancements and upgrades are needed to continue to grow the system and provide value to both MWDOC and the CSANS subscribers. Therefore, to improve the functionality of CSANS, staff is looking to implement the following enhancements and upgrades:

- Improve CSANS email and site analytics to better track participants, including e-mail open rates, click-through rates on messages, ability to survey participants, etc.
- Include a drought factor range to allow agencies to customize the irrigation index factor to accommodate their local drought response needs. For example, if the agency is calling for a 15% drought response and the actual index is 80%, the agency could send an irrigation index range of 65% (drought response) to 80%.
- Improve the notification and messaging capabilities to allow administrators to share messages between agencies to streamline message development and sharing of creative messaging ideas, to improve sort and filter capabilities, and to categorize notifications by topic.
- Improve the source code to allow the code to be more easily maintained.

The consultant MWDOC used to develop CSANS is Enterprise Information Systems (EIS). MWDOC selected EIS as a sole source contract because they have been used extensively by DWR for refinements to the California Irrigation Management Information System (CIMIS), which provides the basis for the CSANS irrigation-based schedule recommendation. EIS is a certified small business based in Sacramento and has been DWR's primary information technology consultant to refine the CIMIS. In addition, the California Department of General Services has certified EIS as a California Multiple Award Schedules (CMAS) contractor that offers information technology products and services at prices which have been assessed to be fair, reasonable, and competitive. DWR staff has confirmed that EIS is uniquely qualified to develop CSANS due to its familiarity with CIMIS. Recent work completed by EIS provides continuity in completing the proposed work, and EIS has demonstrated an ability to perform successfully with DWR and with MWDOC.

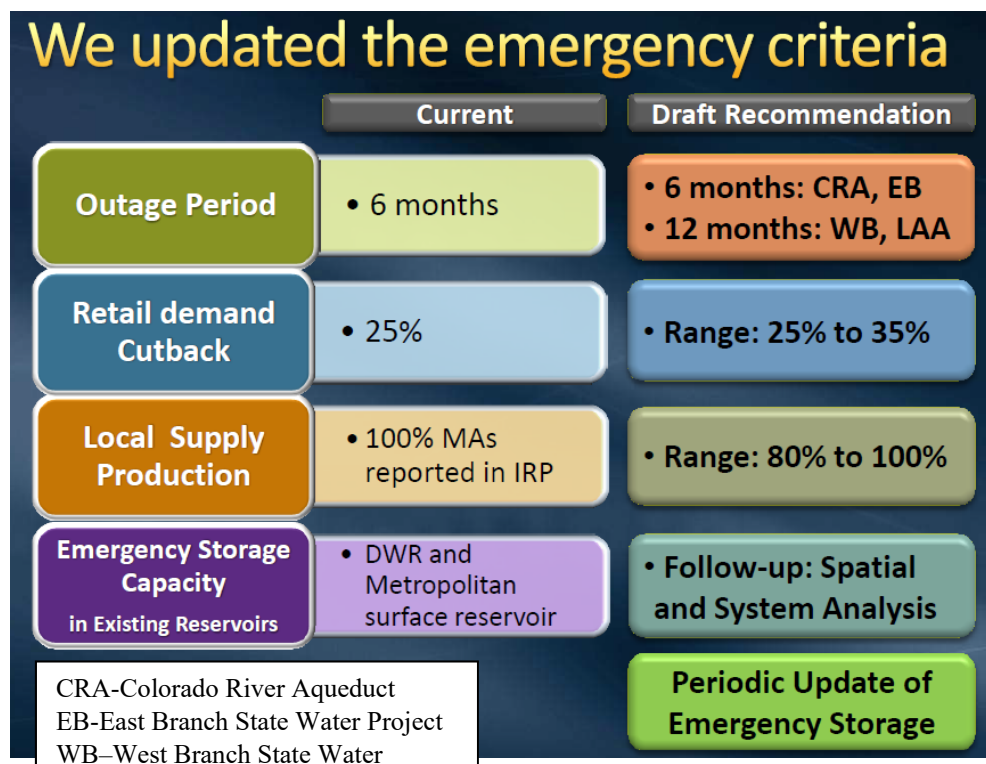
Staff requests the Board authorize the General Manager to enter into a professional services contract with Enterprise Information Systems, Inc. for one year for enhancements and upgrades to the California Sprinkler Adjustment Notification System at a cost not to exceed \$25,000. Metropolitan has approved this funding through the Metropolitan-Funded, Member Agency-Administered funding allocated to MWDOC.

| <b>ENGINEERING &amp; PLANNING</b>                          |   |
|--|---|
| <b>South Orange County Emergency Service Program</b>       | <p>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.</p> <p>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.</p> <p>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.</p> <p>One of the summary conclusions of the study is that there are options available to secure emergency supplies for the SOC agencies either:</p> <ul style="list-style-type: none"> <li>• From IRWD without using the EOCF#2 or</li> <li>• From IRWD, or other groundwater producers, by using the EOCF#2.</li> </ul> <p>Follow-up Recommendations</p> <ol style="list-style-type: none"> <li>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. It is recommended that Dudek follow-up with IRWD staff on this issue to scope out the changes in detail.</li> <li>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.</li> <li>3. Agencies were asked to think about next steps and that a follow-up meeting would be scheduled in about a month to get back with the full group.</li> </ol> |
| <b>Strand Ranch Project</b>                                | <p>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.</p>  |
| <b>MET Evaluation of Regional Storage Portfolio (ERSP)</b> | <p>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</p>   |

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 draft recommendations to update emergency storage criteria at the March 11, 2019 Water Planning and Stewardship Committee. The next step is to present the recommendations to the MET Water Planning and Stewardship Committee through an Information Letter with a White Paper attachment on May 13, 2019.



### CM-12 Meter Replacement

On multiple occasions over the past few years, demand for water through MET Service Connection CM-12 (Aufdenkamp Transmission Main) has fallen below 10% of the maximum service capacity (i.e. below 4 cfs of the maximum 40 cfs capacity); particularly during the winter.

MET Admin Code Section 4504 specifies that when flow through a service connection is reduced below ten percent of the requested maximum capacity of the meter (i.e. below the operating flow range), the agency will be charged as though a flow equaling ten percent of the capacity is being delivered.

This situation has resulted in MWDOC member agencies taking water through CM-12 (SCWD, IRWD, SMWD & LBCWD) incurring additional costs when demand falls below 4 cfs.

Recent changes to the MET Admin Code (April 10, 2018) allow for an expansion of the operating flow range for service connections. MET, MWDOC and the affected member agencies have been exploring replacement of the existing venturi meter at CM-12 with a magmeter that would provide for a greater operating flow range. MET has provided a preliminary cost estimate that was extremely high which will likely

|   |  |
|---|--|
|   | make the project infeasible. We asked MET for some refinements to the estimates and some supplemental information. A revised cost estimate was received which was lower than the original estimate. The level of the cost estimate has caused LBCWD and its partners to look at alternatives.  |
| <b>Poseidon Resources</b>   | <p>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.</p> <p>The Regional Board schedule for the permit is:</p> <p>Draft Permit                      July 2019, followed by a 30-day comment period.</p> <p>Public Workshop                August 2, 2019</p> <p>Board Hearing                      October 25, 2019</p> <p>Assuming success, Poseidon would then seek a permit from the California Coastal Commission</p>   |
| <b>SMWD Rubber Dams Project (San Juan Watershed Project)</b>                      | SMWD has completed the necessary technical studies and will be issuing the response to comments on the Draft Environmental Impact Report (DEIR) soon and hope to be in front of their Board in May 2019.   |
| <b>Doheny Ocean Desalination Project</b>  | <p>South Coast WD released the Doheny Ocean Desalination Project Draft Environmental Impact Report (EIR) on May 17, 2018 and the EIR public 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 May 2019.</p> <p>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&amp;W Appropriations Subcommittee list the projects for which the Secretary of Interior intends to award grants.</p> <p>Congressman Levin is acting as the lead office on this request in the House. ,</p> |
| <b>Water Quality and Other Integration Issues for Water Supply Projects in OC</b> | 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 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 May along with recommendations made by both consultants.   |



|  |  |
|--|--|
| <b>Phase 1 – Investigation Phase for a Hydraulic Model</b> | 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. Staff are still involved in seeking approval from MET to utilize the existing MET hydraulic model of the OC system to save time and resources. MET’s legal counsel is reviewing the issues at this time.   |
| <b>Meetings</b>  | Charles Busslinger attended the April 4, 2019 Southern California Coastal Water Resources Project Workshop on Microplastics. The main focus of the workshop was the establishment of best practices for the sampling, extraction and analysis of microplastics. Microplastics are ubiquitous in surface waters, and have more recently been reported in drinking water. The workshop focused on the current research concerning unknown health risks of microplastics, as well as the challenges of identifying and quantifying microplastics in lab samples. The workshop take-away was that best practices for lab analysis are still being established, and that additional work is needed to; automate sample analysis, further examine effective water treatment removal processes, and continue research on the human health impacts of microplastics. |
|  | On April 5, 2019, Charles Busslinger attended a tour of the Charles E. Meyer Desalination Plant in Santa Barbara and South Coast Water District Out of District Board meeting. The tour and presentation by City staff, IDE Americas, and Kiewit was very informative. The 3 MGD open ocean intake desalination facility provides Santa Barbara with about 1/3 of its water supply needs. Santa Barbara is currently negotiating with Montecito Water District to provide 1/3 of its water needs from the new plant.   |
|  | On April 11, 2019, Karl Seckel and Charles Busslinger met with staff from IRWD, Dudek, and SOC agencies to discuss the draft report on the Planning Level Reliability Alternatives Analysis Report for continuation of the IRWD South Orange County Emergency Interconnect. See above for details.   |
|  | On April 16, 2019 Charles Busslinger attended the MET Engineering Forum in Carson. The forum was very informative and included a discussion of several project delivery challenges and how other MET member agencies are addressing them. The forum concluded with a tour of the Regional Recycled Water Program Advanced Purification Center.   |
|  | On April 24, 2019, Charles Busslinger attended a tour of Trampas Canyon Reservoir and Dam construction site. Sukut Construction is continuing earthmoving activities which are increasing the capacity of the reservoir to 5,000 AF and raising the height of the earthen dam. The new recycled water reservoir will greatly enhance the reliability of recycled water operations in SOC.  |

**Status of Ongoing WEROC Projects  
April 2019**

| Description  | Comments  |
|--|---|
| <p><b><i>Coordination with WEROC Member Agencies</i></b></p> | <p><i>Ongoing: WEROC, with Michael Baker as the lead consultant, is facilitating 19 agencies through the process of updating the Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan. Update: The Hazard Mitigation Plan was approved by Cal 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.</i></p> <p>Kelly and Janine Schunk hosted WEROC Member Agencies and other regional agencies with dams for the 2<sup>nd</sup> Dam Communications Planning workshop. This is a multi-meeting effort to develop standardized communication concepts for the newly required Dam Emergency Action Plans. The updated requirements include changes to public education, dam event notification, and public alert and warning. The group reviewed the updates suggested at a previous meeting on a standardized Multi-agency Conference Call Agenda for a dam emergency and a tri-fold brochure for pre-event community education. They then worked on message mapping alert and warning messages to the public for various dam failure scenarios.</p> <p>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). Upon completion of the RRA and the ERP, the utility is to submit self-certification to the U.S. Environmental Protection Agency (USEPA) showing compliance with each portion of the federal mandate. This is currently required for drinking water utilities, including wholesale agencies, but not wastewater agencies. The following deadlines are included in the law for water systems to submit self-certification that the Risk and Resilience Assessment was prepared:</p> <ul style="list-style-type: none"> <li>➤ March 31, 2020 for systems serving population of 100,000 or more.</li> </ul> |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>➤ December 31, 2020 for systems serving a population of 50,000 or more but less than 100,000.</li> <li>➤ June 30, 2021 for systems serving a population greater than 3,300 but less than 50,000.</li> </ul> <p>A second self-certification indicating the completion of the corresponding ERPs are due within 6 months of the RRA submittal. WEROC will be facilitating a joint RFP process to evaluate participating agency's current compliance with the Act and to complete those components that individual agency's need to comply with the act. This project will be facilitated similar to the Urban Water Management Plan RFP and contract that MWDOC facilitated recently for member agencies. 27 of the 31 water utilities in Orange County have signed on to the project pending cost proposals.</p> |
| <b><i>Training and Programs</i></b>                  | <p>Kelly attended a FEMA and CalOES hosted Dams and Reservoirs Emergency Planning class in Anaheim.</p> <p>Kelly presented at the Family Assistance Foundation Annual Meeting in Burbank on responding to mass casualty events and supporting the survivors and families of these types of events.</p> <p>Kelly participated in ACWA's webinar "Wildfire Preparedness: Wish I knew Then, What I Know Now" which included lessons learned from the Santa Rosa Fire and the Carr Fire impacts to water utilities. It was also announced that ACWA is developing a Disaster Preparedness Sub-committee of its Legal Affairs Committee to develop a guidance document on legal issues a water utility should know prior to a disaster.</p>   |
| <b><i>Coordination with the County of Orange</i></b> | <p>Kelly attended a meeting with OCFA Fire Prevention and GIS staff to discuss the sharing of WEROC maps with OCFA for response coordination. The meeting was very productive in also identifying additional pre-event coordination measures that we could work together on.</p> <p><i>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. Kelly attended the second meeting which focused on the purpose of the plan and what entities and concepts should be included in it. This was an important first step in ensuring the inclusion of water agencies for alert and warning.</i></p>   |
| <b><i>Coordination with Outside Agencies</i></b>     | <p><i>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:</i></p>   |

- *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.*

Following the February hearing, the PUC has separated this hearing into a minimum of 2 phases, the first to be completed prior to the 2019 fire season. The primary discussion is regarding notification of events by the energy companies to response partners and community members. Our main concern is how water utilities are defined or recognized by the PUC and therefore notified and coordinated with by the energy providers. MWDOC is taking a strong stance that water utilities should be included in the definition of “emergency responder” as it has serious implications throughout the entire policy on de-energization. In order to respond to the revised Phase 1, Kelly with support from Ryan Baron at BBK, provided 2 additional responses:

- 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

Please note that BBK clients Valley Center Municipal Water District and Padre Dam Municipal Water District requested to join MWDOC’s efforts. They have agreed that MWDOC staff will take lead in development of policy statements, however their participation will help with splitting up work efforts and sharing the cost for BBK support.

The assigned PUC Commissioner released a Proposed Decision on April 26, 2019. Kelly Hubbard and Mr. Baron of BBK will be reviewing that decision and determining follow-up actions.

Kelly participated in the April CalWARN State Steering Committee meeting. Discussion focused on how to improve future CalWARN trainings and its website. Additionally, she worked with committee members on defining state-wide bylaws and voting procedures.

Kelly attended the quarterly Southern California Mutual Aid Regional Advisory Committee (MARAC) quarterly meeting and Southern Region Emergency Council meeting immediately following. Kelly is the Public Utility Representative for Region 1. Both meetings provide an opportunity to learn about and influence programing or policies that are being developed and implemented on a regional and state-wide basis, as well as lessons learned from our peers. Additionally, it was an opportunity to express the concern of some of our member agencies on continual changes to the dam planning requirements that are not being communicated by CalOES. It was also announced at the meeting that Kelly was voted to be the SEMS

|                             |  |
|-----------------------------|--|
|                             | <p>Technical Group Alternative Representative for Region 1. As a representative to the SEMS Technical Committee Kelly will have the ability to ensure that consideration for water and wastewater systems, as well as special districts, are considered in state-wide policy, programs and procedures.</p>   |
| <b><i>EOC Readiness</i></b> | <p>Janine Schunk collected updated contact information for CalWARN, Region 1 (signatories from San Luis Obispo, Santa Barbara, Ventura, Los Angeles and Orange County). She has updated this information in AlertOC, Outlook, SafetyCenter, and hard copy phone books in multiple locations. This is an annual effort that takes a significant amount of work.</p> <p>Leah Frazier assisted WEROC in purchasing new MRE's for the WEROC South EOC and Janine replaced those at the facility.</p> <p>Janine participated in the OA and MET radio tests and WebEOC tests. She also facilitated the WEROC monthly radio test.</p> |

# Status of Water Use Efficiency Projects

May 2019

| Description   | Lead Agency | Status % Complete | Scheduled Completion or Renewal Date | Comments  |
|---|-------------|-------------------|--------------------------------------|---|
| <b>Smart Timer Rebate Program</b>                                 | MWDSC       | Ongoing           | Ongoing                              | In March 2019, 125 smart timers were installed in Orange County.<br><br>For program water savings and implementation information, see MWDSC Water Use Efficiency Program Savings and Implementation Report.   |
| <b>Rotating Nozzles Rebate Program</b>                            | MWDSC       | Ongoing           | Ongoing                              | In March 2019, 30 rotating nozzles were installed in Orange County.<br><br>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.   |
| <b>SoCal Water\$mart Residential Indoor Rebate Program</b>        | MWDSC       | Ongoing           | Ongoing                              | In March 2019, 167 high efficiency clothes washers and 7 premium high efficiency toilets were installed through this program.<br><br>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.   |
| <b>SoCal Water\$mart Commercial Rebate Program</b>                | MWDSC       | Ongoing           | Ongoing                              | In March 2019, 7 commercial premium high efficiency toilets, 129 residential premium high efficiency toilets, and 2 zero water urinals were installed through this program.<br><br>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report. |
| <b>Industrial Process/ Water Savings Incentive Program (WSIP)</b> | 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  |

| Description                             | Lead Agency | Status % Complete | Scheduled Completion or Renewal Date | Comments  |
|---|-------------|-------------------|--------------------------------------|---|
|   |             |                   |                                      | <p>custom water-saving projects. This fiscal year, two projects have been completed, which will save over 28 AFY.</p> <p>Total water savings to date for the entire program is 673 AFY and 3,613 AF cumulatively.</p>   |
| <b>Turf Removal Program</b>             | MWDOC       | Ongoing           | Ongoing                              | <p>In March 2019, 16 rebates were paid, representing \$216,762 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 22.2 million square feet of turf.</p> <p>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>   |
| <b>Spray to Drip Conversion Program</b> | MWDOC       | Ongoing           | Ongoing                              | <p>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.</p> <p>To date, 244 residential sites and 64 commercial sites have completed spray to drip conversion projects.</p>   |
| <b>Recycled Water Retrofit Program</b>  | MWDSC       | 100%              | September 2018                       | <p>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.</p> |

# Orange County

## Water Use Efficiency Programs Savings and Implementation Report

### Retrofits and Acre-Feet Water Savings for Program Activity

| Program   | Program Start Date | Retrofits Installed in | Month Indicated |               | Current Fiscal Year |               | Overall Program   |                             |
|---|--------------------|------------------------|-----------------|---------------|---------------------|---------------|-------------------|-----------------------------|
|   |                    |                        | Interventions   | Water Savings | Interventions       | Water Savings | Interventions     | Cumulative Water Savings[4] |
| High Efficiency Clothes Washer Program                    | 2001               | March-19               | 167             | 0.48          | 2,119               | 30.96         | 118,664           | 4,094                       |
| Smart Timer Program - Irrigation Timers                   | 2004               | March-19               | 125             | 2.05          | 2,110               | 204.29        | 24,834            | 8,463                       |
| Rotating Nozzles Rebate Program                           | 2007               | March-19               | 30              | 0.12          | 2,995               | 11.97         | 567,302           | 2,775                       |
| Commercial Plumbing Fixture Rebate Program                | 2002               | March-19               | 138             | 0.44          | 10,207              | 115.62        | 103,980           | 5,266                       |
| Industrial Process/Water Savings Incentive Program (WSIP) | 2006               | March-19               | 0               | 0.00          | 2                   | 10.97         | 33                | 673                         |
| Turf Removal Program <sup>[3]</sup>                       | 2010               | April-19               | 96,576          | 1.13          | 690,249             | 42.66         | 22,285,327        | 3,121                       |
| High Efficiency Toilet (HET) Program                      | 2005               | March-19               | 7               | 0.02          | 207                 | 8.80          | 60,310            | 2,229                       |
| Water Smart Landscape Program <sup>[1]</sup>              | 1997               |                        |                 |               |                     |               | 12,677            | 10,621                      |
| Home Water Certification Program                          | 2013               |                        |                 |               |                     |               | 312               | 7,339                       |
| Synthetic Turf Rebate Program                             | 2007               |                        |                 |               |                     |               | 685,438           | 96                          |
| Ultra-Low-Flush-Toilet Programs <sup>[2]</sup>            | 1992               |                        |                 |               |                     |               | 363,926           | 13,452                      |
| Home Water Surveys <sup>[2]</sup>                         | 1995               |                        |                 |               |                     |               | 11,867            | 160                         |
| Showerhead Replacements <sup>[2]</sup>                    | 1991               |                        |                 |               |                     |               | 270,604           | 1,667                       |
| <b>Total Water Savings All Programs</b>                   |                    |                        | <b>4</b>        |               | <b>707,889</b>      | <b>425</b>    | <b>24,505,274</b> | <b>52,624</b>               |
| <b>Total</b>  |                    |                        |                 |               |                     |               |                   | <b>449,197</b>              |

<sup>1</sup> Water Smart Landscape Program participation is based on the number of water meters receiving monthly Irrigation Performance Reports.

<sup>2</sup> Cumulative Water Savings Program To Date totals are from a previous Water Use Efficiency Program Effort.

<sup>3</sup> Turf Removal Interventions are listed as square feet.

<sup>4</sup> Cumulative & annual water savings represents both active program savings and passive savings that continues to be realized due to plumbing code changes over time.

Item 4d



# **HIGH EFFICIENCY CLOTHES WASHERS INSTALLED BY AGENCY**

through MWDOC and Local Agency Conservation Programs

| Agency              | FY 12/13     | FY13/14      | FY14/15      | FY15/16      | FY16/17      | FY17/18      | FY18/19      | Total          | Current FY<br>Water Savings<br>Ac/Ft<br>(Cumulative) | Cumulative<br>Water Savings<br>across all<br>Fiscal Years | 15 yr.<br>Lifecycle<br>Savings<br>Ac/Ft |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--|---|---|
| Brea                | 93           | 115          | 114          | 76           | 57           | 56           | 46           | 1,969          | 0.64   | 504.22  | 1,019                                   |
| Buena Park          | 105          | 106          | 91           | 76           | 54           | 50           | 33           | 1,601          | 0.41   | 397.92  | 828                                     |
| East Orange CWD RZ  | 10           | 8            | 8            | 8            | 3            | 1            | 5            | 198            | 0.06   | 53.89   | 102                                     |
| El Toro WD          | 134          | 121          | 111          | 65           | 47           | 50           | 30           | 1,601          | 0.42   | 399.49  | 828                                     |
| Fountain Valley     | 115          | 102          | 110          | 76           | 65           | 49           | 29           | 2,478          | 0.41   | 665.33  | 1,282                                   |
| Garden Grove        | 190          | 162          | 165          | 251          | 127          | 87           | 55           | 3,705          | 0.81   | 949.05  | 1,917                                   |
| Golden State WC     | 265          | 283          | 359          | 260          | 138          | 156          | 72           | 5,243          | 1.18   | 1,345.09  | 2,713                                   |
| Huntington Beach    | 334          | 295          | 319          | 225          | 180          | 141          | 72           | 8,459          | 1.03   | 2,312.92  | 4,377                                   |
| Irvine Ranch WD     | 1,763        | 1,664        | 1,882        | 1,521        | 1,373        | 1,203        | 711          | 26,580         | 10.07  | 6,427.93  | 13,753                                  |
| La Habra            | 82           | 114          | 87           | 66           | 53           | 48           | 37           | 1,412          | 0.50   | 348.60  | 731                                     |
| La Palma            | 34           | 25           | 34           | 29           | 10           | 14           | 6            | 478            | 0.09   | 120.49  | 247                                     |
| Laguna Beach CWD    | 38           | 37           | 39           | 32           | 19           | 20           | 14           | 966            | 0.23   | 253.92  | 500                                     |
| Mesa Water          | 114          | 86           | 89           | 113          | 80           | 54           | 33           | 2,605          | 0.49   | 708.77  | 1,348                                   |
| Moulton Niguel WD   | 442          | 421          | 790          | 688          | 575          | 527          | 275          | 10,723         | 4.08   | 2,559.84  | 5,548                                   |
| Newport Beach       | 116          | 92           | 95           | 66           | 61           | 51           | 37           | 2,712          | 0.56   | 750.74  | 1,403                                   |
| Orange              | 218          | 163          | 160          | 124          | 80           | 74           | 47           | 4,019          | 0.70   | 1,102.28  | 2,080                                   |
| San Juan Capistrano | 76           | 73           | 92           | 63           | 33           | 33           | 18           | 1,510          | 0.22   | 392.60  | 781                                     |
| San Clemente        | 140          | 94           | 141          | 75           | 70           | 85           | 53           | 2,758          | 0.77   | 711.47  | 1,427                                   |
| Santa Margarita WD  | 553          | 662          | 792          | 466          | 367          | 274          | 172          | 9,962          | 2.54   | 2,479.45  | 5,155                                   |
| Seal Beach          | 31           | 29           | 38           | 23           | 9            | 17           | 6            | 625            | 0.09   | 163.13  | 323                                     |
| Serrano WD          | 13           | 10           | 26           | 8            | 11           | 8            | 1            | 366            | 0.01   | 100.08  | 189                                     |
| South Coast WD      | 89           | 79           | 68           | 43           | 44           | 36           | 22           | 1,642          | 0.33   | 424.22  | 850                                     |
| Trabuco Canyon WD   | 30           | 45           | 47           | 34           | 28           | 22           | 5            | 825            | 0.06   | 212.07  | 427                                     |
| Tustin              | 78           | 59           | 80           | 66           | 44           | 49           | 26           | 1,687          | 0.37   | 448.56  | 873                                     |
| Westminster         | 121          | 82           | 109          | 149          | 84           | 65           | 33           | 2,684          | 0.45   | 696.91  | 1,389                                   |
| Yorba Linda         | 181          | 167          | 156          | 123          | 56           | 67           | 31           | 3,850          | 0.49   | 1,056.61  | 1,992                                   |
| <b>MWDOC Totals</b> | <b>5,365</b> | <b>5,094</b> | <b>6,002</b> | <b>4,726</b> | <b>3,668</b> | <b>3,237</b> | <b>1,869</b> | <b>100,670</b> | <b>27.01</b>   | <b>25,589.64</b>  | <b>19,449</b>                           |

|                         |            |            |            |            |            |            |            |               |             |                 |              |
|-------------------------|------------|------------|------------|------------|------------|------------|------------|---------------|-------------|-----------------|--------------|
| Anaheim                 | 331        | 285        | 295        | 266        | 213        | 173        | 93         | 10,948        | 1.37        | 3,040.64        | 5,665        |
| Fullerton               | 200        | 186        | 211        | 165        | 107        | 99         | 89         | 3,883         | 1.44        | 1,001.50        | 2,009        |
| Santa Ana               | 163        | 131        | 132        | 259        | 141        | 124        | 68         | 3,163         | 1.14        | 808.53          | 1,637        |
| <b>Non-MWDOC Totals</b> | <b>694</b> | <b>602</b> | <b>638</b> | <b>690</b> | <b>461</b> | <b>396</b> | <b>250</b> | <b>17,994</b> | <b>3.95</b> | <b>4,850.67</b> | <b>3,476</b> |

|                             |              |              |              |              |              |              |              |                |              |                  |               |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|------------------|---------------|
| <b>Orange County Totals</b> | <b>6,059</b> | <b>5,696</b> | <b>6,640</b> | <b>5,416</b> | <b>4,129</b> | <b>3,633</b> | <b>2,119</b> | <b>118,664</b> | <b>30.96</b> | <b>30,440.31</b> | <b>22,925</b> |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|------------------|---------------|

# **SMART TIMERS INSTALLED BY AGENCY** through MWDOC and Local Agency Conservation Programs

| Agency              | FY 12/13     |            | FY 13/14   |            | FY 14/15   |              | FY 15/16     |              | FY16/17      |              | FY17/18      |            | FY18/19      |            | Total Program |               | Cumulative<br>Water Savings<br>across all Fiscal<br>Years |
|---------------------|--------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|------------|---------------|---------------|---|
|                     | Res          | Comm       | Res        | Comm       | Res        | Comm         | Res          | Comm         | Res          | Comm         | Res          | Comm       | Res          | Comm       | Res           | Comm.         |   |
| Brea                | 9            | 8          | 4          | 0          | 6          | 43           | 20           | 4            | 31           | 4            | 32           | 0          | 25           | 0          | 188           | 80            | 585.35  |
| Buena Park          | 3            | 0          | 0          | 0          | 10         | 4            | 7            | 4            | 10           | 7            | 15           | 3          | 16           | 7          | 62            | 51            | 186.72  |
| East Orange CWD RZ  | 2            | 0          | 0          | 0          | 0          | 2            | 1            | 0            | 11           | 1            | 6            | 0          | 1            | 0          | 32            | 1             | 26.86   |
| El Toro WD          | 7            | 2          | 11         | 0          | 9          | 8            | 9            | 17           | 33           | 8            | 29           | 4          | 25           | 0          | 169           | 359           | 2,729.70  |
| Fountain Valley     | 3            | 2          | 4          | 0          | 7          | 10           | 13           | 1            | 33           | 12           | 28           | 12         | 31           | 4          | 150           | 56            | 232.40  |
| Garden Grove        | 5            | 2          | 9          | 0          | 10         | 14           | 13           | 11           | 28           | 0            | 27           | 2          | 32           | 3          | 160           | 43            | 211.61  |
| Golden State WC     | 9            | 49         | 9          | 25         | 12         | 39           | 35           | 16           | 56           | 37           | 88           | 6          | 60           | 15         | 373           | 213           | 980.18  |
| Huntington Beach    | 18           | 33         | 20         | 35         | 19         | 19           | 42           | 12           | 88           | 94           | 70           | 30         | 88           | 65         | 430           | 363           | 1,348.19  |
| Irvine Ranch WD     | 414          | 135        | 71         | 59         | 67         | 310          | 239          | 207          | 344          | 420          | 416          | 78         | 316          | 105        | 2,501         | 2,469         | 13,162.63   |
| La Habra            | 4            | 7          | 2          | 0          | 4          | 7            | 3            | 1            | 12           | 7            | 8            | 0          | 15           | 3          | 59            | 47            | 237.72  |
| La Palma            | 1            | 0          | 2          | 0          | 0          | 2            | 3            | 2            | 1            | 0            | 5            | 0          | 3            | 0          | 18            | 2             | 8.38  |
| Laguna Beach CWD    | 76           | 2          | 71         | 0          | 86         | 0            | 86           | 1            | 27           | 0            | 11           | 0          | 5            | 0          | 513           | 20            | 272.59  |
| Mesa Water          | 10           | 2          | 15         | 2          | 17         | 28           | 36           | 12           | 149          | 41           | 49           | 0          | 28           | 55         | 395           | 209           | 894.01  |
| Moulton Niguel WD   | 51           | 74         | 40         | 45         | 46         | 95           | 163          | 100          | 236          | 129          | 284          | 33         | 272          | 64         | 1,470         | 898           | 4,280.63  |
| Newport Beach       | 242          | 26         | 168        | 75         | 11         | 11           | 28           | 43           | 30           | 12           | 24           | 0          | 18           | 0          | 1,080         | 409           | 2,941.42  |
| Orange              | 20           | 24         | 13         | 9          | 18         | 31           | 51           | 13           | 69           | 10           | 61           | 13         | 77           | 26         | 423           | 204           | 1,095.57  |
| San Juan Capistrano | 14           | 18         | 6          | 11         | 6          | 19           | 20           | 8            | 22           | 8            | 23           | 5          | 17           | 0          | 262           | 130           | 746.29  |
| San Clemente        | 26           | 7          | 28         | 2          | 28         | 24           | 26           | 3            | 37           | 13           | 38           | 41         | 33           | 0          | 1,122         | 415           | 3,015.67  |
| Santa Margarita WD  | 53           | 171        | 64         | 93         | 53         | 321          | 189          | 136          | 326          | 221          | 273          | 220        | 189          | 28         | 1,616         | 1,620         | 6,936.47  |
| Seal Beach          | 1            | 0          | 1          | 36         | 1          | 12           | 2            | 2,446        | 2            | 4            | 5            | 0          | 3            | 31         | 15            | 2,533         | 6,825.34  |
| Serrano WD          | 1            | 0          | 0          | 0          | 4          | 0            | 11           | 2            | 4            | 0            | 8            | 0          | 10           | 0          | 56            | 2             | 18.26   |
| South Coast WD      | 13           | 16         | 8          | 4          | 104        | 73           | 9            | 11           | 7            | 0            | 15           | 2          | 6            | 7          | 299           | 221           | 1,312.17  |
| Trabuco Canyon WD   | 6            | 0          | 2          | 0          | 6          | 1            | 16           | 50           | 13           | 3            | 20           | 0          | 26           | 0          | 149           | 157           | 1,063.63  |
| Tustin              | 8            | 4          | 9          | 1          | 18         | 14           | 33           | 8            | 33           | 23           | 27           | 1          | 31           | 0          | 201           | 81            | 404.72  |
| Westminster         | 1            | 1          | 2          | 0          | 13         | 17           | 7            | 1            | 17           | 12           | 22           | 0          | 19           | 0          | 106           | 44            | 232.49  |
| Yorba Linda         | 20           | 0          | 12         | 5          | 32         | 2            | 61           | 27           | 72           | 71           | 68           | 10         | 64           | 4          | 470           | 197           | 990.43  |
| <b>MWDOC Totals</b> | <b>1,017</b> | <b>583</b> | <b>571</b> | <b>402</b> | <b>648</b> | <b>1,026</b> | <b>1,123</b> | <b>3,136</b> | <b>1,691</b> | <b>1,137</b> | <b>1,652</b> | <b>460</b> | <b>1,410</b> | <b>417</b> | <b>12,319</b> | <b>10,824</b> | <b>50,739.42</b>  |

|                             |              |            |            |            |            |              |              |              |              |              |              |            |              |            |               |               |                 |
|-----------------------------|--------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|------------|---------------|---------------|-----------------|
| Anaheim                     | 19           | 10         | 9          | 26         | 7          | 52           | 30           | 34           | 87           | 10           | 66           | 0          | 110          | 69         | 420           | 526           | 2,981.41        |
| Fullerton                   | 9            | 29         | 8          | 0          | 40         | 26           | 32           | 12           | 53           | 7            | 45           | 0          | 64           | 0          | 308           | 199           | 1,083.63        |
| Santa Ana                   | 8            | 19         | 7          | 8          | 9          | 27           | 22           | 26           | 15           | 3            | 16           | 0          | 20           | 20         | 118           | 120           | 423.47          |
| <b>Non-MWDOC Totals</b>     | <b>36</b>    | <b>58</b>  | <b>24</b>  | <b>34</b>  | <b>56</b>  | <b>105</b>   | <b>84</b>    | <b>72</b>    | <b>155</b>   | <b>20</b>    | <b>127</b>   | <b>0</b>   | <b>194</b>   | <b>89</b>  | <b>846</b>    | <b>845</b>    | <b>4,488.51</b> |
| <b>Orange County Totals</b> | <b>1,053</b> | <b>641</b> | <b>595</b> | <b>436</b> | <b>704</b> | <b>1,131</b> | <b>1,207</b> | <b>3,208</b> | <b>1,846</b> | <b>1,157</b> | <b>1,779</b> | <b>460</b> | <b>1,604</b> | <b>506</b> | <b>13,165</b> | <b>11,669</b> | <b>55,228</b>   |

**ROTATING NOZZLES INSTALLED BY AGENCY**  
through MWDOC and Local Agency Conservation Programs

| Agency              | FY 13/14 |        |       | FY 14/15 |        |       | FY 15/16 |        |     | FY 16/17 |        |       | FY 17/18 |       |       | FY 18/19 |       |       | Total Program |         |        | Cumulative Water Savings across all Fiscal Years |
|---------------------|----------|--------|-------|----------|--------|-------|----------|--------|-----|----------|--------|-------|----------|-------|-------|----------|-------|-------|---------------|---------|--------|--|
|                     | Res      | Small  | Large | Comm.    | Res    | Small | Large    | Comm.  | Res | Small    | Large  | Comm. | Res      | Small | Large | Comm.    | Res   | Small | Large         | Comm.   |        |  |
|                     |          |        |       |          |        |       |          |        |     |          |        |       |          |       |       |          |       |       |               |         |        |  |
| Brea                | 84       | 0      | 0     | 157      | 45     | 0     | 74       | 2,484  | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 572           | 2,749   | 0      | 62.74  |
| Buena Park          | 53       | 0      | 0     | 248      | 0      | 0     | 45       | 98     | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 509           | 173     | 2,535  | 904.56   |
| East Orange         | 30       | 0      | 0     | 221      | 0      | 0     | 0        | 0      | 0   | 0        | 0      | 0     | 0        | 30    | 0     | 0        | 0     | 0     | 781           | 0       | 0      | 22.41  |
| El Toro             | 56       | 3,288  | 0     | 1,741    | 28,714 | 0     | 730      | 4,457  | 0   | 55       | 242    | 0     | 36       | 0     | 0     | 0        | 0     | 0     | 3,405         | 46,222  | 890    | 1,421.25   |
| Fountain Valley     | 0        | 0      | 0     | 107      | 0      | 0     | 222      | 0      | 0   | 0        | 0      | 0     | 85       | 0     | 0     | 283      | 0     | 0     | 795           | 283     | 0      | 21.86  |
| Garden Grove        | 80       | 0      | 0     | 88       | 50     | 0     | 110      | 0      | 0   | 55       | 98     | 0     | 52       | 0     | 0     | 0        | 0     | 0     | 985           | 299     | 0      | 37.86  |
| Golden State        | 192      | 0      | 0     | 583      | 1,741  | 0     | 1,088    | 0      | 0   | 207      | 6,008  | 0     | 161      | -495  | 0     | 35       | 259   | 0     | 3,644         | 11,080  | 0      | 299.31   |
| Huntington Beach    | 120      | 0      | 0     | 798      | 1,419  | 0     | 1,345    | 2,836  | 0   | 149      | 3,362  | 0     | -37      | 0     | 0     | 0        | 0     | 0     | 3,760         | 12,526  | 2,681  | 1,469.75   |
| Irvine Ranch        | 11,010   | 4,257  | 0     | 1,421    | 632    | 0     | 1,989    | 5,047  | 0   | 335      | 9,511  | 0     | 356      | -215  | 0     | 0        | 0     | 0     | 47,493        | 94,346  | 2,004  | 5,382.30   |
| La Habra            | 15       | 0      | 0     | 109      | 338    | 0     | 300      | 0      | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 481           | 1,236   | 900    | 404.34   |
| La Palma            | 0        | 0      | 0     | 0        | 0      | 0     | 46       | 505    | 0   | 0        | 2,385  | 0     | 33       | 0     | 0     | 0        | 0     | 0     | 89            | 2,890   | 0      | 38.12  |
| Laguna Beach        | 2,948    | 878    | 0     | 2,879    | 1,971  | 0     | 1,390    | 0      | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 12,139        | 2,896   | 0      | 361.30   |
| Mesa Water          | 361      | 0      | 0     | 229      | 0      | 0     | 166      | 0      | 0   | 113      | 0      | 0     | 36       | 0     | 0     | 0        | 0     | 0     | 2,066         | 385     | 343    | 217.09   |
| Moulton Niguel      | 361      | 227    | 0     | 1,596    | 4,587  | 0     | 5,492    | 1,441  | 0   | 153      | 5,872  | 0     | 893      | 0     | 0     | 677      | 38    | 0     | 13,444        | 20,553  | 2,945  | 1,930.99   |
| Newport Beach       | 19,349   | 6,835  | 0     | 460      | 3,857  | 0     | 348      | 670    | 0   | 0        | 0      | 0     | 45       | 0     | 0     | 0        | 0     | 0     | 46,723        | 21,413  | 0      | 1,856.70   |
| Orange              | 245      | 120    | 0     | 304      | 668    | 0     | 631      | 91     | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 3,170         | 1,072   | 0      | 126.21   |
| San Juan Capistrano | 370      | 0      | 0     | 495      | 737    | 0     | 310      | 593    | 0   | 75       | 123    | 0     | 59       | 0     | 0     | 40       | 1,400 | 0     | 5,594         | 10,252  | 0      | 509.09   |
| San Clemente        | 415      | 5,074  | 0     | 326      | 0      | 0     | 426      | 0      | 0   | 0        | 0      | 0     | 146      | 0     | 0     | 0        | 0     | 0     | 10,135        | 7,538   | 1,343  | 917.84   |
| Santa Margarita     | 389      | 0      | 0     | 1,207    | 1,513  | 0     | 1,820    | 837    | 0   | 15       | 0      | 0     | 224      | 0     | 0     | 0        | 0     | 0     | 16,389        | 6,921   | 611    | 939.44   |
| Seal Beach          | 0        | 0      | 0     | 40       | 5,261  | 0     | 0        | 2,300  | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 155           | 7,852   | 0      | 159.45   |
| Serrano             | 105      | 0      | 0     | 377      | 0      | 0     | 695      | 0      | 0   | 0        | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 3,405         | 0       | 0      | 106.90   |
| South Coast         | 70       | 0      | 0     | 4,993    | 13,717 | 0     | 1,421    | 2,889  | 0   | 16       | 0      | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 8,130         | 18,870  | 0      | 580.71   |
| Trabuco Canyon      | 0        | 0      | 0     | 56       | 0      | 0     | 130      | 0      | 0   | 0        | 4,339  | 0     | 0        | 0     | 0     | 0        | 0     | 0     | 2,086         | 5,130   | 0      | 160.44   |
| Tustin              | 329      | 0      | 0     | 408      | 0      | 0     | 317      | 386    | 0   | 65       | -341   | 0     | 30       | 0     | 0     | 47       | 0     | 0     | 3,448         | 1,058   | 0      | 138.85   |
| Westminster         | 0        | 0      | 0     | 54       | 0      | 0     | 73       | 0      | 0   | 105      | 0      | 0     | 50       | 0     | 0     | 42       | 0     | 0     | 556           | 0       | 0      | 13.41  |
| Yorba Linda         | 40       | 990    | 0     | 921      | 0      | 0     | 1,715    | 0      | 0   | 213      | 0      | 0     | 0        | 0     | 0     | 34       | 0     | 0     | 6,115         | 4,359   | 500    | 519.44   |
| MWDOC Totals        | 36,622   | 21,669 | 0     | 19,818   | 65,250 | 0     | 20,883   | 24,634 | 0   | 1,556    | 31,599 | 0     | 2,199    | -710  | 0     | 875      | 1,980 | 0     | 196,069       | 280,103 | 14,752 | 18,602.34  |

|                             |               |               |          |               |               |          |               |               |          |              |               |          |              |             |          |              |              |          |                |                |               |                  |
|-----------------------------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|--------------|---------------|----------|--------------|-------------|----------|--------------|--------------|----------|----------------|----------------|---------------|------------------|
| Anaheim                     | 338           | 0             | 0        | 498           | 712           | 0        | 794           | 5,221         | 0        | 147          | 3,953         | 0        | 0            | 0           | 0        | 0            | 0            | 0        | 4,020          | 49,799         | 105           | 1,569.31         |
| Fullerton                   | 107           | 0             | 0        | 684           | 1,196         | 0        | 521           | 7,015         | 0        | 65           | 3,034         | 0        | 0            | 0           | 0        | 140          | 0            | 0        | 3,050          | 11,309         | 1,484         | 778.09           |
| Santa Ana                   | 86            | 2,533         | 0        | 310           | 0             | 0        | 0             | 1,420         | 0        | 0            | 1,106         | 0        | 0            | 0           | 0        | 0            | 0            | 0        | 859            | 5,752          | 0             | 150.90           |
| <b>Non-MWDOC Totals</b>     | <b>531</b>    | <b>2,533</b>  | <b>0</b> | <b>1,492</b>  | <b>1,908</b>  | <b>0</b> | <b>1,315</b>  | <b>13,656</b> | <b>0</b> | <b>212</b>   | <b>8,093</b>  | <b>0</b> | <b>0</b>     | <b>0</b>    | <b>0</b> | <b>140</b>   | <b>0</b>     | <b>0</b> | <b>7,929</b>   | <b>66,860</b>  | <b>1,589</b>  | <b>2,498.29</b>  |
| <b>Orange County Totals</b> | <b>37,153</b> | <b>24,202</b> | <b>0</b> | <b>21,310</b> | <b>67,158</b> | <b>0</b> | <b>22,198</b> | <b>38,290</b> | <b>0</b> | <b>1,768</b> | <b>39,692</b> | <b>0</b> | <b>2,199</b> | <b>-710</b> | <b>0</b> | <b>1,015</b> | <b>1,980</b> | <b>0</b> | <b>203,998</b> | <b>346,963</b> | <b>16,341</b> | <b>21,100.63</b> |

