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The Water Authority and its member agencies deliver the water that fuels our economy and quality of life.
NOTICE TO THE PUBLIC

BOARD OF DIRECTORS’ AND STANDING COMMITTEES’
REGULAR MEETING
DECEMBER 6, 2018
BOARD ROOM
WATER AUTHORITY HEADQUARTERS BUILDING
4677 OVERLAND AVENUE, SAN DIEGO, CALIFORNIA

1. **UNIFIED AGENDA:** This unified agenda provides a brief description of each item to be considered by the Board and its Administrative and Finance, Engineering and Operations, Imported Water, Legislation and Public Outreach, and Water Planning Committees. For convenience, the agenda for each of the Committees and for the formal Board meeting are stated separately; however, all agendas shall be considered as a single agenda and any item listed on the agenda of any Committee may be acted upon by the Board. All items on the agenda of any Committee, including information items, may be deliberated and become subject to action by the Board.

2. **DOCUMENTS:** Staff reports and any other public information provided to the Board or Committee before the meeting relating to items on the agenda are available for public review at the San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123 during normal business hours. Additional documents may be distributed at the meeting. Copies of individual items, including the background information, are available through the Clerk of the Board at (858) 522-6614.

3. **MEETING TIMES:** The morning session of Standing Committees will commence at 9:00 a.m. on December 6, 2018 the afternoon session of Standing Committees may commence at the conclusion of the morning session and earlier than 1:00 p.m. Please see the meeting schedule. The meeting of the full Board may begin as early as 2:30 p.m. or as soon thereafter as the last Committee meeting is completed.

4. **ACTION AT COMMITTEE MEETINGS:** Committee meetings are also noticed as meetings of the Board because a quorum of the Board may be present. Members of the Board who are not members of the Committee may participate in the meeting, but only members of the Committee may make, second or vote on any motion or other action of the Committee unless the Board determines to convene for consideration of action on an item or items on the Committee agenda. Items receiving substantive review by a standing committee are generally included on the Consent Calendar for action at the meeting of full Board. Persons interested in an item and wishing to hear the staff report, present oral or written comments, and hear the deliberations should attend the Committee meeting. Closed Sessions also occur at Committee meetings and may not be repeated at the formal Board meeting.

5. **CONSENT CALENDAR:** The agenda contains items listed on a consent calendar which is for matters considered routine or otherwise not requiring further deliberation. A committee or the Board will take action as recommended by one motion. There will be no individual discussion on such items prior to the vote unless an item is removed for discussion. If a member of the public
wishes to talk about a consent calendar item, please notify the Chair before the calendar is called. Persons who wish to be heard on an item are encouraged to speak before the assigned committee.

6. **PUBLIC HEARINGS**: It is not necessary to notify the Chair if a member of the public wishes to speak on items listed on the agenda as public hearings. Public hearings will begin at the time stated in the notice, or as soon thereafter as the matter can be heard. When the Chair opens the hearing, upon invitation of the Chair, step to the podium and begin by giving your name and address for the record. Each speaker has 3 minutes to address the Board.

7. **PUBLIC COMMENT ON MATTERS NOT ON THE AGENDA**: The agenda provides an opportunity for members of the public to address the Committees and Board on matters of interest within the jurisdiction of the Committee or Board that are not listed on the agenda. The Brown Act does not allow any discussion or action by the Board or staff on matters raised during public comment except: 1) to briefly respond to statements made or questions posed; 2) ask a question for clarification; 3) receive and file the matter; 4) if it is within staff's authority, refer it to them for a reply; or, 5) direct that it be placed on a future board agenda for a report or action.

A reasonable amount of time will be allocated by the Chair for public comment. Persons wishing to speak should notify the Chair before the meeting by filling out a "Speaker Request Form" and give it to the secretary. Individual speakers are requested to be as brief as possible and are encouraged to address the appropriate committee who is best able to respond. When the Chair calls, please immediately step to the podium and begin by giving your name and address for the record. Each speaker has 3 minutes to address the Board.

8. **PUBLIC COMMENT ON AGENDA ITEMS**: Persons wishing to speak to an item that is listed on the agenda should notify the Chair before the meeting by filling out a speaker request form and giving it to the secretary. Step to the lectern when asked to do so by the Chair and begin by giving your name and address for the record. Remarks should be limited to three minutes.

9. **INFORMATION ITEMS**: Items are listed on the agenda as information based on staff's judgment. Circumstances or the committee's or Board's judgments may require deliberation or, if necessary, action on these items. Any member of the public with an interest in one of these items should review the background material and request information on the possible action that could be taken.

10. **ASSISTANCE FOR THE DISABLED**: If you are disabled in any way and need accommodation to participate in the Board meeting, please call the Clerk of the Board at (858) 522-6614 for assistance at least three (3) working days prior to the meeting so the necessary arrangements can be made.

11. **RULES GOVERNING MEETINGS**: The Water Authority’s Administrative Code Chapter 2.00 governs conduct of meetings of the Board and the Committees. The Administrative Code is available on line at [www.sdcwa.org](http://www.sdcwa.org) or at the Water Authority Headquarters.
# MEETING SCHEDULE

DECEMBER 6, 2018

## MORNING SESSION
- Engineering & Operations Committee
- Water Planning Committee
- Administrative & Finance Committee

Estimated meeting times:
- Engineering & Operations Committee: 9:00 – 9:55 a.m.
- Water Planning Committee: 10:00 – 10:55 a.m.
- Administrative & Finance Committee: 11:00 – 11:55 a.m.

## LUNCHEON FOR DIRECTORS
- 12:00 p.m. to 1:00 p.m.

## AFTERNOON SESSION
- Imported Water Committee
- Legislation & Public Outreach Committee

Estimated meeting times:
- Imported Water Committee: 1:00 – 2:00 p.m.
- Legislation & Public Outreach Committee: 2:05 – 2:55 p.m.

## FORMAL BOARD MEETING
- 2:30 p.m.

*Time estimates are for convenience only and do not constitute part of the schedule. The first morning session will commence at 9:00 a.m., and the following morning sessions may start at any time after 9:00 a.m. The first afternoon session will commence at 1:00 p.m., and the following afternoon sessions may start at any time after 1:00 p.m. The Board meeting will start no earlier than 2:30 p.m., or following the conclusion of the last committee meeting.*
ENGINEERING AND OPERATIONS COMMITTEE

AGENDA FOR

DECEMBER 6, 2018

Tony Heinrichs – Chair     Michael Hogan
Frank Hilliker – Vice Chair     Mel Katz
Marty Miller – Vice Chair     Ron Morrison
Jack Bebee     Jose Preciado
Brian Boyle     John Simpson
Jerry Butkiewicz     Tim Smith
Lois Fong-Sakai     Ron Watkins


2. Additions to Agenda (Government Code Section 54954.2(b)).

3. Public Comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

   4-B Directors’ comments.

I. CONSENT CALENDAR

1. Amendment 3 to the services contract with Baker Electric, Inc., for electrical preventative maintenance, inspection, testing, and repair services.
   Staff recommendation: Authorize the General Manager to approve Amendment 3 with Baker Electric, Inc., for $400,000 to provide additional electrical preventative maintenance, inspection, testing, and repair services, increasing the contract amount from $965,000 to $1,365,000. (Action)

II. ACTION/DISCUSSION/PRESENTATION

Staff recommendation: Authorize the General Manager to award a construction contract to Kiewit Infrastructure West, Inc., in the amount of $30,400,000 for the Northern First Aqueduct Structures and Lining Rehabilitation Project. (Action)


3. Oroville Dam Main Flood Control and Emergency Spillway Repair Update. (Presentation) Jerry Reed

III. INFORMATION

IV. CLOSED SESSION

V. ADJOURNMENT Melinda Nelson

Clerk of the Board

NOTE: This meeting is called as an Engineering & Operations Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
November 28, 2018

Attention: Engineering and Operations Committee


Purpose
This information item provides a final report on the Engineering and Operations Committee Work Plan for calendar years 2017 and 2018.

Background

Discussion
The Engineering and Operations Committee is responsible for matters of design, construction, replacement, maintenance and operation of the Water Authority’s facilities, property and equipment, including: administration of the Capital Improvement Program; administration of the Aqueduct Protection Program; right of way acquisition and management; system and facility security; water quality; other matters relating to facility operations.

The attached final report lists the Engineering and Operations Committee Work Plan items for calendar years 2017 and 2018 and summarizes the activities taken towards achieving the work plan. The work plan was prepared under the direction of the Engineering and Operations Committee Chair and Vice Chairs.

Prepared by: Jerry Reed, Director of Engineering
Jim Fisher, Director of Operations and Maintenance
Reviewed by: Tony Heinrichs, Chair, Engineering and Operations Committee

Attachments:

Attachment 1 – Final Report on the Engineering and Operations Committee Work Plan
Final Report on the Engineering and Operations Committee Work Plan for Calendar Years 2017 and 2018

1. **Nob Hill Improvements Project**
   Provide oversight to complete construction of the Nob Hill Improvements project. (April 2017 – Infrastructure/Capital Improvement Program Objective 1*)
   
   **Activities**
   This work plan item is complete. Notice of Completion was filed on July 13, 2017.

2. **Miramar Pump Station Rehabilitation Project**
   Provide oversight to complete construction of the Miramar Pump Station Rehabilitation project. (June 2017 – Infrastructure/Capital Improvement Program Objective 3*)
   
   **Activities**
   This work plan item is complete. Notice of Completion was filed on May 03, 2017.

3. **Facility Security Assessments and Implementation**
   Provide oversight of efforts required to perform physical security assessments and develop improvement plans for critical facilities for continued water system protection against potential threats. (June 2017 – Water System Management Goal Objective 2*)
   
   **Activities**
   This work plan item is complete. Physical security assessments were completed for critical Water Authority facilities. Based on assessment results, a prioritized project improvement plan was developed for implementation.

4. **Pipeline 4 Relining Lake Murray Interconnect to Alvarado Project**
   Provide oversight to complete construction of the Pipeline 4 Relining Lake Murray Interconnect to Alvarado project. (August 2017 – Infrastructure/Capital Improvement Program Objective 13*)
   
   **Activities**
   This work plan item is complete. Notice of Completion was filed on May 31, 2017.

5. **Administrative Code Revisions**
   Consider approval of Administrative Code additions for decommissioning Service Connections to reduce risk and maintenance costs. (December 2017 – Infrastructure/Capital Improvement Program Objective 5)
   
   **Activities**
   The intent of this work plan item is complete. After further analysis, it has been determined that no changes are needed to the Administrative Code. Staff will continue to

*Item(s) related to the 2017-2021 Business Plan.
notify impacted Member Agencies and work on decommissioning Service Connections based on each specific situation. In the future, new Service Connection agreements will include decommissioning for the old Service Connection(s).

6. **Carlsbad 6 Flow Control Facility Project**  
Provide oversight to complete construction of the Carlsbad 6 Flow Control Facility project. (June 2018)

**Activities**  
This work plan item is complete. Notice of Completion was filed on April 26, 2018.

7. **Predictive Maintenance**  
Provide oversight for developing a plan to evolve from standard preventative maintenance to agile predictive maintenance, using Asset Management data to revise maintenance schedules and practices in order to increase productivity and efficiency. (June 2018 –Infrastructure/Capital Improvement Program Objective 6)

**Activities**  
Due to staff retirement and other priorities, progress has been delayed. Staff is reevaluating resource allocation and will reprioritize this work for the next two years.

8. **Pipeline 3 Relining Lake Murray to Sweetwater Reservoir Project**  
Provide oversight to complete construction of the Pipeline 3 Relining Lake Murray to Sweetwater Reservoir project. (December 2018)

**Activities**  
This work plan item is complete. Notice of Completion was filed on October 3, 2018.

9. **Compliance with Water Purchase Agreement**  
Provide oversight for operation of the treated water system to achieve minimum annual desalinated water delivery of 48,000 acre feet/year per the Water Purchase Agreement. (June 2018)

**Activities**  
This work plan item was met for fiscal year 2018. Operation of the aqueduct system required coordination with Twin Oaks Treatment Plant and MWD’s Skinner Treatment Plant, adjusting flows accordingly to meet the annual volume required. Actual fiscal year 2018 demand request was 51,772 acre feet.

10. **Lake Hodges Hydroelectric Facility**  
Provide oversight to achieve 97 percent uptime and produce $2.8 million in revenue at the Lake Hodges Hydroelectric Facility in fiscal years 2018 and 2019. (June 2018)
Activities
The Lake Hodges Hydroelectric Facility achieved 98.4 percent uptime and generated $3.05 million in revenue in FY18. Fiscal Year 2019-to-date, the Facility has achieved 98.4 percent uptime and generated $1,142,537 in revenue, and is on track to meet these goals.

11. Rancho Peñasquitos Hydroelectric Facility
Provide oversight to maximize hydroelectric energy revenue at the Rancho Peñasquitos Hydroelectric Facility. (June 2018)

Activities
The Rancho Peñasquitos Hydroelectric Facility generated $348,180 in revenue in FY18, exceeding the annual revenue goal of $316,000. FY19 to-date, the Facility has generated $656,704 in revenue, which has exceeded the annual revenue goal of $316,000.

12. Security Upgrades
Provide oversight of efforts to perform security upgrades of surveillance cameras at new and existing/upgraded facilities to ensure security of Water Authority assets and operations. (December 2018)

Activities
This work plan item is complete. Security upgrades have been completed at three critical facilities.

13. Energy
Consider Energy Task Force recommendations related to issues that impact Water Authority operations. (December 2018)

Activities
Operations and Maintenance continues to work with the Energy Program to investigate, and, where feasible, implement projects that reduce energy bills or produce power.
November 28, 2018

Attention: Engineering and Operations Committee

Amendment 3 to the services contract with Baker Electric, Inc. for electrical preventative maintenance, inspection, testing, and repair services. (Action)

Staff recommendation
Authorize the General Manager to approve Amendment 3 with Baker Electric, Inc. for $400,000 to provide additional electrical preventative maintenance, inspection, testing, and repair services, increasing the contract amount from $965,000 to $1,365,000.

Alternative
Direct staff to initiate a new Request for Proposals for electrical preventative maintenance, inspection, testing, and repair services. Water Authority may need to amend the existing contract to add sufficient funds to last through RFP advertisement and contract award.

Fiscal impact
Funds are available for this contract through June 30, 2019 within the fiscal years 2018 and 2019 Operating Budget. Funds for the remaining term of the contract will be requested in the fiscal years 2020 and 2021 Operating Budget and are contingent upon Board approval. The rate category for this project is Transportation.

Executive Summary
- Water Authority requires electrical preventative maintenance, inspection, testing, and repair services at its critical facilities.
- The current contract with Baker Electric, Inc. was competitively solicited through a Request for Proposal procurement process in Fiscal Year 2016.
- Additional funds are required to complete the contract’s four-year term, provide for additional repair services and for services at the Valley Center Pump Station, Miramar Pump Station and the Lake Hodges Hydroelectric Facility.
- Staff recommends authorizing the General Manager to execute Amendment 3 to the services contract with Baker Electric, Inc.
- The contract with Baker Electric, Inc. was for one year, with the option to renew for an additional three years, and expires in January 2020.

Background
The Water Authority maintains six pump stations, two hydroelectric generating facilities, and one emergency diesel powered electrical generating station. The National Electric Test Association recommends annual electrical preventative maintenance, inspection, and testing be performed on all medium and high-voltage electrical equipment to ensure safety and increased reliability. Water Authority staff would require special equipment, additional training, and additional staff hours to do this type of work. An outside service has been used to perform this specialized preventative maintenance at a lower overall cost to the Water Authority.
Discussion

In December 2015, through a competitive Request for Proposals process, Baker Electric, Inc. was selected to perform the requested services due to their technical expertise, knowledge of switchgear, past performance and a commitment to documentation. The contract with Baker Electric, Inc., was for one year, with the option to renew for an additional three years.

In February 2017, the Water Authority exercised the option to extend the contract’s term, via Amendment 1, along with adding the Valley Center and Miramar Pump Stations to the contract. Amendment 2 added the Lake Hodges Hydroelectric Pumped Storage Facility to the contract. Neither Amendment 1 or Amendment 2 included a request for a funding increase due to uncertainties in the projected electrical maintenance need of these facilities. Since that time, the Water Authority has performed maintenance and assessments to more accurately forecast maintenance costs for the facilities. In addition, the Water Authority has experienced additional as-needed switchgear inspection and repair costs at its other facilities. As a result, additional funding is required to complete the original contract’s four-year term, which is set to expire in January 2020. The Water Authority plans to initiate a new Request for Proposal process for these professional services in mid-2019, in order to replace this contract once it expires.

Baker Electric, Inc. has been performing quality work in a professional manner and is very familiar with the Water Authority’s electrical equipment and facilities. Preparing a new RFP at this time would require significant staff time and would likely result in higher prices and preventative maintenance schedule delays.

Staff’s recommendation is to authorize the General Manager to execute Amendment 3 to the professional services contract with Baker Electric, Inc. to increase the contract amount by $400,000, from $965,000 to a total not-to-exceed amount of $1,365,000.

Due to limited subcontracting opportunities for this type of service, SCOOP outreach was not required for the original contract procurement process.

Prepared by: Jesus M. Meda, Operations and Maintenance Manager
Reviewed by: James E. Fisher, Director of Operations and Maintenance
Approved by: Sandra L. Kerl., Deputy General Manager

JM/JF:mmr
November 28, 2018

Attention: Engineering and Operations Committee

Construction contract with Kiewit Infrastructure West, Inc. for the Northern First Aqueduct Structures and Lining Rehabilitation Project. (Action)

Staff recommendation
Authorize the General Manager to award a construction contract to Kiewit Infrastructure West, Inc. in the amount of $30,400,000 for the Northern First Aqueduct Structures and Lining Rehabilitation Project.

Alternative
Do not award the contract and direct staff to solicit new bids for the project. This will result in a minimum one-year delay to the rehabilitation of the First Aqueduct, delayed pipeline shutdowns, and increased project costs.

Fiscal Impact
Total funds in the amount of $30,400,000 are available in the approved lifetime project budget and the fiscal years 2018 and 2019 Capital Improvement Program appropriation. Funds remaining to be spent in fiscal years 2020 and 2021 will be dependent on Board approval. The rate category for this project is transportation.

Executive Summary
- The First Aqueduct consists of Pipelines 1 and 2 that were brought online in 1947 and 1954, respectively. Through data collection and analysis, the Asset Management Program identified sections of Pipelines 1 & 2 for rehabilitation to extend their service life. This project rehabilitates 14.5 miles of pipeline and 60 pipeline valve and access structures.
- Three bids were received on November 1, 2018 ranging in price from $27,912,254 to $31,349,550. The low bidder was found to be non-responsive due to an incomplete bid.
- Staff reviewed the second bidder, Kiewit Infrastructure West, Inc., and found that their bid of $30,400,000 was the lowest, responsive, and responsible bidder.
- Staff evaluated alternatives other than awarding the project and determined that it is more cost effective to award this project to Kiewit Infrastructure West, Inc.
- The work is expected to start in January 2019 and scheduled to be complete in spring 2021.
- The bids exceeded the construction cost estimate due to market conditions and estimate omissions. Staff will be working with Engineering and Operations Committee leadership in the spring of 2019 to develop a process for assessing current construction market conditions and developing Water Authority cost estimate adaptations and potential process changes.
Background

The First Aqueduct is comprised of Pipelines 1 and 2 that were brought online in 1947 and 1954, respectively. As part of the Asset Management Program, staff and an engineering consultant conducted a condition assessment of the steel pipelines and pipeline valve and access structures. The steel pipelines inspection identified deterioration of the original pipe lining resulting in corrosion damage. The pipe lining requires removal and replacement to prevent continued damage and extend the service life of the pipelines. The structures assessment identified rehabilitation of concrete structures to extend their service life, replacement of valves and piping that are beyond their service life, and abandonment of structures that are no longer required for aqueduct operations and maintenance. The pipe lining and structure work is required to reliably deliver water to the Water Authority’s member agencies.

The project encompasses 14.5 miles of both Pipelines 1 and 2. Figure 1 depicts the limits of work. The First Aqueduct’s three miles of steel pipe lining will be rehabilitated through 12 access portals. Staff met with the Metropolitan Water District of Southern California, the Bureau of Reclamation, and a contractor with lining rehabilitation experience to research the most efficient and cost-effective method to complete the lining rehabilitation work. This includes removing and replacing the lining from the inside to minimize excavation and community impacts. This project will also rehabilitate 60 pipeline valve and access structures north of Hubbard Hill and in the Lake Hodges area by installing new piping, valves, access hatches, and ladders. There is a subsequent project planned to address the remaining pipeline structures south of Hubbard Hill to the First Aqueduct terminus at the San Vicente Reservoir.

The pipeline lining and structure work requires sections of the aqueduct to be temporarily taken out of service. These sections serve ten flow control facilities that deliver water to the member agencies. Six of the ten facilities require interconnections to be installed to either Pipeline 1 or 2 to maintain service during the aqueduct shutdowns. This work was strategically designed to minimize costs by allowing construction to occur during extended aqueduct shutdowns, minimizing overtime and contractor risk of completing the work.

Discussion

Staff provided the Board a project information item in June 2018 that identified a construction cost estimate range of $12 million to $14 million. Staff subsequently revised the construction cost estimate range to $19 million to $23 million to account for cost estimate omissions and changes in market conditions discovered during recent construction bid results in the region. Cost estimate omissions included mobilization and structure rehabilitation costs. The change in market conditions included updated steel pipe lining removal subcontractor costs. Following these revisions to the cost estimate, staff advertised a Notice Inviting Bids for the project.

During the bid period, a $3 million allowance was added to the contract documents to account for potential payments to the contractor for groundwater treatment based on recent experience at a nearby Water Authority project. This increased the cost estimate for the project to $22 million to $26 million prior to the bid opening.
The Water Authority received three bids on November 1, 2018, ranging in price from $27,912,254 to $31,349,555 as shown in Attachment 1. Abbe & Svooba submitted the apparent low bid of $27,912,254 but was deemed non-responsive for submitting an incomplete bid, including leaving out bid amounts, details of plans for construction, and identification of vendors, suppliers, and service providers. Kiewit Infrastructure West, Inc (Kiewit) submitted the second low bid of $30,400,000. Staff reviewed Kiewit’s bid compared to the estimate and determined that Kiewit included all work items in its construction bid. In accordance with the contract documents, staff performed an independent review of the remaining two low bids, including items such as licensing, bonding, and references. Based on this review, Kiewit is the lowest, responsive, and responsible bidder.

SCOOP staff verified Kiewit’s good faith efforts to conduct outreach to qualified small businesses. The small business participation for this project is 14 percent. Minority and women-owned business participation is 14 percent. This information is provided for statistical purposes. Kiewit will be required to comply with the requirements of the Small Contractor Outreach and Opportunities Program.

Staff also performed an analysis to determine the difference between Kiewit’s bid and the revised construction cost estimate. Upon review of the estimate, staff found the contractor used a different cement mortar lining method compared to the method in the estimate, increasing the cost by $3 million. This method is required due to this project’s pipe size and slope, but is less efficient than the method typically used on larger pipe that was used in the estimate. Staff also found the costs for pipe and equipment exceeded the estimate by $1.4 million resulting from recent changes in market conditions.

Staff analyzed multiple project delivery options to ensure the most cost effective and balanced risk approach is taken to complete the project. The following is a summary of the options:

- **Delay project for improved market conditions:** The construction market, both regionally and nationally, is experiencing increasing costs due to the amount of work being bid, material price increases, and labor shortages. This option would place the project on hold until the market conditions trend favorably towards lower bid prices. It is unknown when this would occur, but historically the market trends in 2 to 5 year phases. A delay to the project would increase the chance of pipeline or structure failure as they will continue to degrade over time without the recommended rehabilitation and replacement work. It will also result in impacts to subsequently scheduled projects by increasing competition in later years and interrupting previously planned rehabilitations. Due to these impacts, this option is not recommended for project implementation.

- **Split project into smaller packages:** This project is comprised of three major components; structure rehabilitation, steel pipe lining rehabilitation, and flow control facility interconnections. This option would break the project into three smaller packages to attract more bidders and potentially decrease the total bid costs. The analysis of this option showed an additional $3 million in project costs from the redesign and rebidding efforts, construction management costs associated with two additional projects, and the overhead
associated with two additional contractors. Additionally, the potential bid savings may not be realized given the one-year delay to implement this option and the current upward cost trends the construction market is experiencing. With these additional costs, this option did not provide additional benefits to the project.

- **Complete project using in-house forces:** This option looked at adding Water Authority construction staff to complete the work while subcontracting for specialized tasks such as the steel pipe lining rehabilitation. This option would require the Water Authority to bear the risk of performing a large and complex construction project. Staff determined that this option did not provide cost savings and increased the risk to the agency.

- **Award to the lowest, responsive, and responsible bidder:** Based on staff’s evaluation of the bids received, the Kiewit’s bid accurately reflects the work required for the project. Compared to other options above, this is the most cost-effective and risk balanced option to complete this work.

Based on the evaluation, staff recommends the Board authorize the General Manager to award a construction contract to Kiewit in the amount of $30,400,000, for the Northern First Aqueduct Structures and Lining Rehabilitation Project. Following the recommended Board action, construction is expected to begin in January 2019 and is scheduled to be complete in spring 2021. Upon final inspection and acceptance of the work, staff will return to the Board to recommend issuance of a Notice of Completion of the construction contract.

**Changes in the Construction Environment**

Over the past six months, the Water Authority experienced increased construction costs due to market conditions such as construction labor shortages, increases in raw material prices, and the cost of manufactured goods such as pipe and equipment. The Water Authority has experienced similar market trends in the past. Beginning in 2006, the Water Authority experienced a significant increase in construction bids, mainly caused by a decrease in market competition and increase in worldwide demand for steel and cement.

In an effort to determine the impact of the high bids, a Board ad hoc committee, known as CRACA, or the Comprehensive Reliability and Cost Assessment committee, analyzed Capital Improvement Program costs and developed a preferred reliability and cost alternative for integration into the FY2008/2009 budget. Conversely, during the recession of 2008, the Water Authority began receiving lower construction bids due to better competition resulting from fewer construction projects in the market.

Based on recent changes in the market and similar to what has been accomplished historically, staff will be working with leadership of the Engineering and Operations Committee in the spring of 2019 to develop a process for reviewing the current construction environment and determine Water Authority cost estimate adaptations and potential process changes.
BID OPENING RESULTS
NORTHERN FIRST AQUEDUCT STRUCTURES & LINING
REHABILITATION PROJECT
SPECIFICATION 633

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<td>3.</td>
<td>J.F. Shea Construction, Inc.</td>
<td>$31,349,555</td>
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*Abhe & Svoboda was deemed non-responsive.
November 28, 2018

Attention: Engineering and Operations Committee

Oroville Dam Main Flood Control and Emergency Spillway Repair Update. (Presentation)

Purpose
This presentation provides an update on the Oroville Dam Spillway Repairs.

Background
On October 26, 2017, staff provided a summary and presented a video of the Oroville Spillway Repair.

Discussion
Oroville dam is part of the State Water Project and on February 7, 2017, after several winter storms, significant water was released down the main flood control spillway. At that time, severe erosion was discovered on the lower chute of the main spillway. On February 11, 2017 water cascaded down the emergency spillway causing erosion and potential failure of the concrete weir, triggering the evacuation of almost 200,000 people downstream of Lake Oroville. Fortunately, DWR was able to continue to use the main spillway and the emergency spillway did not fail. Since that time, DWR has completed forensic studies on the cause and also implemented repairs to both spillways. The cost of these repairs is now projected to be $1.1 billion. An ENR article is also attached which includes additional details about the repairs. Since we are a State Water user, staff has tracked and presented construction progress of these repairs over the last year and half at the Engineering and Operations Committee meeting. At this meeting, staff will present a video compilation inclusive of the failure and construction progress to date.

Prepared by: Jerry Reed, Director of Engineering
Approved by: Sandra L. Kerl, Deputy General Manager

Attachments:

Attachment 1 – Oroville Dam Spillway Fix
Rapid Repairs

A Race to the Finish on Oroville Dam Spillway Fix

After record rainfall in winter/spring 2017, water released from Oroville Dam tore through the main spillway chute and
Repairs include a new splash pad apron below the emergency spillway and a more robust concrete main spillway.

PHOTO COURTESY DWR
October 3, 2018

Scott Blair

The Lake Oroville spillway’s 400-acre construction site is an intense flurry of activity. In one corner, an excavator driver uses an old tire as a squeegee to clean away loose rock and prep a foundation. In the steeply sloping spillway chute, a crane operator flies in a rebar cage to workers who tie it into neighboring chute wall segments. Everywhere, dump trucks buzz around the circuitous roadways while rock crushers and batch plants keep pace with dozens of dozers and excavators. Drones hover in the sky photographing and surveying the site, while inspectors pour over every detail of the finished assets.

The scale of the task is immense. Once the spillways are complete, crews will have moved over 1 million cu yd of earth, cleaned 239,000 sq yd of foundation bedrock and crushed 2.3 million tons of aggregate—all in just 18 months.

Seemingly chaotic but actually highly choreographed and sequenced, the $1.1-billion Lake Oroville Spillways Emergency Recovery Project moves at an ultra-fast-track pace for one important reason: to repair the structures in time to protect cities, farmland and hundreds of thousands of people downstream of Oroville Dam before Northern California’s rainy season begins in November. The scale of the task is immense. Once the spillways are complete, crews will have moved over 1 million cu yd of earth, cleaned 239,000 sq yd of foundation bedrock and crushed 2.3 million tons of aggregate—all in just 18 months.

On the Edge of Disaster

Completed in 1968, the 770-ft-tall Oroville dam—tallest in the U.S.—was equipped with a 3,055-ft-long main spillway. It also has an emergency spillway that had never been used. That suddenly changed in February 2017. After weeks of heavy rain filled the reservoir to capacity, dam officials with the California Dept. of Water Resources (DWR) were forced to ramp up water releases from the main spillway. After a large chunk of that spillway’s concrete was gouged out from the heavy flows, water was held back to assess the damage. More heavy rains caused the lake to overtop the emergency spillway—essentially an engineered low spot on the dam similar to the edge of an overflowing bathtub. When the torrent began undercutting the front of the emergency spillway’s weir, threatening to send an uncontrolled wall of water downstream, emergency managers sent out an evacuation order for almost 200,000 people living in the City of Oroville and other low-lying communities.

Despite a few warnings over the years from environmental groups and dam safety experts that the emergency spillway could be at risk, the crisis took many residents by surprise. The city’s mayor, Linda Dahlmeier, recalls turning her cell phone off during the short flight home from San Diego that day. “By the time I landed in Sacramento, they had called the emergency evacuation,” she says. “My daughter lives in that low-lying area with no cellphone service at her house. She only had about 15 minutes to get out, and that was with four of my grandkids. My knees just completely buckled. It was like living in the Twilight...
Leaving a Scar

To prevent overtopping, DWR again released water down the main spillway. While this averted the disastrous erosion of the emergency spillway and surrounding hillside and allowed residents to return home, the releases continued to erode the main spillway, eventually leaving a 1,100-ft-long, 200-ft-deep scar in the spillway and adjacent hillside.

Once the rains abated, DWR was “faced with a major dam safety emergency and an unprecedented challenge to construct new spillways within eight months,” says Ted Craddock, the agency’s executive manager for the Oroville Emergency Recovery. DWR quickly assembled a team of 100 engineers to draft enough of a design to bid the project. General contractor Kiewit Infrastructure West began spillway work on May 20, 2017.

The main spillway work was divided into two phases because no construction could occur during the winter rainy season from December until May. Phase one, completed November 2017 (ENR 12/11-18, 2017 p. 10), rebuilt two sections of reinforced structural erosion-control concrete in an 870-ft-long upper chute section and a 350-ft-long lower section. Crews also placed some 350,000 cu yd of roller-compacted concrete (RCC) to fill the massive gouge and to create a temporary spillway surface and walls. The relatively undamaged portion of the old spillway just below the gates remained in place for the season.

In May, crews ramped up again to demolish the rest of the old spillway, remove the temporary RCC and
complete the main spillway’s permanent structure by placing concrete for the new walls and slab in an alternating checkerboard-like sequence.

“We started the season with 504 concrete placements to perform. Last year we had 312,” says Jeff Petersen, Kiewit’s project director. In the main chute slab, structural concrete is placed in 30-ft-long, 37-ft-wide and 2.5-ft-thick blocks atop a course of leveling concrete about 5 ft thick on average. Each block, reinforced with two layers of epoxy-coated 1-in.-dia rebar—compared with just one layer of uncoated rebar used for the 1968 spillway—gets anchored to meticulously cleaned foundation rock via 15- to 25-ft-long anchor bolts. The original damaged spillway used fewer bolts that penetrated only 5 ft. More than 7,000 anchors will be used by the end of the project. Drains have also been redesigned to lie further below the slabs compared with the original 1960s design.

**Homegrown Solution**

Last season, concrete finishing crews found that pulling a screed up a 25% slope by hand was slow, expensive and exhausting. This season, engineers fabricated a homegrown solution, nicknamed “Franken-screed” because it’s an assemblage of disparate parts. A carrier beam holds the 37-ft-wide screed, which is then pulled up-slope using portable electric winches mounted on the frame. While similar equipment is commonly used for leveling concrete on flat ground, Franken-screed’s modifications for use on the steep grade and its portability via crane make the apparatus one of a kind, Petersen says.

Wall sections run along each side of the 178.5-ft-wide spillway and range from 20 ft to 34.5 ft in height. They vary in width from 2 ft at the top to about 5 ft at the base.

“To accelerate the schedule, we pre-tie the wall cages out on grade beside the spillway and then we fly them in and tie them in place,” Petersen says. This allows crews to form the cage while the bottom slab is still curing. “It takes a little extra steel and a template to hold the wall cage up, but the time savings way offsets the cost of doing the extra rebar.”

As of Oct. 1, crews had completed all but 51 of the final season’s segments, and barring any last minute problems, should complete the main spillway two weeks ahead of schedule, says Tony Meyers, DWR project manager.

A batch plant with an ice maker the size of a small building produces the required 77,000 cu yd of leveling concrete and 82,000 cu yd of structural and erosion-resistant concrete for the job. After running along a wet belt that chills the aggregate by 20°F, the ice drops the mix to around 55°F. To reduce it even further, crews inject 600 inches of liquid nitrogen each day into the mixer trucks to lower the concrete to 40°F before placement, says Kevin Bock, Kiewit plant manager.

Last season, the concrete mixes were “some of the hardest that anyone associated with this project had ever seen,” Meyers says. As a result, this season’s mix was reconfigured with larger aggregate to have a compressive strength below 12,000 PSI. The mix will help to slow the curing process and reduce the minor
surface cracking that occurred on some of last year’s slabs, he adds.

Meanwhile, at the bottom of the spillway, workers perform work akin to dentists by re-capping massive tooth-like dentates that will help to dissipate energy as water flows from the spillway into the Feather River below.

Twelve lattice cranes and two hydro cranes serve the host of activity along the length of the spillway and around the site.

![Image of the spillway](image)

**Splash Down**

When work on the main spillway paused during last winter’s rainy season, the project team focused on repairing and bolstering the emergency spillway. Crews embedded a 1,450-ft-long secant-pile wall into bedrock at depths between 35 ft and 65 ft. The wall will prevent the head-cutting erosion that occurred in February 2017, DWR designers say. Currently, operations are running full tilt to complete a 1,830-ft-long by 750-ft-wide splash pad apron, incorporating more than 700,000 cu yd of RCC. The apron’s stair-step pattern will help dissipate the energy of any water released over the emergency spillway.

The RCC’s finish also acts as an energy dissipater, says Phil Kelley, RCC superintendent. The RCC is placed in 1-ft increments, and excavators use GPS to stay on the correct grade. Kiewit “fabricated a special plate on another [excavator] to act as a trowel to give us this finish, which is a newer innovation that we were able to come up with,” he adds.

At the base of the emergency spillway weir, crews installed 650 steel dowels to support an RCC buttress that will further bolster the structure.

Even though the splash pad doesn’t need to be completed before the rainy season starts, the work is running six to eight weeks ahead of schedule and should wrap up around Nov. 1, DWR’s Meyers says.

As the project team makes its final push, Kiewit retains more than 700 workers on site working around the clock Monday through Saturday, along with a single shift on Sunday. An additional 275 DWR designers and
other employees are still working on the project. Since the spillway incident, more than 1,000 DWR staff have had a hand in design and oversight.

So far, Kiewit has reported two recordable incidents after more than 1.5 million work hours. “There’s been roughly 2 million hours between Kiewit and DWR on the job, so it’s pretty amazing how few injuries there have been with the amount of contiguous, adjacent and overhead work, [risk of] trips and falls, confined space and the amount of people and resources in the area,” Meyers says.

Of the project’s overall $1.1-billion cost, Kiewit’s contract comprises the majority, at $630 million. The initial emergency response in spring 2017 cost $160 million, and another $310 million has been spent on debris and sediment removal, power line replacement, permitting, DWR staff, technical consultants and other support, says Erin Mellon, DWR’s assistant director for the public affairs office. When the spillway’s fix originally went out to bid, DWR used $275 million as a “preliminary cost so we could get the contractor on the ground and start mobilizing,” Craddock says. “On a typical project like this, you’d have a multiyear design investigative effort [to determine cost]. We had a few weeks,” he adds. The initial design was taken to about 30% completion at bid, with remaining design work conducted over the first few months of construction, he adds.

At peak of construction, Kiewit put in place $2.5 million worth of work in a single day on the project, and currently is spending $2.3 million per day.

Work will continue into 2019 on backfill and approximately 1 million cu yd of additional earthwork to restore the slope of the hillside, remove crane pads and other rough grading, says Meyers. The final component, environmental restoration, is just entering the early design phase. Additionally, the road to Lake Oroville’s boat ramp will be reconstructed and reopened to the public in summer 2019.

Restoring Public Trust

It’s not just the site that’s in need of restoration, many observers say. DWR “has a big hill to climb in terms of trust, particularly with the state legislature and the community,” says state Sen. Jim Nielsen (R-Red Bluff). “They’ve got to get better, and the legislature will be exerting greater oversight.”

A final independent forensic report issued in January found that while no one cause led to the incident, factors included a “long-term systemic failure” by DWR—as well as regulatory and general industry practices—to recognize and address inherent spillway design and construction weaknesses, poor bedrock quality and deteriorated spillway chute conditions.

In late September, Gov. Jerry Brown (D) signed into law legislation sponsored by Nielsen that sets up a community oversight committee to “ensure the community will be involved with and informed about all things going on at Oroville,” says Nielsen.

Since the incident, DWR has escorted hundreds of elected officials and local media on site tours, held
numerous community town halls and attended community events to “be a better community partner,” Mellon says.

“The lesson of Oroville is: Do not neglect inspection and deferred maintenance,” Nielsen says. But lessons learned go well beyond Oroville. The spillway incident “was a really sad wake-up call to the nation that our infrastructure is crumbling,” says Dahlmeier.

Recent Articles By Scott Blair

Economist Sees India’s Construction Industry
Transforming Over Next 15 Years

Digital Twin Support and Open Source Promised at Bentley Conference

Scott Blair is Managing Editor

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1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-B Directors’ comments.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION/PRESENTATION

1. Resolution setting preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation. Staff recommendation: Adopt Resolution No. 2018-___ establishing preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation, and requesting that the Metropolitan Water District of Southern California set formal terms and conditions. (Action) 

   Alexi Schnell

2. Lewis Carlsbad Desalination Plant:

   2-A Update on Draft Regional Board Permit for Lewis Carlsbad Desalination Plant Intake. (Presentation) 

   Toby Roy


   Jeremy Crutchfield
Staff recommendations:

a. Authorize the General Counsel to amend the legal services agreement with Hawkins Delafield & Wood LLP as special counsel to include new transactional legal work for the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) project intake and discharge system modifications phased implementation. This will add $318,000 to the contract, increasing the authorized cumulative amount from $180,000 to $498,000.

b. Authorize the General Manager to amend the professional services contract with Clean Energy Capital Securities LLC to include work for the CDP project intake and discharge system modifications phased implementation. This will add $257,500 to the contract, increasing the authorized cumulative amount from $140,000 to $397,500 and extend the term from its current end date of December 31, 2018 to June 30, 2020.

c. Authorize the General Manager to amend the professional services contract with Louis Berger Group to include work for the CDP project intake and discharge system modifications phased implementation. This will add $250,400 to the contract, increasing the authorized cumulative amount from $1,287,692 to $1,538,092 and extend the term from its current end date of December 31, 2018 to June 30, 2021. (Action)

   Jeff Stephenson

4. Update on water supply conditions. (Presentation)  
   Alexi Schnell

III. INFORMATION

   Dana Friehauf

   Jeff Stephenson

IV. CLOSED SESSION

V. ADJOURNMENT  
Melinda Nelson, Clerk of the Board

NOTE: This meeting is called as a Water Planning Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
Attention: Water Planning Committee

Final Report on the Water Planning Committee Work Plan for Calendar Years 2017 and 2018. (Information)

Purpose
This information item provides the final report on the Water Planning Committee Work Plan for Calendar Years 2017 and 2018.

Background

Discussion
The Water Planning Committee is responsible for planning and supply management matters including: water billing, urban water management planning, integrated regional water management planning and grants management, annexations, water shortage and drought response, water use efficiency, conservation, environmental management, facilities planning and local water supply development.

The attached report is a final report on the Water Planning Committee Work Plan for Calendar Years 2017 and 2018 and provides an update on the activities taken towards achieving the work plan. The work plan was prepared under the direction of the Water Planning Committee Chair and Vice Chairs. A new draft work plan will be prepared in January 2019 for calendar years 2019 and 2020, in coordination with the new Water Planning Committee Chair and Vice Chairs, for consideration by the Water Planning Committee in February 2019.

Prepared by: Denise Vedder, Director of Public Outreach and Conservation
Prepared by: Kelley Gage, Director of Water Resources
Reviewed by: David Cherashore, Chair, Water Planning Committee

Attachment 1:
1. Final Report on the Water Planning Committee Work Plan for Calendar Years 2017 and 2018
ATTACHMENT 1
Final Report on the Water Planning Committee Work Plan
for Calendar Years 2017 and 2018

Water Management Planning

1. **New Water Billing and Information Management System**
   Review and consider approving professional services contract to develop a new water billing system and water resources data base to enhance functionality and ensure software compatibility. (December 2017)

   **Activities**
   The Board reviewed and approved a professional service contract to develop the Data Archival and Invoicing System (DAIS) in May 2018. The project was delayed to allow staff adequate time to investigate alternative innovative database approaches prior to completing the project scope of work for professional services.

2. **2020 Urban Water Management Plan Long-Range Demand Forecast**
   Review and consider approving professional services contract to update the Water Authority’s Long-Range Demand Forecast as part of the 2020 Urban Water Management Plan update. (July 2018 – Resource Planning Program, Objective 7*)

   **Activities**
   The Board reviewed and approved a professional services contract to update the Water Authority’s Long-Range Demand Forecast in September 2018.

3. **Integrated Regional Water Management Proposition 1 Grant Funding**
   Review and consider approving an application for the San Diego IRWM planning region’s share of IRWM grant funding from the first round of Department of Water Resources’ Proposition 1 implementation grants. (December 2018 – Resource Planning Program, Objective 8*)

   **Activities**
   In October 2018, the Committee received a report on the San Diego IRWM Plan Update and Department of Water Resources (DWR) Proposition 1, Round 1, implementation grant program. DWR plans to release the final grant solicitation package for the first round of Proposition 1 funding in late-2018, with applications due in mid-2019 and grant awards announced in late-2019. Staff will obtain Board approval prior to submittal of an application to DWR.

4. **Annexation Requests**
   Review and consider approving annexation requests in a manner consistent with Board adopted policies and taking into account current water supply constraints. (Ongoing)

   **Activities**
   In December 2018, the Board will consider adoption of a resolution setting preliminary terms and conditions for Lakeside Water District’s Proposed Yerba Valley Annexation. The Rincon del Diablo Municipal Water District’s Proposed Sringeri Vidya Bharati

*Items related to the 2017-2021 Business Plan.
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Temple Annexation will be considered in January 2019. In October 2018, the Board adopted a resolution setting preliminary terms and conditions for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation. In July 2018, the Board authorized the General Manager to execute an Agreement for Water Service to the Sycuan Band of the Kumeyaay Nation, consistent with California Water Code Section 71611.5 and the Water Authority’s annexation policies.

The Board also took two actions related to the Water Authority’s Annexation Policies. In July 2017, the Board amended Annexation Policy #4, entitled “Annexation Fee,” and amended Policy #12, entitled “Administrative Costs,” to address approved revisions to the annexation fee structure. In September 2017, the Board Authorize the General Manager to make non-substantive updates to the Implementation Procedure for Annexation Policy #2 to ensure consistency with updates to supply and shortage contingency planning documents.

Water Shortage & Drought Response Management

1. **Water Shortage and Drought Response Plan and Model Drought Response Ordinance**
   Review and consider approving an updated Water Shortage and Drought Response Plan and Model Drought Response Conservation Ordinance; ensuring documents are consistent and reflect lessons learned from previous shortage periods. (April 2017, Resource Planning Program, Objective 1 and 2*)

   **Activities**
   In August 2017, the Board reviewed and approved the Water Shortage Contingency Plan, an update of the previously titled Water Shortage and Drought Response Plan. In December 2017, the Committee received an update from staff on the status of the State Water Resources Control Board’s rulemaking process for permanent water waste prohibitions. The State Water Resources Control Board did not complete the rulemaking process in 2018 and therefore, an update to the Model Drought Response Conservation Ordinance was not brought to the Board for consideration.

2. **Urban Water Management Plan Shortage Contingency Analysis**
   Review and consider approving an update to the 2015 Urban Water Management Plan that amends the shortage contingency analysis to comply with updated state requirements and ensure consistency with the Water Shortage and Drought Response Plan update. (December 2018, Resource Planning Program, Objective 3*)

   **Activities**
   With the passage of SB606, state law now requires every urban water supplier to prepare a Water Shortage Conginency Plan in 2021, instead of an updated shortage contingency analysis in the Urban Water Management Plan. Therefore, no action was considered or taken by the Board.

3. **Shortage Management Actions**
   Review and consider approving shortage management actions under the Water Shortage and Drought Response Plan, if required. (May 2018)
Activities
In January 2017, the Board adopted Resolution No. 2017-01, declaring an end to drought conditions in San Diego County and imploring Governor Brown and the State Water Resources Control Board to end the statewide drought emergency and rescind drought emergency water use regulations for areas no longer in drought conditions. This action was based on record-setting winter precipitation and the availability of other local water supplies made possible by the region’s $3.5 billion investment in regional water supply diversification.

In April 2017, Governor Brown issued Executive Order B-40-17, which declared an end to the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. The executive order also directed the State Water Resources Control Board to rescind the water supply stress test and mandatory conservation standards for urban water suppliers, while keeping in place the water use reporting requirements and water waste prohibitions.

4. **Water Supply and Drought Activities Reports**
   Review reports on current water supply, storage and demand conditions along with other drought activities. (December 2018)

   **Activities**
   Staff provided updates to the Committee on supply, storage and demand conditions in the months of January - April and December in calendar year 2017 and January – May and December in calendar year 2018. Staff presentations summarized current rainfall, snowpack, and surface storage totals, as well as forecasted precipitation and temperature probabilities.

**Water Use Efficiency**

1. **Water Use Efficiency Policy Principles**
   Review and consider approving an updated set of Water Use Efficiency Policy Principles that provide strategic direction for water use efficiency programs and activities. (December 2017)

   **Activities**
   Completed - 2017

2. **New Long-Term Water Use Targets**
   Review reports and provide direction on activities related to new long-term water use targets mandated by the state for urban water suppliers in California. (December 2018)

   **Activities**
   The state legislative process to require development of new long-term water use targets was completed in 2018. The Board had provided direction on legislation through the LCO Committee. In July 2018, staff provided information to the Committee on the recently chaptered state legislation, SB 606 (Hertzberg)/AB 1668 (Friedman), on urban water-use objectives and water management. As stated in the report, a formal member agency workgroup was formed in 2018 to provide a forum to discuss proposals developed...
by the state agencies on the water-use objectives and gain input from the member agencies. The report also noted that staff will periodically update the Committee on the state agency process to implement the new laws.

3. **Water Use Efficiency Programs**

   Review and consider approving water use efficiency-related program contracts, and review and provide input on other activities that support the region’s compliance with any applicable long-term water use goals or targets. (December 2018)

   **Activities**
   
   In May 2018, staff presented an update on changes adopted by MWD to its water conservation program, which reflect input and guidance received by MWD staff from multiple sources, including the Water Authority’s MWD Board Delegates. Highlights included the reinstatement of the Water Authority’s eligibility for MWD funding under the Member Agency Administered Program (MAAP); the authorization of a new Landscape Transformation Program and other new landscape training resources.

   In August 2018, staff presented an update on MWD and Water Authority Conservation Programs, which included details on the planning and implementation of new programs using MWD MAAP funds. Consistent with the Water Authority’s updated Water Use Efficiency Policy Principles, adopted by the Board in December 2017, staff reported on the phase-out of the locally-managed Sustainable Landscape incentives and switch to MWD’s new Landscape Transformation Program as a measure to maximize regional benefits from MWD’s new program.

4. **External Funding**

   Review and consider approving external funding agreements (grants, utility funding, other) that reduce operational funds needed to support current and future water use efficiency programs. (December 2018 – Resource Planning Program, Objective 6*)

   **Activities**
   
   In March 2018, the Board adopted a resolution in support of the Water Authority’s application to the the U.S Bureau of Reclamation (Reclamation) for a CALFED Water Use Efficiency grant, committing the Water Authority to financial and legal obligations if the grant application were selected by Reclamation for funding. USBR subsequently notified the Water Authority that it was not selected for a grant.

**Environmental Management**

1. **Environmental Compliance Documentation**

   Review, convene public hearings, as appropriate, and consider adoption of California Environmental Quality Act Documents for Water Authority Capital Improvement and energy projects.

   **Activities**
   
   In February 2017, the Board reviewed and convened a public hearing for the draft Mitigated Negative Declaration Initial Study/Environmental Checklist for the Second San Diego Aqueduct Moosa Canyon Crossing Erosion Control Project.

*Items related to the 2017-2021 Business Plan.

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In April 2017, the Board adopted the final Mitigated Negative Declaration Initial Study/Environmental Checklist for the Second San Diego Aqueduct Moosa Canyon Crossing Erosion Control Project.

In June 2018, the Board reviewed and convened a public hearing for the draft Mitigated Negative Declaration Initial Study/Environmental Checklist for the San Luis Rey Habitat Management Area Restoration Project.

In August 2018, the Board adopted the final Mitigated Negative Declaration Initial Study/Environmental Checklist for the San Luis Rey Habitat Management Area Restoration Project.

2. **Mitigation Program**
   Review reports, provide direction and approve agreements associated with the acquisition, management or disposition of mitigation credits. Approve CEQA compliance document for development of the San Luis Rey Wetlands project.

   **Activities**
   In January 2017, staff presented regarding existing Water Authority biological mitigation credits (acres) available to compensate for planned (through 2040) and projected future CIP and O&M impacts to biological resources and the biological mitigation needs to compensate for those impacts. The presentation showed that the Water Authority has excess mitigation credits.

   In September 2017, the Board authorized the General Manager to market, sell or exchange up to 240 excess mitigation credits at the Water Authority’s San Miguel Conservation Bank and deposit sales proceeds in the CIP Mitigation Program to provide funding for future acquisition or development of mitigation sites or credits. Any credits shall be sold at fair market value and the revenue from such sale, less the brokerage fees/transactional costs, shall be greater than the Water Authority’s investment.

   Per previous Board authorization, in March 2018, the Water Authority entered into an agreement to assist it in marketing, selling or exchanging excess biological mitigation credits (acres) from San Miguel Conservation Bank.

   In June 2018, the Water Authority completed its first sale of 1.09 mitigation credits (acres), netting $36,123. The sale proceeds are deposited in the CIP Mitigation Program to provide funding for future acquisition or development of mitigation sites or credits. Mitigation credits are sold at fair market value.

**Facilities Planning**

1. **East County Agreements**
   Review and consider approving amendments to the 2006 East County Regional Treated Water Improvement Program Agreements. (June 2017 – Infrastructure/Capital Improvement Program, Objective 4*)
Activities
In April 2018, the Board approved and authorized the General Manager to enter into replacement agreements with Padre Dam Municipal Water District and Otay Water District and an amendment with Lakeside Water District for the implementation of the East County Regional Treated Water Improvements Program. This item is complete.

2. **Contract Supplement to the Carlsbad Desalination Water Purchase Agreement**
   Review and consider approving a contract supplement to the Carlsbad Desalination Water Purchase Agreement designating financial responsibilities for the Intake Modifications Project. (October 2017)

   Activities
   This activity has been delayed due to Poseidon’s extended efforts to obtain necessary permits from the San Diego Regional Water Quality Control Board (Water Board), which have now consumed over three years since its original applications submitted in September 2015. The application was deemed complete in October 2015; however, the Water Board has still not released a draft order for a revised NPDES Permit or Feasibility Determination (required by the newly adopted Ocean Plan Amendment) for the new intake. A Water Board hearing is not anticipated until Spring of 2019.

   As reported to the Board in July 2018, due to the extended delays, the project will now be implemented in three phases with the first Temporary Standalone Operations phase (which allows for continued operation of the existing cooling water circulation pumps) to begin by the end of the year. The second phase will consist of an interim pump system with fish friendly pumps that will be operated while pilot studies are conducted and until a new intake system is designed and constructed on the floor of the lagoon. The third and final phase will include the addition of fully compliant wedgewire screens on the bottom of the lagoon.

   The Water Authority and Poseidon are currently working on a contract supplement for the first phase of operation and anticipates it to be ready for Board consideration in early 2019.

**Local Water Supply Development**

1. **Potable Reuse**
   Provide policy level guidance to Water Authority staff and Potable Reuse Coordinating Committee that will support the implementation of member agency potable reuse projects. (March 2018 – Local Water Program, Objective 4*)

   Activities
   In September 2017, the Board committee received an update on the Potable Reuse Coordinating Committee’s (PRCC) activities related to development of potable reuse regulations and regional public outreach.

   The PRCC met in August 2017 to discuss draft regulations released by the State Board on potable reuse through reservoir augmentation. The Water Authority submitted comments in mid-September on the draft regulations, which are expected to be finalized by the State Board.
Board in early 2018. The Water Authority also worked with WateReuse to develop legislation to advance direct potable reuse in California. Assembly Bill 574 (Quirk) requires the State Board to adopt direct potable reuse regulations by 2023. AB 574, sponsored by WateReuse California and supported by the Water Authority through the LCO committee, was signed by the Governor on October 6, 2017.

The Water Authority coordinated on numerous occasions with the PRCC on a web “microsite” and two educational videos on potable reuse in the region. The microsite and videos were presented to the Board in September 2017 and subsequently released to the public.

*Items related to the 2017-2021 Business Plan.

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November 28, 2018

Attention: Water Planning Committee

Resolution setting preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation. (Action)

Staff recommendation
Adopt Resolution No. 2018-__ (Attachment 1), establishing preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation, and requesting that the Metropolitan Water District of Southern California set formal terms and conditions.

Alternatives
Do not adopt the Resolution establishing preliminary, informal terms and conditions for the proposed Yerba Valley Annexation, thereby rejecting Lakeside Water District’s request to concurrently annex property to the Water Authority and Metropolitan Water District of Southern California.

Fiscal Impact
The Water Authority received the standard annexation application fee of $10,340 from the applicant to cover the Water Authority’s costs associated with processing the annexation. Per Board direction, the “buy-in” costs for the territory to annex will be collected through payment of the capacity charge.

Executive Summary
- In October 2018, Lakeside Water District adopted Resolution No. 18-07, to request concurrent annexation of the proposed Yerba Valley Annexation to the Water Authority and Metropolitan Water District of Southern California.
- The annexation is being requested due to uncertain well flows and for fire protection.
- Water Authority annexation policies have been met, with the exception of Policy #8 (Environmental Compliance) and Policy #11 (Avoid Formation of Islands/Windows).
- Water Authority Resolution No. 2018-___ requires that Policy #8 be satisfied prior to final approve of the Yerba Valley Annexation.
- The proposed annexation will create a “window,” but staff recommends moving forward with the annexation due to the property owners’ need for water and a commitment by Lakeside Water District staff to ensure that water service to the property not annexing (“window”) will not be established, either directly or indirectly.

Background
The proposed Yerba Valley Annexation area totals 115.9 acres and consists of 20 individually owned parcels with single-family homes that are currently served by groundwater wells. Estimated demand on the Water Authority is 4.6 acre-feet per year. Lakeside Water District (Lakeside) Resolution No. 18-07 (Attachment 2) requests annexation of the parcels due to uncertain well flows
and fire protection. Existing groundwater wells would continue to be used to supplement outdoor water use. The proposed annexation area (Attachment 3) is located adjacent to the north side of Lakeside’s boundary and is zoned semi-rural. There are no planned changes for parcel usage or zoning.

The process to concurrently annex into the Water Authority and Metropolitan Water District of Southern California (Metropolitan) service areas is a six-step process (see Table 1). However, it is important to note that the process will stop, if at any step the Water Authority or Metropolitan denies approval, but the agencies may reinstate the process upon later application. Step 1 for the proposed Yerba Valley Annexation was completed in October 2018, when Lakeside adopted its resolution to request concurrent annexation of the parcels to the Water Authority and Metropolitan service areas. The staff recommendation in this Board memo corresponds to Step 2 of the annexation process.

Table 1

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<thead>
<tr>
<th>Step</th>
<th>Major Steps for Concurrent Annexation to the Water Authority and Metropolitan</th>
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<tbody>
<tr>
<td>1</td>
<td>Water Authority receives resolution from member agency requesting concurrent annexation to the Water Authority and Metropolitan.</td>
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<tr>
<td>2</td>
<td>Water Authority Board establishes preliminary, informal terms and conditions, and requests Metropolitan set formal terms and conditions <em>(Staff Recommendation)</em>.</td>
</tr>
<tr>
<td>3</td>
<td>Metropolitan Board adopts resolution setting formal terms and conditions.</td>
</tr>
<tr>
<td>4</td>
<td>Member agency adopts resolution accepting the Water Authority and Metropolitan’s terms and conditions.</td>
</tr>
<tr>
<td>5</td>
<td>Water Authority Board verifies all policies have been met; adopts resolution approving, conditionally approving, or denying the annexation.</td>
</tr>
<tr>
<td>6</td>
<td>San Diego Local Agency Formation Commission files notice of completion after the terms and conditions of Metropolitan, Water Authority, and member agency are satisfied.</td>
</tr>
</tbody>
</table>

Discussion

Residents in Yerba Valley have seen their groundwater levels drop over the years to the point that there are concerns that their groundwater supply is not sustainable in the long-term. Based on a survey of the residents, many have resorted to having water trucked-in on a regular or semi-regular basis. To address these concerns, residents formed the “Yerba Valley Group” to meet with area property owners and measure interest in annexing into Lakeside. After holding meetings for the last three years, the owners of 20 parcels committed to pursue an annexation to Lakeside.

To guide staff when evaluating and processing annexation requests, the Board adopted annexation policies and procedures in 2006, with updates to the policies in 2016 and 2017. Of particular importance is Policy #2, Protection of Member Agency Supply Reliability. The policy states that the Board may deny an annexation if it determines the annexation would adversely affect water supply reliability to the Water Authority’s member agencies. To avoid water supply impacts from known near-term annexations, the Water Authority coordinates with its member agencies during preparation of its urban water management plan (UWMP). In this instance, the Water Authority’s 2015 UWMP includes five acre-feet of potential demand from the proposed Yerba Valley
annexation. Therefore, the proposed annexation will not adversely affect member agency supply reliability. It should be noted however, that inclusion of a potential near-term annexation in the UWMP does not limit the Board’s discretion to approve or deny an annexation.

Based on staff’s evaluation (Attachment 4 and Attachment 5), the proposed Yerba Valley Annexation satisfies all but two of the policies. Those two policies are:

- **Policy #8, Environmental Compliance** – The policy states that annexation to the Water Authority is a project subject to the California Environmental Quality Act (CEQA). Environmental compliance for the annexation has not yet been satisfied. Water Authority Resolution No. 2018-___ (Attachment 1) requires that environmental documentation for the Yerba Valley Annexation shall be prepared in accordance with CEQA. As the lead agency under CEQA, Lakeside will be responsible for filing the required environmental documentation.

- **Policy #11, Avoid Formation of Islands/Windows** - The Water Authority’s policy is to not approve an annexation that would leave an unannexed area surrounded by annexed area (create a “window”) unless the Board determines that the Water Authority’s interests will not be adversely affected by the existence of the window. As proposed, a window of unannexed area would be formed within the Yerba Valley Annexation area (see Attachment 3) because one property owner does not want to be included in the annexation. During the past three years, the residents outreached extensively to the property owner to encourage annexation and avoid the formation of a window, but the property owner has declined to participate in the annexation.