# COMMERCIAL PLUMBING FIXTURES INSTALLED BY AGENCY<sup>[1]</sup>

through MWDOC and Local Agency Conservation Programs

| Agency                      | FY 12/13     | FY 13/14     | FY 14/15     | FY 15/16      | FY 16/17      | FY 17/18     | FY 18/19      | Totals         | Cumulative Water Savings across all Fiscal Years |
|-----------------------------|--------------|--------------|--------------|---------------|---------------|--------------|---------------|----------------|--|
| Brea                        | 234          | 0            | 10           | 91            | 734           | 242          | 0             | 1,607          | 586  |
| Buena Park                  | 5            | 23           | 56           | 591           | 133           | 49           | 0             | 2,538          | 1,363  |
| East Orange CWD RZ          | 0            | 0            | 0            | 0             | 0             | 0            | 0             | 0              | 0  |
| El Toro WD                  | 0            | 212          | 6            | 268           | 35            | 737          | 717           | 2,516          | 750  |
| Fountain Valley             | 0            | 0            | 1            | 249           | 0             | 895          | 0             | 1,767          | 755  |
| Garden Grove                | 4            | 1            | 167          | 676           | 410           | 0            | 0             | 2,451          | 1,805  |
| Golden State WC             | 0            | 1            | 0            | 1,008         | 53            | 93           | 0             | 2,958          | 2,278  |
| Huntington Beach            | 104          | 144          | 7            | 783           | 641           | 10           | 0             | 2,964          | 1,942  |
| Irvine Ranch WD             | 1,090        | 451          | 725          | 11,100        | 5,958         | 1,599        | 1,000         | 30,465         | 9,816  |
| La Habra                    | 0            | 0            | 0            | 340           | 42            | 0            | 0             | 925            | 664  |
| La Palma                    | 0            | 0            | 0            | 0             | 509           | 0            | 0             | 675            | 159  |
| Laguna Beach CWD            | 0            | 27           | 0            | 0             | 0             | 0            | 0             | 446            | 373  |
| Mesa Water                  | 6            | 0            | 79           | 661           | 782           | 0            | 110           | 4,364          | 2,549  |
| Moulton Niguel WD           | 0            | 0            | 3            | 413           | 281           | 506          | 4,392         | 6,175          | 1,194  |
| Newport Beach               | 0            | 0            | 566          | 0             | 0             | 0            | 1,596         | 3,430          | 1,609  |
| Orange                      | 1            | 271          | 81           | 275           | 2,851         | 458          | 524           | 6,012          | 2,284  |
| San Juan Capistrano         | 0            | 14           | 0            | 0             | 0             | 0            | 0             | 260            | 457  |
| San Clemente                | 0            | 0            | 1            | 0             | 0             | 0            | 0             | 432            | 444  |
| Santa Margarita WD          | 0            | 0            | 2            | 90            | 743           | 598          | 699           | 2,247          | 376  |
| Seal Beach                  | 0            | 0            | 0            | 0             | 184           | 278          | 0             | 816            | 519  |
| Serrano WD                  | 0            | 0            | 0            | 0             | 0             | 0            | 0             | 0              | 0  |
| South Coast WD              | 148          | 0            | 382          | 0             | 0             | 0            | 0             | 1,320          | 646  |
| Trabuco Canyon WD           | 0            | 0            | 0            | 0             | 0             | 0            | 0             | 11             | 18   |
| Tustin                      | 0            | 0            | 75           | 358           | 212           | 2            | 408           | 1,812          | 1,020  |
| Westminster                 | 1            | 28           | 0            | 146           | 177           | 25           | 0             | 1,163          | 1,191  |
| Yorba Linda                 | 1            | 0            | 0            | 226           | 84            | 338          | 0             | 933            | 684  |
| <b>MWDOC Totals</b>         | <b>1,594</b> | <b>1,172</b> | <b>2,161</b> | <b>17,275</b> | <b>13,829</b> | <b>5,830</b> | <b>9,446</b>  | <b>78,287</b>  | <b>33,480</b>                                    |
| Anaheim                     | 165          | 342          | 463          | 3,072         | 309           | 1,808        | 389           | 15,950         | 8,483  |
| Fullerton                   | 94           | 0            | 178          | 476           | 621           | 274          | 372           | 3,424          | 2,029  |
| Santa Ana                   | 16           | 17           | 5            | 1,293         | 238           | 582          | 0             | 6,319          | 5,637  |
| <b>Non-MWDOC Totals</b>     | <b>275</b>   | <b>359</b>   | <b>646</b>   | <b>4,841</b>  | <b>1,168</b>  | <b>2,664</b> | <b>761</b>    | <b>25,693</b>  | <b>16,149</b>                                    |
| <b>Orange County Totals</b> | <b>1,869</b> | <b>1,531</b> | <b>2,807</b> | <b>22,116</b> | <b>14,997</b> | <b>8,494</b> | <b>10,207</b> | <b>103,980</b> | <b>49,628</b>                                    |

[1] Retrofit devices include ULF Toilets and Urinals, High Efficiency Toilets and Urinals, Multi-Family 4-Liter HETs, Zero Water Urinals, High Efficiency Clothes Washers, Cooling Tower Conductivity Controllers, Ph Cooling Tower Conductivity Controllers, Flush Valve Retrofit Kits, Pre-rinse Spray heads, Hospital X-Ray Processor Recirculating Systems, Steam Sterilizers, Food Steamers, Water Pressurized Brooms, Laminar Flow Restrictors, and Ice Making Machines.

# INDUSTRIAL PROCESS/WATER SAVINGS INCENTIVE PROGRAM

Number of Projects by Agency

| Agency              | FY 11/12 | FY 12/13 | FY 13/14 | FY 14/15 | FY 15/16  | FY 16/17 | FY 17/18 | FY 18/19 | Overall Program Interventions | Annual Water Savings[1] | Cumulative Water Savings across all Fiscal Years[1] |
|---------------------|----------|----------|----------|----------|-----------|----------|----------|----------|-------------------------------|-------------------------|---|
| Brea                | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Buena Park          | 0        | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 2                             | 54                      | 555   |
| East Orange         | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| El Toro             | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 1        | 1                             | 9                       | 5   |
| Fountain Valley     | 0        | 0        | 0        | 0        | 0         | 1        | 0        | 0        | 1                             | 23                      | 48  |
| Garden Grove        | 0        | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 1                             | 0                       | 1   |
| Golden State        | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 1                             | 3                       | 33  |
| Huntington Beach    | 0        | 2        | 0        | 1        | 2         | 0        | 1        | 0        | 6                             | 180                     | 746   |
| Irvine Ranch        | 1        | 1        | 1        | 0        | 2         | 1        | 1        | 0        | 10                            | 119                     | 752   |
| La Habra            | 0        | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 1                             | 0                       | 1   |
| La Palma            | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Laguna Beach        | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Mesa Water          | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Moulton Niguel      | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Newport Beach       | 0        | 0        | 0        | 1        | 0         | 0        | 0        | 0        | 1                             | 21                      | 92  |
| Orange              | 0        | 0        | 0        | 0        | 1         | 2        | 1        | 0        | 5                             | 97                      | 594   |
| San Juan Capistrano | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| San Clemente        | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Santa Margarita     | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Seal Beach          | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Serrano             | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| South Coast         | 0        | 0        | 0        | 0        | 1         | 1        | 0        | 0        | 2                             | 134                     | 280   |
| Trabuco Canyon      | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Tustin              | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Westminster         | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Yorba Linda         | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 1        | 1                             | 20                      | 12  |
| <b>MWDOC Totals</b> | <b>1</b> | <b>3</b> | <b>1</b> | <b>2</b> | <b>9</b>  | <b>5</b> | <b>3</b> | <b>2</b> | <b>32</b>                     | <b>662</b>              | <b>3117</b>   |
| Anaheim             | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Fullerton           | 0        | 0        | 0        | 0        | 0         | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Santa Ana           | 0        | 0        | 0        | 0        | 1         | 0        | 0        | 0        | 1                             | 11                      | 495   |
| <b>OC Totals</b>    | <b>1</b> | <b>3</b> | <b>1</b> | <b>2</b> | <b>10</b> | <b>5</b> | <b>3</b> | <b>2</b> | <b>33</b>                     | <b>673</b>              | <b>3613</b>   |

[1] Acre feet of savings determined during a one year monitoring period.  
If monitoring data is not available, the savings estimated in agreement is used.

**TURF REMOVAL BY AGENCY<sup>(1)</sup>**  
through MWDOC and Local Agency Conservation Programs

| Agency              | FY 13/14       |                | FY 14/15         |                  | FY 15/16         |                  | FY 16/17       |                | FY 17/18       |                | FY 18/19       |                | Total Program    |                   | Cumulative Water Savings across all Fiscal Years |
|---------------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|--|
|                     | Res            | Comm.          | Res              | Comm.            | Res              | Comm.            | Res            | Comm.          | Res            | Comm.          | Res            | Comm.          | Res              | Comm.             |  |
| Brea                | 5,697          | 0              | 71,981           | 30,617           | 118,930          | 404,411          | 8,354          | 479            | 9,853          | 27,234         | 3,180          | 44,733         | 228,997          | 516,940           | 412.33   |
| Buena Park          | 0              | 0              | 11,670           | 1,626            | 77,127           | 16,490           | 3,741          | 0              | 4,586          | 0              | 1,230          | 0              | 98,354           | 18,116            | 64.76  |
| East Orange         | 1,964          | 0              | 18,312           | 0                | 0                | 0                | 0              | 0              | 0              | 0              | 0              | 0              | 48,120           | 0                 | 30.06  |
| El Toro             | 4,582          | 0              | 27,046           | 221,612          | 63,546           | 162,548          | 13,139         | 48,019         | 7,273          | 42,510         | 9,010          | 9,895          | 133,999          | 557,302           | 427.92   |
| Fountain Valley     | 4,252          | 0              | 45,583           | 5,279            | 65,232           | 0                | 3,679          | 0              | 8,631          | 0              | 5,764          | 28,700         | 135,123          | 41,503            | 93.99  |
| Garden Grove        | 8,274          | 0              | 67,701           | 22,000           | 177,408          | 49,226           | 11,504         | 0              | 4,487          | 0              | 0              | 0              | 287,921          | 117,403           | 281.06   |
| Golden State        | 32,725         | 8,424          | 164,507          | 190,738          | 310,264          | 112,937          | 0              | 0              | 0              | 0              | 0              | 0              | 581,902          | 394,867           | 643.73   |
| Huntington Beach    | 20,642         | 0              | 165,600          | 58,942           | 305,420          | 270,303          | 9,560          | 21,534         | 14,236         | 6,032          | 7,937          | 40,135         | 561,045          | 461,872           | 634.85   |
| Irvine Ranch        | 36,584         | 76,400         | 234,905          | 317,999          | 782,844          | 2,675,629        | 231,483        | 46,725         | 86,893         | 61,037         | 48,524         | 131,717        | 1,465,990        | 3,356,351         | 2,698.13   |
| La Habra            | 0              | 0              | 14,014           | 1,818            | 49,691           | 72,164           | 0              | 0              | 3,003          | 0              | 1,504          | 0              | 68,212           | 90,019            | 99.42  |
| La Palma            | 0              | 0              | 4,884            | 0                | 10,257           | 59,760           | 0              | 0              | 0              | 0              | 0              | 0              | 15,141           | 59,760            | 42.63  |
| Laguna Beach        | 4,566          | 226            | 13,647           | 46,850           | 47,614           | 0                | 3,059          | 0              | 589            | 0              | 0              | 0              | 75,670           | 48,788            | 82.86  |
| Mesa Water          | 22,246         | 0              | 131,675          | 33,620           | 220,815          | 106,896          | 4,173          | 77,033         | 17,373         | 77,785         | 3,023          | 0              | 416,749          | 295,334           | 397.12   |
| Moulton Niguel      | 14,739         | 40,741         | 314,250          | 1,612,845        | 889,748          | 1,059,279        | 220,749        | 0              | 98,271         | 0              | 87,819         | 0              | 1,642,553        | 2,840,054         | 2,769.96   |
| Newport Beach       | 894            | 0              | 33,995           | 65,277           | 76,675           | 375,404          | 2,924          | 0              | 5,938          | 6,499          | 0              | 90,403         | 127,428          | 539,929           | 350.41   |
| Orange              | 11,244         | 0              | 120,093          | 281,402          | 289,990          | 106,487          | 12,847         | 2,366          | 11,956         | 0              | 10,320         | 1,798          | 485,372          | 400,776           | 562.65   |
| San Clemente        | 18,471         | 13,908         | 90,349           | 1,137            | 215,249          | 438,963          | 4,267          | 0              | 33,083         | 7,098          | 6,500          | 0              | 405,483          | 474,271           | 524.26   |
| San Juan Capistrano | 12,106         | 0              | 101,195          | 32,366           | 197,290          | 143,315          | 2,624          | 40,748         | 0              | 0              | 0              | 0              | 365,415          | 347,277           | 509.68   |
| Santa Margarita     | 17,778         | 48,180         | 211,198          | 514,198          | 534,048          | 550,420          | 17,010         | 28,094         | 62,706         | 25,000         | 24,121         | 23,198         | 883,459          | 1,217,651         | 1,269.52   |
| Seal Beach          | 0              | 0              | 15,178           | 504              | 17,349           | 15,911           | 1,234          | 0              | 752            | 0              | 0              | 0              | 38,124           | 16,415            | 33.87  |
| Serrano             | 2,971          | 0              | 41,247           | 0                | 127,877          | 4,403            | 5,450          | 0              | 555            | 0              | 4,000          | 0              | 182,100          | 4,403             | 108.45   |
| South Coast         | 15,162         | 116,719        | 84,282           | 191,853          | 181,102          | 128,290          | 14,967         | 0              | 13,319         | 7,806          | 5,990          | 0              | 331,057          | 465,387           | 532.10   |
| Trabuco Canyon      | 2,651          | 0              | 14,771           | 0                | 42,510           | 88,272           | 1,465          | 0              | 4,788          | 0              | 1,536          | 0              | 69,535           | 110,712           | 111.78   |
| Tustin              | 1,410          | 0              | 71,285           | 14,137           | 232,697          | 33,362           | 11,173         | 0              | 16,926         | 0              | 13,189         | 6,894          | 356,660          | 54,393            | 231.99   |
| Westminster         | 0              | 0              | 14,040           | 34,631           | 71,833           | 23,902           | 11,112         | 0              | 10,033         | 0              | 5,924          | 0              | 112,942          | 58,533            | 95.98  |
| Yorba Linda         | 0              | 0              | 112,136          | 12,702           | 360,279          | 116,985          | 19,420         | 0              | 9,529          | 3,696          | 12,590         | 12,020         | 525,303          | 145,403           | 384.25   |
| <b>MWDOC Totals</b> | <b>238,978</b> | <b>304,598</b> | <b>2,195,544</b> | <b>3,692,153</b> | <b>5,493,639</b> | <b>7,015,357</b> | <b>613,934</b> | <b>264,998</b> | <b>424,780</b> | <b>264,697</b> | <b>252,161</b> | <b>438,088</b> | <b>9,642,654</b> | <b>12,633,459</b> | <b>13,393.76</b>                                 |

|                         |          |              |          |          |          |          |          |          |          |          |          |          |          |              |             |
|-------------------------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Anaheim                 | 0        | 0            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0            | -           |
| Fullerton               | 0        | 9,214        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 9,214        | 7.74        |
| Santa Ana               | 0        | 0            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0            | -           |
| <b>Non-MWDOC Totals</b> | <b>0</b> | <b>9,214</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>9,214</b> | <b>7.74</b> |

|                             |                |                |                  |                  |                  |                  |                |                |                |                |                |                |                  |                   |               |
|-----------------------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|---------------|
| <b>Orange County Totals</b> | <b>238,978</b> | <b>313,812</b> | <b>2,195,544</b> | <b>3,692,153</b> | <b>5,493,639</b> | <b>7,015,357</b> | <b>613,934</b> | <b>264,998</b> | <b>424,780</b> | <b>264,697</b> | <b>252,161</b> | <b>438,088</b> | <b>9,642,654</b> | <b>12,642,673</b> | <b>13,401</b> |
|-----------------------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------|---------------|

[1] Installed device numbers are listed as square feet

# **HIGH EFFICIENCY TOILETS (HETs) INSTALLED BY AGENCY**

through MWDOC and Local Agency Conservation Programs

| Agency              | FY 12-13     | FY 13-14     | FY 14-15      | FY 15-16      | FY 16-17   | FY 17-18   | FY 18-19   | Total         | Cumulative Water Savings across all Fiscal Years |
|---------------------|--------------|--------------|---------------|---------------|------------|------------|------------|---------------|--|
| Brea                | 0            | 38           | 146           | 154           | 4          | 6          | 1          | 457           | 116.36   |
| Buena Park          | 0            | 96           | 153           | 112           | 13         | 3          | 0          | 687           | 215.26   |
| East Orange CWD RZ  | 0            | 13           | 26            | 24            | 0          | 0          | 0          | 86            | 24.09  |
| El Toro WD          | 133          | 218          | 869           | 264           | 12         | 6          | 8          | 2,051         | 611.79   |
| Fountain Valley     | 0            | 41           | 132           | 220           | 7          | 9          | 1          | 833           | 278.76   |
| Garden Grove        | 0            | 63           | 350           | 363           | 7          | 4          | 4          | 1,492         | 475.04   |
| Golden State WC     | 2            | 142          | 794           | 512           | 9          | 11         | 2          | 2,803         | 877.57   |
| Huntington Beach    | 0            | 163          | 1,190         | 628           | 4          | 3          | 4          | 2,908         | 822.16   |
| Invine Ranch WD     | 1,449        | 810          | 1,777         | 2,798         | 638        | 239        | 120        | 17,268        | 6,028.83   |
| Laguna Beach CWD    | 0            | 45           | 112           | 81            | 1          | 4          | 0          | 392           | 118.10   |
| La Habra            | 0            | 37           | 94            | 83            | 5          | 1          | 0          | 591           | 215.86   |
| La Palma            | 0            | 21           | 59            | 52            | 4          | 2          | 3          | 227           | 66.14  |
| Mesa Water          | 0            | 147          | 162           | 162           | 7          | 3          | 3          | 1,624         | 650.22   |
| Moulton Niguel WD   | 0            | 400          | 2,497         | 1,939         | 49         | 40         | 18         | 5,748         | 1,345.08   |
| Newport Beach       | 0            | 49           | 168           | 243           | 11         | 6          | 0          | 731           | 208.28   |
| Orange              | 1            | 142          | 978           | 416           | 17         | 10         | 5          | 2,194         | 609.02   |
| San Juan Capistrano | 0            | 35           | 140           | 202           | 3          | 9          | 2          | 534           | 139.85   |
| San Clemente        | 0            | 72           | 225           | 246           | 11         | 6          | 10         | 888           | 256.29   |
| Santa Margarita WD  | 0            | 528          | 997           | 1,152         | 114        | 34         | 5          | 3,348         | 794.11   |
| Seal Beach          | 2            | 17           | 50            | 69            | -1         | 0          | 0          | 857           | 421.72   |
| Serrano WD          | 0            | 2            | 40            | 55            | 3          | 0          | 3          | 124           | 28.81  |
| South Coast WD      | 64           | 102          | 398           | 235           | 11         | 7          | 0          | 1,028         | 266.55   |
| Trabuco Canyon WD   | 0            | 10           | 108           | 169           | 2          | 3          | 2          | 344           | 77.50  |
| Tustin              | 0            | 64           | 132           | 201           | 12         | 10         | 4          | 1,520         | 589.95   |
| Westminster         | 0            | 35           | 161           | 359           | 3          | 4          | 0          | 1,335         | 460.36   |
| Yorba Linda WD      | 0            | 40           | 280           | 379           | 12         | 8          | 2          | 1,261         | 388.78   |
| <b>MWDOC Totals</b> | <b>1,651</b> | <b>3,330</b> | <b>12,038</b> | <b>11,118</b> | <b>958</b> | <b>428</b> | <b>197</b> | <b>51,331</b> | <b>16,086.48</b>                                 |

|                         |          |            |              |              |            |           |           |              |                 |
|-------------------------|----------|------------|--------------|--------------|------------|-----------|-----------|--------------|-----------------|
| Anaheim                 | 0        | 156        | 1,188        | 614          | 70         | 19        | 5         | 5,889        | 2,193.20        |
| Fullerton               | 0        | 61         | 293          | 286          | 14         | 9         | 4         | 1,068        | 314.09          |
| Santa Ana               | 0        | 33         | 602          | 293          | 20         | 0         | 1         | 2,022        | 687.58          |
| <b>Non-MWDOC Totals</b> | <b>0</b> | <b>250</b> | <b>2,083</b> | <b>1,193</b> | <b>104</b> | <b>28</b> | <b>10</b> | <b>8,979</b> | <b>3,194.87</b> |

|                             |              |              |               |               |              |            |            |               |                  |
|-----------------------------|--------------|--------------|---------------|---------------|--------------|------------|------------|---------------|------------------|
| <b>Orange County Totals</b> | <b>1,651</b> | <b>3,580</b> | <b>14,121</b> | <b>12,311</b> | <b>1,062</b> | <b>456</b> | <b>207</b> | <b>60,310</b> | <b>19,281.34</b> |
|-----------------------------|--------------|--------------|---------------|---------------|--------------|------------|------------|---------------|------------------|

**Municipal Water District of Orange County**  
**REVENUE / CASH RECEIPT REPORT**  
**April 2019**

**WATER REVENUES**

| <b>Date</b> | <b>From</b>                        | <b>Description</b>             | <b>Amount</b> |
|-------------|------------------------------------|--------------------------------|---------------|
| 04/01/19    | City of Fountain Valley            | February 2019 Water deliveries | 11,598.85     |
| 04/01/19    | City of La Palma                   | February 2019 Water deliveries | 4,010.86      |
| 04/02/19    | City of La Habra                   | February 2019 Water deliveries | 4,446.66      |
| 04/04/19    | Laguna Beach County Water District | February 2019 Water deliveries | 133,789.03    |
| 04/05/19    | City of Brea                       | February 2019 Water deliveries | 15,997.65     |
| 04/08/19    | South Coast Water District         | February 2019 Water deliveries | 319,648.50    |
| 04/08/19    | Santa Margarita Water District     | February 2019 Water deliveries | 830,631.05    |
| 04/08/19    | City of Buena Park                 | February 2019 Water deliveries | 236,329.44    |
| 04/08/19    | City of Garden Grove               | February 2019 Water deliveries | 28,549.33     |
| 04/11/19    | City of Westminster                | February 2019 Water deliveries | 195,314.01    |
| 04/11/19    | City of Orange                     | February 2019 Water deliveries | 34,642.82     |
| 04/11/19    | Mesa Water                         | February 2019 Water deliveries | 160,466.07    |
| 04/12/19    | City of San Juan Capistrano        | February 2019 Water deliveries | 157,482.81    |
| 04/15/19    | East Orange County Water District  | February 2019 Water deliveries | 175,706.14    |
| 04/15/19    | Serrano Water District             | February 2019 Water deliveries | 12,449.22     |
| 04/15/19    | City of Seal Beach                 | February 2019 Water deliveries | 118,250.65    |
| 04/15/19    | El Toro Water District             | February 2019 Water deliveries | 245,045.29    |
| 04/15/19    | Golden State Water Company         | February 2019 Water deliveries | 128,959.79    |
| 04/15/19    | Yorba Linda Water District         | February 2019 Water deliveries | 35,018.37     |
| 04/15/19    | Moulton Niguel Water District      | February 2019 Water deliveries | 1,152,767.10  |
| 04/15/19    | Irvine Ranch Water District        | February 2019 Water deliveries | 438,133.64    |
| 04/22/19    | City of Newport Beach              | March 2019 Water deliveries    | 25,794.85     |
| 04/23/19    | Trabuco Canyon Water District      | March 2019 Water deliveries    | 20,348.80     |
| 04/26/19    | City of Brea                       | March 2019 Water deliveries    | 15,997.65     |
| 04/29/19    | City of Fountain Valley            | March 2019 Water deliveries    | 16,232.05     |
| 04/29/19    | City of La Habra                   | March 2019 Water deliveries    | 4,446.66      |

TOTAL REVENUES \$ 4,522,057.29



**Municipal Water District of Orange County**  
**REVENUE / CASH RECEIPT REPORT**  
**April 2019**

**MISCELLANEOUS REVENUES**

| <b>Date</b> | <b>From</b>                        | <b>Description</b>   | <b>Amount</b> |
|-------------|------------------------------------|--|---------------|
| 04/01/19    | Stan Sprague                       | April 2019 Retiree Health insurance                          | 244.77        |
| 04/29/19    | Keith Lyon                         | May 2019 Retiree Health insurance                            | 288.99        |
| 04/29/19    | Stan Sprague                       | May 2019 Retiree Health insurance                            | 244.77        |
| 04/29/19    | Judy Pfister                       | Apr-Jun 2019 Retiree Health insurance                        | 121.44        |
| 04/08/19    | Bitly                              | Refund for Annual subscription for Bitly brand tools         | 1,200.00      |
| 04/12/19    | City of San Clemente               | January 2019 Smartimer rebate program                        | 142.06        |
| 04/08/19    | El Toro Water District             | February 2019 Smartimer rebate program                       | 124.99        |
| 04/08/19    | Mesa Water                         | February 2019 Smartimer rebate program                       | 140.00        |
| 04/12/19    | City of San Clemente               | February 2019 Smartimer rebate program                       | 337.49        |
| 04/24/19    | Irvine Ranch Water District        | February 2019 Smartimer rebate program                       | 2,080.42      |
| 04/04/19    | City of Westminster                | February 2019 Turf Removal rebate program                    | 111.00        |
| 04/08/19    | Moulton Niguel Water District      | February 2019 Smartimer and Turf Removal rebate program      | 14,481.02     |
| 04/11/19    | City of Orange                     | February 2019 Turf Removal & Spray to Drip rebate program    | 444.00        |
| 04/29/19    | Yorba Linda Water District         | February 2019 Turf Removal & Spray to Drip rebate program    | 333.00        |
| 04/29/19    | Irvine Ranch Water District        | February 2019 Turf Removal & Spray to Drip rebate program    | 5,674.00      |
| 04/01/19    | El Toro Water District             | February 2019 So Cal Watersmart rebate program               | 810.00        |
| 04/01/19    | Moulton Niguel Water District      | February 2019 So Cal Watersmart rebate program               | 7,750.00      |
| 04/10/19    | Irvine Ranch Water District        | February 2019 So Cal Watersmart rebate program               | 16,500.00     |
| 04/12/19    | City of San Clemente               | February 2019 So Cal Watersmart rebate program               | 375.00        |
| 04/22/19    | El Toro Water District             | March 2019 So Cal Watersmart rebate program                  | 230.00        |
| 04/24/19    | Irvine Ranch Water District        | March 2019 So Cal Watersmart rebate program                  | 9,935.00      |
| 04/29/19    | Moulton Niguel Water District      | March 2019 So Cal Watersmart rebate program                  | 5,400.00      |
| 04/08/19    | Department of Water Resources      | Jan-Mar 2018 Strategic Turfgrass Removal & Design Assistance | 6,735.11      |
| 04/08/19    | Department of Water Resources      | Apr-Jun 2018 Strategic Turfgrass Removal & Design Assistance | 27,986.90     |
| 04/01/19    | City of Newport Beach              | FY 17-18 O & M Costs of the EOCF #2                          | 25,468.93     |
| 04/03/19    | East Orange County Water District  | FY 17-18 O & M Costs of the EOCF #2                          | 52,691.16     |
| 04/04/19    | Laguna Beach County Water District | FY 17-18 O & M Costs of the EOCF #2                          | 6,046.80      |
| 04/05/19    | City of San Clemente               | FY 17-18 O & M Costs of the EOCF #2                          | 3,628.08      |
| 04/08/19    | South Coast Water District         | FY 17-18 O & M Costs of the EOCF #2                          | 3,224.96      |
| 04/11/19    | City of Orange                     | FY 17-18 O & M Costs of the EOCF #2                          | 42,514.91     |
| 04/16/19    | Mesa Water                         | FY 17-18 O & M Costs of the EOCF #2                          | 57,042.62     |
| 04/17/19    | City of San Juan Capistrano        | FY 17-18 O & M Costs of the EOCF #2                          | 60,468.04     |
| 04/17/19    | Irvine Ranch Water District        | FY 17-18 O & M Costs of the EOCF #2                          | 197,538.34    |
| 04/17/19    | Moulton Niguel Water District      | FY 17-18 O & M Costs of the EOCF #2                          | 181,404.13    |
| 04/17/19    | Santa Margarita Water District     | FY 17-18 O & M Costs of the EOCF #2                          | 72,952.20     |
| 04/22/19    | City of Huntington Beach           | FY 17-18 O & M Costs of the EOCF #2                          | 25,707.92     |
| 04/26/19    | City of Brea                       | Addition to Choice School Program FY 18-19                   | 205.50        |
| 04/01/19    | City of Fountain Valley            | Water Loss Control technical assistance - WSO, Inc           | 25,672.00     |
| 04/11/19    | City of Orange                     | Water Loss Control technical assistance - WSO, Inc.          | 9,372.00      |
| 04/11/19    | Trabuco Canyon Water District      | Water Loss Control technical assistance - WSO, Inc.          | 27,322.00     |

**TOTAL MISCELLANEOUS REVENUES \$ 892,949.55**

**TOTAL REVENUES \$ 5,415,006.84**

  
 Robert J. Hunter, General Manager

  
 Hilary Chumpitazi, Treasurer

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of May 2019**

| <i>Invoice#</i>           | <i>Vendor / Description</i>  | <i>Amount to Pay</i> |
|---------------------------|--|----------------------|
| <b>Core Expenditures:</b> |  |                      |
|                           | <b>Richard C. Ackerman</b>   |                      |
| 1230                      | April 2019 Consulting on legal and regulatory matters                        | 1,600.00             |
|                           | *** Total ***  | 1,600.00             |
|                           | <b>Alta FoodCraft</b>  |                      |
| 51908435                  | 4/26/19 Coffee & tea supplies  | 268.11               |
|                           | *** Total ***  | 268.11               |
|                           | <b>ARC Document Solutions, LLC</b>   |                      |
| 9996024C                  | 50% Construction draft plan copies (Credit for revised pricing)              | (296.87)             |
| 99960024R                 | 50% Construction draft plan copies (Revised pricing)                         | 38.13                |
| 10010442R                 | 50% Construction draft plan copies for Seismic Retrofit project              | 8.69                 |
| 10014798R                 | 50% Construction draft plans for MWDOC Phase 1 office remodel copied to PDF  | 74.58                |
| 10054145                  | MWDOC Building plans copied for HVAC upgrade                                 | 13.67                |
| 10038741                  | Plan copies for Seismic Retrofit project                                     | 10.42                |
| 10147303                  | 6 Directional signs for Inspections Trips                                    | 133.35               |
| 10147299                  | Public meeting sign  | 22.23                |
|                           | *** Total ***  | 4.20                 |
|                           | <b>Best Best and Krieger LLP</b>   |                      |
| 846921A                   | Reimbursement for hotel room in Sacramento, CA on 2/5/19 for H. Baez         | 287.10               |
|                           | and M. Baum Haley Legislative Activities trip                                |                      |
| 846921                    | March 2019 State legislative advocacy services                               | 7,500.00             |
| 55401-MAR19               | March 2019 Legal services  | 20,265.77            |
|                           | *** Total ***  | 28,052.87            |
|                           | <b>CDW Government</b>  |                      |
| SBC1558                   | 5 Year anti-virus software renewal   | 3,400.00             |
|                           | *** Total ***  | 3,400.00             |
|                           | <b>CSU Fullerton ASC</b>   |                      |
| AR168967                  | 4th Quarter FY 18/19 Center for Demographic Research support                 | 11,761.05            |
| AR169025                  | Updated Orange County map with water mains infrastructure                    | 188.37               |
|                           | *** Total ***  | 11,949.42            |
|                           | <b>Dudek</b>   |                      |
| 20191850                  | 2/23/19-03/29/19 Planning level reliability for South County Interconnection | 10,532.50            |
|                           | *** Total ***  | 10,532.50            |
|                           | <b>El Toro Water District</b>  |                      |
| 3324                      | 2019 Annual lease for WEROC S. EOC site                                      | 1,000.00             |
|                           | *** Total ***  | 1,000.00             |

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of May 2019**

| <i>Invoice#</i> | <i>Vendor / Description</i>   | <i>Amount to Pay</i> |
|-----------------|---|----------------------|
|                 | <b><i>Finley &amp; Cook PLLC</i></b>                                    |                      |
| SI0033561       | 6/5/19-6/4/20 Jet Reports annual maintenance and enhancements           | 1,397.00             |
|                 | *** Total ***   | 1,397.00             |
|                 | <b><i>GJM Business Interiors</i></b>                                    |                      |
| 0250920-IN      | Humanscale Freedom chair  | 715.33               |
|                 | *** Total ***   | 715.33               |
|                 | <b><i>Gladwell Governmental Services, Inc.</i></b>                      |                      |
| 4124            | April 2019 Records management services                                  | 1,900.00             |
|                 | *** Total ***   | 1,900.00             |
|                 | <b><i>GovConnection, Inc.</i></b>                                       |                      |
| 56689556        | Support for Cisco phone switch and access point for conference room 101 | 324.24               |
|                 | *** Total ***   | 324.24               |
|                 | <b><i>Hashtag Pinpoint Corporation</i></b>                              |                      |
| 1194            | April 2019 Social Media consultation and services                       | 7,917.00             |
|                 | *** Total ***   | 7,917.00             |
|                 | <b><i>James C. Barker, P.C.</i></b>                                     |                      |
| 105-0419        | April 2019 Federal legislative advocacy services                        | 8,000.00             |
|                 | *** Total ***   | 8,000.00             |
|                 | <b><i>L.A. Design Studio</i></b>  |                      |
| 5084            | January-March 2019 Support for MWDOC website                            | 600.00               |
|                 | *** Total ***   | 600.00               |
|                 | <b><i>Lawnscape Systems, Inc.</i></b>                                   |                      |
| 400692          | 4/9/19 Landscape maintenance for atrium                                 | 295.00               |
|                 | *** Total ***   | 295.00               |
|                 | <b><i>Lewis Consulting Group</i></b>                                    |                      |
| 2019-124        | April 2019 Consulting services  | 2,687.50             |
|                 | *** Total ***   | 2,687.50             |
|                 | <b><i>Metropolitan Water District</i></b>                               |                      |
| 45731           | Operation and maintenance costs for East Orange County Feeder No. 2     | 728,688.09           |
|                 | *** Total ***   | 728,688.09           |
|                 | <b><i>National Water Resources Association</i></b>                      |                      |
| 2019            | 2019 Annual membership renewal  | 500.00               |
|                 | *** Total ***   | 500.00               |
|                 | <b><i>NDS</i></b>   |                      |
| 717656          | 4/12/19 Delivery charges for Board packets                              | 211.47               |
|                 | *** Total ***   | 211.47               |

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of May 2019**

| <i>Invoice#</i> | <i>Vendor / Description</i>   | <i>Amount to Pay</i> |
|-----------------|---|----------------------|
|                 | <b>Office Solutions</b>   |                      |
| I-01542925      | MWDOC Letterhead and envelopes printed  | 721.40               |
| I-01557582      | Office chair  | 756.04               |
| I-01560448      | 4/16/19 Office supplies   | 157.36               |
| I-01560970      | 4/17/19 Office supplies   | 54.36                |
| I-01561492      | 2 Cases of index dividers for Board packets   | 156.34               |
| I-01564024      | 4/23/19 Office supplies   | 353.72               |
| I-01568529      | 5/1/19 Office supplies  | 124.32               |
|                 | *** Total ***   | 2,323.54             |
|                 | <b>OMB Electrical Engineers, Inc.</b>   |                      |
| 78268           | 2/23/19-3/29/19 Electrical Engineering services for MWDOC office electrical upgrade             | 3,300.00             |
| 78448           | 2/23/19-3/29/19 Electrical Engineering reimbursable expense for MWDOC office electrical upgrade | 140.81               |
|                 | *** Total ***   | 3,440.81             |
|                 | <b>Orange County Dept. of Education</b>   |                      |
| 94MI4369        | January-March 2019 Core and Choice High School programs   | 8,078.00             |
|                 | *** Total ***   | 8,078.00             |
|                 | <b>Orange County Water District</b>   |                      |
| 20146           | March 2019 50% share of WACO expense  | 246.93               |
| 20174           | March 2019 Postage, shared office & maintenance expense   | 7,415.56             |
| 20231           | April 2019 50% share of WACO expense  | 246.25               |
|                 | *** Total ***   | 7,908.74             |
|                 | <b>Patricia Kennedy Inc.</b>  |                      |
| 10828           | May 2019 Plant maintenance  | 214.00               |
|                 | *** Total ***   | 214.00               |
|                 | <b>Petty Cash</b>   |                      |
| FEB-APR2019     | February-April 2019 Petty Cash reimbursement  | 141.05               |
|                 | *** Total ***   | 141.05               |
|                 | <b>Judy Pfister</b>   |                      |
| JAN-MAR2019     | January-March 2019 Retiree medical premium  | 400.50               |
|                 | *** Total ***   | 400.50               |
|                 | <b>Resilient Communications</b>   |                      |
| 802300          | Power supply for server rack  | 480.00               |
| 802307          | 5 Year maintenance subscription for telephone paging software                                   | 2,470.00             |
|                 | *** Total ***   | 2,950.00             |