Despite the window that would be formed, staff recommends the Board adopt Resolution No. 2018-___ for the following reasons:

- Property owners do not have an adequate water supply and are trucking in water to meet their demands.
- Demand for the Yerba Valley Annexation is included in the 2015 UWMP and therefore, the annexation will not have an adverse effect on member agency supply reliability.
- Property owners made extensive outreach efforts to encourage the remaining property owner to participate in the annexation but were unsuccessful.
- Lakeside staff committed to make all efforts to ensure that water service to the property not annexing (“window”) will not be established, either directly or indirectly.
Attachment 2 – Lakeside Water District Resolution No. 18-07
Attachment 3 – Map of Proposed Yerba Valley Annexation
Attachment 4 – Compliance with Water Authority Annexation Policies
Attachment 5 – Compliance with Water Authority Annexation Policy #2
RESOLUTION NO. 2018-__

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY ESTABLISHING PRELIMINARY INFORMAL TERMS AND CONDITIONS, AND REQUESTING METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ESTABLISH FORMAL TERMS AND CONDITIONS AND APPROVE THE ANNEXATION OF TERRITORY TO SAID AGENCIES (YERBA VALLEY ANNEXATION)

WHEREAS, pursuant to Section 10(d) of the County Water Authority Act, the Board of Directors of the Lakeside Water District adopted Resolution No. 18-07, requesting formal terms and conditions from the San Diego County Water Authority and Metropolitan Water District for the concurrent annexation of the lands described in Resolution No. 18-07, and known as the YERBA VALLEY ANNEXATION; and

WHEREAS, a copy of Lakeside Water District Resolution No. 18-07, is attached; and

WHEREAS, pursuant to Section 10(d) of the County Water Authority Act, the Board of Directors of the San Diego County Water Authority may grant or deny the application and, in granting the application, may fix terms and conditions upon which the territory may be annexed to the San Diego County Water Authority; and

WHEREAS, the Board of Directors of the San Diego County Water Authority adopted Annexation Policies in February 2006 that provide criteria for the evaluation of potential annexations and conditions that may be applied; and

WHEREAS, the Board of Directors of the San Diego County Water Authority approved procedures for Implementation of the San Diego County Water Authority’s Annexation Policy #2: Protection of Member Agency Supply Reliability in April 2010 that provide guidance in determining if approval of a proposed annexation will have an adverse effect on member agency supply reliability, and provide direction on the potential conditions to be imposed; and

WHEREAS, the Board of Directors of the San Diego County Water Authority, in July 2016, amended Water Authority Annexation Policy #4: Annexation Fee, and amended Policy #12: Administrative Costs, to address approved revisions to the annexation fee structure; and

WHEREAS, due to water supply reliability concerns as a result of uncertain well flows, and the need for fire protection in the Yerba Valley area, 20 Yerba Valley property owners are seeking annexation; and

WHEREAS, conditions from the Annexation Policies will need to be satisfied prior to approval of the YERBA VALLEY ANNEXATION; and
WHEREAS, it is in the interest of the San Diego County Water Authority to obtain approval from the Metropolitan Water District of Southern California for the concurrent annexation of the YERBA VALLEY ANNEXATION.

NOW, THEREFORE, it is resolved by the Board of Directors of the San Diego County Water Authority as follows:

1. Pursuant to Section 10(d) of the County Water Authority Act, the Board of Directors of the San Diego County Water Authority requires the following:
   
   a. Environmental documentation for the YERBA VALLEY ANNEXATION shall be prepared in accordance with the California Environmental Quality Act (CEQA).
   
   b. That the property owners acknowledge and agree to participate in any required Proposition 218 action and will be subject to the imposition of any taxes, fees, charges, and assessments currently applicable to the San Diego County Water Authority service area.

2. That the Board of Directors of the Metropolitan Water District of Southern California is requested to determine approval of the concurrent annexation to said Metropolitan Water District of Southern California and the San Diego County Water Authority of the YERBA VALLEY ANNEXATION.

3. That the Clerk of the Board is authorized and directed to forward certified copies of this resolution to the Metropolitan Water District of Southern California and the Lakeside Water District.

PASSED, APPROVED, AND ADOPTED on this sixth day of December 2018.

Ayes:

Noes:

Abstain:

Absent:

________________________________________________________________________

Jim Madaffer,
Chair
I, Melinda Nelson, Clerk of the Board of the San Diego County Water Authority, certify that the vote above is correct and this Resolution No. 2018-____ was duly adopted at the meeting of the Board of Directors on the date stated above.

__________________________________
Melinda Nelson
Clerk of the Board
RESOLUTION NO. 18-07

RESOLUTION OF THE BOARD OF DIRECTORS OF THE LAKESIDE WATER DISTRICT REQUESTING FORMAL TERMS AND CONDITIONS FROM THE SAN DIEGO COUNTY WATER AUTHORITY AND METROPOLITAN WATER DISTRICT FOR THE CONCURRENT ANNEXATION OF TERRITORY TO SAID AGENCIES (YERBA VALLEY ANNEXATION)

WHEREAS, the Board of Directors of the Lakeside Water District desires to initiate proceedings pursuant to the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000, Division 3, commencing with Section 56000 of the California Government Code, for the Yerba Valley Annexation; and

WHEREAS, the proposed change of organization includes the following jurisdictional changes(s):

Concurrent annexation of property to Lakeside Water District, San Diego County Water Authority, and Metropolitan Water District; and

WHEREAS, the purpose for this proposed annexation is to provide water service to the territory to be annexed.

WHEREAS, the territory subject to the proposed annexation is a semi-rural area containing 20 parcels of a total of 115.9 acres, and a legal description of the territory is set forth in Exhibit "A", attached hereto and by this reference incorporated herein; and

WHEREAS, it is in the interest of the Lakeside Water District to obtain formal terms and conditions from the San Diego County Water Authority and the Metropolitan Water District for the concurrent annexation of said territory to those agencies and to the Lakeside Water District, and

WHEREAS, the District requests that the proposed annexation be subject to the following terms and conditions:

1. The Owner of the Annexation Area shall pay to Lakeside Water District all reorganization and processing fees.

2. The Owner of the Annexation Area shall pay all fees of the San Diego County Local Agency Formation Commission including, but not limited to, fees of the State Board of Equalization.

3. The Owner of the Annexation Area shall pay to San Diego County Water Authority all annexation and processing fees.

4. The Owner of the Annexation Area shall pay to Metropolitan Water District all Annexation and processing fees.
5. If upon annexation, Owner develops property in a manner requiring extension of water facilities, Owner shall install, at its sole cost and expense all water and fire protection facilities as may be required by Lakeside Water District, and no water service shall be provided to the Annexation Area until such facilities are installed and accepted by Lakeside Water District. Facilities and works necessary to connect annexed territory to Water Authority facilities and works shall be provided at the cost of the annexed territory. Any annexation to the Water Authority shall be in accordance with the County Water Authority Act and applicable provisions of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.). Any annexation to the Water Authority shall not conflict with Division III, Annexations, of the Metropolitan Water District Administrative Code.

6. Owner shall obtain and transfer to Lakeside Water District, at no cost to Lakeside Water District, easements and rights-of-way for any facilities necessary to service the Annexation Area.

7. Water service by Lakeside Water District to the Annexation Area shall be subject to and in Accordance with the rules and regulations of Lakeside Water District.

NOW, THEREFORE, this Resolution of Application is hereby adopted and approved by the Board of Directors of the Lakeside Water District. The San Diego County Water Authority and the Metropolitan Water District is hereby requested to determine and establish formal terms and conditions for the concurrent annexation to said agencies and to Lakeside Water District of the territory as described in Exhibit “A”.

PASSED AND ADOPTED by the Board of Directors of the Lakeside Water District at a regular meeting held on October 2, 2018, by the following vote to wit:

AYES: Johnson, Hilliker, Neumeister, Jenkins, Robak

NOES:

ABSENT:

[Signatures]

SECRETARY

PRESIDENT
SECRETARY'S CERTIFICATE

I, Brett Sanders, Secretary of the Board of Directors of Lakeside Water District, County of San Diego, California, hereby certify as follows:

The attached is a full and correct copy of Resolution 18-07 adopted at a meeting of the Board of Directors of the District duly held at the regular meeting place thereof on October 2, 2018, by the following vote:

AYES: Johnson, Hilliker, Neumeister, Jenkins, Robak
NOES: None
ABSTAIN: None
ABSENT: None

An agenda of the meeting was posted at least 72 hours before the meeting at 10375 Vine Street, Lakeside, California, a location freely accessible to members of the public, and a brief description of the resolution appeared on the agenda.

The resolution has not been amended, modified or rescinded since the date of its adoption, and the same is now in full force and effect.

Dated: October 3, 2018

[Signature]

Brett Sanders
Secretary of the Board of Directors of Lakeside Water District
Exhibit A

Legal Description
LEGEND

P.O.B. POINT OF BEGINNING

EXISTING WATER DISTRICT BOUNDARY

PROPOSED WATER DISTRICT BOUNDARY

SEE SHEET 2

329-132-05

329-132-07

BUENA VIDA ROAD

NO. 19' 00". N

646.04'

329-132-06

NO. 533.19' W

N89°14'26" W

MUTH VALLEY ROAD

EXISTING LAKESIDE WATER DISTRICT

DISCLAIMER:
FOR ASSESSMENT PURPOSES ONLY. THE DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF LAND DESCRIBED.

SHEET 8 OF 8 SHEETS

LAND RESOLUTION No. RO 18-
PREPARED BY:
KAPPA SURVEYING & ENGINEERING
8707 LA MESA BLVD.
LA MESA, CA 91942

AREA "A" - MUTH VALLEY

2016 3-29-2018 1:20

SCALE 1" = 120'
RO 18-
Lakeside Water District / Yerba Valley Annexation

Legal Description
Area “A”

THAT PORTION OF THE UNINCORPORATED AREA IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING PORTIONS OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST, SAID CORNER BEING ALSO THE MOST NORTHWEST CORNER OF PARCEL 3 OF PARCEL MAP NO. 6059, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON JUNE 16, 1977, AS FILE NO. 77-237553;

THENCE, (1) SOUTH 89°10'52" EAST ALONG THE NORTHERLY LINE OF SAID SOUTHWEST QUARTER AND ALONG THE NORTHERLY LINE OF SAID PARCEL MAP NO. 6059, A DISTANCE OF 990.00 FEET TO THE MOST NORTHEAST CORNER OF PARCEL 1 OF SAID PARCEL MAP NO. 6059, SAID CORNER BEING ALSO THE MOST NORTHWEST CORNER OF PARCEL 3 OF PARCEL MAP NO. 6127, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON JUNE 30, 1977, AS FILE NO. 77-262495;

THENCE, (2) LEAVING SAID NORTH LINE, SOUTH 0°49'08" WEST, ALONG THE COMMON LINE BETWEEN SAID PARCEL 1 OF PARCEL MAP NO. 6059 AND ITS SOUTHERLY PROLIGATION AND PARCEL 3 OF PARCEL MAP NO. 6127, A DISTANCE OF 670.00 TO THE SOUTHWEST CORNER OF SAID PARCEL 3 OF SAID PARCEL MAP NO. 6127;

THENCE, (3) SOUTH 89°10'31" EAST, A DISTANCE OF 59.72 FEET ALONG THE SOUTHERLY LINE OF SAID PARCEL 3 OF PARCEL MAP NO. 6127, TO THE NORTHWEST CORNER OF PARCEL 2 OF SAID PARCEL MAP NO. 6127;

THENCE, (4) SOUTH 0°19'00" EAST, ALONG THE WEST LINE OF SAID PARCEL 2 OF PARCEL MAP NO. 6127, A DISTANCE OF 646.04 FEET, TO THE SOUTHWEST CORNER OF SAID PARCEL 2, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF PARCEL 1 OF SAID PARCEL MAP NO. 6127, SAID CORNER BEING ALSO ON THE SOUTH LINE OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 32;
THENCE, (5) WESTERLY ALONG SAID SOUTH LINE, NORTH 89°14'28" WEST, SAID LINE
ALSO BEING THE SOUTH LINE OF PARCEL 1 OF SAID PARCEL MAP 6127, A DISTANCE
OF 553.19 FEET, TO THE SOUTHWEST CORNER OF SAID PARCEL 1, SAID POINT ALSO
BEING THE SOUTHEAST CORNER OF PARCEL 4 OF PARCEL MAP NO. 6059;

THENCE, (6) NORTH 0°45'33" EAST ALONG THE COMMON LINE OF SAID PARCEL 1 OF
SAID PARCEL MAP 6127 AND ITS NORTHERLY PROLONGATION AND SAID PARCEL 4 OF
PARCEL MAP NO. 6059, A DISTANCE OF 695.51 FEET TO A POINT ON THE WEST LINE
OF SAID PARCEL 4 OF PARCEL MAP 6127, SAID POINT ALSO BEING THE SOUTHEAST
CORNER OF PARCEL 3 OF SAID PARCEL MAP NO. 6059;

THENCE, (7) WESTERLY ALONG THE SOUTH LINE OF SAID PARCEL 3 OF PARCEL MAP
NO. 6059, NORTH 87°57'18" WEST, A DISTANCE OF 501.18 FEET TO THE SOUTHWEST
CORNER OF SAID PARCEL 3 OF PARCEL MAP NO. 6059, SAID CORNER BEING ON THE
WEST LINE OF SAID SECTION 32;

THENCE, (8) NORTH 0°06'39" EAST ALONG SAID WEST LINE OF SECTION 32 AND WEST
LINE OF SAID PARCEL 3 OF PARCEL MAP 6059, DISTANCE OF 610.31 FEET TO THE
POINT OF BEGINNING.

SAID PARCEL CONTAINS 986,861 SQUARE FEET (22.66 ACRES), MORE OR LESS.

FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL
PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT
BE USED AS THE BASIS FOR AN OFFER FOR SALE OF LAND DESCRIBED.

Legal description prepared by:
Kappa Surveying & Engineering, Inc.

By: ____________________________
Allen R. A. Turner III, PLS
Registration expires December 31, 2018
RO 18-
Lakeside Water District / Yerba Valley Annexation

Legal Description
Area “B”

THAT PORTION OF THE UNINCORPORATED AREA IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING A PORTION OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE CENTER OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST,

THENCE, (1) EASTERLY ALONG THE NORTHERLY LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 32, SOUTH 89°10'52" EAST, A DISTANCE OF 1283.84 FEET TO THE NORTHEAST CORNER OF THE NORTHWEST QUARTER OF SAID SOUTHEAST QUARTER;

THENCE, (2) SOUTHERLY ALONG THE EASTERLY LINE OF SAID NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 32, SOUTH 0°57'09" EAST, A DISTANCE OF 656.87 FEET TO THE SOUTHEAST CORNER OF THE NORTH HALFWAY OF SAID NORTHWEST QUARTER OF SAID SOUTHEAST QUARTER, SAID CORNER ALSO BEING THE NORTHEAST CORNER OF PARCEL 2, AS SHOWN ON PARCEL MAP NO. 7630, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON JULY 27, 1978, AS FILE NO. 78-316300;

THENCE, (3) WESTERLY ALONG THE SOUTHERLY LINE OF SAID NORTH HALFWAY OF SAID NORTHWEST QUARTER OF SAID SOUTHEAST QUARTER, BEING ALSO THE NORTHERLY LINE OF SAID PARCEL 2 OF PARCEL MAP NO. 7630, NORTH 89°12'39" WEST, A DISTANCE OF 645.70 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 2;

THENCE, (4) SOUTHERLY ALONG THE COMMON LINE BETWEEN PARCELS 2 AND 3 OF SAID PARCEL MAP NO. 7630, SOUTH 0°37'19" EAST, A DISTANCE OF 657.10 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 3, SAID CORNER BEING ALSO ON THE SOUTH LINE OF THE NORTH HALFWAY OF THE SOUTHEAST QUARTER OF SECTION 32;

THENCE, (5) WESTERLY ALONG SAID SOUTH LINE, SAID LINE ALSO BEING THE SOUTHERLY LINE OF SAID PARCEL 3 OF PARCEL MAP 7630, NORTH 89°14'24" WEST, A DISTANCE OF 649.47 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL 3, SAID POINT BEING ALSO THE SOUTHEAST CORNER OF PARCEL 4 OF PARCEL MAP NO. 7712, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON

THENCE, (6) CONTINUING WECTERLY ALONG THE SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHWEST QUARTER OF SECTION 32, SAID LINE ALSO BEING THE SOUTHERLY LINE OF SAID PARCEL 4 OF PARCEL MAP NO. 7712, NORTH 89°14'28" WEST, A DISTANCE OF 651.09 FEET, TO THE SOUTHWEST CORNER OF SAID PARCEL 4 OF PARCEL MAP NO. 7712, SAID CORNER BEING ALSO THE SOUTHEAST CORNER OF PARCEL 4 OF PARCEL MAP NO. 8375, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON FEBRUARY 1, 1979 AS FILE NO. 79-051502;

THENCE, (7) CONTINUING WESTERLY ALONG SAID SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHWEST QUARTER OF SECTION 32, AND SAID SOUTHERLY LINE OF SAID PARCEL 4 OF SAID PARCEL MAP NO. 8375, NORTH 89°14'28" WEST, A DISTANCE OF 650.10 FEET, TO THE SOUTHWEST CORNER OF SAID PARCEL 4 OF SAID PARCEL MAP NO. 8375;


THENCE, (9) ALONG THE SOUTHERLY, EASTERLY AND NORTHERLY LINES OF SAID PARCEL "A" OF SAID CERTIFICATE OF COMPLIANCE THE FOLLOWING FIVE COURSES, NORTH 76°16'33" EAST, A DISTANCE OF 289.20 FEET TO AN ANGLE POINT THEREIN;

THENCE, (10) SOUTH 58°18'52" EAST, A DISTANCE OF 325.79 FEET TO AN ANGLE POINT THEREIN;

THENCE, (11) NORTH 70°11'08" EAST, A DISTANCE OF 98.00 FEET TO A POINT ON THE EASTERLY LINE OF SAID PARCEL 4 OF PARCEL MAP NO. 8375;

THENCE, (12) NORTHERLY ALONG THE EASTERLY LINE OF SAID PARCEL 4 AND PARCEL 3 OF SAID PARCEL MAP NO. 8375, NORTH 0°18'52" WEST, A DISTANCE OF 395.02 FEET TO THE NORTHEAST CORNER OF SAID PARCEL 3 OF SAID PARCEL MAP NO. 8375;

THENCE, (13) WESTERLY ALONG THE NORTHERLY LINE OF SAID PARCEL 3 OF SAID PARCEL MAP NO. 8375, NORTH 89°10'52" WEST, A DISTANCE OF 650.11 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 3 OF PARCEL MAP NO. 8375;
THENCE, (14) NORTHERLY ALONG THE WESTERN LINES OF PARCELS 2 AND 1 OF SAID PARCEL MAP NO. 8375, NORTH 0°18'52" WEST, A DISTANCE OF 670.04 FEET TO THE NORTHWEST CORNER OF SAID PARCEL MAP NO. 8375, SAID CORNER BEING A POINT ON THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 32, SAID POINT BEING ALSO THE SOUTHWEST CORNER OF PARCEL 1 OF PARCEL MAP NO. 11468, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, ON JULY 9, 1981 AS FILE NO. 81-216264;

THENCE, (15) NORTHERLY ALONG THE WESTERN LINES OF PARCELS 1, 2 AND 4 OF SAID PARCEL MAP NO. 11468, NORTH 0°37'10" WEST, A DISTANCE OF 1335.08 FEET TO THE NORTHWEST CORNER OF SAID PARCEL MAP NO. 11468, SAID POINT ALSO BEING ON THE NORTH LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 32;

THENCE, (16) EASTERNLY ALONG SAID NORTH LINE, SAID LINE ALSO BEING THE NORTH LINE OF SAID PARCEL MAP NO. 11468, SOUTH 89°14'05" EAST, A DISTANCE OF 655.30 FEET TO THE NORTHEAST CORNER OF SAID PARCEL MAP NO. 11468,

THENCE, (17) SOUTHERLY ALONG THE EASTERN LINE OF PARCEL 4 OF SAID PARCEL MAP NO. 11468, SOUTH 0°23'57" EAST, A DISTANCE OF 565.28 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 4 OF SAID PARCEL MAP NO. 11468;

THENCE, (18) WESTERNLY ALONG THE LINE COMMON TO BOTH PARCELS 3 AND 4 OF SAID PARCEL MAP NO. 11468, NORTH 89°14'05" WEST, A DISTANCE OF 455.11 FEET TO AN ANGLE POINT THEREIN;

THENCE, (19) SOUTHWESTERLY ALONG THE LINE COMMON TO BOTH PARCELS 2 AND 3 OF SAID PARCEL MAP NO. 11468, SOUTH 36°24'18" WEST, A DISTANCE OF 127.84 FEET TO THE BEGINNING OF A TANGENT 51.30 FOOT RADIUS CURVE, CONCAVE EASTERNLY;

THENCE, (20) CONTINUING ALONG SAID COMMON LINE SOUTHWESTERLY AND EASTERNLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 114°39'18", AN ARC DISTANCE OF 102.66 FEET;

THENCE, (21) EASTERNLY TANGENT TO SAID LAST MENTIONED CURVE AND CONTINUING ALONG SAID COMMON LINE SOUTH 78°15'00" EAST, A DISTANCE OF 126.24 FEET TO AN ANGLE POINT THEREIN;

THENCE, (22) SOUTHEASTERLY ALONG SAID COMMON LINE, SOUTH 43°45'00" EAST, A DISTANCE OF 171.00 FEET TO THE NORTH CORNER OF PARCEL 1 OF SAID PARCEL MAP NO. 11468, SAID CORNER BEING AN ANGLE POINT COMMON TO PARCELS 1, 2, AND 3 OF SAID PARCEL MAP 11468;
THENCE, (23) SOUTHEASTERLY ALONG A LINE COMMON BETWEEN PARCELS 1 AND 3 OF SAID PARCEL MAP NO. 11468, SOUTH 52°15'00" EAST, A DISTANCE OF 178.00 FEET TO AN ANGLE POINT THEREIN;

THENCE, (24) CONTINUING SOUTHERLY ALONG SAID COMMON LINE, SOUTH 1°30'00" EAST, A DISTANCE OF 224.00 FEET TO THE BEGINNING OF A TANGENT 73.43 FOOT RADIUS CURVE, CONCAVE NORTHEASTERLY;

THENCE, (25) CONTINUING ALONG SAID COMMON LINE SOUTHERLY AND SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 68°30'00", AN ARC DISTANCE OF 87.79 FEET;

THENCE, (26) SOUTHEASTERLY TANGENT TO SAID LAST MENTIONED CURVE AND CONTINUING ALONG SAID COMMON LINE SOUTH 70°00'00" EAST, A DISTANCE OF 73.00 FEET TO A POINT ON THE EASTERLY LINE OF SAID PARCEL MAP NO. 11468, SAID POINT BEING COMMON TO PARCELS 1 AND 3 OF SAID PARCEL MAP NO. 11468, SAID POINT BEING ALSO ON THE WESTERLY LINE OF PARCEL 1 OF PARCEL MAP NO. 11823, RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF SAN DIEGO ON NOVEMBER 25, 1981, AS FILE NO. 81-374150;

THENCE, (27) NORTHERLY ALONG THE WESTERLY LINE OF PARCEL 1 OF SAID PARCEL MAP NO. 11823, NORTH 0°23'57" WEST, A DISTANCE OF 420.00 FEET TO THE SOUTHWEST CORNER OF PARCEL 3 OF SAID PARCEL MAP NO. 11823, SAID CORNER BEING ALSO THE POINT OF BEGINNING OF THAT CERTAIN GRANT DEED TO CRAIG L. CHANDLER AND LISA M. CHANDLER, CO-TRUSTEES OF THE CHANDLER FAMILY TRUST DATED SEPTEMBER 28, 1999 AND RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF SAN DIEGO ON MAY 01, 2013, AS DOCUMENT NO. 2013-0272436;

THENCE, (28) CONTINUING NORTHERLY ALONG THE WESTERLY LINE OF SAID PARCEL 3 OF SAID PARCEL MAP NO. 11823 AND ALONG SAID CHANDLER LAND NORTH 00°23'57" WEST, 94.93 FEET TO THE MOST NORTHERLY CORNER OF LAND DESCRIBED IN DEED TO JEFF MCLEAN, ET UX, RECORDED JULY 22, 1991, AS FILE NO. 1991-0358597 OF OFFICIAL RECORDS;

THENCE, (29) SOUTH 54°48'56" EAST ALONG THE NORTHERLY LINE THEREOF, 187.78 FEET TO AN ANGLE POINT IN THE BOUNDARY OF SAID PARCEL 1 OF SAID PARCEL MAP NO. 11823, BEING THE MOST WESTERLY CORNER OF LAND DESCRIBED IN DEED TO JOE MCLEAN, ET UX, RECORDED JULY 22, 1991, AS FILE NO. 1991-0358598 OF OFFICIAL RECORDS;

THENCE, (30) ALONG THE SOUTHERLY LINE OF SAID MCLEAN LAND, NORTH 77°07'17" EAST, 215.99 FEET TO THE EASTERLY LINE OF SAID PARCEL 1 OF SAID PARCEL MAP NO. 11823;
THENCE, (31) SOUTHERLY ALONG SAID EASTERLY LINE OF SAID PARCEL 1, SOUTH 13°30'00" EAST, 486.16 FEET TO THE SOUTHEASTERLY CORNER OF SAID PARCEL 1, SAID CORNER BEING COMMON TO SAID PARCEL 1 AND PARCEL 2 OF SAID PARCEL MAP NO. 11823, SAID CORNER BEING ALSO A POINT ON THE SOUTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 32;

THENCE, (32) LEAVING SAID CHANDLER LAND EASTERLY ALONG THE SOUTHERLY LINE OF LAST SAID PARCEL 2 AND SAID SOUTHERLY LINE OF SAID NORTHWEST QUARTER OF SAID SECTION 32, SOUTH 89°10'33" EAST, 170.00 FEET TO THE CENTER OF SECTION 32 AND THE **POINT OF BEGINNING**.

SAID PARCEL CONTAINS 3,638,718 SQUARE FEET (83.53 ACRES), MORE OR LESS.

*FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF LAND DESCRIBED.*

Legal description prepared by:
Kappa Surveying & Engineering, Inc.

By: [Signature]
Allen R. A. Turner III, PLS
Registration expires December 31, 2018
THAT PORTION OF THE UNINCORPORATED AREA IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, BEING PORTIONS OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST, SAN BERNARDINO BASE AND MERIDIAN ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CENTER OF SECTION 32, TOWNSHIP 14 SOUTH, RANGE 1 EAST,

THENCE, EASTERLY ALONG THE EAST-WEST CENTERLINE OF SAID SECTION 32 SOUTH 89°10'52" EAST, A DISTANCE OF 1283.84 FEET TO THE NORTHWEST CORNER OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 32;


THENCE, (1) EASTERLY ALONG THE NORTHERLY LINE OF SAID PARCEL 1, SOUTH 89°12'39" EAST, A DISTANCE OF 645.69 FEET TO THE NORTHEAST CORNER OF SAID PARCEL 1;

THENCE, (2) SOUTHERLY ALONG THE EASTERLY LINE OF SAID PARCEL 1, SOUTH 1°16'59" EAST, A DISTANCE OF 656.67 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL 1;

THENCE, (3) WESTERLY ALONG THE SOUTHERLY LINE OF SAID PARCEL 1, NORTH 89°14'24" WEST, A DISTANCE OF 649.47 FEET TO THE SOUTHWEST CORNER OF SAID PARCEL 1;

THENCE, (4) NORTHERLY ALONG THE WESTERLY LINE OF SAID PARCEL 1 NORTH 0°57'09" WEST, A DISTANCE OF 656.88 FEET TO THE NORTHWEST CORNER OF SAID PARCEL 1 AND THE "TRUE POINT OF BEGINNING".
SAID PARCEL CONTAINS 425,077 SQUARE FEET (9.76 ACRES), MORE OR LESS.

FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF LAND DESCRIBED.

Legal description prepared by:
Kappa Surveying & Engineering, Inc.

By: __________________________
Allen R. A. Turner III, PLS
Registration expires December 31, 2018
### Compliance with Water Authority Annexation Policies

**Yerba Valley Annexation (Lakeside Water District)**

**July 2018**

<table>
<thead>
<tr>
<th>Policy No.</th>
<th>Water Authority Annexation Policy</th>
<th>Summary of Policy</th>
<th>Water Authority Staff Evaluation Has Policy Been Satisfied? (If “no”, potential condition has been identified)</th>
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</table>
| 1          | Relationship to San Diego Local Agency Formation Commission (LAFCO) and Metropolitan Water District of Southern California (Metropolitan) Policies | Any annexation shall be in accordance with the County Water Authority Act and applicable provisions of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 et seq.). Annexation shall not conflict with Metropolitan Administrative Code, Division III. | Yes X No
Lakeside Water District (Lakeside) Resolution No. 18-07 states that the annexation will be in accordance with the County Water Authority Act, pursuant to Government Code 56000, and not conflict with Metropolitan’s Administrative Code. |
| 2          | Protection of Member Agency Supply Reliability                                                   | The Water Authority shall evaluate the adequacy of water supplies and facilities to meet the needs of the proposed annexed territory based on adopted Water Authority facilities and supply plans, including without limitation the 2004 Water Facilities Master Plan and the 2015 Urban Water Management Plan (or the most recent update of either). | Yes X No
Refer to Attachment 5, Compliance with Water Authority Annexation Policy #2. |
| 3A         | Conservation and Local Supply Use Requirements                                                  | The Board may condition an annexation to require developments and development projects in the annexed territory to: 1. Utilize recycled water in accordance with California Water Code; | Yes X No
1. Lakeside staff has stated that they do not have recycled water opportunities. Waste water collection, treatment and disposal or reclamation services within Lakeside’s boundaries are performed by separate and unrelated agencies. Lakeside’s 2015 Urban Water Management Plan does not identify recycled water as a source of supply. In addition, the existing homes in the annexing territory are on septic systems. |
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<tr>
<td>3A</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>The Board may condition an annexation to require developments and development projects in the annexed territory to: 2. Incorporate water conserving design and improvements within subdivisions, both residential and commercial and; 3. Incorporate water conserving design and improvements in building, grading, landscaping, and other similar development and construction plans; 4. Require maintenance of water conserving landscape through CC&amp;Rs.</td>
<td>Yes X No 2. Not applicable, as the development is existing. 3. The homeowners within the annexing territory submitted a letter to Lakeside stating that they have water saving devices installed in the homes and have mainly native landscaping requiring little to no outdoor water usage. 4. CC&amp;Rs are not applicable.</td>
</tr>
<tr>
<td>3B</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>Member agency with jurisdiction over the proposed annexation shall submit evidence of the following prior to Board approval: 1. Regulatory plan to require all new developments within proposed annexing territories and member agency’s service area to incorporate water conserving design and improvements based on current Water Authority water-use-efficiency policies. 2. Regulatory plan to require all new developments within proposed annexing territories to use recycled water, or explain why such use in infeasible.</td>
<td>Yes X No 1. Lakeside adopted in December 2007 a regulatory plan to require new developments to use water conserving designs and improvements. 2. Lakeside staff has stated that they do not have recycled water opportunities. Waste water collection, treatment and disposal or reclamation services within Lakeside’s boundaries are performed by separate and unrelated agencies. Lakeside’s 2015 Urban Water Management Plan does not identify recycled water as a source of supply.</td>
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<td>3B</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>Member agency with jurisdiction over the proposed annexation shall submit evidence of the following prior to Board approval: 3. Member agency is signatory to and in substantial compliance with the (CUWCC) Memorandum of Understanding (MOU).</td>
<td>Yes X No 3. Lakeside became a signatory to the CUWCC MOU on June 13, 2007. However, the CUWCC is now dissolved and was replaced by the California Water Efficiency Partnership (CalWEP).</td>
</tr>
<tr>
<td>3B</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>Member agency with jurisdiction over the proposed annexation shall submit evidence of the following prior to Board approval: 4. Member agency has accounted for groundwater and surface water supplies available to the annexing territory in water management plans.</td>
<td>Yes X No 4. Lakeside’s 2015 Urban Water Management Plan documents the availability of groundwater supplies to serve existing and future customers.</td>
</tr>
<tr>
<td>3B</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>Member agency with jurisdiction over the proposed annexation shall submit evidence of the following prior to Board approval: 5. Member agency is maximizing recycled water use and groundwater throughout its service area or has conducted feasibility studies that have determined recycled water infeasible.</td>
<td>Yes X No 5. Groundwater supplies are documented in Lakeside’s 2015 Urban Water Management Plan. Lakeside purchases 75-85% imported water from the Water Authority and supplies the remainder of the district’s demand from local groundwater wells. Lakeside staff has stated that they do not have recycled water opportunities. Waste water collection, treatment and disposal or reclamation services within Lakeside’s boundaries are performed by separate and unrelated agencies. Lakeside’s 2015 Urban Water Management Plan does not identify recycled water as a source of supply.</td>
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<td>3B</td>
<td>Conservation and Local Supply Use Requirements</td>
<td>Member agency with jurisdiction over the proposed annexation shall submit evidence of the following prior to Board approval: 6. Member agency is offering Water Authority and Metropolitan sponsored water conservation programs to new development and encouraging participation.</td>
<td></td>
<td>Yes X No</td>
<td>6. Lakeside co-funds and participates in Water Authority and Metropolitan sponsored water conservation programs that are available to existing and new developments.</td>
</tr>
<tr>
<td>4</td>
<td>Annexation Fee</td>
<td>A per acre annexation fee is no longer collected by the Water Authority (effective July 1, 2017). The Water Authority “buy-in” costs of the annexing territory are collected through the Water Authority capacity charges, which are paid to the Water Authority when the water meter(s) serving the annexing parcel are purchased.</td>
<td></td>
<td>Yes No (included as condition)</td>
<td>As stated in the Board proposed resolution establishing terms and conditions for the annexation, the property owners will be subject to all applicable taxes, fees and charges. Before receiving water service from Lakeside, they will purchase a meter and pay the Water Authority’s capacity charge.</td>
</tr>
<tr>
<td>5</td>
<td>Priority given to Annexations to Member Agency</td>
<td>Priority shall be given to proposals for annexation to an existing member agency.</td>
<td></td>
<td>Yes X No</td>
<td>The proposed annexation is to the Lakeside Water District, which is an existing Water Authority member agency.</td>
</tr>
<tr>
<td>6</td>
<td>Concurrent annexation to Metropolitan, Water Authority and Member Agency</td>
<td>Proposals for annexation to a member agency shall be processed concurrently with an application for annexation to the Water Authority and Metropolitan.</td>
<td></td>
<td>Yes X No</td>
<td>Lakeside Resolution No. 18-07 requests concurrent annexation of property to Lakeside, Water Authority and Metropolitan.</td>
</tr>
<tr>
<td>7</td>
<td>Facilities necessary to connect annexing Territory or New Member Agency</td>
<td>Facilities and works necessary to connect annexed territory or new member agency to Water Authority facilities and works shall be provided at the cost of the annexed territory or new member agency, as determined by the Board.</td>
<td></td>
<td>Yes X No</td>
<td>Lakeside will need to construct approximately 2,947 feet of 8-inch water line to serve the 20 annexed properties. Lakeside Resolution No. 18-07 states that facilities and works necessary to connect annexed territory to Water Authority facilities and works shall be provided at the cost of the annexing territory.</td>
</tr>
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</tbody>
</table>
| 8         | Environmental Compliance        | Annexation to the Water Authority is a project subject to the California Environmental Quality Act (CEQA). | Yes  No (include as condition)  
As lead agency under CEQA, Lakeside plans to file a Notice of Exemption pursuant to CEQA Guidelines. |
| 9         | Consistent with Land-Use Approvals | The member agency with jurisdiction over the annexing territory shall provide certification from the city with jurisdiction over the annexing territory that the annexation is consistent with and supports the timing, location, and development intensity of the city’s general plan and applicable specific plans. | Yes  X  No  
The properties that comprise the Lakeside Annexation are in an unincorporated area of San Diego County and are zoned semi-rural (SR-10). There are no planned changes for parcel usage or zoning, and parcel usage is consistent with current zoning. |
| 10        | Total annexation of Ownership Lands | All parcels within an area proposed for annexation under single ownership or development control shall be annexed concurrently unless the member agency and city with jurisdiction over the annexing territory provide evidence that partial annexation is consistent with land use policies of the city. The Board may exclude from the annexation, or exempt from payment of taxes, fees or charges, lands committed in perpetuity to open space by conservation easement, title restriction, public dedication or other similar instrument. If the annexing territory is not located in a city, the county shall provide the certification. | Yes  X  No  
The proposed Yerba Valley Annexation is approximately 116 acres, made up of 20 individually owned residential properties, and is being annexed concurrently. |
## Compliance with Water Authority Annexation Policies

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</table>
| 11         | Avoid formation of Islands/Windows | Unless the Board determines that Water Authority’s interests would not be adversely affected, “windows” and “islands” shall not be created by an annexation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes  No  X  
As defined in the policy, the proposed annexation would result in the creation of a window within the Water Authority and Metropolitan service areas. The annexation area is made up of 20 individually owned residential properties that have opted to participate; there are seven additional, individually owned properties electing not to participate, one of which will result in the creation of an approximately 10-acre window. The need for this annexation to provide a reliable water supply for the Yerba Valley residents has been demonstrated and staff recommends moving forward with the annexation, even though a window will be formed. This window would not have an adverse effect on the Water Authority’s service area; Lakeside, to the best of its ability, will work to monitor and ensure water is not being used outside of its service area. |
| 12         | Administrative Costs              | Prior to acceptance by the Water Authority of an application for annexation, the applicant shall deposit an annexation application fee of $10,340 to cover costs incurred by the Water Authority as a result of annexation proceedings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes  X  No  
The annexation application fee of $10,340 was provided to the Water Authority. |
| 13         | Annexation of Tribal Lands        | Indian tribal lands may be annexed in compliance with Water Authority annexation policies. In addition, a contract shall be entered into and additional conditions may apply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Not Applicable |
# Compliance with Water Authority Annexation Policy # 2

<table>
<thead>
<tr>
<th>April 2010 Procedures: Potential Adverse Effect Situations</th>
<th>Staff Evaluation based on Situations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potential Regional Adverse Effect</strong></td>
<td><strong>Reason for Potential Regional Adverse Effect and Possible Mitigation Measures</strong></td>
</tr>
<tr>
<td>Annexing territory demands not included in the Water Authority’s UWMP</td>
<td>Supplies have not been planned in UWMP to meet annexation demands. If Water Authority cannot identify additional supplies, member agency develops supplies, potentially offset project.</td>
</tr>
<tr>
<td>Actual demands exceeding forecasted UWMP demands</td>
<td>Supplies may not be adequate to meet demands of annexation and region. If Water Authority cannot identify additional supplies, member agency develops supplies, potentially offset project.</td>
</tr>
<tr>
<td>Water Shortage and Drought Response Plan activated, due to uncertain supplies or shortages</td>
<td>Increasing demands due to annexation may cause further member agency cuts or exceedance of allocation from MWD. Member agency allocation base period demand would not be increased due to annexation.</td>
</tr>
<tr>
<td>Existing facilities insufficient to provide average annual and peak deliveries</td>
<td>Increasing demands due to annexation further jeopardizes system reliability. Identified on case-by-case basis.</td>
</tr>
</tbody>
</table>

The projected water demands associated with the proposed annexation were included in the 2015 UWMP as a potential near term annexation.

Actual Water Authority demands are not exceeding forecasted UWMP demands.

The Water Authority has not activated its Water Authority Water Shortage Contingency Plan.

Existing facilities are sufficient to provide average annual and peak deliveries.

The Yerba Valley Annexation can be served by Lakeside with the addition of approximately 2947’ of 8-inch water lines to serve only the 20 residential properties. There are currently operating wells and storage tanks on each parcel. Lakeside Resolution No. 18-07 states that facilities and works necessary to connect annexed territory to Water Authority facilities and works shall be provided at the cost of the annexed territory.
November 28, 2018

Attention: Water Planning Committee

Update on Draft Regional Board Permit for Lewis Carlsbad Desalination Plant Intake. (Presentation)

Purpose

This presentation will provide an update on Poseidon’s NPDES Permit for the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) Intake Modifications project.

Discussion

The intake facilities for the CDP are currently permitted and configured to draw the plant’s seawater supply from the existing Encina Power Station (EPS) once-through cooling water system. With the State Water Resources Control Board’s Once-Through Cooling Policy, adopted in 2010, effectively phasing out once-through cooling for power plants, the EPS is scheduled to be shut down by December 2018. The shutdown of the EPS and its cooling water system requires the construction of new intake and discharge facilities to allow a transition to a “stand-alone” operation of the desalination plant. The new intake facilities will also need to comply with the statewide Ocean Plan Amendment that addresses desalination facility intakes and discharges, adopted by the State Water Resources Control Board in May 2015.

A permit renewal application package was submitted by Poseidon in September 2015 and deemed complete by the San Diego Regional Water Quality Control Board (San Diego Water Board) in October 2015. Staff from Poseidon and the Water Authority have met regularly with staff from the San Diego Water Board to discuss development of the permit and address additional requests made by the staff of the San Diego Water Board. Even though a final permit adoption is not anticipated until Spring 2019, the CDP will remain in operation following the cessation of energy production at the EPS through a phased implementation of the Intake Modifications project as detailed in staff’s report to the Board in July 2018 provided here as Attachment 1.

As of this writing, the San Diego Water Board has yet to release an Administrative Draft of the NPDES permit for review by Poseidon and the Water Authority. This item will be deferred if staff does not receive the draft permit in time to prepare a presentation.

Prepared by: Jeremy Crutchfield, Principal Engineer
Reviewed by: Toby J. Roy, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager

Attachment 1 - Claude “Bud” Lewis Carlsbad Desalination Plant Permitting Status for the Proposed Intake and Discharge System Modifications Board Memo (July 18, 2018)
July 18, 2018

Attention: Water Planning Committee

Claude "Bud" Lewis Carlsbad Desalination Plant Permitting Status for the Proposed Intake and Discharge System Modifications (Presentation)

Executive Summary

- The new intake and discharge facilities will replace the current facility configuration that utilizes the Encina Power Station once-through cooling system and was anticipated in the Water Purchase Agreement.
- The San Diego Regional Water Quality Control Board is tentatively scheduled to issue a permit for a new intake and discharge for the Lewis Carlsbad Desalination Plant by the end of 2018.
- The permit will allow Poseidon five years to come into compliance with the Ocean Plan requirements.
- The new intake will incorporate a new innovative technology that has not been used in a lagoon environment and will require pilot testing before the final intake can be constructed.
- Water Authority staff expects to return to the Board in Fall 2018 with an updated cost estimate and time schedule based on the draft Water Board permit provisions.

Background

The Claude "Bud" Lewis Carlsbad Desalination Plant (CDP) started commercial operations on December 23, 2015. The project is a result of a long-term Water Purchase Agreement (WPA) executed between the Water Authority and Poseidon that was approved by the Water Authority Board on November 29, 2012. This agreement is the basis for the financing, construction and now the operation of the CDP. Under the WPA, the Water Authority agreed to purchase the output of the plant – a minimum of 48,000 acre-feet and up to 56,000 acre-feet of product water from the CDP annually. The Water Authority’s water purchase payments compensate Poseidon for the fixed and variable costs of the CDP including debt service and equity return payments, as well as fixed and variable plant costs for electricity and operations and maintenance (O&M).

The intake facilities for the CDP are currently permitted and configured to draw the Plant’s seawater supply from the existing Encina Power Station (EPS) once-through cooling water system as shown in Figure 1. With the State Water Resources Control Board’s Once-Through Cooling Policy, adopted in 2010, effectively phasing out once-through cooling for power plants, the EPS is scheduled to be shut down by December 2018, replaced by a new air-cooled power plant. The shutdown of the EPS and its cooling water system will require the construction of new intake and discharge facilities to allow a transition to a "stand-alone" operation of the desalination plant. The intake and discharge system modifications (Modifications) that are
required due to closure of the EPS, necessitate a new NPDES permit. In addition, the Modifications are required to comply with the statewide Ocean Plan Amendment (OPA) that addresses desalination facility intakes and discharges, adopted by the State Water Resources Control Board in May 2015.

Figure 1

The construction of new intake facilities was contemplated and is addressed in the WPA. The WPA obligates the Water Authority to pay, through adjustments to the Unit Price, for Poseidon’s capital and operating costs associated with the Modifications resulting from the power plant closure and compliance with the OPA. Modifications capital and operating costs eligible for pass-through to the Water Authority, related to closure of the power plant (considered a change in law under the WPA), are capped in the WPA at index-linked amounts. Costs related to compliance with the OPA are also considered “change in law” under the WPA, but are not subject to the same caps as closure-related costs. However, the WPA protects the Water Authority by imposing a cap limiting increases due to changes in law (among other provisions) in the water unit price to 10 percent in any year and a total of 30 percent on an aggregate basis.

Poseidon is currently pursuing the renewal of the project’s NPDES permit with the San Diego Regional Water Quality Control Board (San Diego Water Board) and State Water Resources Control Board (State Water Board), based on the proposed Modifications, that will address both the transition to stand-alone operations and compliance with the OPA. Permitting of the Modifications represents one of the first instances statewide where the OPA language will be applied to a new desalination facility permit. A permit renewal application package was submitted by Poseidon in September 2015 and deemed complete by the San Diego Water Board in October 2015. A supplemental Environmental Impact Report (SEIR) covering the proposed
intake and discharge system modifications was approved by the Water Authority Board in August 2016. Since the adoption of the SEIR, staff from Poseidon and the Water Authority have met regularly with staff from the San Diego Water Board and State Water Board to discuss development of the permit.

Previous Board Action: The Water Authority Board approved the Water Purchase Agreement on November 29, 2012.

Previous Board Presentation: On March 24, 2016, The Engineering and Operations Committee received a presentation on the Claude “Bud” Lewis Carlsbad Desalination Plant Intake System Modifications.

Previous Board Action: On August 17, 2016, the Board approved a Contract Administration Memorandum (CAM) Regarding the Proposed Intake and Discharge System Modifications for the Claude “Bud” Lewis Carlsbad Desalination Plant Water Purchase Agreement.

Previous Board Action: On August 17, 2016, the Board approved a supplemental EIR for the new intake structure.

Discussion

Compliance with Ocean Plan Requirements

The OPA implements Water Code Section 13142.5(b) which requires that the best available site, design, technology and mitigation measures feasible shall be used to minimize the intake and mortality of all forms of marine life. “Feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors. To protect sea life, the OPA also requires use of 1.0 mm screens and 0.5 feet per second (ft/s) through-screen velocity.

The initial preferred design for the Modifications, evaluated in the SEIR, would include a surface intake with flow augmentation. A total of ten alternatives were initially evaluated. This preferred alternative utilizes proven technologies. In accordance with the OPA, this alternative would include fish-friendly pumps protected by 1.0 mm traveling screens, with a through screen velocity of 0.5 ft/s. To avoid entrapment of fish in the upstream channels where velocities are higher than 0.5 ft/s, a fish-return system would also be constructed.

However, as the permitting discussion has unfolded with the San Diego Water Board and the State Water Board, both have indicated that it is unlikely that they would permit the preferred design under the OPA. As a result, Poseidon evaluated and presented costs to the State and San Diego Water Boards on an additional ten alternatives of which nine are not economically feasible. One alternative, a modification of Alternative 1 that provides for lower intake velocities in the channel, upstream of the proposed 1.0 mm screens, is potentially economically feasible.

Poseidon recently presented a new option, Alternative 21, to the Regional and San Diego Water Boards. Alternative 21 includes polyethylene pipelines laid along the bottom of the lagoon with
cylindrical wedgewire screens mounted on top of the pipelines. See Figures 2 and 3. This alternative is expected to have less impact on marine life than the preferred alternative, while preliminary cost estimates show that the capital and operating costs of Alternatives 1 and 21 are comparable. However, while the technology proposed in Alternative 21 has been used on smaller freshwater installations, it has not been proven in an estuarine environment similar to the Agua Hedionda Lagoon.

Figure 2

Figure 3

Intake Screens Permanent Impact - 0.2 Acres

The San Diego Water Board staff have indicated that they intend to present Alternative 21 to their Board as the recommended intake considering the best available site, design, technology and mitigation measures feasible. The Water Authority and Poseidon agree that Alternative 21 could have merit; however, the Water Authority has requested that the San Diego Water Board include provisions in the permit to allow time to conduct a 24-month demonstration project to generate site-specific data on the performance and efficacy of the type of screened intake proposed in Alternative 21. This demonstration project would include a side-by-side evaluation of passive and active rotating screens and will be used to confirm the feasibility of using wedgewire screens in an estuarine environment. The demonstration project would evaluate the ability of the intake to reliably and safely deliver water for the long-term operation of the CDP in a cost-effective manner. The data would also be used to refine the design and O&M requirements for the wedgewire screen system and validate and refine the proposed construction and O&M cost assumptions.

Proposed Phased Operations

Poseidon has proposed three phases for facilities to keep the CDP in operation while coming into compliance with the OPA:

1. Poseidon has reached agreement with NRG to allow for the operation of the cooling water circulation pumps to be extended through the end of 2019, while a temporary, interim intake/discharge system is constructed, even though the EPS electricity generation activities are scheduled to shut down in December 2018.
2. A temporary pump system with fish friendly pumps will be constructed to keep the plant in operation while pilot studies are conducted and the new intake system is designed and constructed on the floor of the lagoon.

3. Once constructed, the new intake system will be connected, achieving full compliance with the OPA.

Permitting Timeline

Because Alternative 21 was not considered in the Supplemental EIR for the project, an addendum to the EIR will be required for the Modifications to be permitted. It is expected that the Regional Board could release a draft NPDES permit for the Lewis Carlsbad Desalination Facility, which addresses the Modifications as well as the proposed phased operations, for public review around October 2018. The final NPDES permit could be issued to Poseidon as early as December 2018. Once the new NPDES permit is issued, Poseidon will have up to five years to construct facilities which fully comply with all provisions of the OPA. Staff will return to the Board in fall 2018 with updated costs for the Modifications and a refined project schedule based on the draft permit provisions.

Prepared by: Toby Roy, Water Resources Manager
Reviewed by: Robert R. Yamada, Director of Water Resources
Reviewed by: Sandra L. Kerl, Deputy General Manager
Approved by: Maureen A. Stapleton, General Manager
November 28, 2018

Attention: Water Planning Committee


Staff recommendation
1. Authorize the General Counsel to amend the legal services agreement with Hawkins Delafield & Wood LLP as special counsel to include new transactional legal work for the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) project intake and discharge system modifications phased implementation. This will add $318,000 to the contract, increasing the authorized cumulative amount from $180,000 to $498,000.

2. Authorize the General Manager to amend the professional services contract with Clean Energy Capital Securities LLC to include work for the CDP project intake and discharge system modifications phased implementation. This will add $257,500 to the contract, increasing the authorized cumulative amount from $140,000 to $397,500 and extend the term from its current end date of December 31, 2018 to June 30, 2020.

3. Authorize the General Manager to amend the professional services contract with Louis Berger Group to include work for the CDP project intake and discharge system modifications phased implementation. This will add $250,400 to the contract, increasing the authorized cumulative amount from $1,287,692 to $1,538,092 and extend the term from its current end date of December 31, 2018 to June 30, 2021.

Alternative
Do not authorize the General Manager and General Counsel to amend the referenced contracts and direct staff to renegotiate the terms with each party or solicit new proposals.

Fiscal Impact
Funds in the amount of $825,900 are available in the approved project budget and the fiscal years 2018 and 2019 Capital Improvement Program appropriation. This project relates to the Customer Service rate category.
Executive Summary

- The closure of the Encina Power Station requires the construction of new intake and discharge facilities in compliance with the newly adopted statewide Ocean Plan Amendment to allow a transition to a “stand-alone” operation of the Lewis Carlsbad Desalination Plant.

- Construction of the new intake and discharge facilities will be implemented through three phases to allow for continual operation of the Lewis Carlsbad Desalination Plant under a revised NPDES permit. Contract Administration Memorandums and accompanying contract amendments will be required for each phase to document the Water Purchase Agreement supplements.

- Hawkins Delafield & Wood LLP, Clean Energy Capital Securities LLC, and the Louis Berger Group each were involved with the development of the Water Purchase Agreement and are uniquely qualified to support the legal, financial, engineering and contract administration services required for each phase of the Intake Modifications Project.

- Staff recommends increasing existing contract not-to-exceed amounts for Hawkins Delafield & Wood LLP by $318,000, Clean Energy Capital Securities LLC by $257,500, and the Louis Berger Group by $250,400. Approval of contract amendments will cover activities related to Phases 1 and 2; project budget for Phase 3 will be requested at a later date.

Background

Intake and discharge system modifications (modifications) to the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) are required due to the adjacent Encina Power Station’s pending shutdown in order to transition to stand-alone operation as well as comply with the Ocean Plan Amendment (OPA) adopted by the State Water Resources Control Board in May 2015 that covers ocean water desalination intakes and discharges. Permitting of the modifications represents one of the first instances statewide where the OPA language will be applied to a new desalination facility permit and has resulted in a much lengthier regulatory compliance timeline. This timeline now necessitates that the transition to the OPA-compliant facilities be accomplished through a phased implementation, as described below, to keep the CDP in operation.

1. **Temporary Standalone Operations**: Poseidon has reached agreement with NRG to allow for the operation of the cooling water circulation pumps to be extended through the end of 2019, while a temporary, interim intake/discharge system is constructed, even though the EPS electricity generation activities are scheduled to shut down in December 2018.

2. **Interim Operations**: A temporary pump system with OPA-compliant fish friendly pumps will be constructed to keep the plant in operation while pilot/demonstration studies are conducted for the new intake concept and the new intake system is designed and constructed on the floor of the lagoon. (estimated to begin January 2020)

3. **Permanent Operations**: Once constructed, the new intake system will be connected, achieving full compliance with the OPA. (estimated to begin January 2024)
Previous Board Actions

On July 28, 2016 the Board authorized the General Counsel to amend the legal services agreement with Hawkins Delafield & Wood LLP as special counsel to include new transactional legal work for the Claude “Bud” Lewis Carlsbad Desalination Plant project intake and discharge system modifications, for a not-to-exceed amount of $180,000.

On June 28, 2012 the Board approved the seventh amendment to the Professional Services Agreement with Clean Energy Capital and increased the not-to-exceed amount from $1,402,000 to $1,822,000 for financial advisory and due diligence services related to the preparation and negotiation of a Water Purchase Agreement with Poseidon Resources.

On July 28, 2016 the Board Authorize the General Manager to approve Amendment No. 6 to the professional services contract with Louis Berger Group for technical support services for the proposed intake and discharge modifications for the Claude “Bud” Lewis Carlsbad Desalination Plant, in the amount of $147,900, for a total contract value of $1,287,692, and extending the term from its current end date of December 31, 2016 to June 30, 2017.

Discussion

With the planning and permitting of the intake modifications under way, and given the phasing required due to the permitting timeline, there are extensive engineering, financial services, and legal support required including the following:

- Due diligence review of Poseidon’s costs to ensure appropriate cost determination and allocation.
- Due diligence review of Poseidon’s proposed phased design and construction plans and contractor procurements.
- Water Authority engagement in planned financing efforts by Poseidon to support phased implementation.
- Development of a series of Water Purchase Agreement (WPA) supplements and Contract Administration Memorandums (CAMs) to document any contract supplements required to support phased implementation of the modifications, as well as to ensure that the final WPA contract supplement provisions mirror the risk transfer provisions and include similar involvement and approval rights for the Water Authority as the original WPA.

Given the additional complexity and activity required due to the planned phased implementation of the modifications, amendments are required for existing professional services agreements for the three consultants supporting the Water Authority regarding the implementation of the intake modifications. Therefore, contract amendments are recommended for Hawkins Delafield & Wood LLP, Clean Energy Capital Securities LLC, and the Louis Berger Group. Due to their familiarity with the WPA as part of the original team that negotiated the document, each firm is uniquely qualified to support the complex negotiations and administration of the WPA required.
for the phased implementation of the modifications. A brief description of each firm and the proposed contract amendment amount is provided below:

**Hawkins Delafield & Wood LLP (Hawkins)**
Eric Petersen of Hawkins serves as a special counsel for the Water Authority’s interests in the development and ongoing implementation of the WPA. He and his firm have particular expertise in design/build and design/build/operate procurements in the public utility sector.

**Clean Energy Capital Securities LLC (CEC)**
CEC is an investment banking firm that specializes in municipal financing, equity placement and is experienced in the project financing of large utility projects. CEC has been the primary financial advisor to the Water Authority under two separate contracts associated with the CDP, developing and negotiating both the business and financial terms for the WPA.

**Louis Berger Group (Berger)**
Berger is a global professional services corporation that specializes in delivering major infrastructure programs from planning through construction. Berger has been the Water Authority’s technical advisor on the WPA and oversight on the construction of the CDP.

<table>
<thead>
<tr>
<th>Firm</th>
<th>Current Contract Value ($)</th>
<th>Amendment Value ($)</th>
<th>New Contract Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawkins</td>
<td>$180,000</td>
<td>$318,000</td>
<td>$498,000</td>
</tr>
<tr>
<td>CEC</td>
<td>$140,000</td>
<td>$257,500</td>
<td>$397,500</td>
</tr>
<tr>
<td>Berger</td>
<td>$1,287,692</td>
<td>$250,400</td>
<td>$1,538,092</td>
</tr>
</tbody>
</table>

Staff recommends Board approval to amend a legal services agreement with Hawkins Delafield & Wood LLP and professional services contracts with Clean Energy Capital LLC and Louis Berger Group for services described above under the first two phases of operation for the CDP modifications, expected to extend through December 31, 2020. Due to uncertainty of the final OPA-compliant phase of operations caused by the San Diego Regional Water Quality Control Boards delay in issuing the necessary permits, contract amendments and a potential increase to the project budget for the third operational phase (the permanent improvements) will be requested by staff at a later date. Work on this effort is anticipated to begin by July 1, 2021.

Prepared by: Jeremy Crutchfield, Principal Engineer
Reviewed by: Toby Roy, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager
November 28, 2018

Attention: Water Planning Committee

Public Review Draft of California Water Plan Update 2018 (Information)

Purpose
Provide the Board with an update on the status of the California Department of Water Resources’ Water Plan Update 2018

Background
In 1957, the California Department of Water Resources (DWR) published the California Water Plan (Water Plan). The Water Plan serves as the State’s strategic plan to manage and develop water resources in California. Early updates to the Water Plan were primarily technical documents that focused on water supply development. Over time, that focus gradually expanded to include information on the growing conflicts over California’s limited water resources. In 1998, the Water Plan expanded again to include an evaluation of options to address significant water issues in California.

The Water Plan has been updated 10 times since the first water plan was prepared in 1957, with the most recent update in 2013. Water Plan Update 2018 (Update 2018) marks the eleventh update of the water plan and it builds on previous versions to promote the management and measurement of water resources for sustainability, with the idea that sustainability is an ongoing, resilient, and dynamic balance among four societal values. Update 2018 identifies those societal values as public health and safety, a healthy economy, ecosystem vitality, and opportunities for enriching experiences.

Discussion
DWR initiated the stakeholder process to prepare Update 2018 in October 2016. Over the next 11 months, DWR held in-person meetings and webinars to solicit public input on the development of Update 2018. Water Authority and member agency staff actively engaged in those meetings and webinars. In September 2017, DWR released its preliminary draft of Update 2018 for public comment. Four months later, in January 2018, DWR released its working draft of Update 2018 for public comment. The Water Authority submitted comment letters on both draft documents. One of the primary areas of concern addressed in the comment letters was the Water Authority opposition to a water use surcharge, which was proposed in the draft plan.

DWR plans to release the final draft of Water Plan Update 2018 for public comment in mid-November 2018. Should it be released as anticipated, staff will provide the Board with an update at the Water Planning Committee meeting.

Prepared by: Jeff Stephenson, Principal Water Resources Specialist
Reviewed by: Dana L. Friehauf, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager
November 28, 2018

Attention: Water Planning Committee

Update on water supply conditions. (Presentation)

Purpose
To provide a report on current water supply conditions and outlook for the 2018-2019 winter.

Background
Water Year 2018 (WY 2018) ended September 30, 2018 and was recorded as a dry year. The April 1, 2018 statewide snowpack was at 58 percent of average for WY 2018, a dramatic drop from 159 percent of average for the same date in 2017. Much of Southern California ended up with half or less than half of average annual precipitation. While conditions overall were dry, there were sporadic periods of significant precipitation, but most of which fell as rain and not snow. Despite below-average precipitation in WY 2018, most California reservoirs, except for Lake Oroville, are storing near- or above-average levels of water heading into Water Year 2019 (WY 2019).

Discussion
On November 8, 2018, the U.S. Climate Prediction Center (CPC) issued an El Niño Watch indicating that a weak El Niño is expected to form and continue through the Northern Hemisphere in winter 2018-19 (approximately an 80 percent chance) and into spring 2019 (55-60 percent chance). With the wet season now underway, and the expectation of a weak El Niño this upcoming winter, the U.S. Seasonal Drought Outlook, released on November 15, 2018, indicates that drought improvement and/or removal is favored for California and the southern portion of the Southwest.

State Water Project
October 2018, the first month of WY 2019, was relatively dry in the northern Sierra Nevada, with precipitation of one inch recorded early in the month. On average, October rainfall in this region totals roughly 3 three inches. As of November 19, there has been no recorded rainfall in November 2018. The Northern Sierra 8-Station Index totaled only one inch of precipitation for the water year, or 14% of average for this date. The California Department of Water Resources (DWR) will begin its official snowpack measurements in December 2017.