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of May 2019**

| <i>Invoice#</i> | <i>Vendor / Description</i>                                | <i>Amount to Pay</i> |
|-----------------|--|----------------------|
|                 | <b>Joey C. Soto</b>  |                      |
| MWDOC#011       | March 2019 Grant research and acquisition assistance       | 2,998.45             |
|                 | *** Total ***  | 2,998.45             |
|                 | <b>Top Hat Productions</b>                                 |                      |
| 95067           | 4/18/19 Lunch for Managers' meeting                        | 467.10               |
|                 | *** Total ***  | 467.10               |
|                 | <b>WageWorks, Inc.</b>                                     |                      |
| INV1365064      | April 2019 Cafeteria plan administration                   | 196.07               |
|                 | *** Total ***  | 196.07               |
|                 | <b>Western Municipal Water District</b>                    |                      |
| IN10917         | 25% Share cost of 2/27/19 Washington, DC Briefing luncheon | 712.74               |
|                 | *** Total ***  | 712.74               |
|                 | <b>Zoho Corporation</b>                                    |                      |
| 2224654         | 1 Year subscription for software to monitor servers        | 1,831.50             |
|                 | *** Total ***  | 1,831.50             |
|                 | <b>Total Core Expenditures</b>                             | <hr/> 841,705.23     |

**Choice Expenditures:**

|                |   |                 |
|----------------|---|-----------------|
|                | <b>Discovery Science Center</b>   |                 |
| DSOC/IV/000870 | March 2019 Elementary school program                                    | 38,619.21       |
|                | *** Total ***   | 38,619.21       |
|                | <b>Mission RCD</b>  |                 |
| 2666           | March 2019 Field verifications for Water Use Efficiency rebate programs | 7,070.21        |
|                | *** Total ***   | 7,070.21        |
|                | <b>Orange County Dept. of Education</b>                                 |                 |
| 94MI4369       | January-March 2019 Core and Choice High School programs                 | 21,855.00       |
|                | *** Total ***   | 21,855.00       |
|                | <b>Orange County Water District</b>                                     |                 |
| 20174          | March 2019 Postage expense for rebate programs                          | 13.85           |
|                | *** Total ***   | 13.85           |
|                | <b>Top Hat Productions</b>  |                 |
| 95022          | 4/4/19 Lunch for Water Use Efficiency workgroup meeting                 | 553.03          |
|                | *** Total ***   | 553.03          |
|                | <b>Total Choice Expenditures</b>  | <hr/> 68,111.30 |

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of May 2019**

| <i>Invoice#</i>                  | <i>Vendor / Description</i>  | <i>Amount to Pay</i>         |
|----------------------------------|--|------------------------------|
| <b>Other Funds Expenditures:</b> |  |                              |
| 1044964                          | <b>Michael Baker International</b><br>3/4/19-3/31/19 OC Regional Water/Wastewater Multijurisdictional Hazardous<br>Mitigation Plan update<br>*** Total *** | 2,072.46<br><br><br>2,072.46 |
| 2666                             | <b>Mission RCD</b><br>March 2019 Field verifications for Water Use Efficiency rebate programs<br>*** Total ***   | 1,257.85<br><br>1,257.85     |
| 113309                           | <b>Satellite Phone Store</b><br>3 Satellite phones, antennas and 1 year of service for WEROC<br>*** Total ***  | 7,177.36<br><br>7,177.36     |
| 133970                           | <b>SO-PAK-CO, Inc.</b><br>24 Cases of emergency food for WEROC EOCs<br>*** Total ***   | 1,745.21<br><br>1,745.21     |
|                                  | <b>Total Other Funds Expenditures</b>  | <hr/> 12,252.88              |
|                                  | <b>Total Expenditures</b>  | <hr/> <hr/> 922,069.41       |

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of April 2019**

| <i>Check #</i>             | <i>Date</i>    | <i>Vendor #<br/>Invoice/CM #</i> | <i>Name /<br/>Description</i>                    | <i>Net Amount</i> |
|----------------------------|----------------|----------------------------------|--|-------------------|
| <b>Core Disbursements:</b> |                |                                  |  |                   |
| <b>138811</b>              | <b>4/4/19</b>  | <b>SPECTB</b>                    | <b>Spectrum Business</b>                         |                   |
|                            |                | 0375210032019                    | April 2019 Telephone and internet expense        | 1,099.14          |
|                            |                |                                  | ***Total ***                                     | 1,099.14          |
| <b>138813</b>              | <b>4/4/19</b>  | <b>VERIZO</b>                    | <b>Verizon Wireless</b>                          |                   |
|                            |                | 9826814717                       | March 2019 4G Mobile broadband unlimited service | 114.03            |
|                            |                |                                  | ***Total ***                                     | 114.03            |
| <b>138823</b>              | <b>4/15/19</b> | <b>IRONMO</b>                    | <b>Iron Mountain</b>                             |                   |
|                            |                | ANVF409                          | April 2019 Archived document storage fees        | 209.70            |
|                            |                |                                  | ***Total ***                                     | 209.70            |
| <b>138827</b>              | <b>4/15/19</b> | <b>OFFICED</b>                   | <b>Office Depot, Inc.</b>                        |                   |
|                            |                | 290727266001                     | 3/20/19 Office supplies                          | 384.58            |
|                            |                |                                  | ***Total ***                                     | 384.58            |
| <b>ACH003900</b>           | <b>4/15/19</b> | <b>ACKEEX</b>                    | <b>Linda Ackerman</b>                            |                   |
|                            |                | 4-10-19                          | March 2019 Business expense                      | 97.44             |
|                            |                |                                  | ***Total ***                                     | 97.44             |
| <b>ACH003902</b>           | <b>4/15/19</b> | <b>BERGIO</b>                    | <b>Joseph Berg</b>                               |                   |
|                            |                | 032919                           | March 2019 Business expense                      | 257.70            |
|                            |                |                                  | ***Total ***                                     | 257.70            |
| <b>ACH003906</b>           | <b>4/15/19</b> | <b>DAVISR</b>                    | <b>Rachel Davis</b>                              |                   |
|                            |                | 033119                           | March 2019 Business expense                      | 134.46            |
|                            |                |                                  | ***Total ***                                     | 134.46            |
| <b>ACH003907</b>           | <b>4/15/19</b> | <b>DICKEX</b>                    | <b>Larry Dick</b>                                |                   |
|                            |                | 4/10/19                          | March 2019 Business expense                      | 106.72            |
|                            |                |                                  | ***Total ***                                     | 106.72            |
| <b>ACH003910</b>           | <b>4/15/19</b> | <b>HARRIS</b>                    | <b>Cathleen M. Harris</b>                        |                   |
|                            |                | 033119                           | March 2019 Business expense                      | 279.33            |
|                            |                |                                  | ***Total ***                                     | 279.33            |
| <b>ACH003912</b>           | <b>4/15/19</b> | <b>HOSTER</b>                    | <b>Kevin Hostert</b>                             |                   |
|                            |                | 033119                           | March 2019 Business expense                      | 49.88             |
|                            |                |                                  | ***Total ***                                     | 49.88             |
| <b>ACH003929</b>           | <b>4/15/19</b> | <b>SCHNEI</b>                    | <b>Megan Yoo Schneider</b>                       |                   |
|                            |                | 033119                           | March 2019 Business expense                      | 542.40            |
|                            |                |                                  | ***Total ***                                     | 542.40            |

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of April 2019**

| <b>Check #</b>   | <b>Date</b>    | <b>Vendor #<br/>Invoice/CM #</b>       | <b>Name /<br/>Description</b>  | <b>Net Amount</b>          |
|------------------|----------------|--|--|----------------------------|
| <b>ACH003931</b> | <b>4/15/19</b> | <b>TAMARI<br/>033119</b>               | <b>Satoru Tamaribuchi</b><br>March 2019 Business expense<br>***Total ***                                 | <br>180.38<br>180.38       |
| <b>ACH003932</b> | <b>4/15/19</b> | <b>THOMAS<br/>033119</b>               | <b>Jeffery Thomas</b><br>March 2019 Business expense<br>***Total ***                                     | <br>229.68<br>229.68       |
| <b>138835</b>    | <b>4/16/19</b> | <b>SPECTB<br/>0343564040119</b>        | <b>Spectrum Business</b><br>April 2019 Telephone expense for 3 analog fax lines<br>***Total ***          | <br>108.57<br>108.57       |
| <b>138836</b>    | <b>4/24/19</b> | <b>DUBUQU<br/>120318</b>               | <b>Tina Dubuque</b><br>November-December 2018 Business expense (Re-issue)<br>***Total ***                | <br>140.81<br>140.81       |
| <b>138861</b>    | <b>4/30/19</b> | <b>OFFICED<br/>301774882001</b>        | <b>Office Depot, Inc.</b><br>4/12/19 Office supplies<br>***Total ***                                     | <br>380.71<br>380.71       |
| <b>138863</b>    | <b>4/30/19</b> | <b>USBANK<br/>0403/0640/5443-MAR19</b> | <b>U.S. Bank</b><br>2/23/19-3/22/19 Cal Card charges<br>***Total ***<br>(See attached sheet for details) | <br>23,252.39<br>23,252.39 |
| <b>ACH003936</b> | <b>4/30/19</b> | <b>BAEZHE<br/>033119</b>               | <b>Heather Baez</b><br>March 2019 Business expense<br>***Total ***                                       | <br>181.14<br>181.14       |
| <b>ACH003937</b> | <b>4/30/19</b> | <b>BUIJEA<br/>033119</b>               | <b>Jeannie Bui</b><br>March 2019 Business expense<br>***Total ***  | <br>14.85<br>14.85         |
| <b>ACH003938</b> | <b>4/30/19</b> | <b>HALEY<br/>033119</b>                | <b>Melissa Baum Haley</b><br>March 2019 Business expense<br>***Total ***                                 | <br>336.98<br>336.98       |
| <b>ACH003941</b> | <b>4/30/19</b> | <b>ROBERT<br/>033119</b>               | <b>Bryce Roberto</b><br>March 2019 Business expense<br>***Total ***                                      | <br>41.97<br>41.97         |
| <b>ACH003942</b> | <b>4/30/19</b> | <b>SECKEL<br/>041719</b>               | <b>Karl Seckel</b><br>April 2019 Business expense<br>***Total ***  | <br>81.91<br>81.91         |



**Municipal Water District of Orange County**  
**Disbursement Ratification Report**  
**For the month of April 2019**


| <i>Check #</i>                    | <i>Date</i>    | <i>Vendor #<br/>Invoice/CM #</i>                 | <i>Name /<br/>Description</i>   | <i>Net Amount</i>              |
|-----------------------------------|----------------|--|---|--------------------------------|
| <b>ACH003945</b>                  | <b>4/30/19</b> | <b>WILSON<br/>033119</b>                         | <b>Sarah C. Wilson</b><br>March 2019 Business expense<br>***Total ***   | <br>38.28<br>38.28             |
| <b>Total Core Disbursements</b>   |                |  |   | <b>28,263.05</b>               |
| <b>Choice Disbursements:</b>      |                |  |   |                                |
| <b>ACH003906</b>                  | <b>4/15/19</b> | <b>DAVISR<br/>033119</b>                         | <b>Rachel Davis</b><br>March 2019 Business expense<br>***Total ***  | <br>55.26<br>55.26             |
| <b>138863</b>                     | <b>4/30/19</b> | <b>USBANK<br/>0640-MAR19</b>                     | <b>U.S. Bank</b><br>2/23/19-3/22/19 Cal Card charges<br>***Total ***<br>(See attached sheet for details)                                | <br>138.95<br>138.95           |
| <b>Total Choice Disbursements</b> |                |  |   | <b>194.21</b>                  |
| <b>Other Funds Disbursements:</b> |                |  |   |                                |
| <b>138812</b>                     | <b>4/4/19</b>  | <b>TURFRP<br/>TR12-R-IRWD-36358-35283A</b>       | <b>Turf Removal Program</b><br>Y. Miao (Re-issue)<br>***Total ***   | <br>827.00<br>827.00           |
| <b>138813</b>                     | <b>4/4/19</b>  | <b>VERIZO<br/>9826814717</b>                     | <b>Verizon Wireless</b><br>March 2019 4G Mobile broadband unlimited service<br>***Total ***   | <br>76.02<br>76.02             |
| <b>138815</b>                     | <b>4/15/19</b> | <b>ATTUVEOC<br/>1812-APR19</b>                   | <b>AT&amp;T</b><br>April 2019 U-verse internet service for WEROC N. EOC<br>***Total ***   | <br>50.00<br>50.00             |
| <b>138817</b>                     | <b>4/15/19</b> | <b>ATTCALN<br/>000012817752<br/>000012817753</b> | <b>AT&amp;T</b><br>February 2019 Telephone expense for WEROC S. EOC<br>February 2019 Telephone expense for WEROC N. EOC<br>***Total *** | <br>176.27<br>106.46<br>282.73 |
| <b>138822</b>                     | <b>4/15/19</b> | <b>HOMED1<br/>7785-APR19</b>                     | <b>Home Depot Credit Services</b><br>Supplies for WEROC S. EOC<br>***Total ***  | <br>16.10<br>16.10             |
| <b>138828</b>                     | <b>4/15/19</b> | <b>OCWD<br/>20091</b>                            | <b>Orange County Water District</b><br>February 2019 Credit for Local Resources program<br>***Total ***                                 | <br>703,861.57<br>703,861.57   |

**Municipal Water District of Orange County**  
**Disbursement Ratification Report**  
**For the month of April 2019**

| <b>Check #</b>   | <b>Date</b>    | <b>Vendor #<br/>Invoice/CM #</b> | <b>Name /<br/>Description</b>                           | <b>Net Amount</b> |
|------------------|----------------|----------------------------------|---|-------------------|
| <b>ACH003913</b> | <b>4/15/19</b> | <b>HUBBAR</b>                    | <b>Kelly Hubbard</b>                                    |                   |
|                  |                | 013119                           | January 2019 Business expense                           | 23.55             |
|                  |                |                                  | ***Total ***  | 23.55             |
| <b>ACH003914</b> | <b>4/15/19</b> | <b>HUBBAR</b>                    | <b>Kelly Hubbard</b>                                    |                   |
|                  |                | 022819                           | February 2019 Business expense                          | 73.74             |
|                  |                |                                  | ***Total ***  | 73.74             |
|                  |                | <b>DRIPPR</b>                    | <b>Spray to Drip Program</b>                            |                   |
| <b>138837</b>    | <b>4/26/19</b> | S2D2-R-IRWD-29153-17307          | L. Stone  | 204.44            |
| <b>138838</b>    | <b>4/26/19</b> | S2D2-C-MESA-35313-17324          | Orange Coast Unitarian Universalist Church (Costa Mesa) | 1,509.40          |
| <b>138839</b>    | <b>4/26/19</b> | S2D2-R-O-37365-17335             | L. Panitz   | 270.00            |
| <b>138840</b>    | <b>4/26/19</b> | S2D2-R-WEST-37366-17347          | R. Kemp   | 50.00             |
|                  |                |                                  | ***Total ***  | 2,033.84          |
|                  |                | <b>TURFRP</b>                    | <b>Turf Removal Program</b>                             |                   |
| <b>138841</b>    | <b>4/26/19</b> | TR11-C-NWPT-335-26576            | City of Newport Beach                                   | 126,322.90        |
| <b>138842</b>    | <b>4/26/19</b> | TR11-C-BREA-7699-26819           | City of Brea  | 61,968.90         |
| <b>138843</b>    | <b>4/26/19</b> | TR12-R-MNT-29147-29068           | G. Albert   | 824.45            |
| <b>138844</b>    | <b>4/26/19</b> | TR12-R-TUST-29151-29074          | D. Cron   | 6,208.00          |
| <b>138845</b>    | <b>4/26/19</b> | TR12-R-IRWD-29153-29076          | L. Stone  | 1,362.00          |
| <b>138846</b>    | <b>4/26/19</b> | TR12-R-IRWD-27016-34175          | M. Amidi  | 558.00            |
| <b>138847</b>    | <b>4/26/19</b> | TR12-R-FV-34256-34180            | K. Le   | 1,641.07          |
| <b>138848</b>    | <b>4/26/19</b> | TR12-R-MNT-35255-35179           | M. Lee  | 376.00            |
| <b>138849</b>    | <b>4/26/19</b> | TR12-R-IRWD-35286-35215          | S. Ghoubril   | 412.00            |
| <b>138850</b>    | <b>4/26/19</b> | TR12-R-MNT-35312-35237           | A. Watson   | 2,046.00          |
| <b>138851</b>    | <b>4/26/19</b> | TR12-R-TUST-36360-35286          | B. Harold   | 8,288.00          |
| <b>138852</b>    | <b>4/26/19</b> | TR12-R-MNT-37364-36291           | H. Spindel  | 849.00            |
| <b>138853</b>    | <b>4/26/19</b> | TR12-R-WEST-37366-36292          | B. Kemp   | 926.00            |
| <b>138854</b>    | <b>4/26/19</b> | TR12-R-MNT-37382-36304           | S. Guerdat  | 788.00            |
| <b>138855</b>    | <b>4/26/19</b> | TR12-R-MNT-37388-36307           | D. Shkarovetsky   | 1,174.00          |
| <b>138856</b>    | <b>4/26/19</b> | TR12-R-MNT-37397-36315           | G. Siragusa   | 3,018.00          |
|                  |                |                                  | ***Total ***  | 216,762.32        |
| <b>138862</b>    | <b>4/30/19</b> | <b>SANTI1</b>                    | <b>Santiago Aqueduct Commission</b>                     |                   |
|                  |                | FEB2019                          | February 2019 SAC Pipeline Operation surcharge          | 2,651.49          |
|                  |                |                                  | ***Total ***  | 2,651.49          |
| <b>138863</b>    | <b>4/30/19</b> | <b>USBANK</b>                    | <b>U.S. Bank</b>  |                   |
|                  |                | 0640-MAR19A                      | 2/23/19-3/22/19 Cal Card charges                        | 681.87            |
|                  |                |                                  | ***Total ***  | 681.87            |
| <b>ACH003943</b> | <b>4/30/19</b> | <b>SANTAM</b>                    | <b>Santa Margarita Water District</b>                   |                   |
|                  |                | FEB2019                          | February 2019 SCP Pipeline Operation surcharge          | 15,764.74         |
|                  |                |                                  | ***Total ***  | 15,764.74         |

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of April 2019**

| <i>Check #</i>    | <i>Date</i>    | <i>Vendor #<br/>Invoice/CM #</i> | <i>Name /<br/>Description</i>          | <i>Net Amount</i>   |
|-------------------|----------------|----------------------------------|--|---------------------|
| <b>EFT-190430</b> | <b>4/30/19</b> | <b>METWAT</b>                    | <b>Metropolitan Water District</b>     |                     |
|                   |                | 9649                             | February 2019 Water deliveries         | 4,786,280.26        |
|                   |                |                                  | ***Total ***                           | 4,786,280.26        |
|                   |                |                                  | <b>Total Other Funds Disbursements</b> | <b>5,729,385.23</b> |
|                   |                |                                  | <b>Total Disbursements</b>             | <b>5,757,842.49</b> |



Robert J. Hunter, General Manager



Hilary Chumpitazi, Treasurer

**Cal Card Charges**  
**Statement Date: March 22, 2019**  
**Payment Date: April 30, 2019**

| <b>Date</b>                  | <b>Description</b>   | <b>Amount</b>             |
|------------------------------|--|---------------------------|
| <b><u>Public Affairs</u></b> |  |                           |
| 2/21/2019                    | Water Policy Dinner in Costa Mesa, CA on Feb. 21, 2019 - Parking for J. Bui  | \$ 3.50                   |
| 2/21/2019                    | Lunch for Public Affairs department meeting  | 62.18                     |
| 2/21/2019                    | Decorations for 2/21/19 Water Policy Dinner  | 14.45                     |
| 2/27/2019                    | Refund for damaged item for Children's Water Festival  | (5.25)                    |
| 2/28/2019                    | Urban Water Institute's Spring Water conference in Palm Springs, CA from Feb. 27-Mar. 1, 2019 - Meal for Director Dick, Director Thomas and D. Micalizzi | 74.99                     |
| 2/28/2019                    | Supplies for Children's Water Festival   | 25.90                     |
| 3/1/2019                     | International Association of Business Communicators annual membership for T. Muldoon   | 334.00                    |
| 3/1/2019                     | Urban Water Institute's Spring Water conference in Palm Springs, CA from Feb. 27-Mar. 1, 2019 - Accommodations for D. Micalizzi                          | 224.26                    |
| 3/7/2019                     | UPS packaging and delivery charges for K. Cole proclamation  | 97.43                     |
| 3/13/2019                    | Hermes Creative Awards entry fees for MWDOC logo and State Water Project Inspection Trip video   | 190.00                    |
| 3/20/2019                    | 40 Boxed art sets for Poster Contest winners   | 1,294.40                  |
| 3/20/2019                    | 3 Apple iPads for Poster Contest winners   | 1,088.37                  |
| <b>Total</b>                 |  | <b><u>\$ 3,404.23</u></b> |

**Cal Card Charges**  
**Statement Date: March 22, 2019**  
**Payment Date: April 30, 2019**

| Date                         | Description   | Amount   |
|------------------------------|---|--|
| <b><u>K. Seckel Card</u></b> |   |  |
| 2/20/2019                    | California Water Efficiency Partnership Quarterly meeting in San Francisco, CA on Feb. 26, 2019 - Airline seat charge for J. Berg           | 25.00  |
| 2/21/2019                    | International Public Management Association for Human Resources annual membership renewal for C. Harris                                     | 109.00   |
| 2/22/2019                    | ACWA Legislative Symposium in Sacramento, CA on Mar. 6, 2019 - Partial airfare refund for H. Baez   | \$ (286.98)  |
| 2/23/2019                    | Federal Express delivery charges for CDM Smith on Feb. 21, 2019   | 18.82  |
| 2/24/2019                    | 1/24/19-2/23/19 Web hosting service for MWDOC website   | 15.65  |
| 2/25/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 22.28  |
| 2/25/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 10.93  |
| 2/25/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 8.10   |
| 2/26/2019                    | Images on Demand subscription   | 29.00  |
| 2/26/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Meals for Director Ackerman, H. Baez and M. Baum Haley                         | 124.20   |
| 2/26/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 13.50  |
| 2/26/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 15.77  |
| 2/26/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Meals for Director Ackerman, H. Baez and M. Baum Haley                         | 73.17  |
| 2/27/2019                    | Federal Express delivery charges for materials for DC Briefing Luncheon on Feb. 25, 2019  | 85.85  |
| 2/27/2019                    | Security system and smoke detectors for WEROC S. EOC  | 681.87   |
| 2/27/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Transportation for H. Baez   | 13.60  |
| 2/28/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Accommodations for H. Baez   | 1,031.10   |
| 2/28/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Accommodations for M. Baum Haley   | 1,031.10   |
| 2/28/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Meals for Director Ackerman, Director Yoo Schneider, H. Baez and M. Baum Haley | 87.59  |
| 3/1/2019                     | 3/01/19-3/31/19 E-mail service for California Sprinkler Adjustment Notification system  | 14.95  |
| 3/2/2019                     | Federal Express delivery charges for Lewis Consulting on Feb. 27, 2019 and Hazen and Sawyer on Feb. 28, 2019                                | 79.59  |
| 3/4/2019                     | Image download from Canva   | 1.00   |
| 3/4/2019                     | UPS Delivery charges for Board packets on Feb. 27 and Mar. 1, 2019 and materials for DC Briefing Luncheon on Feb. 22, 2019                  | 137.81 <span style="border: 1px solid black; padding: 0 2px;">1</span> |
| 3/4/2019                     | Urban Water Institute's Annual Water conference in San Diego, CA from Aug. 14-16, 2019 - Accommodations deposit for D. Micalizzi            | 236.88   |

**Cal Card Charges**  
**Statement Date: March 22, 2019**  
**Payment Date: April 30, 2019**

| <b>Date</b>                              | <b>Description</b>  | <b>Amount</b>             |
|--|---|---------------------------|
| <b><u>K. Seckel Card</u> (Continued)</b> |   |                           |
| 3/5/2019                                 | Federal Express delivery charges for Rosenberg & Associates on Mar. 1, 2019   | 23.55                     |
| 3/5/2019                                 | American Water Works Association California-Nevada Section Water Use Efficiency Grade 2 workshop in Rancho Cucamonga, CA on Apr. 29, 2019 - Registration for R. Davis | \$ 550.00                 |
| 3/5/2019                                 | Legislative Activities in Sacramento, CA on Mar. 15, 2019 - Airfare for H. Baez   | 406.96                    |
| 3/7/2019                                 | 2019 New hire pamphlets   | 71.99                     |
| 3/7/2019                                 | ACWA Legislative Symposium in Sacramento, CA on Mar. 6, 2019 - Water for H. Baez  | 6.00                      |
| 3/7/2019                                 | Sheraton Hotel in Sacramento refunded charge for canceled room  | (303.24)                  |
| 3/13/2019                                | Federal Express delivery charges for Lewis Consulting on Mar. 6, 2019   | 19.95                     |
| 3/14/2019                                | American Water Works Association California-Nevada Section Water Use Efficiency Grade 2 exam - Registration for R. Davis  | 135.00                    |
| 3/15/2019                                | Binding machine supplies  | 171.24                    |
| 3/16/2019                                | American Water Works Association California Nevada Section Spring conference in Sacramento, CA from Mar. 25-28, 2019 - Accommodations deposit for J. Berg             | 729.85                    |
| 3/16/2019                                | American Water Works Association California Nevada Section Spring conference in Sacramento, CA from Mar. 26-28, 2019 - Accommodations deposit for K. Hubbard          | 729.85 <sup>2</sup>       |
| 3/18/2019                                | Flowers for MWDOC staff member  | 70.03                     |
| 3/18/2019                                | UPS Delivery charges for Board packets on Mar. 8, 2019  | 38.67                     |
| 3/18/2019                                | California Environmental Dialogue Plenary meeting in Sacramento, CA from Mar. 20-21, 2019 - Airfare for M. Baum Haley   | 529.96                    |
| 3/18/2019                                | Flowers for MWDOC Director  | 48.48                     |
| 3/19/2019                                | Breakfast for Qualified Water Efficient Landscaper training class   | 124.00                    |
| 3/19/2019                                | Managing Grant-Acquired Property webinar - Registration for J. Stalvey  | 249.00                    |
| 3/20/2019                                | Federal Express delivery charges for Hazen & Sawyer on Mar. 18, 2019  | 36.04                     |
| 3/21/2019                                | Federal Express delivery charges for OC Board of Supervisors on Mar. 19, 2019   | 19.04                     |
| 3/21/2019                                | Lunch for Member Managers' meeting  | 530.40                    |
| <b>Total</b>                             |   | <b><u>\$ 7,766.55</u></b> |

- <sup>1</sup> UPS Briefing material charges \$62.37 to be refunded for late delivery  
<sup>2</sup> Sheraton Hotel refunded \$243.29 of deposit on 3/29/19 for shorten stay

**Cal Card Charges**  
**Statement Date: March 22, 2019**  
**Payment Date: April 30, 2019**

| <b>Date</b>                  | <b>Description</b>  | <b>Amount</b>  |
|------------------------------|---|--|
| <b><u>R. Hunter Card</u></b> |   |  |
| 2/23/19-3/22/19              | Meals for R. Hunter's meetings  | \$ 46.57   |
| 2/21/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 -<br>Airfare for Director Yoo Schneider  | 384.16   |
| 2/22/2019                    | ACWA DC conference in Washington, DC from Feb. 26-28, 2019 -<br>Transportation for R. Hunter  | 89.00  |
| 2/25/2019                    | Lunch for MET Directors' meeting - Refund for missing item  | (11.45)  |
| 2/25/2019                    | Legislative Activities in Washington, DC from Feb. 26-28, 2019 - Airfare<br>change for Director Barbre  | 338.70 <span style="border: 1px solid black; padding: 0 2px;">1</span> |
| 2/26/2019                    | Legislative activities in Sacramento, CA on Feb. 26, 2019 - Transportation<br>for Director Tamaribuchi and R. Hunter  | 45.00  |
| 2/26/2019                    | Legislative activities in Sacramento, CA on Feb. 26, 2019 - Transportation<br>for Director Tamaribuchi and R. Hunter  | 33.00  |
| 2/26/2019                    | Legislative activities in Sacramento, CA on Feb. 26, 2019 - Meal for<br>Director Tamaribuchi, R. Hunter and 2 guests  | 115.75   |
| 2/28/2019                    | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 -<br>Dinner for Director Ackerman, Director Yoo Schneider, R. Hunter, H. Baez<br>M. Baum Haley and 10 guests | 2,170.01   |
| 2/28/2019                    | Orange County Business Council Advocacy trip in Washington, DC from<br>May 6-8, 2019 - Registration for Director Yoo Schneider  | 1,785.00   |
| 2/28/2019                    | Legislative Activities in Washington, DC from Feb. 26-28, 2019 -<br>Accommodations for Director Barbre  | 260.07 <span style="border: 1px solid black; padding: 0 2px;">2</span> |
| 2/28/2019                    | Legislative activities in Sacramento, CA on Feb. 26, 2019 and ACWA<br>DC conference in Washington, DC from Feb. 26-28, 2019 - Parking for<br>R. Hunter                  | 60.00  |
| 3/1/2019                     | Association of Metropolitan Water Agencies Water Policy conference in<br>Washington, DC from Apr. 7-10, 2019 - Registration for R. Hunter                               | 925.00   |
| 3/1/2019                     | ACWA Legislative Symposium in Sacramento, CA from Mar. 5-7, 2019 -<br>Airfare change for H. Baez  | 264.98   |
| 3/1/2019                     | Legislative Activities in Washington, DC from Feb. 26-28, 2019 -<br>Accommodations for R. Hunter  | 758.68   |
| 3/1/2019                     | Urban Water Institute's Spring Water conference in Palm Springs, CA from<br>Feb. 27-Mar. 1, 2019 - Accommodations for Director Tamaribuchi                              | 224.26   |
| 3/4/2019                     | Urban Water Institute's Annual Water conference in San Diego, CA from<br>Aug. 14-16, 2019 - Registration for Director Thomas  | 425.00   |
| 3/4/2019                     | Urban Water Institute's Annual Water conference in San Diego, CA from<br>Aug. 14-16, 2019 - Registration for D. Micalizzi   | 425.00   |
| 3/4/2019                     | Orange County Water Association Industry Insight presentation in Irvine, CA<br>on Mar. 20, 2019 - Registration for Director Barbre                                      | 45.00  |
| 3/4/2019                     | Orange County Business Council Advocacy trip in Sacramento, CA from<br>Mar. 18-19, 2019 - Airfare change for Director Yoo Schneider                                     | 62.00  |
| 3/4/2019                     | Urban Water Institute's Annual Water conference in San Diego, CA from<br>Aug. 14-16, 2019 - Accommodations deposit for Director Thomas                                  | 236.88   |
| 3/5/2019                     | Association of Metropolitan Water Agencies Water Policy conference in<br>Washington, DC from Apr. 7-10, 2019 - Airfare for R. Hunter                                    | 629.00   |

**Cal Card Charges**  
**Statement Date: March 22, 2019**  
**Payment Date: April 30, 2019**

| Date                              | Description  | Amount              |
|-----------------------------------|--|---------------------|
| <b>R. Hunter Card (Continued)</b> |  |                     |
| 3/6/2019                          | Orange County Council of Governments General Assembly in Anaheim, CA on Apr. 12, 2019 - Registration for Director Barbre                             | \$ 157.50           |
| 3/7/2019                          | ACWA DC conference in Washington, DC from Feb. 25-28, 2019 - Accommodations for Director Yoo Schneider   | 758.68              |
| 3/7/2019                          | ACWA Legislative Symposium in Sacramento, CA from Mar. 5-7, 2019 - Accommodations for H. Baez  | 596.72              |
| 3/8/2019                          | Orange County Business Council Advocacy trip in Sacramento, CA from Mar. 18-19, 2019 - Airfare for Director Barbre                                   | 246.99 [3]          |
| 3/9/2019                          | Federal Express delivery charges for OC Board of Supervisors on Mar. 6, 2019   | 18.95               |
| 3/11/2019                         | UPS Delivery charges for Board packets on Mar. 2 & 8, 2019   | 65.06               |
| 3/11/2019                         | Orange County Business Council Advocacy trip in Sacramento, CA from Mar. 18-19, 2019 - Registration for Director Barbre                              | 750.00 [4]          |
| 3/11/2019                         | American Water Works Association California Nevada Section Spring conference in Sacramento, CA from Mar. 25-28, 2019 - Airfare for J. Berg           | 283.96              |
| 3/12/2019                         | Flowers for MWDOC staff member   | 81.54               |
| 3/12/2019                         | California Chamber of Commerce online Supervisor course - Registration for Director Yoo Schneider  | 43.99               |
| 3/13/2019                         | Association of California Cities-Orange County Board Installation reception in Newport Beach, CA on Apr. 17, 2019 - Registration for Director Barbre | 35.00               |
| 3/14/2019                         | Orange County Business Council Advocacy trip in Sacramento, CA from Mar. 18-19, 2019 - Accommodations deposit for Director Barbre                    | 507.32 [5]          |
| 3/15/2019                         | Food for staff development meeting   | 45.11               |
| <b>Total</b>                      |  | <b>\$ 12,902.43</b> |

- [1] Trip was canceled, \$138.70 of airfare is available for future flights
- [2] Director Barbre reimbursed MWDOC \$260.07 for canceled hotel charge
- [3] Trip was canceled, airfare is available for future flights
- [4] Director Barbre reimbursed MWDOC \$750.00 for canceled registration
- [5] Director Barbre reimbursed MWDOC \$507.32 for canceled hotel charge



**Municipal Water District of Orange County**  
**GM Approved Disbursement Report <sup>(1)</sup>**  
**For the month of April 2019**

| <i>Check #</i> | <i>Date</i> | <i>Vendor #<br/>Invoice/CM #</i> | <i>Name /<br/>Description</i> | <i>Net Amount</i> |
|----------------|-------------|----------------------------------|-------------------------------|-------------------|
|----------------|-------------|----------------------------------|-------------------------------|-------------------|

**Core Disbursements:**

**Total Core Disbursements**

-

**Choice Disbursements:**

**Total Choice Disbursements**

-

**Other Funds Disbursements:**

**Total Other Funds Disbursements**

-

**Total Disbursements**

-

**No items to report**


Robert J. Hunter, General Manager



Hilary Chumvitazi, Treasurer

- (1) For disbursements that did not make the cut-off of previous month's Disbursement Approval report.  
 Disbursements are approved by GM for payment and need A & F Committee ratification.

**Municipal Water District of Orange County  
WATER USE EFFICIENCY PROJECTS**  
Cash Flow as of 04/30/19

|   | Jul 2018      | Aug 2018      | Sep 2018      | Oct 2018      | Nov 2018        | Dec 2018        | Jan 2019        | Feb 2019        | Mar 2019        | Apr 2019        | May 2019        | Jun 2019        | TOTALS          |
|---|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Cash - Beginning Balance</b>         | \$ 280,031.97 | \$ 273,554.92 | \$ 407,387.74 | \$ 170,892.71 | \$ 70,974.64    | \$ (267,020.46) | \$ (231,676.04) | \$ (243,188.18) | \$ (197,876.62) | \$ (264,705.52) | \$ (279,753.61) | \$ (279,753.61) |                 |
| <b>REVENUES:</b>                        |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| BUREC                                   | 4,605.00      | 111.00        |               | 102,395.93    |                 |                 | 162,953.35      |                 | 6,090.00        |                 |                 |                 | \$ 276,155.28   |
| City of Brea                            |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Buena Park                      | 222.00        | 222.00        |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 222.00          |
| City of Fountain Valley                 |               |               | 1,376.29      | 663.05        | 111.00          |                 | 222.00          |                 | 333.00          |                 |                 |                 | 2,927.34        |
| City of Fullerton                       |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Garden Grove                    | 598.99        |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Huntington Beach                | 222.00        |               |               | 40.00         |                 |                 |                 |                 |                 |                 |                 |                 | 638.99          |
| City of La Habra                        | 3,244.99      | 9,442.99      |               | 1,683.99      | 3,312.00        | 1,245.00        | 3,694.36        | 222.00          | 2,149.28        | 854.55          |                 |                 | 444.00          |
| City of San Clemente                    |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 25,627.16       |
| City of San Juan Capistrano             |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Santa Ana                       |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Tustin                          |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Newport Beach                   | 444.00        | 3,343.80      | 913.75        | 1,980.57      | 173.85          | 2,314.05        | 91.45           | 94.75           | 162.00          | 444.00          |                 |                 | 7,986.62        |
| City of Orange                          | 333.00        | 539.00        | 555.00        | 1,134.10      | 666.00          | 428.00          | 111.00          | 111.00          |                 | 111.00          |                 |                 | 3,648.70        |
| City of Westminster                     |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 2,315.00        |
| County of Orange                        | 32,990.80     |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Department of Water Resources           |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 32,990.80       |
| East Orange County Water District       |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 34,722.01       |
| El Toro Water District                  | 8,271.11      | 774.00        |               | 2,544.00      | 4,063.10        | 290.00          | 104.00          | 1,928.80        | 883.99          | 34,722.01       |                 |                 | 11,752.88       |
| Irvine Ranch Water District             |               | 47,878.73     |               | 11,080.04     | 98,495.70       | 108,960.16      | 11,960.75       | 31,806.10       | 14,474.81       | 34,189.42       |                 |                 | 367,136.82      |
| Laguna Beach County Water District      | 66.82         | 15.00         |               | 140.00        |                 | 30.00           |                 | 45.00           | 30.00           |                 |                 |                 | 120.00          |
| Mesa Water District                     |               | 197.98        | 170.00        |               |                 | 356.00          |                 |                 | 284.01          | 140.00          |                 |                 | 1,354.81        |
| Metropolitan Water District             | 38,341.68     | 191,093.43    | 10,281.98     | 10,872.48     | 21,400.00       | 27,066.04       | 14,020.41       | 204,584.98      | 51,455.67       | 94,158.08       |                 |                 | 530,922.94      |
| Moulton Niguel Water District           |               | 7,726.23      |               |               |                 | 32,011.70       | 53,277.39       |                 |                 | 27,631.02       |                 |                 | 252,988.15      |
| Orange County Water District            |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Santa Margarita Water District          |               | 605.76        |               | 18.98         | 100.00          |                 |                 |                 |                 |                 |                 |                 | -               |
| Trabuco Canyon Water District           |               | 284.07        |               |               |                 |                 |                 |                 | 211.85          | 333.00          |                 |                 | 724.74          |
| Yorba Linda Water District              |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 828.92          |
| <b>Miscellaneous Revenues</b>           |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Miscellaneous                           | 2,228.14      |               |               | 1,587.30      |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Interest Revenue                        | 91,568.53     | 262,233.99    | 13,297.02     | 134,144.44    | 128,321.65      | 172,720.95      | 246,434.71      | 238,792.63      | 76,074.61       | 193,748.07      | -               | -               | \$ 3,815.44     |
| <b>Total Revenues</b>                   |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | \$ 1,557,332.60 |
| <b>EXPENDITURES:</b>                    |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Budget Based Tiered Rates, Ratfells     | 2,220.00      | 1,050.00      | 1,800.00      | 11,960.00     | 730.00          | 5,150.00        | 2,080.00        |                 |                 |                 |                 |                 | 24,990.00       |
| Droplet                                 |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| IRWD                                    |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Golden State Water Company              |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| City of Huntington Beach                |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Laguna Beach CWD                        |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | -               |
| Metropolitan Water District             | 28,091.13     |               | 25,193.39     | 87,250.95     | 24,411.51       |                 |                 |                 | 24,769.89       |                 |                 |                 | 189,716.87      |
| Mission RCD                             |               | 20,060.11     | 18,627.78     | 13,404.64     | 2,770.71        | 2,324.45        | 2,121.45        |                 | 5,774.85        |                 |                 |                 | 65,083.99       |
| Multi Family HET Direct                 |               |               | 4,800.00      |               | 75,975.00       | 100,275.00      | 81,300.00       | 127,420.00      |                 |                 |                 |                 | 388,770.00      |
| Pollard Water                           |               | 44,516.38     |               |               | 3,045.00        |                 |                 | 3,045.00        |                 |                 |                 |                 | 50,606.38       |
| Recycled Water On Site Retrofit program |               |               | 11,099.50     | 1,384.50      |                 |                 |                 |                 |                 |                 |                 |                 | 12,484.00       |
| South Coast Water District              | 690.45        | 4,310.08      | 5,308.76      | 1,129.60      | 18,800.00       |                 |                 |                 | 1,609.06        | 2,033.84        |                 |                 | 18,800.00       |
| Spray to Drip program                   | 34,905.00     |               |               |               | 1,320.58        | 413.25          | 567.80          | 1,060.00        |                 |                 |                 |                 | 18,443.42       |
| SMWD                                    |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 | 34,905.00       |
| Turf Removal                            | 32,139.00     | 58,464.60     | 177,399.11    | 117,228.82    | 337,478.95      | 30,263.28       | 154,566.83      | 58,814.62       | 100,324.71      | 216,762.32      |                 |                 | 1,283,442.24    |
| Water Savings Incentive Program         |               |               |               |               |                 |                 | 15,000.00       |                 |                 |                 |                 |                 | 15,000.00       |
| <b>Miscellaneous Expenses</b>           |               |               |               |               |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| Interest Expense                        |               |               |               |               |                 |                 | 67.77           |                 |                 |                 |                 |                 | 67.77           |
| Salary & Benefit                        |               |               | 5,563.51      | 1,700.00      | 1,785.00        | 1,275.00        | 2,040.00        | 1,020.00        | 425.00          |                 |                 |                 | 13,808.51       |
| <b>Total Expenditures</b>               | \$ 98,045.58  | \$ 128,401.17 | \$ 249,792.05 | \$ 234,068.51 | \$ 466,316.75   | \$ 137,376.53   | \$ 257,946.85   | \$ 193,481.07   | \$ 132,903.51   | \$ 218,796.16   | \$ -            | \$ -            | \$ 2,117,118.18 |
| <b>Cash - Ending Balance</b>            | \$ 273,554.92 | \$ 407,387.74 | \$ 170,892.71 | \$ 70,974.64  | \$ (267,020.46) | \$ (231,676.04) | \$ (243,188.18) | \$ (197,876.62) | \$ (254,705.52) | \$ (279,753.61) | \$ (279,753.61) | \$ (279,753.61) |                 |



**Municipal Water District of Orange County**  
**Consolidated Summary of Cash and Investment**  
 March 31, 2019

Street Address:  
 18700 Ward Street  
 Fountain Valley, California 92708

Mailing Address:  
 P.O. Box 20895  
 Fountain Valley, CA 92728-0895

(714) 963-3058  
 Fax: (714) 964-9389  
[www.mwdoc.com](http://www.mwdoc.com)

Brett R. Barbre  
 President

Joan C. Finnegan  
 Vice President

Larry D. Dick  
 Director

Wayne S. Osborne  
 Director

Megan Yoo Schneider  
 Director

Sat Tamaribuchi  
 Director

Jeffery M. Thomas  
 Director

Robert J. Hunter  
 General Manager

**MEMBER AGENCIES**

City of Brea  
 City of Buena Park  
 East Orange County Water District  
 El Toro Water District  
 Emerald Bay Service District  
 City of Fountain Valley  
 City of Garden Grove  
 Golden State Water Co.  
 City of Huntington Beach  
 Irvine Ranch Water District  
 Laguna Beach County Water District  
 City of La Habra  
 City of La Palma  
 Mesa Water District  
 Moulton Niguel Water District  
 City of Newport Beach  
 City of Orange  
 Orange County Water District  
 City of San Clemente  
 City of San Juan Capistrano  
 Santa Margarita Water District  
 City of Seal Beach  
 Serrano Water District  
 South Coast Water District  
 Trabuco Canyon Water District  
 City of Tustin  
 City of Westminster  
 Yorba Linda Water District

District investments and cash balances are held in various funds designated for certain purposes as follows:

| Fund                                       | Book Value          | % of Portfolio |
|--|---------------------|----------------|
| <b>Designated Reserves</b>                 |                     |                |
| General Operations                         | \$3,341,910         | 22.94%         |
| Grant & Project Cash Flow                  | 1,500,000           | 10.30%         |
| Election Expense                           | 608,000             | 4.17%          |
| Building Repair                            | 385,408             | 2.65%          |
| OPEB                                       | 297,147             | 2.04%          |
| <b>Total Designated Reserves</b>           | <b>6,132,465</b>    | <b>42.10%</b>  |
| <b>General Fund</b>                        | <b>6,477,312</b>    | <b>44.47%</b>  |
| <b>Water Fund</b>                          | <b>1,984,943</b>    | <b>13.63%</b>  |
| <b>Conservation Fund</b>                   | <b>(254,706)</b>    | <b>(1.75%)</b> |
| <b>Desalination Feasibility Study Fund</b> | <b>(145,268)</b>    | <b>(1.00%)</b> |
| <b>WEROC Fund</b>                          | <b>342,501</b>      | <b>2.35%</b>   |
| <b>Trustee Activities</b>                  | <b>29,074</b>       | <b>0.20%</b>   |
| <b>Total</b>                               | <b>\$14,566,321</b> | <b>100.00%</b> |

The funds are invested as follows:

| Term of Investment           | % of Portfolio | Book Value          | Market Value        |
|------------------------------|----------------|---------------------|---------------------|
| Cash                         | 0.68%          | \$98,734            | \$98,734            |
| <b>Short-term investment</b> |                |                     |                     |
| • LAIF                       | 50.65%         | \$7,378,895         | \$7,378,895         |
| • OCIP                       | 27.37%         | 3,986,400           | 3,986,400           |
| <b>Long-term investment</b>  |                |                     |                     |
| • Corporate Bond             | 7.91%          | 1,152,292           | 1,138,533           |
| • Certificates of Deposit    | 13.39%         | 1,950,000           | 1,951,767           |
| <b>Total</b>                 | <b>100.00%</b> | <b>\$14,566,321</b> | <b>\$14,554,329</b> |

The average number of days to maturity/call as of March 31, 2019 equaled 160 and the average yield to maturity is 2.339%. During the month, the District's average daily balance was \$18,393,178.30. Funds were invested in Federal Agency Issues, Certificates of Deposit, Negotiable CD's, Miscellaneous Securities, the Local Agency Investment Funds (LAIF) and the Orange County Investment Pool (OCIP) during the month of March 2019.

The (\$11,992) difference between the book value and the market value on March 31, 2019 represents the exchange difference if all investments had been liquidated on that date. Since it is the District's practice to "buy and hold" investments until maturity, the market values are a point of reference, not an indication of actual loss or gain. There are no current plans or cash flow requirements identified in the near future that would require the sale of these securities prior to maturity.

Robert J. Hunter  
 General Manager

Hilary Chumpitazi  
 Treasurer





# MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Portfolio Management - Portfolio Summary

March 31, 2019

| 3/31/2019                         | Par Value            | Market Value         | Book Value           | % of Portfolio | Days to Mat/Call | YTM @ Cost   |
|-----------------------------------|----------------------|----------------------|----------------------|----------------|------------------|--------------|
| Negotiable Certificate Of Deposit | 1,950,000.00         | 1,951,767.00         | 1,950,000.00         | 13.48          | 792              | 2.504        |
| Corporate Bond                    | 1,150,000.00         | 1,138,533.00         | 1,152,292.24         | 7.95           | 665              | 2.290        |
| Local Agency Investment Funds     | 7,378,895.52         | 7,378,895.52         | 7,378,895.52         | 51.01          | 1                | 2.427        |
| Orange County Investment Pool     | 3,986,399.61         | 3,986,399.61         | 3,986,399.61         | 27.56          | 1                | 2.111        |
| <b>Total Investments</b>          | <b>14,465,295.13</b> | <b>14,455,595.13</b> | <b>14,467,587.37</b> | <b>100.00</b>  | <b>160</b>       | <b>2.339</b> |
| <b>Cash</b>                       |                      |                      |                      |                |                  |              |
| Cash                              | 98,733.71            | 98,733.71            | 98,733.71            |                | 1                | 0.00         |
| <b>Total Cash and Investments</b> | <b>14,564,028.84</b> | <b>14,554,328.84</b> | <b>14,566,321.08</b> |                | <b>160</b>       | <b>2.339</b> |

| Total Earnings           | Month Ending March | Fiscal Year to Date |
|--------------------------|--------------------|---------------------|
| Current Year             | 40,996.76          | 421,541.52          |
| Average Daily Balance    | 18,393,178.30      |                     |
| Effective Rate of Return | 2.339%             |                     |

We certify that this report reflects the cash and investments of the Municipal Water District of Orange County and is in conformity with the Government Code requirements and the District Investment Policy and Guidelines in effect at the time of investment. The Investment Program herein shown provides sufficient cash flow liquidity to meet the next six month's estimated expenditure. The source for the market values are from Union Bank. Per Resolution 2059 there are no compliance exceptions to report.

  
Robert J. Hunter, General Manager

Date

4-29-19

  
Hilary Chumbitazi, Treasurer

Date

4/29/2019

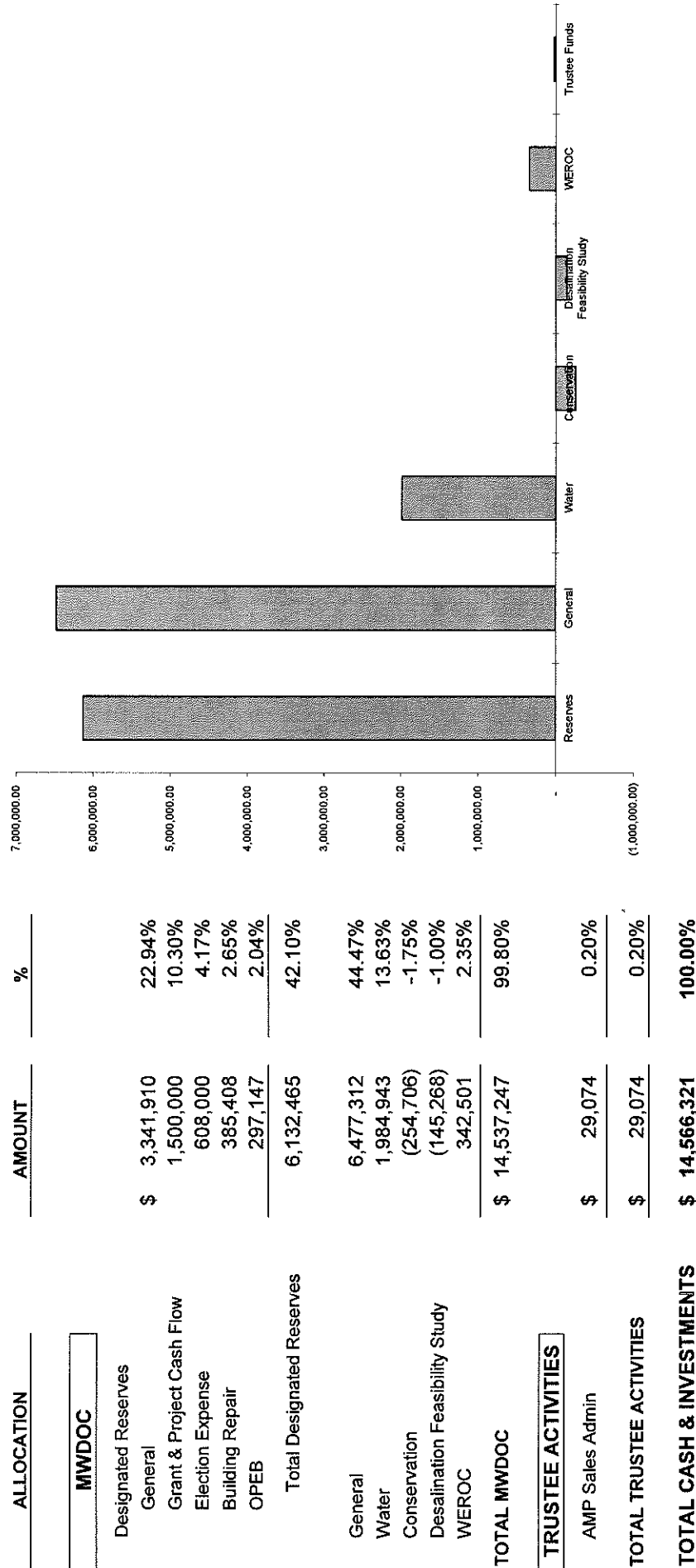
**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Long-Term Portfolio Details - Investments**  
**March 31, 2019**

| Issuer                                   | CUSIP/Ticker | Settlement Date | Par Value           | Market Value               | Book Value          | Coupon Rate  | YTM @ Cost   | Days To Call/Maturity | Maturity Date |
|--|--------------|-----------------|---------------------|----------------------------|---------------------|--------------|--------------|-----------------------|---------------|
| <b>Negotiable Certificate Of Deposit</b> |              |                 |                     |                            |                     |              |              |                       |               |
| Barclays Bank                            | 06740KKY2    | 9/27/2017       | 250,000.00          | 245,317.50                 | 250,000.00          | 2.250        | 2.250        | 1,276                 | 9/27/2022     |
| Capital One Bank                         | 14042E6C9    | 9/2/2015        | 250,000.00          | 249,662.50                 | 250,000.00          | 1.950        | 1.950        | 156                   | 9/3/2019      |
| Comenity Capital                         | 20033AUX2    | 7/25/2017       | 200,000.00          | 197,592.00                 | 200,000.00          | 2.000        | 2.000        | 838                   | 7/16/2021     |
| Discover Bank                            | 254673RV0    | 7/25/2018       | 250,000.00          | 254,005.00                 | 250,000.00          | 3.300        | 3.300        | 1,577                 | 7/25/2023     |
| Goldman Sachs Bank                       | 38148PT98    | 8/8/2018        | 250,000.00          | 254,522.50                 | 250,000.00          | 3.350        | 3.350        | 1,591                 | 8/8/2023      |
| HSBC Bank                                | 40434AK65    | 1/21/2016       | 250,000.00          | 250,735.00                 | 250,000.00          | 3.250        | 2.534        | 112                   | 1/21/2021     |
| Morgan Stanley Bank                      | 61747MJ36    | 2/1/2018        | 250,000.00          | 250,197.50                 | 250,000.00          | 2.500        | 2.500        | 673                   | 2/1/2021      |
| Synchrony Bank                           | 87164XBY1    | 7/25/2014       | 250,000.00          | 249,735.00                 | 250,000.00          | 2.050        | 2.050        | 121                   | 7/30/2019     |
| <b>Sub Total</b>                         |              |                 | <b>1,950,000.00</b> | <b>1,951,767.00</b>        | <b>1,950,000.00</b> | <b>2.596</b> | <b>2.504</b> | <b>792</b>            |               |
| <b>Corporate Bond</b>                    |              |                 |                     |                            |                     |              |              |                       |               |
| JP Morgan Chase                          | 46825HKA7    | 11/2/2015       | 500,000.00          | 498,175.00                 | 500,379.50          | 2.250        | 2.152        | 267                   | 1/23/2020     |
| National Rural Util Coop                 | 63743FE51    | 7/27/2017       | 200,000.00          | 193,156.00                 | 200,000.00          | 2.500        | 2.500        | 1,202                 | 7/15/2022     |
| Wells Fargo                              | 94974BGR5    | 1/13/2016       | 250,000.00          | 249,190.00                 | 250,555.82          | 2.550        | 2.409        | 617                   | 12/7/2020     |
| Westpac Banking Corp                     | 961214DQ3    | 7/25/2017       | 200,000.00          | 198,012.00                 | 201,356.92          | 2.500        | 2.278        | 1,185                 | 6/28/2022     |
| <b>Sub Total</b>                         |              |                 | <b>1,150,000.00</b> | <b>1,138,533.00</b>        | <b>1,152,292.24</b> | <b>2.402</b> | <b>2.290</b> | <b>665</b>            |               |
| <b>Total Investments</b>                 |              |                 | <b>3,100,000.00</b> | <b>3,090,300.00</b>        | <b>3,102,292.24</b> | <b>2.524</b> | <b>2.425</b> | <b>745</b>            |               |
| <b>Total Earnings</b>                    |              |                 |                     |                            |                     |              |              |                       |               |
| Current Year                             |              |                 | <b>6,729.05</b>     | <b>Fiscal Year To Date</b> | <b>55,708.28</b>    |              |              |                       |               |

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Short-Term Portfolio Details - Cash and Investments**  
**March 31, 2019**

| Investments                          | CUSIP/Ticker | Settlement Date           | Par Value                  | Market Value         | Book Value           | Coupon Rate  | YTM @ Cost   | Days To Call/Maturity | Maturity Date |
|--------------------------------------|--------------|---------------------------|----------------------------|----------------------|----------------------|--------------|--------------|-----------------------|---------------|
| <b>Local Agency Investment Funds</b> |              |                           |                            |                      |                      |              |              |                       |               |
| LAIF LGIP                            | LAIF         | 6/30/2010                 | 7,378,895.52               | 7,378,895.52         | 7,378,895.52         | 2.427        | 2.427        | 1                     | N/A           |
| <b>Sub Total</b>                     |              |                           | <b>7,378,895.52</b>        | <b>7,378,895.52</b>  | <b>7,378,895.52</b>  | <b>2.427</b> | <b>2.427</b> | <b>1</b>              |               |
| <b>Orange County Investment Pool</b> |              |                           |                            |                      |                      |              |              |                       |               |
| County of Orange LGIP                | OCIP         | 6/29/2005                 | 3,986,399.61               | 3,986,399.61         | 3,986,399.61         | 2.111        | 2.111        | 1                     | N/A           |
| <b>Sub Total</b>                     |              |                           | <b>3,986,399.61</b>        | <b>3,986,399.61</b>  | <b>3,986,399.61</b>  | <b>2.111</b> | <b>2.111</b> | <b>1</b>              |               |
| <b>Total Investments</b>             |              |                           | <b>11,365,295.13</b>       | <b>11,365,295.13</b> | <b>11,365,295.13</b> | <b>2.316</b> | <b>2.316</b> |                       |               |
| <b>Cash</b>                          |              |                           |                            |                      |                      |              |              |                       |               |
| Petty Cash Cash                      | CASH         | 7/1/2010                  | 500.00                     | 500.00               | 500.00               | 0.000        | 0.000        | 1                     | N/A           |
| US Bank Cash                         | CASHUSBANK   | 7/25/2018                 | 98,233.71                  | 98,233.71            | 98,233.71            | 0.000        | 0.000        | 1                     | N/A           |
| <b>Total Cash</b>                    |              |                           | <b>98,733.71</b>           | <b>98,733.71</b>     | <b>98,733.71</b>     | <b>0.000</b> | <b>0.000</b> | <b>1</b>              |               |
| <b>Total Cash and Investments</b>    |              |                           | <b>11,464,028.84</b>       | <b>11,464,028.84</b> | <b>11,464,028.84</b> | <b>2.316</b> | <b>2.316</b> | <b>1</b>              |               |
| <b>Total Earnings</b>                |              |                           |                            |                      |                      |              |              |                       |               |
| Current Year                         |              | <b>Month Ending March</b> | <b>Fiscal Year To Date</b> |                      |                      |              |              |                       |               |
|                                      |              | 34,267.71                 | 365,833.24                 |                      |                      |              |              |                       |               |

**Municipal Water District of Orange County  
Cash and Investments at March 31, 2019**



**MUNICIPAL WATER DIST OF ORANGE COUNTY**  
**PARS Post-Employment Benefits Trust****Account Report for the Period**  
**3/1/2019 to 3/31/2019**Rob Hunter  
General Manager  
Municipal Water Dist of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708**Account Summary**

| Source        | Beginning Balance as of<br>3/1/2019 | Contributions | Earnings           | Expenses        | Distributions | Transfers     | Ending Balance as of<br>3/31/2019 |
|---------------|-------------------------------------|---------------|--------------------|-----------------|---------------|---------------|-----------------------------------|
| OPEB          | \$2,121,817.79                      | \$0.00        | \$24,263.56        | \$442.05        | \$0.00        | \$0.00        | \$2,145,639.30                    |
| PENSION       | \$208,528.15                        | \$0.00        | \$2,384.58         | \$43.44         | \$0.00        | \$0.00        | \$210,869.29                      |
| <b>Totals</b> | <b>\$2,330,345.94</b>               | <b>\$0.00</b> | <b>\$26,648.14</b> | <b>\$485.49</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$2,356,508.59</b>             |

**Investment Selection****Source**

|         |                               |
|---------|-------------------------------|
| OPEB    | <b>Moderate HighMark PLUS</b> |
| PENSION | <b>Moderate HighMark PLUS</b> |

**Investment Objective****Source**

|         |   |
|---------|---|
| OPEB    | The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments. |
| PENSION | The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments. |

**Investment Return**

| Source  | 1-Month | 3-Months | 1-Year | Annualized Return |         |          | Plan's Inception Date |
|---------|---------|----------|--------|-------------------|---------|----------|-----------------------|
|         |         |          |        | 3-Years           | 5-Years | 10-Years |                       |
| OPEB    | 1.14%   | 8.23%    | 4.55%  | 7.58%             | 5.32%   | -        | 10/26/2011            |
| PENSION | 1.14%   | 8.23%    | -      | -                 | -       | -        | 7/31/2018             |

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Account balances are inclusive of Trust Administration, Trustee and Investment Management fees



## PARS DIVERSIFIED PORTFOLIOS MODERATE

Q1 2019

### WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

#### Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

#### Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

#### Flexible Investment Options

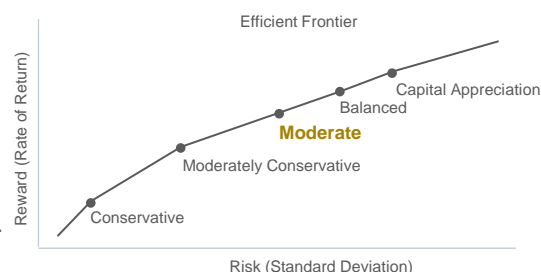
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

#### Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

### INVESTMENT OBJECTIVE

To provide current income and moderate capital appreciation. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important.



### ASSET ALLOCATION — MODERATE PORTFOLIO

|              | Strategic Range | Policy | Tactical |
|--------------|-----------------|--------|----------|
| Equity       | 40 - 60%        | 50%    | 51%      |
| Fixed Income | 40 - 60%        | 45%    | 46%      |
| Cash         | 0 - 20%         | 5%     | 3%       |

### ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

#### HighMark Plus Composite (Active)

|                        |       |
|------------------------|-------|
| Current Quarter*       | 8.24% |
| Blended Benchmark*, ** | 7.94% |
| Year To Date*          | 8.24% |
| Blended Benchmark*, ** | 7.94% |
| 1 Year                 | 4.64% |
| Blended Benchmark**    | 5.18% |
| 3 Year                 | 7.53% |
| Blended Benchmark**    | 7.13% |
| 5 Year                 | 5.33% |
| Blended Benchmark**    | 5.62% |
| 10 Year                | 9.09% |
| Blended Benchmark**    | 8.80% |

#### Index Plus Composite (Passive)

|                        |       |
|------------------------|-------|
| Current Quarter*       | 8.17% |
| Blended Benchmark*, ** | 7.94% |
| Year To Date*          | 8.17% |
| Blended Benchmark*, ** | 7.94% |
| 1 Year                 | 4.88% |
| Blended Benchmark**    | 5.18% |
| 3 Year                 | 6.91% |
| Blended Benchmark**    | 7.13% |
| 5 Year                 | 5.20% |
| Blended Benchmark**    | 5.62% |
| 10 Year                | 8.85% |
| Blended Benchmark**    | 8.80% |

\* Returns less than one year are not annualized. \*\*Breakdown for Blended Benchmark: From 10/1/2012 – Present: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% BBG Barclays US Agg, 10% ICE BofAML 1-3 Yr US Corp/Gov't, 1.50% ICE BofAML US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofAML 1-3 Year Corp./Gov't, 30% BBG Barclays US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007: the blended benchmark was 50% S&P 500, 15% ICE BofAML 1-3Yr Corp/Gov, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth T-Bill.

### ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

#### HighMark Plus Composite (Active)

|      |         |
|------|---------|
| 2008 | -22.88% |
| 2009 | 21.47%  |
| 2010 | 12.42%  |
| 2011 | 0.55%   |
| 2012 | 12.25%  |
| 2013 | 13.06%  |
| 2014 | 4.84%   |
| 2015 | 0.14%   |
| 2016 | 6.45%   |
| 2017 | 13.19%  |
| 2018 | -4.03%  |

#### Index Plus Composite (Passive)

|      |         |
|------|---------|
| 2008 | -18.14% |
| 2009 | 16.05%  |
| 2010 | 11.77%  |
| 2011 | 2.29%   |
| 2012 | 10.91%  |
| 2013 | 12.79%  |
| 2014 | 5.72%   |
| 2015 | -0.52%  |
| 2016 | 7.23%   |
| 2017 | 11.59%  |
| 2018 | -4.03%  |

### PORTFOLIO FACTS

#### HighMark Plus (Active)

|                             |         |
|-----------------------------|---------|
| Composite Inception Date    | 10/2004 |
| No of Holdings in Portfolio | 18      |

#### Index Plus (Passive)

|                             |         |
|-----------------------------|---------|
| Composite Inception Date    | 05/2006 |
| No of Holdings in Portfolio | 12      |

## HOLDINGS

### HighMark Plus (Active)

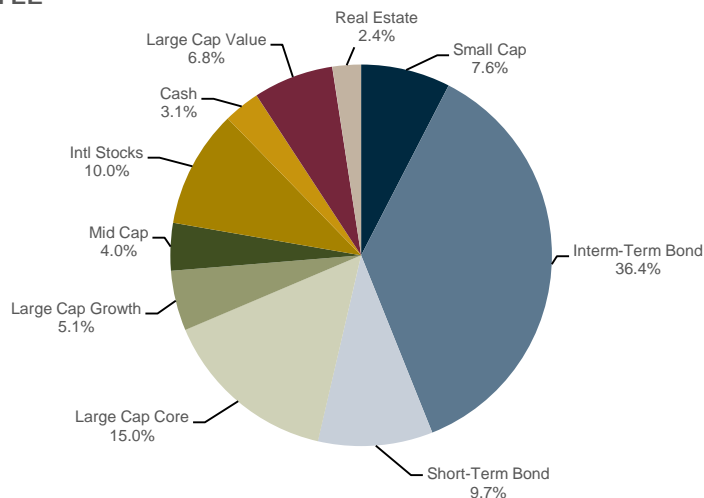
Columbia Contrarian Core I3  
Vanguard Growth & Income Adm  
Dodge & Cox Stock Fund  
Harbor Capital Appreciation - Retirement  
T. Rowe Price Growth Stock - I  
iShares Russell Mid-Cap ETF  
Vanguard Real Estate ETF  
Undiscovered Managers Behavioral Value-R6  
Victory RS Small Cap Growth - R6  
DFA Large Cap International Portfolio  
Dodge & Cox International Stock  
MFS International Growth - R6  
Hartford Schroders Emerging Markets Eq  
Vanguard Short-Term Invest-Grade Adm  
PIMCO Total Return Fund - Inst  
PGIM Total Return Bond - R6  
DoubleLine Core Fixed Income - I  
First American Government Obligations Z

### Index Plus (Passive)

iShares Core S&P 500 ETF  
iShares S&P 500 Value ETF  
iShares S&P 500 Growth ETF  
iShares Russell Mid-Cap ETF  
Vanguard Real Estate ETF  
iShares Russell 2000 Value ETF  
iShares Russell 2000 Growth ETF  
iShares MSCI EAFE ETF  
Vanguard FTSE Emerging Markets ETF  
Vanguard Short-Term Invest-Grade Adm  
iShares Core U.S. Aggregate  
First American Government Obligations Z

*Holdings are subject to change at the discretion of the investment manager.*

## STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark's Portfolio Management Group (PMG) with full investment authority according to the PARS Moderate active and passive objectives.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a \$10 million initial value would grow to \$12.53 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofAML US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofAML 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofAML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.

## HIGHMARK CAPITAL MANAGEMENT

350 California Street  
Suite 1600  
San Francisco, CA 94104  
800-582-4734

### ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has nearly 100 years (including predecessor organizations) of institutional money management experience with \$7.6 billion in assets under management and \$8.3 billion in assets under advisement\*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

### ABOUT THE PORTFOLIO MANAGEMENT TEAM

#### Andrew Brown, CFA®

Senior Portfolio Manager

Investment Experience: since 1994

HighMark Tenure: since 1997

Education: MBA, University of Southern California; BA, University of Southern California

#### Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager

Investment Experience: since 2004

HighMark Tenure: since 2014

Education: BA, Colgate University

#### J. Keith Stribling, CFA®

Senior Portfolio Manager

Investment Experience: since 1985

HighMark Tenure: since 1995

Education: BA, Stetson University

#### Christiane Tsuda

Senior Portfolio Manager

Investment Experience: since 1987

HighMark Tenure: since 2010

Education: BA, International Christian University, Tokyo

#### Anne Wimmer, CFA®

Senior Portfolio Manager

Investment Experience: since 1987

HighMark Tenure: since 2007

Education: BA, University of California, Santa Barbara

#### Randy Yurchak, CFA®

Senior Portfolio Manager

Investment Experience: since 2002

HighMark Tenure: since 2017

Education: MBA, Arizona State University;

BS, University of Washington

#### Asset Allocation Committee

Number of Members: 16

Average Years of Experience: 28

Average Tenure (Years): 15

#### Manager Review Group

Number of Members: 7

Average Years of Experience: 19

Average Tenure (Years): 7

\*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**COMBINED FINANCIAL STATEMENTS**  
**AND**  
**BUDGET COMPARATIVE**  
**JULY 1, 2018 THRU MARCH 31, 2019**

**Municipal Water District of Orange County  
Combined Balance Sheet  
As of March 31, 2019**

| <b><u>ASSETS</u></b>                            | <b>Amount</b>                 |
|---|-------------------------------|
| Cash in Bank                                    | 98,733.71                     |
| Investments                                     | 14,467,587.37                 |
| Accounts Receivable                             | 24,101,737.35                 |
| Accounts Receivable - Other                     | 159,824.96                    |
| Accrued Interest Receivable                     | 117,185.52                    |
| Prepays/Deposits                                | 262,869.68                    |
| Leasehold Improvements                          | 3,735,829.68                  |
| Furniture, Fixtures & Equipment                 | 563,307.34                    |
| Less: Accum Depreciation                        | <u>(2,972,684.57)</u>         |
| <b>TOTAL ASSETS</b>                             | <b><u>\$40,534,391.04</u></b> |
| <br><b><u>LIABILITIES AND FUND BALANCES</u></b> |                               |
| <b>Liabilities</b>                              |                               |
| Accounts Payable                                | 24,910,904.29                 |
| Accounts Payable - Other                        | 15.92                         |
| Accrued Salaries and Benefits Payable           | 355,258.19                    |
| Other Liabilities                               | 362,110.82                    |
| Unearned Revenue                                | <u>954,311.68</u>             |
| Total Liabilities                               | <u>26,582,600.90</u>          |
| <br><b>Fund Balances</b>                        |                               |
| Restricted Fund Balances                        |                               |
| Water Fund - T2C                                | <u>1,000,093.75</u>           |
| Total Restricted Fund Balances                  | <u>1,000,093.75</u>           |
| Designated Reserves                             |                               |
| General Operations                              | 3,341,910.36                  |
| Grant & Project Cash Flow                       | 1,500,000.00                  |
| Election Expense                                | 608,000.00                    |
| Building Repair                                 | 385,407.45                    |
| OPEB  | <u>297,147.00</u>             |
| Total Designated Reserves                       | <u>6,132,464.81</u>           |
| General Fund                                    | 3,072,149.80                  |
| General Fund Capital                            | 525,009.00                    |
| WEROC Capital                                   | 114,948.58                    |
| WEROC   | <u>183,846.12</u>             |
| Total Unrestricted Fund Balances                | <u>10,028,418.31</u>          |
| Excess Revenue over Expenditures                |                               |
| Operating Fund                                  | 3,455,778.66                  |
| Other Funds                                     | <u>(532,500.58)</u>           |
| Total Fund Balance                              | <u>13,951,790.14</u>          |
| <b>TOTAL LIABILITIES AND FUND BALANCES</b>      | <b><u>40,534,391.04</u></b>   |

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July 2018 thru March 2019**

|                              | <b>Month to Date</b> | <b>Year to Date</b> | <b>Annual<br/>Budget</b> | <b>% Used</b> | <b>Encumbrance</b> | <b>Budget<br/>Remaining</b> |
|------------------------------|----------------------|---------------------|--------------------------|---------------|--------------------|-----------------------------|
| <b><u>REVENUES</u></b>       |                      |                     |                          |               |                    |                             |
| Retail Connection Charge     | 0.00                 | 7,697,005.75        | 7,697,006.00             | 100.00%       | 0.00               | 0.25                        |
| Ground Water Customer Charge | 0.00                 | 499,012.00          | 499,012.00               | 100.00%       | 0.00               | 0.00                        |
| Water rate revenues          | 0.00                 | 8,196,017.75        | 8,196,018.00             | 100.00%       | 0.00               | 0.25                        |
| Interest Revenue             | 39,049.16            | 404,554.82          | 390,000.00               | 103.73%       | 0.00               | (14,554.82)                 |
| Subtotal                     | 39,049.16            | 8,600,572.57        | 8,586,018.00             | 100.17%       | 0.00               | (14,554.57)                 |
| Choice Programs              | 0.00                 | 1,085,459.35        | 1,174,750.00             | 92.40%        | 0.00               | 89,290.65                   |
| Miscellaneous Income         | 18,374.20            | 22,240.62           | 3,000.00                 | 741.35%       | 0.00               | (19,240.62)                 |
| School Contracts             | 10,406.52            | 64,161.21           | 102,031.00               | 62.88%        | 0.00               | 37,869.79                   |
| Gain on Sale of Investments  | 0.00                 | 3.61                | 0.00                     |               | 0.00               | (3.61)                      |
| Transfer-In From Reserve     | 0.00                 | 0.00                | 5,276.00                 | 0.00%         | 0.00               | 5,276.00                    |
| Subtotal                     | 28,780.72            | 1,171,864.79        | 1,285,057.00             | 91.19%        | 0.00               | 113,192.21                  |
| <b>TOTAL REVENUES</b>        | <b>67,829.88</b>     | <b>9,772,437.36</b> | <b>9,871,075.00</b>      | <b>99.00%</b> | <b>0.00</b>        | <b>98,637.64</b>            |

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July 2018 thru March 2019**

|   | Month to Date | Year to Date | Annual Budget | % Used  | Encumbrance  | Budget Remaining |
|---|---------------|--------------|---------------|---------|--------------|------------------|
| <b><u>EXPENSES</u></b>                  |               |              |               |         |              |                  |
| Salaries & Wages                        | 279,658.70    | 2,603,262.53 | 3,522,982.00  | 73.89%  | 0.00         | 919,719.48       |
| Salaries & Wages - Grant Recovery       | 0.00          | (3,837.94)   | (6,300.00)    | 60.92%  | 0.00         | (2,462.06)       |
| Salaries & Wages - Recovery             | (357.00)      | (7,639.80)   | 0.00          | 0.00%   | 0.00         | 7,639.80         |
| Director's Compensation                 | 14,656.48     | 144,693.61   | 255,360.00    | 56.66%  | 0.00         | 110,666.39       |
| MWD Representation                      | 11,849.92     | 96,477.26    | 145,920.00    | 66.12%  | 0.00         | 49,442.74        |
| Employee Benefits                       | 85,342.07     | 798,242.22   | 1,108,564.00  | 72.01%  | 0.00         | 310,321.78       |
| CalPers Unfunded Liability Contribution | 0.00          | 207,000.00   | 207,000.00    | 100.00% | 0.00         | 0.00             |
| Employee Benefits - Grant Recovery      | 0.00          | (875.57)     | 0.00          | 0.00%   | 0.00         | 875.57           |
| Employee Benefits - Recovery            | (68.00)       | (1,455.20)   | 0.00          | 0.00%   | 0.00         | 1,455.20         |
| Director's Benefits                     | 7,823.22      | 68,390.95    | 94,767.00     | 72.17%  | 0.00         | 26,376.05        |
| Health Insurance for Retirees           | 6,391.74      | 47,940.27    | 70,519.00     | 67.98%  | 0.00         | 22,578.73        |
| Training Expense                        | 934.00        | 7,664.23     | 25,000.00     | 30.66%  | 0.00         | 17,335.77        |
| Tuition Reimbursement                   | 0.00          | 2,856.28     | 5,000.00      | 57.13%  | 0.00         | 2,143.72         |
| Temporary Help Expense                  | 0.00          | 0.00         | 5,000.00      | 0.00%   | 0.00         | 5,000.00         |
| Personnel Expenses                      | 406,231.13    | 3,962,718.84 | 5,433,812.00  | 72.93%  | 0.00         | 1,471,093.17     |
| Engineering Expense                     | 28,560.26     | 253,874.75   | 330,000.00    | 76.93%  | 308,963.65   | (232,838.40)     |
| Legal Expense                           | 43,999.64     | 149,809.83   | 255,000.00    | 58.75%  | 105,190.17   | 0.00             |
| Audit Expense                           | 0.00          | 19,380.00    | 29,000.00     | 66.83%  | 0.00         | 9,620.00         |
| Professional Services                   | 164,826.52    | 758,279.70   | 1,430,758.00  | 53.00%  | 465,098.63   | 207,379.67       |
| Professional Fees                       | 237,386.42    | 1,181,344.28 | 2,044,758.00  | 57.77%  | 879,252.45   | (15,838.73)      |
| Conference-Staff                        | 925.00        | 21,656.06    | 42,880.00     | 50.50%  | 0.00         | 21,223.94        |
| Conference-Directors                    | 2,039.50      | 13,016.31    | 24,930.00     | 52.21%  | 0.00         | 11,913.69        |
| Travel & Accom.-Staff                   | 9,958.59      | 42,085.71    | 99,600.00     | 42.25%  | 0.00         | 57,514.29        |
| Travel & Accom.-Directors               | 2,800.91      | 22,318.04    | 51,750.00     | 43.13%  | 0.00         | 29,431.96        |
| Travel & Conference                     | 15,724.00     | 99,076.12    | 219,160.00    | 45.21%  | 0.00         | 120,083.88       |
| Membership/Sponsorship                  | 7,381.73      | 139,255.53   | 141,662.00    | 98.30%  | 0.00         | 2,406.47         |
| CDR Support                             | 0.00          | 35,283.21    | 47,044.00     | 75.00%  | 11,761.05    | (0.26)           |
| Dues & Memberships                      | 7,381.73      | 174,538.74   | 188,706.00    | 92.49%  | 11,761.05    | 2,406.21         |
| Business Expense                        | 134.91        | 2,056.16     | 5,600.00      | 36.72%  | 0.00         | 3,543.84         |
| Maintenance Office                      | 6,721.44      | 73,205.44    | 132,796.00    | 55.13%  | 58,060.72    | 1,529.84         |
| Building Repair & Maintenance           | 1,352.05      | 9,518.83     | 20,000.00     | 47.59%  | 13,210.13    | (2,728.96)       |
| Storage Rental & Equipment Lease        | 1,209.70      | 2,885.20     | 3,460.00      | 83.39%  | 574.80       | 0.00             |
| Office Supplies                         | 2,463.64      | 20,072.89    | 36,000.00     | 55.76%  | 1,412.26     | 14,514.85        |
| Postage/Mail Delivery                   | 1,145.39      | 7,755.46     | 9,000.00      | 86.17%  | 1,711.06     | (466.52)         |
| Subscriptions & Books                   | 0.00          | 375.65       | 1,500.00      | 25.04%  | 0.00         | 1,124.35         |
| Reproduction Expense                    | 2,382.62      | 9,820.41     | 33,073.00     | 29.69%  | 1,651.66     | 21,600.93        |
| Maintenance-Computers                   | (1.28)        | 3,130.26     | 8,000.00      | 39.13%  | 1,250.94     | 3,618.80         |
| Software Purchase                       | 0.00          | 30,946.90    | 45,861.00     | 67.48%  | 0.00         | 14,914.10        |
| Software Support                        | 2,083.26      | 30,883.22    | 51,934.00     | 59.47%  | 600.00       | 20,450.78        |
| Computers and Equipment                 | 350.00        | 9,391.24     | 11,850.00     | 79.25%  | 0.00         | 2,458.76         |
| Automotive Expense                      | 1,670.53      | 15,355.20    | 17,262.00     | 88.95%  | 0.00         | 1,906.80         |
| Toll Road Charges                       | 53.91         | 742.82       | 1,000.00      | 74.28%  | 0.00         | 257.18           |
| Insurance Expense                       | 9,262.18      | 81,640.09    | 138,500.00    | 58.95%  | 0.00         | 56,859.91        |
| Utilities - Telephone                   | 1,906.30      | 16,970.23    | 20,178.00     | 84.10%  | 559.29       | 2,648.48         |
| Bank Fees                               | 0.00          | 4,079.87     | 21,225.00     | 19.22%  | 0.00         | 17,145.13        |
| Miscellaneous Expense                   | 8,910.02      | 63,390.21    | 119,205.00    | 53.18%  | 0.00         | 55,814.79        |
| MWDOC's Contrb. to WEROC                | 15,948.33     | 169,023.01   | 216,868.00    | 77.94%  | 0.00         | 47,844.99        |
| Depreciation Expense                    | 2,822.34      | 25,401.02    | 0.00          | 0.00%   | 0.00         | (25,401.02)      |
| Other Expenses                          | 58,415.34     | 576,644.11   | 893,312.00    | 64.55%  | 79,030.86    | 237,637.03       |
| Election Expense                        | 0.00          | 196,135.57   | 304,000.00    | 64.52%  | 0.00         | 107,864.43       |
| Building Expense                        | 3,440.81      | 103,668.89   | 531,827.00    | 19.49%  | 147,416.52   | 280,741.59       |
| Capital Acquisition                     | 9,017.72      | 22,532.15    | 255,500.00    | 8.82%   | 9,520.00     | 223,447.85       |
| TOTAL EXPENSES                          | 737,597.15    | 6,316,658.70 | 9,871,075.00  | 63.99%  | 1,126,980.88 | 2,427,435.43     |
| NET INCOME (LOSS)                       | (669,767.27)  | 3,455,778.66 | 0.00          |         |              |                  |