Storage in Lake Oroville has remained below average since April 2017 due to significant repair work to fix major damage to the main and emergency spillways that was sustained in late February 2017. DWR announced on October 31, 2018, that it had met its goal of completely reconstructing the main spillway by November 1 to be prepared for the upcoming winter. DWR’s operations plan for the 2018-19 flood season calls for DWR to maintain lower-than-average lake levels during the winter months to provide operational flexibility to ensure flood protection, meet water deliveries, meet environmental requirements, and to prevent use of the emergency spillway this winter. Construction will continue on the emergency spillway into early 2019.
Table 1 shows storage levels for Lake Oroville and San Luis Reservoir as of November 19, 2018.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage in Million Acre-Feet</th>
<th>Percent of Capacity</th>
<th>Percent of Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oroville</td>
<td>1.051</td>
<td>30%</td>
<td>49%</td>
</tr>
<tr>
<td>San Luis*</td>
<td>1.186</td>
<td>58%</td>
<td>102%</td>
</tr>
<tr>
<td>Combined</td>
<td>2.237</td>
<td>40%</td>
<td>68%</td>
</tr>
</tbody>
</table>

*San Luis storage includes SWP and Central Valley Project. SWP share in San Luis was approximately 784 thousand acre-feet.

Colorado River
For WY 2019, as of November 13, 2018, Upper Colorado River Basin rainfall is at 119 percent of average, and snowpack measurements have not been recorded. Table 2 shows storage levels for Lakes Powell and Mead as of November 13, 2018.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Storage in Million Acre-Feet</th>
<th>Percent of Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Powell</td>
<td>10.61</td>
<td>44%</td>
</tr>
<tr>
<td>Lake Mead</td>
<td>9.97</td>
<td>38%</td>
</tr>
<tr>
<td>Combined</td>
<td>20.58</td>
<td>41%</td>
</tr>
</tbody>
</table>

In August 2018, the Bureau of Reclamation released its lower basin shortage projection. For calendar year 2019, Reclamation anticipates no shortage condition on the Colorado River, but this increases to a 57 percent shortage probability in 2020.

Metropolitan Water District
As of October 31, 2018, the Metropolitan Water District of Southern California (MWD) had 8,502 acre-feet of additional storage in Diamond Valley Reservoir compared to this time last year. The total storage in Diamond Valley Reservoir is approximately 810,000 acre-feet. MWD staff generally begins their monthly supply reports to the MWD board in January.

Local Conditions
Local reservoir storage as of October 29, 2018, was at 47 percent of capacity, or approximately 347,800 acre-feet. This total includes “dead storage,” or capacity that is physically inaccessible or restricted by agency operating or emergency storage policies. It also includes Water Authority carryover and emergency storage in Lake Hodges, Olivenhain Reservoir and San Vicente Reservoir. A breakdown of Water Authority storage for October 2018 is contained in Exhibit D of this month’s Water Resources Report.
Above-average temperatures in the San Diego region continued through the summer and into the fall, with the average daily maximum temperature at Lindbergh Field 5.8 degrees and 6.9 degrees Fahrenheit above normal for July and August 2017, respectively. Figure 1 shows the departure from normal maximum monthly temperatures at Lindbergh Field for the past two water years, with only January 2017 and May 2018 registering a below-normal average maximum temperature. October 2018 temperatures continued to be above-average, with the average daily maximum temperature at Lindbergh Field 2.6 degrees above normal.

Figure 1 – Average Daily Maximum Temperature Departure from Normal (°F)
Water Years 2017 and 2018

Precipitation in the San Diego region has been limited to early October. Table 3 contains cumulative rainfall totals since October 2018 for Lindbergh Field and Ramona Airport. These locations are geographically representative of coastal and inland regions of the Water Authority service area.

Table 3 – 2018 Water Year Rainfall Totals (October 1 – November 18, 2018)

<table>
<thead>
<tr>
<th>Station</th>
<th>Precipitation (Inches)</th>
<th>Percent of Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lindbergh Field</td>
<td>0.57</td>
<td>52%</td>
</tr>
<tr>
<td>Ramona Airport</td>
<td>0.99</td>
<td>68%</td>
</tr>
</tbody>
</table>

Outlook
On November 15, 2018, the National Oceanic and Atmospheric Administration’s Climate Prediction Center (CPC) issued its three-month outlook (December through February) for temperature and precipitation across the country (Figure 2). The CPC precipitation outlook shows that above-normal precipitation is favored in much of the south, including all but a small portion of northern California. The CPC temperature outlook shows that above-normal temperatures are favored for all of the western states, with a greater than 40 percent probability of above normal temperatures for southern California.

**Figure 2 - Precipitation and Temperature Outlook (December 2018–February 2019)**

Based on current supply levels, even under dry winter conditions this year, the Water Authority and its member agencies will meet anticipated demands through a combination of drought-resilient local and regional water resources, including the Claude “Bud” Lewis Carlsbad Desalination Plant, conserved agricultural water transfers, savings from canal lining projects, and continued water-use efficiency measures.

Prepared by: Alexi Schnell, Water Resources Specialist
Reviewed by: Jeff Stephenson, Principal Water Resources Specialist
Dana Friehauf, Water Resources Manager
Kelley Gage, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager
November 28, 2018

Attention:  Water Planning Committee

Water Resources Report

Purpose
This report includes the following exhibits for October 2018:

- Rainfall and Temperature data
- Deliveries to Member Agencies (Exhibit A)
- Water Use by Member Agencies (Exhibit B)
- Potable M&I Water Use (Exhibit C)
- Storage Available to Member Agencies (Exhibit D)
- Firm Water Deliveries to Member Agencies (Exhibit E)
- Summary of Water Authority Member Agency Operations (Exhibit F)

<table>
<thead>
<tr>
<th>Station</th>
<th>October 2018</th>
<th></th>
<th>WATER YEAR 2019 TO DATE (October 2018 through October 2018)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Normal</td>
<td>Actual</td>
<td>Normal</td>
</tr>
<tr>
<td>Lindbergh Field</td>
<td>0.57</td>
<td>0.57</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>(N.O.A.A.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramona Airport (N.O.A.A.)</td>
<td>0.99</td>
<td>0.72</td>
<td>0.99</td>
<td>0.72</td>
</tr>
<tr>
<td>Lake Henshaw (Vista I.D.)</td>
<td>0.70</td>
<td>1.09</td>
<td>0.70</td>
<td>1.09</td>
</tr>
</tbody>
</table>

Sources: National Weather Service, Vista Irrigation District.

<table>
<thead>
<tr>
<th>Station</th>
<th>October 2018 Actual</th>
<th>October 2018 Normal</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lindbergh Field (N.O.A.A.)</td>
<td>75.4</td>
<td>72.8</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Since January 2014, 55 of last 58 months were hotter than normal at Lindbergh Field.
# MONTHLY WATER RESOURCES REPORT

**Water Deliveries to Member Agencies**

**(acre-feet)**

## OCTOBER 2018

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>October</th>
<th>12 Months Ended October</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>Carlsbad M.W.D.</td>
<td>1,377.5</td>
<td>1,870.0</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>80.0</td>
<td>92.1</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>1,893.3</td>
<td>2,001.1</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>724.9</td>
<td>824.3</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>2,714.3</td>
<td>3,374.3</td>
</tr>
<tr>
<td>Lakeside W.D.</td>
<td>246.0</td>
<td>269.3</td>
</tr>
<tr>
<td>National City, City of</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>1,908.2</td>
<td>2,390.9</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>1,580.5</td>
<td>2,001.1</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>2,492.4</td>
<td>2,772.2</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>873.9</td>
<td>942.9</td>
</tr>
<tr>
<td>Pendleton M.C.B.</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>1,113.2</td>
<td>1,235.0</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>1,732.4</td>
<td>2,285.3</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>629.2</td>
<td>498.2</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>463.8</td>
<td>515.0</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>13,893.0</td>
<td>14,247.4</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>420.7</td>
<td>223.4</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>718.4</td>
<td>529.5</td>
</tr>
<tr>
<td>South Bay I.D. 2</td>
<td>671.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>1,338.5</td>
<td>1,580.5</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>1,690.3</td>
<td>2,362.0</td>
</tr>
<tr>
<td>Vista I.D. 1</td>
<td>1,536.7</td>
<td>745.3</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>474.1</td>
<td>640.8</td>
</tr>
</tbody>
</table>

| Deliveries To SDCWA Agencies 2 | 38,576.2 | 41,311.0 | 430,359.1 | 430,579.4 |
| Less: Deliveries to SDCWA Storage 2 | 242.7 | 526.8 | 3,394.4 | 36,787.5 |
| **TOTAL MEMBER AGENCY DELIVERIES** | **38,333.5** | **40,784.2** | **426,964.7** | **393,791.9** |

1. There were no Supplemental wheeled water deliveries to Escondido and Vista I.D. in October.
2. Member agency deliveries include puts into Water Authority storage accounts. For October 2018, storage account deliveries totaled 180 AF and 63 AF to San Vicente Reservoir and Lower Otay Reservoir, respectively, through city of San Diego connections. October 2017 storage account deliveries totaled 251 AF and 276 AF to San Vicente Reservoir and Lower Otay Reservoir, respectively, through city of San Diego connections.
## MONTHLY WATER RESOURCES REPORT
### Estimated Water Use by Member Agency (acre-feet)

#### OCTOBER 2018

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Imported/Desal 2018</th>
<th>Surface 2018</th>
<th>Groundwater 2018</th>
<th>Recycled 2018</th>
<th>Desal / Supplemental 1</th>
<th>October Totals 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>1,172.1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,811.4</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>80.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>87.0</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>1,797.5</td>
<td>2,156.3</td>
<td>0.0</td>
<td>42.7</td>
<td>37.5</td>
<td>1,835.0</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>792.7</td>
<td>1,000.1</td>
<td>-</td>
<td>6.0</td>
<td>7.0</td>
<td>857.8</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>2,565.8</td>
<td>2,763.2</td>
<td>35.1</td>
<td>0.0</td>
<td>13.0</td>
<td>2,613.9</td>
</tr>
<tr>
<td>Lakeside W.D.</td>
<td>246.0</td>
<td>269.3</td>
<td>-</td>
<td>67.6</td>
<td>74.9</td>
<td>313.6</td>
</tr>
<tr>
<td>National City, City of 2</td>
<td>15.2</td>
<td>0.2</td>
<td>2.7</td>
<td>34.3</td>
<td>34.3</td>
<td>366.3</td>
</tr>
<tr>
<td>Oceanside, City of 3</td>
<td>1,908.2</td>
<td>2,390.9</td>
<td>-</td>
<td>215.3</td>
<td>10.1</td>
<td>2,133.6</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>1,580.5</td>
<td>1,905.4</td>
<td>-</td>
<td>-</td>
<td>286.6</td>
<td>1,867.1</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>2,492.4</td>
<td>2,772.2</td>
<td>-</td>
<td>365.8</td>
<td>446.3</td>
<td>2,858.2</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>873.4</td>
<td>942.3</td>
<td>-</td>
<td>88.1</td>
<td>98.2</td>
<td>961.5</td>
</tr>
<tr>
<td>Pendleton M.C.B.</td>
<td>13.9</td>
<td>10.4</td>
<td>600.0</td>
<td>34.0</td>
<td>34.1</td>
<td>647.9</td>
</tr>
<tr>
<td>Poway, City of 5</td>
<td>913.9</td>
<td>949.5</td>
<td>-</td>
<td>50.0</td>
<td>78.0</td>
<td>963.9</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>1,509.4</td>
<td>2,008.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,509.4</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>422.5</td>
<td>483.0</td>
<td>-</td>
<td>47.3</td>
<td>69.6</td>
<td>469.8</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>463.8</td>
<td>515.0</td>
<td>-</td>
<td>282.2</td>
<td>332.4</td>
<td>746.0</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>12,834.7</td>
<td>14,738.3</td>
<td>2,478.5</td>
<td>1,448.7</td>
<td>14.1</td>
<td>16,082.3</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>420.7</td>
<td>223.4</td>
<td>86.9</td>
<td>351.9</td>
<td>49.8</td>
<td>557.4</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>718.4</td>
<td>530.1</td>
<td>116.7</td>
<td>472.9</td>
<td>43.3</td>
<td>878.4</td>
</tr>
<tr>
<td>South Bay I.D.</td>
<td>631.1</td>
<td>3.0</td>
<td>110.9</td>
<td>729.4</td>
<td>405.9</td>
<td>1,147.9</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>1,043.7</td>
<td>1,251.0</td>
<td>-</td>
<td>-</td>
<td>291.7</td>
<td>1,335.4</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>1,690.3</td>
<td>2,362.0</td>
<td>-</td>
<td>31.8</td>
<td>30.4</td>
<td>1,722.1</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>1,536.7</td>
<td>745.3</td>
<td>0.0</td>
<td>42.7</td>
<td>-</td>
<td>1,536.7</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>474.1</td>
<td>640.8</td>
<td>-</td>
<td>485.2</td>
<td>654.0</td>
<td>959.3</td>
</tr>
</tbody>
</table>

**TOTAL USE:**

|                     | 36,197.0 | 40,381.1 | 2,830.8 | 3,122.6 | 2,155.5 | 2,247.8 | 2,578.6 | 2,897.4 | 500.0 | 1,414.6 | 44,261.9 | 50,063.5 |

**PERCENT CHANGE:**

|                     | -10%     | -9%      | -4%      | -11%     | -65%     | -12%     |

1 Supplemental Water was added as a local supply source beginning in December 2017, for Escondido and Vista I.D. only.
2 De Luz figures included in Fallbrook P.U.D. totals.
3 Brackish groundwater figures included in Groundwater figures.
4 Pendleton M.C.B. Imported Use includes South Coast Water District deliveries.
5 Poway’s recycled use is reported quarterly and is estimated at 1/3 of that amount, monthly.

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# MONTHLY WATER RESOURCES REPORT

**Potable M&I Water Use for State Water Resources Control Board Emergency Regulation Tracking**

(acre-feet)

**OCTOBER 2018**

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>October 2018</th>
<th>2013</th>
<th>41 Months Ended October 2018</th>
<th>CY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>1,380.4</td>
<td>1,507.6</td>
<td>52,329.0</td>
<td>61,049.2</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>80.0</td>
<td>88.8</td>
<td>3,435.5</td>
<td>3,928.6</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>1,546.1</td>
<td>1,818.7</td>
<td>60,112.9</td>
<td>74,809.5</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>590.6</td>
<td>740.9</td>
<td>23,862.8</td>
<td>29,535.8</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>2,613.9</td>
<td>3,031.4</td>
<td>100,126.1</td>
<td>119,899.9</td>
</tr>
<tr>
<td>Lakeside W.D.</td>
<td>313.6</td>
<td>361.0</td>
<td>11,962.3</td>
<td>14,794.8</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>2,088.5</td>
<td>2,490.4</td>
<td>80,789.6</td>
<td>98,775.9</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>1,570.5</td>
<td>1,860.8</td>
<td>62,035.1</td>
<td>73,730.5</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>2,492.4</td>
<td>2,877.3</td>
<td>96,177.3</td>
<td>112,581.8</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>862.3</td>
<td>992.3</td>
<td>32,562.6</td>
<td>39,491.2</td>
</tr>
<tr>
<td>Pendleton M.C.B.</td>
<td>13.9</td>
<td>669.6</td>
<td>21,378.2</td>
<td>27,181.2</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>907.9</td>
<td>1,100.1</td>
<td>32,763.6</td>
<td>42,931.9</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>911.4</td>
<td>963.8</td>
<td>34,515.7</td>
<td>39,033.9</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>355.2</td>
<td>383.8</td>
<td>12,498.0</td>
<td>16,903.3</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>461.8</td>
<td>592.0</td>
<td>17,827.8</td>
<td>22,972.5</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>15,314.3</td>
<td>17,415.4</td>
<td>580,062.7</td>
<td>684,933.4</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>507.6</td>
<td>578.9</td>
<td>19,629.7</td>
<td>22,854.9</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>835.1</td>
<td>1,003.6</td>
<td>32,997.5</td>
<td>40,268.2</td>
</tr>
<tr>
<td>Sweetwater Authority 5</td>
<td>1,514.2</td>
<td>1,818.1</td>
<td>60,186.6</td>
<td>73,963.7</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>1,265.2</td>
<td>1,384.0</td>
<td>48,257.7</td>
<td>56,396.2</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>651.0</td>
<td>749.0</td>
<td>25,403.9</td>
<td>32,642.3</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>1,529.2</td>
<td>1,681.1</td>
<td>59,251.3</td>
<td>67,580.9</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>635.0</td>
<td>717.4</td>
<td>24,463.5</td>
<td>34,078.4</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>38,440.1</strong></td>
<td><strong>44,826.0</strong></td>
<td><strong>1,492,629.4</strong></td>
<td><strong>1,790,338.0</strong></td>
</tr>
<tr>
<td><strong>PERCENT CHANGE</strong></td>
<td><strong>-14%</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**

1. SWRCB emergency regulation went into effect June 2015.
2. The 2013 baseline is utilized to be consistent with the May 2015 SWRCB emergency drought regulation, which was partially rescinded on April 26, 2017. The conservation regulation expired completely on November 25, 2017. Agencies have continued to report to SWRCB beyond November.
3. Excludes recycled water use and Transitional Special Agricultural Water Rate program deliveries. TSAWR deliveries are estimated for months where agencies have not reported.
4. Baseline includes January-December 2013 three times; and June-October 2013 once, in order to establish the base period of 41 months.
5. Sweetwater Authority is comprised of member agencies city of National City and South Bay Irrigation District.

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**MONTHLY WATER RESOURCES REPORT**

Reservoir Storage

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Reservoir</th>
<th>Capacity</th>
<th>October 2018</th>
<th>% of October 2017</th>
<th>October 2017</th>
<th>% of Change During Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>Maerkle</td>
<td>600</td>
<td>17</td>
<td>3%</td>
<td>393</td>
<td>66%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>Dixon</td>
<td>2,606</td>
<td>2,557</td>
<td>98%</td>
<td>2,495</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>Wohlford</td>
<td>6,506</td>
<td>2,278</td>
<td>35%</td>
<td>2,264</td>
<td>35%</td>
</tr>
<tr>
<td>Subtotals</td>
<td></td>
<td>9,112</td>
<td>4,835</td>
<td>53%</td>
<td>4,759</td>
<td>52%</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>Red Mountain</td>
<td>1,335</td>
<td>249</td>
<td>19%</td>
<td>204</td>
<td>15%</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>Cuyamaca</td>
<td>8,195</td>
<td>379</td>
<td>5%</td>
<td>598</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Jennings</td>
<td>9,790</td>
<td>9,039</td>
<td>92%</td>
<td>8,449</td>
<td>86%</td>
</tr>
<tr>
<td>Subtotals</td>
<td></td>
<td>17,985</td>
<td>9,418</td>
<td>52%</td>
<td>9,047</td>
<td>50%</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>Poway</td>
<td>3,432</td>
<td>3,244</td>
<td>95%</td>
<td>2,570</td>
<td>75%</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>Morro Hill</td>
<td>465</td>
<td>329</td>
<td>71%</td>
<td>465</td>
<td>100%</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td></td>
<td>12,000</td>
<td>2,416</td>
<td>20%</td>
<td>2,275</td>
<td>19%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>Barrett</td>
<td>34,806</td>
<td>11,101</td>
<td>32%</td>
<td>12,094</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>El Capitan</td>
<td>112,807</td>
<td>27,894</td>
<td>25%</td>
<td>39,681</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Hodges</td>
<td>10,633</td>
<td>8,205</td>
<td>77%</td>
<td>11,551</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Lower Otay</td>
<td>47,067</td>
<td>31,476</td>
<td>67%</td>
<td>33,707</td>
<td>72%</td>
</tr>
<tr>
<td></td>
<td>Miramar</td>
<td>6,682</td>
<td>5,493</td>
<td>82%</td>
<td>4,897</td>
<td>73%</td>
</tr>
<tr>
<td></td>
<td>Morena</td>
<td>50,694</td>
<td>2,935</td>
<td>6%</td>
<td>3,961</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>Murray</td>
<td>4,684</td>
<td>4,293</td>
<td>92%</td>
<td>4,075</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td>San Vicente</td>
<td>91,695</td>
<td>48,579</td>
<td>53%</td>
<td>62,361</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>Sutherland</td>
<td>29,508</td>
<td>12,365</td>
<td>42%</td>
<td>13,368</td>
<td>45%</td>
</tr>
<tr>
<td>Subtotals</td>
<td></td>
<td>388,576</td>
<td>152,358</td>
<td>39%</td>
<td>165,694</td>
<td>48%</td>
</tr>
<tr>
<td>San Diego WD / Santa Fe I D</td>
<td>San Diego</td>
<td>883</td>
<td>336</td>
<td>38%</td>
<td>298</td>
<td>34%</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>Loveland</td>
<td>25,400</td>
<td>13,358</td>
<td>53%</td>
<td>13,765</td>
<td>54%</td>
</tr>
<tr>
<td></td>
<td>Sweetwater</td>
<td>28,079</td>
<td>2,987</td>
<td>11%</td>
<td>8,723</td>
<td>31%</td>
</tr>
<tr>
<td>Subtotals</td>
<td></td>
<td>53,479</td>
<td>16,345</td>
<td>31%</td>
<td>22,488</td>
<td>42%</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>Turner</td>
<td>1,612</td>
<td>1,125</td>
<td>70%</td>
<td>1,200</td>
<td>74%</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>Henshaw</td>
<td>51,774</td>
<td>2,107</td>
<td>4%</td>
<td>3,560</td>
<td>7%</td>
</tr>
<tr>
<td><strong>MEMBER AGENCY TOTAL</strong></td>
<td></td>
<td>541,253</td>
<td>192,779</td>
<td>36%</td>
<td>232,952</td>
<td>43%</td>
</tr>
<tr>
<td><strong>WATER IN STORAGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(4,675)</td>
</tr>
<tr>
<td>Olivenhain</td>
<td>24,774</td>
<td>17,665</td>
<td>18,021</td>
<td></td>
<td></td>
<td>(963)</td>
</tr>
<tr>
<td>San Vicente - Comprised of:</td>
<td>157,665</td>
<td>130,909</td>
<td>124,910</td>
<td></td>
<td></td>
<td>(231)</td>
</tr>
<tr>
<td>Water Authority</td>
<td>Emergency</td>
<td>27,829</td>
<td>29,127</td>
<td></td>
<td></td>
<td>(102)</td>
</tr>
<tr>
<td></td>
<td>Carryover</td>
<td>91,835</td>
<td>95,775</td>
<td></td>
<td></td>
<td>(334)</td>
</tr>
<tr>
<td></td>
<td>Operating</td>
<td>11,146</td>
<td>8</td>
<td></td>
<td></td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Hedges</td>
<td>20,000</td>
<td>3,562</td>
<td></td>
<td></td>
<td>(573)</td>
</tr>
<tr>
<td>Subtotals</td>
<td></td>
<td>202,437</td>
<td>152,136</td>
<td>75%</td>
<td>148,547</td>
<td>73%</td>
</tr>
<tr>
<td><strong>TOTAL WATER IN STORAGE</strong></td>
<td></td>
<td>743,690</td>
<td>344,914</td>
<td>46%</td>
<td>393,080</td>
<td>53%</td>
</tr>
<tr>
<td><strong>OTHER AGENCIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(6,441)</td>
</tr>
<tr>
<td>Metropolitan Water District</td>
<td>Skinner</td>
<td>44,264</td>
<td>35,962</td>
<td>81%</td>
<td>38,675</td>
<td>87%</td>
</tr>
<tr>
<td></td>
<td>Diamond Valley</td>
<td>810,000</td>
<td>704,147</td>
<td>87%</td>
<td>695,645</td>
<td>86%</td>
</tr>
<tr>
<td>State Water Project</td>
<td>Oroville</td>
<td>3,537,577</td>
<td>1,788,891</td>
<td>33%</td>
<td>1,217,912</td>
<td>34%</td>
</tr>
<tr>
<td><strong>TOTAL OTHER WATER IN STORAGE</strong></td>
<td></td>
<td>4,391,841</td>
<td>1,919,000</td>
<td>44%</td>
<td>1,952,232</td>
<td>44%</td>
</tr>
</tbody>
</table>

1 Excludes storage allocated to Escondido Mutual Water Co. or its rights to a portion of the unallocated water in Lake Henshaw.
2 City of Poway updated capacity volume.
3 Includes reserved subject to city's outstanding commitments to San Dieguito WD, and California American Mutual (Cal-Am) Water Company.
4 Includes allocated and unallocated water in Lake Henshaw.
5 Water Authority carryover, emergency and operating pools in San Vicente Reservoir were established in June 2015. City of San Diego presently states total capacity in San Vicente at 249,358 AF, with the Water Authority portion being 157,663 AF and the remaining capacity, 91,695 AF, allocable to the city. Figures for October 2018 include evaporation/seepage estimates.
6 No defined capacities for storage accounts in El Capitan, Lower Otay and Sweetwater Authority reservoirs. Figures for October 2018 include evaporation/seepage estimates.

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## Tier 1 Estimated Deliveries to Member Agencies (Figures in acre-feet)

**Calendar Year 2018 (2 Months)**

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>CY2018 Tier 1 Threshold</th>
<th>CYTD Firm Deliveries</th>
<th>% of Tier 1 Threshold (Pre-QSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad M.W.D.</td>
<td>12,376.0</td>
<td>11,450.0</td>
<td>92.5%</td>
</tr>
<tr>
<td>Del Mar, City of</td>
<td>935.0</td>
<td>926.6</td>
<td>99.1%</td>
</tr>
<tr>
<td>Escondido, City of</td>
<td>17,859.0</td>
<td>9,957.0</td>
<td>55.8%</td>
</tr>
<tr>
<td>Fallbrook P.U.D.</td>
<td>10,325.0</td>
<td>8,253.7</td>
<td>79.9%</td>
</tr>
<tr>
<td>Helix W.D.</td>
<td>25,519.0</td>
<td>25,226.9</td>
<td>98.9%</td>
</tr>
<tr>
<td>Lakeside M.W.D.</td>
<td>3,168.0</td>
<td>2,455.7</td>
<td>77.5%</td>
</tr>
<tr>
<td>Oceanside, City of</td>
<td>19,383.0</td>
<td>18,393.0</td>
<td>94.9%</td>
</tr>
<tr>
<td>Olivenhain M.W.D.</td>
<td>13,071.0</td>
<td>16,297.4</td>
<td>124.7%</td>
</tr>
<tr>
<td>Otay W.D.</td>
<td>21,390.0</td>
<td>25,164.3</td>
<td>117.6%</td>
</tr>
<tr>
<td>Padre Dam M.W.D.</td>
<td>9,393.0</td>
<td>8,830.6</td>
<td>88.8%</td>
</tr>
<tr>
<td>Pendleton M.C.B. / South Coast W.D.</td>
<td>758.0</td>
<td>147.1</td>
<td>19.4%</td>
</tr>
<tr>
<td>Poway, City of</td>
<td>9,348.0</td>
<td>8,752.2</td>
<td>93.6%</td>
</tr>
<tr>
<td>Rainbow M.W.D.</td>
<td>19,018.0</td>
<td>16,079.7</td>
<td>84.5%</td>
</tr>
<tr>
<td>Ramona M.W.D.</td>
<td>8,052.0</td>
<td>4,985.0</td>
<td>61.9%</td>
</tr>
<tr>
<td>Rincon Del Diablo M.W.D.</td>
<td>5,482.0</td>
<td>4,635.6</td>
<td>84.6%</td>
</tr>
<tr>
<td>San Diego, City of</td>
<td>144,555.0</td>
<td>141,282.4</td>
<td>97.7%</td>
</tr>
<tr>
<td>San Dieguito W.D.</td>
<td>3,116.0</td>
<td>3,018.0</td>
<td>96.9%</td>
</tr>
<tr>
<td>Santa Fe I.D.</td>
<td>5,226.0</td>
<td>6,143.2</td>
<td>117.6%</td>
</tr>
<tr>
<td>Sweetwater Authority</td>
<td>9,650.0</td>
<td>2,303.8</td>
<td>23.9%</td>
</tr>
<tr>
<td>Vallecitos W.D.</td>
<td>10,557.0</td>
<td>10,674.2</td>
<td>101.1%</td>
</tr>
<tr>
<td>Valley Center M.W.D.</td>
<td>29,774.0</td>
<td>18,441.9</td>
<td>61.9%</td>
</tr>
<tr>
<td>Vista I.D.</td>
<td>11,876.0</td>
<td>7,007.4</td>
<td>59.0%</td>
</tr>
<tr>
<td>Yuima M.W.D.</td>
<td>2,165.0</td>
<td>5,525.9</td>
<td>255.2%</td>
</tr>
<tr>
<td><strong>MEMBER AGENCY TOTALS</strong></td>
<td><strong>393,542.0</strong></td>
<td><strong>355,951.6</strong></td>
<td><strong>90.4%</strong></td>
</tr>
</tbody>
</table>

Less: QSA deliveries-calendar year 2018 (173,083.0)
Deliveries to CWA storage-calendar year 2018 5 5,908.2
MWD Under-10% Flows-calendar year 2018 43.5
Deliveries from CWA storage-calendar year 2018 6 (2,114.7)
Water Authority WPA desalination deliveries-calendar year 2018 (36,763.6)

**Estimated Tier 1 deliveries calendar year to date** 7 149,942.0 38.1%
**Invoiced Tier 1 deliveries calendar year to date** 7 152,485.0 38.7%

---

1 Tier 1 threshold is 60% of a member agency’s historic maximum year firm demand.
2 Carlsbad MWD and Vallecitos WD deliveries exclude local desalination supply transported via Water Authority system.
3 There were no Supplemental wheeled water deliveries to Escondido and Vista I.D. this month.
4 Sweetwater Authority is comprised of member agencies city of National City and South Bay Irrigation District.
5 Includes storage puts to San Vicente Reservoir, forced deliveries or deliveries to Olivenhain Reservoir.
6 Includes sales from Water Authority storage accounts, including Olivenhain Reservoir.
7 Estimated Tier 1 deliveries are based on member agency deliveries net of QSA deliveries, seawater desalination and storage puts/takes. Invoiced deliveries are as reported on Metropolitan’s invoice. Difference between Estimated and Invoiced Deliveries is explained by storage puts or takes of pre-deliveries in Twin Oaks Valley Water Treatment Plant (TOVWTP) or member agency treatment plants.
MONTHLY WATER RESOURCES REPORT  
Summary of Water Authority Member Agency Operations  
OCTOBER 2018

**Member Agency Deliveries (AF)**

<table>
<thead>
<tr>
<th></th>
<th>October</th>
<th>Trailing 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>Imported &amp; Desal</td>
<td>38,334</td>
<td>40,784</td>
</tr>
<tr>
<td>Surface</td>
<td>393,792</td>
<td>393,792</td>
</tr>
</tbody>
</table>

**Member Agency Water Use**

OCTOBER 2018

- **Imported & Desal:** 84%
- **Surface:** 7%
- **Well & Brackish Recovery:** 4%
- **Recycled, Supplemental & Local Desal:** 5%

Previous 12 Months

- **Imported & Desal:** 79%
- **Surface:** 6%
- **Well & Brackish Recovery:** 5%
- **Recycled, Supplemental & Local Desal:** 10%

**Member Agency Storage (AF)**

<table>
<thead>
<tr>
<th></th>
<th>October</th>
<th>Trailing 12-Month Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>Local</td>
<td>192,779</td>
<td>209,447</td>
</tr>
<tr>
<td>Surface</td>
<td>232,952</td>
<td>231,628</td>
</tr>
</tbody>
</table>

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PRIMA Water Resources Department

96 of 376
November 28, 2018

Attention: Water Planning Committee

Fiscal Year 2018 Annual Water Supply Report (Information)

Purpose
Provide the Board with an update on FY 2018 implementation of the projected local and regional water supplies identified in the Water Authority’s 2015 Urban Water Management Plan (UWMP).

Discussion
The FY 2018 Annual Water Supply Report (Report) serves as the means to annually track implementation of the projected local and regional supplies identified in the Water Authority’s 2015 UWMP. The UWMP serves as the Water Authority’s long-term water supply planning document. It identifies the diverse mix of water resources to be developed over the next 25 years to ensure the region’s long-term water supply reliability. The next update of the projected resource mix will occur with preparation of the 2020 UWMP.

The Report focuses on both the verifiable and additional planned supplies identified in the 2015 UWMP. Verifiable supplies are those supplies with substantial evidence and adequate documentation regarding implementation and supply utilization. They were identified by the Water Authority or member agencies as having achieved a level of certainty in their planning and implementation. Additional planned supplies are supplies that the Water Authority or member agencies are actively pursuing and currently funding, but do not rise to the level of verifiable for implementation. The categorization of member agency local supplies into the appropriate supply type was based on member agency input during preparation of the 2015 UWMP.

The Report is organized into five sections. Section 1 discusses the purpose of the Report. Section 2 provides an overview of the region’s current and projected supply portfolio. Section 3 provides a summary on progress to implement the supplies identified in the Water Authority’s 2015 UWMP. Section 4 provides a discussion on member agency per capita water use and member agency local water supply development. The final section, Section 5, contains an update on the Water Authority’s water supply programs and projects. The Report was distributed to the member agencies for their review and the attached Report takes into account the comments received.

Prepared by: Jeff Stephenson, Principal Water Resources Specialist
Reviewed by: Dana L. Friehauf, Water Resources Manager
Reviewed by: Kelley Gage, Director of Water Resources
Approved by: Sandra L. Kerl, Deputy General Manager

Attachment: Fiscal Year 2018 Annual Water Supply Report
Fiscal Year 2018
Annual Water Supply Report

Tracking Supply Development within the San Diego Region

December 2018

Prepared by the
Water Resources Department

Also available at
www.sdcwa.org
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Section 1  Introduction

The San Diego County Water Authority (Water Authority) is a regional wholesale water agency serving 24 member agencies within its service area (Figure 1). The Fiscal Year 2018 (FY 18) Annual Water Supply Report (Report) satisfies the Water Authority’s Administrative Code (Section 8.00.050) requirement to provide the Water Authority’s member agencies, the County of San Diego, and each city in the county of San Diego an annual statement regarding the Water Authority’s water supplies and implementation of its plans to meet future water supply needs.

The Report also provides updated information on the development of member agency local water supplies that are included in the Water Authority’s 2015 Urban Water Management Plan (2015 UWMP). The 2015 UWMP is the Water Authority’s long-term planning document to ensure a reliable water supply for the region. A copy of the 2015 UWMP can be found on the Water Authority’s website at www.sdcwa.org. The next update to the Water Authority’s UWMP will be in 2020.

The focus of the Report is long-term planning and water supply reliability. The Report is organized into five sections. This section provides an introduction that describes the purpose of the Report. Section 2 provides an overview of the San Diego region’s FY 18 and projected water resource mix. Next, Section 3 provides a summary on the progress to implement the supplies identified in the 2015 UWMP. Section 4 provides discussion on per capita water use and member agency local water supply development. And finally, Section 5, contains an update on the Water Authority’s water supply programs and projects.
Section 2  Supply Overview

The Water Authority serves 97 percent of San Diego County’s population and provides approximately 80 to 90 percent of the water used within the region, depending upon the amount of local supply utilized. The County Water Authority Act, adopted by the California State Legislature, states that the Water Authority shall provide each of its member agencies with adequate supplies of water to meet their expanding and increasing needs, as far as practicable.

Total water demand within the Water Authority’s service area for FY 18 reached 518,397 acre-feet (AF). This represents an approximate nine percent increase over the previous year. The increase in water use in FY 18 could be reflective of several factors, such as: 1) an increase in economic growth in San Diego County; 2) Governor Brown’s rescission of his state-wide drought emergency proclamation; 3) the State Water Resources Control Board’s elimination of its mandatory conservation standards in May 2016; and 4) an increase in temperature combined with a decrease in precipitation.

Despite the recent increase in water use over the last two fiscal years, water use has been lower than projections from the 2015 UWMP. To address this forecast disconnect, Water Authority staff, in coordination with its member agencies, developed the Interim Water Demand Forecast Reset (Interim Reset). In February 2018, Water Authority staff presented the Interim Reset to the Water Authority’s board of directors. The Interim Reset was developed as a provisional update to support Water Authority supply, infrastructure and financial planning efforts that utilize regional long-range demand projections. The Interim Reset was not intended as a comprehensive update of the demand forecast or underlying demographic and economic projections used to model water demands. The resulting impact of the Interim Reset is a roughly nine percent drop in total projected water demand over the entire forecast period. -- A full-scale update of the water demand forecast model datasets and modeling equations is planned to coincide with preparation of the Water Authority’s 2020 UWMP.

A breakdown of the Water Authority and member agency water supplies utilized in FY 18 is shown in Table 1. A summary discussion on the status of these projects and current supply yields is included in Section 3.

<table>
<thead>
<tr>
<th>Water Authority Supplies</th>
<th>Acre-Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>IID Water Transfer</td>
<td>115,000</td>
</tr>
<tr>
<td>AAC and CC Lining Projects</td>
<td>79,326</td>
</tr>
<tr>
<td>Seawater Desalination</td>
<td>34,907</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>229,233</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Member Agency Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Recycling</td>
</tr>
<tr>
<td>Potable Reuse</td>
</tr>
<tr>
<td>Groundwater</td>
</tr>
<tr>
<td>Brackish Groundwater</td>
</tr>
<tr>
<td>Surface Water</td>
</tr>
<tr>
<td>Seawater Desalination</td>
</tr>
<tr>
<td>San Luis Rey Water Transfer</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MWD Supplies</th>
<th>163,639</th>
</tr>
</thead>
</table>

| **Total Supplies**    | **518,397** |

1 In Calendar Year 17, the City of Escondido and Vista Irrigation District began receiving wheeled water deliveries from the San Luis Rey – Indian Water Authority.

2 Amount of MWD supply is determined after accounting for Water Authority and member agency utilized supplies.
The current projected 25-year mix of Water Authority and member agency supplies to ensure continued long-term regional supply reliability for the region is included in the 2015 UWMP. These supplies are separated into one of the following three categories for purposes of analysis:

- **Verifiable Projects** - Those projects with substantial evidence and adequate documentation regarding implementation and supply utilization. They have been identified by the Water Authority or member agencies as having achieved a level of certainty in their planning and implementation. Verifiable supplies are included in water supply assessments and verifications prepared by retail water agencies and used by the cities and county in their land use decisions regarding available water supplies for growth under Senate Bills 221 and 610.

- **Additional Planned Projects** - Those projects that the Water Authority or member agencies are actively pursuing and currently funding, but do not rise to the level of verifiable for implementation. The feasibility phase for these projects is complete and funding of advanced planning efforts continues.

- **Conceptual Projects** - Those projects considered to be in the pre-planning and pre-feasibility analysis phase, where the projects have not progressed to a point where the project yield can be factored into reliability assessments or uncertainty planning.

Categorizing member agency local projects into the appropriate project type was based on member agency input during preparation of the 2015 UWMP. This Report focuses on verifiable and additional planned supply targets identified in the 2015 UWMP.

**Section 3  Summary of Local and Regional Supply Development**

As noted in the 2015 UWMP, this Report serves as an annual update on implementation of the projected supply mix in years when an urban water management plan is not prepared. A complete evaluation and update of the resource mix occurs every five years with the update of the urban water management plan.

Table 2 contains a summary of the implementation status of member agency local supply development as compared with the actual water supply yield identified in Table 1 and the 2015 UWMP verifiable and additional planned targets. Specific information on the supplies and 2015 UWMP targets is included in Section 4.
### Table 2
Status of Member Agencies’ Local Supply Development

<table>
<thead>
<tr>
<th>Water Resource Action</th>
<th>Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Recycling</strong></td>
<td>In FY 18, recycled water use was 27,116 AF, an increase of 14 percent when compared to FY 17. However, a significant increase in recycled water use would still be needed to meet the 2020 target of 43,299 AF. The lower than anticipated use of recycled water may be due to several factors, including construction delays and a continued reduction in water use in response to recent drought conditions. Looking at the use of recycled water in the long-term (e.g. 2040), those targets may be achievable as member agencies expand their existing facilities and demand for recycled water increases.</td>
</tr>
<tr>
<td><strong>Potable Reuse</strong></td>
<td>Potable reuse will be a new, critical supply for the San Diego region. The 2020 potable reuse target, taking into account planned and verifiable targets, is 7,770 AF, while the 2025 target is 32,386 AF. Several agencies continued to work towards development of this new supply, including the City of San Diego (Pure Water San Diego Program), City of Oceanside, and Padre Dam Municipal Water District, in partnership with the Helix Water District, County of San Diego, and the City of El Cajon (East County Advanced Water Purification Program).</td>
</tr>
<tr>
<td><strong>Groundwater</strong></td>
<td>Groundwater yields, excluding brackish groundwater, increased by 16 percent in FY 18 to 16,418 AF. Although this is an increase from the previous year, it is still less than the 2020 target of 21,040 AF. In future years, the implementation of groundwater sustainability plans under the Sustainable Groundwater Management Act could potentially result in a reduction in groundwater extraction. Brackish groundwater production was 9,401 AF in FY 18, which is less than the 2020 target of 12,100 AF.</td>
</tr>
<tr>
<td><strong>Surface Water</strong></td>
<td>In FY 18, the region used approximately 44,563 AF of local surface water to meet its needs. Based on member agency estimates provided during preparation of the 2015 UWMP, surface water yield in a normal year is approximately 52,000 AF.</td>
</tr>
<tr>
<td><strong>Seawater Desalination</strong></td>
<td>In FY 18, the Carlsbad Municipal Water District (Carlsbad MWD) and Vallecitos Water District (Vallecitos WD) received 2,500 AF and 3,500 AF respectively, of supply from the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP). These volumes are consistent with the 2020 target for local seawater desalination.</td>
</tr>
</tbody>
</table>
Table 3 provides a summary of the implementation status of the Water Authority’s supplies as compared with the actual supply yields (Table 1) and the 2015 UWMP targets. Detailed information on the supplies and targets is included in Section 5.

<table>
<thead>
<tr>
<th>Water Resources Action</th>
<th>Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-Term Colorado River Transfers</td>
<td>In FY 18, the Water Authority received 115,000 AF of transfer water in accordance with the delivery schedule contained in the Imperial Irrigation District transfer agreement. In addition, the Water Authority received 79,326 AF of conserved water from projects that lined portions of the All American and Coachella Canals. These amounts are consistent with the 2015 UWMP targets.</td>
</tr>
<tr>
<td>Seawater Desalination</td>
<td>The Water Authority received 34,892 AF of its supply from the Claude “Bud” Lewis CDP in FY 18. This does not include 6,000 AF of contract deliveries to Carlsbad MWD and Vallecitos WD in FY 18. When combined, the region’s total supply from seawater desalination was 40,892 AF. The 2015 UWMP target for seawater desalination is 50,000 AF/YR. Shortfalls in FY 18 were due primarily to a mechanical failure on the plant’s reverse osmosis high-pressure feed piping. The loss of redundancy caused by the mechanical failure is expected to be fully restored by November 2018.</td>
</tr>
<tr>
<td>Carryover Storage Program</td>
<td>Construction of the San Vicente Dam Raise Carryover Storage Project was completed in 2014. The carryover pool of 100,000 AF was full as of June 2016. At the end of FY 18, the carryover storage pool was at 93,600 AF, reflecting evaporative losses. In addition, at the end of FY 18, the Water Authority’s out-of-region groundwater storage banking program had approximately 16,000 AF in storage.</td>
</tr>
</tbody>
</table>

Section 4 Update on Member Agency Per Capita Water Use and Member Agency Local Supply Projects

The 2015 UWMP includes estimated regional potable gallon per-capita per-day (GPCD) targets that are based on aggregated member agency targets. It also contains local supply targets provided by the member agencies for water recycling, potable reuse, groundwater, surface water, and seawater desalination. The following sub-sections provide a status update on per capita water use and the development of these local supplies.

4.1 Per Capita Water Use

Under legislation adopted by the California Legislature, known as the Water Conservation Act of 2009, or SBX7-7, retail water suppliers are required to reduce per capita water use by 20 percent by the year 2020. As a wholesale agency, the Water Authority is not subject to these
requirements. To reflect retail compliance, the Water Authority utilizes urban water use targets calculated by each of the member agencies to determine the regional demand reduction. Member agency water use efficiency targets can be achieved through a combination of recycled water supplies and additional conservation savings, consistent with SBX7-7 guidelines. Figure 2 shows actual regional GPCD estimates and a projected aggregated member agency potable GPCD target to comply with SBX7-7. The 2020 GPCD target is 167. Regional FY 18 potable per capita use was 134 gallons, well below the target of 167 gallons.

![Figure 2](image)

It is important to note that per capita water use is affected by a combination of short and long-term variables, including weather, water use efficiency gains, conservation, water rates, and the economy. Overall, per capita water use has dropped by over 40 percent since the 1990s, reflecting a long-term trend towards greater water use efficiency. Variability in annual historic per capita water use was also influenced by weather. For example, 1990 and 2000 were dry years, which contributed to higher overall per capita water use, while 1995 was a wet year which contributed to lower per capita water use. The slight increase shown in per capita use from FY 16 to FY 18 may be attributed to a gradual recovery in water demand following the lifting of statewide emergency conservation standards in early 2017 and sustained economic recovery in the San Diego region. Continued implementation of water use efficiency programs and recycled water development, along with a growing water use efficiency ethic, will help to ensure that the 2020 SBX7-7 GPCD target is met.

On May 31, 2018, two significant bills related to long-term water use efficiency (SB 606 and AB 1668) were signed into law by Governor Brown. The laws are intended to help the state better prepare for droughts and climate change through various provisions, including the creation of water-use objectives for retail water agencies (not individual households or businesses). As a wholesale water supplier, the Water Authority is not subject to the water-use objective provision of the law. However, there are other provisions of the law that address water supply and shortage contingency
planning that do apply to the Water Authority. The Water Authority has already implemented many of the new planning requirements included in the legislation.

The new water-use objectives for retail water agencies will be calculated based on aggregated standards for indoor and outdoor use, system water loss, variances, and a potable reuse credit. The state agencies have initiated work on developing the standards which must be adopted by the State Water Resources Control Board by June 2022. Retail water suppliers will report compliance beginning in November 2023, and by November 1 every year thereafter. The retail water suppliers are required to meet the objective by 2027 or face financial penalties. Water Authority staff will work closely with local retail water agencies and remain engaged in the State’s implementation of the long-term framework water-use objectives and reporting requirements to ensure the adopted regulations are fair and equitable for the region.

4.2 Water Recycling

Implementation of water recycling is an essential component to diversifying the region’s water supplies. Recycled water development helps relieve pressure on the region’s potable water supplies by providing a drought-resilient, locally controlled water supply source. Recycled water may be used for non-potable purposes, including filling ponds and ornamental fountains, irrigating parks, golf courses, freeway medians, community greenbelts, school athletic fields, food crops, firefighting, and controlling dust at construction sites.

Figure 3 shows the actual and projected verifiable and additional planned recycled water use in the region for 1990 through 2040. The projected use figures were provided by the member agencies for inclusion in the 2015 UWMP. As shown in Figure 3, non-potable recycled water use increased from 2,658 AF in FY 90 to 29,095 AF in FY 15. In FY 16, recycled water use dropped by 21 percent to 22,818 AF, but has since increased to 27,116 AF in FY 18. Despite the recent
increase in recycled water use, several of the same factors that impacted recycled water use in prior years will make it difficult for the region to achieve its near-term 2020 target for recycled water use. Those factors include construction delays, reductions in water use due to drought response, and an increase in the price of recycled water to customers. It should be noted, however, that the price of recycled water is still generally lower than the price of potable water.

In the long-term, the verifiable yield of recycled water supplies is projected to increase due to the expansion of existing facilities. Examples include an expansion of the City of Oceanside’s recycled water system with a tertiary treatment capacity upgrade to serve 3,500 AF/YR of additional recycled water by 2040. Another member agency, the Carlsbad MWD, will increase its water recycling facility’s capacity to more than 5,000 AF/YR. It is anticipated that by 2020, one-third of Carlsbad’s total water demand will be met by recycled water. Other member agencies have identified additional planned recycled water projects that could result in a projected yield of approximately 11,000 AF/YR by 2040.

4.3 Potable Reuse

The next increment of major water supply development for the San Diego region will come from potable reuse projects implemented by the Water Authority’s member agencies. Potable reuse uses multi-barrier treatment processes to treat recycled water to drinking water standards, producing a locally controlled, sustainable and drought-resilient supply. Several member agencies in the region are pursuing potable reuse through groundwater recharge or reservoir augmentation.

Figure 4 shows the projected verifiable and planned potable reuse project yields in the San Diego region. The Pure Water San Diego Program is the City of San Diego’s multi-year phased program that is expected to provide one-third of the city’s water supply by 2035. Phase 1 will convey 15 million gallons per day (MGD) to Miramar Reservoir by the end of 2023 and 30

---

**Figure 4**

Projected Verifiable\Additional Planned Potable Reuse Projections in Normal Year

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Verifiable</th>
<th>Additional Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2025</td>
<td>25,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2030</td>
<td>25,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2035</td>
<td>50,000</td>
<td>125,000</td>
</tr>
<tr>
<td>2040</td>
<td>75,000</td>
<td>125,000</td>
</tr>
</tbody>
</table>

Source: Interim Demand Forecast Reset
MGD by the end of 2024. From Miramar Reservoir, purified water will be blended with imported and local supplies and treated again at the Miramar Drinking Water Treatment Plant before distribution and delivery to customers. The Environmental Impact Report for Phase 1 was unanimously adopted by City Council in April 2018. In May 2018, the City of San Diego’s Phase 1 draft Title 22 Engineering Report, which describes the City’s plans to comply with the Division of Drinking Water’s recycled water regulations was approved by the State Water Resources Control Board’s Division of Drinking Water (DDW).

The East County Advanced Water Purification Program is led by the Padre Dam Municipal Water District (Padre Dam MWD), in partnership with the Helix Water District, County of San Diego, and the City of El Cajon. The program will use state-of-the-art treatment technology to augment water supply to Lake Jennings. It is expected to meet up to 30 percent of East County’s current water demands. The program was envisioned to be implemented in two phases in a planning study in 2015, however the program partners are working towards a single-phase implementation. The program will expand the existing Ray Stoyer Water Reclamation Facility from 2 MGD to 15 MGD and produce 10.5 MGD of purified water for reservoir augmentation by 2025. A Mitigated Negative Declaration (MND) was adopted in July 2015 for the initial expansion of the Ray Stoyer Water Reclamation Facility which is in line with the 2015 planning study. A revised MND for the single-phase project was prepared and submitted for public review in September 2018. In FY 18, Padre Dam MWD received conditional approvals from Division of Drinking Water for reservoir augmentation and their treatment process.

The City of Oceanside’s Aquifer Augmentation (Indirect Potable Reuse) Project will reuse a total of 6 MGD of highly purified water. Advanced treatment methods consist of microfiltration, reverse osmosis, ultraviolet light and advanced oxidation. Near-term construction will enable 3,360 acre-ft per year to be injected via three wells into the Mission Basin aquifer. The project will increase local water supplies by increasing groundwater basin levels and improving overall groundwater basin quality. The project is currently in preliminary design and undergoing permitting, construction of exploratory borings, and environmental documentation scheduled to be complete in December 2018.

Additional member agencies evaluating and/or implementing potable reuse projects in the region include the City of Escondido, Santa Fe Irrigation District, San Dieguito Water District, and the Marine Corps Base Camp Pendleton. To support these efforts, the Water Authority is working with its member agencies through the Water Authority’s Potable Reuse Coordinating Committee to provide regional coordination in three key areas: public outreach and messaging; engaging with regulatory agencies and the State’s Expert Panels; and helping to secure funding.

### 4.4 Groundwater

Groundwater supplies in the San Diego region are a component of the region’s diverse resource mix. Once treated, groundwater is suitable for drinking and can be delivered directly into an agency’s potable water distribution system. And while supplies are limited due to geology and the semi-arid hydrologic characteristics of the region, local agencies are taking actions to
develop and manage available supplies.

Figure 5 shows the reported actual and projected verifiable and additional planned groundwater yield for the region, excluding brackish groundwater projects. The historic yields can vary since they are linked to hydrologic cycles. In FY 17, groundwater yields were low due to a multi-year drought. In FY 18, groundwater yields increased by 16 percent to 16,418 AF. In future years, the implementation of groundwater sustainability plans under the Sustainable Groundwater Management Act could potentially result in a reduction in groundwater extraction. The projected yields are the expected normal year yields provided by the member agencies for the 2015 UWMP.

![Figure 5](image)

Figure 5 shows the reported actual and projected verifiable and additional planned groundwater yield for the region, excluding brackish groundwater projects. The historic yields can vary since they are linked to hydrologic cycles. In FY 17, groundwater yields were low due to a multi-year drought. In FY 18, groundwater yields increased by 16 percent to 16,418 AF. In future years, the implementation of groundwater sustainability plans under the Sustainable Groundwater Management Act could potentially result in a reduction in groundwater extraction. The projected yields are the expected normal year yields provided by the member agencies for the 2015 UWMP.

Figure 6 shows the actual and projected brackish groundwater yield for the region. The projected long-term increase in yield is based on normal year yield and planned expansions to existing projects. In FY 18, brackish groundwater production by the member agencies increased to 9,401 AF. The significant increase from FY 17 to FY 18 was due to the Sweetwater Authority completing expansion activities at the Richard A. Reynolds Desalination Facility and bringing the facility back into service after being out of service during FY 17. The increase was also due to the Mission Basin Desalter resuming normal production. With work completed on these facilities, brackish groundwater production is on track to meet target normal year production levels.
4.5 Surface Water

Surface water was the primary source of the region’s water supply until imported water was made available in 1947. It is still considered an essential supply for the San Diego region. Surface water yields are highly variable since they are linked to fluctuations in local weather patterns. Runoff from rainfall is captured in local reservoirs, which is then treated to provide a water supply suitable for potable use. Since 1980, annual surface water yields have ranged from a low of 4,100 AF to a high of nearly 150,000 AF. In FY 18, the region used 44,563 AF of local surface water to meet its needs. Based on member agency estimates provided during preparation of the 2015 UWMP, surface water yield in a normal year is approximately 52,000 AF.

4.6 Seawater Desalination

In FY 18, the Carlsbad MWD and Vallecitos WD received 2,500 AF and 3,500 AF respectively, of supply from the Claude “Bud” Lewis CDP. The annual commitments of 6,000 AF of member agency local supply are assigned to these agencies through executed Uniform Contracts with the Water Authority and will be in effect through the term of the Water Authority’s Water Purchase Agreement (WPA).
The Otay Water District (Otay WD) has pursued delivery of desalinated seawater from the proposed Rosarito Desalination Project in Mexico. Based on input from Otay WD, the 2015 UWMP included up to 16,800 AF/YR by 2040 of potential deliveries from the planned seawater desalination facility in Rosarito Beach (Figure 7). Otay WD informed the Water Authority that they have suspended work on the conveyance system in the United States and will continue to monitor development of the facility in Rosarito. The Water Authority will coordinate with Otay WD during preparation of the 2020 UWMP update to determine if the project should be included in the plan.

**Section 5 Update on Implementation of Water Authority Programs and Projects**

### 5.1 Imperial Irrigation District (IID) Water Conservation and Transfer Agreement

The Quantification Settlement Agreement (QSA), signed in October 2003, resolved long-standing disputes regarding priority and use of Colorado River water and created a baseline for implementing water transfers in California. With approval of the QSA, the Water Authority and IID implemented their Water Conservation and Transfer Agreement, providing reliability for the San Diego region and assisting California in reducing its use of Colorado River water to its legal allocation.

Water deliveries began in 2003 with an initial transfer of 10,000 AF of conserved water into San Diego County. Transfer volumes have increased according to a water delivery schedule contained in the transfer agreement. Deliveries will ramp-up to 200,000 AF/YR by Calendar...
Year 2021, and then remain fixed for the duration of the transfer agreement. The initial term of the Transfer Agreement is 45 years, with a provision that either agency may extend the agreement for an additional 30-year term. In FY 18, the Water Authority received 115,000 AF of transfer water in accordance with the delivery schedule contained in the agreement.

5.2 All American Canal (AAC) and Coachella Canal (CC) Lining Projects

As part of the QSA and related contracts, the Water Authority contracted with the United States and others for 77,700 AF/YR of conserved water from projects that lined portions of the AAC and CC. The projects reduce the loss of water that occurs through seepage and the conserved water is delivered to the Water Authority. This conserved water will provide the San Diego region with an additional 8.5 million AF over the 110-year life of the agreement. In accordance with the contracts, the Water Authority received 79,326 AF of conserved water in FY 18, which included approximately 1,600 AF of additional supply based on environmental requirements.

5.3 Claude “Bud” Lewis Carlsbad Desalination Plant

The Claude “Bud” Lewis CDP started commercial operations in December 2015. The project is a result of the long-term WPA executed between the Water Authority and Poseidon Resources, a private company that develops water and wastewater infrastructure. Under the WPA, the Water Authority agreed to purchase the entire output of the CDP – a minimum of 48,000 AF/YR up to a maximum of 56,000 AF/YR. The Water Authority has the option to buy the CDP beginning 10 years after the date of commercial operation and through the end of the 30-year term of the WPA. Since commercial operation began, the plant has produced over 35 billion gallons of desalinated water. In FY 18, the total output of the plant was 40,892 AF, representing almost eight percent of the region’s total demand over that period. This includes approximately 34,892 AF of Water Authority supplies and 6,000 AF of member agency supplies delivered to the Vallecitos WD and Carlsbad MWD.

5.4 Metropolitan Water District of Southern California

Formed in 1928 to develop, store and distribute supplemental water in Southern California for domestic and municipal purposes, the Water Authority’s imported water sources include purchases from MWD. The Water Authority, one of 26 member agencies, is the largest member agency in terms of financial contributions, purchasing approximately 171,000 AF from MWD in FY 18 (less than 13 percent of MWD’s FY 2018 sales). As of June 30, 2017, the Water Authority has a preferential right to 24.04 percent of MWD’s available supplies.

MWD obtains its water from two sources - the Colorado River, through the MWD-owned and operated Colorado River Aqueduct, and Northern California through the State Water Project (SWP), with which MWD has a water supply contract through the State of California. To meet emerging challenges from dry hydrologic conditions and regulatory restrictions that limit supplies from the SWP, MWD’s water supply strategy also includes utilizing its storage programs to maximize available supplies in wet years for use in dry years.

Since 2000, the Colorado River Basin has experienced a historic extended drought. During this time, reservoir storage in the Colorado River system has declined from nearly full to about half.
of its capacity. Declining reservoir levels have pushed the system to the verge of a first-ever shortage condition, possibly occurring in 2020. Under the existing agreements, a shortage would result in cutbacks to annual water supplies for Arizona and Nevada, but no reductions to California due to its senior status on the river.

5.5 Carryover Storage Program

In addition to Water Authority supplies expected during a normal water year, the Water Authority has also invested in carryover storage supplies to assist in achieving reliability in dry years. The Water Authority’s carryover storage program includes both in-region surface water storage and out-of-region groundwater storage in California’s Central Valley. The following is a summary on the status of the two carryover storage projects.

San Vicente Dam Raise Carryover Storage Project

The San Vicente Dam Raise Carryover Storage Project provides approximately 100,000 AF of local storage capacity, facilitating the reliable and efficient delivery of water to residents of the Water Authority service area. Construction was completed in 2014, and in June 2016, the carryover pool of 100,000 AF was full. The ending carryover storage pool volume in FY 18 was approximately 93,600 AF. The decrease in the carryover pool storage was primarily due to evaporative losses.

Water Authority’s Out-Of-Region Groundwater Program

In 2008, the Water Authority acquired a total of 70,000 AF of permanent storage allocation in the Semitropic-Rosamond Water Bank Authority and the Semitropic Water Bank (40,000 AF and 30,000 AF, respectively) located in Kern County. Due to its location near the California Aqueduct, the Kern River, and the Friant-Kern Canal, the location is ideally suited for groundwater banking. In 2008, the Water Authority acquired approximately 16,000 AF of water which continues to be stored in the Water Authority’s out-of-region banking program. Water Authority staff plans to conduct an evaluation of the long-term need for Central Valley groundwater carryover storage in 2019.
ADMINISTRATIVE AND FINANCE COMMITTEE

AGENDA FOR

DECEMBER 6, 2018

Elsa Saxod – Chair
Gary Arant – Vice Chair
Doug Wilson – Vice Chair
Jimmy Ayala
David Cherashore
Gary Croucher
Ed Gallo

Christy Guerin
Matt Hall
Kathleen Coates Hedberg
Tony Heinrichs
Jim Murtland
John Simpson
Ron Watkins

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

   4-B Directors’ comments.