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**Water Fund**  
**From July 2018 thru March 2019**

|  | <b>Month to Date</b> | <b>Year to Date</b>   | <b>Annual<br/>Budget</b> | <b>% Used</b>  | <b>Budget<br/>Remaining</b> |
|--|----------------------|-----------------------|--------------------------|----------------|-----------------------------|
| <b><u>WATER REVENUES</u></b>                   |                      |                       |                          |                |                             |
| Water Sales                                    | 16,945,328.60        | 118,790,658.60        | 188,976,940.00           | 62.86%         | 70,186,281.40               |
| Readiness to Serve Charge                      | 839,273.57           | 7,937,383.59          | 10,902,178.00            | 72.81%         | 2,964,794.41                |
| Capacity Charge CCF                            | 299,996.67           | 2,827,475.01          | 3,854,976.00             | 73.35%         | 1,027,500.99                |
| SCP/SAC Pipeline Surcharge                     | 23,639.39            | 249,216.39            | 365,000.00               | 68.28%         | 115,783.61                  |
| Interest                                       | <u>2,252.92</u>      | <u>16,191.22</u>      | <u>13,000.00</u>         | <u>124.55%</u> | <u>(3,191.22)</u>           |
| <b>TOTAL WATER REVENUES</b>                    | <u>18,110,491.15</u> | <u>129,820,924.81</u> | <u>204,112,094.00</u>    | <u>63.60%</u>  | <u>74,291,169.19</u>        |
| <b><u>WATER PURCHASES</u></b>                  |                      |                       |                          |                |                             |
| Water Sales                                    | 16,945,328.60        | 118,790,658.60        | 188,976,940.00           | 62.86%         | 70,186,281.40               |
| Readiness to Serve Charge                      | 839,273.57           | 7,937,383.59          | 10,902,178.00            | 72.81%         | 2,964,794.41                |
| Capacity Charge CCF                            | 299,996.67           | 2,827,475.01          | 3,854,976.00             | 73.35%         | 1,027,500.99                |
| SCP/SAC Pipeline Surcharge                     | <u>23,639.39</u>     | <u>249,216.39</u>     | <u>365,000.00</u>        | <u>68.28%</u>  | <u>115,783.61</u>           |
| <b>TOTAL WATER PURCHASES</b>                   | <u>18,108,238.23</u> | <u>129,804,733.59</u> | <u>204,099,094.00</u>    | <u>63.60%</u>  | <u>74,294,360.41</u>        |
| <b>EXCESS OF REVENUE OVER<br/>EXPENDITURES</b> | <u>2,252.92</u>      | <u>16,191.22</u>      | <u>13,000.00</u>         |                |                             |

**Municipal Water District of Orange County**  
**WUE Revenues and Expenditures (Actuals vs Budget)**  
**From July 2018 thru March 2019**

|  | Year to Date<br>Actual | Annual<br>Budget    | % Used  |
|--|------------------------|---------------------|---------|
| <b>Spray To Drip Conversion</b>            |                        |                     |         |
| Revenues                                   | 17,564.62              | 128,540.00          | 13.66%  |
| Expenses                                   | <u>20,704.48</u>       | <u>128,540.00</u>   | 16.11%  |
| Excess of Revenues over Expenditures       | (3,139.86)             | 0.00                |         |
| <b>Member Agency Administered Passthru</b> |                        |                     |         |
| Revenues                                   | 408,570.00             | 100,000.00          | 408.57% |
| Expenses                                   | <u>408,570.00</u>      | <u>100,000.00</u>   | 408.57% |
| Excess of Revenues over Expenditures       | 0.00                   | 0.00                |         |
| <b>ULFT Rebate Program</b>                 |                        |                     |         |
| Revenues                                   | 13,138.34              | 43,500.00           | 30.20%  |
| Expenses                                   | <u>13,138.34</u>       | <u>43,500.00</u>    | 30.20%  |
| Excess of Revenues over Expenditures       | 0.00                   | 0.00                |         |
| <b>HECW Rebate Program</b>                 |                        |                     |         |
| Revenues                                   | 182,197.54             | 425,000.00          | 42.87%  |
| Expenses                                   | <u>182,420.86</u>      | <u>425,000.00</u>   | 42.92%  |
| Excess of Revenues over Expenditures       | (223.32)               | 0.00                |         |
| <b>CII Rebate Program</b>                  |                        |                     |         |
| Revenues                                   | 110,847.21             | 462,500.00          | 23.97%  |
| Expenses                                   | <u>110,730.00</u>      | <u>462,500.00</u>   | 23.94%  |
| Excess of Revenues over Expenditures       | 117.21                 | 0.00                |         |
| <b>Turf Removal Program</b>                |                        |                     |         |
| Revenues                                   | 489,407.85             | 1,345,000.00        | 36.39%  |
| Expenses                                   | <u>1,090,954.01</u>    | <u>1,345,000.00</u> | 81.11%  |
| Excess of Revenues over Expenditures       | (601,546.16)           | 0.00                |         |
| <b>Comprehensive Landscape (CLWUE)</b>     |                        |                     |         |
| Revenues                                   | 78,336.44              | 366,840.00          | 21.35%  |
| Expenses                                   | <u>105,006.80</u>      | <u>366,840.00</u>   | 28.62%  |
| Excess of Revenues over Expenditures       | (26,670.36)            | 0.00                |         |
| <b>Large Landscape Survey Program</b>      |                        |                     |         |
| Revenues                                   | 1,726.15               | 64,000.00           | 2.70%   |
| Expenses                                   | <u>9,149.24</u>        | <u>64,000.00</u>    | 14.30%  |
| Excess of Revenues over Expenditures       | (7,423.09)             | 0.00                |         |
| <b>WSIP - Industrial Program</b>           |                        |                     |         |
| Revenues                                   | 0.00                   | 36,755.00           | 0.00%   |
| Expenses                                   | <u>15,000.00</u>       | <u>36,755.00</u>    | 40.81%  |
| Excess of Revenues over Expenditures       | (15,000.00)            | 0.00                |         |
| <b>WUE Projects</b>                        |                        |                     |         |
| Revenues                                   | 1,301,788.15           | 2,972,135.00        | 43.80%  |
| Expenses                                   | <u>1,955,673.73</u>    | <u>2,972,135.00</u> | 65.80%  |
| Excess of Revenues over Expenditures       | (653,885.58)           | 0.00                |         |
| <b>WEROC</b>                               |                        |                     |         |
| Revenues                                   | 360,403.01             | 489,160.00          | 73.68%  |
| Expenses                                   | <u>266,386.90</u>      | <u>489,160.00</u>   | 54.46%  |
| Excess of Revenues over Expenditures       | 94,016.11              | 0.00                |         |





## Memorandum

**DATE:** May 6, 2019

**TO:** Administrative & Finance Committee  
(Directors Thomas, Finnegan)

**FROM:** Robert Hunter

**SUBJECT:** Quarter ending March 2019 Fiscal YTD Financials Actual versus Budget

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The following reports are attached:

- Revenues and Expenditures Actual versus Budget for the General Fund
- Revenues and Expenditures Actual versus Budget Detailed Comparative Report for the General Fund
- Revenues and Expenditures Actual versus Budget for Water Funds
- Revenues and Expenditures Actual versus Budget for Other Funds
- Revenues and Expenditures Actual versus Budget for the Water Use Efficiency Projects

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget Summary Report  
Fiscal Year to Date ending March 2019 (Unaudited)  
( \$000 Omitted )  
General Fund and Reserve Fund

GENERAL FUND

|   | <u>YTD Actual</u> | <u>Annual Budget</u> | <u>% Used</u> |
|---|-------------------|----------------------|---------------|
| <u>REVENUES</u>   |                   |                      |               |
| Water Rate revenues:  |                   |                      |               |
| Retail Connection Charge  | 7,697             | 7,697                | 100.00%       |
| Ground Water Customer Charge  | 499               | 499                  | 100.00%       |
| Subtotal  | 8,196             | 8,196                | 100.00%       |
| Other Revenues:   |                   |                      |               |
| Interest income   | 405               | 390                  | 103.73%       |
| Choice Programs   | 1,085             | 1,175                | 92.40%        |
| School Contracts <sup>(1)</sup>                                     | 64                | 102                  | 62.88%        |
| Other income <sup>(2)</sup>   | 22                | 3                    | 741.47%       |
| Transfer in from Reserve <sup>(3)</sup>                             | 0                 | 5                    | 0.00%         |
| Subtotal  | 1,576             | 1,675                | 94.11%        |
| TOTAL REVENUES  | 9,772             | 9,871                | 99.00%        |
| <u>EXPENSES</u>   |                   |                      |               |
| Personnel Expenses (incl. Dir.)                                     | 3,963             | 5,434                | 72.93%        |
| Professional services <sup>(4)</sup>                                | 778               | 1,460                | 53.27%        |
| Outside engineering   | 254               | 330                  | 76.93%        |
| Legal expense <sup>(5)</sup>  | 150               | 255                  | 58.75%        |
| Travel & Conference <sup>(6)</sup>                                  | 99                | 219                  | 45.21%        |
| Dues and memberships <sup>(7)</sup>                                 | 175               | 189                  | 92.49%        |
| General & Admin expense   | 773               | 1,197                | 64.54%        |
| Building repair & expense <sup>(8)</sup>                            | 104               | 532                  | 19.49%        |
| Capital acquisition (not including building repairs) <sup>(9)</sup> | 23                | 256                  | 8.82%         |
| TOTAL EXPENSES  | 6,317             | 9,871                | 63.99%        |
| EXCESS OF REVENUES OVER EXPENSES                                    | 3,456             |                      |               |

RESERVE FUND

|  |       |
|--|-------|
| Beginning Balance                            | 5,520 |
| Nov 2018 - excess from FY 17-18 General Fund | 612   |
| TOTAL RESERVE FUND                           | 6,132 |

- (1) School Contracts begin in September  
(2) Insurance refund received  
(3) Transfer in from Reserves is moved at year-end  
(4) Professional Services - Projects in process  
(5) Legal expense includes unanticipated events  
(6) Travel & Conference scheduled throughout the fiscal year  
(7) Dues and memberships are generally paid early in the fiscal year  
(8) Building repair & expense scheduled throughout the fiscal year  
(9) Capital acquisition delayed due to new electrical and installation

Municipal Water District of Orange County  
Revenues and Expenditures Actual vs Budget Line Item Report  
Fiscal Year to Date ending March 2019 (Unaudited)  
General Fund

|                              | YTD ACTUAL | ANNUAL BUDGET | % Used  |
|------------------------------|------------|---------------|---------|
| REVENUES                     |            |               |         |
| Retail Connection Charge     | 7,697,006  | 7,697,006     | 100.00% |
| Ground Water Customer Charge | 499,012    | 499,012       | 100.00% |
| Water Rate Revenues          | 8,196,018  | 8,196,018     | 100.00% |
| Choice Programs              | 1,085,459  | 1,174,750     | 92.40%  |
| Interest Revenue             | 404,555    | 390,000       | 103.73% |
| Miscellaneous Income         | 22,244     | 3,000         | 741.47% |
| School Contracts             | 64,161     | 102,031       | 62.88%  |
| Transfer in from Reserve     | 0          | 5,276         | 0.00%   |
| Other Revenues               | 1,576,420  | 1,675,057     | 94.11%  |
| TOTAL REVENUES               | 9,772,437  | 9,871,075     | 99.00%  |

|   |           |           |         |
|---|-----------|-----------|---------|
| OPERATING EXPENSES                      |           |           |         |
| Salaries & Wages                        | 2,603,263 | 3,522,982 | 73.89%  |
| less Recovery's                         | (11,478)  | (6,300)   | 182.19% |
| Directors' Compensation                 | 144,694   | 255,360   | 56.66%  |
| MWD Representation                      | 96,477    | 145,920   | 66.12%  |
| Employee Benefits                       | 798,242   | 1,108,564 | 72.01%  |
| less Recovery's                         | (2,331)   | 0         | 0.00%   |
| CALPERS Unfunded Liability Contribution | 207,000   | 207,000   | 100.00% |
| Directors Benefits                      | 68,391    | 94,767    | 72.17%  |
| Health Insurances for Retirees          | 47,940    | 70,519    | 67.98%  |
| Training Expense                        | 7,664     | 25,000    | 30.66%  |
| Tuition Reimbursement                   | 2,856     | 5,000     | 57.13%  |
| Temporary Help Expense                  | 0         | 5,000     | 0.00%   |
| Personnel Expenses                      | 3,962,719 | 5,433,812 | 72.93%  |
| Engineering Expense                     | 253,875   | 330,000   | 76.93%  |
| Legal Expense                           | 149,810   | 255,000   | 58.75%  |
| Audit Expense                           | 19,380    | 29,000    | 66.83%  |
| Professional Services                   | 758,280   | 1,430,758 | 53.00%  |
| Professional Fees                       | 1,181,344 | 2,044,758 | 57.77%  |
| Conference-Staff                        | 21,656    | 42,880    | 50.50%  |
| Conference-Directors                    | 13,016    | 24,930    | 52.21%  |
| Travel & Accom.-Staff                   | 42,086    | 99,600    | 42.25%  |
| Travel & Accom.-Directors               | 22,318    | 51,750    | 43.13%  |
| Travel & Conference                     | 99,076    | 219,160   | 45.21%  |
| Membership/Sponsorship                  | 139,256   | 141,662   | 98.30%  |
| CDR Support                             | 35,283    | 47,044    | 75.00%  |
| Dues & Memberships                      | 174,539   | 188,706   | 92.49%  |

Municipal Water District of Orange County  
Revenues and Expenditures Actual vs Budget Line Item Report  
Fiscal Year to Date ending March 2019 (Unaudited)  
General Fund

|                                  | YTD ACTUAL | ANNUAL BUDGET | % Used |
|----------------------------------|------------|---------------|--------|
| Business Expense                 | 2,056      | 5,600         | 36.72% |
| Maintenance Office               | 73,205     | 132,796       | 55.13% |
| Building Repair & Maintenance    | 9,519      | 20,000        | 47.59% |
| Storage Rental & Equipment Lease | 2,885      | 3,460         | 83.39% |
| Office Supplies                  | 20,073     | 36,000        | 55.76% |
| Postage/Mail Delivery            | 7,755      | 9,000         | 86.17% |
| Subscriptions & Books            | 376        | 1,500         | 25.04% |
| Reproduction Expense             | 9,820      | 33,073        | 29.69% |
| Maintenance-Computers            | 3,130      | 8,000         | 39.13% |
| Software Purchase                | 30,947     | 45,861        | 67.48% |
| Software Support                 | 30,883     | 51,934        | 59.47% |
| Computers and Equipment          | 9,391      | 11,850        | 79.25% |
| Automotive Expense               | 15,355     | 17,262        | 88.95% |
| Toll Road Charges                | 743        | 1,000         | 74.28% |
| Insurance Expense                | 81,640     | 138,500       | 58.95% |
| Utilities - Telephone            | 16,970     | 20,178        | 84.10% |
| Bank Fees                        | 4,080      | 21,225        | 19.22% |
| Miscellaneous Expense            | 63,390     | 119,205       | 53.18% |
| MWDOC's Contribution to WEROC    | 169,023    | 216,868       | 77.94% |
| Depreciation Expense             | 25,401     | 0             | 0.00%  |
| Election Expense                 | 196,136    | 304,000       | 64.52% |
| MWDOC Building Expense           | 103,669    | 531,827       | 19.49% |
| Capital Acquisition              | 22,532     | 255,500       | 8.82%  |
| Other Expenses                   | 898,981    | 1,984,639     | 45.30% |
| TOTAL EXPENSES                   | 6,316,659  | 9,871,075     | 63.99% |
| EXCESS OF REVENUES OVER EXPENSES | 3,455,779  | 0             |        |

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Statement of Revenues and Expenditures  
Fiscal Year to Date ending March 2019 (Unaudited)  
Water Funds

|   | <u>YTD Actual</u>  | <u>Annual Budget</u> | <u>Balance</u>      |
|---|--------------------|----------------------|---------------------|
| <b><u>Water Revenues</u></b>            |                    |                      |                     |
| Water Sales                             | 118,790,659        | 188,976,940          | (70,186,281)        |
| Readiness to Serve Charge               | 7,937,384          | 10,902,178           | (2,964,794)         |
| Capacity Charge CCF                     | 2,827,475          | 3,854,976            | (1,027,501)         |
| SCP/SAC Pipeline Surcharge              | 249,216            | 365,000              | (115,784)           |
| Interest                                | <u>16,191</u>      | <u>13,000</u>        | <u>3,191</u>        |
| Total Water Revenues                    | <u>129,820,925</u> | <u>204,112,094</u>   | <u>(74,291,169)</u> |
| <br><b><u>Water Purchases</u></b>       |                    |                      |                     |
| Water Sales                             | 118,790,659        | 188,976,940          | (70,186,281)        |
| Ready to Serve Charge                   | 7,937,384          | 10,902,178           | (2,964,794)         |
| Capacity Charge                         | 2,827,475          | 3,854,976            | (1,027,501)         |
| SCP/SAC Pipeline Surcharge              | <u>249,216</u>     | <u>365,000</u>       | <u>(115,784)</u>    |
| Total Water Purchases                   | <u>129,804,734</u> | <u>204,099,094</u>   | <u>(74,294,360)</u> |
| EXCESS OF REVENUES OVER<br>EXPENDITURES | <u>16,191</u>      | <u>13,000</u>        | <u>3,191</u>        |

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Fiscal Year to Date ending March 2019 (Unaudited)  
Other Funds

|                                      | <u>YTD Actual</u> | <u>Annual Budget</u> | <u>Balance</u> |
|--------------------------------------|-------------------|----------------------|----------------|
| <b><u>WEROC</u></b>                  |                   |                      |                |
| Revenues                             | 360,403           | 489,160              | (128,757)      |
| Expenditures                         | 266,387           | 489,160              | (222,773)      |
| Excess of Revenues over Expenditures | 94,016            | 0                    | 94,016         |

**WUE Projects (details on next page)**

|                                      |           |           |             |
|--------------------------------------|-----------|-----------|-------------|
| Revenues                             | 1,301,788 | 2,972,135 | (1,670,347) |
| Expenditures                         | 1,955,674 | 2,972,135 | (1,016,461) |
| Excess of Revenues over Expenditures | (653,886) | 0         | (653,886)   |

Footnote:

- 1) The excess of expense over revenue is waiting for reimbursement.
- 2) USBR (Federal) Grant is billed in October and April with funds being received one month later.
- 3) DWR is billed quarterly to county and takes a few months to a year to receive funds.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Fiscal Year to Date ending March 2019 (Unaudited)  
Water Use Efficiency Projects

|  | <u>Actual</u> | <u>Variance %</u> | <u>Fiscal Year<br/>Budget</u> | <u>% of<br/>Budget</u> | <u>Projected Final<br/>FY Budget</u> |
|--|---------------|-------------------|-------------------------------|------------------------|--------------------------------------|
| <b><u>Spray to Drip Conversion</u></b> |               |                   |                               |                        |                                      |
| Revenues                               | 17,565        |                   | 128,540                       | 13.66%                 | 128,540                              |
| Expenditures                           | 20,704        |                   | 128,540                       | 16.11%                 | 128,540                              |
| Excess of Revenues over Expenditures   | (3,140)       | -18%              |                               |                        |                                      |

Actual Variance: Payment to Program Participants ahead of Grant, Metropolitan (on water bill), and Retail Water Agencies reimbursements.

Budget Variance: To be on target the % of Budget should be closer to 75%. All reporting current. Have requested marketing to increase to build participation. Year end likely outcome will be less than \$128,540.

**Member Agency Administered Pass thru**

|                                      |         |    |         |         |         |
|--------------------------------------|---------|----|---------|---------|---------|
| Revenues                             | 408,570 |    | 100,000 | 408.57% | 100,000 |
| Expenditures                         | 408,570 |    | 100,000 | 408.57% | 100,000 |
| Excess of Revenues over Expenditures | 0       | 0% |         |         |         |

Actual Variance: Reporting to collect Revenues on pace with Expenditures.

Budget Variance: Met our expected outcome.

**ULFT Rebate Program**

|                                      |        |    |        |        |        |
|--------------------------------------|--------|----|--------|--------|--------|
| Revenues                             | 13,138 |    | 43,500 | 30.20% | 43,500 |
| Expenditures                         | 13,138 |    | 43,500 | 30.20% | 43,500 |
| Excess of Revenues over Expenditures | 0      | 0% |        |        |        |

Actual Variance: This tracks MWD OC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: Actual Budget is less than originally expected. This should continue to grow by years end.

**HECW Rebate Program**

|                                      |         |    |         |        |         |
|--------------------------------------|---------|----|---------|--------|---------|
| Revenues                             | 182,198 |    | 425,000 | 42.87% | 425,000 |
| Expenditures                         | 182,421 |    | 425,000 | 42.92% | 425,000 |
| Excess of Revenues over Expenditures | (223)   | 0% |         |        |         |

Actual Variance: This tracks MWD OC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: On target. This may grow further over the remaining 3 months.

**CII Rebate Program**

|                                      |         |    |         |        |         |
|--------------------------------------|---------|----|---------|--------|---------|
| Revenues                             | 110,847 |    | 462,500 | 23.97% | 462,500 |
| Expenditures                         | 110,730 |    | 462,500 | 23.94% | 462,500 |
| Excess of Revenues over Expenditures | 117     | 0% |         |        |         |

Actual Variance: This tracks MWD OC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: On target. This may grow further over the remaining 3 months.

Notes:

[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.

[2] Fiscal year budget versus Actual

[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Revenues and Expenditures Actual versus Budget  
Fiscal Year to Date ending March 2019 (Unaudited)  
Water Use Efficiency Projects

|                                      | <u>Actual</u> | <u>Variance %</u> | <u>Fiscal Year<br/>Budget</u> | <u>% of<br/>Budget</u> | <u>Projected Final<br/>FY Budget</u> |
|--------------------------------------|---------------|-------------------|-------------------------------|------------------------|--------------------------------------|
| <b><u>Turf Removal Program</u></b>   |               |                   |                               |                        |                                      |
| Revenues                             | 489,408       |                   | 1,345,000                     | 36.39%                 | 1,345,000                            |
| Expenditures                         | 1,090,954     |                   | 1,345,000                     | 81.11%                 | 1,345,000                            |
| Excess of Revenues over Expenditures | (601,546)     | -123%             |                               |                        |                                      |

Actual Variance: Payment to Program Participants ahead of Grant, Metropolitan (on water bill), and Retail Water Agencies reimbursements.

Budget Variance: To be on target the % of Budget should be closer to 75% for the first 9 months of the year. All reporting current. Close to 75%.

|   |          |      |         |        |         |
|---|----------|------|---------|--------|---------|
| <b><u>Comprehensive Landscape (CLWUE)</u></b> |          |      |         |        |         |
| Revenues                                      | 78,336   |      | 366,840 | 21.35% | 366,840 |
| Expenditures                                  | 105,007  |      | 366,840 | 28.62% | 366,840 |
| Excess of Revenues over Expenditures          | (26,670) | -34% |         |        |         |

Actual Variance: Grant funded program. Revenues will catch up as Granting Agencies pay submitted invoices. All reporting is current.

Budget Variance: Budget percent for revenues will catch up at year-end closing. For expenditures, this will increase as we move through the fiscal year.

|  |         |       |        |        |        |
|--|---------|-------|--------|--------|--------|
| <b><u>Large Landscape Survey Program</u></b> |         |       |        |        |        |
| Revenues                                     | 1,726   |       | 64,000 | 2.70%  | 64,000 |
| Expenditures                                 | 9,149   |       | 64,000 | 14.30% | 64,000 |
| Excess of Revenues over Expenditures         | (7,423) | -430% |        |        |        |

Actual Variance: MWD OC currently has all Revenues in house (holding) sufficient to cover Expenditures. Revenue won't match expenses until year end closing is posted.

Budget Variance: Budget percent for revenues will catch up at year-end closing. For expenditures, this will increase as we move through the fiscal year. Activity not likely to hit \$64,000.

|   |          |    |        |        |        |
|---|----------|----|--------|--------|--------|
| <b><u>WSIP - Industrial Program</u></b> |          |    |        |        |        |
| Revenues                                | 0        |    | 36,755 | 0.00%  | 36,755 |
| Expenditures                            | 15,000   |    | 36,755 | 40.81% | 36,755 |
| Excess of Revenues over Expenditures    | (15,000) | 0% |        |        |        |

Actual Variance: Expenditures are covered through Grant funding, grant reporting due at the end of May.

Budget Variance: Several projects in the queue to finish this year.

Notes:

[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.

[2] Fiscal year budget versus Actual

[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.





**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Administration & Finance Committee**  
(Directors Thomas, Finnegan, Vacant)

Robert J. Hunter, General Manager  
Staff: Hilary Chumpitazi, Finance Manager

**SUBJECT: ANNUAL REVIEW AND UPDATES TO THE INVESTMENT POLICY AND GUIDELINES**

**STAFF RECOMMENDATION**

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It is recommended that the Board of Directors: Adopt a Resolution establishing the District's Investment Policy and Guidelines, and authorize staff to update the Administrative Code accordingly.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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Annual review of Investment Policy and Guidelines

**DETAILED REPORT**

---

MWD OC's Administrative Code requires an annual review of the District's Investment Policy and Guidelines. The 2019 Local Agency Investment Guidelines had three statutory changes that do not affect our investment policy. The County of Orange made a few changes to their maximum investment percentage (compared to total portfolio) and a reduction in maturity terms for the following types of investments: Municipal Debt, Medium-Term Notes and Negotiable Certificates of Deposits. They also increased the amount allowed in the State of California Local Agency Investment Fund and decreased the maximum maturity on Repurchase Agreements. Staff has decided to not change this part of our policy as it is still in line with the States limits. However, after reviewing the Investment Policy we have made a few verbiage changes and have updated the Glossary section as attached.

|   |                  |            |             |
|---|------------------|------------|-------------|
| <b>Budgeted (Y/N):</b>                        | Budgeted amount: | Core ____  | Choice ____ |
| <b>Action item amount:</b>                    |                  | Line item: |             |
| <b>Fiscal Impact (explain if unbudgeted):</b> |                  |            |             |

RESOLUTION NO. ~~2059~~  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
INVESTMENT POLICY AND GUIDELINES

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**RESOLUTION NO. ~~2059~~**  
**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**INVESTMENT POLICY AND GUIDELINES**  
**~~2019~~**

BE IT RESOLVED by the Board of Director of the Municipal Water District of Orange County that the following is the policy and guidelines of the District for investment of funds and rescinds prior Resolution No. 205~~9~~, dated ~~June 24~~August 16, 2017.

**SECTION 2100 - PURPOSE**

The purpose of this policy is to set forth the investment and operational policies for the management of the public funds of Municipal Water District of Orange County. These policies have been adopted by, and can be changed only by a majority vote of the Board of Directors.

These policies are designed to ensure the prudent management of public funds, the safety of principal, the availability of operating funds when needed, and an investment return competitive with those of comparable funds and financial market indexes.

A copy of this policy will be provided to all investment ~~dealers-brokers~~ and investment managers doing business with the Municipal Water District of Orange County. Receipt of this policy, including confirmation that it has been reviewed by persons dealing directly with the Municipal Water District of Orange County's account will be received prior to any organization providing investment services to the Municipal Water District of Orange County.

**SECTION 2101 - STATUTORY AND DELEGATED AUTHORITY**

Authority to manage the investment of surplus funds is derived from California Government Code Sections 53601, et seq. In accordance with Section 53607 of the Government Code of the State of California, the authority of the Board of Directors to invest public funds may be delegated to the Treasurer for a one-year period, which may be renewed annually.

The Municipal Water District of Orange County (MWDOC) Board of Directors has expressly delegated the investment authority of the Board of Directors to the Treasurer pursuant to Resolution No. 1166. By Resolution No. 1277, the Board of Directors created the office of Deputy Treasurer and delegated to the Deputy Treasurer the authority to direct investment of MWDOC funds under the circumstances set forth in said Resolution, and to make a monthly report of those transactions to the Board. The Board of Directors created the office of Alternate Deputy Treasurer by Resolution No. 1434 and specified circumstances under which the Alternate Deputy Treasurer would have authority to direct the investment of MWDOC funds.

No person may engage in an investment transaction on behalf of MWDOC unless he or she has been duly appointed by the Board of Directors to the office of Treasurer, Deputy Treasurer, or Alternate Deputy Treasurer, and subject to the limitations and conditions set forth in the Resolutions establishing those offices and the terms of this policy. Notwithstanding the foregoing, upon the occurrence of a vacancy in the office of Treasurer, the Board of Directors may appoint an Acting Treasurer, who shall have and exercise the authority delegated to the Treasurer until appointment of a successor Treasurer by the Board of Directors.

The delegations in Resolution Nos. 1277 and 1434 are renewed on the adoption of this Policy. The Treasurer shall be responsible for all transactions undertaken and shall establish procedures and a system of internal controls to regulate the activities of subordinate officials.

#### **SECTION 2101.5 – COMPLIANCE EXCEPTIONS REPORTING**

Any compliance exceptions with the Investment Policy and Guidelines (IPG) will be reported within 72 hours to the General Manager, Board President, and the Chair of the Administration & Finance Committee. At the time of reporting, a recommended resolution to the matter shall be included. Notification shall also be included in the monthly Treasurer's Report to the Board of Directors with the resolution noted.

#### **SECTION 2102 - ORGANIZATION**

The organizational structure of the investment functions of MWDOC shall consist of the Board of Directors, the Administration & Finance Committee, the Treasurer and Deputy Treasurers. The responsibilities of these groups are as follows:

Board of Directors - the elected body responsible for the administration and investment of the assets of MWDOC. The Board may acquire, hold, manage, purchase, sell, assign, trade, transfer and/or dispose of any security, evidence of debt, or other investment in which MWDOC's assets may be invested by law. To assist them in discharging their responsibilities, the Board shall appoint a Treasurer, Deputy Treasurers and custodians of assets.

Administration & Finance Committee - appointed by the Board to review transactions, performance and asset mix, monitor, recommend policy, and propose adjustments for Board approval.

Treasurer - responsible for the administration and the investment of the funds, subject to the policies and restrictions set by the Board. The Treasurer as investment officer of MWDOC is granted full authority and responsibility by the Board in the purchase, sale, assignment, exchange and transfer of securities and for the safe custody of security holdings, subject to Board policies, rules, regulations and directives consistent with regulatory and statutory limitations. The Treasurer is responsible for interpreting, administering and advising on legal requirements, investment policies and strategies; collecting income, preparation of reports. Also responsible for Deputy Treasurer, and investment staff compliance with this Investment Policy and guidelines.

Deputy Treasurers - act in the absence of the Treasurer as specified within the Resolution of appointment to fulfill the duties and responsibilities as assigned by the Treasurer.

#### **SECTION 2103- INVESTMENT PHILOSOPHY**

Except where specifically directed by the State Constitution, statutes or regulations, the general investment policies of MWDOC will be guided by the prudent investor standard ("Standard") set forth in California Government Code Section 53600.3. Under this Standard, those with investment responsibility for public funds are trustees and, as trustees, shall act with care, skill, prudence and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of MWDOC, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a

like character and with like aims to safeguard the principal and maintain the liquidity needs of the agency.

This Standard shall be applied in the context of managing the overall investment portfolio. The investment officer, acting in accordance with written procedures and this investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

#### **SECTION 2104 - SCOPE**

It is intended that this Investment Policy cover all funds and investment activities of MWDOC. Any reference to the portfolio shall mean the collection of MWDOC securities held by the Treasurer. Those securities held in Trust or escrow by a third-party Trustee or escrow agent on behalf of MWDOC are invested under the Treasurer's direction in accordance with this Investment Policy and the terms of the specific escrow or trust agreements related to the funds.

MWDOC funds are divided into two categories, and the investment objectives and policies vary with the nature of the fund.

- Operating and Fiduciary Funds - These funds are to provide for the ordinary annual operating expenses of MWDOC (General Fund, Water Fund) and Funds to provide for trustee functions and expenditures (WFC, with the exception of the Debt Service Reserve) and other specified recurring and non-recurring purposes where MWDOC serves in a fiduciary role. These funds are considered "short-term" for investment purposes and will be invested to provide the safety and liquidity to meet all anticipated expenditures.
- Reserve funds – These funds are designated for contingencies or emergencies and may be used to supplement the other funds as necessary. These funds may be invested "longer-term" as defined in this Investment Policy.

#### **SECTION 2105- INVESTMENT OBJECTIVES**

When investing, reinvesting, purchasing, acquiring, exchanging, selling or managing MWDOC's funds, the primary objective is to safeguard the principal of the funds. The secondary objective is to meet the liquidity needs of MWDOC. The third objective is to achieve a maximum return on invested funds (California Government Code Section 53600.5.). It is the policy of MWDOC to invest funds in a manner to obtain the highest yield possible while meeting the daily cash flow demands of MWDOC as long as investments meet the criteria established by this investment policy for safety and liquidity and conform to all laws governing the investment of MWDOC's funds.

##### **Safety of Principal.**

Safety of principal is the foremost objective of MWDOC. Each investment transaction shall seek to first ensure that capital losses are avoided, whether they arise from securities defaults, institution default, broker-dealer default, or erosion of market value of securities. MWDOC shall mitigate the risk to the principal of invested funds by limiting credit and interest rate risks. Credit risk is the risk of loss due to the failure of a security's issuer or

backer. Interest rate risk is the risk that the market value of the MWDOC's portfolio will change due to an increase/decrease in general interest rates.

1) Credit risk will be mitigated by:

- (a) Limiting investments to only the most creditworthy types of permissible investments as described in Section 2106;
- (b) By pre-qualifying the financial institutions with which the Agency will do business; and
- (c) By diversifying the investment portfolio so that the potential failure of any one issue or issuer will not place an undue financial burden on the District.

2) Interest rate risk will be mitigated by:

- (a) Structuring the portfolio so that securities mature to meet the District's cash requirements for ongoing obligations, thereby reducing the possible need to sell securities on the open market at a loss prior to their maturity to meet those requirements; and
- (b) Investing primarily in shorter term securities.

#### **Liquidity**

Availability of sufficient cash to pay for current expenditures shall be maintained. An adequate percentage of the portfolio shall be maintained in liquid short-term securities which can be converted to cash as necessary to meet disbursement requirements. Since cash requirements cannot always be anticipated, sufficient investments in securities with active secondary or resale markets shall be utilized.

#### **Rates of Return**

Yield on investments shall be considered only after the basic requirements of safety and liquidity have been met. The investment portfolio shall be designed to attain a market average rate of return throughout budgetary and economic cycles, taking into account the MWDOC's risk constraints, the composition and cash flow characteristics of the portfolio, and applicable laws.

#### **SECTION 2106- INVESTMENT POLICY GUIDELINES**

MWDOC authorized investment types, amounts, maturities, and other characteristics are stated in the Government Code Section 53601 (as periodically amended), and with the following exceptions as noted below.

- ° Collective Investment Pools - Assets of any of the funds may be invested in collective investment pools run and managed by other public bodies and banks that are approved by the Board of Directors. However, no such investment shall be made in a pool where the investment objectives differ from the investment objectives listed in Section 2105 of this investment policy, nor should any investment be made in a fund that engages in market timing or anticipating interest rate changes or that uses derivatives or other securities other than as a hedge against interest rate risk. The investment shall not exceed 20% of portfolio in effect immediately after such investment and no more than 10% in one pool.

- Money Market Mutual Funds - Investment in shares of money market mutual funds may be made if the investments meet the same restrictions as those of collective investment pools. In addition, purchase of these funds must not result in payment of a purchase premium or commission. These mutual funds must attain the highest ranking of two nationally recognized ratings services and the investment adviser must be registered with the Securities and Exchange Commission (SEC) as an investment adviser with not less than five years' experience managing market mutual funds with investment portfolios of greater than \$500 million. An investment shall not exceed 20% of portfolio in effect immediately after such investment.
- Cash Holdings - The portfolio will hold sufficient cash equivalent investments to ensure availability of sufficient funds to meet known obligations for the next three months. Idle cash will be invested to the fullest extent practicable in interest-bearing investments.
- Other permissible investments for the Operating and Fiduciary funds are:
  - Bank checking accounts, time deposits or certificates of deposit not to exceed the current Federal Deposit Insurance Corporation (FDIC) limit without being collateralized.
  - Negotiable Certificates of Deposit shall not exceed 30% of portfolio in effect immediately after such investment and no more than 5% in one issuer.
  - U.S. Treasury obligations.
  - U.S. Government Agency obligations and, U.S. Government Instrumentality obligations. May not invest more than 50% of portfolio from one issuer.
  - Prime Commercial Paper rated A-1/P-1/F-1 by Moody's, Standard and Poor's or Fitch. May not exceed 25% of portfolio in effect immediately after such investment and may purchase no more than 5% of the outstanding commercial paper of any single issuer. The maximum maturity for Commercial Paper is 270 days.
  - Prime Banker's Acceptances rated A-1/P-1/F-1 by Moody's, Standard and Poor's or Fitch shall not exceed 40% of portfolio in effect immediately after such investment and no more than 5% may be of any one commercial bank. The maximum maturity is 180 days.
  - Corporate Securities (Medium-Term Notes) with a rating of "A" or better by at least two nationally recognized rating services. Shall not exceed 30% of portfolio in effect immediately after such investment with no more than 5% in one issuer.
  - Loans with an agreement for the collateral to be repurchased by the borrower (Repurchase Agreements); the amount of such instruments will not exceed 20% of the market value of the portfolio with no more than 10% from one issuer. Maximum maturity is 1 year. U.S. Treasury and Agency securities are acceptable collateral with a market value of at least 102% of the value of the Repurchase Agreement. Prior to investment, a Master Repurchase Agreement will be signed with the qualified counterparty.
- Permissible investments for Reserve Funds are:
  - All investments permitted for the Operating and Fiduciary funds, except maturities may not exceed five years without Board approval prior to investment.
- Prohibited Investments and Investment Practices - The following are prohibited:

- Purchases on margin or short sales.
  - "Derivative" securities of any type.
  - Lending securities with an agreement to buy them back after a stated period of time (Reverse Repurchase Agreements).
  - Futures, Options and Margin Trading
  - In no instance shall a swap be used in speculation. Losses are only acceptable if the proposed swap or trade can clearly enhance quality or yield (value) over the life of the new security on a Total Return basis.
  - Investments are limited to maturities of five years or less without express authorization of the Board prior to the investment.
- Diversification - The investment portfolio will be diversified to avoid undue concentration in securities of one type or securities of one financial institution, so that no single investment or class of investments can have a disproportionate impact on the total portfolio. This restriction does not apply to U.S. Treasury securities.
  - Exemptions - Any investment currently held that does not meet the guidelines of this policy shall be exempted from the requirements of this policy. At maturity or liquidation, such monies shall be reinvested only as provided by the current policy.