I. CONSENT CALENDAR

   Staff recommendation: Note and file the Treasurer’s report.
   (Action)

2. Vote Entitlement and Representation Resolution for Calendar Year 2019. Lisa Marie Harris
   Staff recommendation: Adopt Resolution No. 2018-___ establishing the vote and representative entitlements of each member agency effective January 1, 2019. (Action)
3. **Adopt Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.**
   
   **Staff recommendation:** Adopt the Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.  
   
   **(Action)**

**II. ACTION/DISCUSION/PRESENTATION**

1. **Approve the Refinancing of the Claude “Bud” Lewis Carlsbad Desalination Project Conveyance Pipeline and approve related debt management activities.**
   
   **Staff recommendations:**
   
   a. **Adopt Resolution No. 2018____ approving the refunding of California Pollution Control Financing Authority $203,215,000 Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) via a negotiated sale; a Preliminary Limited Offering Memorandum, a Bond Purchase Agreement and other documents and agreements necessary to accomplish tax exempt project refinancing through the California Pollution Control Financing Authority (CPCFA); and**
   
   b. **Approve the amendment to the Legal Services Agreement with Polsinelli LLP, Bond Counsel to increase the amount by $175,000 from $344,000 for as-needed services, Pipeline Refunding bond counsel services and disclosure counsel services to $519,685.**
   
   c. **Approve the amendments to the Financial Advisory Services agreements with Montague DeRose and Associates, LLC and Acacia Financial Group, Inc to increase the amount by $260,000, from $976,250 for Carlsbad Desalination debt and debt refinancing transaction fees to $1,236,250.**
   
   **(Action)**

**III. INFORMATION**

1. **Controller’s Report on Monthly Financial Activity.**

2. **Board calendar.**
IV. CLOSED SESSION

V. ADJOURNMENT

Melinda Nelson, Clerk of the Board

NOTE: This meeting is called as an Administrative and Finance Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
November 28, 2018

Attention: Administrative and Finance Committee


Purpose
This information item provides the final report on the Administrative and Finance Committee Work Plan for Calendar Years 2017 and 2018.

Background

Discussion
The Administrative and Finance Committee is responsible for administrative and finance matters including rates, fees, charges, and other sources of revenue; budget; audit; investments; human resources; employer-employee relations; information technology; insurance; risk management; and other matters of general business operations.

The attached report lists the Administrative and Finance Committee Work Plan for Calendar Years 2017 and 2018 and summarizes the activities taken to achieve the work plan. The work plan was prepared under the direction of the Administrative and Finance Committee Chair and Vice Chairs.

Prepared by: Lisa Marie Harris, Director of Finance/Treasurer
Jason Foster, Director of Administrative Services
Reviewed by: Elsa Saxod, Chair, Administrative and Finance Committee

Attachment:

1. Final Report on the Administrative and Finance Committee Work Plan for Calendar Years 2017 and 2018
1. **Cost of Service Study**
   Review and consider approval of a Cost of Service Study that includes updated annexation fees and capacity charges. (June 2017 – Financial Management Program, Objective 3*)

   **Activities**
   Carollo Engineers, an independent Cost of Service Consultant, completed its analysis and report. The report was included as an attachment to the May 25, 2017 Board Action setting the public hearing date for the consideration and adoption of the rates and charges.

   On June 28, 2018, the Board approved a Cost of Service Study for Calendar Year 2019 Rates and Charges. The study was completed by Carollo Engineers, an independent Cost of Service Consultant.

2. **Budget**
   Review and consider adoption of the multi-year budget for fiscal years 2018 and 2019. (June 2017)

   **Activities**
   On January 26, 2017, the Board heard an update and provided input on the development of the Fiscal Years 2018 and 2019 Budget.

   On May 25, 2017, the Board reviewed a presentation on the General Manager’s Recommended Budget for Fiscal Years 2018 and 2019. The presentation included information on the components of and the factors impacting the FYs 2018 and 2019 Budget, along with budget themes and key initiatives and projects.

   On June 6 and 8, 2017, the Board reviewed presentations on the General Manager’s Recommended Budget for Fiscal Years 2018 and 2019 during two special committee meetings. The presentations included information on Asset Management, the Capital Improvement Program, Cybersecurity, all Operating Departments, Equipment Replacement, and Grants.

   On June 22, 2017, the Board adopted Resolution No. 2017-12, approving the General Manager’s Recommended Budget for Fiscal Years 2018 and 2019, for operations and capital improvements and appropriating $1,584,127,560 consistent with the approved budget.

   On July 26, 2018, the Board adopted the mid-term adjustments to the budget. The overall budget remained unchanged at $1,584,127,560.

*Items related to the 2017-2021 Business Plan.
3. **Rates and Charges**
   Review and consider adoption of rates and charges for the 2018 calendar year. (June 2017)

   **Activities**
   On April 27, 2017, the Board heard a Preliminary Assessment of Calendar Year 2018 Rates and Charges.

   On May 25, 2017, the Board adopted Resolution No. 2017-09 setting the time and place for a public hearing on June 22, 201, during the Administrative and Finance Committee meeting, to receive comments regarding proposed rates and charges to be effective January 1, 2018.

   On June 22, 2017, the Board conducted the Public Hearing; adopted Ordinance No. 2017-01, an ordinance of the Board of Directors of the San Diego County Water Authority setting rates and charges for the delivery and supply of water, use of facilities and provision of services; adopted Resolution No. 2017-13, a resolution of the Board of Directors of the San Diego County Water Authority continuing the Standby Availability Charge; adopted Ordinance No. 2017-02, an ordinance of the Board of Directors of the San Diego County Water Authority amending and restating the System Capacity and Water Treatment Capacity Chargers imposed by the Water Authority pursuant to Section 5.9 of the County Water Authority Act; and found the actions exempt from CEQA pursuant to Public Resources Code § 21080(b)(8) and authorized the General Manager to file a notice of exemption.

   On May 24, 2018, the Board adopted Resolution No. 2018-08 setting the time and place for a public hearing on June 28, 2018, during the Administrative and Finance Committee meeting, to receive comments regarding proposed rates and charges to be effective January 1, 2019.

   On June 28, 2018, the Board conducted the Public Hearing; adopted Ordinance No. 2018-02, an ordinance of the Board of Directors of the San Diego County Water Authority setting rates and charges for the delivery and supply of water, use of facilities and provision of services; adopted Resolution No. 2018-09, a resolution of the Board of Directors of the San Diego County Water Authority continuing the Standby Availability Charge; adopted Ordinance No. 2018-04, an ordinance of the Board of Directors of the San Diego County Water Authority amending and restating the System Capacity and Water Treatment Capacity Chargers imposed by the Water Authority pursuant to Section 5.9 of the County Water Authority Act; and found the actions exempt from CEQA pursuant to Public Resources Code § 21080(b)(8) and authorized the General Manager to file a notice of exemption; adopted Ordinance No. 2018-03, approving the recommended policy change to the Rate Stabilization Fund calculation.

*Items related to the 2017-2021 Business Plan.*
4. **Cybersecurity**  
Review and consider approving cybersecurity initiatives that protect and preserve the Water Authority’s infrastructure and critically important information. (June 2017 – Technology Program, Objective 6*)

**Activities**
On June 8, 2017, the Board reviewed a presentation on cybersecurity during a special committee meeting on the General Manager’s Recommended Budget for Fiscal Years 2018 and 2019. The presentation included information on cyber risks and the actions, products, and partnerships the Water Authority uses to build cyber resilience.

On June 22, 2017, the Board adopted the Budget for Fiscal Years 2018 and 2019, which included several new Information Technology initiatives intended to strengthen cybersecurity.

On July 26, 2018, the Administration and Finance Committee received open session and closed session updates on the Water Authority’s cybersecurity activities. The presentation included a summary of security improvements made over the previous year, and it outlined a new IT/Cybersecurity Resource Deployment Plan designed to help the Water Authority manage its ongoing information security needs in the future.

5. **Business Insurance**  
Review and consider approving business insurance renewals for the workers’ compensation, general liability and property programs. (June 2017 and June 2018)

**Activities**
On June 22, 2017, the Board authorized the purchase of workers’ compensation, general liability and property insurance for fiscal year 2018.

On June 28, 2018, the Board authorized the purchase of workers’ compensation, general liability and property insurance for fiscal year 2019.

6. **Enterprise Resource Planning System Maintenance and Support Agreements**  
Review and consider renewing the PeopleSoft enterprise resource planning software maintenance and support agreements for the next four fiscal years. (October 2017)

**Activities**
On June 22, 2017, the Board authorized the renewal of the Enterprise Resources Planning System software annual maintenance and support agreements with Oracle USA, Inc. for the next four fiscal years.

*Items related to the 2017-2021 Business Plan.*
7. **Development of a Long Term Strategic Plan for Debt Program**

Review and consider approving debt issuance for Carlsbad Intake Financing, future CIP debt and potential refunding for outstanding debt. (January 2017 – Financial Management Program, Objective 1*)

**Activities**

In October 2016, the Finance Department completed a refunding and risk analysis for financing options for the pipeline refunding, intake and plant bonds.

In January 2017, a strategic plan was completed that evaluated risk transfer options, cost and benefits and recommended the appropriate financing structures for the pipeline refunding, and the future intake and plant bond financing.

On October 25, 2018, the Administrative and Finance Committee heard a presentation on municipal bond market conditions in anticipation of pursuing a refinancing of the Claude “Bud” Lewis Carlsbad Desalination Project Conveyance Pipeline Bonds in late 2018.

On December 6, 2018, the Administrative and Finance Committee is scheduled to consider approving and recommending to the full Board the refinancing of the Claude “Bud” Lewis Carlsbad Desalination Project Conveyance Pipeline Bonds.

*Items related to the 2017-2021 Business Plan.*
November 28, 2018

Attention: Administrative and Finance Committee

Monthly Treasurer’s Report on Investments and Cash Flow

Purpose
The purpose of the Treasurer’s Report is to provide monthly financial information to the Board of Directors.

Executive Summary
- The Water Authority’s overall portfolio of $350 million increased in yield to 2.18% exceeding investment benchmark of 1.85%.
- Average Water Authority Portfolio term is 2.2 years.
- Water Authority portfolio is well diversified with investment holdings in Agencies, Treasuries and Corporate notes totaling 80% of the portfolio.

Attached for review by the Administrative and Finance Committee and the Board of Directors is the Treasurer’s Report as of October 31, 2018. The reports are formatted to provide information as required by the California Government Code and the San Diego County Water Authority’s Annual Statement of Investment Policy, which was last adopted by the Board on December 7, 2017. A brief description of each report follows:

Portfolio Master Summary: This one-page report summarizes all cash and investments held by the Water Authority.

Portfolio Characteristics: This one-page snapshot shows the Water Authority’s portfolio holdings by type and percentage; the maturity distribution of the portfolio; the portfolio yield for the past twelve months, compared to a rolling average yield of the Board adopted benchmark; the credit quality of the portfolio’s holdings; the cash flow projections for the next six months; and relevant market information.

Chandler Portfolio Summary: This one-page snapshot shows the Chandler Asset portfolio holdings including average duration, coupon, yield and ratings; account summary; top issuers; sector allocation; maturity distribution; and credit quality.

Portfolio Details - Investments: This report takes the summary information listed in the Portfolio Master Summary and provides details of active investments.

Activity Summary: This one-page report produces a thirteen-month rolling summary of portfolio investment activity.
The Water Authority’s portfolio is diversified among investment types, with a current concentration toward short-term maturities. This concentration is the result of cash flow needs, as well as the current historic low interest rate environment. The portfolio is comprised of high quality investments, with 80% invested in AAA rated or AAA/AA+ split-rated securities at month end. In October 2018, the Water Authority’s overall portfolio yield increased from 2.09% to 2.18% and continues to exceed the investment benchmark of 1.85%.

All investments have been made in accordance with the San Diego County Water Authority Statement of Investment Policy. This report provides documentation that the Water Authority has sufficient funds to meet the financial obligations for the next six months. The market value information is provided by Bloomberg L.P. and is as of the report date.

________________________________________________

Lisa Marie Harris, Director of Finance/Treasurer
## PORTFOLIO MASTER SUMMARY
### as of October 31, 2018

### PORTFOLIO PERCENTAGES

<table>
<thead>
<tr>
<th>Investment Type</th>
<th>Permitted By Board Policy</th>
<th>Portfolio Percentage</th>
<th>Book Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Agency Investment Fund (LAIF)</td>
<td>$65 Million</td>
<td>1.92%</td>
<td>$6,462,322</td>
</tr>
<tr>
<td>Banker's Acceptances</td>
<td>40%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Treasury Securities*</td>
<td>100%</td>
<td>23.40%</td>
<td>78,881,684</td>
</tr>
<tr>
<td>Agency Securities*</td>
<td>100%</td>
<td>28.67%</td>
<td>96,639,235</td>
</tr>
<tr>
<td>Asset-Backed, Mortgage-Backed, Mortgage Pass-Through Securities, and Collateralized Mortgage Obligations</td>
<td>20%</td>
<td>0.59%</td>
<td>1,998,828</td>
</tr>
<tr>
<td>Supranational Securities*</td>
<td>10%</td>
<td>2.31%</td>
<td>7,790,040</td>
</tr>
<tr>
<td>Repurchase Agreements</td>
<td>20%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Reverse Repurchase Agreements</td>
<td>20%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>Certificates of Deposit (Placement, Negotiable &amp; Time Deposits)</td>
<td>30%</td>
<td>0.74%</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>25%</td>
<td>5.84%</td>
<td>19,685,643</td>
</tr>
<tr>
<td>Medium Term Notes/Corporates*</td>
<td>30%</td>
<td>12.80%</td>
<td>43,153,903</td>
</tr>
<tr>
<td>Municipal Securities</td>
<td>30%</td>
<td>0.00%</td>
<td>-</td>
</tr>
<tr>
<td>JPA Pools (CAMP)</td>
<td>25%</td>
<td>23.13%</td>
<td>77,958,824</td>
</tr>
<tr>
<td>Mutual Funds and Money Market Mutual Funds*</td>
<td>20%</td>
<td>0.60%</td>
<td>2,035,835</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.00%</td>
<td>$337,106,314</td>
</tr>
</tbody>
</table>

Accrued Interest (unavailable for investing) | $118,036 |
Checking/Petty Cash/Available Funds (unavailable for investing) | $648,428 |

**Subtotal for Pooled Funds:** $337,872,778

### Debt Service Reserve (DSR) Funds Excluded from Portfolio Percentages:

Trinity Plus - Reserve (GIC) - Series 1998A COPs | $12,240,775 |

**Subtotal for Debt Service Reserve Funds (unavailable for CIP expenditures):** $12,240,775

**Total Cash and Investments:** $350,113,553

### PORTFOLIO INFORMATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Pooled Funds**</th>
<th>Debt Service Reserve</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio Yield to Maturity - 365 Days</td>
<td>2.06%</td>
<td>5.55%</td>
<td>2.18%</td>
</tr>
<tr>
<td>Average Term</td>
<td>816</td>
<td>1</td>
<td>787</td>
</tr>
<tr>
<td>Average Days to Maturity (730 Days Maximum)</td>
<td>445</td>
<td>1</td>
<td>430</td>
</tr>
</tbody>
</table>

* Some investments in these categories are managed by Chandler Asset Management.
** Pooled Funds include Operating, Pay Go, RSF, Equipment and Stored Water funds.
Portfolio Characteristics as of October 31, 2018

Pooled Funds

Asset Allocation

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Treasury (AAA/AA+)</td>
<td>23.4%</td>
</tr>
<tr>
<td>Agency (AAA/AA+)</td>
<td>28.7%</td>
</tr>
<tr>
<td>Other (AAA)*</td>
<td>27.8%</td>
</tr>
<tr>
<td>AA**</td>
<td>12.6%</td>
</tr>
<tr>
<td>A ***</td>
<td>5.6%</td>
</tr>
<tr>
<td>not rated ****</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

* Includes money market funds, JPA pools (CAMP) and medium-term notes/corporates and asset-backed securities
** Includes commercial paper and medium-term notes/corporates
*** Includes medium-term notes/corporates; the Water Authority’s Investment Policy does not permit investments with a rating below A-
**** Includes LAIF, which is part of the state investment pool, and is not rated

Maturity Distribution

Credit Quality

Projected Cash Flows in Millions *

<table>
<thead>
<tr>
<th>Month</th>
<th>Investment Maturities</th>
<th>Projected Receipts</th>
<th>Projected Disbursements</th>
<th>Reinvestment/Use of Liquid Funds</th>
<th>Projected Cash &amp; Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 18</td>
<td>$2.00</td>
<td>$58.91</td>
<td>$46.37</td>
<td>$14.54</td>
<td>$337.87</td>
</tr>
<tr>
<td>Nov 18</td>
<td>$2.00</td>
<td>$58.91</td>
<td>$46.37</td>
<td>$14.54</td>
<td>$350.41</td>
</tr>
<tr>
<td>Dec 18</td>
<td>$2.00</td>
<td>$56.31</td>
<td>$56.44</td>
<td>1.87</td>
<td>$350.29</td>
</tr>
<tr>
<td>Jan 19</td>
<td>$2.00</td>
<td>$54.75</td>
<td>$51.95</td>
<td>4.80</td>
<td>353.09</td>
</tr>
<tr>
<td>Feb 19</td>
<td>-</td>
<td>$38.85</td>
<td>$44.65</td>
<td>(5.79)</td>
<td>347.29</td>
</tr>
<tr>
<td>Mar 19</td>
<td>14.50</td>
<td>$44.43</td>
<td>$41.15</td>
<td>17.78</td>
<td>350.57</td>
</tr>
<tr>
<td>Apr 19</td>
<td>64.35</td>
<td>$54.09</td>
<td>$125.35</td>
<td>(6.91)</td>
<td>279.31</td>
</tr>
</tbody>
</table>

* Numbers may not foot due to rounding

Our Region’s Trusted Water Leader
San Diego County Water Authority

On September 26th the FOMC raised the federal funds range from 175-200 basis points to 200-225 basis points. The next meeting is November 8th.
Portfolio Summary
As of October 31, 2018

SDCWATER Chandler
Account #10569

PORTFOLIO CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Modified Duration</td>
<td>2.17</td>
</tr>
<tr>
<td>Average Coupon</td>
<td>1.91%</td>
</tr>
<tr>
<td>Average Purchase YTM</td>
<td>2.17%</td>
</tr>
<tr>
<td>Average Market YTM</td>
<td>2.98%</td>
</tr>
<tr>
<td>Average S&amp;P/Moody Rating</td>
<td>AA/Aa1</td>
</tr>
<tr>
<td>Average Final Maturity</td>
<td>2.31 yrs</td>
</tr>
<tr>
<td>Average Life</td>
<td>2.28 yrs</td>
</tr>
</tbody>
</table>

ACCOUNT SUMMARY

<table>
<thead>
<tr>
<th>Description</th>
<th>Beg. Values as of 9/30/18</th>
<th>End Values as of 10/31/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Value</td>
<td>152,069,651</td>
<td>152,564,155</td>
</tr>
<tr>
<td>Accrued Interest</td>
<td>870,667</td>
<td>510,767</td>
</tr>
<tr>
<td>Total Market Value</td>
<td>152,940,318</td>
<td>153,074,922</td>
</tr>
<tr>
<td>Income Earned</td>
<td>235,829</td>
<td>252,659</td>
</tr>
<tr>
<td>Cont/WD</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Par</td>
<td>155,163,687</td>
<td>155,776,246</td>
</tr>
<tr>
<td>Book Value</td>
<td>153,736,442</td>
<td>154,349,001</td>
</tr>
<tr>
<td>Cost Value</td>
<td>153,736,442</td>
<td>154,349,001</td>
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</table>

SECTOR ALLOCATION

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Agency</td>
<td>36.4%</td>
</tr>
<tr>
<td>US Treasury</td>
<td>27.0%</td>
</tr>
<tr>
<td>US Corp</td>
<td>25.5%</td>
</tr>
<tr>
<td>Supras</td>
<td>5.1%</td>
</tr>
<tr>
<td>Foreign Corp</td>
<td>2.4%</td>
</tr>
<tr>
<td>Neg CD</td>
<td>1.6%</td>
</tr>
<tr>
<td>ABS</td>
<td>1.3%</td>
</tr>
<tr>
<td>Money Mkt Fd</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

MATURITY DISTRIBUTION

<table>
<thead>
<tr>
<th>Maturity (Yrs)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 25</td>
<td>2.1%</td>
</tr>
<tr>
<td>25 - 50</td>
<td>2.9%</td>
</tr>
<tr>
<td>50 - 100</td>
<td>16.1%</td>
</tr>
<tr>
<td>100 - 200</td>
<td>3.4%</td>
</tr>
<tr>
<td>200 - 300</td>
<td>15.6%</td>
</tr>
<tr>
<td>300 - 500</td>
<td>21.4%</td>
</tr>
<tr>
<td>500 - 1000</td>
<td>38.5%</td>
</tr>
</tbody>
</table>

CREDIT QUALITY (S&P)

<table>
<thead>
<tr>
<th>Credit Quality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>77.6%</td>
</tr>
<tr>
<td>AA</td>
<td>12.3%</td>
</tr>
<tr>
<td>A</td>
<td>(7.5%)</td>
</tr>
<tr>
<td>NR</td>
<td>(2.5%)</td>
</tr>
</tbody>
</table>

TOP ISSUERS

<table>
<thead>
<tr>
<th>Issuer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government of United States</td>
<td>27.0%</td>
</tr>
<tr>
<td>Federal Home Loan Mortgage Corp</td>
<td>22.4%</td>
</tr>
<tr>
<td>Federal National Mortgage Assoc</td>
<td>11.0%</td>
</tr>
<tr>
<td>Federal Home Loan Bank</td>
<td>3.0%</td>
</tr>
<tr>
<td>Toronto Dominion Holdings</td>
<td>3.0%</td>
</tr>
<tr>
<td>US Bancorp</td>
<td>2.6%</td>
</tr>
<tr>
<td>Intl Bank Recon and Development</td>
<td>2.6%</td>
</tr>
<tr>
<td>Wal-Mart Stores</td>
<td>1.3%</td>
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<tr>
<td>Total</td>
<td>72.8%</td>
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</table>
### Managed Pool Accounts

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM 90D</th>
<th>Days to Maturity</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH21</td>
<td>2200</td>
<td>Bank of New York Mellon Corp</td>
<td>1,136,246.11</td>
<td>02/20/2015</td>
<td>1,136,246.11</td>
<td>1,136,246.11</td>
<td>1,136,246.11</td>
<td>2.380</td>
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### Medium Term Notes

<table>
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<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM 90D</th>
<th>Days to Maturity</th>
<th>Maturity Date</th>
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</thead>
<tbody>
<tr>
<td>037833AQ3</td>
<td>20001</td>
<td>APPLE INC.</td>
<td>1,950,000.00</td>
<td>02/20/2015</td>
<td>1,942,297.50</td>
<td>1,982,662.50</td>
<td>2.100</td>
<td>AA+</td>
<td>1.686</td>
<td>186</td>
<td>05/06/2019</td>
<td></td>
</tr>
<tr>
<td>06051GEU9</td>
<td>21031</td>
<td>Bank of America Corp</td>
<td>2,000,000.00</td>
<td>09/13/2015</td>
<td>1,988,466.67</td>
<td>1,985,446.67</td>
<td>3.300</td>
<td>A-</td>
<td>3.625</td>
<td>1,532</td>
<td>01/11/2023</td>
<td></td>
</tr>
<tr>
<td>084670BL1</td>
<td>20009</td>
<td>BERKSHIRE HATHAWAY INC.</td>
<td>2,000,000.00</td>
<td>06/15/2018</td>
<td>1,989,300.00</td>
<td>2,010,620.00</td>
<td>2.100</td>
<td>AA+</td>
<td>1.966</td>
<td>286</td>
<td>08/14/2019</td>
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<tr>
<td>06406RA5</td>
<td>20015</td>
<td>Bank of New York Mellon Corp</td>
<td>2,000,000.00</td>
<td>03/21/2017</td>
<td>1,945,220.00</td>
<td>1,990,160.00</td>
<td>2.600</td>
<td>A</td>
<td>2.708</td>
<td>1,194</td>
<td>02/07/2022</td>
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<tr>
<td>16676AAN0</td>
<td>20007</td>
<td>CHEVRON CORP.</td>
<td>2,000,000.00</td>
<td>05/15/2015</td>
<td>1,985,160.00</td>
<td>2,027,200.00</td>
<td>2.193</td>
<td>A</td>
<td>1.876</td>
<td>379</td>
<td>11/19/2019</td>
<td></td>
</tr>
<tr>
<td>00440EAP2</td>
<td>21012</td>
<td>Chubb INA Holdings Inc</td>
<td>2,000,000.00</td>
<td>06/27/2018</td>
<td>1,927,620.00</td>
<td>1,935,580.00</td>
<td>2.700</td>
<td>AA+</td>
<td>3.446</td>
<td>1,593</td>
<td>03/13/2023</td>
<td></td>
</tr>
<tr>
<td>532457BQ0</td>
<td>20017</td>
<td>Eli Lilly &amp; Co.</td>
<td>2,000,000.00</td>
<td>08/29/2017</td>
<td>1,933,880.00</td>
<td>2,017,440.00</td>
<td>2.350</td>
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<td>2.154</td>
<td>1,291</td>
<td>05/15/2022</td>
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</tr>
<tr>
<td>30231GAAD4</td>
<td>20005</td>
<td>EXXON MOBIL</td>
<td>2,000,000.00</td>
<td>04/28/2015</td>
<td>1,992,900.00</td>
<td>2,030,500.00</td>
<td>1.819</td>
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<td>0.001</td>
<td>A</td>
<td>0.001</td>
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</tbody>
</table>

Subtotal and Average: 121,522,334.20  98,697,756.18  98,697,756.18  98,697,756.18  121,522,334.20  98,697,756.18  98,697,756.18  98,697,756.18  98,697,756.18  2.694  1
# Portfolio Details - Investments

**October 31, 2018**

## Negotiable CD's

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P 365 Days to Maturity</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>89114MCP0</td>
<td>21021</td>
<td>TORONTO DOMINION BANK/NY</td>
<td>08/28/2018</td>
<td>2,500,000.00</td>
<td>2,500,000.00</td>
<td>2,500,000.00</td>
<td>2.52</td>
<td>A-</td>
<td>174</td>
</tr>
</tbody>
</table>

| Subtotal and Average | 2,500,000.00 | 2,500,000.00 | 2,500,000.00 | 2,500,000.00 | 2.555 | 174 |

## Commercial Paper - Discount

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P 365 Days to Maturity</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>4664OQRH6</td>
<td>10221</td>
<td>JP MORGAN SECURITIES LLC</td>
<td>08/21/2018</td>
<td>10,000,000.00</td>
<td>9,832,700.00</td>
<td>9,832,700.00</td>
<td>2.52</td>
<td>A-</td>
<td>167</td>
</tr>
</tbody>
</table>

| Subtotal and Average | 23,518,278.81 | 19,685,643.33 | 19,685,643.33 | 2.618 | 161 |

## Federal Agency - Coupon

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P 365 Days to Maturity</th>
<th>Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>3133EEWG1</td>
<td>10183</td>
<td>FEDERAL FARM CREDIT BANK</td>
<td>04/28/2016</td>
<td>3,500,000.00</td>
<td>3,484,425.00</td>
<td>3,521,000.00</td>
<td>1.30</td>
<td>AA+</td>
<td>151</td>
</tr>
</tbody>
</table>

| Subtotal and Average | 107,857,891.50 | 96,125,000.00 | 95,027,922.13 | 96,696,450.35 | 1.670 | 497 |
SDCWA - Fiscal Year 2019
Portfolio Management

Page 3

Portfolio Details - Investments
October 31, 2018
CUSIP

Investment #

Average
Balance

Issuer

Purchase
Date

Par Value

Market Value

Book Value

6,000,000.00
4,000,000.00
10,000,000.00
5,000,000.00
5,000,000.00
5,000,000.00
5,000,000.00
5,000,000.00
12,000,000.00
5,000,000.00
1,250,000.00
1,250,000.00
1,250,000.00
1,400,000.00
250,000.00
1,500,000.00
1,500,000.00
2,000,000.00
3,000,000.00
4,000,000.00

5,974,686.00
3,983,124.00
9,788,280.00
4,875,390.00
4,965,040.00
4,978,905.00
4,894,140.00
4,939,650.00
11,949,372.00
4,939,650.00
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1,207,812.50
1,232,128.75
1,320,813.20
237,851.50
1,459,921.50
1,445,859.00
1,903,750.00
2,785,628.45
3,960,516.80

6,098,906.25
4,038,125.00
10,082,812.50
4,993,750.00
4,989,062.50
5,027,343.75
4,950,000.00
5,009,179.69
11,928,750.00
4,938,085.94
1,196,972.66
1,216,015.63
1,243,896.48
1,323,929.68
239,345.70
1,467,773.44
1,455,937.50
1,918,125.00
2,800,394.08
3,985,360.05

79,400,000.00

78,031,776.20

78,903,765.85

2,000,000.00
2,000,000.00
2,000,000.00
2,000,000.00

1,900,540.00
1,933,940.00
1,985,300.00
1,917,600.00

1,910,420.00
1,947,560.00
1,996,700.00
1,935,360.00

8,000,000.00

7,737,380.00

7,790,040.00

2,000,000.00

1,994,663.56

2,003,103.69

2,000,000.00

1,994,663.56

2,003,103.69

Stated
Rate

S&P

YTM Days to
365 Maturity

Maturity
Date

Treasury Securities - Coupon
912828D23
912828D23
912828K58
912828VA5
912828Q52
912828D23
912828K58
912828F62
912828D23
912828F62
912828P38
912828W55
9128283X6
912828R28
912828P38
912828F96
9128283C2
9128282S8
9128282D1
9128284U1

10160
10167
10181
10190
10191
10193
10194
10198
10217
10224
21003
21004
21005
21009
21011
21015
21016
21019
21026
21029

UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
UNITED STATES TREASURY
Subtotal and Average

09/29/2015
11/23/2015
04/21/2016
11/10/2016
11/10/2016
12/29/2016
12/29/2016
03/30/2017
04/18/2018
09/28/2018
02/21/2018
02/21/2018
02/21/2018
05/08/2018
06/26/2018
07/23/2018
07/23/2018
08/27/2018
09/11/2018
09/11/2018

83,751,211.52

1.625
1.625
1.375
1.125
0.875
1.625
1.375
1.500
1.625
1.500
1.750
1.875
2.250
1.625
1.750
2.000
2.000
1.625
1.375
2.625

AA+
AA+
AA+
AA+
AA+
AA+
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1.154
1.340
1.164
1.162
0.966
1.386
1.684
1.427
2.209
2.660
2.672
2.592
2.421
2.802
2.743
2.690
2.733
2.709
2.843
2.823

180
180
546
546
165
180
546
364
180
364
1,552
1,215
837
1,641
1,552
1,095
1,460
1,399
1,764
1,702

04/30/2019
04/30/2019
04/30/2020
04/30/2020
04/15/2019
04/30/2019
04/30/2020
10/31/2019
04/30/2019
10/31/2019
01/31/2023
02/28/2022
02/15/2021
04/30/2023
01/31/2023
10/31/2021
10/31/2022
08/31/2022
08/31/2023
06/30/2023

1.810

574

2.803
2.708
2.808
2.741

1,413
1,182
995
1,453

2.765

1,258

2.898

1,414 09/15/2022

2.898

1,414

Supranationals
4581X0CZ9
459058FY4
459058GH0
45950VLH7

21002
21006
21018
21001

Inter-American Devel. Bank
Intl Bank Recon & Develop
Intl Bank Recon & Develop
International Finance Corp
Subtotal and Average

02/22/2018
02/22/2018
07/25/2018
02/21/2018
7,790,040.00

1.750
2.000
2.750
2.000

AAA
AAA
AAA

09/14/2022
01/26/2022
07/23/2021
10/24/2022

Asset Backed Securities
89238TAD5

21027

Toyota Auto Receivables
Subtotal and Average

09/11/2018
2,003,103.69

2.960

Portfolio CWA2
CC
Run Date: 11/13/2018 - 13:52

129 of 376

PM (PRF_PM2) 7.3.0


<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM</th>
<th>Days to Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total and Average</td>
<td></td>
<td>395,097,455.71</td>
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<td>349,922,756.18</td>
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</table>

SDCWA - Fiscal Year 2019
Portfolio Management
Portfolio Details - Investments
October 31, 2018
### Portfolio Details - Cash

**October 31, 2018**

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM</th>
<th>Days to Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>PETTY CASH</td>
<td>07/01/2018</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>2,500.00</td>
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</tr>
<tr>
<td>CASH02</td>
<td>1000</td>
<td>WELLS FARGO - OPERATING/POOLED</td>
<td>07/01/2018</td>
<td>653,988.47</td>
<td>653,988.47</td>
<td>653,988.47</td>
<td>0.001</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASH03</td>
<td>1001</td>
<td>WELLS FARGO - PAYROLL ZBA</td>
<td>07/01/2018</td>
<td>-8,060.35</td>
<td>-8,060.35</td>
<td>-8,060.35</td>
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<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CASH39</td>
<td>4000</td>
<td>WELLS FARGO - 2010B BONDS-BABS</td>
<td>07/01/2018</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.000</td>
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</tr>
</tbody>
</table>

**Average Balance**

|                  | 0.00 | 1 |

**Total Cash and Investments**

|                  | 395,097,455.71 | 350,571,184.30 | 346,778,599.88 | 350,113,552.67 | 2.184 | 430 |

---

**Portfolio Details - Cash**

**October 31, 2018**

<table>
<thead>
<tr>
<th>CUSIP</th>
<th>Investment #</th>
<th>Issuer</th>
<th>Average Balance</th>
<th>Purchase Date</th>
<th>Par Value</th>
<th>Market Value</th>
<th>Book Value</th>
<th>Stated Rate</th>
<th>S&amp;P</th>
<th>YTM</th>
<th>Days to Maturity</th>
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<tbody>
<tr>
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<td></td>
<td></td>
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</tr>
<tr>
<td>CASH01</td>
<td>48</td>
<td>PETTY CASH</td>
<td>07/01/2018</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>2,500.00</td>
<td>0.000</td>
<td>1</td>
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<tr>
<td>CASH02</td>
<td>1000</td>
<td>WELLS FARGO - OPERATING/POOLED</td>
<td>07/01/2018</td>
<td>653,988.47</td>
<td>653,988.47</td>
<td>653,988.47</td>
<td>0.001</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>CASH03</td>
<td>1001</td>
<td>WELLS FARGO - PAYROLL ZBA</td>
<td>07/01/2018</td>
<td>-8,060.35</td>
<td>-8,060.35</td>
<td>-8,060.35</td>
<td>0.000</td>
<td>1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CASH39</td>
<td>4000</td>
<td>WELLS FARGO - 2010B BONDS-BABS</td>
<td>07/01/2018</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.000</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Average Balance**

|                  | 0.00 | 1 |

**Total Cash and Investments**

|                  | 395,097,455.71 | 350,571,184.30 | 346,778,599.88 | 350,113,552.67 | 2.184 | 430 |
### SDCWA - Fiscal Year 2019
#### Portfolio Management
#### Activity Summary
#### October 2017 through October 2018

#### Yield to Maturity

<table>
<thead>
<tr>
<th>Month End</th>
<th>Year</th>
<th>Number of Securities</th>
<th>Total Invested</th>
<th>Yield to Maturity</th>
<th>Managed Pool Rate</th>
<th>Number of Investments Purchased</th>
<th>Number of Investments Redeemed</th>
<th>Average Term</th>
<th>Average Days to Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>October</td>
<td>2017</td>
<td>70</td>
<td>359,683,297.80</td>
<td>1.408</td>
<td>1.753</td>
<td>0</td>
<td>9</td>
<td>732</td>
<td>380</td>
</tr>
<tr>
<td>November</td>
<td>2017</td>
<td>71</td>
<td>378,358,659.08</td>
<td>1.407</td>
<td>1.701</td>
<td>2</td>
<td>1</td>
<td>699</td>
<td>345</td>
</tr>
<tr>
<td>December</td>
<td>2017</td>
<td>70</td>
<td>370,296,770.16</td>
<td>1.441</td>
<td>1.843</td>
<td>0</td>
<td>1</td>
<td>711</td>
<td>329</td>
</tr>
<tr>
<td>January</td>
<td>2018</td>
<td>69</td>
<td>389,178,674.95</td>
<td>1.463</td>
<td>1.841</td>
<td>0</td>
<td>1</td>
<td>674</td>
<td>292</td>
</tr>
<tr>
<td>February</td>
<td>2018</td>
<td>76</td>
<td>392,242,687.74</td>
<td>1.524</td>
<td>1.912</td>
<td>8</td>
<td>1</td>
<td>709</td>
<td>317</td>
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<tr>
<td>March</td>
<td>2018</td>
<td>76</td>
<td>395,193,009.08</td>
<td>1.575</td>
<td>2.043</td>
<td>1</td>
<td>1</td>
<td>708</td>
<td>301</td>
</tr>
<tr>
<td>April</td>
<td>2018</td>
<td>65</td>
<td>326,198,345.22</td>
<td>1.732</td>
<td>2.098</td>
<td>1</td>
<td>12</td>
<td>682</td>
<td>355</td>
</tr>
<tr>
<td>May</td>
<td>2018</td>
<td>67</td>
<td>337,842,814.13</td>
<td>1.819</td>
<td>2.258</td>
<td>3</td>
<td>1</td>
<td>669</td>
<td>340</td>
</tr>
<tr>
<td>June</td>
<td>2018</td>
<td>68</td>
<td>338,091,900.59</td>
<td>1.860</td>
<td>2.341</td>
<td>2</td>
<td>1</td>
<td>673</td>
<td>332</td>
</tr>
<tr>
<td>July</td>
<td>2018</td>
<td>73</td>
<td>356,123,323.61</td>
<td>1.897</td>
<td>2.318</td>
<td>6</td>
<td>1</td>
<td>676</td>
<td>336</td>
</tr>
<tr>
<td>August</td>
<td>2018</td>
<td>80</td>
<td>348,533,173.51</td>
<td>1.967</td>
<td>2.482</td>
<td>7</td>
<td>1</td>
<td>724</td>
<td>360</td>
</tr>
<tr>
<td>September</td>
<td>2018</td>
<td>93</td>
<td>365,168,741.66</td>
<td>2.066</td>
<td>2.633</td>
<td>14</td>
<td>0</td>
<td>803</td>
<td>434</td>
</tr>
<tr>
<td>October</td>
<td>2018</td>
<td>93</td>
<td>349,465,124.75</td>
<td>2.154</td>
<td>2.694</td>
<td>0</td>
<td>5</td>
<td>787</td>
<td>430</td>
</tr>
</tbody>
</table>

**Average**

- Number of Securities: 75
- Total Invested: 362,028,963.25
- Yield to Maturity: 1.716%
- Managed Pool Rate: 1.740%
- Number of Investments Purchased: 3
- Number of Investments Redeemed: 3
- Average Term: 711
- Average Days to Maturity: 350
November 28, 2018

Attention: Administrative and Finance Committee

Vote Entitlement and Representation Resolution for Calendar Year 2019. (Action)

**Staff recommendation**
Adopt Resolution 2018-__ establishing the vote and representative entitlements of each member agency effective January 1, 2019.

**Alternative**
None.

**Fiscal Impact**
None.

### Executive Summary

- The vote entitlement of each member agency is reestablished each year on January 1 and is calculated as one vote for each $5 million of total financial contribution.
- Total financial contribution includes all amounts and charges paid directly by or on behalf of the member agency to the Water Authority and the Metropolitan Water District.
- Each member agency must have at least one representative on the Board of Directors.
- Each member agency may designate and appoint one additional representative for each full five percent of total Water Authority assessed value of all properties within their service area.

### Discussion

The cumulative total financial contribution as of June 30, 2018 was $13,464,248,619 and the total vote entitlement for the Calendar Year 2019 is 2,692.85. The cumulative total financial contribution is calculated by adding the total member agency financial contribution for the fiscal year ended June 30, 2018 to the cumulative total member agency financial contribution as of June 30, 2017. The total vote entitlement is the cumulative total financial contribution divided by $5 million.

Attachment A of the Resolution lists the cumulative total financial contribution by member agency as of June 30, 2018 and the vote entitlements by member agency for Calendar Year 2019.

The total member agency representative entitlement for Calendar Year 2019 is thirty-six (36). The member agency representative entitlements are based on assessed values certified by the County of San Diego, Auditor and Controller, as of June 30, 2018. The number of Carlsbad representative remains with two representatives based on the Calendar Year 2019 calculation.
Attachment B of the Resolution lists the representative entitlement of each member agency. In summary, the City of San Diego has ten representatives; Carlsbad, Helix Water District and Otay Water District each have two representatives and the remaining member agencies each have one representative.

Prepared by: Priscilla Tam, Accounting Technician
Reviewed by: Christopher Woidzik, Controller
Reviewed by: Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Dan Denham, Assistant General Manager

Attachments: Resolution No. 2018-___ Vote and Member Representative Entitlements
Resolution for Calendar Year 2019
- Attachment A: Vote Entitlements Effective January 1, 2019
- Attachment B: Representative Entitlements Effective January 1, 2019
RESOLUTION NO. 2018-__

RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SAN DIEGO COUNTY WATER AUTHORITY
ESTABLISHING THE NUMBER OF VOTES BY REPRESENTATIVES
OF MEMBER AGENCIES FOR CALENDAR YEAR 2019 AS DETERMINED BY
TOTAL FINANCIAL CONTRIBUTION FOR THE FISCAL YEAR ENDING 2018 AND
THE NUMBER OF MEMBER REPRESENTATIVES AS DETERMINED BY TOTAL
ASSESSED VALUES AS OF JUNE 30, 2018

WHEREAS, pursuant to subdivision (i) of section 6 of the County Water
Authority Act, the Board of Directors is required annually to determine the total
financial contribution of each member agency and the number of member
representatives; and

WHEREAS, the Finance Department has calculated and reported to the
Board of Directors the total financial contribution and corresponding votes of
each member agency of the Water Authority; and

WHEREAS, the number of member representatives to which a member
agency is entitled is determined by percentage of assessed valuation in accordance
subdivision (d) of section 6 of the County Water Authority Act and the Finance
Department has calculated and reported to the Board of Directors the percentage
of assessed valuation of each member agency.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the
Water Authority, that the number of votes allocated to each member public
agency is shown in Attachment A and the number of member representatives for
each public agency to the Water Authority Board of Directors is shown in Attachment B.

PASSED, APPROVED AND ADOPTED, on this 6th day of December, 2018.

Ayes:

Noes:

Abstain:

Absent:

____________________________
Jim Madaffer, Chair

ATTEST:

____________________________
Christy Guerin, Secretary

I, Melinda Nelson, Clerk of the Board of Directors of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2018-__ was duly adopted at the meeting of the Board of Directors on the date stated above.

____________________________
Melinda Nelson
Clerk of the Board
## ATTACHMENT A

### Vote Entitlement

**Effective January 1, 2019**

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Total Cumulative Financial Contribution*</th>
<th>Vote Entitlement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>$487,779,337</td>
<td>97,556</td>
<td>3.62%</td>
</tr>
<tr>
<td>Del Mar</td>
<td>$39,898,724</td>
<td>7,980</td>
<td>0.30%</td>
</tr>
<tr>
<td>Escondido</td>
<td>$476,820,518</td>
<td>95,364</td>
<td>3.54%</td>
</tr>
<tr>
<td>Fallbrook</td>
<td>$309,815,064</td>
<td>61,963</td>
<td>2.30%</td>
</tr>
<tr>
<td>Helix</td>
<td>$908,962,011</td>
<td>181,792</td>
<td>6.76%</td>
</tr>
<tr>
<td>Lakeside</td>
<td>$99,884,084</td>
<td>19,977</td>
<td>0.74%</td>
</tr>
<tr>
<td>National City</td>
<td>$100,026,281</td>
<td>20,005</td>
<td>0.74%</td>
</tr>
<tr>
<td>Oceanside</td>
<td>$692,989,041</td>
<td>138,598</td>
<td>5.15%</td>
</tr>
<tr>
<td>Olivenhain</td>
<td>$440,610,807</td>
<td>88,122</td>
<td>3.27%</td>
</tr>
<tr>
<td>Otay</td>
<td>$781,085,134</td>
<td>156,217</td>
<td>5.80%</td>
</tr>
<tr>
<td>Padre Dam</td>
<td>$363,120,638</td>
<td>72,624</td>
<td>2.70%</td>
</tr>
<tr>
<td>Pendleton</td>
<td>$12,261,668</td>
<td>2,452</td>
<td>0.09%</td>
</tr>
<tr>
<td>Poway</td>
<td>$287,018,932</td>
<td>57,404</td>
<td>2.13%</td>
</tr>
<tr>
<td>Rainbow</td>
<td>$537,402,273</td>
<td>107,480</td>
<td>3.99%</td>
</tr>
<tr>
<td>Ramona</td>
<td>$200,905,337</td>
<td>40,181</td>
<td>1.49%</td>
</tr>
<tr>
<td>Rincon</td>
<td>$195,741,065</td>
<td>39,148</td>
<td>1.45%</td>
</tr>
<tr>
<td>San Diego</td>
<td>$5,352,910,275</td>
<td>1,070,582</td>
<td>39.76%</td>
</tr>
<tr>
<td>San Dieguito</td>
<td>$143,990,366</td>
<td>28,798</td>
<td>1.07%</td>
</tr>
<tr>
<td>Santa Fe</td>
<td>$214,211,770</td>
<td>42,842</td>
<td>1.59%</td>
</tr>
<tr>
<td>South Bay</td>
<td>$270,971,483</td>
<td>54,194</td>
<td>2.01%</td>
</tr>
<tr>
<td>Vallecitos</td>
<td>$380,701,241</td>
<td>76,140</td>
<td>2.83%</td>
</tr>
<tr>
<td>Valley Center</td>
<td>$700,073,099</td>
<td>140,015</td>
<td>5.20%</td>
</tr>
<tr>
<td>Vista</td>
<td>$409,239,269</td>
<td>81,848</td>
<td>3.04%</td>
</tr>
<tr>
<td>Yuima</td>
<td>$57,830,202</td>
<td>11,566</td>
<td>0.43%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,464,248,619</strong></td>
<td><strong>2,692,850</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

**ATTACHMENT B**

**Representative Entitlement**  
**Effective January 1, 2019**

<table>
<thead>
<tr>
<th>Member Agency</th>
<th>Secured</th>
<th>Unsecured</th>
<th>Total</th>
<th>Percent</th>
<th>Member Representative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carlsbad</td>
<td>26,141,427,969</td>
<td>996,154,816</td>
<td>27,137,582,785</td>
<td>5.14%</td>
<td>2</td>
</tr>
<tr>
<td>Del Mar</td>
<td>3,665,991,770</td>
<td>23,866,021</td>
<td>3,689,677,791</td>
<td>0.70%</td>
<td>1</td>
</tr>
<tr>
<td>Escondido</td>
<td>8,577,374,178</td>
<td>275,963,971</td>
<td>8,853,338,149</td>
<td>1.68%</td>
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</tr>
<tr>
<td>Fallbrook</td>
<td>4,005,966,807</td>
<td>46,338,505</td>
<td>4,052,305,312</td>
<td>0.77%</td>
<td>1</td>
</tr>
<tr>
<td>Helix</td>
<td>26,611,426,002</td>
<td>708,980,428</td>
<td>27,320,406,430</td>
<td>5.18%</td>
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<tr>
<td>Lakeside</td>
<td>2,666,998,406</td>
<td>129,801,425</td>
<td>2,796,799,831</td>
<td>0.53%</td>
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</tr>
<tr>
<td>National City</td>
<td>4,054,973,669</td>
<td>232,906,205</td>
<td>4,287,879,874</td>
<td>0.81%</td>
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</tr>
<tr>
<td>Oceanside</td>
<td>23,471,973,741</td>
<td>512,802,931</td>
<td>23,984,776,672</td>
<td>4.55%</td>
<td>1</td>
</tr>
<tr>
<td>Olivenhain</td>
<td>23,258,317,519</td>
<td>389,622,971</td>
<td>23,647,940,490</td>
<td>4.48%</td>
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</tr>
<tr>
<td>Otay</td>
<td>30,879,912,941</td>
<td>648,108,461</td>
<td>31,528,021,402</td>
<td>5.98%</td>
<td>1</td>
</tr>
<tr>
<td>Padre Dam</td>
<td>11,475,885,284</td>
<td>273,151,260</td>
<td>11,749,036,544</td>
<td>2.23%</td>
<td>2</td>
</tr>
<tr>
<td>Pendleton*</td>
<td>36,973,763</td>
<td>422,026,397</td>
<td>10,932,480,836</td>
<td>2.07%</td>
<td>1</td>
</tr>
<tr>
<td>Poway</td>
<td>4,660,902,605</td>
<td>24,770,432</td>
<td>4,885,673,037</td>
<td>0.89%</td>
<td>1</td>
</tr>
<tr>
<td>Rainbow</td>
<td>4,397,466,541</td>
<td>44,814,759</td>
<td>4,442,281,300</td>
<td>0.84%</td>
<td>1</td>
</tr>
<tr>
<td>Ramona</td>
<td>9,774,345,428</td>
<td>275,169,065</td>
<td>10,049,514,493</td>
<td>1.90%</td>
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<tr>
<td>Rincon</td>
<td>248,321,938,882</td>
<td>10,523,074,014</td>
<td>258,845,012,896</td>
<td>49.05%</td>
<td>10</td>
</tr>
<tr>
<td>San Diego</td>
<td>10,333,067,415</td>
<td>162,585,794</td>
<td>10,495,653,209</td>
<td>1.99%</td>
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</tr>
<tr>
<td>San Dieguito</td>
<td>11,448,212,284</td>
<td>79,593,908</td>
<td>11,527,806,192</td>
<td>2.19%</td>
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<tr>
<td>Santa Fe</td>
<td>10,895,653,558</td>
<td>336,838,336</td>
<td>11,232,491,894</td>
<td>2.13%</td>
<td>1</td>
</tr>
<tr>
<td>South Bay</td>
<td>15,646,436,786</td>
<td>396,331,895</td>
<td>16,042,768,681</td>
<td>3.04%</td>
<td>1</td>
</tr>
<tr>
<td>Vallecitos</td>
<td>4,667,130,684</td>
<td>27,292,623</td>
<td>4,694,423,307</td>
<td>0.89%</td>
<td>1</td>
</tr>
<tr>
<td>Valley Center</td>
<td>14,582,086,924</td>
<td>524,149,503</td>
<td>15,106,236,427</td>
<td>2.86%</td>
<td>1</td>
</tr>
<tr>
<td>Vista</td>
<td>391,448,369</td>
<td>14,763,172</td>
<td>399,131,541</td>
<td>0.08%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>$ 510,476,365,964</td>
<td>$ 17,084,309,385</td>
<td>$ 527,560,675,349</td>
<td>100.00%</td>
<td>36</td>
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</tbody>
</table>

5% of Total Assessed Valuation is $24,852,565,148

Note: County of San Diego – 1 Special Representative

*Pendleton Military Reservation is entitled to only one member representative notwithstanding total assessed valuation.

Source: Report from County of San Diego Auditor/Controller - Property tax services dated 7/04/2018. Report ID: Val Mail-01 PSVVP70@
November 28, 2018

Attention: Administrative and Finance Committee

Adopt Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019. (Action)

Recommendation
Adopt the Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.

Alternative
Adopt the Annual Statement of Investment Policy, without amendments, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.

Fiscal impact
There is no fiscal impact.

Background
It is the policy of the Board to review and approve the Annual Statement of Investment Policy (Policy) and to delegate the investment authority to the Treasurer on an annual basis. Annual statements of investment policy and quarterly updates to the legislative body are optional per California Government Code (Code) section 53646. However, the Water Authority annually reviews, updates and adopts its Policy and submits a monthly Treasurer’s Report to the Board. Staff believes that the annual review and adoption of the Policy by the Board, along with submission of the monthly Treasurer’s Report to the Board, is central to a transparent portfolio management process.

Each year staff review changes to the Code to ensure the Water Authority’s Policy is kept current with the Code. As a part of the annual review, Chandler Asset Management a private investment advisor under contract with the Water Authority, also conducted a review of the Policy. Also, each year the staff reviews market conditions and evaluates the Water Authority Investment Strategy.

Previous Board Action
On December 7, 2017, the Board approved the updated investment management strategy and the updated Annual Statement of Investment Policy.

Discussion
After review, there are three recommended changes to the Annual Statement of Investment Policy for Calendar Year 2019.
Asset-Backed, Mortgage-Backed, Mortgage Pass-Through Securities, and Collateralized Mortgage Obligations:
This year California Governor Brown signed AB-1770, which modified section (o) of California Code 53601 to remove the issuer credit quality requirement. This change will become effective on January 1, 2019. Staff recommends removing language from the Policy to be consistent with the new AB-1770.

Reverse Repurchase Agreements:
Remove Reverse Repurchase Agreements from the Policy. The Water Authority is not utilizing reverse repurchase transactions. The Policy currently lists Reverse Repurchase Agreements as an ineligible investment. Removing these from the list of Authorized Investment Instruments in Policy will keep the Policy consistent.

Portfolio Limitations:
To keep the language consistent within the Policy and consistent with best practices, language on downgraded securities and credit quality requirements has been updated.

These recommendations have been incorporated into the attached Annual Statement of Investment Policy for Calendar Year 2019 and are summarized below. The recommended changes are highlighted in “redline” format in the attachment.

Prepared by: Liana M. Whyte, Budget and Analysis Manager
Reviewed by: Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Dan Denham, Assistant General Manager

Attachments: Annual Statement of Investment Policy for Calendar Year 2019
SAN DIEGO COUNTY WATER AUTHORITY

Annual Statement of Investment Policy

Calendar Year 2018-2019

INTRODUCTION

The purpose of this document is to identify various policies and procedures that enhance opportunities for a prudent and systematic investment policy and to organize and formalize investment related activities. The ultimate goal is to enhance the economic status of the Water Authority while protecting its funds.

The Board of Directors and, upon formal delegation, the Treasurer for the San Diego County Water Authority, duly authorized to invest Water Authority monies by California Government Code, are trustees of Water Authority funds and therefore fiduciaries subject to the prudent investor standard.

SCOPE

It is intended that this policy cover all funds and investment activities under the direct authority of the San Diego County Water Authority, except for the employee’s retirement and deferred compensation funds. For investment purposes, the Water Authority manages the Operating Fund, Rate Stabilization Fund, Pay-As-You-Go Fund, Equipment Replacement Fund and Stored Water Fund together as the Pooled Operating Fund. The funds under the direct authority of the San Diego County Water Authority are accounted for in the Comprehensive Annual Financial Report and include:

Operating Fund – Holds the Water Authority’s working capital and emergency operating reserve.

Rate Stabilization Fund – Established to mitigate future water rate increases.

Pay-As-You-Go Fund (PAYGO) – Funds are dedicated for construction outlays and debt service.

Equipment Replacement Fund – Used to purchase minor capital equipment such as computer systems, vehicles, etc.

Stored Water Fund – Used to purchase water to fill Water Authority reservoirs.

Construction (CIP) Fund – Holds the proceeds of long-term debt and commercial paper to be expended for construction.

Debt Service Reserve Fund – Holds the required legal reserve for Water Authority debt issues.
OBJECTIVES

The investment policies and practices of the Board of Directors and the Treasurer for the San Diego County Water Authority are based upon limitations placed on it by governing legislative bodies. These policies have three primary goals:

1. To assure compliance with all Federal, State and Local laws governing the investment of monies under the control of the Treasurer.
2. To protect the principal monies entrusted to this organization.
3. To generate the maximum amount of investment income within the parameters of this Annual Statement of Investment Policy.

These goals are enhanced by the following objectives in order of importance.

A. **Safety:** It is the primary duty and responsibility of the Treasurer to protect, preserve and maintain cash and investments placed in his/her trust. Each investment transaction shall seek to ensure that capital losses are avoided, whether from institution default, broker-dealer default, or erosion of market value of securities. The Treasurer shall evaluate or cause to have evaluated each potential investment, seeking both quality in issuer and in underlying security or collateral. Diversification of the portfolio will be used in order to reduce exposure to principal loss.

B. **Liquidity:** An adequate percentage of the portfolio will be maintained in liquid short-term securities which can be converted to cash if necessary to meet disbursement requirements. Since all cash requirements cannot be anticipated, investment in securities with active secondary markets will be utilized. These securities will have a low sensitivity to market risk.

C. **Return on Investments:** The investment portfolio will be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints for safety and liquidity needs.

D. **Public Trust:** All participants in the investment process shall act as custodians of the public trust. Investment officials shall recognize that the investment portfolio is subject to public review and evaluation. The overall program shall be designed and managed with a degree of professionalism that is worthy of the public trust. In a diversified portfolio it must be recognized that occasional measured losses are inevitable, and must be considered within the context of the overall portfolio’s investment return, provided that adequate diversification has been implemented.

PRUDENT INVESTOR STANDARD

The Board of Directors and Treasurer adhere to the guidance provided by the “prudent investor standard”, California Government Code (Section 53600.3), which obligates a fiduciary to insure that “When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee 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
the agency, 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. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law.”

DELEGATION OF AUTHORITY

The investment, per this policy, of Water Authority idle monies is annually delegated to the Treasurer by the Board of Directors who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires. The Treasurer may delegate the day-to-day operations of investing to his/her designee(s), but not the responsibility for the overall investment program. A memorandum will be forwarded to the General Manager indicating the individual who is acting on behalf of the Treasurer which details the period of time the designee will be responsible for the investment function. All transactions will be reviewed by the Treasurer on a regular basis to assure compliance with this Annual Statement of Investment Policy.

The Water Authority may engage the services of one or more external investment advisers, who are registered under the Investment Advisers Act of 1940, to assist in the management of the Water Authority’s investment portfolio in a manner consistent with the objectives. External investment advisers may be granted discretion to purchase and sell investment securities in accordance with this investment policy.

ETHICS AND CONFLICT OF INTEREST

Officers and employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions. Employees and investment officers shall disclose any material financial interest in financial institutions that conduct business with this jurisdiction, and they shall further disclose any large personal financial/investment positions that could be related to the performance of the Water Authority’s portfolio. Employees and officers shall subordinate their personal investment transactions to those of the Water Authority, particularly with regard to the timing of purchases and sales, and shall avoid transactions that might impair public confidence. All officers and employees involved in the investment of public funds are required to comply with the Water Authority’s Conflict of Interest Code.

AUTHORIZED INVESTMENT INSTRUMENTS - POOLED OPERATING FUND

The Water Authority is governed by the California Government Code, Sections 53600 et seq. Within the context of these limitations, the following investments are authorized:

Local Agency Investment Fund (LAIF): The Water Authority may invest in the Local Agency Investment Fund established by the State Treasurer for the benefit of local agencies (Government Code Section 16429.1(b)). In order to ensure that LAIF is purchasing securities that comply with the Government Code, the monthly LAIF report shall be reviewed by the Treasurer. The maximum permitted investment will be governed by State Law.

Bankers’ Acceptances: The Water Authority may invest in Banker’s Acceptances, provided that they are issued by institutions which have short-term debt obligations rated “A-1” or its equivalent or better by at least one NRSRO. No more than 40% of the portfolio may be invested in
Banker’s Acceptances, and no more than 5% of the portfolio may be invested in any single issuer. The maximum maturity shall not exceed 180 days.

Treasury Securities: The Water Authority may invest in United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest (Government Code Section 53601(b)). The purchase of zero-coupon, or strips, is not permitted. Because these investments are the safest possible, there is no maximum portfolio limit. Maximum investment maturities will be restricted to five years.

Repurchase Agreements: The Water Authority may invest (Government Code Section 53601(j)) in overnight and term repurchase agreements with primary dealers of the Federal Reserve Bank of New York and have long-term debt obligations which are rated in a rating category of “A” or its equivalent or better by at least one NRSRO with which the Water Authority has entered into a master repurchase agreement. This agreement will be modeled after the Securities Industry and Financial Markets Association (SIFMA)’s master repurchase agreement.

All collateral used to secure this type of transaction is to be delivered to a third party prior to release of funds. The third party will have an account in the name of the San Diego County Water Authority. The market value of securities used as collateral for repurchase agreements shall be monitored on a daily basis by the Treasurer and will not be permitted to fall below 102 percent of the value of the repurchase agreement. Collateral shall not include strips, zero-coupon instruments or instruments with maturities in excess of five years. The right of substitution will be granted, provided that permissible collateral is maintained.

In order to conform with provisions of the Federal Bankruptcy Code which provides for the liquidation of securities held as collateral for repurchase agreements, the only securities acceptable as collateral shall be securities that are direct obligations of and guaranteed by the U.S. Government and Agency securities as permitted under this policy. The Water Authority will maintain a first perfected security interest in the securities subject to the repurchase agreement and shall have a contractual right to liquidation of purchased securities upon the bankruptcy, insolvency or other default of the counterparty. Maximum portfolio exposure will be limited to 20 percent and maturities that do not exceed one year.

Reverse Repurchase Agreements: The Water Authority may enter (Government Code Section 53601(j)) into reverse repurchase agreements only “with primary dealers of the Federal Reserve Bank of New York or with a nationally or state-chartered bank that has or has had a significant banking relationship with a local agency”, and when an unanticipated cash outflow can be met more advantageously by agreeing to a reverse repurchase agreement rather than selling securities outright. In this situation, the reverse shall not exceed 92 days, and shall be matched to a known cash inflow of sufficient size to repay the principal and interest of the reverse repurchase agreement.

The Water Authority may also enter into reverse repurchase agreements when proceeds obtained through the reverse can be reinvested at a higher rate. The spread and reverse must be reviewed by the Treasurer prior to the transaction taking place. Reverse repurchase agreements entered into may not exceed a maximum maturity of 92 days unless the minimum spread between the rate on the investment and cost of funds is guaranteed in writing, in which case the maximum maturity is limited to one year. In all cases, the transaction must be matched as to maturity and dollars invested with its corresponding reinvestment.

In both situations a master repurchase agreement modeled after the Securities Industry and Financial Markets Association (SIFMA) is required prior to the transaction taking place. In all cases,
the security being reversed must have been held in the portfolio for a minimum of 30 days. Restrictions placed on repurchase agreements also apply to reverse repurchase agreements. Maximum portfolio exposure will be limited to 20 percent of the total portfolio value excluding the proceeds of reverses. This transaction requires written approval of the Treasurer.

Securities lending is not considered a reverse repurchase transaction and is not authorized under this section.

Certificates of Deposit: The Water Authority may invest in Time Deposits (Non-Negotiable Certificates of Deposit). They may invest in Federally Insured Time Deposits in state or federally chartered banks, savings and loans, or credit unions, provided that the amount per institution is limited to the maximum covered under federal insurance, no more than 20% of the portfolio will be invested in a combination of federally insured and collateralized time deposits, and the maximum maturity does not exceed five (5) years. The Water Authority may invest in Collateralized Time Deposits in state or federally chartered bank, savings and loans, or credit unions in excess of insured amounts which are fully collateralized with the securities in accordance with California law, provided that no more than 20% of the portfolio will be invested in a combination of federally insured and collateralized time deposits, and the maximum maturity does not exceed five (5) years. The maximum portfolio exposure, combined with placement services and Negotiable CDs, is limited to 30 percent and no more than 5 percent of the portfolio may be invested in any single issuer.

Placement Service Deposits: The Water Authority may invest in deposits placed with a private sector entity that assists in the placement of deposits with eligible financial institutions located in the United States (Government Code Section 53601.8). The full amount of the principal and the interest that may be accrued during the maximum term of each deposit shall at all times be insured by federal deposit insurance. The combined maximum portfolio exposure to deposits placed pursuant to this section, Certificates of Deposits, and Negotiable Certificates of Deposit is limited to 30 percent. Maximum investment maturity will be restricted to five years.

Negotiable Certificates of Deposit: The Water Authority may invest in negotiable certificates of deposit issued by a nationally or state-chartered bank, a savings association or federal association, a state or federal credit union, or by a federally licensed or state licensed branch of a foreign bank, provided that no more than 30 percent of the total portfolio is invested in NCDs (in combination with CDs and Placement Services), and no more than 5 percent may be invested in a single issuer, and the maximum maturity shall not exceed five (5) years. The amount of the NCD insured up to the FDIC limit does not require any credit ratings, and any amount above the FDIC insured limit must be issued by institutions which have short term debt obligations rated “A-1” or its equivalent or better by at least one NRSRO; or long term obligations rated in a rating category of “A” or its equivalent or better by at least one NRSRO.

Commercial Paper: The Water Authority may invest in the highest grade of commercial paper (Government Code Section 53601(h)), are rated “A-1” or its equivalent or better by at least one NRSRO, issued only by general corporations that are organized and operating within the United States and having total assets in excess of $500 million. If the general corporation has long term ratings, they must have long-term obligations rated in a rating category of “A” or its equivalent or better by at least one NRSRO. Purchases shall not exceed ten percent of the outstanding paper of the issuing general corporation. Maximum investment maturity will be restricted to 270 days. Maximum portfolio exposure is limited to 25 percent and single-issuer holdings to no more than 5 percent per issuer.
Medium-Term Notes: The Water Authority may invest in corporate and depository institution debt securities provided that the issuer is a corporation organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Securities must have long-term obligations rated in a rating category of “A” or its equivalent or better by at least one NRSRO. Permissible types of notes include fixed rate and variable rate. Maximum investment maturity is restricted to five years. Maximum portfolio exposure is limited to 30 percent and single-issuer holdings to no more than 5 percent per issuer.

Municipal Securities: The Water Authority may invest in: (i) Registered treasury notes or bonds issued by any of the 50 United States, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by a state or by a department, board, agency, or authority of any state (Government Code Section 53601(c)(d)); and (ii) Bonds, notes, warrants, or other evidence of debt issued by a local agency or municipality located within California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency (Government Code Section 53601(a)(e)). Securities must have long-term obligations rated in a rating category of “A” or its equivalent or better by at least one NRSRO. Maximum maturity is limited to 5 years. Maximum portfolio exposure is limited to 30 percent and single-issuer holdings to no more than 5 percent per issuer.

Agencies: The Water Authority may invest in federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises (Government Code Section 53601(f)). Permissible types of securities include discount, coupon and variable rate security issues. Agency callable securities are limited to a maximum allocation of 20 percent of the portfolio. Maximum maturity is limited to 5 years.

Supranationals: The Water Authority may invest in United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank. Securities must be eligible for purchase and sale within the United States and have a minimum rating of “AA” as rated by Moody’s Investors Service, Standard and Poor’s, or Fitch Ratings. Maximum maturity is limited to 5 years. Maximum portfolio exposure is limited to 10 percent and single-issuer holdings to no more than 5 percent per issuer.

Asset-Backed, Mortgage-Backed, Mortgage Pass-Through Securities, and Collateralized Mortgage Obligations: The Water Authority may invest in these securities, given that the securities are rated in a rating category of “AA” or its equivalent or better by a NRSRO, they are issued by an issuer having long-term debt obligations rated in a rating category of “A” or its equivalent or better by one NRSRO. No more than 20% of the total portfolio may be invested in these securities, and no more than 5% of the portfolio may be invested in any single Asset-backed or mortgage security issuer. There is no issuer limitation on any mortgage security where the issuer is the US Treasury or Federal Agency/GSE. The maximum legal final maturity does not exceed five (5) years.

Mutual Funds and Money Market Mutual Funds: Must be registered with the Securities and Exchange Commission under the Investment Company Act of 1940, provided that:

a. Mutual Funds: invest in the securities and obligations as authorized under California Government Code, Section 53601 (a) to (k) and (m) to (q) inclusive and that meet either of the following criteria:
1. Attained the highest ranking or the highest letter and numerical rating provided by not less than two (2) NRSROs; or
2. Have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience investing in the securities and obligations authorized by California Government Code, Section 53601 and with assets under management in excess of $500 million.
3. No more than 10% of the total portfolio may be invested in shares of any one mutual fund.

b. Money Market Mutual Funds: registered with the Securities and Exchange Commission under the Investment Company Act of 1940 and issued by diversified management companies and meet either of the following criteria:
1. Have attained the highest ranking or the highest letter and numerical rating provided by not less than two (2) NRSROs; or
2. Have retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years’ experience managing money market mutual funds with assets under management in excess of $500 million.
3. No more than 20% of the total portfolio may be invested in shares of any one Money Market Mutual Fund.

c. No more than 20% of the total portfolio may be invested in these securities.

Local Government Investment Pools: The Water Authority may invest in local government investment pools created by a joint powers authority authorized under Government Code Section 53601(p). Pools must have the highest rating by at least one of the three largest nationally recognized statistical rating organizations. Maximum portfolio exposure is limited to 25 percent.

<p>| Authorized Investments Summary |
|----------------|----------------|----------------|----------------|
| <strong>Investment Type</strong> | <strong>Maximum Maturity</strong> | <strong>Maximum % of Portfolio</strong> | <strong>% Issuer</strong> | <strong>Minimum Rating Category</strong> |
| Local Agency Investment Fund | Maximum permitted by program |  |  |  |
| Banker's Acceptances | 180 days | 40% | 5% | A-1, A by one NRSRO |
| US Treasury | 5 years | None | None | None |
| Repurchase Agreement | 1 year | 20% | None | A by one NRSRO |
| Reverse Repurchase-Agreement | 92 days | 20% | - | - |
| Non-Negotiable CD | 5 years | 30% all CDs | None | Limited to insured amount |
| CDARS | 5 years | 30% all CDs | N/A | |
| Negotiable CD | 5 years | 30% all CDs | 5% | A-1, A by one NRSRO |
| Commercial Paper | 270 days | 25% | 5% | A-1, A by one NRSRO |
| Corporate Medium Term Notes | 5 years | 30% | 5% | A by one NRSRO |</p>
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<th>Local Agency Credit</th>
<th>Rating</th>
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**AUTHORIZED INVESTMENT INSTRUMENTS - BOND PROCEEDS, DEBT SERVICE AND OTHER AFFILIATED ENTITIES**

All investment types listed above are authorized investments for bond proceeds, debt service, and other affiliated entities with the addition of the following:

**Collateralized Guaranteed Investment Contracts (GICs)/Full Flex Repurchase Agreements:** Investment of funds in GICs is permitted, as per Section 5922 of the Government Code, when collateralized by U.S. Government guaranteed and direct obligation securities. Collateral must be held by a third party institution, and must be marked to market on a weekly basis to a minimum of the value of the outstanding balance of the contract. The maximum maturity date on a GIC is limited to the final maturity date of the bonds being issued.

**Initially Uncollateralized Guaranteed Investment Contracts (GICs):** Investment of funds in GICs which are not initially collateralized is permitted, as per Section 5922 of the Government Code, only if (a) the term of the GIC does not exceed three (3) years, (b) the counterparty to the GIC is rated in the highest long-term rating category by both Moody’s Investors Service and Standard & Poor’s (or whose payment obligations under such GIC are insured or guaranteed by an entity the unsecured obligations of which are so rated), and (c) the GIC requires that it be collateralized as described above in the event the counterparty’s rating is downgraded below the highest long-term rating category by either Moody’s Investors Service or Standard & Poor’s.

**Local Agency Investment Fund (LAIF):** The Water Authority may also invest bond proceeds in the Local Agency Investment Fund (Government Code Section 16429.1(d)). There is a $175M limit on the amount of bond proceeds that may be deposited into the fund. Liquidity for bond proceeds, per fund regulations, is thirty calendar day increments from the date of the initial deposit. Bond proceeds deposited in LAIF should be managed to include a 90-day review by the Treasurer to insure safety, as well as probable income.

In the event that a conflict arises between the bond covenants and this Annual Statement of Investment Policy, the following will guide the (re)investment of bond proceeds: when the Annual Statement of Investment Policy is more conservative than the bond covenants, the Annual Statement of Investment Policy will prevail; if the bond covenants are more conservative than the Annual Statement of Investment Policy, the bond covenants will prevail. All future debt transaction
reinvestment guidelines will incorporate the current Annual Statement of Investment Policy into the bond covenants.

The Board of Directors has granted the Treasurer the authority to invest debt service reserve funds in U.S. Treasury, federal agency, and municipal securities with maturities exceeding 5 years if it is considered to be in the best interest of the Water Authority and if the maturity of such investments does not exceed the expected use of funds.

PORTFOLIO LIMITATIONS

The total dollar amount of bond proceeds and debt service reserve funds invested are to be excluded from the total used to calculate percentages for investment types.

Percentage limitations, where listed, are applicable at the date of purchase. In the event that the percentage limits attributable to a security type is exceeded due to a temporary imbalance in the portfolio, the Treasurer will make a determination as to the appropriate course of action. The appropriate course of action may be to liquidate securities to rebalance the portfolio or to hold the securities to maturity in order to avoid a market loss. Portfolio percentages are in place to ensure diversification of the investment portfolio and, as such, a small temporary imbalance would not violate this basic tenet. When a portfolio percentage is exceeded, the Treasurer will report the occurrence in the Treasurer’s Report at the next regularly scheduled Administrative and Finance Committee meeting of the Board, with detail of the strategy determined to address the imbalance, for Board ratification.

Credit requirements listed in this policy indicate the minimum credit rating (or its equivalent) required at the time of purchase without regard to modifiers (e.g., +/- or 1, 2, 3). In the event that an investment originally purchased within policy guidelines is downgraded by any one of the credit rating agencies, to a credit level making the security an ineligible investment, the Treasurer shall report it at the next regularly scheduled Administrative and Finance Committee meeting of the Board. The course of action to be followed will then be decided on a case-by-case basis, considering such factors as the reason for the downgrade, prognosis for recovery or further rating downgrades, and the market price of the security.

INELIGIBLE INVESTMENTS

State law notwithstanding, any investments not specifically described herein are prohibited, including, but not limited to futures and options.

In accordance with Government Code, Section 53601.6, investment in inverse floaters, range notes, or mortgage derived interest-only strips is prohibited.

Investment in any security that could result in a zero interest accrual if held to maturity is prohibited. Trading securities for the sole purpose of speculating on the future direction of interest rates is prohibited.

Purchasing or selling securities on margin is prohibited.

The use of reverse repurchase agreements, securities lending or any other form of borrowing or leverage is prohibited.

The purchase of foreign currency denominated securities is prohibited.

INTERNAL CONTROLS

A system of internal controls has been established and documented in writing in the Water Authority’s Financial Services Policies and Procedures Manual. The controls shall be designed to prevent losses of public funds arising from fraud, employee error, and misrepresentation of third
parties, unanticipated changes in financial markets or imprudent action by employees and officers of the Water Authority. Controls deemed most important include: control of collusion, separation of duties and administrative controls, separating transaction authority from accounting and record keeping, custodial safekeeping, clear delegation of authority, management review and approval of investment transactions, specific limitations regarding securities losses and remedial action, written confirmation of telephone transactions, minimizing the number of authorized Investment Officials, documentation of transactions and strategies, and code of ethics standards. The Treasurer has established an annual process of independent review by an external audit firm. This review provides assurance of strong internal controls by reviewing compliance with previously established policies and procedures.

REPORTING

Monthly Reports

Monthly transaction reports will be submitted by the Treasurer to the Governing Body within 30 days of the end of the reporting period in accordance with California Government Code Section 53607.

Quarterly Reports

At a minimum frequency of quarterly, the Water Authority will submit an investment report to the Governing Body which provides full disclosure of the Water Authority’s investment activities within 30 days after the end of the period. These reports will disclose, at a minimum, the following information about the Water Authority’s portfolio:

1. An asset listing showing par value, cost and independent third-party fair market value of each security as of the date of the report, the source of the valuation, type of investment, issuer, maturity date, interest rate and interest rate.

2. Transactions for the period.

3. A description of the funds, investments and programs (including lending programs) managed by contracted parties (i.e. LAIF; investment pools, outside money managers and securities lending agents)

4. A one-page summary report that shows:
   a. Average maturity of the portfolio and modified duration of the portfolio;
   b. Maturity distribution of the portfolio;
   c. Percentage of the portfolio represented by each investment category;
   d. Average portfolio credit quality; and,
   e. Time-weighted total rate of return for the portfolio for the prior one month, three months, twelve months and since inception compared to the Water Authority’s market benchmark returns for the same periods;

5. A statement of compliance with investment policy, including a schedule of any transactions or holdings which do not comply with this policy or with the California Government Code, including a justification for their presence in the portfolio and a timetable for resolution.

6. A statement that the Water Authority has adequate funds to meet its cash flow requirements for the next six months.

QUALIFIED BANKS AND SECURITIES DEALERS
A competitive bid process, when practical, will be used to place all investment purchases and sales transactions. For any investment transaction not conducted directly with the issuer, the Water Authority shall conduct business only with banks, savings and loans, and registered investment securities dealers. The Water Authority’s staff will investigate all institutions that wish to conduct business with the Water Authority. All institutions must sign the appropriate Information Request Form, and agree to abide by the conditions set forth in the Water Authority’s Annual Statement of Investment Policy. A list will be maintained by the cash management staff of approved institutions and securities broker/dealers. This will be done annually by having the financial institutions complete and return the Broker Dealer Information Request Form and an audited financial statement within 90 days of the institution’s fiscal year-end. Previous Board approved substitute certification language may be offered to primary dealers of the Federal Reserve at the discretion of the Treasurer. In the event the substitute language is not accepted by the primary dealer, the Treasurer may return to the Water Authority’s Board for approval of alternative language proposed by the primary dealer. If the Water Authority is utilizing the services of an investment advisor, the investment advisor may use their own list of approved issuers and financial institutions for executing transactions.

RISK MANAGEMENT AND DIVERSIFICATION

The Water Authority recognizes that investment risks can result from issuer defaults, market price changes or various technical complications leading to temporary illiquidity. Portfolio diversification is employed as a way to control risk. The Treasurer is expected to display prudence in the selection of securities, as a way to minimize default risk. No individual investment transaction shall be undertaken which jeopardizes the total capital position of the overall portfolio. The Treasurer shall periodically establish guidelines and strategies to control risks of default, market price changes and illiquidity.

Mitigating Credit Risk in the Portfolio
Credit risk is the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt. The Water Authority will mitigate credit risk by adopting the following strategies:

The diversification requirements included in the “Authorized Investments” section of this policy are designed to mitigate credit risk in the portfolio.

No more than 5% of the total portfolio may be deposited with or invested in securities issued by any single issuer unless otherwise specified in this policy.

The Water Authority may elect to sell a security prior to its maturity and record a capital gain or loss in order to manage the quality, liquidity or yield of the portfolio in response to market conditions or Agency’s risk preferences.

Mitigating Market Risk in the Portfolio:
Market risk is the risk that the portfolio value will fluctuate due to changes in the general level of interest rates. The Water Authority recognizes that, over time, longer-term portfolios have the potential to achieve higher returns. On the other hand, longer-term portfolios have higher volatility of return. The Water Authority will mitigate market risk by providing adequate liquidity for short-term cash needs, and by making longer-term investments only with funds that are not needed for current cash flow purposes.

The Water Authority further recognizes that certain types of securities, including variable rate securities, securities with principal paydowns prior to maturity, and securities with embedded options, will affect the market risk profile of the portfolio differently in different
interest rate environments. The Water Authority, therefore, adopts the following strategies to control and mitigate its exposure to market risk:

The maximum percent of callable securities (does not include “make whole call” securities as defined in the Glossary) in the portfolio will be 20%.

The maximum stated final maturity of individual securities in the portfolio will be five (5) years, except as otherwise stated in this policy.

The duration of the portfolio will generally be approximately equal to the duration (typically, plus or minus 20%) of a Market Benchmark, an index selected by the Water Authority based on the Water Authority’s investment objectives, constraints and risk tolerances.

PERFORMANCE BENCHMARK

Controlling and managing risk is the foremost portfolio management objective. The Water Authority strives to maintain an efficient portfolio by providing for the lowest level of risk for a given level of return. The Water Authority shall monitor and evaluate the portfolio’s performance relative to the chosen market benchmark(s), which will be included in the quarterly report. The Water Authority shall select an appropriate, readily available index to use as a market benchmark.

SAFEKEEPING AND CUSTODY

To protect against potential losses caused by the collapse of security dealer(s), all book-entry securities owned by the Water Authority, including repurchase agreement collateral, shall be kept in safekeeping with “perfected interest” by a third party bank trust department, acting as agent for the Water Authority under the terms of a custody agreement executed by the bank and by the Water Authority. All securities will be received and delivered using standard delivery-versus-payment procedures. The only exception to the foregoing shall be certificates of deposit and investments in: (i) LAIF; (ii) local government investment pools; and (iii) money market funds, since the purchased securities are not deliverable. A record of these investments shall be held by the Treasurer.

STATEMENT OF INVESTMENT POLICY

This Annual Statement of Investment Policy shall be reviewed and submitted annually to the Board of Directors in order to incorporate any changes necessary to ensure consistency and its relevance to current law, and financial and economic trends. This Annual Statement of Investment Policy shall be reviewed at a public meeting and voted on prior to the start of each calendar year.

Glossary of Investment Terms

AGENCIES. Shorthand market terminology for any obligation issued by a government-sponsored entity (GSE), or a federally related institution. Most obligations of GSEs are not guaranteed by the full faith and credit of the US government. Examples are:

FFCB. The Federal Farm Credit Bank System provides credit and liquidity in the agricultural industry. FFCB issues discount notes and bonds.
FHLB. The Federal Home Loan Bank provides credit and liquidity in the housing market. FHLB issues discount notes and bonds.

FHLMC. Like FHLB, the Federal Home Loan Mortgage Corporation provides credit and liquidity in the housing market. FHLMC, also called “FreddieMac” issues discount notes, bonds and mortgage pass-through securities.

FNMA. Like FHLB and FreddieMac, the Federal National Mortgage Association was established to provide credit and liquidity in the housing market. FNMA, also known as “FannieMae,” issues discount notes, bonds and mortgage pass-through securities.

GNMA. The Government National Mortgage Association, known as “GinnieMae,” issues mortgage pass-through securities, which are guaranteed by the full faith and credit of the US Government.

PEFCO. The Private Export Funding Corporation assists exporters. Obligations of PEFCO are not guaranteed by the full faith and credit of the US government.

TVA. The Tennessee Valley Authority provides flood control and power and promotes development in portions of the Tennessee, Ohio, and Mississippi River valleys. TVA currently issues discount notes and bonds.

ASKED. The price at which a seller offers to sell a security.

ASSET BACKED SECURITIES. Securities supported by pools of installment loans or leases or by pools of revolving lines of credit.

AVERAGE LIFE. In mortgage-related investments, including CMOs, the average time to expected receipt of principal payments, weighted by the amount of principal expected.

BANKER’S ACCEPTANCE. A money market instrument created to facilitate international trade transactions. It is highly liquid and safe because the risk of the trade transaction is transferred to the bank which “accepts” the obligation to pay the investor.

BENCHMARK. A comparison security or portfolio. A performance benchmark is a partial market index, which reflects the mix of securities allowed under a specific investment policy.

BID. The price at which a buyer offers to buy a security.

BROKER. A broker brings buyers and sellers together for a transaction for which the broker receives a commission. A broker does not sell securities from his own position.

CALLABLE. A callable security gives the issuer the option to call it from the investor prior to its maturity. The main cause of a call is a decline in interest rates. If interest rates decline since an issuer issues securities, it will likely call its current securities and reissue them at a lower rate of interest. Callable securities have reinvestment risk as the investor may receive its principal back when interest rates are lower than when the investment was initially made.

CERTIFICATE OF DEPOSIT (CD). A time deposit with a specific maturity evidenced by a certificate. Large denomination CDs may be marketable.

CERTIFICATE OF DEPOSIT ACCOUNT REGISTRY SYSTEM (CDARS). A private placement service that allows local agencies to purchase more than $250,000 in CDs from a single financial institution (must be a participating institution of CDARS) while still maintaining FDIC insurance coverage. CDARS is currently the only entity providing this service. CDARS facilitates the trading of deposits between the California institution and other participating institutions in amounts that are less than $250,000 each, so that FDIC coverage is maintained.

COLLATERAL. Securities or cash pledged by a borrower to secure repayment of a loan or repurchase agreement. Also, securities pledged by a financial institution to secure deposits of public monies.

COLLATERALIZED MORTGAGE OBLIGATIONS (CMO). Classes of bonds that redistribute the cash flows of mortgage securities (and whole loans) to create securities that have different levels of prepayment risk, as compared to the underlying mortgage securities.

COMMERCIAL PAPER. The short-term unsecured debt of corporations.
**COST YIELD.** The annual income from an investment divided by the purchase cost. Because it does not give effect to premiums and discounts which may have been included in the purchase cost, it is an incomplete measure of return.

**COUPON.** The rate of return at which interest is paid on a bond.

**CREDIT RISK.** The risk that principal and/or interest on an investment will not be paid in a timely manner due to changes in the condition of the issuer.

**CURRENT YIELD.** The annual income from an investment divided by the current market value. Since the mathematical calculation relies on the current market value rather than the investor’s cost, current yield is unrelated to the actual return the investor will earn if the security is held to maturity.

**DEALER.** A dealer acts as a principal in security transactions, selling securities from and buying securities for his own position.

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

**DELIVERY VS. PAYMENT (DVP).** A securities industry procedure whereby payment for a security must be made at the time the security is delivered to the purchaser’s agent.

**DERIVATIVE.** Any security that has principal and/or interest payments which are subject to uncertainty (but not for reasons of default or credit risk) as to timing and/or amount, or any security which represents a component of another security which has been separated from other components (“Stripped” coupons and principal). A derivative is also defined as a financial instrument the value of which is totally or partially derived from the value of another instrument, interest rate, or index.

**DISCOUNT.** The difference between the par value of a bond and the cost of the bond, when the cost is below par. Some short-term securities, such as T-bills and banker’s acceptances, are known as discount securities. They sell at a discount from par, and return the par value to the investor at maturity without additional interest. Other securities, which have fixed coupons, trade at a discount when the coupon rate is lower than the current market rate for securities of that maturity and/or quality.

**DIVERSIFICATION.** Dividing investment funds among a variety of investments to avoid excessive exposure to any one source of risk.

**DURATION.** The weighted average time to maturity of a bond where the weights are the present values of the future cash flows. Duration measures the price sensitivity of a bond to changes in interest rates. (See modified duration).

**FEDERAL FUNDS RATE.** The rate of interest charged by banks for short-term loans to other banks. The Federal Reserve Bank through open-market operations establishes it.

**FEDERAL OPEN MARKET COMMITTEE.** A committee of the Federal Reserve Board that establishes monetary policy and executes it through temporary and permanent changes to the supply of bank reserves.

**LEVERAGE.** Borrowing funds in order to invest in securities that have the potential to pay earnings at a rate higher than the cost of borrowing.

**LIQUIDITY.** The speed and ease with which an asset can be converted to cash.

**LOCAL AGENCY INVESTMENT FUND (LAIF).** A voluntary investment fund open to government entities and certain non-profit organizations in California that is managed by the State Treasurer’s Office.

**LOCAL GOVERNMENT INVESTMENT POOL.** Investment pools that range from the State Treasurer’s Office Local Agency Investment Fund (LAIF) to county pools, to Joint Powers Authorities (JPAs). These funds are not subject to the same SEC rules applicable to money market mutual funds.

**MAKE WHOLE CALL.** A type of call provision on a bond that allows the issuer to pay off the remaining debt early. Unlike a call option, with a make whole call provision, the issuer makes a lump sum
payment that equals the net present value (NPV) of future coupon payments that will not be paid because of the call. With this type of call, an investor is compensated, or "made whole."

**Margin.** The difference between the market value of a security and the loan a broker makes using that security as collateral.

**Market Risk.** The risk that the value of securities will fluctuate with changes in overall market conditions or interest rates.

**Market Value.** The price at which a security can be traded.

**Marking to Market.** The process of posting current market values for securities in a portfolio.

**Maturity.** The final date upon which the principal of a security becomes due and payable.

**Medium Term Notes.** Unsecured, investment-grade senior debt securities of major corporations which are sold in relatively small amounts on either a continuous or an intermittent basis. MTNs are highly flexible debt instruments that can be structured to respond to market opportunities or to investor preferences.

**Modified Duration.** The percent change in price for a 100 basis point change in yields. Modified duration is the best single measure of a portfolio’s or security’s exposure to market risk.

**Money Market.** The market in which short-term debt instruments (T-bills, discount notes, commercial paper, and banker’s acceptances) are issued and traded.

**Mortgage Pass-Through Securities.** A securitized participation in the interest and principal cash flows from a specified pool of mortgages. Principal and interest payments made on the mortgages are passed through to the holder of the security.

**Municipal Securities.** Securities issued by state and local agencies to finance capital and operating expenses.

**Mutual Fund.** An entity which pools the funds of investors and invests those funds in a set of securities which is specifically defined in the fund’s prospectus. Mutual funds can be invested in various types of domestic and/or international stocks, bonds, and money market instruments, as set forth in the individual fund’s prospectus. For most large, institutional investors, the costs associated with investing in mutual funds are higher than the investor can obtain through an individually managed portfolio.

**Nationally Recognized Statistical Rating Organization (NRSRO).** A credit rating agency that the Securities and Exchange Commission in the United States uses for regulatory purposes. Credit rating agencies provide assessments of an investment’s risk. The issuers of investments, especially debt securities, pay credit rating agencies to provide them with ratings. The three most prominent NRSROs are Fitch, S&P, and Moody's.

**Negotiable CD.** A short-term debt instrument that pays interest and is issued by a bank, savings or federal association, state or federal credit union, or state-licensed branch of a foreign bank. Negotiable CDs are traded in a secondary market and are payable upon order to the bearer or initial depositor (investor).

**Premium.** The difference between the par value of a bond and the cost of the bond, when the cost is above par.

**Prepayment Speed.** A measure of how quickly principal is repaid to investors in mortgage securities.

**Prepayment Window.** The time period over which principal repayments will be received on mortgage securities at a specified prepayment speed.

**Primary Dealer.** A financial institution (1) that is a trading counterparty with the Federal Reserve in its execution of market operations to carry out U.S. monetary policy, and (2) that participates for statistical reporting purposes in compiling data on activity in the U.S. Government securities market.

**Prudent Person (Prudent Investor) Rule.** A standard of responsibility which applies to fiduciaries. In California, the rule is stated as “Investments shall be managed with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person,
acting in a like capacity and familiar with such matters, would use in the conduct of an
enterprise of like character and with like aims to accomplish similar purposes.”

**REALIZED YIELD.** The change in value of the portfolio due to interest received and interest earned and
realized gains and losses. It does not give effect to changes in market value on securities, which
have not been sold from the portfolio.

**REGIONAL DEALER.** A financial intermediary that buys and sells securities for the benefit of its
customers without maintaining substantial inventories of securities and that is not a primary
dealer.

**REPURCHASE AGREEMENT.** Short-term purchases of securities with a simultaneous agreement to sell
the securities back at a higher price. From the seller’s point of view, the same transaction is a
reverse repurchase agreement.

**SAFEKEEPING.** A service to bank customers whereby securities are held by the bank in the customer’s
name.

**STRUCTURED NOTE.** A complex, fixed income instrument, which pays interest, based on a formula
tied to other interest rates, commodities or indices. Examples include inverse floating rate notes
which have coupons that increase when other interest rates are falling, and which fall when other interest rates are rising, and "dual index floaters," which pay interest based on the
relationship between two other interest rates - for example, the yield on the ten-year Treasury
note minus the Libor rate. Issuers of such notes lock in a reduced cost of borrowing by
purchasing interest rate swap agreements.

**SUPRANATIONAL.** A Supranational is a multi-national organization whereby member states transcend
national boundaries or interests to share in the decision making to promote economic
development in the member countries.

**TOTAL RATE OF RETURN.** A measure of a portfolio’s performance over time. It is the internal rate of
return, which equates the beginning value of the portfolio with the ending value; it includes
interest earnings, realized and unrealized gains, and losses in the portfolio.

**U.S. TREASURY OBLIGATIONS.** 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 US and overseas. The Treasury issues
both discounted securities and fixed coupon notes and bonds.

**TREASURY BILLS.** All securities issued with initial maturities of one year or less are issued as
discounted instruments, and are called Treasury bills. The Treasury currently issues three- and
six-month T-bills at regular weekly auctions. It also issues “cash management” bills as needed
to smooth out cash flows.

**TREASURY NOTES.** All securities issued with initial maturities of two to ten years are called Treasury
notes, and pay interest semi-annually.

**TREASURY BONDS.** All securities issued with initial maturities greater than ten years are called
Treasury bonds. Like Treasury notes, they pay interest semi-annually.

**VOLATILITY.** The rate at which security prices change with changes in general economic conditions
or the general level of interest rates.

**YIELD TO MATURITY.** The annualized internal rate of return on an investment which equates the
expected cash flows from the investment to its cost.
November 28, 2018

Attention: Administrative and Finance Committee

Approve the Refinancing of the Claude “Bud” Lewis Carlsbad Desalination Project Conveyance Pipeline and approve related debt management activities. (Action)

Staff recommendation
1. Adopt Resolution No. 2018____ approving the refunding of California Pollution Control Financing Authority $203,215,000 Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) via a negotiated sale; a Preliminary Limited Offering Memorandum, a Bond Purchase Agreement and other documents and agreements necessary to accomplish tax exempt project refinancing through the California Pollution Control Financing Authority (CPCFA); and

2. Approve the amendment to the Legal Services Agreement with Polsinelli LLP, Bond Counsel to increase the amount by $175,000 from $344,000 for as-needed services, Pipeline Refunding bond counsel services and disclosure counsel services to $519,685.

3. Approve the amendments to the Financial Advisory Services agreements with Montague DeRose and Associates, LLC and Acacia Financial Group, Inc to increase the amount by $260,000, from $976,250 for Carlsbad Desalination debt and debt refinancing transaction fees to $1,236,250.

Alternative
The Board may choose not to approve the issuance of refunding bonds and/or amend the bond counsel contract with Polsinelli LLP, and the Financial Advisory Services agreements with Montague DeRose and Associates, LLC and Acacia Financial Group, Inc.

Fiscal impact
This action does not increase the amount nor extend the life of debt currently outstanding. The estimated new interest rates on the refunding bonds (Series 2019 Pipeline Bonds) are expected to result in present value savings of $13.6 million in future debt service payments.

Executive Summary
- All of the Series 2012 Pipeline Bonds were callable after July 1, 2017 and eligible for current tax-exempt refunding not-to-exceed an amount of $210 million.
- The financing and risk structure of the Project financing remain unchanged and the Project ratings are Baa3 and BBB- by Moody’s and Fitch Ratings respectively.
- Actual level of savings will depend on the interest rates at the time the transaction is completed, the current estimated present value savings is approximately $13.6 million.
- Recommended amendments to Bond Counsel Services and Financial Advisory Services contracts will provide continued services related to the Pipeline Refunding.
Background
On November 29, 2012, the Water Authority Board approved the implementation and financing of a desalination project (the Project) to be located in Carlsbad, California, including a desalination plant and 10-mile pipeline to deliver desalinated water from the plant to the Water Authority’s water system. The Project has been financed in part with proceeds of two series of bonds, $530,345,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (Poseidon Resources (Channelside) LP Desalination Project) (Series 2012 Plant Bonds), and originally issued $203,215,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) (the Series 2012 Pipeline Bonds).

In connection with the Project, the Water Authority entered into a Carlsbad Seawater Desalination Project Water Purchase Agreement, dated December 20, 2012 (the Water Purchase Agreement), the Water Authority and Poseidon Resources (Channelside) LP, and a Pipeline Installment Sale and Assignment Agreement, dated December 24, 2012, by and between the Water Authority and the San Diego County Water Authority Financing Agency. It is expected that payments made by the Water Authority under these agreements will constitute a substantial portion of the amounts ultimately applied to pay debt service payments on the bonds, contingent on attainment of certain operating and product water delivery conditions.

The Lewis Carlsbad Desalination Plant (Plant) achieved commercial operations December 23, 2015 and has provided a highly reliable local water supply to the region. Development of the Plant was the responsibility of Poseidon Water (Poseidon) under the Water Purchase Agreement which was approved by the Board in November 2012. The Carlsbad Desalination Conveyance Pipeline (the Pipeline) that connects the desalination plant with the Water Authority’s Second Aqueduct is owned and operated by the Water Authority but was designed and constructed by Poseidon through a separate Design-Build Agreement, also approved by the Board in November 2012.

The Water Authority is committed to purchasing a minimum of 48,000 acre-feet (AF) of water from the plant over the 30-year term of the Water Purchase Agreement and was also responsible for completing aqueduct improvements in order to accept the desalinated product water from the Plant. Through October of this year, the Project has delivered nearly 120,000AF (39.4 billion gallons) of desalinated water to the region.

The debt issued for the Project is secured solely by the revenues generated through the sale of delivered desalinated water. Therefore, the Project risk is entirely borne by Poseidon, as is the cost responsibility for paying the Pipeline Bonds in the event Poseidon fails to deliver desalinated water. The mechanism for this risk transfer to Poseidon is Contracted Shortfall Payments. Bond payments are made directly by the Water Authority monthly to the bond trustee as water is delivered. However, the amount the Water Authority is obligated to pay in each year is reduced by Contracted Shortfall Payments, if any, due from Poseidon.

Contracted Shortfall Payments result from any failure by Poseidon to meet its supply obligations and are proportionate to Poseidon’s underperformance. In the event that Poseidon is unable to deliver water, or if the water does not meet contractual specifications, Poseidon is responsible for making the debt service payments through Contracted Shortfall Payments.
Contracted Shortfall Payments are assigned to the Pipeline Trustee to offset the Pipeline Bond payments. Because the Pipeline Bonds are secured by the Project and not the Water Authority’s credit, the Pipeline Bonds bear a higher interest rate than conventional Water Authority bonds. The structure of the transaction for the proposed Series 2019 Pipeline Bonds is the same as for the Series 2012 Pipeline Bonds.

The current credit ratings of the Project are Baa3 and BBB- by Moody’s Investor Services and Fitch Ratings, respectively.

Previous Water Authority Action
On December 18, 2017, in accordance with the requirements of the bond documents, the Water Authority caused a portion of the outstanding Carlsbad Desalination Series 2012 Pipeline Bonds to be redeemed, using excess construction funds. The total amount redeemed was $2,670,537.50, consisting of $2,610,000 principal amount and $60,537.50 accrued interest. The current principal amount of Series 2012 Pipeline Bonds outstanding and proposed to be refunded is $203,215,000.

Discussion
Although interest rates have risen over the past 12-months, interest rate levels still remain attractive. Given the current interest rate environment, all of the Water Authority’s outstanding Series 2012 Pipeline Bonds can be refunded to realize significant debt service savings. While the actual level of savings will depend on the interest rates at the time the transaction is completed, the current estimated present value savings is approximately $13.6 million. All of the Series 2012 Pipeline Bonds were callable on or after July 1, 2017.

To optimize the savings, Staff is recommending that the documents for the transaction be prepared in advance and the capital markets be accessed as soon as the Water Authority Board and the CPCFA approval processes are complete. Staff is anticipating pricing the refunding bonds in early 2019.

Staff is recommending that the financing and risk structure of the Project remain unchanged. Therefore, there are no recommended changes in the refunding documents that change in any way the existing financing or risk structure. In addition, the proposed refunding does not extend the life of the debt. To maximize savings, Staff is evaluating call options and the potential to purchase bond insurance, which would increase the level of savings.

Method of Sale
Because of the complex nature of the Project financing and the importance of investor outreach and communications, Staff is recommending that a negotiated method of sale be used for the Series 2019 Pipeline Bonds. The banking team was selected from the Water Authority’s pool of pre-approved underwriters. A Request for Proposals (RFP) was issued to the underwriter pool in October 2016. The selection team included Water Authority Staff and the municipal financial advisors. The evaluation was based upon factors including key personnel experience, related project experience, rating agency strategy, investor marketing approach, modeling ability and price. Based upon this review, J.P. Morgan Securities LLC was selected as the senior manager. J.P. Morgan, which was the lead underwriter in the original financing, provided the most comprehensive and well-developed approach to the refunding. In addition, RBC Capital Markets (the Royal Bank of Canada) was selected as co-senior manager, and Goldman Sachs and Loop Capital were selected as co-managers.
Maximum Authorized Issuance Amount
The maximum size of the tax-exempt refunding is $210 million, which is the not-to-exceed amount specified in the authorizing resolution (Attachment A). The maximum amount is set based upon the potential for changes in the interest rates to increase the amount of outstanding bonds eligible for refunding under the Water Authority’s Debt and Disclosure Policy.

Costs of Issuance
Costs of issuance includes the underwriters’ discount, professional fees for bond, underwriter and disclosure counselors, financial advisors, and other costs such as credit rating agency charges, CPCFA fees, printer charges and the cost of pre-sale marketing such as an internet road show and one-on-one investor meetings. The cost of issuance is estimated at approximately $3.7 million, including $1.2 million for underwriter fees. The final cost of issuance will be presented to the Board with the results of the sale. The cost of issuance will be funded out of the proceeds of the bonds.

Documents to be approved:
Because there are certain events required to achieve Project completion, the documents will need to be updated closer to the time of sale to reflect current events and information. This will include things like dates, operating data and other information that will not materially impact the documents. Should a material change be necessary, staff will bring the item back to the Board at an upcoming Board meeting for approval.

Each transaction requires certain Board approval of resolutions and documents described below. The Preliminary Limited Offering Memorandum (PLOM) and authorizing resolutions and amendments are provided as either attachments to or hyperlink in this memorandum. Other documents are on file with the Clerk of the Board for review. A list and brief description of each document is provided below.

- Authorizing Resolution;
- Preliminary Limited Offering Memorandum;
- Tax Certificate;
- Pipeline Bond Purchase Agreement;
- Pipeline Trust Indenture;
- Continuing Disclosure Agreement;
- Omnibus Amendment;
- Collateral Document Master Refunding Amendment;
- Water Purchase Agreement Amendment;
- Ancillary Amendments and Consents

The Authorizing Resolution, Attachment A, approves the issuance subject to certain conditions, approves the form of the documents discussed below, and delegates to Water Authority officers the authority to finalize, execute and deliver the documents and to do any and all things necessary to complete the transaction.

The PLOM is the primary disclosure document for the bond transaction. The PLOM contains information necessary for investors to make informed investment decisions regarding the Pipeline Bonds. Critical information provided includes details of the debt issue, Water Authority information, Project scope, Project construction and operation details, Project participants and financial statements and disclosures.
The Tax Certificate is a summary description of the project and the financing, as well as representations of the Water Authority and is used by bond counsel for purposes of its opinion regarding the tax-exempt status of the bonds.

The Pipeline Bond Purchase Agreement sets forth the terms of the bond sale, interest rates, sales prices, indemnity covenants and representations of the parties to the financing transaction.

The Pipeline Trust Indenture between CPCFA and MUFG Union Bank, N.A. (Trustee) authorizes the issuance of the bonds, redemption, payments of principal and interest, application of bond proceeds and discusses the trustee responsibilities. This is the agreement whereby the Issuer will assign all loan payments and Contracted Shortfall Payments to the Trustee.

The Continuing Disclosure Agreement enables the bond underwriters to fulfill their obligations under applicable securities rules and prescribe the ongoing disclosure requirements of the Water Authority.

Other pertinent documents consist of a series of amendments and agreements which are intended to update references from the Series 2012 Pipeline Bonds to the Series 2019 Pipeline Bonds and reaffirm the binding effect of existing agreements. These are the Omnibus Amendment, the Collateral Document Master Refunding Amendment and a series of Ancillary Amendments and Consents with various third parties including City of Carlsbad, Kiewit Shea, SDG&E and other parties that executed documents in connection with the Series 2012 Pipeline Bonds financing.

The Omnibus Amendment amends existing documents that are impacted by the refunding. The amendments ensure that the documents incorporate the refunding and maintain the original intent of the agreement. The documents affected by the Omnibus Amendment consist of the Pipeline Loan Agreement with respect to the Series 2012 Pipeline Bonds, the Installment Sale and Assignment Agreement and the Loan Agreement with respect to the Series 2012 Plant Bonds.

Similar to the Omnibus Amendment, the Collateral Document Master Refunding Amendment updates definitions and references to the refunding bonds for agreements to which the CPCFA is not a party, namely the Collateral Trust Agreement and the Pledge and Security Agreements from Poseidon’s General and Limited Partner.

The draft PLOM can be found at the following link: [http://www.sdcwa.org/finance-investor-relations](http://www.sdcwa.org/finance-investor-relations)

Copies of all the documents are on file with the Clerk of the Board. All of the aforementioned documents will be updated as needed prior to the bond sale to reflect information not presently available.

**Approve the refunding of California Pollution Control Financing Authority $203,215,000 Water Furnishing Revenue Bonds, Series 2012**

Staff recommends the board adopt Resolution No. 2018-___ approving the refunding of California Pollution Control Financing Authority $203,215,000 Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) via a negotiated sale; a Preliminary Limited Offering Memorandum, a Bond Purchase Agreement and other documents and agreements necessary to accomplish tax exempt project refinancing through the California Pollution Control Financing Authority (CPCFA).
On November 29, 2012 the board approved the implementation and financing of a desalination project. The Project has been financed in part with proceeds of two series of bonds, $530,345,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (Poseidon Resources (Channelside) LP Desalination Project) (Series 2012 Plant Bonds), and originally issued $203,215,000 aggregate principal amount of California Pollution Control Financing Authority Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) (the Series 2012 Pipeline Bonds).

Amend Polsinelli LLP Bond Counsel Services Agreement
Staff recommends the board to amend the current contract to increase the amount by $175,000 from $344,000 for as-needed services, Pipeline Refunding bond counsel services and disclosure counsel services to $519,685.

On February 23, 2017 the board approved the selection of firms to serve in the Water Authority’s pre-approved bond counsel pool of which included Polsinelli LLP. The firms in the pool including Polsinelli provide the Water Authority General Bond Counsel support and areas of specialization such as public-private partnerships, conduit financings (i.e. California Pollution Control Financing Authority, and Disclosure counsel support. During the term of the contract the Water Authority has engaged Polsinelli to provide bond counsel services in support of the current Pipeline refunding transaction, but the firm has also assisted the Authority with various as needed Bond/Disclosure counsel services including review of debt policies and continuing disclosure documents as well as bond disclosure training for Water Authority and Member Agency staff. The contract amendment will allow for continued support of as needed bond/disclosure counsel services that may be needed in the future.

Amend the Montague DeRose and Associates, LLC and Acacia Financial Group, Inc. Financial Advisory Services Agreements Staff recommends the board amend the agreements to increase the amount by $260,000, from $976,250 for Carlsbad Desalination debt and debt refinancing transaction fees to $1,236,250. Fees for transactional services are paid through cost of issuance and only in the event of closing a debt related transaction.

On December 10, 2015, the board authorized the General Manager to award a multi-year professional services contract to Montague DeRose and Associates, LLC and Acacia Financial Group, Inc. During the term of these agreements, the Water Authority has been engaged with Montague DeRose and Associates and Acacia Financial Group in support of the current Pipeline refunding transaction. These amendments will allow continued support of financial advisory services as related to debt and debt refinancing transactions.

Prepared by: David Gore, Sr. Management Analyst
Liana M. Whyte, Budget & Analysis Manager
Reviewed by: Lisa Marie Harris, Director of Finance/Treasurer
Approved by: Dan Denham, Assistant Deputy General Manager

Attachment A: Resolution No. 2018 ___ approving the issuance of Series 2019 Pipeline Bonds and documents and agreements necessary to accomplish tax exempt project financing through the CPCFA
SAN DIEGO COUNTY WATER AUTHORITY
RESOLUTION NO. 2018- _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY APPROVING AGREEMENTS NECESSARY TO ACCOMPLISH REFUNDING OF EXISTING TAX EXEMPT PROJECT FINANCING THROUGH THE CALIFORNIA POLLUTION CONTROL FINANCING AUTHORITY; APPROVING SUPPORTING CONTRACTS AND CONTRACT AMENDMENTS; AND AUTHORIZING THE EXECUTION OF AGREEMENTS AND THE TAKING OF ACTIONS NECESSARY IN CONNECTION WITH THE ISSUANCE OF THE CALIFORNIA POLLUTION CONTROL FINANCING AUTHORITY WATER FURNISHING REVENUE REFUNDING BONDS, SERIES 2019 (SAN DIEGO COUNTY WATER AUTHORITY DESALINATION PROJECT PIPELINE)

WHEREAS, the San Diego County Water Authority, a county water authority duly organized and existing under and pursuant to the Constitution and laws of the State of California (the “Water Authority”), is authorized under provisions of the Constitution and laws of the State of California, and in accordance therewith, to purchase real and personal property as the Water Authority may determine to be necessary and proper, to make installment sale payments therefor and to refund its installment sale payment obligation through the issuance of refunding revenue bonds, and to incur indebtedness by contract, to make contract payments with respect thereto and to refund its contract payment obligation through the issuance of refunding revenue bonds; and

WHEREAS, Water Authority Resolution No. 89-21, adopted by the Board of Directors of the Water Authority (the “Board”) on May 11, 1989 and amended on December 11, 1997 and December 17, 2009, provides for the pledge of water system revenues and establishes covenants to secure the payment of obligations payable from net water revenues; and

WHEREAS, pursuant to that certain Trust Indenture, dated December 24, 2012, by and between the California Pollution Control Financing Authority (the “Issuer”) and MUFG Union Bank, N.A. (the “2012 Pipeline Trustee”), the Issuer has previously issued its Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline), in the aggregate principal amount of $203,215,000 (the “Series 2012 Pipeline Bonds”), of which $200,605,000 remains outstanding following a partial redemption of the Series 2012 Pipeline Bonds on December 18, 2017 in the amount of $2,610,000 from excess construction proceeds; and

WHEREAS, the Water Authority is considering approval of agreements and other documents related to the continuing development of the Carlsbad Seawater Desalination Project (the “Project”) and in connection with such consideration, the Water Authority and the San Diego County Water Authority Financing Agency (the “Financing Agency”) have requested the Issuer issue the California Pollution Control Financing Authority Water Furnishing Revenue Refunding Bonds, Series 2019 (San Diego County Water Authority Desalination Project Pipeline) in an amount not to exceed $210,000,000.00 (the “Series 2019 Pipeline Bonds”) in order to refund and defease the Series 2012 Pipeline Bonds; and
WHEREAS, the proceeds of the Series 2012 Pipeline Bonds were loaned to the Financing Agency under the Pipeline Loan Agreement, dated as of December 24, 2012, between the Issuer and the Financing Agency ("Pipeline Loan Agreement"); and

WHEREAS, the Financing Agency is and will continue to be obligated to make loan repayments under the Pipeline Loan Agreement solely from, and the Financing Agency’s obligation to make such loan repayments will continue to be secured solely by, installment sale payments to be made by the Water Authority to the Financing Agency under that certain Pipeline Installment Sale and Assignment Agreement, dated as of December 24, 2012 (the “Installment Sale Agreement”), by and between the Financing Agency and the Water Authority; and

WHEREAS, under certain circumstances, Poseidon Resources (Channelside) LP ("Poseidon") is obligated to make contracted shortfall payments to the Water Authority pursuant to the terms of that certain Design-Build Agreement for Product Water Pipeline Improvements Relating to the Carlsbad Seawater Desalination Project, dated December 20, 2012 (the “Pipeline DBA”), by and between the Water Authority and Poseidon and that certain Carlsbad Seawater Desalination Project Water Purchase Agreement, dated December 20, 2012 (the “Water Purchase Agreement”), by and between Poseidon and the Water Authority, which obligation is and will continue to be secured pursuant to the terms of that certain Collateral Trust Agreement, dated as of December 24, 2012 (the “Collateral Trust Agreement”), among Poseidon, the 2012 Pipeline Trustee and MUFG Union Bank, N.A., as collateral agent (the “Collateral Agent”), and others, and the Water Authority has assigned, and will continue to assign, its rights to receive such payments to the Financing Agency pursuant to the Installment Sale Agreement (the “Contracted Shortfall Payments”) as additional security for the Series 2019 Pipeline Bonds, and the Financing Agency’s and Water Authority’s obligations to make loan or installment payments will be deemed satisfied to the extent Poseidon is obliged to make contracted shortfall payments (whether or not such contracted shortfall payments are made); and

WHEREAS, the Water Authority staff has presented and the Board has considered the following agreements necessary for issuance of the Series 2019 Pipeline Bonds:

- the Trust Indenture (the “2019 Pipeline Indenture”), between the Issuer and MUFG Union Bank, N.A., as trustee (the “Trustee”), relating to the Series 2019 Pipeline Bonds;
- the Omnibus Refunding Amendment Agreement (the “Omnibus Agreement”), among the Issuer, the Financing Agency, the Water Authority and MUFG Union Bank, N.A., as collateral agent and trustee, which amends, supplements and restates certain provisions of the Pipeline Loan Agreement, the Installment Sale Agreement and the Loan Agreement dated as of December 24, 2012, between the Issuer and Poseidon, made in connection with the Issuer’s Water Furnishing Revenue Bonds, Series 2012 (Poseidon Resources (Channelside) LP Desalination Project) (as amended, the “Plant Loan Agreement”);
- the Collateral Document Master Refunding Amendment among the Issuer, the Trustee and Poseidon, which amends, supplements and restates certain provisions of the Collateral Trust Agreement, the Pledge and Security Agreement dated as of December 24, 2012 (the “LP Pledge Agreement”), by and among Poseidon Resources Channelside Holdings LLC, a Delaware limited liability company, as pledgor, Poseidon and the Collateral Agent, and the Pledge and Security Agreement dated as of December 24, 2012 (the “GP Pledge Agreement” and together with the Collateral Trust Agreement and the LP Pledge Agreement, the “Existing
Collateral Documents”) by and among Poseidon Resources Channelside GP, Inc., as pledgor, Poseidon, and the Collateral Agent (the “Collateral Document Amendment”);

• an amendment or Contract Administration Memorandum to the Water Purchase Agreement, which sets forth the terms under which the Water Authority purchases desalinated potable water (“Product Water”) from Poseidon and the criteria for the production, conveyance, exchange, and delivery of Product Water from the Project to the Water Authority;

• the Bond Purchase Agreement for the California Pollution Control Financing Authority Water Furnishing Revenue Refunding Bonds, Series 2019 (San Diego County Water Authority Desalination Project Pipeline) (“Bond Purchase Agreement”) among the Issuer, the Treasurer of the State of California, the Water Authority, the Financing Agency and the underwriters named therein;

• a form of Amended and Restated Continuing Disclosure Agreement related to the issuance of the Series 2019 Pipeline Bonds (the “Continuing Disclosure Agreement”);

• any conforming amendments or Contract Administration Memoranda to any documents related to the San Diego County Water Authority Desalination Project Pipeline, including but not limited to an amendment to the Pipeline DBA (the “Conforming Amendments”);

• any Ancillary Amendments and Consents with various parties to documents executed with respect to the Series 2012 Pipeline Bonds (the “Ancillary Amendments”); and

WHEREAS, the Board has also considered the Preliminary Limited Offering Memorandum on file with the Board; and

WHEREAS, all acts, conditions and things required by the Constitution and laws of the State of California to exist, to have happened and to have been performed precedent to and in connection with the making of the agreements and the consummation of the financing authorized by this resolution do exist, have happened and have been performed in regular and due time, form and manner, and the Water Authority is duly authorized and empowered, pursuant to each and every requirement of law, to consummate such financing as provided in this resolution.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY RESOLVES AS FOLLOWS:

1. The foregoing recitals are adopted as findings and determinations of the Board.

FINANCE DOCUMENTS

2. The Chair of the Board, the General Manager and the Director of Finance/Treasurer (each, an “Authorized Officer” and collectively the “Authorized Officers”) each acting individually, are authorized and directed, on behalf of the Water Authority, to execute and deliver each or any of the financing documents described in the eighth Whereas clause hereof, substantially in the approved form, with such changes and updates as the Authorized Officer executing such document may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof.
3. The following agreements on file with the Clerk of the Board are approved and may be executed on behalf of the Water Authority as provided in paragraph 2 of this resolution:

- the 2019 Pipeline Indenture;
- the Omnibus Agreement;
- the Collateral Document Amendment;
- the Water Purchase Agreement amendment;
- the Bond Purchase Agreement;
- the Continuing Disclosure Agreement; and
- the Ancillary Amendments.

4. The form of the Preliminary Limited Offering Memorandum is hereby approved. The Authorized Officers are each, acting individually, hereby authorized and directed, on behalf of the Water Authority, to approve the distribution of a Preliminary Limited Offering Memorandum in substantially such form and to certify that such Preliminary Limited Offering Memorandum is, as of its date, “deemed final” by the Water Authority for purposes of Rule 15c2-12 of the Securities and Exchange Commission. The Authorized Officers are hereby authorized and directed, on behalf of the Water Authority, to cause to be prepared and to execute and deliver to the purchasers of the Series 2019 Pipeline Bonds a Limited Offering Memorandum in substantially the form of the Preliminary Limited Offering Memorandum, with such changes as such officers may, with the concurrence of the General Counsel of the Water Authority, require or approve, such approval to be conclusively evidenced by the execution and delivery thereof, to authorize the distribution of said Limited Offering Memorandum and to certify that said Limited Offering Memorandum is, as of its date, “final and complete” for purposes of Rule 15c2-12 of the Securities and Exchange Commission.

5. The sale of the Series 2019 Pipeline Bonds by negotiated sale is hereby authorized. The Authorized Officers are each, acting individually, hereby authorized, for and in the name and on behalf of the Water Authority, to execute and deliver the Bond Purchase Agreement to such underwriters as are designated by the Director of Finance/Treasurer of the Water Authority from the Water Authority’s approved underwriter pool.

6. The Secretary of the Water Authority or the Clerk of the Board are hereby authorized and directed to attest the signatures of such Authorized Officers as may be required or appropriate in connection with the issuance of the Series 2019 Pipeline Bonds and the execution and delivery of the 2019 Pipeline Indenture, the Omnibus Agreement, the Collateral Document Amendment, the Water Purchase Agreement amendment, the Bond Purchase Agreement, the Preliminary Limited Offering Memorandum, the Continuing Disclosure Agreement and the Ancillary Amendments (collectively, the “Agreements”).

7. The authorization of the issuance of the Series 2019 Pipeline Bonds and the execution and delivery of the Agreements, are subject to the following conditions precedent:

   (a) The Series 2019 Pipeline Bonds shall have a final maturity date not later than November 21, 2045;
(b) The Series 2019 Pipeline Bonds shall be issued in an aggregate principal amount not to exceed $210,000,000;

(c) The underwriters’ discount shall not exceed 0.5% of the principal amount of the Series 2019 Pipeline Bonds; and

(d) The net debt service savings with respect to any installment sale payments made pursuant to the Installment Sale Agreement, as amended by the Omnibus Agreement, to be refunded realized by the Water Authority on a present value basis shall be consistent with the Water Authority’s refunding criteria contained in the Water Authority’s debt management policy (including any determination by the Director of Finance/Treasurer to include individual refunding candidates that are above or below the target savings specified in the refunding criteria in order to optimize policy and/or financial objectives) as determined by the Authorized Officer authorizing the sale of the Series 2019 Pipeline Bonds.

SUPPORTING CONTRACTS AND CONTRACT AMENDMENTS

8. The Authorized Officers are authorized to execute the supporting contracts and contract amendments referenced in the Board memorandum dated [December __, 2018] relating to the issuance of the Series 2019 Pipeline Bonds, including but not limited to the Conforming Amendments and any additional and necessary Ancillary Amendments. The Authorized Officers are hereby authorized to determine the closing date, at their discretion, based on market conditions and other factors such Authorized Officers deem appropriate.

ADDITIONAL DELEGATION

9. The Authorized Officers are hereby authorized and directed, jointly and severally, with the concurrence of the General Counsel of the Water Authority, to do any and all things and to execute and deliver any and all certificates, requisitions, agreements, notices, consents, and other documents, including the tax certificate and closing certificates, which they may deem necessary or advisable in order to consummate transactions authorized by this resolution and otherwise to carry out, give effect to and comply with the terms and intent of this resolution and the Agreements. Such actions heretofore taken by such Authorized Officers are hereby ratified, confirmed, and approved. The authority of the Authorized Officers and the General Counsel of the Water Authority, Secretary of the Water Authority and Clerk of this Board under this resolution may be delegated as provided in the Water Authority’s Administrative Code.
PASSED, APPROVED AND ADOPTED, on this 6TH Day of December, 2018.

AYES:

NOES:

ABSTAIN:

ABSENT:

Jim Madaffer, Chair

ATTEST:

Christy Guerin, Secretary

I, Melinda Nelson, Clerk of the Board of Directors of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2018-___ was duly adopted at the meeting of the Board of Directors on the date stated above.

Melinda Nelson
Clerk of the Board
November 28, 2018

Attention: Administrative and Finance Committee

Controller’s Report on Monthly Financial Activity. (Information)

Purpose
The purpose of the Controller’s Report is to provide summarized financial information on a monthly basis to the Board of Directors.

Financial Information
Attached for review by the Administrative and Finance Committee and the Board of Directors are the following financial documents comprising the Controller’s Report:

1. Water Sales Volumes, in acre-feet
2. Water Sales Revenues, in millions
3. Water Purchases and Treatment Costs, in millions
4. Budget Status Report
5. Schedule of Cash and Investments

A summary of the Fiscal Years 2018 and 2019 Budget Status Report (in millions) for the fifteen-month period of July 1, 2017 through September 30, 2018 are as follows:

<table>
<thead>
<tr>
<th>FY 2018 &amp; 2019 (15 months - 63%)</th>
<th>FY 2018 &amp; 2019 (15 months - 63%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amended Budget</td>
</tr>
<tr>
<td></td>
<td>Amended</td>
</tr>
<tr>
<td></td>
<td>Budget</td>
</tr>
<tr>
<td>Net Water Sales Revenues</td>
<td>$ 272.8</td>
</tr>
<tr>
<td>Revenues &amp; Other Income</td>
<td>218.5</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>491.3</td>
</tr>
<tr>
<td>Expenses</td>
<td>436.0</td>
</tr>
<tr>
<td>Net Revenues Before CIP</td>
<td>55.3</td>
</tr>
<tr>
<td>CIP Expenses</td>
<td>137.6</td>
</tr>
<tr>
<td>Net Fund Withdraws</td>
<td>$ (82.3)</td>
</tr>
</tbody>
</table>

Net Revenues after CIP
At September 2018, the Water Authority is fifteen months into its two-year budget and has a favorable variance of $55.3 million in Net Revenues after CIP. The period-to-date budget provided for a withdraw from fund balance of $51.9 million, but due to the actual excess of net revenues over expenses in the amount of $3.4 million, no withdraw has been required.

The Budget Status Report (Attachment 4) compares actual revenues and expenses, on a budgetary basis, to the period-to-date adopted budget, as amended by the Board. Budgeted amounts for the fifteen-month period are presented on a straight-line basis unless noted herein. Water sales and purchases are budgeted based on projected monthly volume in acre-feet. Period-to-date budgeted revenue categories were all adjusted to reflect the expected timing of receipt. Period-to-date budgeted expense categories for the QSA Mitigation and CIP Expenses were adjusted for periodic items.
Net Water Sales Revenue
Net Water Sales Revenue is the Water Authority’s principal source of revenue and is the difference between the sale of water and the cost of that water. Sales include revenues from variable commodity charges for supply, treatment and transportation, as well as from fixed charges for customer service, storage, infrastructure access charge, and supply reliability. Cost of water includes payments to three water suppliers: Metropolitan Water District (MWD), Imperial Irrigation District (IID), and Poseidon Resources (Channelside) LP.