#### **SECTION 2107 - EXECUTION**

The responsibility for the execution of security transactions shall rest with such qualified members of the investment staff as designated by the Board. The selection of the broker-dealer for a specific transaction shall be based on price and yield quotations. Every effort shall be made to obtain appropriate discounts on individual orders.

Security orders shall be placed on the basis of accepted investment practices. All security transactions, including for repurchase agreements, entered into by MWDOC shall be on a Delivery-vs.-Payment (DVP) basis, i.e. payment will be made upon receipt of the securities to the safekeeping or trust account or custodial facility. All securities shall be held in MWDOC's name pursuant to an agreement and all financial institutions are instructed to mail confirmation and safekeeping receipts directly to MWDOC within three business days after the trade.

Receipts for the confirmation of trades of authorized securities will include information on trade date, par value, maturity, interest rate, price, yield, settlement date, description of securities purchased, agency's name, amount due, and third party custodial information.

#### **SECTION 2108 - PERSONAL CONDUCT**

The Board of Directors of Municipal Water District of Orange County is acutely aware of the responsibilities the staff has in administering the investment assets of MWDOC.

Members of the Board of Directors, the Treasurer, Deputy Treasurers and members of the investment staff may not have a direct or indirect interest in the gains or profits of any investment made by MWDOC and may not receive any pay or emolument (profit arising from office or employment usually in the form of compensation or perquisites) for services other than as designated by MWDOC for compensation and authorized expenses.



All persons responsible for investment decisions or who are involved in the management of MWDOC assets shall be governed in their personal investment activities by the codes of conduct established by the applicable state statutes, the Financial Industry Regulatory Authority (FINRA), the Securities and Exchange Commission, and the Code of Ethics and Standards of Professional Conduct of the Association for Investment Management and Research.

All persons responsible for investment decisions or who are involved in the management of MWDOC assets shall refrain from any personal business activity that could conflict with the proper execution and management of the MWDOC investment program, or that could impair their ability to make impartial investment decisions.

#### **SECTION 2109 - REPORTING**

The Treasurer shall prepare an investment report monthly, including a management summary that provides the status of the current investment portfolio and transactions made over the last month. The Report shall be submitted within forty-five (45) days following the month ended. The report should be provided to and reviewed by the General Manager, the Administration & Finance Committee and provided to the Board of Directors. The report will include the following:

- A listing of individual securities held at the end of the reporting period;
- Average weighted yield to maturity of portfolio on MWDOC investments;
- Listing of investments by maturity date;
- Market values of current investments;
- Percentage of the total portfolio which each type of investment represents.

This investment policy shall be reviewed by the Administration and Finance Committee annually and as frequently as necessary, to enable the Treasurer to respond to changing economic and market conditions.

#### **SECTION 2110 - GLOSSARY**

**AGENCIES:** Federal agency securities and/or Government-sponsored enterprises.

**ASKED:** The price at which securities are offered.

**BANKERS' ACCEPTANCE (BA):** A draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer.

**BENCHMARK:** A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

**BID:** The price offered by a buyer of securities. (When you are selling securities, you ask for a bid.) See Offer.

**BROKER:** A broker brings buyers and sellers together for a commission.

**BROKER-DEALER:** A person or firm acting as a principal in securities transaction as either a broker or a dealer depending on the transaction. Technically, a broker is only an agent who executes orders on behalf of clients, whereas a dealer acts as a principal and trades from the

firm's own account. Transaction confirmations must disclose this information. Because most brokerage firms act as both brokers and principals, the term broker-dealer is commonly used to describe them.

**CASH EQUIVALENTS (CE):** Highly liquid and safe instruments or investments that can be converted into cash immediately. Examples include bank accounts, money market funds, and Treasury bills.

**CERTIFICATE OF DEPOSIT (CD):** A time deposit with a specific maturity that usually pays interest. Also referred to as Negotiable CD's, they are insured by FDIC up to \$250,000, but they are not collateralized beyond that amount, evidenced by a Certificate. Large denomination CD's are typically negotiable.

**COLLATERAL:** Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

**COMMERCIAL PAPER:** Short-term unsecured promissory note issued by corporations or municipalities with maturities ranging from 2 to 270 days.

**COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR):** It includes five combined statements for each individual fund and account group prepared in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

**COUPON:** (a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value. (b) A certificate attached to a bond evidencing interest due on a payment date.

**DEALER:** A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

**DEBENTURE:** A bond secured only by the general credit of the issuer.

**DELIVERY VERSUS PAYMENT:** There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

**DERIVATIVES:** (1) Financial instruments whose return profile is linked to, or derived from, the movement of one or more underlying index or security, and may include a leveraging factor, or (2) financial contracts based upon notional amounts whose value is derived from an underlying index or security (interest rates, foreign exchange rates, equities or commodities).

**DISCOUNT:** The difference between the cost price of a security and its maturity when quoted at lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount.

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**DISCOUNT SECURITIES:** Non-interest bearing money market instruments that are issued at a discount and redeemed at maturity for full face value (*e.g., U.S. Treasury Bills.*)

**DIVERSIFICATION:** Dividing investment funds among a variety of securities offering independent returns.

**DURATION:** A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

**FEDERAL CREDIT AGENCIES:** Agencies of the Federal government set up to supply credit to various classes of institutions and individuals, *e.g.,* S&L's, small business firms, students, farmers, farm cooperatives, and exporters.

**FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC):** A federal agency that insures bank deposits, currently up to \$250,000 per entity.

**FEDERAL FUNDS RATE:** The rate of interest at which Fed funds are traded. This rate is currently pegged by the Federal Reserve through open-market operations.

**FEDERAL HOME LOAN BANKS (FHLB):** Government sponsored wholesale banks (currently 12 regional banks), which lend funds and provide correspondent banking services to member commercial banks, thrift institutions, credit unions and insurance companies. The mission of the FHLBs is to liquefy the housing related assets of its members who must purchase stock in their district Bank.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION (FNMA):** FNMA, like GNMA was chartered under the Federal National Mortgage Association Act in 1938. FNMA is a federal corporation working under the auspices of the Department of Housing and Urban Development (HUD). ~~It is the largest single provider of residential mortgage funds in the United States.~~ Fannie Mae, as the corporation is called, is a private stockholder-owned corporation. The corporation's purchases include a variety of adjustable mortgages and second loans, in addition to fixed-rate mortgages. FNMA's securities are also highly liquid and are widely accepted. FNMA assumes and guarantees that all security holders will receive timely payment of principal and interest.

**FEDERAL OPEN MARKET COMMITTEE (FOMC):** Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other Presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

**FEDERAL RESERVE SYSTEM:** The central bank of the United States created by Congress and consisting of a seven member Board of Governors in Washington, D.C., 12 regional banks and about 5,7003,543 commercial banks that are members of the system.

**FITCH, INC.:** (See Nationally Recognized Statistical Rating Organization)

**GOVERNMENT NATIONAL MORTGAGE ASSOCIATION (GNMA or Ginnie Mae):** Securities Residential mortgage-backed security (MBS) instruments influencing the volume of bank credit guaranteed by GNMA and issued by ~~mortgage bankers, commercial banks, savings and loan~~

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associations, and other institutions geographically diverse mortgage companies, commercial banks, and thrifts of all sizes, as well as state housing finance agencies. Security holder is protected by full faith and credit of the U.S. Government. Ginnie Mae securities are backed by the FHA, VA or FHA mortgages. The term “pass-throughs” is often used to describe Ginnie Maes.

**LIQUIDITY:** A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

**LOCAL GOVERNMENT INVESTMENT POOL (LGIP):** The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

**MARKET VALUE:** The price at which a security is trading and could presumably be purchased or sold.

**MASTER REPURCHASE AGREEMENT:** A written contract covering all future transactions between the parties to repurchase—reverse repurchase agreements that establishes each party’s rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

**MATURITY:** The date upon which the principal or stated value of an investment becomes due and payable.

**MEDIUM TERM NOTES:** Debt securities issued by a corporation or depository institution with a maturity of five years or less. This can also include debt securities originally issued for maturities longer than five years, but which have now fallen within the five year maturity range. If issued by a bank they are also referred to as “bank notes”.

**MOODY’S INVESTORS SERVICES, INC.:** (See Nationally Recognized Statistical Rating Organization)

**MONEY MARKET:** The market in which short-term debt instruments (bills, commercial paper, bankers’ acceptances, etc.) are issued and traded.

**NATIONALLY RECOGNIZED STATISTICAL RATING ORGANIZATION:** Firms that review the creditworthiness of the issuers of debt securities and express their opinion in the form of letter ratings (e.g. AAA, AA, A, BBB, etc.). The primary rating agencies are the following Standard & Poor’s Corporation, Moody’s Investor Services, Inc., and Fitch, Inc.

**OFFER:** The price asked by a seller of securities. (When you are buying securities, you ask for an offer.) See Asked and Bid.

**OPEN MARKET OPERATIONS:** Purchases and sales of government and certain other securities in the open market by the New York Federal Reserve Bank as directed by the FOMC in order to influence the volume of money and credit in the economy. Purchases inject reserves into the bank system and stimulate growth of money and credit; sales have the opposite effect. Open market operations are the Federal Reserve’s most important and most flexible monetary policy tool.

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**OPTIONS:** A contract that gives the buyer the right to buy or sell an obligation at a specified price for a specified time.

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**PORTFOLIO:** Collection of securities held by an investor.

**PRIMARY DEALER:** A group of government securities dealers who submit daily-weekly reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

**PRUDENT PERSON RULE:** An investment standard. In some states the law requires that a fiduciary, such as a trustee, may invest money only in a list of securities selected by the custody state—the so-called legal list. In other states the trustee may invest in a security if it is one which would be bought by a prudent person of discretion and intelligence who is seeking a reasonable income and preservation of capital.

**QUALIFIED PUBLIC DEPOSITORIES:** A financial institution which does not claim exemption from the payment of any sales or compensating use or ad valorem taxes under the laws of this state, which has segregated for the benefit of the commission eligible collateral having a value of not less than its maximum liability and which has been approved by the Public Deposit Protection Commission to hold public deposits.

**RATE OF RETURN:** The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

**REPURCHASE AGREEMENT (REPO):** A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security “buyer” in effect lends the “seller” money for the period of the agreement, and the terms of the agreement are structured to compensate him for this.

**REVERSE REPURCHASE AGREEMENT (REVERSE REPO):** A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specified date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to a repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

**SAFEKEEPING:** A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank’s vaults for protection.

**SECONDARY MARKET:** A market made for the purchase and sale of outstanding issues following the initial distribution.

**SECURITIES & EXCHANGE COMMISSION:** Agency created by Congress to protect investors in securities transactions by administering securities legislation.

**SEC RULE 15(C) 3-1:** See Uniform Net Capital Rule.

**STANDARD & POOR'S CORPORATION:** (See Nationally Recognized Statistical Rating Organization)

**STRUCTURED NOTES:** Notes issued by Government Sponsored Enterprises (FHLB, FNMA, SLMA, etc.) and Corporations, which have imbedded options (e.g., call features, step-up coupons, floating rate coupons, derivative-based returns) into their debt structure. Their market performance is impacted by the fluctuation of interest rates, the volatility of the imbedded options and shifts in the shape of the yield curve.

**TOTAL RETURN:** A measure of performance, Total Return is the actual rate of return of an investment or a pool of investments, over a given evaluation period. Total Return accounts for two categories of return: income and capital appreciation. Income includes interest paid by fixed-income investments, distributions or dividends. Capital appreciation represents the change in the market price of an asset.

**TREASURY BILLS:** A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months, or one year.

**TREASURY BONDS:** Long-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities of more than 10 years.

**TREASURY NOTES:** Medium-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities from two to 10 years.

**TREASURY SECURITIES:** Securities issued by the U.S. Treasury and backed by the full faith and credit of the United States. Treasuries are considered to have no credit risk and are the benchmark for interest rates on all other securities in the U.S. and overseas. The Treasury issues both discounted securities and fixed coupon notes and bonds.

**UNIFORM NET CAPITAL RULE:** Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among members of underwriting syndicates. Liquid capital includes cash and assets easily converted into cash.

**U.S. GOVERNMENT AGENCY SECURITIES:** Debt securities issued by U.S. Government sponsored enterprises and federally related institutions (FHLB, Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), FNMA).

**YIELD:** The rate of annual income return on an investment, expressed as a percentage. (a) INCOME YIELD is obtained by dividing the current dollar income by the current market price for the security. (b) NET YIELD or YIELD TO MATURITY is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

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BE IT FURTHER RESOLVED the investment policy shall be reviewed by the Administration and Finance Committee annually, and as frequently as necessary, to enable the Treasurer to respond to changing market conditions;

Said Resolution was adopted, upon roll call, by the following vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

I certify the foregoing is a true, full and correct copy of Resolution No. \_\_\_\_\_ adopted by the Board of Director of Municipal Water District of Orange County at its Regular meeting held on May 15, 2019.

\_\_\_\_\_  
Maribeth Goldsby, District Secretary  
Municipal Water District of Orange County



**ACTION ITEM**

May 15, 2019

**TO:** Administration & Finance Committee  
(Directors Thomas, Finnegan, Vacant)

**FROM:** Robert J. Hunter, General Manager

**Staff Contact:** Cathy Harris

**SUBJECT:** AMENDMENT TO ADMINISTRATIVE CODE  
INCOMPATABILITY OF OFFICE

**STAFF RECOMMENDATION**

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It is recommended that Board of Directors consider and approve adding Section 1406 (Incompatible Offices) to the Administrative Code (Option#1).

**COMMITTEE RECOMMENDATION**

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MWDOC has a decade-long history of taking a transparent, public position on the incompatibility of office issue. During the negotiations that produced the 2011 Settlement Agreement, MWDOC presented the legal opinion that the requirements of incompatibility of office applied to MWDOC Member Agency, Boards, City Councils, Mayors, City Managers and General Managers for Metropolitan Water District Director appointments. This position was reiterated by letter (April 21, 2014) for the Met Director position selection process that concluded in October 2014. Section 150(B)(5) was added to the MWDOC Administrative Code on June 17, 2015 to codify the position and requirements for Met Director appointments.

The MWDOC Administration and Finance (A&F) Committee has held public discussions concerning the addition of incompatibility of office language to the Administrative Code pertaining to the elected position of MWDOC Director and similar to the appoint Met Director language. This code change is not required under election law or by the Orange County Registrar of Voters but is intended to promote public transparency and clarity. Incompatibility of Office has been the most often asked question regarding the current MWDOC Director appointment process. A code section that clearly states the legal requirements would help clarify the issue.

The A&F Committee requested staff confer with Legal Counsel to determine whether the incompatible office provision could or should extend to agencies outside of MWDOC's service area (e.g., other MET member agencies). Legal Counsel conducted additional

|   |                  |           |             |
|---|------------------|-----------|-------------|
| <b>Budgeted (Y/N):</b>                        | Budgeted amount: | Core ____ | Choice ____ |
| <b>Action item amount:</b>                    | Line item:       |           |             |
| <b>Fiscal Impact (explain if unbudgeted):</b> |                  |           |             |



analysis and is recommending the below revised language. The item was on the March 20, 2019 Board meeting agenda and at that time the Board agreed to discuss it further in Committee. The April A&F Committee referred the addition of Section 1406 (Incompatible Offices) to the May 8, 2019 A&F Committee meeting for further discussion.

## SUMMARY

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Following discussion with the Executive Committee, it was recommended that a Section be added to the Administrative Code related to Incompatible Offices. The purpose of adding this section is to make it clear that the office of MWDOC Director is incompatible with “public offices” of Member Agencies. Administrative Code Section 1500(B)(5) already states that the office of MWDOC MET Director is incompatible with “public offices” of Member Agencies and the proposed addition is consistent with such. Adding Section 1406 will make the incompatibility of offices very clear to the public so there is no confusion and will require MWDOC to take action to enforce any violations. Upon conferring with legal counsel, it is recommended the following Section be added to the Code.

### Section 1406 INCOMPATIBILITY OF OFFICES

Government Code Section 1099 prohibits a public official, such as a Board Member or General Manager of a special district, or a City Council Member or City Manager of a City, from simultaneously holding two public offices that are incompatible. Offices are generally incompatible if there is a possibility of a significant clash of duties or loyalties between the offices. Examples of incompatible offices include, but are not limited to, being a MWDOC Director and also being a public official of a MWDOC Member Agency or also being a public official of a city that is served by a MWDOC Member Agency. Government Code Section 1099 further provides that if a public official holds two incompatible offices, the public official is deemed to automatically forfeit the first office upon taking the second. MWDOC shall take steps to enforce Government Code Section 1099 as necessary.

## BOARD OPTIONS

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### Option #1

- Approve the amendment of the MWDOC Administrative Code, as developed by Legal Counsel, and create new Section 1406 INCOMPATIBILITY OF OFFICE as stated above.

**Fiscal Impact:** None.

**Business Analysis:** The addition to the Administrative Code as specified will improve public transparency and clarity.

### Option #2

- Modify the language developed by Legal Counsel, approve an amendment to the MWDOC Administrative Code, and create new Section 1406 INCOMPATIBILITY OF OFFICE.

**Fiscal Impact:** None.

**Business Analysis:** The addition to the Administrative Code with modifications would be intended to improve public transparency and clarity. However, any modifications to the proposed language should be reviewed by Legal Counsel.

**Option #3**

- Do not approve an amendment to the MWDOC Administrative Code pertaining to Incompatibility of Office.

**Fiscal Impact:** None.

**Business Analysis:** This option will not improve public transparency or clarity.

**STAFF RECOMMENDATION**

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**Option #1**



**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM: ADMINISTRATIVE & FINANCE COMMITTEE**  
(Directors Thomas, Finnegan, Vacant)

Robert Hunter  
General Manager

Staff Contact: Damon Micalizzi

**SUBJECT: MEMBERSHIP IN THE INTERNATIONAL ASSOCIATION OF BUSINESS COMMUNICATORS (IABC)**

**STAFF RECOMMENDATION**

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It is recommended that the Board of Directors authorize membership in the International Association of Business Communicators (IABC) during this fiscal year 18/19.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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Public Affairs Assistant, Traci Muldoon has been a member of the International Association of Business Communicators (IABC) prior to joining the Municipal Water District of Orange County (MWDOC) Public Affairs Team last year. As such, membership in IABC was added to the MWDOC Budget for FY 19/20. This membership was briefly discussed and during budget discussion (in February) and ultimately approved during the adoption of the budget (in April). Consequently, Ms. Muldoon's membership was set to expire prior to the new Fiscal Year. Due to the fact that Ms. Muldoon serves on various Ad/Hoc IABC Committees, Staff is requesting authorization from the Board to pay \$334 to avoid a lapse in her membership during this Fiscal Year. Staff recommends paying for this out of the Public Affairs Budget miscellaneous expense.

|  |                      |        |           |
|--|----------------------|--------|-----------|
| <b>Budgeted (Y/N):</b> No  | Budgeted amount: n/a | Core X | Choice __ |
| <b>Action item amount:</b> \$334.00  | Line item:           |        |           |
| <b>Fiscal Impact (explain if unbudgeted):</b> This membership would paid for out of the Public Affairs Budget Cost Center 32 - 7040 Miscellaneous Expense. |                      |        |           |



**ACTION ITEM**

May 15, 2019

**TO: Administration & Finance Committee  
(Directors Thomas, Finnegan, Vacant)**

**FROM: Robert Hunter, General Manager**

**Staff Contact: Hilary Chumpitazi**

**SUBJECT: Membership and Participation in California Council for Environmental & Economic Balance (CCEEB) and Association of Metropolitan Water Agencies (AMWA)**

**STAFF RECOMMENDATION**

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Staff recommends the Administration & Finance Committee discuss membership in CCEEB and AMWA and recommend to the Board Option #1, the continuation of membership and active participation for FY 2019-20.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

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MWDOC has been a member of the Association of Municipal Water Agencies (AMWA) since 2015 and the California Council for Environmental & Economic Balance (CCEEB) since 2016. MWDOC participates in CCEEB primarily through the California Environmental Dialogue (CED). Each year, information has been provided to the MWDOC Board of Directors on the purpose, operation and benefits of these two organizations and (after active discussion) the Board of Directors has approved participation. However, membership and participation in both organizations was removed from the approved FY 2019-20 budget. Subsequent to the April Board meeting, Directors requested the question of membership and participation in both organizations be agendaized for action at the May 2019 Administration & Finance (A&F) committee meeting and Board of Directors meeting.

|   |                      |         |           |
|---|----------------------|---------|-----------|
| <b>Budgeted (Y/N): N</b>  | Budgeted amount: n/a | Core_X_ | Choice __ |
| <b>Action item amount: \$67,919</b>   | Line item:           |         |           |
| <b>Fiscal Impact (explain if unbudgeted):</b> Funding of membership and participation in both CCEEB and AMWA would result in projected reserves being \$2,431 below targets. This is well within the margin of error for the budgeting process. |                      |         |           |

Specifically, the Board of Directors took two actions relative to these items in the FY 2019-20 budget process:

- Removal of the membership, registration and travel expenses for the California Council for Environmental & Economic Balance (\$38,413)
- Removal of the membership, registration and travel expenses for the Association of Metropolitan Water Agencies (\$29,506)

The expenses for these two items total \$67,919 for FY 2019-20. The budget passed by the MWDOC Board of Directors on April 17, 2019 included projected reserve levels \$65,488 above target levels. The net effect of the Board authorizing participation in both organizations would result in projected reserves \$2,431 below target levels. This is well within the margin of error for the budgeting process.

### **California Council for Environmental & Economic Balance (CCEEB)**

CCEEB offers MWDOC the opportunity for dialogue and interaction with senior regulators on issues of importance to our Member Agencies. CCEEB is organized around projects and MWDOC participates in the California Environmental Dialogue (CED). As stated in the attached fact sheet, the “goal of CED is to provide a venue where business leaders, environmental interests, and state regulators can discuss topics of mutual concern outside of the traditional regulatory or legislative settings.” The fact sheet provides a partial list of CED members and an additional list is included of the CCEEB Board of Directors. Water agencies that are CCEEB members include Metropolitan Water District of Southern California, Inland Empire Utilities Agency, LA Department of Water & Power, State Water Resources Control Board, Cal/EPA, and MWDOC.

CCEEB is in pursuit of long-term policy changes, and it’s issued statements and issues papers are respected by regulators as a result of comprehensive vetting. Participation in the organization has provided various opportunities for MWDOC to have candid discussions with agencies and industry sectors regarding issues of both allied and opposing views.

MWDOC Directors have discussed CCEEB’s support of the California WaterFix. MWDOC worked with CCEEB on a process that included active dialogue on the WaterFix and resulted in CCEEB taking a formal position of support for the WaterFix. CCEEB’s support letter to Governor Brown (attached) was copied to the State Water Resources Control Board and the Department of Water Resources. Due to Metropolitan’s concerns over the length of the public comment sessions on the WaterFix, CCEEB was not asked to make a formal statement at Metropolitan. However, their support letter was cited in GM Hunter’s formal comments of October 10, 2017.

Board approval of CCEEB membership and participation would include the following activities and costs (budget exhibit referenced):

|  |          |
|--|----------|
| Exhibit D – District Participation Costs:                  | \$25,113 |
| Exhibit E – Staff Registration & Travel Budget: 2 staff    | \$ 2,200 |
| Registration: \$200    Travel: \$2,000                     |          |
| CA Environmental Dialogue Travel – 5 Trip:                 | \$ 5,000 |
| Exhibit F – Board Registration & Travel Budget: 1 Director | \$ 1,100 |

|  |                 |          |
|--|-----------------|----------|
| Registration: \$100                        | Travel: \$1,000 |          |
| CA Environmental Dialogue Travel – 5 Trip: |                 | \$ 5,000 |
| TOTAL                                      |                 | \$38,413 |

### **Association of Metropolitan Water Agencies (AMWA)**

AMWA is a national organization that focuses on policy, regulatory and legislative activities on the federal level. Their national focus precludes a specific focus on western water issues. However, four of the twenty-two board directors are from California and another three are from Colorado River Basin states. The value of the organization is partially reflected in the twenty-five California water utilities which are AMWA members including:

|                            |                       |                            |
|----------------------------|-----------------------|----------------------------|
| Anaheim Public Utilities   | Burbank Water & Power | Coachella Valley WD        |
| Contra Costa WD            | East Bay MUD          | Glendale Water & Power     |
| LA DWP                     | Marin MWD             | Metropolitan               |
| MWDOC                      | OCWD                  | Pasadena Water & Power     |
| Riverside Public Utilities | Sacramento Utilities  | SDCWA                      |
| San Diego Public Utilities | San Francisco PUC     | Santa Clara Valley WD      |
| Santa Cruz Water Dept.     | Santa Margarita WD    | Santa Rosa Utilities Dept. |
| Sonoma County Water        | Vallejo Public Works  | Ventura Water              |
| West Basin MWD             |                       |                            |

AMWA's mission statement is:

AMWA's primary objective is to be the unified and definitive voice for the nation's largest publicly owned drinking water systems on regulatory, legislative, and security issues. To this end, the association works with Congress and federal agencies to ensure safe and cost-effective federal drinking water laws and regulations and to develop federal-local partnerships to protect water systems and consumers against acts of terrorism and cybercrime.

AMWA is also committed to the collection and exchange of management, scientific, and technical information to support competitive utility operations, effective utility leadership, safe and secure water supplies, and effective communication on drinking water quality.

AMWA provides an expert Washington staff on regulatory, legislative, security and utility management issues. MWDOC's lobbyist, Jim Barker, has followed AMWA's activities for more than twenty years and has worked with their staff and respects the organization. The connection between AMWA and Mr. Barker has recently proved valuable on aspects of the PFAS contamination issue that is impacting a number of our Member Agencies. AMWA is deeply imbedded in the PFAS issue and provided rapid insight and information to Mr. Barker.

AMWA also produces weekly, monthly, and quarterly newsletters which we email to our Member Agencies. Examples of the Monday Morning Briefing, Congressional Report, Regulatory Report, and the Sustainability and Security Report are attached.

Board approval of AMWA membership and participation would include the following activities and costs (budget exhibit referenced):

|   |          |
|---|----------|
| Exhibit D – District Participation Costs:       | \$19,940 |
| Exhibit E – Staff Registration & Travel Budget: | \$ 9,566 |
| a. Misc. Conference, TBD: 1 staff               |          |
| Registration: \$1,632    Travel: \$2,244        |          |
| b. Exec Conference, Rhode Island: 1 staff       |          |
| Registration: \$920    Travel: \$1,600          |          |
| c. Water Policy Conference, TBD: 1 staff        |          |
| Registration: \$920    Travel: \$2,250          |          |
| TOTAL   | \$29,506 |

### **Water Tax Coordinated Value Example**

Our participation on both AMWA and CCEEB has allowed MWDOC to link national experience with state issues to provide significant input on critical issues. For example, we recently used the networking aspect of AMWA's national membership of general managers to research the State Water Board's reliance on the Kentucky utility consolidation process as a model. Beginning with a current AMWA member in Kentucky and then a former Member we were able to clarify information and access the Deputy Secretary of the Kentucky Energy and Environment Cabinet.

This in-depth information was then utilized at a recent CEEB meeting which included not only the Chair of the State Water Resources Control Board but also Laurel Firestone, the Governor's recent appointment to the board. Ms. Firestone is charged with the board's actions on non-compliant systems. Her focus is on outcomes/results. Based in information gathered through the AMWA network, MWDOC was able to elevate the discussion with Ms. Firestone, which resulted in an invitation for further, detailed discussions. The non-compliant systems questions is the point of the spear for the Water Tax issue. The CCEEB/CED membership is a valuable tool in our opposition to the Tax and policy/regulatory issues in general. Memberships to both CCEEB and AMWA are not only valuable individually, synergistically valuable by participating in both concurrently

### **BOARD OPTIONS**

#### **Option #1**

- Authorize the FY 2019-20 membership, registration and travel expenses for both Directors and Staff for both the California Council of Environmental & Economic Balance (CCEEB & CED) (\$38,413) and the Association of Metropolitan Water Agencies (AMWA) (\$29,506).

**Fiscal Impact:** \$67,919 for the FY 2019-20 operating budget. MWDOC passed a budget with \$65,488 in available funds. Approving both organizations would produce projected reserve balances \$2,431 below targets (well within estimating error).

**Business Analysis:** This option will continue our relationship with both organizations and the synergistic value thereby derived.

**Option #2**

- Authorize the FY 2019-20 membership, registration and travel expenses for both Directors and Staff for only the California Council of Environmental & Economic Balance (CCEEB & CED) (\$38,413).

**Fiscal Impact:** \$38,413 from the FY 2019-20 operating budget. MWDOC passed a budget with \$65,488 in available funds. Approving only CCEEB/CED would produce projected reserve balances \$27,075 above targets.

**Business Analysis:** This option will continue our relationship with only CCEEB/CED.

**Option #3**

- Authorize the FY 2019-20 membership, registration and travel expenses for both Directors and Staff for only the Association of Metropolitan Water Agencies (AMWA) (\$29,506).

**Fiscal Impact:** \$29,506 from the FY 2019-20 operating budget. MWDOC passed a budget with \$65,488 in available funds. Approving only AMWA would produce projected reserve balances \$35,982 above targets.

**Business Analysis:** This option will continue our relationship only with AMWA.

**Option #4**

- Do not authorize the FY 2019-20 membership, registration and travel expenses for either the California Council of Environmental & Economic Balance (CCEEB & CED) (\$38,413) and the Association of Metropolitan Water Agencies (AMWA) (\$29,506).

**Fiscal Impact:** No impact to the FY 2019-20 operating budget. MWDOC passed a budget with \$65,488 in available funds. Approving neither organization would not change projected reserve balances.

**Business Analysis:** This option will terminate our relationship with both organizations and undermine the interactions and relationships MWDOC developed over the last four years.

**STAFF RECOMMENDATION**

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**Option #1**





*The CED is an on-going dialogue among business leaders, environmental groups, and government officials. Using dialogue to develop innovative policy solutions, our mission is to meet the needs of a healthy environment and a vibrant economy while improving the effectiveness and efficiency of our environmental regulatory system.*

The California Environmental Dialogue (CED) has long worked on California's pressing environmental issues through its Plenary, Long View Committee, and Clean Air Dialogue Working Group. The goal of the CED is to provide a venue where business leaders, environmental interests, and state regulators can discuss topics of mutual concern outside of the traditional regulatory or legislative settings. By engaging in sustained, facilitated dialogue on contentious and complex issues, CED members are able to open lines of communication across sectors and better understand each other's challenges and perspectives. Although the goal of CED's dialogue is not to solve every problem set before it, the CED is often able to work towards consensus, encapsulating shared positions in publicly available policy principles and white papers. These joint statements have been instrumental in helping to solve pressing environmental and economic concerns that affect us all.

### CED Membership

#### ***Business Community***

Alliance of Automobile  
Manufacturers  
The Boeing Company  
California Electric  
Transportation Coalition  
California Farm Bureau  
Federation  
California Natural Gas Vehicle  
Coalition  
Diesel Technology Forum  
General Motors  
Honeywell  
Inland Empire Utilities Agency  
Irvine Ranch Water District  
NBC Universal

NRG  
Pacific Gas & Electric Company  
Sempra Energy Utilities  
Sonoma County Water Agency  
Tesoro  
The Walt Disney Company  
Wine Institute

#### ***Federal, State & Regional Agencies***

US EPA Region IX  
Senate and Assembly  
Legislative Staffs  
Cal/EPA  
Air Resources Board  
State Water Board

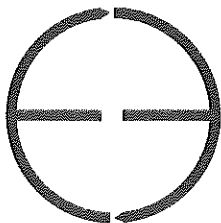
Resources Agency  
Energy Commission  
Public Utilities Commission  
CalTrans  
California Air Pollution  
Control Officers Association

#### ***Environmental Groups***

American Lung Association  
California Coast Keeper  
Coalition for Clean Air  
Earth Island Institute  
Natural Resources Defense  
Council  
Sierra Club  
Trust for Public Land

The CED is a special project of the California Council for Environmental and Economic Balance board of directors, and is managed by Jonathan Clay of JGC Government Relations, Inc. All three of CED's groups meet on a regular schedule throughout the year. The CED Plenary – its main deliberative body – meets for two-day dialogue sessions, allowing for enough time for in-depth discussion. CED members set the work agenda and agree on topics for discussion, and all three groups are supported by professional staff and facilitation so that progress is sustained.

***In short, by engaging in formal dialogue, the CED builds relationships and trust, which in turn allows its members to pursue public and private policy solutions that enhance environmental outcomes and economic efficiencies.***



## California Council for Environmental and Economic Balance

101 Mission Street, Suite 1440, San Francisco, California 94105  
415-512-7890 phone, 415-512-7897 fax, [www.cceeb.org](http://www.cceeb.org)

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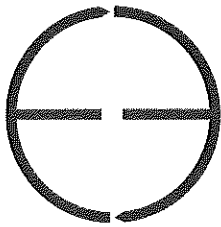
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August 28, 2017

The Honorable Edmund G. Brown  
Governor  
State of California  
California State Capitol  
Sacramento, CA 95814

**RE: California WaterFix – SUPPORT**

Dear Governor Brown:

On behalf of the California Council for Environmental & Economic Balance (CCEEB), I am pleased to convey our support for the California WaterFix ("WaterFix" or "Project").

As you know, in 1973 Governor Edmund G. "Pat" Brown founded CCEEB to bring together the perspectives of labor, business and public leaders to work together to advance balanced and effective policy solutions to achieve a sound economy and a healthy environment. From its beginning, CCEEB has tackled the toughest environmental problems facing California, including water quality, transportation, energy, air quality, hazardous waste and land use. We are a non-partisan, not for profit organization.

We have had in depth conversations and discussions with our members – business and labor – over the course of the past year regarding the Project. We have grappled with concerns over added costs for the business community, the need to ensure the health and reliability of the Delta, and the need for long-term reliability in water supply across the state. Like many issues that confront CCEEB in the policy realm, we take Governor Pat Brown's interest in balanced policy-making to heart – particularly as it relates to the WaterFix and all of its complexities. Ultimately, the membership agrees that reliability is essential in our state with over 39.5 million residents, ever fluctuating weather patterns, natural events and the need to protect the sixth largest economy in the world and its infrastructure.

In this regard, CCEEB is pleased to join the list of supporters for the WaterFix. If you have any questions regarding our position, please contact CCEEB Water, Chemistry and Waste Project Manager Dawn Koepke at (916) 930-1993 or Jackson Gualco of The Gualco Group, Inc. at (916) 441-1392. Thank you.

Sincerely,

Gerald D. Secundy  
CCEEB President

cc: Honorable Felicia Marcus, Chair, State Water Resources Control Board  
Honorable Grant Davis, Director, Department of Water Resources  
Catalina Hayes-Bautista, Deputy Legislative Secretary, Office of the Governor  
Members, CCEEB Water, Chemistry & Waste Project  
The Gualco Group, Inc.





ASSOCIATION OF  
METROPOLITAN WATER AGENCIES

## MONDAY MORNING BRIEFING

*The Latest Water Policy News*

### Monday Morning Briefing: April 29, 2019

#### EPA plan on PFAS in groundwater “expects” polluters to address contamination

EPA last week took a step forward in implementing the agency’s [PFAS Action plan](#), releasing [draft interim guidance](#) with recommendations for the clean-up of groundwater contaminated with perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonate (PFOS). The guidance will apply to sites being evaluated and/or addressed under federal cleanup programs, such as the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act.

The draft provides interim recommendations “for screening levels, and preliminary remediation goals (PRGs) to inform final cleanup levels for PFOA and/or PFOS contamination of groundwater that is a current or potential source of drinking water.” The guidance recommends a screening level, the level at which the contamination may warrant further investigation, of 40 parts per trillion (ppt) and PRGs of 70 ppt. The PRG is in line with EPA’s [Lifetime Health Advisory Level](#) of a combined concentration of PFOA and PFOS of 70 ppt.

The agency’s recommendations stop short of requiring polluters to cleanup groundwater with PFOA or PFAS contamination that exceed that level. Instead, the guidance says that “EPA expects that responsible parties will address levels of PFOA and/or PFOS over 70 ppt.” The document also cautions that determining a site needs more evaluation “does not necessarily indicate that additional response action is appropriate beyond assessing the actual or potential risk posed by releases or threatened releases at the site.”

The agency is taking comment on the draft interim guidance until June 10, 2019. AMWA members who have questions or comments on EPA’s plan should contact AMWA’s Stephanie Hayes Schlea at [schlea@amwa.net](mailto:schlea@amwa.net).

## EPA: No federal permits needed for pollutants introduced to surface water via a groundwater connection

EPA last week [released](#) an interpretive statement on the applicability of the National Pollutant Discharge Elimination System permits to releases of pollutants from a point source into groundwater. The [notice](#) of availability and request for comment gives the public until June 7 to provide input.

This statement follows a February 2018 [request](#) for public comment regarding whether EPA should review, revise, and/or clarify the agency's previous statements regarding this issue. Based on public input, and after reviewing past statements and the history, structure and text of the Clean Water Act (CWA), last week's interpretive statement declared that "Congress excluded releases of pollutants to groundwater from the Act's permitting requirements, regardless of whether there is a hydrological connection between the groundwater and a water of the United States."

The agency's [news release](#) goes on to state that Congress instead "left regulation of those releases to the states and EPA's other statutory authorities." EPA clarifies that the agency will still protect groundwaters and hydrologically connected surface waters through its authorities under the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act.

This recent development has been spurred by a series of ongoing litigation attempting to determine when the CWA applies to pollutants that reach surface waters via a hydrological connection to groundwaters. The Supreme Court is scheduled to hear arguments this fall on a case attempting to answer this question, *County of Maui v. Hawai'i Wildlife Fund*.

## Tuesday webinar: \$6 billion in water infrastructure financing up for grabs

This Tuesday, April 30, from 2:00 – 3:00 p.m. ET, EPA will conduct a how-to webinar on applying for loans in the third round of the Water Infrastructure Finance and Innovation Act (WIFIA) program. Online [registration](#) is available.

In February, Congress provided \$60 million in funding for the program as part of EPA's FY19 appropriations bill. The agency expects to leverage this sum into approximately \$6 billion in loans that will be distributed to major water infrastructure projects nationwide.

In addition to the webinar, EPA is offering three [information sessions](#) in May to provide more information to prospective borrowers about the program and this round of funding: May 8 in Atlanta, Ga., May 13 in Washington, D.C., and May 23 in Phoenix, Ariz. To learn more about the



available funding and the selection process, the Notice of Funding Availability can be found on EPA's [WIFIA website](#).

## Trump, congressional leaders to huddle over infrastructure plan

President Trump is expected to host House Speaker Nancy Pelosi (D-Calif.) and Senate Minority Leader Chuck Schumer (D-N.Y.) at the White House this week to talk about the potential for developing a broad infrastructure bill this year. Reports from Washington say the meeting is planned for the morning of Tuesday, April 30.

Since the president's election, members of both parties have repeatedly suggested that the two sides could find common ground on a broad infrastructure package. No such comprehensive legislation has emerged, though, even as Congress has enacted a number of infrastructure-related bills, including last year's America's Water Infrastructure Act. That legislation reauthorized EPA's Drinking Water State Revolving Fund and Water Infrastructure Finance and Innovation Act programs.

The biggest obstacle to reaching a comprehensive infrastructure bill is how to pay for it. Speaker Pelosi has indicated that House Democrats want to pursue infrastructure legislation that would spend up to \$2 trillion on a wide range of projects, but Republicans have resisted calls to impose new taxes on high earners to generate the necessary revenue.

## Save the date for AMWA's 2019 Executive Management Conference

Rhode Island is a great place to visit in the fall, so make your plans now to attend AMWA's 2019 [Executive Management Conference](#), October 20-23 in historic Newport, Rhode Island.

There's nothing else quite like AMWA's annual convening of senior drinking water executives – a forum featuring an agenda focused on their unique interests, outlooks and scope of management responsibility. Save these dates and watch for more information on AMWA's 2019 Executive Management Conference. Program details and online registration will be available in the coming weeks.

## This week in Congress

Members of the House and Senate return to Washington this week following a two-week break. In the House a vote is expected on legislation to reverse President Trump's withdrawal from the Paris Climate Agreement. The Senate's week will begin with consideration of a number of pending judicial nominations, and a vote is possible on a revised disaster aid bill.