Net Water Sales Revenue was $201.5 million, or 10 percent higher than the budgeted amount of $183.9 million. Actual Water Purchase and Treatment Costs were lower than budgeted by 10 percent due to lower than projected water sales of 6 percent. Detailed information relating to Net Water Sales Revenue is described below and shown on Attachments 1, 2, and 3.

Total acre-feet (AF) of water sold was budgeted at 578,316 AF. Actual water sales volume was 547,078 AF or 5 percent lower than budgeted (Attachment 1). Total Water Sales Revenue was $794.1 million or 6 percent lower than the budget of $842.0 million (Attachment 2). Lower water sales volume can be attributed to two primary factors: 1) the commencement of deliveries through the Indian Water Authority to Vista and Escondido that directly offset budgeted sales to those agencies and 2) greater than projected member agency use of local surface water supplies.

Total Water Purchases and Treatment costs were budgeted at $658.1 million. Actual costs were $592.6 million or 10 percent lower than budgeted (Attachment 3). This cost category included $95.6 million for 147,497 AF of water purchased from IID, $113.0 million for MWD’s conveyance charges related to IID, Coachella Canal and All-American Canal water, and $130.2 million of water purchased from Poseidon Resources (Channelside) LP. The primary driver for the variance is the shutdown that occurred at the Plant in the summer of 2017 (FY18) for 53 days due to a mechanical coupling failure and resulted in replacement water purchases from MWD. In addition, when the Plant is not producing at levels required by the Water Purchase Agreement, Poseidon is obligated to make a shortfall payment. A provision exists in the Water Purchase Agreement that allows Poseidon to make up for shortfalls within the fiscal year, but they were not able to make up the cumulative difference by the end of Fiscal Year 2018. In Fiscal Year 2019, however, Poseidon has been delivering water as requested.

Revenues and Other Income
As shown in Attachment 4, total Revenues and Other Income were budgeted at $124.0 million for the fifteen-month period ended September 30, 2018. Actual revenues were $140.6 million or $16.6 million higher than budgeted.

Actual revenues materially higher than the period-to-date budget are as follows:
- **Capacity Charges**: $11.6 million higher than budgeted due to a greater number of permits issued than anticipated because of several major housing developments in San Diego, Santee, and Escondido
- **Other Income**: $9.6 million more than budgeted due to shortfall revenue related to the Claude “Bud” Lewis Carlsbad Desalination Plant of $7.2 million, an insurance refund for the Emergency and Carryover Storage Project of $0.9 million, and $1.5 million of miscellaneous revenue reimbursements received.
Actual revenues materially lower than the period-to-date budget are as follows:

- **Grant Reimbursements:** $4.2 million lower than budgeted due to the timing of reimbursements received for Integrated Regional Water Management Program (IRWMP)
- **Contributions in Aid of Capital Improvement Program:** $1.6 million lower than budgeted as there has been minimal corresponding revenues due to timing of projects
- **Build America Bonds Subsidy:** $0.9 million lower than budgeted due to subsidies reduced by Congressionally-mandated sequestration rates

**Expenses**

As shown in Attachment 4, total Expenses were budgeted at $266.6 million for the fifteen-month period ended September 30, 2018. Actual expenses were $263.2 million or 1 percent lower than budgeted. Actual expenses materially lower than the period-to-date budget are as follows:

- **Grant Expenses:** $5.0 million lower than budgeted from the timing delay in expense recognition of the pass-through IRWMP grants
- **Operating Departments:** $1.5 million below budgeted due to vacant staff position savings and lower professional and technical services costs from the timing of projects
- **Equipment Replacement:** $1.4 million below budgeted due to the timing of purchases

Actual expenses materially higher than the period-to-date budget are as follows:

- **Debt Service:** $3.6 million higher than budgeted due to the net effect of bond interest and commercial paper fee payments being higher than budget (this variance will increase through the remainder of the fiscal year until the full pipeline debt payments are made)
- **Other Expenses:** $0.9 million more than budgeted due to maintenance expenses associated with the Mission Trails Chlorine Injection project and Skinner Plant project

**CIP Expenses**

Attachment 4 shows CIP Expenses were budgeted at $93.2 million through September but actual expenses amounted to $75.5 million or $17.7 million lower than budgeted. This was due to project work delays as well as contractors submitting their invoices late. However, budgeted CIP program expenses in total are projected to be fully spent by the end of the fiscal year.

**Cash and Investments**

As of September 30, 2018, the Water Authority’s cash and investments balance was $376.4 million, approximately 68 percent unrestricted funds with the remaining 32 percent of funds restricted for specific purposes. To maximize investment returns, the Water Authority Treasurer pools the cash of the Pay-As-You-Go Fund with total unrestricted funds. For additional information on cash positions and purposes, see the Schedule of Cash and Investments (Attachment 5).

Prepared by: Jocelyn Matsuo, Senior Accountant
Reviewed by: Geena Xiaoqing Balistrieri, CPA, Accounting Supervisor
Approved by: Christopher Woidzik, CPA, Controller

Attachments:
- Attachment 1 – Water Sales Volumes
- Attachment 2 – Water Sales Revenues
- Attachment 3 – Water Purchases and Treatment Costs
- Attachment 4 – Budget Status Report
- Attachment 5 – Schedule of Cash and Investments
**Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2018 and 2019.**

**Fiscal Year 2018 Cumulative Water Sales (AF)**

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</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>50,172</td>
<td>100,133</td>
<td>144,944</td>
<td>183,572</td>
<td>214,851</td>
<td>242,655</td>
<td>266,443</td>
<td>288,214</td>
<td>315,331</td>
<td>348,044</td>
<td>386,055</td>
<td>431,353</td>
</tr>
<tr>
<td>Actual</td>
<td>41,812</td>
<td>85,217</td>
<td>124,748</td>
<td>166,200</td>
<td>199,748</td>
<td>222,937</td>
<td>247,082</td>
<td>271,036</td>
<td>292,608</td>
<td>325,042</td>
<td>360,219</td>
<td>399,826</td>
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<tr>
<td>AF Difference (b)</td>
<td>(8,360)</td>
<td>(14,916)</td>
<td>(20,196)</td>
<td>(17,372)</td>
<td>(15,103)</td>
<td>(19,718)</td>
<td>(19,361)</td>
<td>(22,723)</td>
<td>(23,002)</td>
<td>(25,836)</td>
<td>(31,527)</td>
<td>-</td>
</tr>
<tr>
<td>Cum. Actual AF</td>
<td>-17%</td>
<td>-15%</td>
<td>-14%</td>
<td>-9%</td>
<td>-7%</td>
<td>-8%</td>
<td>-7%</td>
<td>-6%</td>
<td>-7%</td>
<td>-7%</td>
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**Fiscal Year 2019 Cumulative Water Sales (AF)**

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</tr>
</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>50,735</td>
<td>101,256</td>
<td>146,963</td>
<td>186,363</td>
<td>218,268</td>
<td>246,628</td>
<td>270,892</td>
<td>293,098</td>
<td>320,758</td>
<td>354,125</td>
<td>393,337</td>
<td>439,980</td>
</tr>
<tr>
<td>Actual</td>
<td>48,357</td>
<td>101,940</td>
<td>147,252</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>AF Difference (b)</td>
<td>(2,378)</td>
<td>684</td>
<td>289</td>
<td>-</td>
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<tr>
<td>Cum. Actual AF</td>
<td>-5%</td>
<td>1%</td>
<td>0%</td>
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<td>-</td>
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**% Difference (b/a)**

- FY18: -7%
- FY19: 0%
- Total: -5%

**WATER SALES VOLUMES (in Acre-Feet)**

**Budget Versus Actual**

for the 15 Months Ended September 30, 2018
*Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2018 and 2019.

### Fiscal Year 2018 Cumulative Water Sales (in Millions $)

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</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>$71.1</td>
<td>$141.9</td>
<td>$206.9</td>
<td>$265.0</td>
<td>$314.3</td>
<td>$359.6</td>
<td>$401.4</td>
<td>$441.0</td>
<td>$486.7</td>
<td>$539.3</td>
<td>$598.7</td>
<td>$667.2</td>
</tr>
<tr>
<td>Actual</td>
<td>67.2</td>
<td>139.4</td>
<td>202.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td>Difference (b)</td>
<td>$3.9</td>
<td>$(2.5)</td>
<td>$(4.6)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Cum. Actual</td>
<td>-5%</td>
<td>-2%</td>
<td>-2%</td>
<td>-</td>
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</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-5%</td>
<td>-2%</td>
<td>-2%</td>
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</tbody>
</table>

### Fiscal Year 2019 Cumulative Water Sales (in Millions $)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>$63.5</td>
<td>$206.9</td>
<td>$842.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Actual</td>
<td>591.8</td>
<td>202.3</td>
<td>794.1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Difference</td>
<td>$(43.3)</td>
<td>$(4.6)</td>
<td>$(47.9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>% Difference</td>
<td>-7%</td>
<td>-2%</td>
<td>-6%</td>
<td></td>
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</tr>
</tbody>
</table>
*Budgeted amounts are based on the Adopted Multi-Year Budget for Fiscal Years 2018 and 2019.

**Fiscal Year 2018 Cumulative Cost of Water Purchases and Treatment (in Millions $)**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>$53.9</td>
<td>$107.6</td>
<td>$155.6</td>
<td>$198.5</td>
<td>$233.8</td>
<td>$265.8</td>
<td>$296.6</td>
<td>$325.9</td>
<td>$369.4</td>
<td>$398.8</td>
<td>$443.1</td>
<td>$495.1</td>
</tr>
<tr>
<td>Actual</td>
<td>44.9</td>
<td>87.4</td>
<td>124.7</td>
<td>168.6</td>
<td>203.6</td>
<td>232.9</td>
<td>263.8</td>
<td>295.8</td>
<td>324.6</td>
<td>358.4</td>
<td>397.2</td>
<td>442.4</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>$ (9.0)</td>
<td>$ (20.2)</td>
<td>$ (30.9)</td>
<td>$ (29.9)</td>
<td>$ (30.2)</td>
<td>$ (32.9)</td>
<td>$ (32.8)</td>
<td>$ (30.1)</td>
<td>$ (34.9)</td>
<td>$ (40.4)</td>
<td>$ (45.9)</td>
<td>$ (52.7)</td>
</tr>
<tr>
<td>Cum. Actual</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-17%</td>
<td>-19%</td>
<td>-20%</td>
<td>-15%</td>
<td>-13%</td>
<td>-12%</td>
<td>-11%</td>
<td>-9%</td>
<td>-10%</td>
<td>-10%</td>
<td>-10%</td>
<td>-11%</td>
</tr>
</tbody>
</table>

**Fiscal Year 2019 Cumulative Cost of Water Purchases and Treatment (in Millions $)**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><em>Budget (a)</em></td>
<td>$56.2</td>
<td>$112.2</td>
<td>$163.0</td>
<td>$208.4</td>
<td>$246.1</td>
<td>$280.4</td>
<td>$314.4</td>
<td>$346.9</td>
<td>$384.1</td>
<td>$427.6</td>
<td>$476.8</td>
<td>$534.4</td>
</tr>
<tr>
<td>Actual</td>
<td>48.3</td>
<td>102.5</td>
<td>150.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Difference (b)</td>
<td>$(7.9)</td>
<td>$(9.7)</td>
<td>$(12.8)</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>Cum. Actual</td>
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<td></td>
</tr>
<tr>
<td>% Difference (b/a)</td>
<td>-14%</td>
<td>-9%</td>
<td>-8%</td>
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</tr>
</tbody>
</table>

## Budget Versus Actual for the 15 Months Ended September 30, 2018

**Fiscal Year 2018**
- Budget: $658.1M
- Actual: $592.6M

**Fiscal Year 2019**
- Budget: $658.1M
- Actual: $592.6M

**Difference**
- Budget: $(52.7)M
- Actual: $(12.6)M

**% Difference**
- Budget: -11%
- Actual: -8%
San Diego County Water Authority
Fiscal Years 2018 and 2019 Budget Status Report
For the 15 Months Ended September 30, 2018

Unaudited

<table>
<thead>
<tr>
<th>[A]</th>
<th>[B]</th>
<th>[C]</th>
<th>Revenues = [-B + C]</th>
<th>[C / A]</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2018 &amp; 2019 Amended Budget</td>
<td>15 Months Period-to-Date Amended Budget (a)</td>
<td>15 Months Period-to-Date Actual</td>
<td>Variance Positive (Negative)</td>
<td>Actual to FY 2018 &amp; 2019 Amended Budget</td>
</tr>
</tbody>
</table>

### Net Water Sales Revenue

<table>
<thead>
<tr>
<th>Description</th>
<th>[A]</th>
<th>[B]</th>
<th>[C]</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales</td>
<td>$1,302,329,168</td>
<td>$841,957,128</td>
<td>$794,312,046</td>
<td>$47,825,046</td>
</tr>
<tr>
<td>Water Purchases &amp; Treatment</td>
<td>1,029,543,474</td>
<td>658,104,333</td>
<td>592,596,793</td>
<td>65,507,540</td>
</tr>
<tr>
<td>Total Net Water Sales Revenue</td>
<td>2,331,872,642</td>
<td>1,500,061,461</td>
<td>1,386,908,839</td>
<td>113,152,622</td>
</tr>
</tbody>
</table>

### Revenues and Other Income

<table>
<thead>
<tr>
<th>Description</th>
<th>[A]</th>
<th>[B]</th>
<th>[C]</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Access Charges</td>
<td>67,991,290</td>
<td>41,355,686</td>
<td>40,635,604</td>
<td>63%</td>
</tr>
<tr>
<td>Property Taxes and In-Lieu Charges</td>
<td>25,360,573</td>
<td>13,323,391</td>
<td>14,037,182</td>
<td>58%</td>
</tr>
<tr>
<td>Investment Income</td>
<td>10,421,836</td>
<td>5,174,743</td>
<td>6,247,093</td>
<td>58%</td>
</tr>
<tr>
<td>Hydroelectric Revenue</td>
<td>7,105,700</td>
<td>4,427,675</td>
<td>2,678,025</td>
<td>58%</td>
</tr>
<tr>
<td>Grant Reimbursements</td>
<td>26,635,000</td>
<td>11,447,923</td>
<td>16,307,077</td>
<td>50%</td>
</tr>
<tr>
<td>Build America Bonds Subsidy</td>
<td>22,605,916</td>
<td>11,447,923</td>
<td>11,158,993</td>
<td>50%</td>
</tr>
<tr>
<td>Other Income</td>
<td>985,432</td>
<td>488,763</td>
<td>4,956,669</td>
<td>50%</td>
</tr>
<tr>
<td>Total Revenues and Other Income</td>
<td>218,457,118</td>
<td>124,043,708</td>
<td>140,622,090</td>
<td>16,578,382</td>
</tr>
</tbody>
</table>

### Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>[A]</th>
<th>[B]</th>
<th>[C]</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Service</td>
<td>280,945,000</td>
<td>169,486,570</td>
<td>173,458,630</td>
<td>55%</td>
</tr>
<tr>
<td>QSA Mitigation</td>
<td>18,829,481</td>
<td>11,914,814</td>
<td>11,914,814</td>
<td>63%</td>
</tr>
<tr>
<td>Equipment Replacement</td>
<td>4,855,000</td>
<td>3,019,810</td>
<td>1,626,819</td>
<td>34%</td>
</tr>
<tr>
<td>Grant Expenses</td>
<td>27,135,000</td>
<td>11,447,923</td>
<td>16,307,077</td>
<td>50%</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>1,000,000</td>
<td>622,000</td>
<td>1,489,202</td>
<td>149%</td>
</tr>
<tr>
<td>Operating Departments (see below)</td>
<td>103,202,095</td>
<td>64,710,558</td>
<td>63,202,679</td>
<td>1,507,879</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>435,966,576</td>
<td>266,631,722</td>
<td>263,171,361</td>
<td>3,460,361</td>
</tr>
</tbody>
</table>

### Net Revenues Before CIP

- **$55,276,236**
- **$41,264,781**
- **$78,986,018**
- **$37,721,237**

### CIP Expenses*

- **$137,617,918**
- **$93,165,604**
- **$75,498,833**
- **$17,666,771**

### Net Fund Withdraws

- **$(82,341,682)**
- **$(51,900,823)**
- **$3,487,185**
- **$55,388,008**

*(CIP Expenses are all funded by Pay-As-You-Go Fund)

### Operating Departments Detail

<table>
<thead>
<tr>
<th>Description</th>
<th>[A]</th>
<th>[B]</th>
<th>[C]</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Services</td>
<td>$11,917,782</td>
<td>$7,472,778</td>
<td>$7,067,060</td>
<td>$405,718</td>
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<tr>
<td>Colorado River Program</td>
<td>3,393,607</td>
<td>2,127,885</td>
<td>1,664,656</td>
<td>463,229</td>
</tr>
<tr>
<td>Engineering</td>
<td>7,656,312</td>
<td>4,800,719</td>
<td>4,007,483</td>
<td>793,236</td>
</tr>
<tr>
<td>Finance</td>
<td>4,968,187</td>
<td>3,115,817</td>
<td>2,869,340</td>
<td>246,377</td>
</tr>
<tr>
<td>General Counsel</td>
<td>6,775,956</td>
<td>4,248,711</td>
<td>3,813,317</td>
<td>867,394</td>
</tr>
<tr>
<td>General Manager &amp; Board of Directors</td>
<td>9,197,614</td>
<td>5,767,157</td>
<td>5,137,582</td>
<td>629,575</td>
</tr>
<tr>
<td>MWD Program</td>
<td>4,286,992</td>
<td>2,688,062</td>
<td>2,333,631</td>
<td>354,431</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>38,855,858</td>
<td>24,363,694</td>
<td>21,750,656</td>
<td>2,613,038</td>
</tr>
<tr>
<td>Public Outreach and Conservation</td>
<td>8,136,211</td>
<td>5,101,629</td>
<td>4,084,860</td>
<td>1,016,769</td>
</tr>
<tr>
<td>Water Resources</td>
<td>8,012,576</td>
<td>5,024,106</td>
<td>4,255,307</td>
<td>768,799</td>
</tr>
<tr>
<td>Additional Pension Expense</td>
<td>-</td>
<td>6,650,687</td>
<td>6,650,687</td>
<td><strong>553,688,008</strong></td>
</tr>
<tr>
<td>Total Operating Departments</td>
<td>$103,202,095</td>
<td>$64,710,558</td>
<td>$63,202,679</td>
<td>$1,507,879</td>
</tr>
</tbody>
</table>
San Diego County Water Authority  
Fiscal Years 2018 and 2019 Budget Status Report 
For the 15 Months Ended September 30, 2018

Notes to the Budget Status Report:

a) Period-to-date budgeted amounts are 15/24ths (63%) of Fiscal Years 2018 and 2019 amended budget unless noted.
b) Water sales and water purchases period-to-date budgeted amounts are based on projected acre-feet calculated per month.
c) Property taxes are primarily received in December and April. In-lieu charges in the amount of $559,402 for Fiscal Year 2018 and $596,454 for Fiscal Year 2019 are received quarterly from the City of San Diego.
d) Investment income excludes unrealized gains/losses, which are non-cash transactions.
e) Hydroelectric revenue budget amount includes Rancho Penasquitos Pressure Control and Hydroelectric Facility (Rancho Hydro) and Lake Hodges Pumped Storage Facility (Hodges Hydro). Power generating from both locations are sold to San Diego Gas and Electric.
f) Capacity charges are primarily received in July, October, January and April, after the quarterly period ends, and accrued revenue are recorded for the quarter ending June.
g) Water standby availability charges are primarily received in January and May.
h) Contributions in aid of capital improvement program include planned reimbursements for miscellaneous projects.
i) Bonds and Certificates of Participation debt service payments are due semi-annually on November 1 and May 1. Pipeline Bonds, Series 2012 debt service payments are due semi-annually on July 1 and January 1. Debt Service includes principal, interest expense, and debt service fees. Amortization expense relating to long-term debt, such as discounts, premiums, and deferred loss on refunding are excluded because they are non-cash transactions.
j) The QSA mitigation payments includes: QSA JPA Fiscal Year 2018 contributions of $1,850,000 is due in July 2017 and $8,314,814 is due in December 2017; QSA JPA Fiscal Year 2019 contributions of $1,750,000 is due in July 2018 and $6,914,667 is due in December 2018.
k) Amounts include capital equipment purchases included in the project budget and not funded through the Equipment Replacement Fund.
l) The semi-annual subsidy payments from the United States Treasury equal to 35 percent of the interest payable on the Series 2010B Bonds were reduced under Congressionally-mandated sequestration.
m) In June 2018, the Board approved the mid-term budget adjustments which resulted in moving $4,998 of Operating Department expenses from FY19 to FY18.
n) In June 2018, the Board amended the Capital Improvement Program two-year appropriation by an increase of $19.0 million.
o) Includes withdraws from fund balances.
p) Period-to-date budgeted amounts adjusted based on items occurring on a periodic basis.
q) FY18 Actuarial amounts related to pension expense for measurement period ended June 30, 2017.
San Diego County Water Authority
Schedule of Cash and Investments
As of September 30, and August 31, 2018
Unaudited

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>August</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Fund</td>
<td>$ 101,316,609</td>
<td>$ 81,988,492</td>
<td>$ 85,596,000</td>
</tr>
<tr>
<td>Equipment Replacement Fund</td>
<td>674,126</td>
<td>804,515</td>
<td></td>
</tr>
<tr>
<td>Rate Stabilization Fund</td>
<td>155,530,553</td>
<td>155,425,934</td>
<td>$ 147,000,000</td>
</tr>
<tr>
<td><strong>Total Unrestricted Funds</strong></td>
<td>(1) 68%</td>
<td>257,521,288</td>
<td>66% 238,218,941</td>
</tr>
<tr>
<td>Pay-As-You-Go Fund</td>
<td>96,157,489</td>
<td>97,676,317</td>
<td></td>
</tr>
<tr>
<td>Debt Service Reserve Funds</td>
<td>22,720,972</td>
<td>22,702,130</td>
<td></td>
</tr>
<tr>
<td><strong>Total Restricted Funds</strong></td>
<td>32% 118,878,461</td>
<td>34% 120,378,447</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cash and Investments</strong></td>
<td>$ 376,399,749</td>
<td>$ 358,597,388</td>
<td></td>
</tr>
</tbody>
</table>

Note:

(1) Total Unrestricted Funds and the Pay-As-You-Go Fund represent the Pooled Funds in the Treasurer's Report.

Reserve Fund Categories

Operating Fund: The Water Authority's working capital and emergency operating reserve. The Operating Fund's policy requires a maximum of 45 days of average annual operating expenses to be kept in reserves as assessed on an annual basis.

Stored Water Fund (SWF): This fund provides working capital to purchase water inventory necessary to fully utilize the Water Authority's storage facilities. A 70,000 acre-feet target was established for Carryover Storage inventory along with a maximum of 100,000 acre-feet, which is the storage capacity. The SWF is to only hold a cash position if the cost to replace the target amount is below the current value of water inventory in the fund.

Equipment Replacement Fund (ERF): The ERF is funded by transfers from the Operating Fund for capital equipment purchases such as computers, vehicles, and SCADA systems and is used to replace equipment which has reached the end of its effective useful life.

Rate Stabilization Fund (RSF): The RSF holds the water revenues greater than expenditures in years of strong water sales. Funds can then be used to mitigate "rate shock" in years of weak water sales and/or to manage debt service coverage. The RSF target balance is equal to the financial impact of 2.5 years of wet weather or mandatory restrictions and the maximum fund balance is equal to the financial impact of 3.5 years of wet weather or mandatory restrictions. The current balance in this fund represents approximately 106% of the targeted value of $147.0 million and 74% of the maximum balance of $211.2 million.

Pay-As-You-Go Fund (PAYGO): The PAYGO fund collects Capacity Charges and Water Standby Availability Charges to be used to pay for the cash portion of the CIP. The funds are dedicated for construction outlays as well as debt service.

Debt Service Reserve Fund: This fund contains the required legal reserve for Water Authority debt issues. Such reserves are held for the purpose of making an issue's annual debt service payments in the event the Water Authority should be unable to make such payments. The funds are held by trustees and interest earned is transferred into the Operating Fund and is not restricted.
BOARD CALENDAR

JANUARY 2019
• 02  MWD Delegates meeting at 11:00 a.m.
• 10  Officers & Committee Leadership Training - 1:30 to 3:00 p.m.
• 24  Committees begin at 9:00 a.m.
  Formal Board meeting begins at 2:30 p.m.

FEBRUARY 2019
• 06  MWD Delegates meeting at 11:00 a.m.
• 14  Required AB 1661 Sexual Harassment Prevention Board member and staff training - 1:30 to 3:30 p.m.
• 28  Committees begin at 9:00 a.m.
  Formal Board meeting begins at 2:30 p.m.

MARCH 2019
• 06  MWD Delegates meeting at 11:00 a.m.
• 14  Tentative Special Board Meeting - 1:30 p.m.
• 28  Committees begin at 9:00 a.m.
  Formal Board meeting begins at 2:30 p.m.
IMPORTED WATER COMMITTEE

AGENDA FOR

DECEMBER 6, 2018

Lois Fong-Sakai – Interim Chair
Tom Kennedy – Vice Chair
David Barnum
Michael Hogan
Mel Katz
Barry Leonard
Keith Lewinger
Jim Madaffer
Marty Miller
Jim Murtland
Ron Roberts
Elsa Saxod
Joel Scalzitti
Fern Steiner
Doug Wilson

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-B Directors’ comments.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION/PRESENTATION

1. MWD Issues and Activities Update.
   1-A Metropolitan Water District Delegates Report. (Discussion) (Supplemental Materials) MWD Delegates

2. Colorado River Programs.
   2-A Colorado River Board Representative’s report. Doug Wilson
3. Salton Sea Quantification Settlement Agreement Promotional Video. (Presentation)  

Kara Mathews

III. INFORMATION

IV. CLOSED SESSIONS

1. Conference with Legal Counsel – Existing Litigation  
   Government Code §54956.9(d)(1)  
   SDCWA v. Metropolitan Water District of Southern California;  
   San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-516389; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case Nos. S243500; and S251025  
   Mark Hattam

2. Conference with Legal Counsel – Existing Litigation  
   Government Code §54956.9(d)(1)  
   California Department of Water Resources v. All Persons Interested;  
   Sacramento Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and JCCP 4942  
   Mark Hattam

3. Conference with Legal Counsel – Existing Litigation  
   Government Code §§54956.9(d)(1)  
   Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested in the Matter; Los Angeles Superior Court Case No. BC 720692  
   Mark Hattam

V. ADJOURNMENT

Melinda Nelson  
Clerk of the Board

NOTE: This meeting is called as an Imported Water Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Recodified). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
November 28, 2018

Attention: Imported Water Committee


Purpose
This information item provides the final report on the Imported Water Committee Work Plan for Calendar Years 2017 and 2018.

Background

Discussion
The Imported Water Committee is responsible for imported water matters, including: Activities and issues as a member agency of the Metropolitan Water District of Southern California; administration of the Colorado River Quantification Settlement Agreement and related agreements; Colorado River Board; State Water Project; San Joaquin-Sacramento Bay-Delta; and other matters relating to water supplies from outside San Diego County.

The attached report lists the Imported Water Committee Work Plan for Calendar years 2017 and 2018 and summarizes the activities taken to achieve the work plan. The work plan was prepared under the direction of the Imported Water Committee Chair and Vice Chairs.

Prepared by: Amy Chen, Director of Metropolitan Water District Program
Kelly Rodgers, Director of Colorado River Program
Reviewed by: Lois Fong-Sakai, Interim Chair, Imported Water Committee

Attachment:

1. Final Report on the Imported Water Committee Work Plan for Calendar Years 2017 and 2018
Bay-Delta Plan

1. **Bay-Delta Proposal Review**
   Review and provide direction for the assessment of any Delta fix proposal and its cost and benefit to Water Authority ratepayers. (December 2017 – Bay-Delta Program, Objective 2*)

   **Activities**
   The Committee received updates on the Bay-Delta activities through the California WaterFix (WaterFix) update reports and the monthly Delegates and MWD Program reports (ongoing). The Committee received detailed written reports and presentations on the three white papers presented by MWD on the WaterFix project (Summer 2017). The white papers covered infrastructure, operations, and finance and cost allocation; but they lacked critical information including contractors’ participation levels. During the August 2017 Committee meeting, MWD Assistant General Manager Roger Patterson provided an update on the WaterFix project. In October 2017, the MWD board authorized MWD’s participation in the project, including funding of up to 26% share of the project cost. The Committee received a presentation during the October 2017 meeting on the then-contractors’ participation levels. To date, none of the Central Valley Project contractors have agreed to pay. In February 2018, the Committee received an update on the state’s recently updated WaterFix economic analysis and then in April 2018, the Committee received an analysis of the potential cost impacts of WaterFix to the Water Authority’s ratepayers. In May 2018, the Committee began its effort to update the Water Authority’s Bay-Delta policy principles, including to incorporate a position on WaterFix. After receiving additional reports in June and July 2018, the Committee and subsequently the Board adopted WaterFix and updated Bay-Delta policy principles on August 9, 2018, which among other things conveyed the Water Authority’s support for WaterFix conditioned upon the project’s costs being properly recovered on conservation or supply rates.

2. **Bay-Delta Communications**
   Engage in communications on behalf of the Water Authority regarding its perspectives on the Delta fix proposal to San Diego civic leaders, opinion leaders, the media, and the business community. (December 2018 – Bay-Delta Program, Objectives 8* and 10*)

   **Activities**
   The Committee received updates on the analysis done by staff on the three white papers issued by MWD on the WaterFix project (Summer and Fall 2017). Staff continues to communicate regularly with San Diego business leaders, civic leaders, and opinion leaders on the project, including the lack of sufficient information on contractors’ participation levels. As part of the Water Authority’s Delegates’ Report, the Committee received copies of a letter to Department of Water Resources Director Nemeth, which was
also sent to the San Diego legislative delegation, related to Amendment of State Water Project Contract for California WaterFix (June 2018).

**Colorado River Water Supplies**

1. **Water Supply Deliveries**
   Support and provide guidance to the Colorado River Task Force to ensure full access to supplies linked to the Quantification Settlement Agreement (QSA) and related agreements, including the water transfer with Imperial Irrigation District, the All-American Canal Lining Project, and the Coachella Canal Lining Project. (December 2017 and 2018)

   **Activities**
   The Colorado River Task Force no longer meets as an entity, but staff continues to work with the Imported Water Committee to ensure full access to QSA supplies.

2. **Water Transfer Flexibility**
   Promote and consider adoption of demonstration projects to be conducted with IID and other stakeholders to provide enhanced flexibility of annual transfer volumes and efficiency-based conservation targets. (June 2017 – Colorado River Program, Objective 1*)

   **Activities**
   Staff has continued to explore supply flexibility opportunities with IID based on need. Discussions have continued throughout 2018.

3. **Quantification Settlement Agreement Timeline**
   Consider extension or early termination options of the Exchange and Transfer Agreements and recommend preferred option. (December 2017 – Colorado River Program, Objective 3*)

   **Activities**
   Staff completed analysis and presented to the Board in July, August, and September 2017. On December 7, the Committee and Board voted unanimously to extend the exchange agreement with Metropolitan Water District by 10 years. Staff transmitted the required agreement notice to MWD prior to the December 31, 2017 deadline.

4. **Salton Sea**
   Review and provide guidance on the Water Authority’s perspectives on developing responsible mitigation and restoration plans for the Salton Sea to secure the support of the QSA parties, Federal Government, the Governor’s Office, elected officials, and opinion leaders. (December 2017 and 2018 – Colorado River Program, Objective 4*)

   **Activities**
   The Committee received updates throughout 2017 regarding the Salton Sea and Stipulated Order that was ultimately adopted by the State Water Resources Control Board (State Board) in November 2017. Under the order, the State must carry out restoration

*Items related to the 2017-2021 Business Plan.*
obligations and begin implementation of its Salton Sea Management Program (SSMP), solidifying its commitment to the sea. The Committee was provided a summary of State Board meetings held September 2017, March 2018, and October 2018 where the State presented the status of SSMP implementation. Staff and Committee Directors attended the annual San Diego Chamber of Commerce Washington, D.C., trips in September 2017 and October 2018 where they met with federal agencies regarding Colorado River-related issues, including the Salton Sea. Staff and Committee Directors also met with San Diego delegation leaders in Sacramento throughout 2017 and 2018 regarding the Salton Sea.

5. **Imperial Valley Outreach**
   Review and provide direction for quarterly stakeholder briefings with the farming community and other Imperial Valley stakeholders to enhance relationships, exchange perspectives, and advocate for balanced representation on matters related to QSA implementation and Salton Sea environmental initiatives. (December 2017 – Colorado River Program, Objective 5*)

   **Activities**
   Committee members received updates on the status of Imperial Valley issues, including drought contingency planning from the perspective of the Imperial Irrigation District, local elections and the impacts on local government, and major litigation between IID and a local farmer over IID equitable distribution program (water apportionment to farmers) that could impact how water is managed in the Valley. The Committee was briefed on the Imperial Valley perspective on Salton Sea issues.

   Through written reports, the Committee was also kept up to date on Imperial Valley outreach activities, including, but not limited to:

   - Participating in Imperial Valley Farm Bureau, Vegetable Grower, and Water Conservation Advisory Board meetings;
   - Attending Salton Sea Authority meetings;
   - Meeting with the Salton Sea Task Force Outreach Committee; and
   - Helping to organize and attending the State's Salton Sea Management Program outreach presentations throughout Imperial and Riverside Counties

   These activities continued throughout 2018 and another Imperial Valley Outreach Tour is being scheduled for Spring 2019.

6. **Basin States Issues**
   Review and consider approval of Water Authority Intentionally Created Surplus (ICS) account for temporary storage of Colorado River supplies in Lake Mead. (June 2019 – Colorado River Program, Objective 7*)

   **Activities**
   Staff and Committee Directors met with federal agencies during the annual San Diego Chamber of Commerce Washington, D.C., trip in October 2018 regarding establishing a Water Authority ICS account. The Committee received an update in October 2018 on the work being carried out by staff to attain an ICS account, as well the Basin States’ drought contingency planning efforts.

*Items related to the 2017-2021 Business Plan.
Metropolitan Water District (MWD) Water Supplies

1. **Ensure Long-Term Regional MWD Water Supply Reliability**
   Review and consider recommendations to ensure MWD is a sustainable supplemental imported water supplier, providing quality supplies at an equitable cost for San Diego County water ratepayers. (December 2017 – MWD Program, Objective 9*)

   **Activities**
   The Committee received information related to regional water supply reliability and quality through monthly MWD Program and Delegates reports, including reports and presentations on MWD’s: expansion of cyclic storage agreements (April and July 2017); recovery of water seepage at Lake Perris (April 2017); participation in Phase 1 of Sites Reservoir development (April 2017); Integrated Water Resources Plan policy discussions (June 2017); potential regional recycled water program (July 2017); updated Local Resources Program target (September 2018); and evaluation of MWD’s emergency storage requirement (December 2018).

   As part of the Water Authority’s Delegates’ Report, the Committee received copies of letters related to: authorization of agreement with California Department of Water Resources for preliminary design of a water recovery project at Lake Perris - support project subject to availability of funds in existing budget, and with reservation of rights to cost of service (April 2017); opposition to authorizing MWD General Manager to enter into Cyclic Storage agreements with Metropolitan’s member agencies (April 2017); opposition to appropriating $2 million and awarding $13.9 million contract for construction of an advanced water treatment demonstration plant (July 2017); opposition letter to authorizing the MWD General Manager to enter into cyclic agreements providing a credit of up to $225 per acre-foot for in-lieu deliveries in fiscal year 2017/18 (July 2017), requesting additional review time and data related to MWD’s white paper on its emergency storage requirement (December 2018).

2. **MWD Rate Litigation**
   Review and consider recommendations related to the MWD rate litigation to successfully preserve the favorable ruling for the 2011-2014 rate cases and achieve victorious court rulings for the 2015-2018 rate cases. (December 2017 – MWD Program, Objective 6*)

   **Activities**
   The Committee received regular updates on the MWD rate litigation in closed session. In June 2017, the 1st District Court of Appeal ruled in favor of the Water Authority on 9 out of 10 significant issues in the 2010 and 2012 SDCWA v. Metropolitan cases. The one issue the Court of Appeal ruled against the Water Authority related to MWD’s allocation of State Water Project costs. In July 2017, the Water Authority filed a petition for review to the State Supreme Court. The State Supreme Court denied to review the case in September 2017. In June 2018, the Water Authority filed a new lawsuit against MWD’s rates for calendar years 2019 and 2020. The 2010 and 2012 cases have been remanded to the trial court, while 2014 and 2016 cases remain stayed. The 2018 case was transferred to San Francisco Court in November 2018. In October 2018, following two years of settlement discussions with MWD, newly elected Chair Madaffer sent a public letter

*Items related to the 2017-2021 Business Plan.*
outlining the Water Authority’s settlement approach to resolve the differences between the two agencies. Settlement discussions continue.

3. **Ensure MWD’s Long-Term Fiscal Sustainability**
Review and provide guidance to address issues related to MWD policies and programs to ensure its long-term fiscal sustainability. (December 2018 – MWD Program, Objective 9*)

**Activities**
The Committee heard and received reports on MWD’s: Treatment Fixed Charge discussions (April and May 2017); Ordinance authorizing revenue bonds (June 2017); mid-term biennial budget review (September 2017); and proposed biennial budget for fiscal years 2019 and 2020 (March 2018).

4. **Advocate Equity and Transparency in MWD’s Decision Making Process**
Support the MWD Delegates to advocate for equity and transparency in MWD’s decision making process. (December 2018 – MWD Program, Objective 9*)

**Activities**
Throughout the year, the Committee received copies of letters from the Water Authority Delegates, Board Leadership, and staff to MWD focusing on a number of policy issues. Those letters are listed in Attachment A.

The Water Authority believes water agencies’ rate models should be public so ratepayers can review and understand how water rates are set. After MWD refused to provide its functioning rate model to the Water Authority, in August 2016, the Water Authority filed a California Public Records Act lawsuit to compel MWD to produce its fully functional rate model. After the trial court and court of appeal failed to make the rate model public, the Water Authority petitioned the California Supreme Court. Despite gaining support from many open government organizations such as the Howard Jarvis Taxpayers Association and Project on Government Oversight, on October 31, 2018, the California Supreme Court denied reviewing the case.

5. **Consider options to secure short-term water transfers and optimize the Water Authority’s out-of-region storage to meet dry-year supply needs**
Review and provide guidance on short-term transfer and exchange opportunities to maximize the value of Water Authority carryover storage accounts within the San Diego Region and Central Valley. (December 2018)

**Activities**
Due to improved hydrological conditions in 2017 and reduced water demand forecasts, the Water Authority did not require the use of stored water nor store additional water in its out-of-region storage in the Central Valley. The Board approved entering into an agreement with Homer, LLC (Homer), to allow its lease of a portion of the Water Authority’s recharge capacity in 2017 and storage capacity for calendars years 2017, 2018, and 2019 (March and June 2017). The payments from Homer, through this

*Items related to the 2017-2021 Business Plan.
agreement, help offset some of the annual management and maintenance fees the Water Authority pays to Semitropic Water Storage District.

6. **State Water Project**
   Review issues related to State Water Project, including contract extension, cost allocation, facility maintenance, major repairs, and provide guidance on advocacy positions to protect San Diego ratepayers’ interest. (December 2018)

   **Activities**
   The Committee received updates on the status of the Oroville Dam repairs via the monthly Delegates’ and Imported Water Committee Chair’s reports (ongoing).
Below is a complete list of Water Authority Delegates, Board Leadership, and staff letters to MWD related to:

<table>
<thead>
<tr>
<th>Bay-Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>- California WaterFix Board Review – Request for adequate time to review and distribute information (June 9, 2017)</td>
</tr>
<tr>
<td>- Water Authority’s position on California WaterFix (August 22, 2017)</td>
</tr>
<tr>
<td>- Summary of key questions regarding the California WaterFix (September 6, 2017)</td>
</tr>
<tr>
<td>- California WaterFix – Request for implementation agreements (September 30, 2017)</td>
</tr>
<tr>
<td>- California WaterFix – Request for implementation agreements (October 4, 2017)</td>
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<table>
<thead>
<tr>
<th>Budget, Rates, Charges, and Debt Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Opposition to adoption of resolution approving Treatment Charge Workgroup’s proposed policy principles, recommended treatment capacity charge, and treatment capacity charge implementation (April 10, 2017)</td>
</tr>
<tr>
<td>- Opposition to the approval of introduction by title only of an Ordinance determining that the interests of the district require the use of revenue bonds in the aggregate principal amount of $400,000,000 to finance a portion of capital expenditures (May 6, 2017)</td>
</tr>
<tr>
<td>- Opposition to adoption of resolution to continue Metropolitan’s Water Standby Charge for fiscal year 2017/18 (May 6, 2017)</td>
</tr>
<tr>
<td>- Opposition to the adoption of Ordinance No. 150 determining that the interests of Metropolitan require the use of revenue bonds in the aggregate principal amount of $400 million to finance a portion of capital expenditures (June 11, 2017)</td>
</tr>
<tr>
<td>- Opposition to the adoption of Third Supplemental Subordinate Resolution to the Master Subordinate Resolution authorizing the issuance of up to $80 million of Subordinate Water Revenue Bonds, 2017 Series C; and approval of expenditures to fund the costs of issuance of the Bonds (June 11, 2017)</td>
</tr>
<tr>
<td>- MWD’s interest rate swap agreements (August 10, 2017)</td>
</tr>
<tr>
<td>- Opposition to adoption of resolution establishing the tax rate for fiscal year 2017/18 (August 14, 2017)</td>
</tr>
<tr>
<td>- Request for records for proposed biennial budget for fiscal years 2019 and 2020 (March 11, 2018)</td>
</tr>
<tr>
<td>- Opposition to adoption of resolution to continue Metropolitan’s Water Standby Charge for fiscal year 2018/19 (May 4, 2017)</td>
</tr>
<tr>
<td>- Opposition to approving and authorizing the distribution of Appendix A; and adopting Fourth Supplemental Subordinate Resolution to the Master Subordinate Resolution Authorizing the issuance of up to $80 Million of Subordinate Water Revenue Bonds and the expenditure of this debt (May 7, 2018)</td>
</tr>
<tr>
<td>- Opposition to resolution establishing the tax rate for fiscal year 2018/19 (August 19, 2018)</td>
</tr>
<tr>
<td>External Audit Practice</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Amendment of the contract with Macias Gini O’Connell, LLP to increase the maximum amount payable by $324,715, from $915,096 to $1,239,811 and extend the term by one year for external audit services (May 6, 2017)</td>
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<thead>
<tr>
<th>Long-Term Resources Planning</th>
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</thead>
<tbody>
<tr>
<td>Opposition to adoption of Policy Principles guiding Metropolitan’s role in regional implementation of Integrated Water Resources Plan targets for local resources and conservation (July 11, 2017)</td>
</tr>
<tr>
<td>Discrepancies between MWD'S and Member Agencies' 2015 Urban Water Management Plans; and MWD denying request for opportunity to present information to MWD Board of Directors (August 3, 2017)</td>
</tr>
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<table>
<thead>
<tr>
<th>Water Supply Programs and Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriation of $1.5 million and authorization of agreement with the California Department of Water Resources for preliminary design of a water recovery project at Lake Perris (Appropriation No. 15402) – Support project subject to availability of funds in existing budget, and with reservation of rights regarding cost of service (April 8, 2017)</td>
</tr>
<tr>
<td>Opposition to authorizing the General Manager to enter into Cyclic Storage Agreements with Metropolitan's member agencies (April 8, 2017)</td>
</tr>
<tr>
<td>Opposition to authorizing the General Manager to enter into cyclic agreements providing a credit of up to $225 per acre-foot for in-lieu deliveries in fiscal year 2017/18 (July 9, 2017)</td>
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<tr>
<th>Local Supply and Demand Management Programs</th>
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<tbody>
<tr>
<td>Opposition to adaptation of resolution to apply for and accept funding from the State Water Resources Control Board's Water Recycling Funding Program (April 9, 2017)</td>
</tr>
<tr>
<td>Opposition to appropriating $2 million; awarding $13,856,000 contract to Kiewit Infrastructure West Co. to construct an advanced water treatment demonstration plant; and authorizing increase of $300,000 to an agreement with Stantec Consulting, Inc. (July 8, 2017)</td>
</tr>
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<thead>
<tr>
<th>Transparency</th>
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<tbody>
<tr>
<td>PRA Request on Delta Wetlands Appraisals (August 9, 2017)</td>
</tr>
<tr>
<td>Ethics Office Issues (September 14, 2017)</td>
</tr>
<tr>
<td>Review of the Policies, Procedures, and Governance of Metropolitan's Ethics Office (March 9, 2018)</td>
</tr>
<tr>
<td>Ethics Office Issues (March 12, 2018)</td>
</tr>
<tr>
<td>Request for Brown Act Training (June 19, 2018)</td>
</tr>
</tbody>
</table>
November 28, 2018

Attention: Imported Water Committee

Metropolitan Water District’s Evaluation of Regional Storage Portfolio effort. (Presentation)

Purpose
This memo reports the Metropolitan Water District of Southern California’s (MWD) effort to reassess its regional storage portfolio.

Executive Summary
- MWD’s storage capacity currently totals 6.1 million acre-feet; as of January 1, 2018, it had about 3.1 million acre-feet of water in storage, of which 626,000 acre-feet is designated as emergency storage, intended to accommodate 75 percent of its member agencies’ firm demands over a 6-month period.
- In a recent “seismic resiliency” effort that MWD participated in with the Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP), it was found that a 7.8 magnitude earthquake on the San Andreas Fault may cause outage durations longer than MWD’s previous 6-month assumption for the imported water aqueducts.
- Based on this new knowledge, MWD is undertaking a comprehensive evaluation of its regional storage portfolio with its first order of business to reexamine its emergency storage requirement.
- MWD preliminarily is recommending an updated emergency storage requirement of 650,000 acre-feet, an increase of 24,000 acre-feet above its existing requirement of 626,000 acre-feet.

Background
After hydrologic extremes experienced during the 2010s drought and the following historically wet year in 2017 tested MWD’s storage programs, this February, MWD presented to its Board a plan to “evaluate” its storage programs and to “reevaluate” its emergency storage requirement. Since its inaugural 1996 Integrated Water Resources Plan (IRP), MWD began to increasingly rely on storage as part of its integral strategy to manage fluctuations in its imported water sources. MWD has increased its storage capacity to the current 6.1 million acre-feet, through investments in surface reservoirs like Diamond Valley Lake and partnerships with local groundwater basins via programs like cyclic storage and conjunctive use. Additionally, MWD has storage along the State Water Project (SWP) through groundwater banking programs in the Central Valley and access to SWP reservoirs for its exclusive use through the Monterey Agreement. It also has storage along the Colorado River in groundwater storage and exchange programs, and more recently in Lake Mead through its Intentionally Created Surplus account.

Before assessing its overall storage portfolio, MWD will reevaluate its emergency storage requirement: the amount of water it holds in storage for emergency purposes, which is not included in dry-year storage reserves. MWD first established the criteria for determining its emergency storage requirements through the adoption of its October 1991 Final Environmental Impact Report for the Eastside Reservoir (now referred to as Diamond Valley Lake) and these criteria were
reiterated in MWD’s 1996 IRP. MWD’s current emergency storage requirement’s objective is to provide a 6-month water supply to meet 75 percent of its member agencies’ firm demands under “normal” hydrologic conditions. The requirement is set based on the following “criteria” that would occur during an emergency:

- Interruptible water deliveries would be suspended (such as those for replenishment and seawater barrier);
- “Firm” deliveries to member agencies would be “restricted” to accommodate a 25 percent “mandatory cutback” from “normal-year” demands;
- Water stored through MWD’s surface reservoir and groundwater programs would be available;
- Local supplies would produce at their full production levels; and
- MWD would utilize its emergency storage and other available storage programs.

Based on these criteria, MWD’s current emergency storage requirement is 626,000 acre-feet.

In August 2015, the Seismic Resilience Water Supply Task Force, (Task Force) which included staff from MWD, DWR, and LADWP, was formed to evaluate how quickly the Los Angeles Aqueduct (LAA), SWP, and Colorado River Aqueduct (CRA) systems could recover after a 7.8 magnitude earthquake on the San Andreas Fault that would sever all three imported water systems. In June 2017, the task force released its study, which included updated outage duration estimates for the three systems as summarized in Table 1.

Table 1. Outage Duration Estimates for Southern California’s Imported Water Systems

<table>
<thead>
<tr>
<th>Aqueduct</th>
<th>Outage Duration Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado River Aqueduct</td>
<td>2 to 6 months (recovery of 80% CRA capacity)</td>
</tr>
<tr>
<td></td>
<td>3 to 5 years (recovery of 100% CRA capacity)</td>
</tr>
<tr>
<td>California Aqueduct: East Branch</td>
<td>12 to 24 months</td>
</tr>
<tr>
<td>California Aqueduct: West Branch</td>
<td>6 to 12 months</td>
</tr>
<tr>
<td>Los Angeles Aqueduct</td>
<td>18 months</td>
</tr>
</tbody>
</table>

Following the June 2017 report, MWD initiated a process to update its emergency storage requirement to consider the updated outage duration estimates.

Discussion
To evaluate its emergency storage requirement, MWD held three workshops in April, August, and November of this year. In the first workshop, MWD reviewed how its existing emergency storage requirement is set, and presented an overview of the Task Force’s updated imported water systems outage duration estimates following a 7.8 magnitude earthquake on the San Andreas. The emergency storage requirement is influenced by three main factors: 1) imported water system’s outage duration; 2) demand reductions achieved during the outage; and 3) local supply production sustained during the outage. At the first workshop, MWD received feedback from the member agencies that the emergency storage requirement should be based on a range of supply and demand.

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2 MWD also overviewed the impact of changing the emergency storage requirement on its dry-year storage – for example, if the requirement is increased, then less dry-year storage would be available.
possibilities rather than relying a single static equation with fixed assumptions. At its second workshop, MWD presented an “envelope” approach that considers various combinations of retail demand reductions and local supply production levels.\(^3\) The results of 12 scenarios that considered “normal-year” retail demand reductions of 0 percent, 25 percent, 35 percent, and 50 percent with “normal-year” “effective” local supply production levels of 100 percent, 90 percent, and 80 percent were presented (see Table 2).\(^4\) Because the information was presented in PowerPoint, member agency managers requested the foundational information that generated the results, specifically the underlying data. MWD agreed to put together a white paper laying out the assumptions, background information, and the data used to generate the results. At the third workshops MWD reviewed its white paper, “2018 Evaluation of Regional Storage Portfolio Evaluation of Metropolitan’s Emergency Storage Objective” (Attachment 1), which outlined updated criteria used to set the emergency storage requirement and proposed updating the requirement to 650,000 acre-feet. MWD did not explain how it chose the updated requirement except that it falls within the emergency storage requirement identified the shaded portions in Table 2.\(^5\)

<table>
<thead>
<tr>
<th>Local Production Level</th>
<th>Retail Demand Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>1,120,600</td>
<td>629,700</td>
</tr>
<tr>
<td>90%</td>
<td>1,236,200</td>
</tr>
<tr>
<td>80%</td>
<td>1,373,100</td>
</tr>
</tbody>
</table>

MWD requested that member agencies provide comments on the white paper by November 13, 2018 with the goal of presenting the refined white paper to its Board in early 2019. The underlying data previously requested by the member agencies has not yet been fully provided by MWD staff.

There are two main concerns the Water Authority has related to the white paper. First, there is insufficient data to assess the adequacy of the emergency storage requirements presented in Table 2. The emergency requirements are calculated using the difference between projected retail demands during an emergency at various reduction levels and varying “effective” local supply productions.\(^6\) The data MWD relied on came from its 2015 IRP process. It is generally acknowledged that since the 2015 IRP adoption, projected retail demands are trending lower than those estimated in the 2015 IRP.\(^7\) At the same time in recent discussions, MWD also reported that member agencies’ local

\(^3\) All of these scenarios assume the LAA does not produce any water.

\(^4\) MWD reported during the second workshop that the demand and supply numbers were based on information member agencies provided through MWD 2015 Integrated Resources Plan update process.

\(^5\) Also, the white paper did not provide the data requested by some member agencies, including the Water Authority, to support the paper’s analysis. For example, the white paper did not provide member agency level detail on how much each agency’s retail demands were expected to be reduced.

\(^6\) The “effective” local supply production is the difference between local supply production capability and “unused” local supply production.

\(^7\) Actual demands are lower than those projected in the 2015 IRP due to a variety of factors including demands rebounding slower following the Governor’s emergency drought declaration and lower population growth than that projected in the demographic forecasts used in the 2015 IRP (the Southern California Association of Governments’ 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy growth and the San Diego Association of Government’s Series 13 forecasts). Additionally, demands may continue to be lower than projected in the 2015 IRP due to the implementation of recently passed legislation, *Making Conservation a California Way of Life*. 

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supply production is tracking below the 2015 IRP’s projections – over the past 11 years (2007-2017) local supply production averaged about 460,000 acre-feet below the 2015 IRP’s projected 2.4 million acre-feet of local supply production for 2040. This reported gap was one of the rationales MWD relied on to increase its Local Resources Program target in October 2018. To adequately confirm the “new” emergency storage requirement, more understanding of the demand and supply assumptions is warranted.

Second, no other agency’s emergency water supplies were included in the development of MWD’s emergency storage “envelope,” except for the Water Authority’s. While MWD relies on member agencies’ normal-year supply production (except for the LAA’s yield), to generate the emergency storage assessment, the Water Authority’s emergency storage supplies were the only ones used to offset member agencies’ demands. For example, MWD excluded 65,000 acre-feet of emergency supplies Calleguas identified in its 2015 Urban Water Management Plan (UWMP). Similarly, more than 150,000 acre-feet of “unused local supply production” was identified in the white paper but excluded from “effective” local production – meaning this amount of local supplies, while available, is not being factored into the regional emergency storage calculation. Although MWD acknowledges that local supply production and retail demand reduction varies by member agency, it does not provide enough details to assess which member agencies have unused local supplies or which assumptions are driving these supplies being unused.

Regardless whether or how individual agencies’ emergency and unused local supplies should be factored into the development of a regional emergency storage requirement, all member agencies supplies should be treated the same. Additionally, MWD should provide the data and assumptions used in its analysis and collaborate further with its member agencies to establish the criteria used to set its emergency storage requirement. (The Water Authority’s comments on the white paper are further detailed in Attachment 2.)

Next Steps
MWD plans to compile member agencies’ comments on the white paper and then determine if a fourth workshop or additional information is needed before it seeks Board approval to adjust the emergency storage requirement. The Water Authority requested MWD remove its emergency storage supplies from this evaluation and requested more time at the member agency managers’ level to review the data and assumptions used. Moving forward, MWD said it will undertake a spatial analysis to better understand where emergency water should be stored. After MWD completes its emergency storage evaluation, it will turn to assessing its overall storage portfolio.

Prepared by: Liz Mendelson-Goossens, Senior Water Resources Specialist

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8 MWD included 90,000 acre-feet of “local storage” without confirming with the Water Authority that this water is in storage or available for MWD’s regional emergency planning purposes. Additionally, MWD does not identify the Water Authority’s ESP in its 2015 IRP.
9 Calleguas identified that it has “accumulated over 65,000 acre-feet of groundwater storage credits under FCGMA-approved programs in basins within the Calleguas service area that may be able to be pumped by purveyors during an extended emergency outage of imported supplies.” See page 8-6 of Calleguas’ 2015 UWMP found here: [http://www.calleguas.com/images/docs-documents-reports/cmwdfinal2015uwmp.pdf](http://www.calleguas.com/images/docs-documents-reports/cmwdfinal2015uwmp.pdf)
10 When local supply production is assumed to be at 100 percent of the 2015 IRP’s projections.
11 MWD defines “unused local supplies” as “the aggregated production of individual member agencies above what is needed to meet their demands,” suggesting supplies are available within a member agency but could not be used widely either due to lack of facilities or lack of MWD policy to facilitate their use.
Reviewed by: Amy Chen, Director of MWD Program
Approved by: Dennis A. Cushman, Assistant General Manager

Attachments:

Attachment 1 – MWD white paper, “2018 Evaluation of Regional Storage Portfolio Evaluation of Metropolitan’s Emergency Storage Objective”
SUMMARY

In February 2018, the Metropolitan Water District of Southern California (Metropolitan) and its member agencies embarked on a comprehensive process for the Evaluation of Regional Storage Portfolio (ERSP) to maximize potential for performance and operations of Metropolitan’s storage programs. As part of the ERSP process, a Workgroup comprised of staff from all the groups within Metropolitan and representatives from various member agencies evaluated Metropolitan’s emergency storage objective.

This White Paper provides a summary of the ERSP Workgroup process in its review of the policy, history, and criteria for evaluating Metropolitan’s emergency storage. Metropolitan’s emergency storage objective is based on the potential for major earthquake damage to the aqueducts that transport imported water supplies to Southern California. Emergency storage allows Metropolitan to deliver reserve supplies to the member agencies to supplement local supplies and help avoid severe water shortages during periods when the imported water aqueducts are out of service.

This paper also describes in detail the mechanisms that were considered by the Workgroup in updating the emergency storage objective, including: 1) updated emergency criteria, and 2) a revised methodology that shifts from the traditional single equation for determining emergency storage to an updated evaluation that considers various combinations of criteria to determine a storage amount that provides an envelope of alternatives for Metropolitan’s emergency storage.

In the review and update of emergency criteria, the Workgroup centered on the following:

- A retail demand cut back of 25 to 35 percent appears reasonable, based on the level of conservation that the region achieved during the recent drought; and
- During an emergency that severs imported supplies, a six-month aggregated loss of 10 to 20 percent of local supply seems reasonable. This loss is based on the member agencies’ reported production in the 2015 Integrated Water Resources Plan (IRP). This would allow contingency planning for some level of damage to local facilities and accommodates different durations of local repairs. This is a modification from the prior rigid assumption of full local supply production and full use of local emergency storage during an outage period.

The Workgroup discussions also led to an approach that shifted from the traditional single equation methodology for determining emergency storage towards an envelope concept. Rather than considering a specific region wide scenario of conservation and local supply loss, the Workgroup discussion led to the development of a range of emergency storage values that could provide reliability during the outage period. The concept of envelope of solutions emerged, with the idea that an envelope of solutions will yield an appropriate emergency storage objective for the region that could be achieved through various combinations of retail demand cutback and local production. This envelope concept underscores member agencies’ unique situations while taking into account their inputs in identifying practicable ranges of decreases in retail demand and local production. The Workgroup focused on an acceptable range of emergency storage values from 500,000 to 700,000 acre-feet. Within this, an emergency storage objective of 650,000 acre-feet is recommended, as this level of storage could be attained through the Workgroup identified practicable ranges of achievable conservation actions and plausible levels of local supply production during an emergency outage. It is proposed that this storage level would be revisited with each completion of a new IRP and using a similar methodology.
Background

Metropolitan’s need for emergency storage is based on the potential for major earthquake damage to the Colorado River, California, and Los Angeles Aqueducts that could isolate Southern California from its essential imported water supplies. Metropolitan’s emergency criteria assume that damage from such a catastrophic event could render the aqueducts that transport imported water supplies to Southern California out of service; thus, isolating the region from its imported water supplies. Metropolitan’s objective is to provide regional emergency storage that will allow Metropolitan to deliver reserve supplies to all its member agencies during this period of outage. The emergency storage would allow Metropolitan member agencies to supplement local supplies to help avoid severe water shortages during periods when aqueducts are out of service.

Metropolitan’s emergency storage planning criteria were previously established and reported in the following documents:

1. Final Environmental Impact Report for the Eastside Reservoir (now named the Diamond Valley Lake) dated October 1991, which was adopted by the Board on September 24, 1991;
2. Southern California’s 1996 Integrated Water Resources Plan, which was adopted by the Board on January 9, 1996;
3. Reports on Metropolitan Water Supplies dated February 2002 and March 2003;
4. 2006 IRP Implementation Report, which was presented to the Board on September 11, 2006 and transmitted on October 9, 2006;
5. Metropolitan’s Emergency Storage Requirement, report presented to the Board on May 11, 2010; and
6. The 2015 Urban Water Management Plan dated June 2016, which was adopted by the Board on May 2016

Metropolitan’s Current Emergency Criteria

Metropolitan’s current emergency storage objective is to provide a six-month water supply at 75 percent of member agencies’ retail demand under normal hydrologic conditions. Metropolitan’s emergency plan outlines that under catastrophic loss of water supply the following actions will be implemented, which serve as the criteria for determining Metropolitan’s emergency storage objective:

1. any existing interruptible water deliveries would be suspended;
2. firm supplies to member agencies would be restricted by a mandatory cutback of 25 percent from normal year retail demand levels;
3. water stored in the surface reservoirs and groundwater basins under Metropolitan’s interruptible program would be made available;
4. full local groundwater production, recycled water, and local surface emergency storage reserve production would be sustained; and
5. Metropolitan would draw on its emergency storage as well as other available storage.

Review and Update of Metropolitan’s Emergency Criteria

The following sections detail the updated assumptions and changed conditions since the last evaluation of emergency storage in 2010. This includes updated demand and supply forecasts developed for the 2015 IRP, updated studies on the potential for seismic damage and outage periods for the imported supply aqueducts, and flexibility improvements within Metropolitan’s distribution system implemented as a result
of recent drought and supply challenges. This new information is critical to the review and update of the emergency criteria, which are the basis for revising Metropolitan’s emergency storage objective.

**Outage Period Criteria**

The outage period pertains to the amount of time the regional aqueducts that deliver imported water to Southern California will be out of service. This outage period is derived from the estimated restoration timelines based on the nature of potential damage to the aqueduct coupled with the operational ability to deliver supplies to the area served by that specific aqueduct. During an emergency outage period, Metropolitan’s member agencies will depend on previously stored imported supplies to supplement continued local supply production in meeting reduced levels of retail demands. It is acknowledge that some areas would be more impacted because they are primarily or exclusively fed more directly by an imported aqueduct which is assumed to be damaged.

**Recent Seismic Studies**

In August 2015, Metropolitan, City of Los Angeles Department of Water and Power (LADWP), and California Department of Water Resources (DWR) formed the Seismic Resilience Water Supply Task Force (Task Force) for the purpose of collaborating on studies and mitigation measures to improve the reliability of imported water supplies to Southern California. The specific goals of the Task Force included:

- Revisiting historical assumptions regarding potential aqueduct outages;
- Establishing a common understanding about individual agency aqueduct vulnerability assessments, projected damage scenarios, and planning assumptions; and
- Discussing ideas for improving the resilience of Southern California’s imported water supplies through multi-agency cooperation

Through exchange of information and ideas between the three agencies and experts from the industry and academia, the Task Force assessed potential aqueduct damage and restoration timeline for M 7.8 earthquake on the San Andreas Fault. This scenario assumes impacts to the Colorado River Aqueduct (CRA), the State Water Project (SWP), and the Los Angeles Aqueduct (LAA). A complete description of probable seismic damages and repair durations presented in Metropolitan’s “Seismic Resilience Water Supply Task Force Report No. 1536” dated June 2017 ([http://www.mwdh2o.com/PDF_About_Your_Water/Report1536_Final.pdf](http://www.mwdh2o.com/PDF_About_Your_Water/Report1536_Final.pdf)).

Table 1 presents a summary of the estimated outage duration under the earthquake scenario based on the nature of damage for each of the aqueducts.

<table>
<thead>
<tr>
<th>Aqueduct</th>
<th>Estimated Outage Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado River Aqueduct</td>
<td>2 to 6 months (recovery of 80% CRA capacity)</td>
</tr>
<tr>
<td></td>
<td>3 to 5 years (recovery of 100% CRA capacity)</td>
</tr>
<tr>
<td>California Aqueduct: East Branch</td>
<td>12 to 24 months</td>
</tr>
<tr>
<td>California Aqueduct: West Branch</td>
<td>6 to 12 months</td>
</tr>
<tr>
<td>Los Angeles Aqueduct</td>
<td>18 months</td>
</tr>
</tbody>
</table>
Operational Flexibility

Metropolitan’s integrated system provides operational flexibility. The flexibility in Metropolitan’s distribution system was demonstrated during the unprecedented drought of 2014-2016. Facing consecutive years of low SWP supplies, Metropolitan pushed CRA and Diamond Valley Lake (DVL) supplies to areas that Metropolitan normally serves only with SWP supplies or at higher blend of SWP. Figure 1 illustrates Metropolitan’s operations during that period of extraordinary drought when SWP supplies were at a historic low. Metropolitan can utilize much of the same operational flexibility in its distribution system to facilitate movement of stored supplies during a prolonged outage. This flexibility combined with retail demand reduction through additional conservation and local supplies production at appropriate levels will allow the region to meet its demands in most areas during emergency outages.

Figure 1
Metropolitan Operations during Extraordinary Drought Actions (2014-16)

During an emergency outage, the region’s supplemental water needs would be met by previously stored imported supplies. These supplies would be delivered from existing DWR and Metropolitan surface reservoirs located in various parts of the region, as shown in Figure 2.

To serve the western areas that previously received SWP water, Metropolitan can draw from emergency supplies stored in Castaic, Elderberry Forebay, and Pyramid Lakes during an outage. To supplement emergency storage in this area, when 80 percent of the CRA capacity is restored within six months, CRA supplies would also be available to Metropolitan areas that are normally served with SWP supplies from the West Branch. The far western portion of Metropolitan’s service area could be supplied with up to 50 cfs of water from Greg Avenue Pump Station while repairs to the three aqueducts are being executed and in the unlikely event that stored water was not available within the Castaic/Pyramid system.

To serve the eastern areas that previously received CRA and SWP water, Metropolitan can draw from emergency supplies stored DVL, Lake Skinner, Lake Mathews, and Perris Lake during an outage. When the CRA is restored at 80 percent of capacity within six months, it could provide up to 960,000 acre-feet per
year of imported water to the region. This is more than the 15-year historic average (2003 to 2017) CRA delivery of approximately 885,000 acre-feet per year and more than the 2015 IRP CRA delivery target of 900,000 acre-feet per year for a normal year. Some areas that normally receive SWP water from the East Branch may be served by delivering DVL water to Mills through the Inland Feeder/Lakeview Pipeline intertie. Metropolitan recognizes that there are currently no options to supply the Rialto Pipeline from emergency storage reservoirs during an outage of the East Branch of the California Aqueduct. However, water stored in Silverwood Lake (which is not included in Metropolitan’s emergency storage portfolio) would be available to supply the Rialto Area as soon as repairs to damaged penstocks and pipelines downstream of Silverwood Lake are completed. This would likely require far less time than repairs to the East Branch north of Silverwood Lake. In addition, other potential options to supply the Rialto region include several pump back operations and increased groundwater storage and extraction capacity for emergencies.

Metropolitan will continue to deliver treated water, from stored emergency supplies during outage and from imported supplies upon service restoration, through Metropolitan’s existing water treatment plants that are located throughout the service area. Four of Metropolitan’s five water treatment plants have redundant power feeds from the power provider and a project is currently underway to equip the fifth plant with a redundant power feed. All five water treatment plants have backup emergency generators that support all treatment processes with the exception of ozone. Emergency disinfection by chlorine is used when the plants are reliant on generator power for treatment operations during a loss of utility power.

**Figure 2**

**Existing DWR and Metropolitan Surface Reservoirs South of the San Andreas Fault**

*Updated Outage Criteria*

In updating the emergency outage criteria, both the duration of aqueduct repair based on the nature of potential seismic damage and recently demonstrated operational flexibilities of Metropolitan’s distribution system are taken into consideration.
Figure 3 shows the range of outage durations for the CRA, California Aqueduct East and West Branches, and the LAA. The effective outage period is then derived by considering the estimated durations of repair for each regional aqueduct coupled with the operational ability to deliver supplies to the area served by that specific aqueduct. The following operational assumptions are considered:

- The estimated 18-month outage duration and repair of LAA under the earthquake scenario is longer than that of the California Aqueduct West Branch. The West Branch is estimated to be back in service within one year and can then supply water to LADWP through LA-35 while the LAA is being repaired.
  
  ➢ **Outage period update: 12 months for areas receiving supplies from West Branch and LAA.**

- The estimated outage duration and repair time for East Branch under the earthquake scenario is from 12 to 24 months. However, when 80 percent of the CRA capacity comes back in service within 6 months, CRA supplies will be available to Metropolitan to areas that normally receive SWP supplies. Thus, many areas that are normally served with water imported through the East Branch may be served with water imported through the CRA, using delivery of DVL water to Mills and several other options that should be evaluated in the Rialto area discussed above.

  ➢ **Outage period update: 6 months for areas receiving supplies from CRA and East Branch.**

Thus, using these assumptions, the effective new outage criteria presented in Figure 3 below call for storing supplemental supplies for 12 months in the West Branch and LAA areas (supplied by emergency storage in Castaic, Pyramid, and Elderberry) and 6 months in the CRA and East Branch areas (supplied by emergency storage in Perris, Skinner, Mathews, and DVL). In addition to the 12-month stored emergency supplies, West Branch areas could also be served with CRA supplies within 6 months to help meet demands in areas normally served with SWP supplies and higher blend areas.

![Updated Emergency Outage Criteria](image)

**Retail Demand Cut Back Criteria**

**Demand Projection**

The first step in calculating the emergency storage objective is to determine the total amount of emergency demand for each member agency. The emergency storage objective is intended to meet supplemental water demands on Metropolitan during an emergency outage now updated to a period of 6 to 12 months. In addition, during emergency outage, all interruptible deliveries are assumed to be suspended. Table 2 below shows the firm demands, under normal-year (or average condition), remaining after interruptible deliveries are subtracted from the total retail demand. Calculations are provided for the current year 2018, with numbers from the last emergency storage evaluation reported to the Board in May 2010 presented for comparison. The demands in Table 2 were calculated at the member agency level, with the figures shown in this table representing the aggregate total retail demand (M&I and agricultural), replenishment, and
seawater barrier demands over the emergency outage period considered. The total retail demands are based on forecasts from the Southern California Association of Government’s (SCAG) 2012 Regional Transportation Plan/Sustainable Community Strategy and from the San Diego County Association of Government’s (SANDAG) Series 13: 2050 Regional Growth Forecast (October 2013) forecast. The SCAG and SANDAG regional growth forecasts are the core assumptions in the econometric demand modeling for Metropolitan’s 2015 IRP.

Table 2
Firm Retail Demands (Average Year)
(Acre-Feet)

<table>
<thead>
<tr>
<th></th>
<th>2010 Demands for 6 months</th>
<th>2018 Demands for 6 to 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Retail Demand</td>
<td>2,284,744</td>
<td>2,735,617</td>
</tr>
<tr>
<td>Replenishment</td>
<td>(95,651)</td>
<td>(197,103)</td>
</tr>
<tr>
<td>Seawater Barrier</td>
<td>(31,127)</td>
<td>(52,000)</td>
</tr>
<tr>
<td>Firm Retail Demand</td>
<td>2,157,966</td>
<td>2,486,514</td>
</tr>
</tbody>
</table>

Reduced Retail Demands during Emergency Outage

The next step in calculating the emergency storage demand on Metropolitan is to subtract the mandatory percentage reduction, or cut back, in water use from the retail demands. For illustrative purposes, Table 3 below shows resulting reduction in retail demands during emergency outage after a mandatory cut back of 25 percent is imposed for both 2010 and 2018 average condition retail demands. The 2010 calculation assumes a 100 percent reduction in deliveries to Interim Agricultural Water Program (IAWP) demands, which is not applicable in 2018 since the IAWP was discontinued in 2012. The demands in Table 3 are calculated at the member agency level, with the figures representing the aggregated total over the emergency outage period considered.

The assumption of a 25 percent retail demand cut back is a planning criterion that is consistent with previous Metropolitan studies that showed overall outdoor water use at approximately 30 percent. That cut back criterion is also consistent with the Public Policy Institute of California (PPIC) report (Building Drought Resilience in California’s Cities and Suburbs, June 2017) based on lessons learned during drought. A higher austerity and public awareness during an emergency outage may support a higher cut back through achievable conservation actions.

Table 3
Retail Level Emergency Demands (Average Year)
(Acre-Feet)

<table>
<thead>
<tr>
<th></th>
<th>2010 Demands for 6 months</th>
<th>2018 Demands for 6 to 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Retail Demand</td>
<td>2,157,966</td>
<td>2,486,514</td>
</tr>
<tr>
<td>25% Mandatory Reduction</td>
<td>(539,492)</td>
<td>(621,629)</td>
</tr>
<tr>
<td>100% IAWP Reduction</td>
<td>(37,046)</td>
<td>N/A</td>
</tr>
<tr>
<td>Retail Demand during Emergency</td>
<td>1,581,429</td>
<td>1,864,885</td>
</tr>
</tbody>
</table>

Local Production Level Criteria
The next step in the emergency storage calculation is to determine the amount of local supplies available to meet demands at the member agency level. For the 2010 evaluation, the calculation assumed full local supply production and full use of local emergency storage, also described as 100 percent of the local production reported in the IRP. For illustrative purposes for 2018, Table 4 below presents the local supply production at 100 percent, 90 percent, and 80 percent of the production level developed with the member agencies for the 2015 IRP. The LAA production is excluded from this calculation because the emergency storage objective also assumes the loss of all imported water supplies. The sum of an agency’s locally produced supplies and local emergency storage represents the total amount of local supplies available to them. Table 4 shows the aggregate total for each type of local supplies over the emergency outage period considered. The Unused Local Production represents the aggregated production of individual member agencies above what is needed to meet their demands. In contrast, the Effective Local Production is the aggregated amount of local supplies that are produced to meet the reduced retail demands during an emergency outage. The effective production is derived by subtracting unused local supply production from the aggregate total local production. This analysis assumes that these local supplies would not be used to meet the demands of other member agencies.

### Table 4

<table>
<thead>
<tr>
<th>Effective Local Production (Acre-Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010 Local Production for 6 months</td>
</tr>
<tr>
<td>100%</td>
</tr>
<tr>
<td>Groundwater</td>
</tr>
<tr>
<td>Surface Water</td>
</tr>
<tr>
<td>Recycling and GW Recovery</td>
</tr>
<tr>
<td>Seawater Desalination</td>
</tr>
<tr>
<td>Los Angeles Aqueduct</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Local Emergency Storage</td>
</tr>
<tr>
<td>IRP Targets(^{(1)})</td>
</tr>
<tr>
<td>Subtotal Local Production</td>
</tr>
<tr>
<td>Unused Local Production</td>
</tr>
<tr>
<td>Effective Local Production</td>
</tr>
</tbody>
</table>

Note: (1) Conservation and local supply targets from the 2015 IRP for Year 2018.

The member agency local production data is included as Attachment 1. The local production numbers are approximation of year 2018 from the 2015 IRP and are estimated for the 6-month and 12-month emergency outage periods. The total of these numbers allow Metropolitan to calculate the Emergency Storage Objective for the region.

### Emergency Demands on Metropolitan

The final step in calculating the emergency storage objective is to subtract the effective local production from the retail demands during an emergency outage for each member agency. The results of this aggregation represent the total supplemental water demands on Metropolitan, which in essence is Metropolitan’s Emergency Storage Objective during an outage period. Table 5 shows the aggregated
totals for 2010, and the aggregated totals at varying local production levels for 2018. This table illustrates an unexpected similarity in emergency demand in 2010 and 2018 (for the 100% local production case), at 626,400 acre-feet and 629,700 acre-feet respectively, even though a longer period of outage is considered for the 2018 evaluation. However, as shown in the table below for the 2018 calculation, the higher retail demands during this longer emergency period is counterbalanced by the higher aggregated total effective local production within the same emergency period. The table below also illustrates that the emergency demand on Metropolitan, and in effect Metropolitan’s Emergency Storage Objective, increases as effective local production decreases under the 90 percent and 80 percent scenarios.

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Emergency Demands on Metropolitan (Acre-Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Production</td>
<td>2010 Emergency Storage Evaluation</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Retail Demand during Emergency</td>
<td>1,581,429</td>
</tr>
<tr>
<td>Effective Local Production</td>
<td>(955,029)</td>
</tr>
<tr>
<td>Metropolitan Emergency Demand</td>
<td>626,400</td>
</tr>
</tbody>
</table>

Sensitivity Analysis
In the discussions for the review and update of Metropolitan’s emergency criteria, the two basic questions needing consideration are: 1) the appropriate level of mandatory retail demand cutback based on additional conservation that may be achieved during an emergency outage, and 2) the level of sustainable local supply production considering the potential damage that could beset local facilities during the design earthquake scenario. To explore the sensitivities of the emergency storage objective from these two criteria, Metropolitan performed additional evaluation at various percentages of demand cut backs and levels of local production.

Table 6 shows the resulting Metropolitan emergency storage objective at various combinations of retail demand cutback and local production levels, based on the 2015 IRP supply and demand conditions for year 2018. This matrix of emergency storage values presents retail demand cut backs of 0 percent, 25 percent, 35 percent, and 50 percent and local supply production levels of 100 percent, 90 percent, and 80 percent.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Metropolitan’s Emergency Storage Objective for Year 2018 (Acre-Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Production Level</td>
<td>Retail Demand Cutback</td>
</tr>
<tr>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>100%</td>
<td>1,120,600</td>
</tr>
<tr>
<td>90%</td>
<td>1,236,200</td>
</tr>
<tr>
<td>80%</td>
<td>1,373,100</td>
</tr>
</tbody>
</table>
Envelope Concept for Metropolitan’s Emergency Storage Objective

Rather than considering a specific region wide scenario of conservation and local supply loss, the Workgroup discussion led to the development of a range of emergency storage values that could provide reliability during the outage period. The concept of an envelope of solutions emerged, with the idea that an envelope of solutions will yield an appropriate emergency storage objective for the region. The emergency storage objective, in turn, could be achieved through various combinations of retail demand cutback from achievable conservation and local production level taking into account potential damages to local facilities. This envelope concept underscores member agencies’ individual and unique situations while taking into account their inputs in identifying practicable ranges of decreases in retail demand and local production.

For the retail demand cut back, most member agencies considered the 25 to 35 percent range to be reasonable, based on the level of conservation that the region was able to achieve during the recent drought. For the local supply production, several member agencies expressed expectations of some level of damage to local facilities during the design earthquake scenario. Thus, for local production, the Workgroup focused on a range from 80 percent to 100 percent of the member agencies’ reported local production in the 2015 IRP. This would allow contingency planning for uncertainties in damage to local facilities and to accommodate different durations of local repairs during an emergency outage. This is a modification from the previous rigid assumption of full local supply production and full use of local emergency storage at the IRP level during an outage period.

As indicated in Table 6, the current criteria of 25 percent retail demand cut back and 100 percent local production level yield an estimated emergency storage objective of 630,000 acre-feet for year 2018. In addition, as highlighted from the same table matrix of values, the Workgroup focused on an acceptable range of emergency storage values from 500,000 to 700,000 acre-feet, which could provide reliability during the outage period. Within this range, an emergency storage objective of 650,000 acre-feet is recommended, as this level of storage could be attained through the Workgroup identified practicable ranges of achievable conservation actions and plausible levels of local supply production during an emergency outage. Figure 4 shows that the emergency storage objective could be achieved through various combinations within the practicable ranges of decreases in retail demand and local production.

Figure 4
Emergency Storage Objective derived from Envelope of Solution

![Figure 4](attachment:figure_4.png)
Allocation of Emergency Storage in Regional Reservoirs

Once the total emergency storage is determined, it can then be allocated to the various surface reservoirs within the region, previously illustrated in Figure 2 above, south of the San Andreas Fault system. The total storage capacity of existing DWR and Metropolitan surface reservoirs and the allocation to emergency storage, seasonal, regulatory, and drought carryover needs are shown in Table 7 through 11. For the DWR reservoirs, the values in the tables reflect the normal maximum operating and dead pool storages indicated in the DWR report “California State Water Project, Volume III, Storage Facilities, Bulletin 200” dated November 1974. For this evaluation, recreational waters in DWR reservoirs are assumed to be available for use during emergency outage periods. On a short-term basis for operational purposes, storage at any specific reservoir may be below these planning levels. When this happens, the emergency storage is shifted temporarily to any of the other existing reservoirs.

Department of Water Resources Surface Reservoirs

Table 7 below shows the five major reservoirs owned and operated by DWR in or near Metropolitan’s service area. Castaic Lake, Elderberry Forebay, and Pyramid Lake are located on the West Branch of the California Aqueduct. Silverwood Lake and Lake Perris are on the East Branch of the California Aqueduct. The total storage capacity of these five reservoirs is approximately 721,600 acre-feet. When cost allocation factors from DWR Bulletin 132 Appendix B, Table B-2 are applied to the operational storage capacities, Metropolitan’s share of storage in the reservoirs is equivalent to 644,400 acre-feet.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Total Storage Capacity</th>
<th>Dead Storage</th>
<th>Storage Paid by Others</th>
<th>Storage Paid by Metropolitan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyramid Lake</td>
<td>169,900</td>
<td>4,800</td>
<td>7,000</td>
<td>158,100</td>
</tr>
<tr>
<td>Castaic Lake</td>
<td>323,700</td>
<td>18,600</td>
<td>12,500</td>
<td>292,600</td>
</tr>
<tr>
<td>Elderberry Forebay</td>
<td>28,200</td>
<td>800</td>
<td>1,100</td>
<td>26,300</td>
</tr>
<tr>
<td>Silverwood Lake</td>
<td>73,000</td>
<td>4,000</td>
<td>24,300</td>
<td>44,700</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>126,800</td>
<td>4,100</td>
<td>0</td>
<td>122,700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>721,600</strong></td>
<td><strong>32,300</strong></td>
<td><strong>44,900</strong></td>
<td><strong>644,400</strong></td>
</tr>
</tbody>
</table>


From 2005 to 2017, DWR temporarily lowered the maximum storage elevation in Lake Perris because of seismic safety issues. This elevation change resulted in reduction of storage available to Metropolitan in Lake Perris, which was taken into account in past emergency storage evaluations. In 2018, the seismic retrofit of Lake Perris was completed, which restored storage to its full capacity. For purposes of the emergency storage analysis provided herein, it is assumed that 122,700 acre-feet would be available to Metropolitan from Lake Perris. Furthermore, the Monterey Amendment, executed by the DWR and most of the State Water Contractors in 1995 and 1996, addresses the allocation of SWP water in times of shortage and deals with a number of other issues that facilitate more water management flexibility for Contractors.

Table 8 shows the distribution of Metropolitan’s emergency storage in DWR reservoirs. Of the total 644,400 acre-feet of storage in DWR Reservoirs that is for Metropolitan use, almost 381,000 acre-feet of this amount is allocated to emergency storage and the remaining 263,600 acre-feet is for seasonal,
Silverwood Lake capacity does not add to the total Emergency Storage Capacity because of its location outside of major earthquake faults assumed for the emergency storage calculation methodology. However, Silverwood Lake could be available after a seismic event upon restoration of any damaged distribution system downstream of the lake. It is expected that the portion of the distribution system downstream of the lake could be restored more expeditiously after an event due to accessibility of the pipelines and redundancies in the system.

### Table 8

**Allocation of Emergency Storage in DWR Reservoirs**

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Metropolitan Storage Capacity</th>
<th>Seasonal, Regulatory and Dry-Year Storage</th>
<th>Emergency Storage Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyramid Lake</td>
<td>158,100</td>
<td>0</td>
<td>158,100</td>
</tr>
<tr>
<td>Castaic Lake</td>
<td>292,600</td>
<td>153,900</td>
<td>138,700</td>
</tr>
<tr>
<td>Elderberry Forebay</td>
<td>26,300</td>
<td>0</td>
<td>26,300</td>
</tr>
<tr>
<td>Silverwood Lake</td>
<td>44,700</td>
<td>44,700</td>
<td>0</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>122,700</td>
<td>65,000</td>
<td>57,700</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>644,400</strong></td>
<td><strong>263,600</strong></td>
<td><strong>380,800</strong></td>
</tr>
</tbody>
</table>

**Metropolitan Surface Reservoirs**

Table 9 shows the allocation of storage resources in Metropolitan’s three major surface reservoirs, Lake Mathews, Lake Skinner, and DVL. The three reservoirs provide approximately 1,036,000 acre-feet of total storage capacity to Metropolitan’s service area.

Lake Mathews has available storage of approximately 178,500 acre-feet and distributes CRA water to Riverside, Orange, Los Angeles, and San Bernardino counties. Lake Skinner has approximately 43,800 acre-feet of available storage and receives CRA and SWP water for distribution to Riverside and San Diego counties. DVL is Southern California’s largest reservoir with approximately 810,000 acre-feet of total capacity, with 798,500 acre-feet of available capacity to meet demands and provide emergency water supplies.

### Table 9

**Allocation of Storage Capacities in Metropolitan Reservoirs**

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Total Storage Capacity</th>
<th>Dead Storage</th>
<th>Available Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Mathews</td>
<td>182,000</td>
<td>3,500</td>
<td>178,500</td>
</tr>
<tr>
<td>Lake Skinner</td>
<td>44,000</td>
<td>200</td>
<td>43,800</td>
</tr>
<tr>
<td>Diamond Valley Lake</td>
<td>810,000</td>
<td>11,500</td>
<td>798,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,036,000</strong></td>
<td><strong>15,200</strong></td>
<td><strong>1,020,800</strong></td>
</tr>
</tbody>
</table>

Table 10 shows the components of storage, including emergency, seasonal, regulatory, and dry-year storages, for all of Metropolitan’s reservoirs. For comparison purposes, the table also illustrates the distribution of emergency storage under the current criteria with 630,000 acre-feet and under the envelop.
concept with 650,000 acre-feet of recommended emergency storage objective. Under the 630,000 acre-feet scenario, out of the roughly 1,021,000 acre-feet of available Metropolitan storage capacity, approximately 248,900 acre-feet are reserved for emergency storage, with the remaining 771,900 acre-feet available for seasonal, regulatory, and dry-year storage. Under the envelope concept of 650,000 acre-feet, out of the roughly 1,021,000 acre-feet of available Metropolitan storage capacity, approximately 269,200 acre-feet are reserved for emergency storage, with the remaining storage capacity available for seasonal, regulatory, and dry-year storage.

### Table 10
Allocation of Emergency Storage in Metropolitan Reservoirs
(Acre-Feet)

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Available Capacity</th>
<th>Emergency Storage Objective</th>
<th>Emergency Storage Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Seasonal, Regulatory and Drought Storage</td>
<td>Emergency Storage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seasonal, Regulatory and Drought Storage</td>
<td>Emergency Storage</td>
</tr>
<tr>
<td>Lake Mathews</td>
<td>178,500</td>
<td>100,000</td>
<td>78,500</td>
</tr>
<tr>
<td>Lake Skinner</td>
<td>43,800</td>
<td>10,000</td>
<td>33,800</td>
</tr>
<tr>
<td>Diamond Valley Lake</td>
<td>798,500</td>
<td>661,900</td>
<td>136,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,020,800</strong></td>
<td><strong>771,900</strong></td>
<td><strong>248,900</strong></td>
</tr>
</tbody>
</table>

### Table 11
Emergency Storage Capacities in DWR and Metropolitan Reservoirs

The Table 11 presents a summary comparison of Metropolitan’s emergency storage from 2010 and the current 2018 calculations using the recommended emergency storage objective of 650,000 acre-feet under the envelope concept. The table below also shows the emergency storage in DWR Reservoirs, Lake Mathews, and Lake Skinner to be fixed quantities, with any remaining need reflected as changes in DVL’s emergency storage allocation.

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>2010 Emergency Storage Evaluation</th>
<th>2018 Emergency Storage Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current Criteria at 630 TAF</td>
<td>Envelope Concept at 650 TAF</td>
</tr>
<tr>
<td>Pyramid Lake</td>
<td>158,300</td>
<td>158,100</td>
</tr>
<tr>
<td>Castaic Lake</td>
<td>139,500</td>
<td>138,700</td>
</tr>
<tr>
<td>Elderberry Forebay</td>
<td>31,100</td>
<td>26,300</td>
</tr>
<tr>
<td>Lake Perris</td>
<td>5,400</td>
<td>57,700</td>
</tr>
<tr>
<td>Lake Mathews</td>
<td>78,500</td>
<td>78,500</td>
</tr>
<tr>
<td>Lake Skinner</td>
<td>33,800</td>
<td>33,800</td>
</tr>
<tr>
<td>Diamond Valley Lake</td>
<td>179,800</td>
<td>136,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>626,400</strong></td>
<td><strong>629,700</strong></td>
</tr>
</tbody>
</table>
### Attachment 1

2018 Member Agency Local Production  
(Source data for Table 4)

<table>
<thead>
<tr>
<th>Agencies at 6 month Outage</th>
<th>Groundwater</th>
<th>Surface Production</th>
<th>Recycling - GW Recovery</th>
<th>Reclamation</th>
<th>Other Imports</th>
<th>Seawater Desal</th>
<th>Local Storage</th>
<th>ISOP Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foothill MWD</td>
<td>3,970</td>
<td>260</td>
<td>120</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>67</td>
</tr>
<tr>
<td>Pasadena</td>
<td>6,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>118</td>
</tr>
<tr>
<td>San Marino</td>
<td>2,260</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Three Valleys MWD</td>
<td>21,650</td>
<td>3,100</td>
<td>4,384</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>447</td>
</tr>
<tr>
<td>Upper San Gabriel MWD</td>
<td>74,163</td>
<td>4,500</td>
<td>4,354</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>625</td>
</tr>
<tr>
<td>Anaheim</td>
<td>23,832</td>
<td>0</td>
<td>39</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>249</td>
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<tr>
<td>Fullerton</td>
<td>10,376</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>104</td>
</tr>
<tr>
<td>MWDCC</td>
<td>197,945</td>
<td>2,000</td>
<td>93,163</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,661</td>
</tr>
<tr>
<td>Santa Ana</td>
<td>13,476</td>
<td>0</td>
<td>160</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>139</td>
</tr>
<tr>
<td>Eastern MWD</td>
<td>40,460</td>
<td>1,550</td>
<td>25,112</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>859</td>
</tr>
<tr>
<td>Western MWD</td>
<td>73,700</td>
<td>2,750</td>
<td>21,295</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,064</td>
</tr>
<tr>
<td>IEUA</td>
<td>74,860</td>
<td>16,240</td>
<td>29,573</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>963</td>
</tr>
<tr>
<td>San Diego County Water Authority</td>
<td>5,230</td>
<td>24,536</td>
<td>19,956</td>
<td>0</td>
<td>25,319</td>
<td>90,000</td>
<td>18,007</td>
<td>2,264</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agencies at 12 month Outage</th>
<th>Groundwater</th>
<th>Surface Production</th>
<th>Recycling - GW Recovery</th>
<th>Reclamation</th>
<th>Other Imports</th>
<th>Seawater Desal</th>
<th>Local Storage</th>
<th>ISOP Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Basin MWD</td>
<td>182,300</td>
<td>0</td>
<td>65,972</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,590</td>
</tr>
<tr>
<td>Compton</td>
<td>6,400</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>56</td>
</tr>
<tr>
<td>Long Beach</td>
<td>28,760</td>
<td>0</td>
<td>10,118</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>462</td>
</tr>
<tr>
<td>Torrance</td>
<td>2,700</td>
<td>0</td>
<td>9,150</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>207</td>
</tr>
<tr>
<td>West Basin MWD</td>
<td>34,600</td>
<td>0</td>
<td>33,621</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,173</td>
</tr>
<tr>
<td>Santa Monica</td>
<td>8,200</td>
<td>0</td>
<td>145</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>109</td>
</tr>
<tr>
<td>Burbank</td>
<td>300</td>
<td>0</td>
<td>13,585</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>153</td>
</tr>
<tr>
<td>Glendale</td>
<td>1,500</td>
<td>0</td>
<td>8,964</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>221</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>77,784</td>
<td>0</td>
<td>11,681</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,070</td>
</tr>
<tr>
<td>San Fernando</td>
<td>3,143</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>Calleguas MWD</td>
<td>23,710</td>
<td>0</td>
<td>7,483</td>
<td>13,100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,190</td>
</tr>
<tr>
<td>Poway Hills</td>
<td>0</td>
<td>0</td>
<td>700</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>Las Virgenes MWD</td>
<td>100</td>
<td>0</td>
<td>4,804</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>207</td>
</tr>
</tbody>
</table>

**MWD TOTAL**  
832,000  54,335  353,787  13,100  25,319  90,000  18,007  1,387,238

Note: Member agency local production are approximation for year 2018 based on 2015 ISOP and are estimated for the outage periods indicated. The total of these numbers allow Metropolitan to calculate its Emergency Storage Objective for the region. For agencies along the Rialto Pipeline, see discussion on page 5 related to system limitations for receiving CRA supplies.
November 13, 2018

Mr. Brad Coffey
Group Manager, Water Resource Management
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153


Dear Mr. Coffey,

The Water Authority appreciates the opportunity to provide comments on the draft White Paper, 2018 Evaluation of Regional Storage Portfolio Evaluation of Metropolitan’s Emergency Storage Objective. Based on our review (and in order to properly advise the Water Authority’s MWD Board representatives), we request that the member agencies be provided with the underlying data upon which the White Paper recommendations are based, and convene an additional workshop among MWD staff and the member agencies. The additional workshop would provide an important opportunity to fully understand and agree upon the assumptions used to develop the 12 scenarios for the increased emergency storage requirement, based on the available underlying data, prior to submittal to the Board of Directors for deliberation. Pending receipt of this data, we submit the following preliminary comments and questions for future consideration and discussion.

The White Paper correctly notes that the purpose of MWD’s emergency storage is to “allow MWD to deliver reserve supplies to the member agencies to supplement local supplies and help avoid severe water shortages during periods when the imported water aqueducts are out of service” (emphasis added). And yet, the White Paper erroneously includes the Water Authority’s Emergency Storage Program (ESP) water supply as part of MWD’s regional storage. The Water Authority’s ESP supply is a local water supply that was wholly paid for by its ratepayers, planned and designed to meet the San Diego region’s needs during an emergency. By contrast, no other member agency’s local emergency water supplies were included in the respective local supply production assumptions contained in the White Paper. This apparent error must be corrected in order to avoid skewing results.

While we have no objection generally to MWD’s new “envelope” methodology, we would like to understand how current supply and demand projections have been considered in the development of the revised emergency storage objective. Reliance on the 2015 Integrated Water Resources Plan (IRP) for baseline demand and supply projections to set the emergency target, as the white paper proposes, should be tested against current supply and demand projections.
November 13, 2018
Mr. Coffey
Page 2

We appreciate the staff work to date on this subject and look forward to continuing the Workgroup process in order to provide a solid foundation for the Board's future deliberation of this subject as part of its evaluation of MWD's regional storage portfolio.

Sincerely,

Amy Chen
Director of MWD Program

cc: Maureen A. Stapleton, General Manager
    Jeff Kightlinger, MWD General Manager
November 28, 2018

Attention: Imported Water Committee

Colorado River Board Representative’s report. (Discussion)

Purpose
The Colorado River Board (CRB) Representative’s report summarizes monthly activities of the Colorado River Board of California.

Discussion
This report covers activities from the November 14, 2018 CRB meeting in Ontario, California.

Agency Updates
The following CRB agencies provided updates:

- Department of Water Resources (DWR) – DWR reported there has been a dry start to the water year with one storm system in the beginning of October. DWR is sponsoring an event in partnership with the Water Education Foundation, Scripps Institution of Oceanography, and NASA Jet Propulsion Laboratory on December 5 at UC Irvine on “Understanding Our Ability to Predict the Winter’s Precipitation.”
- Metropolitan Water District of Southern California (MWD) – MWD’s total reservoir storage is at 81 percent of capacity and total deliveries for the year are 1.35 million acre feet (MAF). It was reported that a U.S. military helicopter accidentally took out four miles of MWD ground wire, which transports electricity from Lake Mead to MWD facilities. The lines are now back in full service.

Colorado River Basin Water Report
The Colorado River Basin Forecast Center (CBRFC) held an Upper Colorado Stakeholder Engagement Forum in Denver, Colorado on October 25. CBRFC staff provided an update on improvements to the intervening flow forecast between Lakes Powell and Mead as well as efforts to address declining precipitation trends in forecasting. Water supply and storage conditions as of the November 13, 20181 Bureau of Reclamation (Reclamation) Weekly Water Supply Report are shown in Table 1.

<table>
<thead>
<tr>
<th>Conditions as of Nov. 13</th>
<th>Volume (MAF)</th>
<th>Percent of Capacity</th>
<th>Elevation (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Powell</td>
<td>10.61</td>
<td>44%</td>
<td>3,587.70</td>
</tr>
<tr>
<td>Lake Mead</td>
<td>9.97</td>
<td>38%</td>
<td>1,079.50</td>
</tr>
<tr>
<td>Total System Storage</td>
<td>27.55</td>
<td>46%</td>
<td>---</td>
</tr>
</tbody>
</table>

| Water Year 2019 Precipitation | 119% of average* |
| October Observed Inflow to Lake Powell | 69% of average |

*Precipitation values may vary significantly week-to-week early in the water year.

---

1 These hydrologic conditions are updated from those reviewed at the CRB meeting.
Drought Contingency Plan (DCP) Status
The four draft final interstate DCP agreements were posted on Reclamation’s website October 9. A drafting group is now working with the Basin States Principals to develop a proposed Seven States letter that will go to congressional delegations to express support for the Upper and Lower Basin DCPs and seek federal legislation that would direct the Secretary of Interior to implement the DCPs. This will be the cover letter to the four interstate DCP agreements and draft federal legislation which will be sent to congressional representatives for all seven states. Arizona is coming closer to finalizing its intrastate agreements so that this letter may be finalized and submitted by late-November. It is expected that finalization of the DCP documents will occur by the end of the calendar year.

Minute 323 Implementation
The Minute 323 Binational Desalination Work Group developed a proposal for a cost share agreement to prepare a study of binational desalination opportunities in the Sea of Cortez pursuant to section IX B of Minute 323. This section calls for opportunities for joint cooperative projects to increase delivery or exchange of Colorado River water to benefit both the U.S. and Mexico. The total cost of preparing the report is estimated at $600,000. Cost-sharing partners include: Central Arizona Water Conservation District, Arizona Department of Water Resources, Salt River Project Agricultural and Improvement and Power District, Southern Nevada Water Authority, the Six Agency Committee, and Freeport-McMoRan Inc. The report is expected to be completed by May 2020, upon funding approval.

Tribal Water Supply and Demand Study Report
Reclamation released a preliminary draft of the Colorado River Basin Tribal Water Supply and Demand Study report in late October. This report has been under development since 2014 and aims to: assess current and future water development for tribes of the Ten Tribes Partnership, assess system impacts resulting from development of tribal water including unused tribal water, and identify tribal water development challenges and opportunities. It is planned that the report will be published in mid-December.

Glen Canyon Dam Adaptive Management Program
The Technical Work Group met via webinar October 10 to discuss and approve a high flow experiment this fall at Glen Canyon Dam to flush out sediments to riparian beaches for recreation and habitat. There were concerns the experiment would also flush non-native fish downstream and spread their populations. The Department of Interior decided to move forward, and the experiment was conducted November 5-8.

Lower Colorado River Multi-Species Conservation Program (LCRMSCP)
The LCRMSCP Steering Committee met October 24 in Las Vegas, Nevada to approve a $9.73 million payment to enter into a 635-acre land conservation easement in Palo Verde Valley, California, of which the land is owned by MWD. A presentation was also given by the U.S. Fish and Wildlife Service to down-list the razorback sucker from endangered to threatened.
November 28, 2018

Attention: Imported Water Committee

Salton Sea Quantification Settlement Agreement Promotional Video. (Presentation)

Purpose
This presentation introduces the Water Authority’s new Salton Sea Quantification Settlement Agreement (QSA) Promotional Video entitled “Partnering for the Future – A Sustainable Salton Sea”.

Discussion
The concept of the Water Authority’s Salton Sea QSA promotional video stemmed from the desire to showcase the Water Authority’s partnership in mitigation efforts at the Salton Sea and the work that has been carried out by the QSA Joint Powers Authority (JPA). The video, recently completed by staff inhouse, will serve as a stakeholder outreach tool to be shown at events such as Imperial Valley outreach tours and MWD inspection trips, and will also be shared with key community leaders and decision makers. The video provides a brief history of the QSA and the Salton Sea and specifically highlights the importance of the Water Authority’s investment in QSA supplies. It also discusses the QSA JPA’s and State of California’s distinct but complimentary mitigation and restoration programs at the Salton Sea.

This presentation will provide a preview of the video, discuss its purpose and use, and overview next steps.

Prepared by:  Kimberlyn Velasquez, Water Resources Specialist
Kara Mathews, Senior Water Resources Specialist

Reviewed by: Kelly Rodgers, Director of Colorado River Program

Approved by: Dan Denham, Assistant General Manager
November 28, 2018

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)

Name of Case: SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-516389; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case Nos. S243500; and S251025

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code §54956.9(d)(1), to discuss the above-referenced matter at the December 6, 2018 meeting.

A closed session has also been included on the agenda of the formal Board of Directors’ meeting. Unless the Board desires additional discussion, it is not staff’s intention to ask for a closed session with the full Board at that time, but staff may request action to confirm directions given or action recommended by the committee.

Prepared by: Mark J. Hattam, General Counsel
November 28, 2018

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)
Name of Case: California Department of Water Resources v. All Persons Interested;
Sacramento Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and
JCCP 4942

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code
§54956.9(d)(1), to discuss the above-referenced matter at the December 6, 2018 meeting.

A closed session has also been included on the agenda of the formal Board of Directors’
meeting. Unless the Board desires additional discussion, it is not staff’s intention to ask for a
closed session with the full Board at that time, but staff may request action to confirm directions
given or action recommended by the committee.

Prepared by: Mark J. Hattam, General Counsel
November 28, 2018

Attention: Imported Water Committee

CLOSED SESSION:
Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)
Name of Case: Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested in the Matter; Los Angeles Superior Court Case No. BC 720692

Purpose
This memorandum is to recommend a closed session, pursuant to Government Code §54956.9(d)(1), to discuss the above-referenced matter at the December 6, 2018 meeting.

A closed session has also been included on the agenda of the formal Board of Directors’ meeting. Unless the Board desires additional discussion, it is not staff’s intention to ask for a closed session with the full Board at that time, but staff may request action to confirm directions given or action recommended by the committee.

Prepared by: Mark J. Hattam, General Counsel
LEGISLATION AND PUBLIC OUTREACH COMMITTEE

AGENDA FOR

DECEMBER 6, 2018

Christy Guerin – Chair    Frank Hilliker
Jerry Butkiewicz – Vice Chair    Jim Madaffer
Matt Hall – Vice Chair    Ron Morrison
Gary Arant    Mark Muir
Chris Cate    Ron Roberts
Gary Croucher    Joel Scalzitti
Betty Evans    Fern Steiner
Ed Gallo

1. Roll call – determination of quorum.

2. Additions to agenda (Government Code Section 54954.2(b)).

3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.

4. Chair’s report.
   4-B Directors’ comments.

I. CONSENT CALENDAR

1. Water Conservation Authority Amended and Restated Joint Powers Agreement.
   Staff recommendation: Approve the Amended and Restated Joint Powers Agreement creating the Water Conservation Authority. Authorize the Water Authority’s representative to the Water Conservation Authority to sign the final agreement on behalf of the Water Authority Board of Directors. (Action)

II. ACTION/DISCUSSTION/PRESENTATION

1. Legislative issues.
   1-A Washington report by Ken Carpi. (In person report) (Supplemental Materials)
1-B Sacramento Report

1-C Proposed 2019 Legislative Policy Guidelines.
Staff recommendation: Adopt the proposed 2019 Legislative Policy Guidelines. (Action)

1-D Water Authority Sponsorship of Legislation in the 2019 State Legislative Session.
Staff recommendation: Sponsor or co-sponsor the following legislative proposals:

- Legislative Proposal #1 to seek grant eligibility for public-private partnership projects, like the Carlsbad desalination intake facility.
- Legislative Proposal #2 to create opportunities for bulk energy storage projects to advance as transmission assets to improve grid reliability.
- Legislative Proposal #3 to provide a path of reciprocity for military veterans to apply their skills and experiences toward water and wastewater system operation certifications. (Action)

2. Quarterly Water Conservation Garden Report. (Presentation) Betty Evans

3. Fiscal Year 2018 Annual Report. (Presentation) Mike Lee

III. INFORMATION

1. Government Relations Update. Glenn Farrel

IV. CLOSED SESSION

V. ADJOURNMENT

Melinda Nelson
Clerk of the Board

NOTE: This meeting is called as a Legislation and Public Outreach Committee meeting. Because a quorum of the Board may be present, the meeting is also noticed as a Board meeting. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Authority Administrative Code (Revised). All items on the agenda, including information items, may be deliberated and become subject to action. All public documents provided to the committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.
November 28, 2018

Attention: Legislation and Public Outreach Committee


Purpose
This information item provides the final report on the Legislation and Public Outreach Committee Work Plan for Calendar Years 2017 and 2018.

Background

Discussion
The Legislation and Public Outreach Committee is responsible for matters relating to legislation, lobbying and intergovernmental relations; community relations; media relations; and the Small Contractor Outreach and Opportunities Program (SCOOP).

The attached report lists the Legislation and Public Outreach Committee Work Plan for Calendar Years 2017 and 2018 and summarizes the activities taken to achieve the work plan. The work plan was prepared under the direction of the Legislation and Public Outreach Committee Chair and Vice Chairs.

Prepared by: Glenn Farrel, Government Relations Manager
Denise Vedder, Director of Public Outreach and Conservation
Reviewed by: Christy Guerin, Chair, Legislation and Public Outreach Committee

1. Legislative Positions
Review and consider adopting positions on legislation that affects the Water Authority’s and member agencies’ interests and attainment of the Water Authority’s Business Plan goals, including legislation relating to the state’s long-term water use efficiency framework. (September 2017 and September 2018)

Activities
• In March 2017, the Committee approved and recommended to the full Board the following positions on bills:
  Support if Amended on AB 18 (Garcia), relating to parks and resources bonds.
  Support if Amended on AB 196 (Bigelow), relating to use of Greenhouse Gas Reduction Funds.
  Support on AB 554 (Cunningham), relating to statewide desalination goals.
  Support on AB 574 (Quirk), relating to potable reuse.
  Support on AB 869 (Rubio), relating to disposition of recycled water production within the long-term water use efficiency framework.
  Oppose Unless Amended on AB 1041 (Levine), relating to urban water shortage contingency analyses.
  Support on SB 5 (De Leon), relating to parks, resources, and water bonds.
  Support on SB 214 (Atkins), relating to San Diego River Conservancy.

• In April 2017, the Committee approved and recommended to the full Board the following positions on bills:
  Support if Amended on AB 798 (Garcia), relating to Salton Sea restoration.
  Oppose Unless Amended on AB 885 (Rubio), relating to lead testing.
  Co-sponsorship and Support on AB 968 (Rubio), relating to long-term water use efficiency standards and performance measures.
  Support on AB 1587 (Levine), relating to quagga mussels.
  Co-sponsorship and Support on AB 1654 (Rubio), relating to drought contingency plans.
  Oppose on AB 1667 (Friedman), relating to dedicated landscape meters.
  Oppose Unless Amended on AB 1668 (Friedman), relating to drought contingency planning.
  Oppose on AB 1669 (Friedman), relating to long-term water use efficiency standards.
  Support if Amended on SB 615 (Hueso), relating to Salton Sea restoration.
  Oppose on Proposed Budget Trailer Bill RN 17-12268, relating to long-term water use standards.
  Oppose Unless Amended on Proposed Budget Trailer Bill RN 17-09926, relating to drought contingency planning.

• In May 2017, the Committee approved and recommended to the full Board the following positions on bills:
Support if Amended on AB 1030 (Ting), relating to energy storage systems.
Support on AB 1343 (Chen), relating to water use efficiency programs at schools.
Oppose Unless Amended on SB 80 (Wieckowski), relating to CEQA notices for multi-county water projects.

- In June 2017, the Committee approved and recommended to the full Board the following positions on bills:
  Support and Seek Amendments on SB 100 (De Leon), relating to the California Renewable Portfolio Standards program.
  Oppose Unless Amended on SB 623 (Monning), as proposed to be amended, relating to a public goods charge on water.

- In July 2017, the Committee approved and recommended to the full Board the following positions on bills:
  Support on AB 1361 (Garcia), relating to water service for Indian tribal lands.

- In August 2017, the Committee approved and recommended to the full Board the following positions on bills:
  Support on H.R. 448 (Huffman), relating to the exclusion of water conservation rebates from federal income tax.
  Support on S. 1464 (Feinstein), relating to the exclusion of water conservation rebates from federal income tax.

- In March 2018, the Committee approved and recommended to the full Board the following positions on bills:
  Support on AB 1944 (Garcia), relating to the San Luis Rey Valley Groundwater Basin.
  Support if Amended on AB 2060 (Garcia), relating to advance payment grant awards for disadvantaged communities.
  Support on AB 2283 (Holden), relating to income tax exemption for water conservation rebates.
  Oppose Unless Amended on SB 998 (Dodd), relating to water system shutoffs.
  Support and Amend on SB 1367 (Atkins), relating to the San Diego River Conservancy program.
  Oppose Unless Amended on the Brown Administration’s proposed budget trailer bill, dated February 1, 2018, related to safe and affordable drinking water.

- In April 2018, the Committee approved and recommended to the full Board the following positions on bills:
  Support on AB 3170 (Friedman), relating to sales tax exemptions for water use efficiency products.
  Oppose Unless Amended on AB 831 (Wieckowski), relating to accessory dwelling units.

- In May 2018, the Committee approved and recommended to the full Board the following positions on bills:
Support if Amended on AB 3206 (Friedman), relating to water meter accuracy and performance standards.
Oppose Unless Amended on SB 1244 (Wieckowski), relating to inadvertent disclosure of records.
Oppose Unless Amended on SB 1422 (Portantino), relating to microplastics in drinking water.
• In August 2018, the Committee approved and recommended to the full Board the following positions on bills:
  Support on AB 2787 (Quirk), relating to pumped hydropower storage.

2. **Legislative Policy Guidelines**
   Review, provide input, and consider approving Legislative Policy Guidelines for the following calendar year. (December 2017 and December 2018)

   **Activities**
   • On January 26, 2017, the Committee reviewed and sought input on proposed federal legislative priorities for 2017.
   • On February 23, 2017, the Committee approved and recommended to the full Board a final set of federal legislative priorities for 2017.
   • On October 26, 2017, the Committee reviewed and sought input on proposed Legislative Policy Guidelines for 2018.
   • On December 7, 2017, the Committee reviewed and approved a final set of Legislative Policy Guidelines for 2018.
   • On January 25, 2018, the Committee reviewed and sought input on proposed federal legislative priorities for 2018.
   • On February 22, 2018, the Committee approved and recommended to the full Board a final set of federal legislative priorities for 2018.
   • On October 25, 2018, the Committee reviewed and sought input on proposed Legislative Policy Guidelines for 2019.
   • On December 6, 2018, the Committee is scheduled to review, approve and recommend to the full Board a final set of Legislative Policy Guidelines for 2019.

3. **Advocacy Trips**
   Participate in at least one legislative advocacy trip to Sacramento and one advocacy trip to Washington, D.C., annually. (December 2017 and December 2018)
   • During the 2017 calendar year, Board and Committee members participated in the following advocacy trips to Sacramento:
During the 2017 calendar year, Board members participated in the following advocacy trips to Washington, D.C.:
   o February 28 – March 2, 2017 – in conjunction with ACWA Washington, D.C., conference
   o June 2017 – Water Authority Board/management visit to Washington, D.C.
   o September 2017 – in conjunction with San Diego Regional Chamber of Commerce

In December 2017, Water Authority Board officers and Committee leadership engaged in a series of in-district legislative briefings with the San Diego legislative delegation. During those legislative briefings, Committee members discussed:
   o Long-term water-use efficiency legislative activities and the Water Authority’s perspective
   o Water tax legislation
   o QSA and Salton Sea restoration activities
   o Potential Water Authority sponsored legislation for 2018

During the 2018 calendar year, Board and Committee members participated in the following advocacy trips to Sacramento:
   o February 27-28 – San Diego Regional Chamber of Commerce’s annual advocacy trip to Sacramento, including private meetings and interactions with a variety of legislators, Administration officials, and legislative leaders from through the state.
   o On April 30, 2018, Committee and Water Authority leadership participated in a series of briefings with members of the San Diego legislative delegation, key committee members, legislative leadership, and the Governor’s office to discuss high-priority issues, including:
     • Water tax legislative proposals
     • Long-term water use efficiency legislation
     • Water Authority’s perspective on the WaterFix
     • Carlsbad desalination intake facility
• During the 2018 calendar year, Board members participated in the following advocacy trips to Washington, D.C.:
  o February 27 -March 1, the Water Authority Board Secretary attended the Association of California Water Agencies’ (ACWA) annual Washington D.C., conference. The Board Secretary met with Congressional representatives and their staff and presented on a variety of federal topics including water storage, water recycling, desalination, and hydropower.
  o October 1 -2, Water Authority Board members and Committee members participated in the San Diego Regional Chamber of Commerce’s annual advocacy trip. They also had separate meetings with Congressman Scott Peters, the Deputy Commissioner of the Bureau of Reclamation, and with representatives of the Environmental Protection Agency.

4. **Legislative Roundtables**
   Participate in at least two legislative roundtable events at the Water Authority’s headquarters during each calendar year. (December 2017 and December 2018 – Communications and Messaging program – Objective #12)

**Activities**
• On August 7, 2017, the Water Authority hosted Assemblymember Lorena Gonzalez Fletcher for a legislative roundtable event at the Water Authority’s headquarters office. Assemblymember Gonzalez Fletcher shared her experiences as Chair of the Assembly Appropriations Committee and her perspectives on a variety of priority regional issues of interest.

• On December 12, 2017, the Water Authority hosted Assemblymember Todd Gloria for a legislative roundtable event at the Water Authority’s headquarters office. Assemblymember Gloria shared his experiences as a freshman legislator in Sacramento and his perspectives on a variety of priority regional issues of interest.

• On August 1, 2018, the Water Authority hosted Senator Ben Hueso who shared his perspectives on a wide range of issues, including water conservation, local water supply development, binational issues, water financing, and Salton Sea restoration.

• A final legislative roundtable for 2018 is in the planning stages for December.

5. **Sponsored Legislation**
   Review and consider approving Water Authority sponsorship of legislation each year to advance or protect the Water Authority’s and member agencies’ interests. (December 2017 and December 2018 – Communications and Messaging – Objective #8)

**Activities**
During 2017, the Committee actively engaged in shaping and directing staff activities relative to the sponsorship of two bills during the state legislative sessions:
• AB 1323 (Weber), which would have created a stakeholder workgroup process through the Department of Water Resources for development of long-term water use


efficiency standards. The measure failed to pass out of fiscal committee by the appropriate deadline.

- SB 701 (Hueso), on which the Water Authority partnered with other stakeholders, including the Imperial Irrigation District, would have authorize the issuance of a general obligation bond in the amount of $500 million to help fulfill the state’s funding obligations related to Salton Sea restoration. The measure failed to pass out of fiscal committee by the appropriate deadline.

During 2018, the Committee actively engaged in shaping and directing staff activities relative to the sponsorship of three bills during the state legislative sessions:

- AB 2064 (Gloria/Weber): AB 2064 would have provided an improved and comprehensive advance payment structure for non-governmental organizations and disadvantaged communities participating in Integrated Regional Water Management grant-funded projects. AB 2064 was vetoed by the Governor.

- AB 2371 (Carrillo): AB 2371 was co-sponsored by the Water Authority and the Natural Resources Defense Council to statutorily advance consensus-based concepts to improve landscape water use efficiency recommended by the Independent Technical Panel under the auspices of the Department of Water Resources. AB 2371 was signed into law by the Governor (Chapter 867, Statutes of 2018).

- SB 1277 (Hueso): SB 1277 was a placeholder measure to allow Salton Sea stakeholders to develop and implement a manageable administrative structure to ensure Salton Sea restoration project implementation remains on-budget and on-time, with appropriate contracting and fiscal controls. SB 1277 failed passage during the 2018 legislative session.

- On December 6, 2018, the Committee is scheduled to provide input to staff on sponsored state legislation in 2019.

6. **Small-Business Outreach**

Review and consider setting a small-business participation target as a percentage of total procurement dollars as needed; review and provide input on efforts designed to enable the Water Authority to achieve the established target. (June 2018)

**Activities:**

- On June 22, 2017, the Committee provided input and approved a recommendation to continue the 20 percent small business participation goal. The Committee also received and provided input on the third quarter report for the Small Contractor Outreach and Opportunity Program (SCOOP).

- On August 24, 2017, the Committee reviewed and provided input on the SCOOP annual report. The Committee also provided direction to staff to transition from quarterly to twice yearly updates on small business activities.

- On April 12, 2018, the Committee reviewed and provided input on the SCOOP mid-year update.
• On September 27, 2018, the Committee Chair provided a brief update on the SCOOP annual report.

7. **Water Use Efficiency/Water Conservation Outreach**  
Review, evaluate and provide direction regarding preferred outreach strategies, programs and partnerships that promote water use efficiency as a permanent and positive lifestyle, or raise regional awareness and compliance with any mandatory water use restrictions in effect. (December 2018 – Communication and Messaging Program, Objective 4)

**Activities**
- On January 26, 2017, the Committee received an update and provided comments to staff on activities associated with the Live WaterSmart campaign.
- On May 25, 2017, the Committee received information and provided input on the Garden Friendly Plant Fairs partnership between Home Depot, the Water Authority and its member agencies.
- On September 28, 2017, the Committee received a presentation and provided comments on the completion of the Water Authority’s Sustainable Landscapes Demonstration Garden. Following the meeting, committee members attended a short ceremony to dedicate the garden.

8. **Public Outreach**  
Review and consider supporting the development and implementation of regional outreach and communication initiatives that increase public awareness and support for policies, initiatives and investments that protect or enhance water supply reliability. (December 2018 – Communication and Messaging Program, Objectives 1, 3, 5, 6, 13)

**Activities**
- On February 23, 2017, the Committee received a presentation on revisions to the Fleet Science Center exhibit to include updated facts and figures and new information on local supply diversification efforts and seawater desalination.
- On March 23, 2017, the Committee received updates and provided comments on Water Authority outreach and conservation program activities.
- On June 22, 2017, the Committee received a presentation and offered input on Water Authority Capital Improvement Program outreach activities.
- On October 26, 2017, the Committee received a presentation and provided input on Water Authority education program activities.
- On December 7, 2017, the Committee received a presentation and provided comments on Water Authority outreach and conservation program activities.
• On February 22, 2018, the Committee received a presentation and approved an enhanced value of water outreach and education program called Brought to You by Water and directed staff to enter into a professional services contract with Southwest Strategies to execute the program. The regional communications program included several pieces, including the development of a website, branded program materials, mass media promotions, sponsored events and an online hub of water news and information called Water News Network.

• On April 12, 2018, the Committee received a presentation and provided comments on Water Authority's social media outreach efforts.

• On April 12, 2018, the Committee received a presentation and provided direction to staff to engage in efforts to educate ratepayers about statewide proposals to tax drinking water.

• On May 24, 2018, the Committee received a presentation and offered input on quarterly outreach efforts, focused on the soft launch of the Brought to You by Water Program.

• On July 26, 2018, the Committee received a presentation and offered input on the Brought to You by Water Program and the Water News Network.

• On August 23, 2018, the Committee heard from two Citizens Water Academy alumni on program impact and importance in the community.

• On Sept. 27, 2018, the Committee received updates and provided comments on the Brought to You by Water program.

• On October 25, 2018, the Committee reviewed and provided input on the Citizens Water Academy program.

• On December 6, 2018, the Committee is scheduled to hear a presentation on the FY 2018 Annual Report.

9. **Public Opinion Research**

   Provide input on suggested research topics and review findings of public opinion polls or other research to help gauge effectiveness of outreach activities or identify emerging needs. (December 2017 – Communication and Messaging Program, Objective 3)

   **Activities:**
   
   • On March 23, 2017, the Committee provided input on annual public opinion poll topics and survey instrument.

   • On June 22, 2017, the Committee reviewed public opinion poll findings and provided comments.
On July 26, 2018, the Committee reviewed the results of a staff research project conducted to gauge effectiveness of public opinion polls and new methodologies to increase participation.
November 28, 2018

Attention: Legislation and Public Outreach Committee

Water Conservation Authority Amended and Restated Joint Powers Agreement. (Action)

Recommendation
Approve the Amended and Restated Joint Powers Agreement creating the Water Conservation Authority. Authorize the Water Authority’s representative to the Water Conservation Authority to sign the final agreement on behalf of the Water Authority Board of Directors.

Alternative
Do not approve the Amended and Restated Joint Powers Agreement creating the Water Conservation Authority. Do not authorize the Water Authority’s representative to the Water Conservation Authority to sign the Amended and Restated Joint Powers Authority Agreement on behalf of the Water Authority Board of Directors.

Fiscal impact
Funds in the amount of $273,560 have already been approved by the Board and are available in the General Manager’s adopted operating budget for fiscal years 2018 and 2019 in the Public Outreach and Conservation Department to cover the Water Authority’s share of Water Conservation Garden operations through June 30, 2019. Funds to cover the Water Authority’s share of Garden operating costs in future years would be included in future operating budgets and contingent upon Board approval. The rate category is Customer Service.

Background
The Water Authority has been a member of the Water Conservation Authority and has supported the Garden’s efforts to promote outdoor water efficiency since 2001. The Joint Powers Agreement (Agreement) outlines the powers and responsibilities of the Water Conservation Authority, provides the framework for standard operating procedures and a process for adding and withdrawing members. The Agreement has been in place since 1992, and it has been amended five times to add member agencies and to address funding and management issues.

Previous Board Action: On December 7, 2017, the Water Authority’s Board authorized a new, five-year Operation Agreement between the Water Conservation Authority and the Friends of the Water Conservation Garden (IRS 501(c)(3)) for the continued operation and maintenance of the Water Conservation Garden through June 30, 2023. The new Operation Agreement outlined the annual funding agreements of each of the Water Conservation Authority member agencies.

On May 25, 2017, the Water Authority’s Board approved a one-year extension of the Operation Agreement between the Water Conservation Authority and the Friends of the Water Conservation Garden for the continued operation and maintenance of the Water Conservation Garden through June 30, 2018.
On December 8, 2016, the Board approved a six-month extension of the Operation Agreement between the Water Conservation Authority and the Friends of the Water Conservation Garden for the continued operation and maintenance of the Water Conservation Garden through June 30, 2017.