ASSOCIATION OF  
METROPOLITAN WATER AGENCIESCONGRESSIONAL  
REPORT

## Congressional Report: April 2019

### AMWA calls on lawmakers to preserve water infrastructure funding

Congress should support strong funding for EPA's water infrastructure assistance programs next year, AMWA and a coalition of seven water sector and infrastructure organizations wrote to lawmakers on April 1 as work gets underway to put together spending legislation for the 2020 fiscal year. The associations' letter was sent to Congress after the Trump Administration's FY20 budget proposed slashing overall EPA funding by nearly one third.

The [water sector letter](#) did not discuss the proposed budget cuts directly, but noted the country's need of nearly \$750 billion in water infrastructure spending over the next 20 years (as estimated by EPA), and pointed to the Drinking Water and Clean Water State Revolving Funds (SRFs), along with the Water Infrastructure Finance and Innovation Act (WIFIA) program, as the "core programs" at the federal level that offer funding for "critical drinking water and clean water projects."

Specifically, the letter asked lawmakers to fund the DWSRF and WIFIA in FY20 at their fully-authorized levels of \$1.3 billion and \$50 million, respectively. The letter also asked Congress to increase funding for the CWSRF "beyond its FY19 level of \$1.7 billion." Congress' authorization of the CWSRF has expired, so there is no "fully-authorized" level of funding that may be requested.

The letter went on to note a number of new EPA grant programs that Congress authorized last fall as part of America's Water Infrastructure Act (AWIA), including initiatives focusing on lead removal, water utility resiliency, and water workforce development, among others. AMWA and the other associations called on lawmakers to appropriate "the fully authorized funding level for each of these new AWIA programs in FY20."

Congress is widely expected to reject President Trump's proposal to slash EPA funding by several billion dollars, but it remains to be determined how much money will be available to devote to the agency's water infrastructure programs next year.



## Wheeler touts water infrastructure programs in Hill testimony

EPA Administrator Andrew Wheeler testified in defense of the Trump administration's FY20 budget request at a trio of congressional hearings this month and consistently encountered resistance from both sides of the aisle over its plan to drastically reduce the agency's budget. But Wheeler used his testimony to frame water infrastructure investments as a top priority, even though the budget proposal would lessen funding for those objectives.

Administrator Wheeler testified at respective [House](#) and [Senate](#) appropriations subcommittee hearings on the budget, plus a [hearing](#) of the House Environment and Climate Change Subcommittee. As submitted to Congress, Trump's FY20 budget [plan](#) would reduce EPA spending from its FY19 level of just over \$8.8 billion to \$6.1 billion next year. The plan seeks \$863 million and \$25 million, respectively, for the DWSRF and WIFIA programs in FY20. The DWSRF received \$1.164 billion in FY19, while WIFIA was awarded \$68 million.

Despite the budget's proposed cuts to EPA spending, Wheeler told the committees that water is a priority for the administration. In his [testimony](#) to House appropriators, for example, Wheeler framed water issues as "the largest and most immediate environmental and public health issues affecting the world right now." He noted the agency's own estimates of the need for more than \$700 billion in water infrastructure investments over the next 20 years, and applauded the leveraging ability of WIFIA and the recycling of funds in the SRFs that generate "additional funding available well beyond the annual federal investment" in the programs. Wheeler also stressed that the White House budget requested a total of \$83 million to begin funding five new water-related grant programs authorized by Congress last year through America's Water Infrastructure Act.

Wheeler encountered numerous questions during the three hearings on the budget's proposal to reduce DWSRF funding by more than \$300 million. In response to a member of the House Environment and Climate Change Subcommittee who questioned the cuts, Wheeler noted that roughly \$80 billion is currently revolving at the state level in the two SRFs, and also argued that the administration was proposing to increase WIFIA funding by 25 percent compared to the administration's FY19 budget request for WIFIA. However, when compared to the amount of funding Congress actually appropriated for the program last year, the White House's FY20 budget proposal would reduce WIFIA funding by \$43 million, or about 63 percent.

The consensus from lawmakers at all three hearings seemed to be that Congress would not go along with the administration's recommendations of severe EPA cuts in its own FY20 spending bills. But details of potential spending levels for EPA's water infrastructure programs will not be known until Congress begins developing its funding legislation later this year.



## Wheeler doesn't commit to timeline for lead pipe replacement program

EPA Administrator Andrew Wheeler avoided answering a question posed during his April 2 [appearance](#) before a House Appropriations subcommittee about the agency's plans for implementing a congressionally authorized grant program to promote the replacement of lead service lines, though an EPA staff member shed additional light on the topic during AMWA's Water Policy Conference later in the month.

During Administrator Wheeler's testimony on EPA's FY20 budget request before the House Interior, Environment, and Related Agencies Appropriations Subcommittee, Rep. Brenda Lawrence (D-Mich.) asked about EPA's plans for implementing [three grant programs](#) authorized by Congress in the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016. One of those programs would offer funds to help communities and low-income households replace lead service lines or undertake other efforts to remove lead from drinking water. AMWA supported and helped craft the version of the program that was enacted as part of the WIIN Act, and over the past two fiscal years Congress has appropriated \$25 million to EPA to get the program up and running. However, to date EPA has not taken any apparent steps to begin soliciting or offering lead service line replacement grants, and the agency recommended eliminating funding for the program in its FY20 budget.

Rep. Lawrence's question during the April 2 hearing noted that Congress has appropriated dollars for all three new WIIN Act programs, "but the money has not gone out the door." She asked the administrator to explain the agency's plans for using the funding.

In response, Wheeler said that "in the coming weeks" EPA planned to "announce the details and allocations" for two of the programs – for providing assistance to small and disadvantaged communities, and for lead testing in schools and child care centers. He said that EPA is "a little slower" in awarding funds for new grant programs compared to established ones, and then repeated his expectation that the agency would move forward with details on "both" programs "in the next few weeks." Wheeler's response did not acknowledge the status of the lead reduction program, and Rep. Lawrence did not immediately press him with a follow-up question. So, the present status of the program at EPA remains unclear.

A bit more detail on the lead reduction program was offered later in April during AMWA's Water Policy Conference. Jennifer McLain, acting director of EPA's Office of Ground Water and Drinking Water, said in response to a question that EPA plans to begin soliciting applications later this year for grants to help communities and low-income homeowners replace lead service lines or undertake other initiatives to reduce the prevalence of lead in drinking water, consistent with the specifications established when Congress created the program in 2016. An EPA [website](#) also lists "Reducing Lead in Drinking Water Grant Request for Applications" under a "What's Next?" column

on implementation of the 2016 law.

At this point it remains unknown how exactly EPA will solicit applicants for the lead reduction grants, or whether Congress will continue to fund the program beyond the current fiscal year.

## Congress approves Colorado River management plan

The House and Senate this month each unanimously approved legislation directing the Interior Department to implement the Colorado River Drought Contingency Plan. The plan is a multistate agreement that aims to protect the river's two primary reservoirs, Lake Powell and Lake Mead, against shortages that could stem from ongoing drought.

The Colorado River's seven basin states – Arizona, California, Colorado, New Mexico, Nevada, Utah, and Wyoming – agreed to the drought plan last month, but congressional approval was necessary to allow the Interior Department to implement it. The necessary legislation, [H.R. 2030](#), easily passed each chamber earlier this month, and President Trump subsequently signed it into law on April 16.

The Drought Contingency Plan updates 2007 guidelines for water operations on the Colorado River, which is in the midst of a nearly two-decade-long drought. Among other provisions, the agreement outlines shortage cutbacks that affected states will contribute if Lake Mead drops below certain elevations.

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ASSOCIATION OF  
METROPOLITAN WATER AGENCIES

# REGULATORY REPORT

## Regulatory Report: April 2019

### AMWA asks agencies to consider WOTUS implications for drinking water

AMWA submitted [comments](#) to EPA and the U.S. Army Corps of Engineers (USACE) April 12 in response to the agencies' February 14, 2019 [proposal](#) to redefine the Waters of the United States (WOTUS) definition. This rule would replace the 2015 Clean Water Rule and, if finalized, would adopt a narrower scope for federal jurisdiction over the nation's waters in comparison to the 2015 rule. The new rule follows closely with the late Supreme Court Justice Anton Scalia's plurality opinion from the landmark court case [Rapanos v. United States](#), which concluded that WOTUS should be restricted to "relatively permanent, standing or continuously flowing bodies of water."

AMWA's comments support the overall goal of streamlining the regulatory process and clarifying the definition of WOTUS but highlights issues that EPA and USACE should consider while developing the final rule. The association emphasizes the importance of preventing pollution of source waters in order to protect public health and urges EPA and USACE to "be cognizant of the rule's impact on source waters, particularly those used for drinking water, and to finalize language that is protective of these vital resources."

AMWA reiterates [previous comments](#) on the need for drinking water infrastructure to be excluded from the definition of WOTUS in a similar fashion to waste treatment systems, which have been excluded since 1979 under the Clean Water Act (CWA). The letter underlines the fact that "current and past practice under the CWA has been to exclude [day to day operations of drinking water facilities] from jurisdiction under WOTUS" and that the association does not believe it was the intent of Congress, EPA, or USACE that this infrastructure be included under the definition.

On top of these requests, AMWA also asks that EPA and USACE further investigate possible limitations that states might face in implementing their own policies for protecting their waters, considering many states have laws that prevent them from being more protective than the federal law. In light of this, AMWA asked for a delay in the implementation of the new definition to allow states ample time to determine the possible impacts to their waters.

Finally, AMWA lists concerns with the cost-benefit analysis completed for the WOTUS proposal. The association states that the “current analysis is lacking in sufficient detail and consideration for the needs and limitations of drinking water utilities” and encourages both EPA and USACE to “perform a more rigorous analysis using sound scientific assessments in order to better estimate the impact of this new rule on treatment costs for drinking water.”

A final rule is expected by the end of the year.

## New guidance released by EPA aims to clarify application of CWA permitting to groundwater

EPA [released](#) an interpretive statement on the agency’s stance for the applicability of the Clean Water Act’s (CWA) National Pollutant Discharge Elimination System on releases of pollutants from a point source into groundwater. The [notice](#) of availability and request for comment was released April 23 and gives the public until June 7 to provide input.

This statement follows a February 2018 [request](#) for public comment regarding whether EPA should review, revise, and/or clarify the agency’s previous statements regarding this issue. Based on public input, and after reviewing past statements and the history, structure and text of the CWA, EPA determined that “Congress excluded releases of pollutants to groundwater from the Act’s permitting requirements, regardless of whether there is a hydrological connection between the groundwater and a water of the United States.”

The agency’s [news release](#) goes on to state that Congress instead “left regulation of those releases to the states and EPA’s other statutory authorities.” EPA clarifies that the agency will still protect groundwaters and hydrologically connected surface waters through its authorities under the Safe Drinking Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

This recent development has been spurred by a series of ongoing litigations attempting to determine when the CWA applies to pollutants that reach surface waters via a hydrological connection to groundwaters. The Supreme Court is scheduled to hear arguments this fall on a case attempting to answer this question, *County of Maui v. Hawai’i Wildlife Fund*.

## EPA releases status report for Federal Action Plan to Reduce Childhood Lead Exposures

EPA [released](#) a [status report](#) April 1 outlining the progress that has been made on EPA’s [Action Plan, Federal Lead Action Plan to Reduce Childhood Lead Exposures and Associated Health Impacts](#), that was released December 19, 2018. The plan was developed through cross-governmental collaboration of the [President’s Task Force on Environmental Health Risks and Safety Risks to](#)



Children, which includes 17 federal departments and offices and is co-chaired by EPA and the Department of Health and Human Services.

The Action Plan outlines four goals:

- Reduce children's exposure to lead sources;
- Identify lead-exposed children and improve their health outcomes;
- Communicate more effectively with stakeholders; and
- Support and conduct critical research to inform efforts to reduce lead exposures and related health risks.

The majority of the updates for reducing lead in drinking water are continuations of work that was already ongoing when the plan was released in December, for instance the agency's work on revising the Lead and Copper Rule (LCR). However, the report does outline a few new accomplishments that have occurred this year.

- EPA hosted the first in a series of webinars on lead service line replacement in March 2019. The series showcases best practices for states and utilities implementing a voluntary lead service line replacement program.
- EPA sent out letters to state governors announcing the Lead Testing in Schools and Child Care Programs Drinking Water grant authorized by the Water Infrastructure Improvements for the Nation Act (WIIN). At the beginning of 2019, EPA received letters from all 50 states and the District of Columbia confirming their commitment to reducing lead in drinking water in schools. The letters also confirmed their desire to receive grant funding. According to both the report and EPA's [website](#), EPA expects to notify states and the District of Columbia of funding allotments for the grant in March 2019. States will then have until July 21, 2019 to submit their application package.
- EPA is conducting the tribal consultation on the Reduction of Lead in Drinking Water Grant authorized by the WIIN Act through the end of March 2019.

The status report also updates timelines to some of EPA's rulemakings. The proposal for the revised LCR is now slated to be released this summer. The proposal was originally scheduled to be released in February of this year. The finalized rule for *Regulations Implementing Section 1417 of the Safe Drinking Water Act: Prohibition on Use of Lead Pipes, Solder, and Flux* has also been delayed and is now due to be published winter 2019-2020.

## Michigan governor directs MDEQ to establish MCLs for PFAS

Michigan Governor Gretchen Whitmer's office [announced](#) March 26 that the state will begin the process for establishing Maximum Contaminant Levels for per- and polyfluoroalkyl substances (PFAS). According to the news release, the state "has long advocated that the federal government

establish national standards to protect the nation's water from PFAS contamination, but [it] can no longer wait for the Trump Administration to act." The press release does not state which specific PFAS would be regulated. PFAS is a general term for the whole group of man-made chemicals that include PFOA, PFOS, and Gen-X, but is comprised of thousands of different chemicals.

The governor goes on to direct the state's [PFAS Action Response Team](#) to form a science advisory workgroup that will be tasked to "review both existing and proposed health-based drinking water standards from around the nation to inform the rulemaking process for appropriate Maximum Contaminant Levels (MCL) for Michigan by no later than July 1, 2019."

The statement directs the Michigan Department for Environmental Quality to immediately file a request for rulemaking to establish an enforceable MCL in response to the workgroup's conclusions. The directive states that this proposal will be completed on "an accelerated schedule with input from stakeholders by no later than October 1, 2019."

## State associations praise EPA's PFAS Action Plan, but highlight significant concerns

The Association of State Drinking Water Administrators, Environmental Council of States, the Association of Clean Water Administrators, and the Association of State and Territorial Solid Waste Management Officials sent a [comment letter](#) to EPA Administrator Wheeler on April 4 regarding the agency's [PFAS Action Plan](#).

In the letter, the four groups commend EPA for developing the Action Plan, which outlines both short-term and long-term actions that the agency will deploy to address per- and polyfluoroalkyl substances (PFAS). However, the majority of the letter criticizes the plan and highlights a multitude of concerns. In particular, the letter states EPA "should commence the work required for developing a Safe Drinking Water Act (SDWA) Maximum Contaminant Level (MCL) for PFOA and PFOS while completing the regulatory determination rather than taking those steps sequentially." They also state that the agency should look beyond setting contaminant levels for only PFOA and PFOS and consider the multitude of other PFAS that could potentially be impacting environmental and human health. Many states are already implementing or developing their own MCLs for a variety of PFAS and the four groups encourage EPA to use these as guidelines.

The groups also emphasize the need to focus on keeping PFAS out of the environment through programs like the Toxic Substances Control Act and requests that EPA provide more timelines and deadlines within the Action Plan.

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ASSOCIATION OF  
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# SUSTAINABILITY AND SECURITY REPORT



## Sustainability & Security Report: April 2019

### Social engineering, malicious links major threats to ICS environments

An F-Secure [report](#) examining the state of cybersecurity in the energy sector warns that many operational technology components in industrial control systems (ICS) were built with remote operation capabilities but are partly or entirely lacking in security protocols. Although the report is focused on the energy sector, many of its findings and recommendations are applicable to the water sector. In a press release announcing the report, F-Secure researcher Sami Ruohonen stated, “Espionage and sabotage attacks against Critical National Infrastructure organizations have increased over the years, and I don’t think we have seen it all yet.”

F-Secure observes that many ICS components were built before the creation of ICS-focused malware like Stuxnet, and, therefore, were not designed with security in mind. This is complicated by the fact that discarding old systems, which originally cost millions of dollars and were expected to work for decades, is cost-prohibitive. The report also acknowledges the challenge in updating these systems as, given that ICS need to be “on” all the time, there are few opportunities for the systems to be idle long enough to complete updates and install patches.

The report then examines the threat actors and the techniques they use for exploiting this situation, adding that a fundamental reason behind successful attacks is target organizations’ lack of mature cybersecurity practices. The report also notes that state-sponsored attackers are deliberate about their attempts to penetrate systems, taking months to identify employees who are viable targets for social engineering and phishing attacks.

### AMWA urges EPA to pilot reuse projects as part of reuse action plan

Following EPA’s [announcement](#) on February 27 that the agency would develop a Water Reuse Action Plan, EPA staff circulated to AMWA and other organizations a draft discussion framework for

Page 123 of 151



the action plan. (A [later version of the framework](#) was released for public comment.) In response, AMWA sent a [letter](#) urging the agency to seize the opportunity to work with federal partners and pilot water reuse projects at its own facilities and property. “By leading by example, the federal government will advance the consideration and application of water reuse,” the letter reads. The letter also urged EPA to continue to fund research regarding the public health implications of direct and indirect potable reuse, stating, “It is imperative that procedures and policies for implementing direct potable reuse be irrefutable regarding the safety for public health.”

## Survey reveals high rate of successful OT attacks

A recent Ponemon Institute [survey](#) of professionals in industries using operational technology (OT), including industrial control systems, revealed that 90 percent of respondents experienced at least one damaging cyberattack over the past two years, while 62 percent experienced two or more attacks. More than one-third (37 percent) reported at least one significant disruption caused by malware and nearly one-fourth (23 percent) experienced least one nation state attack. The study also observed 80 percent of respondents cite a lack of visibility into their organization’s attack surface as a top challenge for preventing cyberattacks from affecting business operations.

## EPA releases framework for reuse action plan

EPA announced on April 18 that it is seeking public input to inform the development of a draft Water Reuse Action Plan. To provide context and facilitate input, EPA released a [Discussion Framework for Development of a Draft Water Reuse Action Plan](#). The framework describes a business case for reuse, examples of reuse applications, examples of previous efforts and published literature that could inform a plan, potential collaborators, and a potential framework for the draft plan. EPA invites ideas on all aspects of water reuse and is accepting input through July 1 via public docket ID [EPA-HQ-OW-2019-0174](#). EPA will consider all public input in preparation of its draft Water Reuse Action Plan, which will be released for public comment in September of this year.

According to a [news release](#), the development of the action plan will leverage other efforts to advance water reuse, including the U.S. Department of Energy’s [Water Security Grand Challenge](#) and EPA’s “priority to fund water reuse and recycling projects” through the 2019 WIFIA funds. The agency’s goal for the action plan is to “accelerate the application of water reuse as a safe, reliable and sustainable way to meet the country’s current and future water demands.”

AMWA is considering submitting additional comments to the agency before the July 1 deadline. Any AMWA member with comments to share regarding EPA’s initiative is encouraged to forward their suggestions to [Erica Brown](#) in AMWA’s office.

## EPA utility resilience program retools online resources



EPA's Creating Resilient Water Utilities (CRWU) program has released new versions of three online tools that utilities can use to inform their preparedness and mitigation planning efforts. The CRWU program provides drinking water, wastewater, and stormwater utilities with practical tools, training, and technical assistance to help these utilities prepare for drought, hurricanes, and other extreme weather events.

The [Storm Surge Inundation Map](#), which allows utilities to anticipate how hurricane- and severe storm-related flooding may affect their service areas, has been reformatted. In addition, the online map now also includes storm surge data for Puerto Rico. The tool includes three tabs: Hurricane Strike Frequency, Storm Surge Flooding, and FEMA Flood Zones.

Hurricane Strike Frequency illustrates the average time between hurricane strikes for locations along the East Coast and Gulf Coast while Storm Surge Flooding illustrates how the potential height of storm surge can vary across hurricane categories at a given location. The FEMA Flood Zone tab allows utilities to explore whether their service areas are within what FEMA has assessed to be the 100-year (one percent annual probability) or 500-year (0.2 percent annual probability) floodplains.

CRWU also recently revised its [Resilient Strategies Guide for Water Utilities](#). The web-based guide allows utilities to develop mitigation strategies based on their stated resilience-related priorities, such as preparing for drought, protecting water quality, and improving energy-efficiency, among others.

The updated [Adaptation and Case Study Information Exchange](#) is an interactive map highlighting utility resilience efforts across the United States. It has been updated with new case studies and now has over 40 examples. The case studies describe a variety of utility approaches to managing concerns like long-term planning and extreme events. A dozen case studies come from AMWA member utilities.

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Association of Metropolitan Water Agencies  
1620 I Street, NW, Suite 500  
Washington, DC 20006



**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Administration & Finance Committee**  
(Directors Thomas, Finnegan, Vacant)

Robert J. Hunter, General Manager  
Staff Contact: Charles Busslinger, Cathy Harris

**SUBJECT:** **Office Improvements - Status Update & Approval of Additional Design Services**

**STAFF RECOMMENDATION**

It is recommended that the Board of Directors review the presentation on the Status of Building Improvements, and authorize staff to proceed with Phase 3 Design and Value Engineering in the amount of \$18,000.

**COMMITTEE RECOMMENDATION**

Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

Staff recommends the Board of Directors review the presentation on the status of the office improvements, and approve additional design services with IDS in the amount of \$18,000 to complete:

1. The design of Phase 3 of the office remodel;
2. Value engineering services and consolidation of all 3 phases of the office remodel with the completed seismic and ADA improvement plans into one set of construction plans, to improve efficiencies and reduce construction costs; and
3. Creation of 3D rendered views of the office remodel

|   |   |                              |           |
|---|---|------------------------------|-----------|
| <b>Budgeted (Y/N):</b>  | Budgeted amount: Phase 3 Design was not included in the FY 2018/19 Budget | Core _X_                     | Choice __ |
| <b>Action item amount: \$18,000</b>   |   | Line item: 19-8810 & 19-8811 |           |
| <b>Fiscal Impact (explain if unbudgeted): In FY 2017-2018, the Board approved \$44,236 for IDS to complete Phase 1&amp;2 design work. In an effort to incorporate Phase 3 and coordinate with seismic work and ADA Improvements, an additional \$18,000 is being requested.</b> |   |                              |           |

## DETAILED REPORT

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On May 16, 2018, the Board authorized staff to proceed with seismic improvements to the MWDOC Administration Building to retrofit and upgrade the seismic performance level of the building, and to proceed with Phases 1 & 2 of office interior remodel work. Since then staff have been working with consultants to develop plans and bid documents for the approved building improvements.

### **Additional Work**

During the course of the design, additional building issues surfaced which prompted investigation (i.e. building power outage, and a failure of the I.T. Server Room Air Conditioning system). Staff notified the Board of these additional issues through informational items on September 12, 2018, and January 9, 2019. Those investigations revealed deficiencies in the electrical system supplying power to the building, and that the I.T. Server Room air conditioning system, which was temporarily repaired, was past the end of its useful life. These two discoveries necessitated changes to the design and to the strategy for taking the building improvements out to bid.

The electrical deficiencies require additional improvements to the electrical system both outside of the building, and in the electrical room (i.e. improvements to the electrical backbone of the building). The improvements are necessary to provide sufficient power for replacement of the I.T. Server room air conditioning system with one designed for 24-7 operation (i.e. a Computer Room Air Conditioner – CRAC unit), and to provide sufficient power and additional circuitry for the remodel. The existing transformer is approximately 50 years old, sized too small for our needs and is running very hot and could fail at any time. The additional electrical improvements would replace conductor cabling and switch gear providing power to the building, and replace electrical equipment inside of the electrical room (particularly the transformer, and old electrical panels). These improvements will provide the required power to meet current code requirements and provide the additional circuits needed for the remodel. The equipment proposed for replacement has reached the end of their useful life.

### **Remodel Value Engineering**

The plans for seismic and code-required ADA improvements have been completed. Due to the extent of work above the suspended ceiling needed for the seismic improvements, the architectural consultant has strongly recommended that all 3 phases of the remodel be combined with the seismic and ADA improvements into one set of bid documents to realize efficiencies and reduce construction costs.

### **Project Schedule**

Electrical Improvements: The Notice Inviting Bids for the electrical improvements has been posted and the Bid Opening is scheduled for May 29, 2019. Board consideration of award is anticipated June 19, 2019.

Computer Room Air Conditioner (CRAC): Plans for replacement of the CRAC unit are currently in with the City Building Department for Plan Check. The Notice Inviting Bids is anticipated in June 2019 with Board consideration of award anticipated in July 2019.

Remodel: The consultant has indicated that the consolidated plans are anticipated to be completed by the end of May 2019 for submittal to the City for Plan Check. Staff anticipates

the project will be brought to the Board for consideration of project award in November 2019.

**Consideration of Board Authorization for Phase 3 Design & Value Engineering**

The attached presentation includes additional information on past and proposed costs for building improvements. Staff recommends that the Board authorize the value engineering and Phase 3 design services with IDS in the amount of \$18,000.

**Attachment:** Office Building Rehabilitation & Remodel Update Presentation



## Office Building Rehabilitation & Remodel May 2019 Update Municipal Water District of Orange County

Combined P&O and A&F  
Committee Meeting

### Office Building Options (April 2018 Presentation)

| Option 4                       | Cost     |
|--------------------------------|----------|
| Relocate to Essential Facility | \$11.8 M |

**Option 1**  
Retrofit to Non-Essential  
Facility Performance  
Level

| Option 1                  | Cost    |
|---------------------------|---------|
| Past Building Investments | \$691 K |
| Future Investments        | \$1.7 M |
| Total Investments         | \$2.4 M |

**Option 4**  
Relocate and Build to  
Essential Facility  
Performance Level

**Option 2**  
Retrofit to Essential  
Facility Performance  
Level

| Option 3                      | Cost    |
|-------------------------------|---------|
| Rebuild to Essential Facility | \$8.1 M |

**Option 3**  
Rebuild on-site to  
Essential Facility  
Performance Level

| Option 2  | Cost    |
|---|---------|
| Retrofit to Essential Facility                  | \$1.9 M |
| Total of recent and upcoming<br>including above | \$5.0 M |

## Past Building Investments (as of April 2018)

| Investment Item                     | Timeframe | Cost            |
|-------------------------------------|-----------|-----------------|
| Handrails installed on Sidewalk     | 2009      | \$5,650         |
| Window Replacement                  | 2013-2014 | \$10,176        |
| Fire System Replacement             | 2016      | \$21,990        |
| Restroom Remodel                    | 2015-2016 | \$144,204       |
| HVAC Replacement                    | 2013-2016 | \$435,487       |
| Entry Area Remodel                  | 2015-2017 | <u>\$73,682</u> |
| Total Previous Building Investments |           | \$691,189       |



## Recent Design Efforts

| Investment Item   | Timeframe            | Cost to Date | Approved                    | Status   |
|---|----------------------|--------------|-----------------------------|--|
| Seismic & ADA Design  | May 2018 – Feb 2019  | \$51,854     | \$130,120<br>(Seismic)      | Waiting for Remodel Design to go into Plan Check |
| Interior Design – Office Remodel  | June 2018 - Ongoing  | \$18,392     | \$44,236<br>(ADA & Remodel) | Waiting for Phase 3 Design & Value Engineering   |
| Electrical System Analysis  | Sept 2018 – Oct 2018 | \$13,354     | \$13,394                    | Complete   |
| Electrical System Rehab.  | Feb 2019 - Ongoing   | \$6,940      | \$9,500                     | Out for Bids                                     |
| HVAC Replacement  | Feb 2019 - Ongoing   | \$10,000     | \$15,000                    | In Plan Check                                    |
| Interior Design – Phase 3   | May 2019 - Ongoing   | <u>\$0*</u>  | <u>\$18,000*</u>            | *Pending Board Approval                          |
| Total Building Design & Analysis Investments<br><small>(as of April 2019)</small> |                      | \$100,540    | \$230,250                   |  |





## Future Building Investment Estimates

| Future Investment Item  | Cost Estimate (2018) | Cost Estimate (2019) |
|---|----------------------|----------------------|
| Structural & Non-Structural Seismic Improvements                | \$500,000            | \$807,020*           |
| Other Investments (Entrance Area Displays, Atrium, Glass Doors) | \$65,569             | \$65,902             |
| Conference Room & Office Remodel (Phase 1 & 2)                  | \$734,966            |                      |
| Office Workspace Remodel (Phases 1, 2 & 3)                      |                      | \$890,179*           |
| Electrical System Rehab (New Transformer & Switchgear)          | \$60,000             | \$75,000             |
| HVAC Replacement (I.T. Server Room)                             | \$109,532            | \$92,000             |
| Roof Replacement  | \$99,000             | -----                |
| Emergency Generator   | \$122,000            | \$60,000             |
|   | \$1,691,067          | \$1,990,101          |
| Fire Suppression Bracing (Not included in 2018 Estimate)        |                      | \$135,869*           |
| Additional ADA Improvements                                     |                      | \$459,319*           |
| HVAC (Additional Electrical Room Ventilation - City Permit)     |                      | \$15,000             |
| Required Outside Electrical Work                                |                      | \$170,000            |
| Total Future Building Investments                               | \$1,691,067          | \$2,770,289*         |

\* IDS Estimate includes 10% contingency & 25% Owners Contingency due to market conditions and the building remaining occupied during construction



## Total Building Investment Estimates (Historical & Future)

| Estimated Building Investments by Type (2009 – 2020) |  | Cost Estimate |
|--|--|---------------|
| Fire System Replacement                              |  | 21,990        |
| Structural/Non-Structural Seismic Improvements       |  | \$1,073,009*  |
| ADA Improvements                                     |  | \$628,634*    |
| Office Remodel                                       |  | \$1,072,714*  |
| HVAC   |  | \$557,487     |
| Electrical System                                    |  | \$267,894     |
| Emergency Generator                                  |  | \$60,000      |
| Total Building Investments                           |  | \$3,691,728*  |

| Historical & Future Building Investment |             |
|---|-------------|
| Past Investments (Prior to April 2018)  | \$ 691,189  |
| Design Investments (May 2018 – 2020)    | \$ 230,250  |
| Future Investments                      | \$2,770,289 |
| Total Building Investments              | \$3,691,728 |

\* Include IDS Cost Estimates with 35% Contingency



## SEOC Improvements

### Current Efforts

- Electrical System
- Air Conditioning System
- Space Planning



## Questions







**ACTION ITEM**

May 15, 2019

**TO:** Board of Directors

**FROM:** **Administration & Finance Committee**  
(Directors Thomas, Finnegan, Vacant)

Robert Hunter, General Manager  
**Staff Contact:** Cathy Harris, Admin. Services Mgr. & Hilary Chumpitazi, Finance Mgr.

**SUBJECT: Amendment to District Money Purchase Pension Plan**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors approve changes as presented at the Board Meeting.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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Staff is currently working with District Legal Counsel and gathering information and compiling all required documents for amending the Pension Plan to allow for Employer contributions on behalf of the Directors. This information will be presented to the Board on May 15, 2019.

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



**INFORMATION ITEM**

May 6, 2019

**TO:** Administration & Finance Committee  
(Directors Thomas, Finnegan, Vacant)

**FROM:** Robert Hunter, General Manager

Staff Contact: Cathleen Harris, Administrative Services Manager

**SUBJECT:** Contract with Municipal Resource Group (MRG) to Implement Performance Management System

**STAFF RECOMMENDATION**

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Staff recommends the Planning & Operations Committee receive and file as presented.

**SUMMARY**

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One of the goals identified during the Administration Department presentation in December 2018 was to improve the District's current Performance Management process. In an effort to improve the current format and streamline processes, the General Manager will be entering into a contract with Municipal Resource Group (MRG). MRG will review current District practices, recommend new approaches and assist in the implementation of an improved performance management system.

Per our Administrative Code and Contracts Manual, staff sought bids and received the following two quotes:

|   |          |          |
|---|----------|----------|
| Cal State University Fullerton                                | 33 hours | \$19,800 |
| Municipal Resource Group<br>San Francisco and Sacramento Area | 88 hours | \$18,000 |

Based on the quotes received and references provided, staff selected MRG for this project. MRG has a representative located in Irvine who will be working on this project.

In accordance with the Administrative Code, this contract is within the General Manager's approval authority (under \$25,000).

|  |                           |          |           |
|--|---------------------------|----------|-----------|
| Budgeted (Y/N): Y                      | Budgeted amount: \$25,000 | Core _x_ | Choice __ |
| Action item amount: \$18,000           | Line item: 13-6205-2000   |          |           |
| Fiscal Impact (explain if unbudgeted): |                           |          |           |



**Administration Activities Report  
April 5, 2019 to April 26, 2019**

| Activity                    | Summary   |
|-----------------------------|---|
| <b>Administration/Board</b> | <p>Staff worked on the following:</p> <ul style="list-style-type: none"> <li>• Scheduled meetings for Rob Hunter, Karl Seckel and other various meetings of the Board members.</li> <li>• Assisted Rob/Karl with various write-ups and follow-up for the Committees and Board.</li> <li>• Continue to send the Water Supply Reports to the member agencies.</li> <li>• Training of administrative staff.</li> <li>• Processed and reviewed agreements for appropriate Board approval and insurance requirements.</li> <li>• Review Insurance documents for all District Agreements.</li> <li>• Continue review of Administrative Code for requirements and potential changes; consulted with Legal Counsel.</li> <li>• Coordinated logistics for Elected Officials Forum.</li> <li>• Responded to two Public Records Act Requests.</li> <li>• Assisted Legal Counsel in the preparation of Ordinance; submitted Ordinance to OC Register for publication.</li> <li>• Prepared Notice of Vacancy; arranged for posting at 7 sites within Division 3; submitted to OC Register for publication.</li> <li>• Prepared Information Packet for potential candidates for Division 3.</li> <li>• Continued to review Records Management system and evaluate new filing ideas, as well as work with Admin staff regarding potential changes.</li> <li>• Made travel arrangements for AWWA CA NV Spring Conference, AWWA ACE 19, Water Policy Conference in DC, CWEA Conference, CAPIO, Newport Beach Conference, CalWEP Peer to Peer Conference, WUE and employee training.</li> <li>• Assisted with coordination of ISDOC Meeting and ACCOC Meeting held at MWD OC.</li> <li>• Assisted with preparation of support/oppose letters to council members.</li> </ul> |
| <b>Records Management</b>   | <ul style="list-style-type: none"> <li>• The District's annual records management audit was completed on April 8 and 9 and an assessment report was provided to the District. Findings indicate that the District continues to make significant improvements in the Records Management program, especially on the organization of the Department Network folders, destruction of records that have exceeded their retention period, and records retention policies.</li> <li>• The District has implemented more than 90% of the recommendations from the 2016 Records Management Needs Assessment and will continue with a few</li> </ul>  |



|                                |  |
|--------------------------------|--|
|                                | recommendations provided by the consultant in the upcoming year.   |
| <b>Recruitment /Departures</b> | <ul style="list-style-type: none"> <li>With the recent launch of the District's Neogov web posting page, the WEROC position job posting is now accessible at <a href="https://www.governmentjobs.com/careers/mwdoc">https://www.governmentjobs.com/careers/mwdoc</a></li> </ul>  |
| <b>Other</b>                   |  |
| <b>Projects and Activities</b> | <ul style="list-style-type: none"> <li>Coordination efforts continue with IDS Consultants, Engineering and WEROC staff, regarding building improvements, seismic retrofits, electrical upgrades, IT Server Air Conditioning unit.</li> <li>Personnel Manual updates will be presented in July.</li> <li>A CPR, First Aid and AED training class has been scheduled for June 17<sup>th</sup>.</li> <li>Mandatory Harassment Prevention training will be held on April 29 and May 7<sup>nd</sup> for all staff. Legal Counsel, Joseph Ortiz (BBK), will provide a presentation titled <i>The Respectful Workplace and Harassment Avoidance</i></li> <li>Human Resources continues research on scheduling workshops to be presented by Cal State University of Fullerton Leadership Development Program. Topics to be presented are currently being reviewed.</li> <li>An informational meeting regarding coordination of benefits will be presented by JPIA on May 2<sup>nd</sup> for employees who are eligible for retiree health benefits with the next 2+/- years.</li> <li>Staff is coordinating with Municipal Resource Group to review the District's Performance Management practices, recommend new approaches and assist in the implementation of an improved performance management process.</li> <li>Staff is assisting with review of the Administrative Code Changes regarding travel, business expense reimbursement, Finance and Investment Policy.</li> <li>Staff is reviewing and finalizing job descriptions for the Water Loss Control staff.</li> <li>Staff is coordinating with Legal Counsel on the District's Money Purchase Pension Plan and amendments to the Plan.</li> </ul> |

**INFORMATION ITEM**

May 8, 2019

**TO:** Administration & Finance Committee  
(Directors Thomas, Dick, Finnegan)

**FROM:** Robert J. Hunter, General Manager

Staff Contact: Jeff Stalvey

**SUBJECT:** Finance and IT Pending Items Report

**SUMMARY**

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The following list details the status of special projects that are in-progress or to be completed during FY 2018-19.

| Description   | % of Completion | Estimated Completion date | Status      |
|---|-----------------|---------------------------|-------------|
| <b><u>Finance</u></b>   |                 |                           |             |
| Further Implementation of WUE Landscape Programs Databases and Web Site.                    | On-going        | On-going                  | In Progress |
| 2019 W-9 collection for water rebates. Currently holding 2 rebate checks awaiting W-9 form. | On-going        | On-going                  | In Progress |
| Government Compensation in California Report 2018   | <b>100%</b>     | 04-30-19                  | Completed   |
| Preparation of documents for FY2019-20 budget process.                                      | <b>100%</b>     | 04-30-19                  | Completed   |
| RFP for Actuarial Services. We have been with Demsey Filliger for 5 years.                  | <b>0%</b>       | 05-31-19                  | Not Started |
| File and pay sales tax for items purchased with no sales tax being charged in 2018.         | <b>100%</b>     | 04-15-19                  | Completed   |

| Description   | % of Completion | Estimated Completion date | Status                       |
|---|-----------------|---------------------------|------------------------------|
| <b><u>Information Technology</u></b>                            |                 |                           |                              |
| Network security issues (hackers, viruses and spam emails)      | On-going        | On-going                  | Continuous system monitoring |
| Purchase and upgrade Conference room 101 with Interactive board | <b>0%</b>       | 06-30-19                  | Not Started                  |
| Upgrade VOIP telephone phone system (Hardware and software)     | <b>100%</b>     | 04-30-19                  | Completed                    |

| Description   | % of Completion | Estimated Completion date | Status    |
|---|-----------------|---------------------------|-----------|
| <b><u>FY 2018-19 Completed Special Tasks</u></b>  |                 |                           |           |
| <b><u>Finance</u></b>   |                 |                           |           |
| Pulled 83 W-9's to respond to an IRS penalty notice for 2016 1099 filings. Legal counsel responded. IRS waived the penalty. | <b>100%</b>     | 02-28-19                  | Completed |
| <b><u>Information Technology</u></b>  |                 |                           |           |
| Purchase and upgrade Virtual Hyper-V Host Server (Hardware and Software)  | <b>100%</b>     | 12-31-18                  | Completed |



## INFORMATION ITEM

May 6, 2019

**TO:** Administration & Finance Committee  
(Directors Thomas, Osborne, Finnegan)

**FROM:** Robert Hunter, General Manager      Staff Contact: Kevin Hostert

**SUBJECT:** Monthly Water Usage Data, Imported Water Projections, and Water Supply Info.

**STAFF RECOMMENDATION**

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Staff recommends the Administration & Finance Committee receive and file this information.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**REPORT**

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The attached figures show the recent trend of water consumption in Orange County (OC), an estimate of Imported Water Sales for MWD OC, and selected water supply information.

- OC Water Usage, Monthly by Supply **OCWD Groundwater was the main supply in March.**
- OC Water Usage, Monthly, Comparison to Previous Years Water usage in **Marc 2019 was below average compared to the last 5 years.** We are continuing to see slight decreases in overall water usage compared to FY 2017-18. It has been 25 months since all mandatory water restrictions were lifted by the California State Water Resources Control Board.
- Historical OC Water Consumption Orange County M & I water consumption is projected to be **534,000 AF in FY 2018-19** (this includes ~15 TAF of agricultural usage and non-retail water agency usage). This is about **6,000 AF less than FY 2017-18** and is about **15,000 AF more than FY 2016-17**. Water usage per person is projected to be slightly higher in **FY 2018-19 for Orange County at 147 gallons per day** (This includes recycled water). Although OC population has increased 20% over the past two decades, water usage has not increased, on average. A long-

|  |                      |               |                  |
|--|----------------------|---------------|------------------|
| Budgeted (Y/N): N                      | Budgeted amount: N/A | Core <u>X</u> | Choice <u>  </u> |
| Action item amount: N/A                | Line item:           |               |                  |
| Fiscal Impact (explain if unbudgeted): |                      |               |                  |

term decrease in per-capita water usage is attributed mostly to Water Use Efficiency (water conservation) efforts. ***O.C. Water Usage for the last three Fiscal Years is the lowest since the 1982-83 Fiscal Year*** (FY 1982-83 was the third wettest year on record).

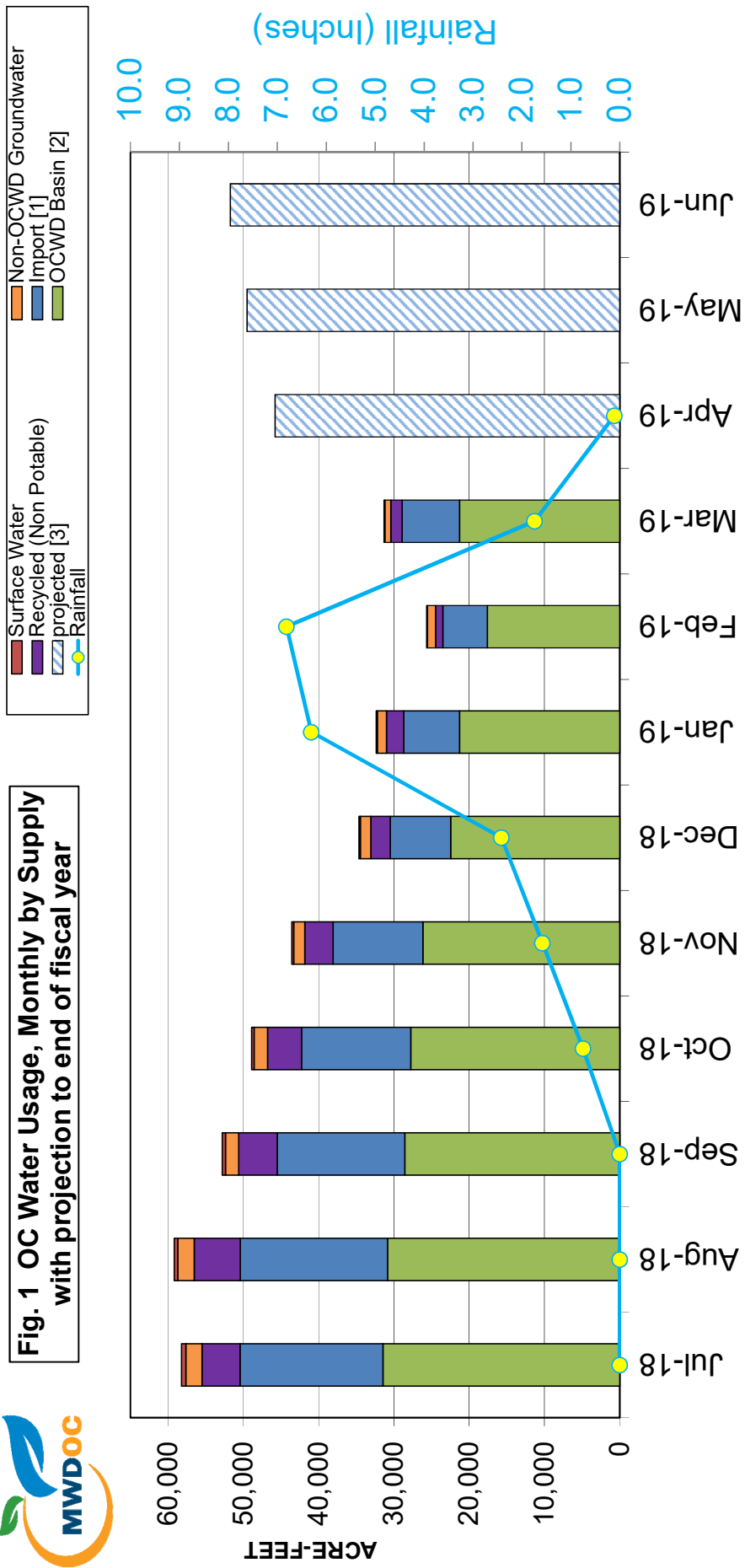
Water Supply Information Includes data on Rainfall in OC; the OCWD Basin overdraft; Northern California and Colorado River Basin hydrologic data; the State Water Project (SWP) Allocation, and regional storage volumes. The data have implications for the magnitude of supplies from the three watersheds that are the principal sources of water for OC. Note that a hydrologic year is Oct. 1<sup>st</sup> through Sept. 30<sup>th</sup>.

- Orange County's accumulated rainfall through ***late April*** was above average for this period. Water year to date rainfall in Orange County is ***19.71 inches***, which is ***159% of normal***.
- Northern California accumulated precipitation through ***late April*** was ***134% of normal for this period***. Water Year 2018 was 82% of normal while water year 2017 was 187% of normal. The ***Northern California snowpack*** was ***172% of normal*** as of April 1<sup>st</sup>. ***As of late April, 0.00%*** of California is experiencing ***moderate drought conditions*** while 5.97% of the state is experiencing abnormally dry conditions. The State Water Project Contractors Table A Allocation was increased to 70% in March 2019.
- Colorado River Basin accumulated precipitation through ***late April*** was ***115% of normal*** for this period. The ***Upper Colorado Basin snowpack*** was ***128% of normal*** as of April 15<sup>th</sup>. ***Lake Mead and Lake Powell*** combined have about ***58% of their average storage volume*** for this time of year and are at ***39.7% of their total capacity***. If Lake Mead's ***level falls below a "trigger" limit 1,075 ft. at the end of a calendar year***, then a shortage will be declared by the US Bureau of Reclamation (USBR), impacting Colorado River water deliveries to the Lower Basin states. As of late March, Lake Mead levels were ***14.01' above the "trigger" limit***. The USBR predicts that the start of 2019 will not hit the "trigger" level but there is ***a 69% chance that the trigger level will be hit in 2020 and a 82% chance in 2021 (As of April 1<sup>st</sup> 2019, Reclamation has not updated their projections following the recent storm activity)***.





**Fig. 1 OC Water Usage, Monthly by Supply  
with projection to end of fiscal year**



[1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water, "Barrier Replenishment" deliveries, and deliveries into Irvine Lake.

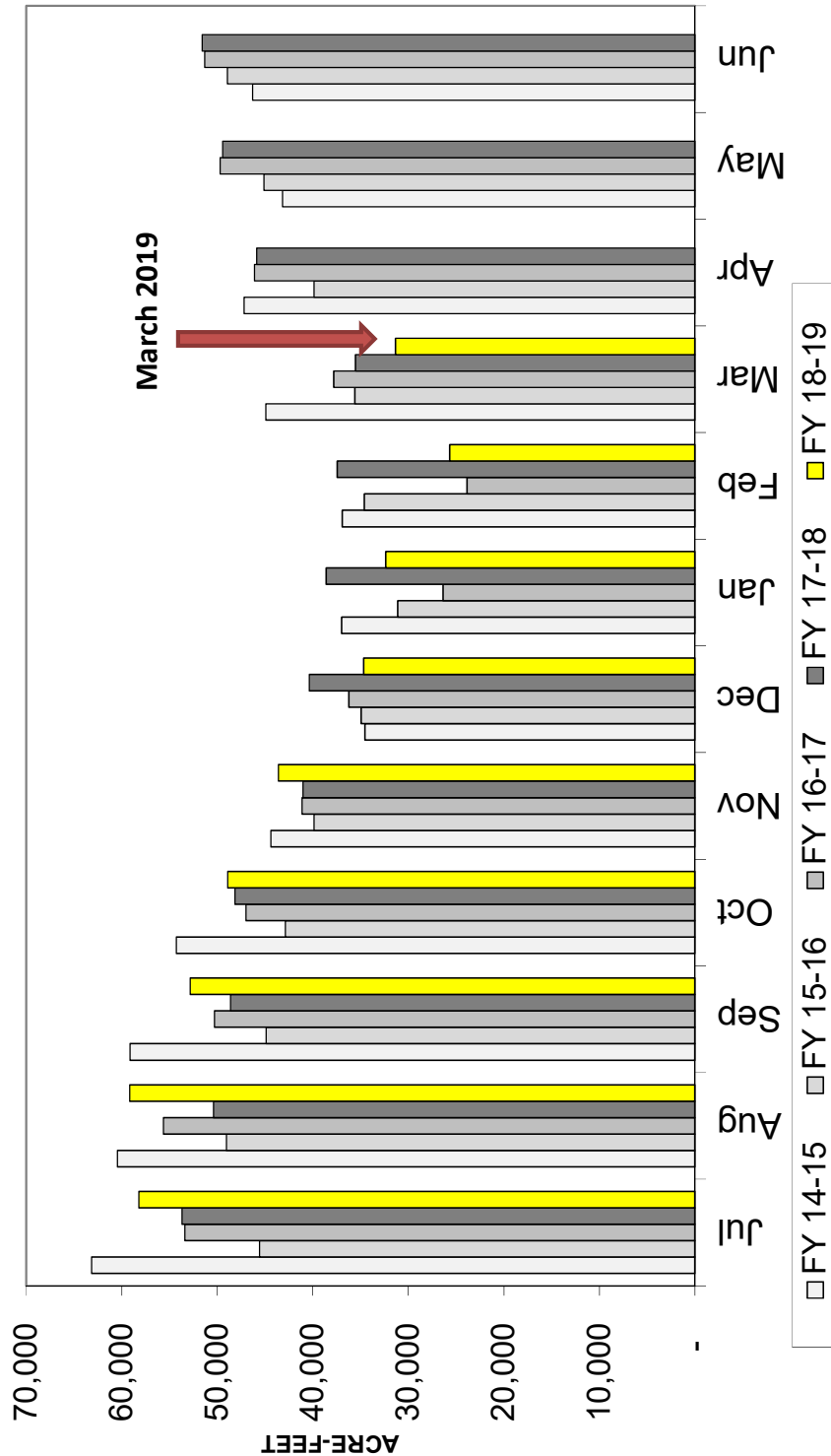
[2] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '17-18 is 75%.

[3] MWDOC's estimate of monthly demand is based on the projected FY 15-16 "Retail" water demand and historical monthly demand patterns.

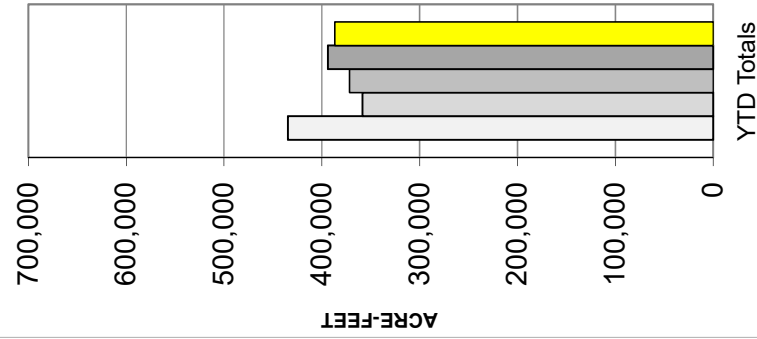
[4] Total water usage includes IRWD groundwater agricultural use and usage by non-retail water agencies.



**Fig. 2 OC Monthly Water Usage [1]: Comparison to Last 4 Fiscal Years**

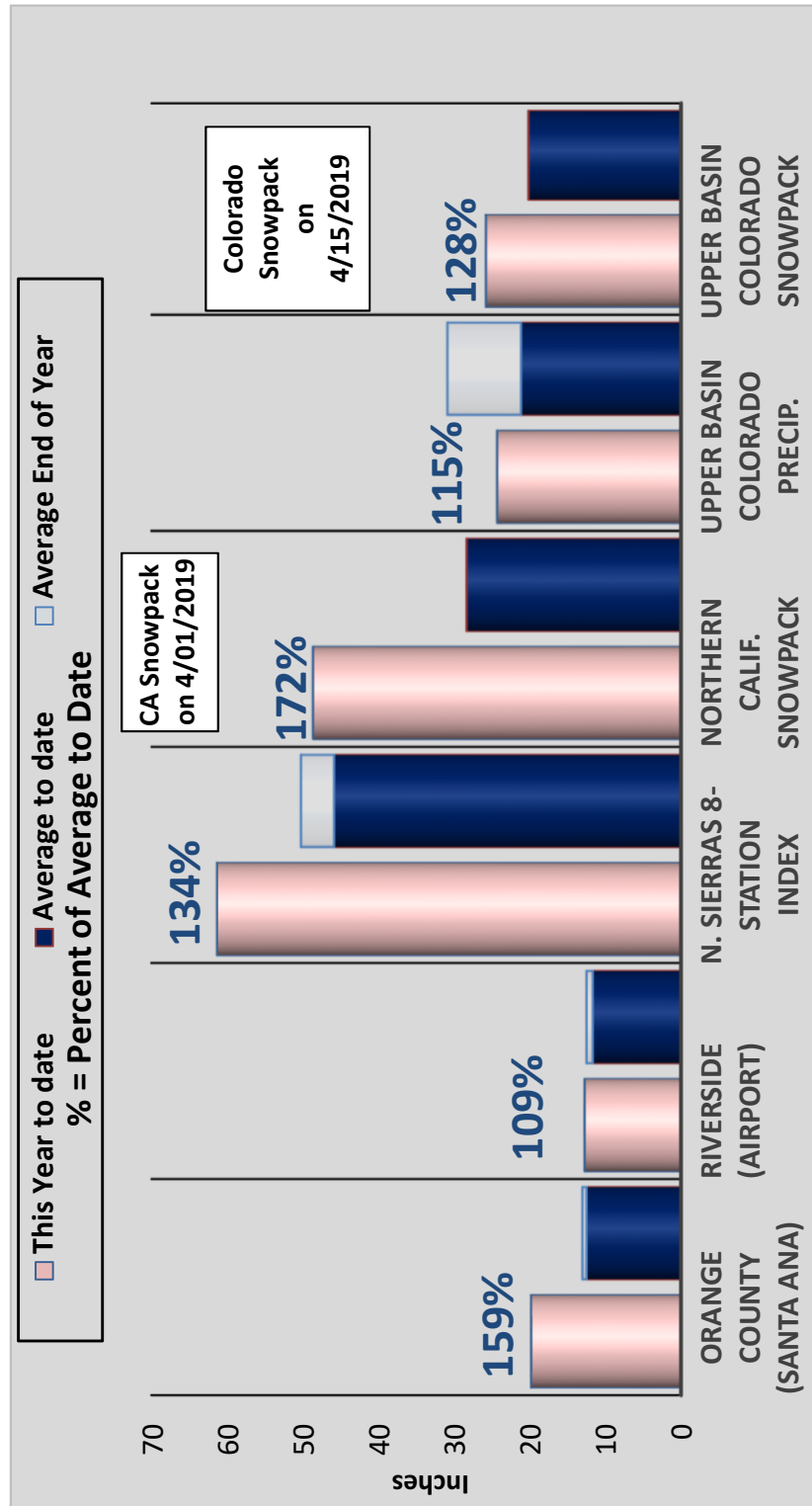


**Partial Year Subtotals**



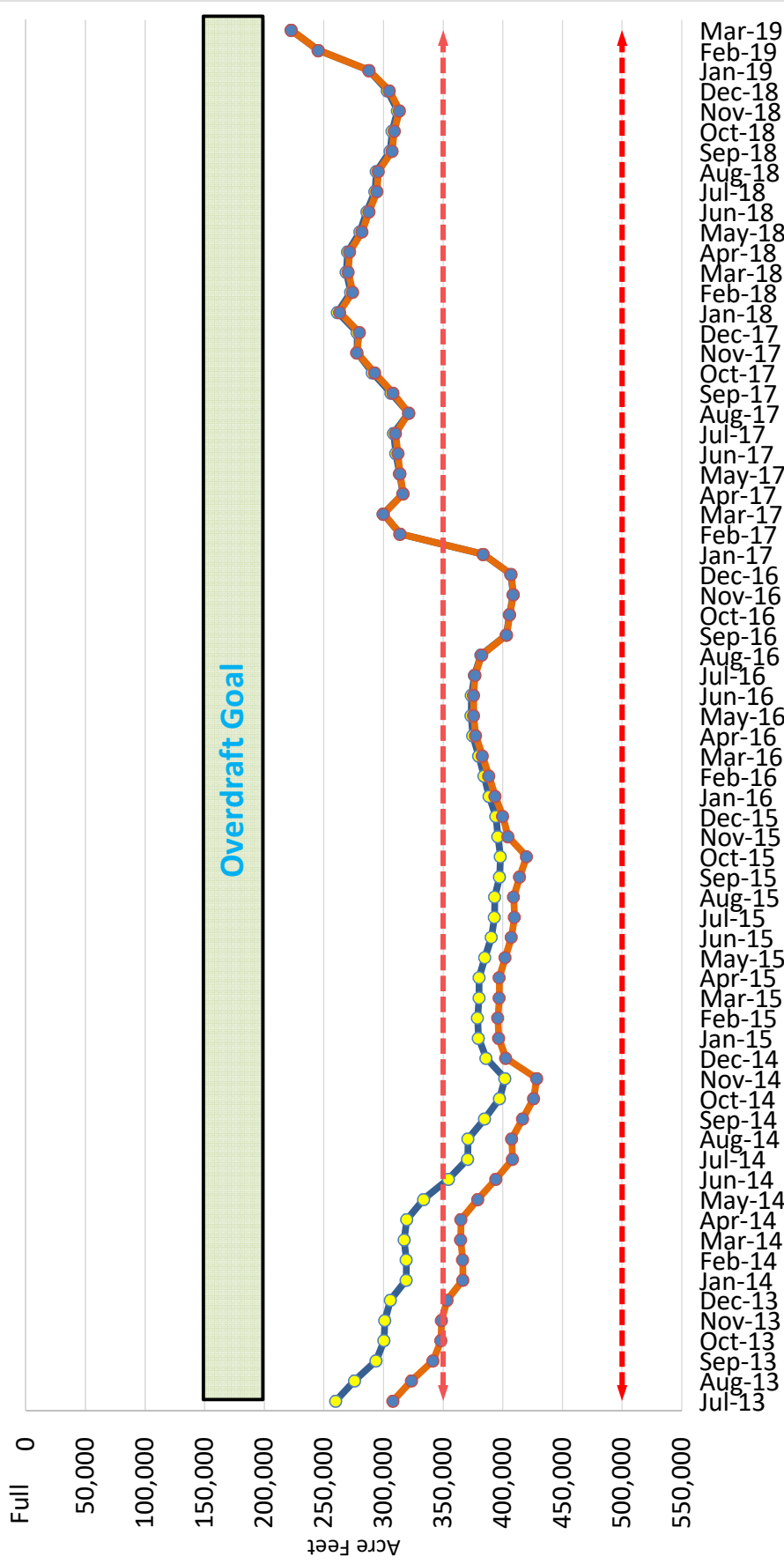
[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water and excludes GWRS production) Recent months numbers include some estimation.

# Accumulated Precipitation for the Oct.-Sep. water year, through Late April 2019



\* The date of maximum snowpack accumulation (April 1st in Northern Calif. , April 15th in the Upper Colorado Basin) is used for year to year comparison.

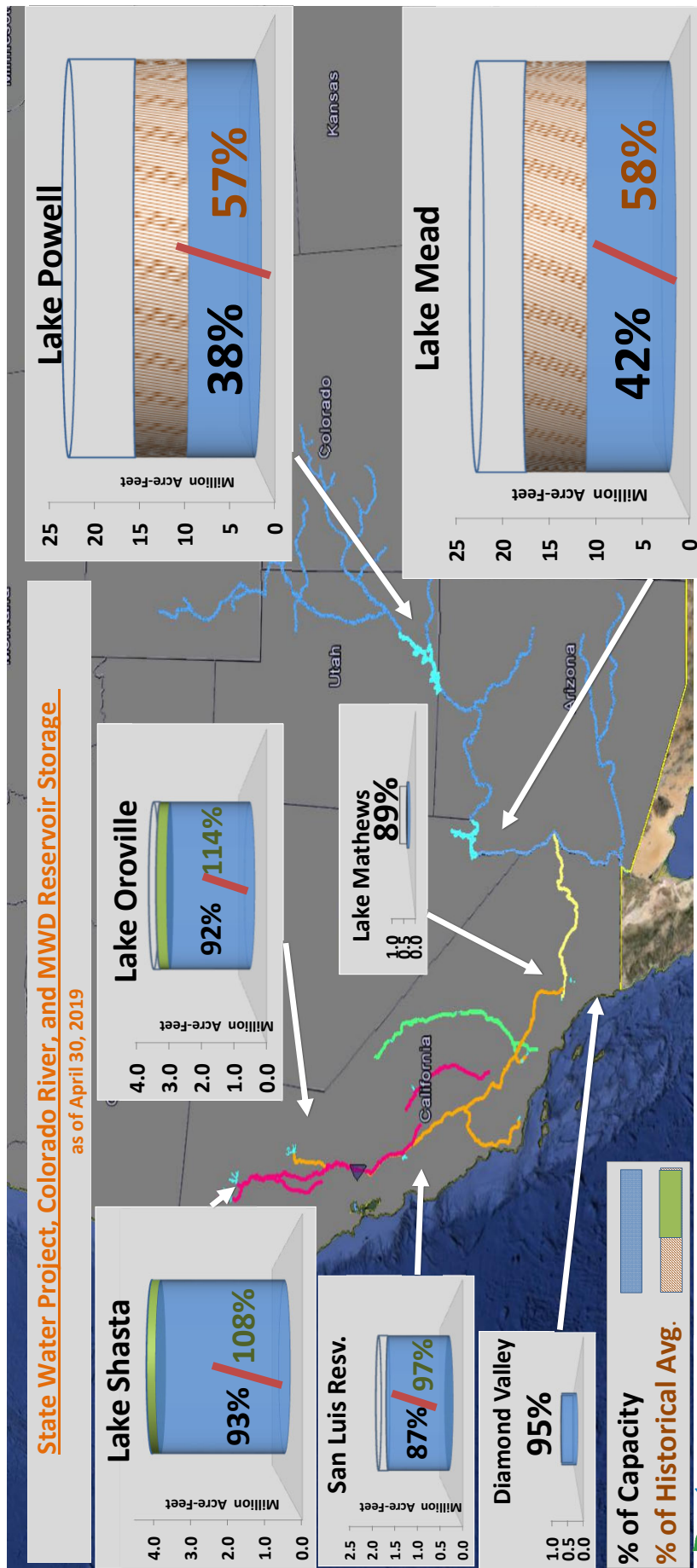
# **Accumulated Overdraft of the OCWD Groundwater Basin as of March 2019**



|                       | Jul-17  | Aug-17  | Sep-17  | Oct-17  | Nov-17  | Dec-17  | Jan-18  | Feb-18  | Mar-18  | Apr-18  | May-18  | Jun-18  |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| AO (AF)               | 308,488 | 321,131 | 306,280 | 290,800 | 277,691 | 278,056 | 261,521 | 272,475 | 268,752 | 269,889 | 280,329 | 286,163 |
| AO w/CUP removed (AF) | 310,216 | 321,131 | 308,007 | 292,522 | 277,691 | 279,776 | 263,237 | 274,188 | 270,463 | 271,601 | 282,041 | 287,869 |
| AO (AF)               | 292,869 | 294,090 | 305,572 | 307,374 | 311,765 | 303,249 | 287,800 | 245,452 | 222,625 |         |         |         |
| AO w/CUP removed (AF) | 294,572 | 295,790 | 307,271 | 309,072 | 313,460 | 304,943 | 287,800 | 245,452 | 222,625 |         |         |         |



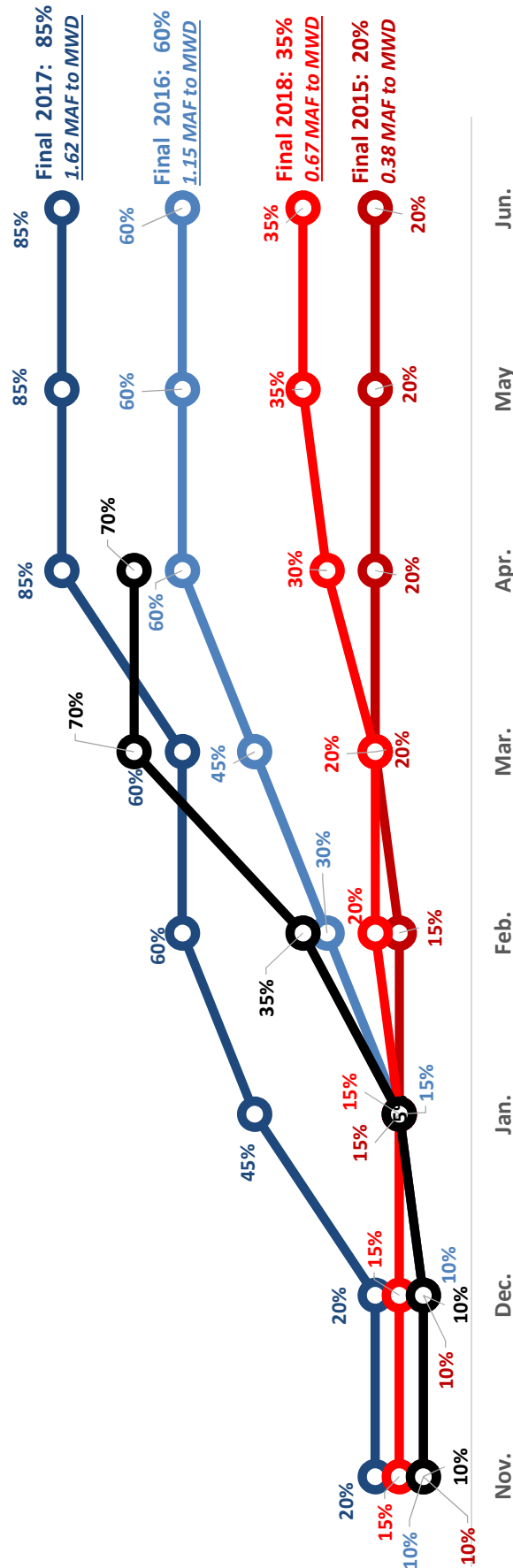
**State Water Project, Colorado River, and MWD Reservoir Storage**  
as of April 30, 2019



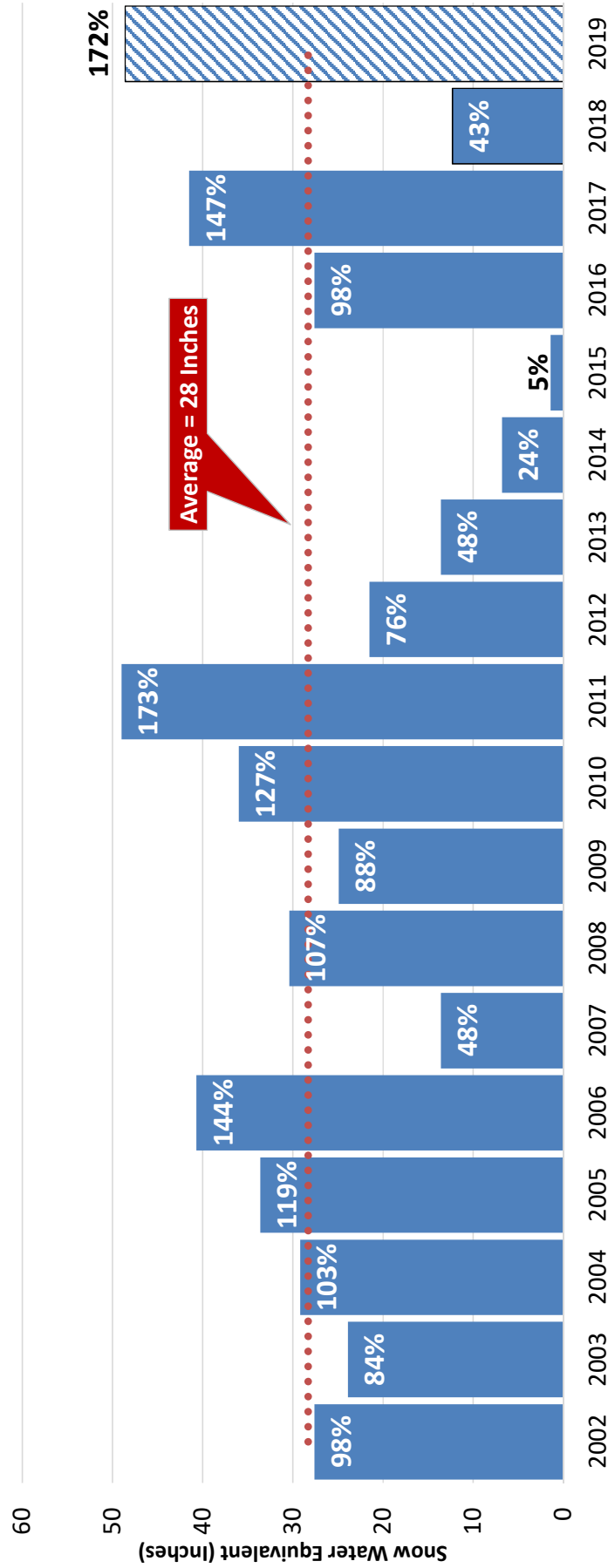
## SWP TABLE A ALLOCATION

FOR STATE WATER PROJECT CONTRACTORS

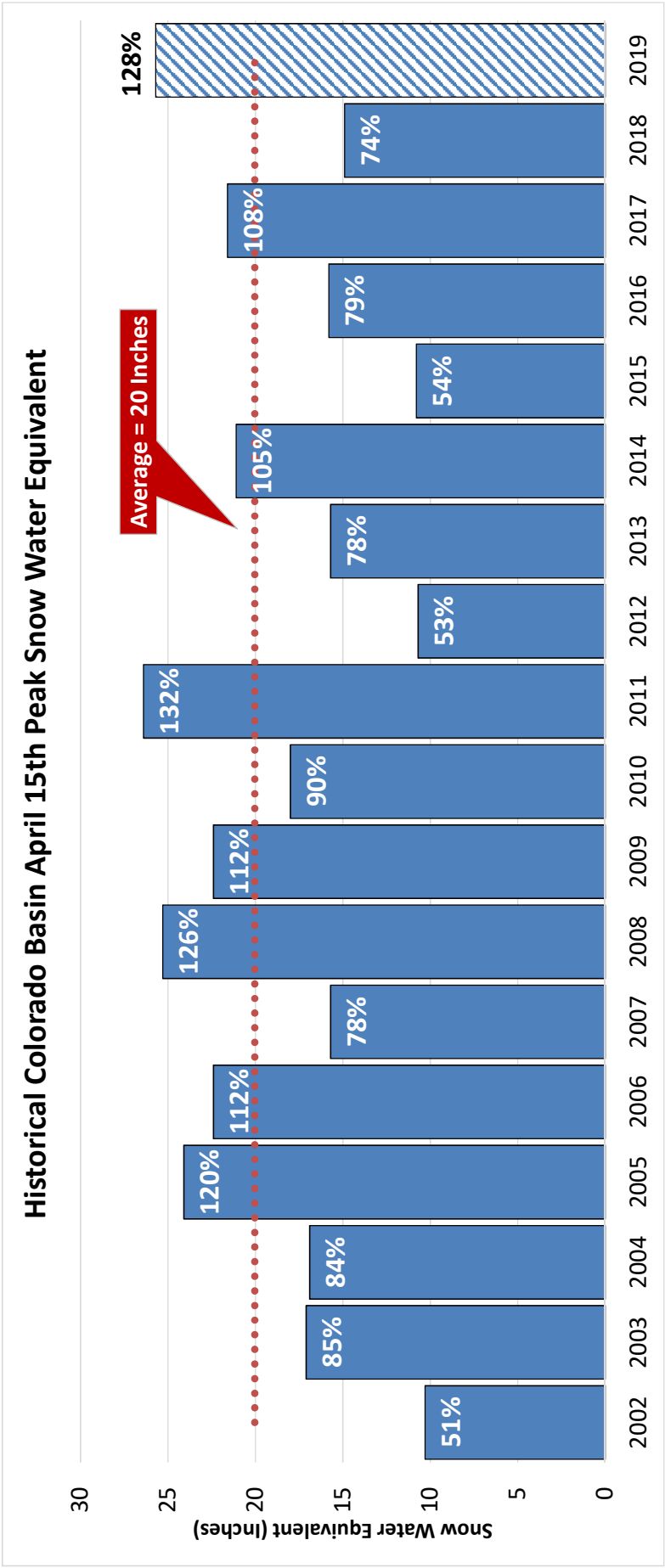
Final 2019: ???



# Historical Northern California April 1st Peak Snow Water Equivalent



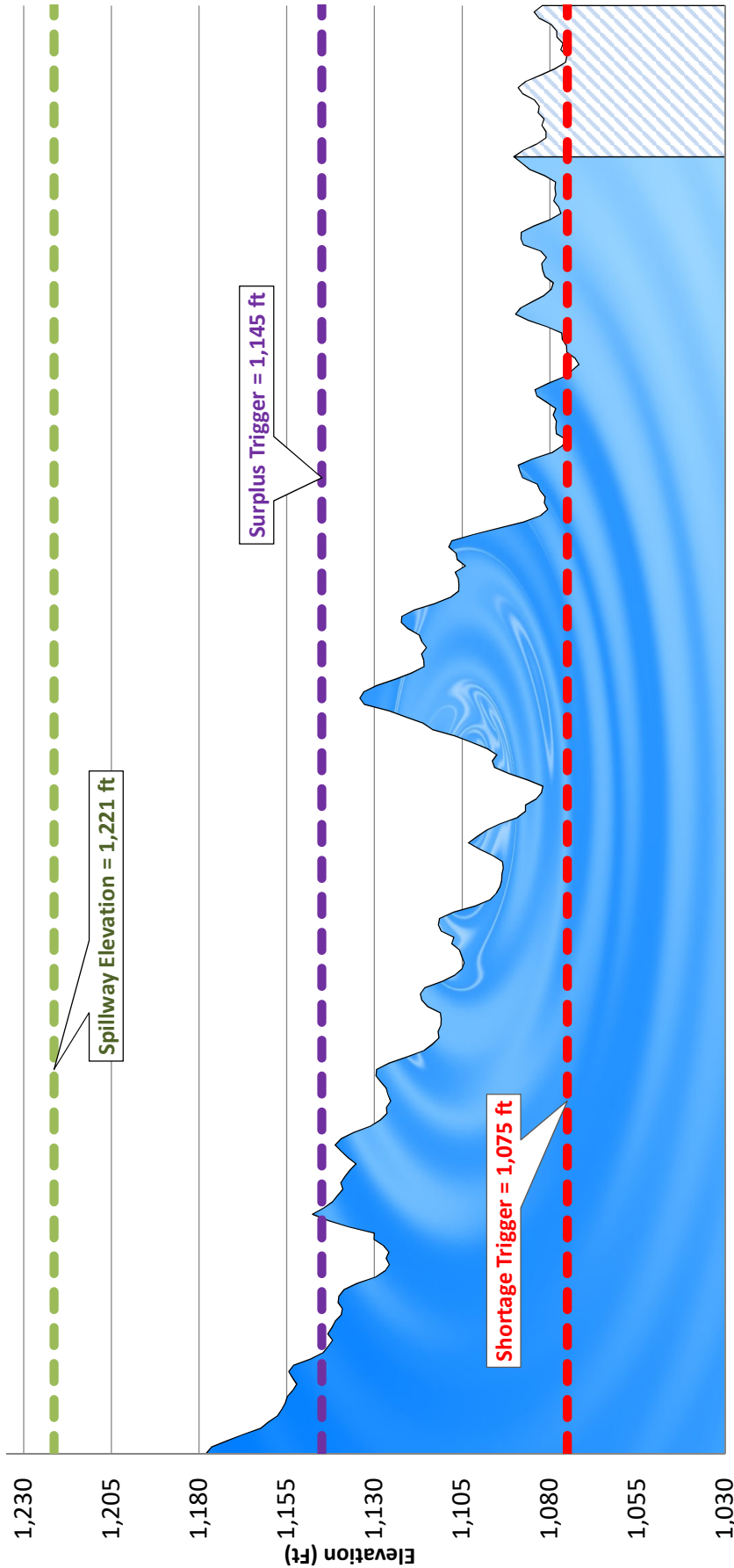




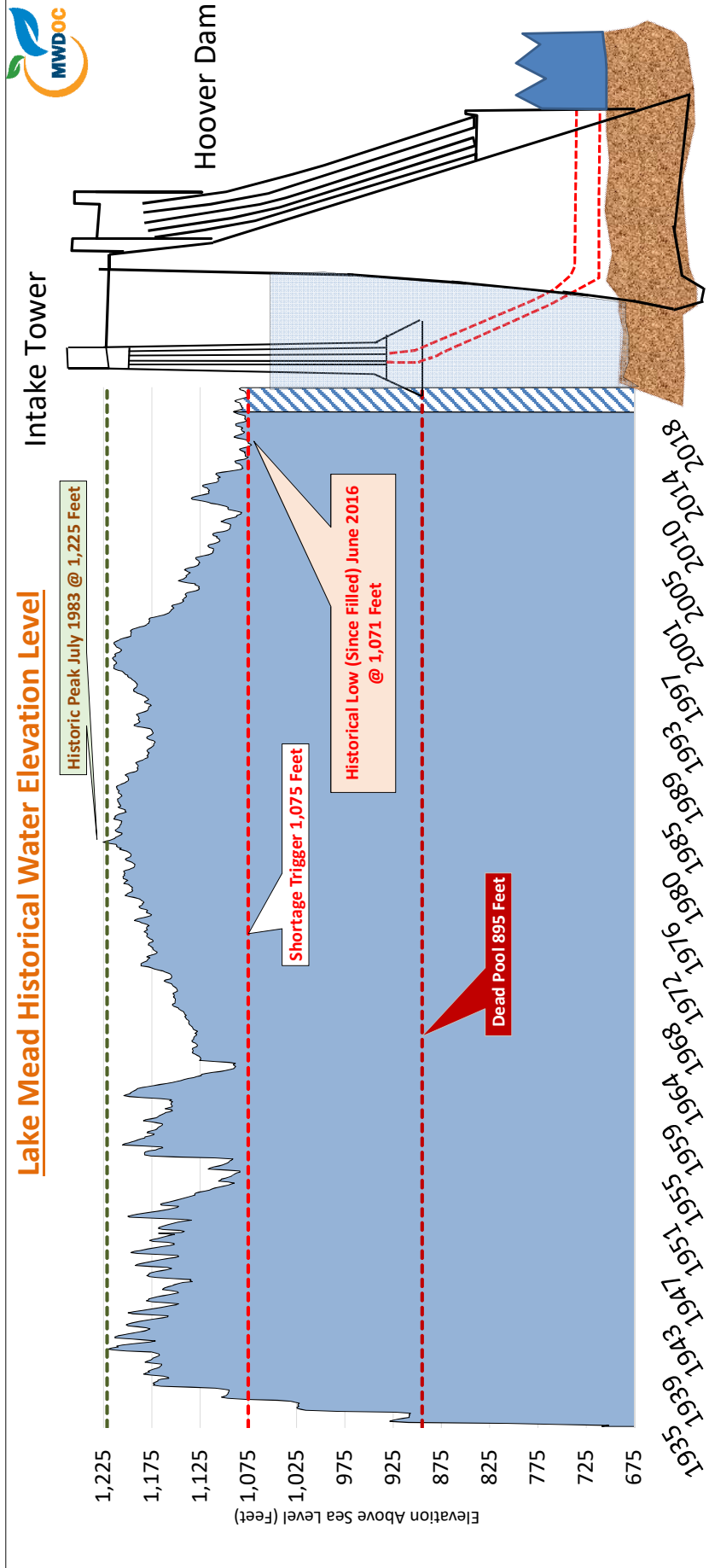


# Lake Mead Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical    □ Projected



Jan 02 Jan 03 Jan 04 Jan 05 Jan 06 Jan 07 Jan 08 Jan 09 Jan 10 Jan 11 Jan 12 Jan 13 Jan 14 Jan 15 Jan 16 Jan 17 Jan 18 Jan 19 Jan 20 Jan 21





# Lake Powell Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical    □ Projected