On December 9, 2010, the Board Approved the key components of the Operation Agreement between the Water Conservation Garden Authority and the Friends of the Water Conservation Garden approved the inclusion of $368,871 in the Fiscal Years 2012 and 2013 budget and indicated support for future funding levels when the Board established the budget for Fiscal Years 2014 and 2015.

Discussion

The current members of the Water Conservation Authority are the San Diego County Water Authority, Helix Water District, Otay Water District, City of San Diego, Sweetwater Authority and Grossmont-Cuyamaca Community College District. The Water Conservation Authority and the Friends of the Garden signed a new Operation Agreement in January 2018. To ensure that the Joint Powers Agreement between the Water Conservation Authority and its members was consistent with the new Operation Agreement, the Water Conservation Authority formed a Governance Committee. The committee worked with the law firm of Best, Best and Krieger to recommend revisions and amendments. (The cost for the legal work was covered by the Helix Water District.)

The Governance Committee recommendations were approved by the Water Conservation Authority board in August. Each of the Water Conservation Authority member agencies must now pass a resolution accepting the Amended and Restated Joint Powers Agreement and authorize their respective Water Conservation Authority board representative to execute the updated agreement. Attachment 1 is the resolution.

A redline version of the Amended and Restated Joint Powers Agreement is included as Attachment 2.

A summary of the primary amendments to the Agreement include:

Article 5 – Creation of the Authority: Removed the word Auditor from the board position of Treasurer/Auditor to clarify that the Treasurer does not conduct the audit, but is responsible for hiring and overseeing an outside auditing firm. The new language also clarifies that the position of Treasurer must be filled by one of the Water Conservation Authority board members or a CPA. Replaced references to Treasurer/Auditor throughout the Agreement with the word Treasurer.

Article 12 – Treasurer’s Report: Added language to require Treasurer to include a list of the Water Conservation Authority’s real and property assets as part of the annual written financial report.

Article 15 – Responsibilities of Agencies: Added language outlining the annual funding contributions of each Water Conservation Authority member agency. The funding levels have
already been agreed to by each agency under the Operation Agreement adopted last year. They are:

- Water Authority: 30 percent
- Otay Water District: 20 percent
- Helix Water District: 20 percent
- City of San Diego: 15 percent
- Sweetwater Authority: 15 percent
- Grossmont-Cuyamaca: 0 percent (contribution of land in lieu of cash)

Article 17 – Withdrawal: Added language stipulating that agencies withdrawing from the Agreement must provide written notice and a waiver and release of all rights and/or interest in all assets of the Water Conservation Authority.

Article 20 – Termination and Distribution: Removed language regarding dissolution of the Water Conservation Authority that allowed distribution of the assets to all past and present parties to the Agreement, proportionate to their cash contributions. Added language to reflect the terms of the License Agreement between the Water Conservation Authority and the Grossmont-Cuyamaca Community College District. Other assets would be distributed among Water Conservation Authority members, according to the current annual funding percentages or as agreed to by the remaining members.

In addition, the revisions include updated language throughout the document to replace references to “xeriscape” with “water-efficient.”

Staff recommends the Board adopt the attached resolution amending and restating the Joint Powers Agreement creating the Water Conservation Authority and designate Water Authority Board Director Betty Evans to sign and execute the final agreement on behalf of the Water Authority.

Prepared by: Denise Vedder, Director of Public Outreach & Conservation
Reviewed by: Betty Evans, Board representative, Water Conservation Authority
Approved by: Dennis A. Cushman, Assistant General Manager

Attachment 1: Resolution Amending and Restating the Joint Powers Agreement Creating the Water Conservation Authority.

Attachment 2: Amended and Restated Joint Powers Agreement (redline version)
RESOLUTION ____
OF THE BOARD OF DIRECTORS OF THE SAN DIEGO COUNTY WATER AUTHORITY
AMENDING AND RESTATING THE JOINT POWERS AGREEMENT CREATING
THE WATER CONSERVATION AUTHORITY

WHEREAS, the Water Conservation Garden’s Joint Powers Authority and its member agencies, including the San Diego County Water Authority, desire to amend and restate the joint powers agreement creating the Water Conservation Authority; and

WHEREAS, the agreement was entered into in 1992, by Helix Water District, Otay Water District and Cuyamaca Community College to operate and maintain a xeriscape demonstration garden and related facilities on the campus of Cuyamaca College in the furtherance of water conservation; and

WHEREAS, the agreement was subsequently amended and restated in 2001, 2003 and 2006 to create the Water Conservation Authority and to include the following as members: The City of San Diego and the San Diego County Water Authority (2001), Padre Dam Municipal Water District (2003) and Sweetwater Authority (2006); and

WHEREAS, in 2010, the Water Conservation Authority entered into an agreement with the Friends of the Water Conservation Garden to operate and maintain the Water Conservation Garden; and

WHEREAS, on August 13, 2018, the Water Conservation Garden’s Governance Committee presented an amended and restated joint powers agreement to the Water Conservation Garden’s Joint Powers Authority to update the terms to reflect current operations of the Water Conservation Authority; and

WHEREAS, on August 13, 2018, the Water Conservation Garden’s Joint Powers Authority approved the changes with minor revisions and requested each member agency approve the Joint Power Agreement by resolution; and

WHEREAS, Article 27 of the Joint Powers Agreement provides that said agreement may be amended by approval of all the governing bodies of the Joint Powers Agreement; and

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the San Diego County Water Authority Board of Directors as follows:

SECTION 1. That the San Diego County Water Authority approves the amended and restated Joint Powers Agreement creating the Water Conservation Authority as set forth in the proposed amendment and by this reference incorporated herein.
SECTION 2. That Betty Evans, Board Representative for the San Diego County Water Authority, is hereby authorized to finalize and execute the proposed amended and restated Joint Powers Agreement creating the Water Conservation Authority.

PASSED, ADOPTED AND APPROVED this 6th day of December 2018, by the following vote:

Ayes:
Noes:
Absent:

_______________________________
Jim Madaffier, Chair

ATTEST:

_______________________________
Christy Guerin, Secretary

I, Melinda Nelson, Clerk of the Board of the San Diego County Water Authority, certify that the vote shown above is correct and this Resolution No. 2018-_____ was duly adopted at the meeting of the Board of Directors on the date stated above.

_______________________________
Melinda Nelson, Clerk of the Board
AMENDED AND RESTATED
JOINT POWERS AGREEMENT
CREATING THE WATER CONSERVATION AUTHORITY

This AMENDED AND RESTATED JOINT POWERS AGREEMENT is, dated for
reference purposes only as ____________, made and entered into in the County of San
Diego, State of California by the Otay Water District, the Helix Water District, the Grossmont-
Cuyamaca Community College District, San Diego County Water Authority, City of San Diego
and the Padre Dam Municipal Water District, Sweetwater Authority. Said agencies are
sometimes referred to herein as “parties.”

WHEREAS, the parties have entered into a Joint Powers Agreement, dated August 12,
1992 and amended from time to time, for the purpose of creating and maintaining a
taxiscape water efficient demonstration garden in the furtherance of water conservation; and

WHEREAS, on August 12, 1992 the parties to the Joint Powers Agreement created the
Water Conservation Authority to carry out the stated purposes of the Joint Powers Agreement; and

WHEREAS, the Joint Powers Agreement has been amended

• In 2001 to add the City of San Diego as a member; and

• In 2001 to add the San Diego County Water Authority as a member; and

• In 2003 to add Padre Dam Municipal Water District as a member; and

• On August 13, 2003, entered into an Amended and Restated Joint
Powers Agreement to address a variety of issues including the process
for a member to withdraw and the effect of such a withdrawal; and

• On August 9, 2006 the Agreement was amended to add Sweetwater
Authority as a member.

WHEREAS, the Joint Powers Agreement did not adequately provide a process by
which a member of the Water Conservation Authority could withdraw, nor did it adequately
set forth the effect of such withdrawal. Parties now desire to amend and restate the Agreement
to update the terms to reflect current operations of the Authority.

NOW, THEREFORE, it is agreed by and between the parties that the Joint Powers
Agreement creating the Water Conservation Authority dated August 12, 1992, and all of its
subsequent amendments, are hereby rescinded and replaced by the following Agreement.

ARTICLE 1

DEFINITIONS

The following definitions shall apply to the provisions of this Agreement:

A. “Authority” or “WCA” shall mean the Water Conservation Authority created by this Agreement.

B. “Board of Directors” or “Board” shall mean the governing board of the Authority.

C. “Agency” or “agencies” shall mean any public agency established by general law or special act under the laws of the State of California and which is a signatory member of this Authority; provided, however, that this definition shall not be construed to prevent the Authority from permitting membership by other public entities upon terms and conditions approved by the Board.

Need definition of public agency vs public entities vs government entity

B. “Authority” or “WCA” shall mean the Water Conservation Authority created by this Agreement.

C. “Board of Directors” or “Board” shall mean the governing board of the Authority.

D. “Garden” shall mean that water efficient demonstration garden located on the campus of Cuyamaca Community College.

E. “Fiscal year” shall mean that period of 12 months which is established as the fiscal year of the Authority. The fiscal year shall end on the 30th of June and begin on the 1st of July each year.

F. “Joint Powers Law” means the Joint Exercise of Powers Act, set forth in Chapter 5 of Division 7 of Title 1 of the Government Code, Sections 6500 et.seq., as may be amended from time to time.

G. “Operating Agreement” means that agreement by and between the Authority and the Friends of the Water Conservation Garden for the funding and operation of the Garden.

H. “Treasurer and Auditor” shall mean that person appointed by the Board who is required to draw warrants on behalf of the Authority and provide for an annual audit, in accordance with law. The Treasurer may also serve as the Auditor to perform the duties of the Treasurer as set forth in Section __ below.

Is it necessary to have a Treasurer and Auditor? The Garden handles the Authority bank account and audit with the Authority paying for their audit consisting on a simple one page statement. Agencies either auto pay or send check to the Garden payable to Authority for quarterly funding payment. Garden deposits checks in the Authority account then writes a
check from the Authority account to the Garden account from each deposit made by Authority. DeAna signs the checks from Authority to Garden. A small amount (5%) is withheld in the Authority account to pay for the audit. The Garden takes care of the Authority audit.

I. “Xeriscape Water Efficient” means quality landscaping and practices that conserve water and protect the environment.

ARTICLE 2

PURPOSES

This Agreement is entered into by agencies pursuant to the provisions of Government Code Sections 6500 et seq., to further the purposes of water conservation by creating, operating and maintaining a xeriscape Water Efficient demonstration garden and related facilities located on the campus of Cuyamaca College to educate the public about landscaping practices which conserve water on the campus of Grossmont Cuyamaca Community College.

Change xeriscape to water efficient throughout the document practices.

ARTICLE 3

PARTIES TO AGREEMENT

Each party to this Agreement certifies that it intends to and does contract with all other parties who are signatories to this Agreement and, in addition, which such other parties as may later be added as parties to and signatories of this Agreement as provided herein. Each party to this Agreement also certifies that the withdrawal or removal of any party from this Agreement shall not affect this Agreement, nor such party’s intent to contract, as described above, with the other parties of the Agreement then remaining.

ARTICLE 4

EFFECTIVE DATE OF AGREEMENT

This Agreement shall become effective upon the first day it has been executed by two agencies; and shall continue in effect until terminated in accordance with its terms.

ARTICLE 5

CREATION OF AUTHORITY

Pursuant to Sections 6500 et seq., of the Government Code, there is hereby created a public entity, separate and apart from the parties hereto, to be known as the Water Conservation Authority. Pursuant to Government Code Section 6408.1, the debts, liabilities and obligations of the Authority shall not constitute debts, liabilities or obligations of any party to this Agreement or of any other agency.
ARTICLE 6

POWERS OF AUTHORITY

A. The Authority shall have the powers common to agencies and is hereby authorized to do all acts necessary for the exercise of said common powers, including, but not limited to, any or all of the following:

1. To make and enter into contract, including contracts of employment and construction contracts; (period after contract and delete remaining sentence) (rewrite this to agree with the operating agreement, i.e., authority to assign entering into contracts to the Garden) contracts

2. To incur debts, liabilities or obligations; (delete if we don't need)

3. To acquire, hold or dispose of property, contributions and donations of property, equipment, facilities, funds, services or other forms of assistance from persons, firms, corporations and governmental entities. (Is there anything to be noted for real property? Add or not — separation of real and personal property)

4. To sue and be sued in its own name; and

B. To exercise all powers necessary and proper to carry out the terms and provisions of this Agreement or otherwise authorized by law.

B. — law. Anything to the contrary notwithstanding, the Authority shall not have the power to approve items which involve the continuing expenditure of money beyond the current fiscal year without first obtaining a unanimous vote of all members of the Board of Directors. (difficulty understanding — need legal explanation)

C. This organization is organized exclusively for charitable purposes within the meaning of section 501(c)(3) of the Internal Revenue Code. (What is the charitable purpose of the authority and/or the garden — relieving poor and distressed?)

Notwithstanding any other provision of these articles, an Authority shall not carry on any other activities not permitted to be carried on (a) by an Authority exempt from Federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1986 (or the corresponding provision of any future United States Internal Revenue law) or (b) by an Authority contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code of 1986 (or corresponding provision of any future United States Internal Revenue law).

D. — Said powers shall be exercised pursuant to the terms hereof and in the manner provided by law for an irrigation district established pursuant to the Irrigation District Law, California Water Code §20500 et seq. (Does irrigation district still apply and what is the CA Water Code)
ARTICLE 7

BOARD OF DIRECTORS

A. The Authority shall be governed by the Board of Directors which is hereby established and which shall be composed of one representative from each agency. In addition to appointing its member to the Board, each agency shall appoint at least one alternate. The alternate appointed by an agency shall have the authority to attend any meeting. The alternate may participate in and vote at any meeting as a member of the Board only when the regular member is absent.

B. Each Director or alternate to the Board shall serve until a successor is appointed. Each Director or alternate shall serve at the pleasure of the appointing agency.

C. Each Director or alternate shall have one vote.

ARTICLE 8

POWERS OF THE BOARD OF DIRECTORS

Where is it defined in the operating agreement that the Authority cannot tell Elyssa what to do?

The Board of Directors of the Authority shall have the following powers and functions:

A. To define the goals of the Authority to fulfill its purposes as defined in Article 2;

A. The Board shall / To determine details of and define the program of the Authority. (define “program” — what does that mean?)

B. The Board shall / To determine and select all consultants and employees necessary to carry out the programs of the Authority.

C. The Board shall / To have the authority to hire persons or entities deemed necessary for the administration of the Authority.

D. The Board shall / To direct investment of funds collected by the Authority.

E. The Board shall / To develop and provide or contract for various services for the Authority to include but not be limited to executing contracts for the provision of materials and equipment necessary to create, maintain and operate the xeriscape demonstration garden and related facilities.

F. The Board shall / To administer and supervise the xeriscape demonstration garden site and related facilities and all programs associated with it.
E. To cause to be prepared an annual budget and audit pursuant to Article 12;

F. To have the powers and duties reasonably necessary to carry out the purposes of the Authority.

G. The Board shall receive and review periodic accountings of all funds.

H. The Board shall have the power to conduct on behalf of the Authority all other business of the Authority.

(In each item delete “The Board shall” and add “To”. Or could specifically state what Authority is doing—maintain core exhibits. Or just item H and add the ability to terminate the operating agreement.)

ARTICLE 9

MEETINGS OF THE BOARD OF DIRECTORS

A. Meetings. The Board shall provide for its regular, adjourned regular and special meetings upon the call of the President of the Board; provided, however, that it shall hold at least one regular meeting annually.

B. Minutes. The Clerk of the Authority shall cause minutes of regular, adjourned regular and special meetings to be kept and shall, as soon as possible after each meeting, cause a copy of the minutes to be forwarded to each member of the Board and to each agency.

C. Quorum. A majority of the members of the Board shall constitute a quorum for the transaction of business, except that less than a quorum may adjourn from time to time. A member that has given notice to withdraw pursuant to Article 17 shall not be included in calculating a quorum. A vote of the majority of the members of the Board present shall be necessary to take action by the Board, except as otherwise specifically set forth in this Agreement.

D. Compliance with the Brown Act. All meetings of the Board, including, without limitation, regular, adjourned regular and special meetings, shall be called, noticed, held and conducted in accordance with the provisions of the Ralph M. Brown Act, Government Code Section 54950, et seq.

ARTICLE 10

OFFICERS OF THE AUTHORITY

Delete February

A. President and Vice President. The officers of the Authority shall be elected for a two-year term at the first meeting of the Board in February no later than March 30 of every even numbered year or as necessary to fill a vacancy. Each officer shall hold office until a successor is elected. In the event the President or Vice President so elected ceases to be a
member of the Board the resulting vacancy in the office of President or Vice President shall be filled at the next meeting of the Board after such vacancy occurs. In the absence or inability of the President to act, the Vice President shall act as President. The President, or in his or her absence, the Vice President, shall preside at and conduct all meetings of the Board.

B. Clerk Secretary. The Board shall appoint a Clerk Secretary, who may be a member of the Board and shall maintain the records of the Board.

C. Treasurer and Auditor. The Board shall appoint the Treasurer and Auditor, who may be a member of the Board. We must appoint until the agreement has been changed, who pursuant to Government Code Section 6505.5, shall be the treasurer of one of the contracting parties to this Agreement or a certified public accountant. Treasurer shall also cause the Board approved payments to be made to the Garden pursuant to the terms of this Agreement and the Operating Agreement.

D. Other Officers. The Board shall have the power to appoint such other officers as may be necessary to carry out the purposes of this Agreement.

ARTICLE 11

INSURANCE COVERAGE

The Authority shall maintain levels and types of insurance coverage for the Authority determined by the Board of Directors to be reasonably adequate. (How is authority covered, are individuals covered, is this included in the operating agreement??)

ARTICLE 12

ACCOUNTS AND RECORDS

Should the Authority have a budget for their funding of the Garden?

A. Annual Budget. The Authority shall annually adopt a budget including an allocation of contributions from member agencies.

B. Funds and Accounts. The Treasurer and Auditor of the Authority shall establish and maintain such funds and accounts as required by the Board and as required by good accounting practice. Authorized representatives of the member agencies shall be authorized to inspect the books and records of the Authority which the Treasurer and Auditor maintains at all reasonable times and as otherwise required by law The Authority shall adhere to a standard of strict accountability of all funds as set forth in the Joint Powers Law.

C. Treasurer’s Report. The Treasurer and Auditor, within 120 days after the close of each fiscal year, shall give a complete written report of all financial activities for such fiscal year to the Board and to each member agency. The Treasurer’s report shall include a list of all Authority real and personal property assets.
D. **Annual Audit.** The Treasurer and Auditor shall provide for a certified, annual audit of the accounts and records of the Authority, which audit shall be made by a certified public accountant and shall conform to generally accepted auditing standards. A report thereof shall be filed as a public record with each of the agencies. Such report shall be filed within four months of the end of the year under examination. *(Explained on page 2—revise accordingly)*

Should we track the assets of the Authority—what are they and what is the value

**ARTICLE 13**

**RESPONSIBILITY FOR MONIES, FUNDS AND PROPERTY**

A. The Treasurer/ Auditor of the Authority shall have the custody of and disburse the Authority’s funds. (S)he shall have the authority to delegate the signatory function of Treasurer/ Auditor to such persons as are authorized by the Board.

B. A bond in the amount determined adequate by the Board may be required of all officers and personnel authorized to disburse funds of the Authority, such bond to be paid for by the Authority. *Delete this section??*

C. The Treasurer and Auditor of the Authority shall assume the duties described in Government Code Section 6505.5 including: (If treasurer/auditor required, then review this section)

1. Receive and acknowledge receipt for all money of the Authority and place in the treasury of the Authority;

2. Be responsible, upon his or her official bond, for the safekeeping and disbursement of all the Authority’s money so held by him or her.

3. Pay, when due, out of money of the Authority so held by him or her, all sums payable on outstanding bonds and coupons of the Authority.

4. Pay any other sums due from Authority money only upon warrants approved by the President of the Board or his or her designee. The warrants shall be drawn by the Treasurer and Auditor, who shall be selected by the Board.

5. Verify and report periodically to the Authority and to agencies the amount of money held for the Authority, the amount of receipts since the last report, and the amount paid out since the last report.

D. The Treasurer and Auditor shall deposit the funds of the Authority in accordance with the investment policy required by law, and approved by the Board, in those institutions and investments permitted pursuant to Government Code Section 53601, et seq.
ARTICLE 14

RESPONSIBILITIES OF THE AUTHORITY

Revise based on operating agreement.

The Authority shall perform the following functions in discharging its responsibilities under this Agreement:

A. Provide or cause to be provided a Xeriscape Water Efficient Demonstration Garden and related facilities.

B. Coordinate and supervise the Xeriscape Water Efficient Demonstration Garden and related facilities consistent with the Operating Agreement.

C. Provide or cause to be provided programs on water conservation.

C. Cause distributions of all funds to the Garden consistent with the Operating Agreement except that amount reasonably necessary to fund the annual audit of the Authority.

D. To communicate with the Friends of the Garden and the Garden Executive Director through the Authority Board. Individual member agencies shall have no authority to direct the actions of the Garden Executive Director or other Garden staff except as otherwise provided in the Operating Agreement;

E. To use the Authority’s best efforts, through the member agencies, to share resources and work cooperatively with the Friends of the Garden to advance the Garden as provided in Section 5.16 of the Operating Agreement;

F. The Authority shall have such other responsibilities as deemed necessary by the Board of Directors in accordance with this Agreement.

ARTICLE 15

RESPONSIBILITIES OF AGENCIES

Members shall have the following responsibilities:

A. Each agency shall appoint a representative and at least one alternate to the Board of Directors, pursuant to Article 7 of this Agreement.

B. Each agency shall provide the Authority with such other information or assistance as may be necessary for the Authority to carry out joint or cooperative programs under this Agreement.

--- What might these programs include? --- as provided for in the Operating Agreement.
C. Each agency shall comply with all Bylaws adopted or approved by the Board of Directors. Fulfill obligations entered into jointly with other agencies or third party under this agreement or any other agreement.

D. Each agency shall make an annual funding contribution to satisfy the funding obligations agreed to by each agency when the Authority approved the Operating Agreement. The funding obligation in the Operating Agreement shall be paid by each agency based upon the following formula:

- **SD County Water Authority**: 30%
- **Otay Water District**: 20%
- **Helix Water District**: 20%
- **City of San Diego**: 15%
- **Sweetwater Authority**: 15%
- **Grossmont-Cuyamaca CCD**: 0%*  
  
  *contribution of land in lieu of cash

**Total**: 100%

E. If a member withdraws from the Authority, the remaining members shall assume the prorate portion of the withdrawing members future funding responsibility until such time as a new member joins the Authority and the above listed funding percentages are recalculated.

**ARTICLE 16**

**MEMBERSHIP**

Membership may include other government public agencies. “Ex officio” membership may include private parties as well as government non-signatory public agencies. Clarify

The Authority shall allow entry of new members only upon approval by of the majority of the Board. Agencies entering under this article may be required to pay their share of the organizational expenses, as determined by the Board. Add: Once an agency leaves the Authority, they have no rights to the Authority assets and no longer own any portion of the Garden.

**ARTICLE 17**

**WITHDRAWAL**
An agency may only withdraw from this Agreement by providing the Authority written notice of its intent to withdraw within the first calendar month of the fiscal year. Such notice shall not become effective until the last day of fiscal year in which notice was given. To be effective said notice shall include a written waiver and release of any and all rights to or interest in any asset owned, operated, or controlled by the Authority.

ARTICLE 18

CANCELLATION

Notwithstanding the provisions of Article 19, the Authority shall have the right to cancel, for good cause, any agency’s participation in the Authority.

ARTICLE 19

EFFECT OF WITHDRAWAL

A. The withdrawal of any agency from this Agreement shall not terminate the same, and an agency, by withdrawing, shall not be entitled to payment or return of any contribution paid, consideration or property paid or donated by the agency to the Authority or to any distribution of assets, except as provided in Article 20.

B. The withdrawal of any agency, pursuant to Article 17, shall not terminate its responsibility to contribute its share, as determined by the Board, for (1) liabilities and claims accrued during the time the agency was a participant and (2) budgeted expenses for the fiscal year in which notice of intent to withdraw is given.

ARTICLE 20

TERMINATION AND DISTRIBUTION

A. This Agreement may be terminated by the written consent of a majority of the agencies; provided, however, that this Agreement and the Authority shall continue to exist for the purpose of disposing of all claims, distribution of assets, and all other functions necessary to conclude the affairs of the Authority.

B. The Board is vested with all powers necessary for the purpose of winding up and dissolving the business affairs of the Authority. These powers shall include the power to require agencies, including those, which were signatories hereto at the time an obligation arose or was incurred, to pay their share of any obligation incurred by the Board.

C. Upon termination of this Agreement, all assets of the Authority shall be distributed only among the parties that have been signatories hereto, including any of the agencies which previously withdrew or were canceled pursuant to this Agreement, in accordance with and proportionate to their cash contributions (including property at market value when received) made during the term of this Agreement if it is feasible to do so. However, the Board may, in its discretion, distribute assets incorporated into the xeriscape
demonstration garden to one or more of the parties hereto without regard to any party’s contributions. The Board shall determine such distribution within six months after discharge or disposal of the last pending obligation covered by this Agreement pursuant to that certain License Agreement by and between the Authority and Grossmont-Cuyamaca Community College District, dated __________.

D. Upon the dissolution of this Authority, assets not distributed pursuant to Section (C) above shall be distributed for one or more exempt purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code (or corresponding section of any future tax code), or shall be distributed to the federal government, or to a state or local government, for a public purpose. Any such assets not so disposed of shall be disposed by the Court of Common Pleas of the county in which the principal office of the Authority is then located, exclusively for such purposes or to such organization or organizations as said Court shall determine, which are organized and operated exclusively for such purposes among the then members pursuant to those percentages identified in Article 15 or as otherwise agreed by the remaining members.

ARTICLE 21
PROVISION FOR BYLAWS

The Board may cause to be developed and adopt Bylaws for the Authority to govern its day-to-day operations. Each agency shall receive a copy of any Bylaws developed under this article.

ARTICLE 22
NOTICES

Notices to agencies hereunder shall be sufficient if delivered to the clerk of the respective agency.

ARTICLE 23
ENFORCEMENT

The Authority shall have the right to enforce this Agreement. If any suit or other proceeding or arbitration is brought by the Authority, or any member, to enforce this Agreement, the prevailing party shall be entitled to recover costs and expenses, including reasonable attorney’s fees.

ARTICLE 24
INVALIDITY

Should any portion, term, condition or provision of this Agreement be determined by a Court of competent jurisdiction to be illegal and in conflict with any law of the State of California, or be otherwise rendered unenforceable or ineffectual, the validity of the remaining
portion terms, conditions, and provisions shall not be affected thereby provided than the purpose and intent of the Agreement can be reasonably carried out without the unenforceable or ineffectual term, condition or provision.

ARTICLE 25

TORT LIABILITY

Section 895.2 of the Government Code imposes certain tort liability jointly upon public entities solely by reason of such entities being parties to an Agreement as defined in Section 895 of said Code. Therefore, the parties hereto, as between themselves pursuant to the authorization contained in Sections 895.4 and 895.6 of the Government Code, each assumes the full liability imposed upon it or any of its officers, agents or employees by law for injury caused by a negligent or wrongful act or omission occurring in the performance of the Agreement, to the same extent that such liability would be imposed in the absence of Section 895.2 of said Code. To achieve this purpose, each party indemnifies and holds harmless the other party for any loss, cost or expense that may be imposed upon such other party solely by virtue of Section 895.2 of the Government Code.

ARTICLE 26

AGREEMENT COMPLETE

The foregoing constitutes the full and complete Agreement of the parties. There are no oral understandings or agreements not set forth in writing herein.

ARTICLE 27

AMENDMENTS

This Agreement may be amended by approval of all of the governing bodies of the parties to this Agreement.
IN WITNESS WHEREOF, the parties hereto have first executed this Agreement by authorized officials thereof on the date indicated below.
HELIX WATER DISTRICT

President of its Board
Authorized by Resolution No. ____________

OTAY WATER DISTRICT

President of its Board
Authorized by Resolution No.

GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT

By:
Authorized by Board Amendment
Docket Item ____________

SAN DIEGO COUNTY WATER AUTHORITY

By:
Name:
Title:

CITY OF SAN DIEGO

By:
Authorized by Resolution No. ____________

PADRE DAM MUNICIPAL WATER DISTRICT

By:
Authorized by Resolution No. ____________
November 28, 2018

Attention: Legislation and Public Outreach Committee


**Staff Recommendation**
Adopt the proposed 2019 Legislative Policy Guidelines.

**Alternatives**
1. Direct staff to make additional modifications to the Legislative Policy Guidelines as determined by the Board.
2. Do not adopt the proposed 2019 Legislative Policy Guidelines.

**Purpose**
This memo presents proposed 2019 Legislative Policy Guidelines to the Board for consideration and adoption.

**Fiscal Impact**
There is no fiscal impact.

---

**Executive Summary**

- This proposed action is to update the Board’s policy guidance relative to issues that may be considered within legislative and regulatory venues.
- The proposed 2019 Legislative Policy Guidelines reflect input and extensive review by Water Authority staff, member agencies, and Water Authority Board members.
- There are several substantive modifications proposed to the 2019 Legislative Policy Guidelines, including the integration of the Board’s Bay-Delta and WaterFix policy direction adopted on August 9, 2018.

**Background**
The Water Authority maintains a set of legislative policy guidelines to direct staff and legislative advocates on issues of importance to the Water Authority, its member agencies, and the San Diego region. The proposed modifications to the Water Authority’s Legislative Policy Guidelines, identified in the attached draft 2019 Legislative Policy Guidelines (Attachment 2), reflect policy positions and guidance provided by the Water Authority Board during the course of the 2018 calendar year, and recommendations from Water Authority staff, member agencies, and Board members.

The Board approved an original set of Legislative Policy Guidelines in December 1993. They are reviewed and updated annually. The guidelines provide a useful framework for staff and
legislative advocates to evaluate the potential impact of state and federal legislation on the Water Authority and its member agencies. The guidelines also permit staff and the Water Authority’s legislative advocates to act in a timely fashion between Board meetings on issues that are consistent with the guidelines. Such actions are then reported to the Board during the next regular monthly Board meeting.

Staff and legislative advocates consult the guidelines to determine recommended positions on legislation and amendments. Irrespective of whether a staff recommended position on legislation meets, or fails to meet, the principles set forth in the guidelines, staff brings those recommendations before the Board for consideration of adopting a formal position in support or opposition, accordingly. Prior to each Board meeting, staff provides a written report on recommended positions, an analysis of each bill, and a discussion of the measure’s relevance to the Legislative Policy Guidelines and other Board policies.

Discussion
This report presents an updated version of the Water Authority’s Legislative Policy Guidelines for the 2019 calendar year. Updates, revisions, and added guidelines reflect new positions and policy guidance the Board discussed, adopted, and provided during the course of the 2018 calendar year, as well as new changes recommended by Water Authority staff, member agencies, and Board members.

In the proposed 2019 Legislative Policy Guidelines presented to the Board at its October 25 meeting, staff identified proposed updates to sections related to:

- Biological and Habitat Preservation
  - Environmental & Conservation Planning
- Energy
  - Energy Independence
- Imported Water Issues
  - Bay-Delta
  - Imported Water Supply
    - Colorado River
    - Water Transfers
  - Metropolitan Water District
- Local Water Resources
  - Desalination
- State Administrative and Regulatory Agencies
- Water Facilities and Facility Operations
  - Water System Operations
- Water Planning
  - Land Use and Water Management
    - Local Conditions
- Water Quality Issues
  - Contaminants
• Water Use Efficiency
  o Long-Term Water Use Efficiency
  o Reporting

Additional modifications have been made to the proposed Legislative Policy Guidelines at the request of Board members since the October 25 meeting, and those modifications can be found in the following sections:

• Bay-Delta
  o Co-Equal Goals
  o Imported Water Supply
  o WaterFix

The proposed 2019 Legislative Policy Guidelines are attached. Revisions, updates, and recommended additions are underlined, while deletions are reflected by strike-throughs. When the Board adopts the updated Guidelines, staff will incorporate all changes into the final document.

Prepared by: Glenn A. Farrel, Government Relations Manager
Ivy Ridderbusch, Management Analyst
Approved by: Dennis A. Cushman, Assistant General Manager

Attachment 1: Matrix of Proposed Legislative Policy Guideline Modifications
Attachment 2: Draft Proposed 2019 Legislative Policy Guidelines
### PROPOSED LEGISLATIVE POLICY GUIDELINE MODIFICATIONS

<table>
<thead>
<tr>
<th>LPG Policy Category</th>
<th>Page #</th>
<th>Sub-Category</th>
<th>Policy #</th>
<th>Description of Proposed Change</th>
<th>Submitted By</th>
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<tbody>
<tr>
<td>Biological and Habitat Preservation</td>
<td>8</td>
<td>Environmental &amp; Conservation Planning</td>
<td>Support – 6</td>
<td>Add new policy guideline regarding eradication/prevention of nutria in the Delta</td>
<td>Water Authority Staff</td>
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<td>Energy</td>
<td>17</td>
<td>Energy Independence</td>
<td>13</td>
<td>Add new policy guideline regarding pumped hydropower storage projects</td>
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<td>26-29</td>
<td>Bay-Delta</td>
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<td>Modification of entire Bay-Delta policy category to reflect the Board’s August 9, 2018 Bay-Delta and WaterFix-related policy principles</td>
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<td>31</td>
<td>Metropolitan Water District</td>
<td>Support – 4</td>
<td>Modification of policy guideline to eliminate guidance relative to take-or-pay contracts and replace it with long-term financial planning and transparency guidance</td>
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<td>Preamble</td>
<td>Add new statement regarding Colorado River water supplies</td>
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<td>Add new policy guidance regarding alternative conveyance of the Water Authority’s Colorado River water supplies</td>
<td>Water Authority Staff and Board of Directors</td>
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<td>Add new policy guidance regarding storage of Colorado River water supplies</td>
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<td>Policy #</td>
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<td>Local Water Resources</td>
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<td>Desalination</td>
<td>Support – 2</td>
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<td>Add new policy guideline regarding open and transparent regulatory processes</td>
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<td>49-50</td>
<td>Water System Operations</td>
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<td>Add new policy guideline regarding leak loss control requirements</td>
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<td>Water System Operations</td>
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<td>Land Use and Water Management: Local Conditions</td>
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<td>Contaminants</td>
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<td>Add new policy guideline regarding financial and legal responsibility related to issues on private property or on-site plumbing systems</td>
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<td>Long-Term Water Use Efficiency</td>
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<td>Add new policy guideline regarding retention of local control in implementation of long-term water use efficiency legislation</td>
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2018-2019
LEGISLATIVE POLICY GUIDELINES

Government Relations Program
San Diego County Water Authority
Purpose

The San Diego County Water Authority’s legislative policy guidelines reflect policy positions adopted by the Board of Directors through 2017. The guidelines provide direction to staff and the legislative advocates when they evaluate proposed legislation that may affect the Water Authority, its member agencies, or regional water management and use. Legislation that meets, or fails to meet, the principles set forth in the guidelines may be supported or opposed accordingly. The guidelines permit staff and the Water Authority’s legislative advocates to act in a timely fashion between Board meetings on issues that are clearly within the guidelines. Such actions are then reported to the Board during the next regular monthly Board meeting.

While the title of this document suggests these policy guidelines are applicable solely to state and federal legislative issues reviewed by the Water Authority, increasingly state and federal regulatory and administrative bodies are developing rules, guidelines, white papers, and regulations that can significantly affect the Water Authority and its member agencies. Water Authority staff, including the Water Authority’s legislative team, often utilize these Legislative Policy Guidelines to provide guidance on emerging and active regulatory and administrative issues.

Legislation that does not meet the principles set forth in the guidelines or that has potentially complicated or varied implications will not be acted upon by staff or the legislative advocates in between Board meetings and will instead be presented to the Board directly for guidance in advance of any position being taken.
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Bill Positions Considered by the Water Authority Board of Directors

The following represent active bill positions that may be recommended by the Water Authority staff for consideration by the Water Authority’s Board of Directors in providing guidance to the Water Authority staff and legislative advocates. Once adopted by the Board of Directors, the bill position will be communicated with the author of the legislation and may be communicated with other legislators, legislative staff, the Administration, member agencies, and the public. Advocacy strategies and activities will be directed toward implementation of the Board’s policies through advancement of the Water Authority adopted bill position.

- **SUPPORT:** This position reflects the Water Authority’s unconditional interests to see the legislation become law. Water Authority staff and legislative advocates will work for passage of the bill in its present form.

- **SUPPORT AND SEEK AMENDMENTS:** This position reflects the similar level of unconditional support for a bill as the SUPPORT position. However, this position connotes that the Water Authority would prefer specific amendments to be considered that would improve the measure. Water Authority staff and legislative advocates will communicate and advocate in support of the legislation even if amendments proffered by the Water Authority are not included in the measure.

- **SUPPORT IF AMENDED:** This is an affirmative position that connotes conditional support for a measure, but only if it is amended to incorporate specific amendments approved by the Water Authority Board. Water Authority staff and legislative advocates will not advocate in support of the legislation unless it is amended as requested by the Water Authority.

- **OPPOSE:** This position reflects the Water Authority’s unconditional interests to defeat the legislation. Water Authority staff and legislative advocates will work for defeat of the measure in its present form, and will not pursue amendments to address the measure’s shortcomings.

- **OPPOSE UNLESS AMENDED:** This is a position that connotes conditional opposition to a measure, unless it is amended to incorporate specific amendments approved by the Water Authority Board. Water Authority staff and legislative advocates will actively work to defeat the legislation until and unless it is amended as requested by the Water Authority. If legislation is amended as requested by the Water Authority, the Water Authority staff and legislative advocates will cease working to defeat the legislation, but will not advocate in support of the measure unless further directed by the Water Authority Board.

All other bills that are of potential interest or concern to the Water Authority are monitored by the staff and legislative advocates, as reflected on the monthly bill matrix provided to the Board. If any of those measures are amended, they are reevaluated to determine if a formal position should be recommended for Board consideration.
Binational Issues

Policy Category: Binational Issues
Binational Issues

The Water Authority generally supports initiatives that fund and encourage cooperative projects that serve the San Diego/Baja California area. The Water Authority opposes initiatives that take away local control over binational water supply and infrastructure projects.

The Water Authority’s policy principles support initiatives that:

1. Provide funding for development of Board-approved water supply and infrastructure projects to serve the San Diego/Baja California region while protecting local interests.

2. Encourage enhanced cooperation between entities in San Diego and Baja California in development of supply and infrastructure projects that will benefit the entire border region.

The Water Authority’s policy principles oppose initiatives that:

1. Would usurp local control over the financing and construction of water supply and infrastructure projects in the San Diego/Baja California region.
Biological and Habitat Preservation

Policy Category: Biological and Habitat Preservation
Environmental & Conservation Planning
Funding
Species & Habitats
Biological and Habitat Preservation

The Water Authority generally supports the preservation of biological and habitat values through comprehensive approaches that provide the necessary regulatory certainty for long lead time water supply projects. The Water Authority also believes that water storage and conveyance facilities provide inherent long-term habitat values that should be recognized in the regulatory process.

The Water Authority supports regulatory exemption of emergency activities when the emergency threatens the continued delivery of safe and clean water. The Water Authority also supports efforts to provide state and federal funding for habitat conservation efforts in San Diego County, on the Salton Sea, Colorado River, and at the Bay-Delta.

The Water Authority generally opposes regulations that reduce or limit the use of existing water rights or supplies, restrict the development of future water supplies, or interfere with the operation, maintenance, or repair of existing water conveyance and storage facilities.

Environmental & Conservation Planning

The Water Authority’s policy principles support initiatives that:

1. Support development of comprehensive multi-species habitat conservation plans that anticipate and mitigate project development impacts while preserving representative ecosystems, rather than individual species.

2. Exempt operation, maintenance, and repair of water system facilities from endangered species and other habitat conservation regulations because they provide beneficial cyclical habitat values to declining species and foster biological diversity in California.

3. Provide environmental regulatory certainty for implementation of existing and proposed long-term water supply programs.

4. Consolidate wetlands regulations to alleviate multi-agency jurisdiction over the same environmental resource.

5. Streamline filing of CEQA notices of determination for multi-county water projects by making those notices available on the CEQAnet website through the Governor’s Office of Planning and Research.

5.6. Support the eradication of nutria (myocaster coypus) or prevent the species from becoming established in the Delta.
Funding
The Water Authority’s policy principles support initiatives that:

1. Authorize federal and state funding to develop and implement regional or subregional conservation programs, including but not limited to property acquisition, revegetation programs, and watershed plans.

2. Provide state and/or federal funding for the restoration of the Salton Sea.

3. Provide federal and/or state funding to implement actions that address the ecological and water supply management issues of the Lower Colorado River from Lee’s Ferry to the southerly international border with Mexico.

4. Provide federal and/or state funding to implement actions that address the ecological and water supply management issues of the Sacramento-San Joaquin River Delta.

The Water Authority’s policy principles oppose initiatives that:

1. Provide for after-the-fact reduction in quantity or quality of a public water supply due to new restrictions on the operation or use of water supply facilities unless funding for alternate sources of water is provided.

2. Impose a “utility user fee” or “surcharge” on water for the purposes of financing open space/habitat preservation, restoration, or creation.

Species & Habitats
The Water Authority’s policy principles support initiatives that:

1. Incorporate an emergency exemption for “take” of a listed species listed under the state or federal Endangered Species Acts when necessary to mitigate or prevent loss of or damage to life, health, property, or essential public services.

2. Encourage species listings, critical habitat designation, and recovery plans developed pursuant to the state or federal Endangered Species Acts to be consistent with existing interstate compacts, tribal treaties, and other state and federal agreements.

3. Facilitate implementation of the Conserved Water Transfer Agreement with the Imperial Irrigation District and other Quantification Settlement Agreement programs with impacts or potential impacts to species and habitat along the lower Colorado River and at the Salton Sea.
4. Designate feral pigs as a noxious invasive animal species in the San Diego region, or authorizes actions, including eradication, to protect the region’s waters and natural landscapes from damage by feral pigs.

The Water Authority’s policy principles oppose initiatives that:

1. Impose endangered species or habitat conservation requirements that restrict the operation, maintenance, or repair of public water supply, conveyance, treatment, or storage facilities.
Drought Response

The Water Authority and its member agencies have made significant investments in supply, storage and infrastructure to avoid or minimize water shortages during drought periods and ensure a reliable supply of water for the residents and businesses of San Diego County. The Water Authority generally supports emergency drought regulations that ensure the Water Authority and its member agencies receive the water supply benefits of the investments made in reliability. The Water Authority generally supports drought regulations that recognize variations among communities, regions, and counties with respect to their abilities to withstand the impacts and effects of drought. The Water Authority generally opposes initiatives that create a disincentive to water agencies to invest in drought-resilient supplies and creates a "one-size-fits-all" approach to emergency drought declarations.

Drought Response
The Water Authority’s policy principles support initiatives that:

1. Ensure the Water Authority and its member agencies receive the water supply benefits of its investment in local water supply sources.

2. Allow local agencies to achieve compliance with emergency or non-emergency drought regulations or objectives through a combination of water conservation measures and development and implementation of local water supply sources that are not derived from the Delta.

3. Allow for local agencies to account for all water supplies available during droughts and other events when calculating the water supply shortage level.

4. Create a process for development and implementation of emergency drought declarations and regulations that recognizes variations among communities, regions, and counties with respect to their abilities to withstand the impacts and effects of drought.

5. Recognize variations among communities, regions, and counties with respect to their abilities to withstand the impacts and effects of droughts, and ensure that any temporary or permanent statutory or regulatory direction for improving water use efficiency to meet statutory or regulatory goals or standards is focused on regional achievement of objectives rather than a one-size-fits-all approach.

The Water Authority’s policy principles oppose initiatives that:

1. Disincentivize or impede water agencies from making investments to maximize the potential for recycled water, potable reuse, desalination and other drought-resilient local water supplies.
2. Create a “one-size-fits-all” approach to emergency drought declarations and regulations that ignores variations among communities, regions, and counties with respect to their ability to withstand the impacts and effects of drought.
Energy

Policy Category: Energy

Energy Costs
Energy Independence
Energy

Electricity for treating and delivering water is a major cost to the Water Authority. Generally, the Water Authority supports initiatives that help to lower the cost of electricity. The Water Authority has some capacity to generate electricity and has acquired federal preferential power, and therefore supports legislation that helps it to utilize or market the electricity it produces and acquires. The Water Authority also supports actions related to energy creation that will reduce the overall cost of water. The Water Authority’s goal is to ensure existing and planned facilities are built and operated in a manner that is environmentally sensitive, reliable, and energy efficient. This section outlines the Water Authority’s policies toward initiatives affecting renewable energy, energy consumption, and efficiency and conservation related to existing or planned facilities.

The Water Authority generally supports initiatives that will facilitate the development of renewable and alternative energy sources. The Water Authority also supports initiatives that will provide funding for projects to increase energy efficiency, reliability, and reduce peak demands.

The Water Authority generally opposes legislation that would increase the cost of its power supply. The Water Authority also opposes initiatives that would interfere with its ability to produce electricity, buy or sell, and deliver electrical power or natural gas.

Energy Costs
The Water Authority’s policy principles support initiatives that:

1. Provide opportunities for reduced energy rates under tariff schedules for the Water Authority and its member agencies.

2. Provide protection to water agencies in San Diego County from energy rate increases and provides rate relief for member agencies.

3. Provide funding, including state and federal grants, for in-line hydro-electric, solar, wind, battery storage, biogas cogeneration, nanogrids, microgrids, closed-loop pumped storage facilities and other renewable energy generation or storage technology as a means of reducing greenhouse gas emissions.

4. Promote funding for use of renewable energy in the operation of water agency facilities in San Diego County.

5. Prohibit investor-owned utilities from implementing rate changes that undercut the financial viability of renewable energy facilities obligated under long-term Power Purchase Agreements.
The Water Authority’s policy principles oppose initiatives that:

1. Adversely affect the cost of energy needed to operate MWD’s facilities, State Water Project facilities, or the facilities of the Water Authority and its member agencies.

2. Impose greenhouse gas reduction obligations on a public water agency for electricity purchased or produced for the sole purpose of operating its system.

Energy Independence
The Water Authority’s policy principles support initiatives that:

1. Provide greater flexibility in the utilization of Water Authority and its member agencies’ facilities for generation and acquisition of electrical and natural gas power.

2. Provide the Water Authority and its member agencies with greater flexibility in the licensing, permitting, interconnection, construction, and operation of its existing and potential in-line hydroelectric, solar, wind, battery, nanogrid, microgrid, closed-loop pumped-storage projects, and other renewable energy generation or storage technology.

3. Make SWP power available for all water projects.

4. Promote the classification of electricity generated by in-line hydroelectric and closed-loop pumped storage facilities as a clean, environmentally sound, and renewable energy resource.

5. Promote the expansion of closed-loop pumped storage facilities to provide a clean and environmentally sound energy resource.

6. Promote the expansion of in-line hydroelectric energy recovery systems at treatment facility discharge systems.

7. Promote the production, purchase, delivery, and use of alternative sources of energy on a wholesale basis.

8. Facilitate the Water Authority’s opportunities to exercise the authorities granted by the County Water Authority Act, Section 45-5.1.

9. Promote large-scale (greater than 50 MW) pumped storage as counting toward energy storage procurement targets.

10. Provide clear statutory, regulatory, or administrative authority for the Water Authority to wheel acquired or produced power to itself, its member agencies, or...
entities with which the Water Authority is under contract for the purchase, treatment, transport, or production of water.

11. Recognize all grid services that energy storage provides, and supports fair compensation in the wholesale energy market for such services.

12. Provides timely, efficient, and cost effective interconnection of new energy resources such as solar, inline hydroelectric, pumped storage, and other renewable energy generation or storage technologies to the electric distribution and transmission grid.

12.13. Recognize the value of large-scale hydropower and pumped hydropower facilities in assisting the state to meet its renewable and zero-carbon emission goals of 100 percent by 2045.

The Water Authority’s policy principles oppose initiatives that:

1. Adversely affect the ability of the Water Authority or its member agencies to own, operate, and/or construct work for supplying its member public agencies, or its own facilities with natural gas and electricity.

2. Impede the Water Authority’s or its members agencies’ ability to contract for, deliver, and use the purchase of natural gas and electricity from the United States, the State of California, and any other public agency or private entity and sell the gas and electricity to any public agency or private entity engaged in retail sales of electricity and gas.

3. Reduce the Water Authority or its member agencies’ ability to maintain high operational efficiency at all times.

4. Restrict the Water Authority or its member agencies’ ability to expand or improve infrastructure or facilities.

5. Restrict or caps future energy demands needed for possible expansion of recycled water, potable reuse, and desalination projects.

6. Adversely affect the Water Authority or its member agencies’ ability to expand cogeneration or polygeneration at planned or existing facilities.

7. Inhibit the scientific advancement of energy and water efficient/conserving technologies that may be implemented at Water Authority and member agency facilities.

8. Prevent the Water Authority and its member agencies from enhancing energy reliability and independence for their facilities.
9. Do not count or credit qualified renewable energy projects toward accomplishment and satisfaction of the California Renewables Portfolio Standard objectives.

10. Prohibit the Water Authority from wheeling – or securing statutory, regulatory, or administrative authority necessary to wheel – acquired or produced power to itself, its member agencies, or entities with which the Water Authority is under contract for the purchase, treatment, transport, or production of water.

11. Result in a lengthy, more complicated, or more costly interconnection of new energy resources, such as solar, inline hydroelectric, pumped storage, and other renewable energy generation or storage technologies to the electric distribution and transmission grid.
Financial Issues

Policy Category: Fiscal Policy and Water Rates
   Fees, Taxes, and Charges
   Financial Management
   Funding
   Rates

Policy Category: Water Bonds
Fiscal Policy and Water Rates

The Water Authority generally supports initiatives that improve the Water Authority’s ability to obtain cost-effective financing for the construction, operation, and maintenance of public facilities. The Water Authority supports initiatives that are consistent with the Board’s policy principles adopted in 2006, regarding user fees and statewide water infrastructure funds. The Water Authority supports initiatives that promote local control over water rates, but ensure that rate-making is undertaken pursuant to a clearly defined cost-of-service basis and foundation.

The Water Authority generally opposes unfunded federal or state mandates that are not accompanied by subventions. The Water Authority opposes initiatives that reallocate the Water Authority’s revenues or reserves to statewide purposes. The Water Authority opposes imposition by the state of a “public goods charge,” or excise tax on water for statewide purposes. The Water Authority opposes state-imposed user fees on water imposed by the state unless the fee is restricted to paying for specific projects and programs with identified costs and clearly identified benefits. The Water Authority opposes the imposition of a state water user fee to pay the interest or principal on a statewide water bond. The Water Authority opposes initiatives that would interfere with public agencies’ ability to set their own rates and manage their own finances.

Fees, Taxes & Charges

The Water Authority’s policy principles oppose initiatives that:

1. Impose mandated costs or regulatory constraints on local governments without providing subventions to reimburse local governments for such costs.

2. Pre-empt the Water Authority’s or its member agencies’ ability to impose or change rates, charges, fees, or assessments.

3. Weaken the protections afforded the Water Authority or its member agencies under California’s Proposition 1A (November 2, 2004).

4. Impose a water user fee on water agencies or water users that does not provide a commensurate and directly linked benefit in the local area or region from which the water user fee is collected.

5. Impose a water user fee for statewide projects or programs, for which the projects or programs are not clearly defined, the beneficiaries identified, and the reasonable costs identified.

6. Impose a water user fee in order to create a state fund that can be used to finance undefined future projects and programs.
7. Allow the state to retain more than five percent of water user fees for administrative costs.

8. Do not restrict the use of water user fees to only the specific purposes for which they are imposed, without any possibility of diversion to meet other fiscal needs of the state.

9. Impose a “public goods charge” or “water tax” on public water agencies or their ratepayers.

10. Impose a fee on water users to repay the principal and interest on a statewide general obligation bond.

11. Establish regulatory or permit fees that lack a nexus to the costs of oversight.

12. Establish a broad-based user fee that does not support a specific program activity; any fee must provide a clear nexus to the benefit the fee would provide.

Financial Management
The Water Authority’s policy principles oppose initiatives that:

1. Are inconsistent with the Water Authority’s and its member agencies’ current investment policies and practices.

2. Make any unilateral reallocation of Water Authority or its member agencies’ revenues by the state unless the state takes compensatory measures to restore those funds.

3. Reduce the Water Authority’s or its member agencies’ revenues without giving the Water Authority and its member agencies a commensurate public benefit that is clearly identifiable and separate from a general statewide benefit.

4. Restructure the Water Authority’s or its member agencies’ responsibilities without also providing the commensurate restructuring of revenues.

5. Require the expenditure of Water Authority or member agency funds to accomplish federal water supply commitments such as may be required in national treaties.

6. Reduce or eliminate the tax-exempt status on municipal financings.

Funding
The Water Authority’s policy principles support initiatives that:

1. Require the federal and state governments to provide subvention to reimburse local governments for all mandated costs or regulatory actions.
2. Provide the Water Authority and its member agencies with additional forms of cost-effective financing for public facilities.

3. Revitalize the Title XVI federal funding program by converting new authorizations to a competitive grant program with congressional oversight while protecting existing Title XVI authorizations for the San Diego region.

4. Provide the Water Authority and its member agencies with grant funding for public facilities.

The Water Authority’s policy principles oppose initiatives that:

1. Impose additional administrative requirements and/or restricts the Water Authority’s or its member agencies’ ability to finance public facilities through the issuance of long-term debt.

2. Interfere with the responsibility of a region, operating under an Integrated Regional Water Management Plan, for setting priorities and generating projects to be paid from any IRWM accounts and grants.

3. Interfere with the control exercised by the San Diego funding subregion over the use and expenditure of any water user fee revenues that may be dedicated to the region.

Rates

The Water Authority’s policy principles support initiatives that:

1. Maintain the authority of water agencies to establish water rates locally, consistent with cost-of-service requirements of the law.

2. Maximize the ability of water agencies to design rate structures to meet local water supply goals and that conform to cost-of-service requirements of the law.

The Water Authority’s policy principles oppose initiatives that:

1. Impair the Water Authority’s or its member agencies’ ability to provide reasonable service at reasonable costs to member agencies or to charge all member agencies the same rate for each class of service consistent with cost-of-service requirements of the law.

2. Undermine or weaken cost-of-service rate-making requirements in existing law.

3. Impair the Water Authority’s or its member agencies’ ability to maintain reasonable reserve funds and obtain and retain reasonable rates of return on its reserve accounts.
4. Mandate a specific rate structure for retail water agencies.

5. Prescribe mandatory conservation-based rate structures that override the authority of the boards of directors of local water agencies to set rate structures according to the specific needs of the water agencies.
Water Bonds

The Water Authority generally supports water bond legislation that provides an equitable share to the San Diego region, focuses on statewide priorities that achieve the coequal goals of improving water supply reliability and restoring ecosystems in the Delta. The Water Authority also supports bond legislation that ensures the grant application is not unduly burdensome and is open and transparent.

However, the Water Authority generally opposes water bond legislation that does not provide equitable funding for the San Diego region. The Water Authority also opposes water bond legislation that does not result in real improvements in water supply and water supply reliability and resolve statewide conflicts over water supply.

It shall be the Water Authority's policy to support water bond legislation or an initiative that:

1. Provides an equitable share of funding to San Diego County, with major funding categories being divided by county and funded on a per-capita basis to ensure bond proceeds are distributed throughout the state in proportion to taxpayers' payments on the bonds.

2. Focuses on statewide priorities, including restoration of fish and wildlife habitat, construction of an improved method of conveyance of water through or around the Delta that provides water supply reliability to Delta water users, promotion of greater regional and local self-sufficiency, surface storage, and promotion of water use efficiency.

3. Provides the states' share of funding for projects that advance the achievement of the co-equal goals of water supply reliability and Delta ecosystem restoration.

4. Provides funding for water infrastructure that resolves conflicts in the state's water system and provides long-term benefits to water supply, water supply reliability, water quality, and ecosystem restoration.

5. Defines the “San Diego sub-region” and “San Diego county watersheds” as “those portions of the westward-flowing watershed of the South Coast hydrologic region situated within the boundaries of San Diego County.”

6. Includes within IRWM funding money that a region may use over time to develop and refine its plan and to develop institutional structures necessary to establish and implement the plan.

7. Gives primary consideration to funding priorities established by local and regional entities through their IRWM planning process.

8. Ensures that the application process for funding is not unnecessarily burdensome and costly, with an emphasis on streamlining the process.
9. Limits state overhead to no more than five percent of bond funding amounts.

10. Places as much emphasis and provides at least as much funding for surface storage as for groundwater storage.

11. Funds emergency and carryover storage projects such as the San Vicente dam raise project.

12. Consolidates administration of all voter-approved water-related bond funding in one place, preserves existing expertise within the state bureaucracy to manage bond funding processes, and provides consistent application and evaluation of bond funding applications.

It shall be the Water Authority’s policy to oppose water bond legislation or an initiative that:

1. Does not provide an equitable share of funding to San Diego County, based on San Diego County taxpayers’ proportional contribution to repayment of the bond.

2. Does not provide funding for infrastructure that resolves statewide or regional conflicts over water supplies.

3. Does not provide funding that results in net increases in real water supply and water supply reliability.

4. Commits a significant portion of its funding to projects that do not result in net increases in real water supply or water supply reliability.
Imported Water Issues

Policy Category: Bay-Delta
- Co-Equal Goals
- WaterFix

Policy Category: Metropolitan Water District

Policy Category: Imported Water Supply
- Colorado River
- State Water Project
- Water Transfers
Bay-Delta

Generally, the Water Authority has supported an implementable and affordable solution to the conflicts between water supply exports and Delta ecosystem protection. These long-standing Delta conflicts have made water supply less reliable. Irrespective of whether a proposed Delta fix is the Bay-Delta Conservation Plan, California WaterFix, or some other conveyance-related proposal, the Water Authority is also interested in ensuring that the solution to Delta conflicts be cost-effective, and that the water contractors who finance the solution be capable of financing and maintaining improvements to the Delta. The Water Authority supports Delta solution costs being shared equitably among beneficiaries of the improvements, and that MWD member agencies be required to make firm commitments to pay their share of MWD’s State Water Project contract obligations if the costs are apportioned fairly and equitably to all users. These policy principles reflect the Board’s multi-year engagement on issues related to the Bay-Delta Conservation Plan, California WaterFix, and other Delta fix proposals.

Co-Equal Goals

The Water Authority’s policy principles support initiatives that:

1. Require the Delta Stewardship Council or DWR to provide periodic analyses of the cost of proposed Delta improvements to the Legislature and the public.

2. Provide conveyance and storage facilities that are cost-effective for the San Diego region’s ratepayers, improve the reliability and quality of the San Diego region’s water supplies, and protect the Bay-Delta’s ecosystem.

3. Require water agencies and other entities that contract to pay the costs of improvements in the Delta to obtain take-or-pay contracts with their member agencies to pay the fixed costs of the improvements.

4. Implement a long-term, comprehensive solution for the Bay-Delta that:
   a) Achieves the co-equal goals of water supply reliability and environmental restoration embodied in the 2009 Delta bill package.
   b) Provides deliberative processes that are designed to ensure a meaningful dialogue with all stakeholders in order to reduce future conflicts and challenges to implementation of a Bay-Delta solution.
   c) Provides regulatory certainty and predictable supplies to help meet California’s water needs in the long-term.
   d) Provides a Bay-Delta solution that acknowledges, integrates and supports the development of water resources at the local level including water use efficiency, seawater and brackish water desalination, groundwater storage and conjunctive use, and recycled water including direct and indirect potable reuse.
e) Improves the ability of water users to divert water from the Delta during wet periods, when impacts on fish and ecosystem are lower and water quality is higher.

f) Develops a statewide water transfer market that will improve water management.

g) Improves coordination of Central Valley Project and State Water Project operations.

h) Restores the Bay-Delta ecosystem to a point where species listed under the state and federal Endangered Species Acts are no longer threatened or endangered, taking into account all factors that have degraded Bay-Delta habitat and wildlife.

i) Ensures a meaningful dialogue with all stakeholders and that ecosystem restoration issues are addressed in an open and transparent process.

j) Provides a Bay-Delta solution and facilities that are cost-effective when compared with other water supply development options for meeting Southern California’s water needs.

k) Identifies the total cost of any Bay-Delta solution before financing and funding decisions are made, which must include the cost of facilities, mitigation and required or negotiated ecosystem restoration.

l) Allocates costs of the Bay-Delta solution to stakeholders in proportion to benefits they receive.

m) Requires a firm commitment and funding stream by all parties to pay for the proportional benefits they will receive from a Bay-Delta solution, through take-or-pay contracts or the legal equivalent.

n) Conditions financial support on provisions allowing access to any water conveyance or storage facilities that are included in the Bay-Delta solution.

o) Uses public funds to support specific projects and actions with identified costs that protect and restore the environment and provide broad-based public benefits.

p) Provides “right-sized” facilities to match firm commitments to pay for the Bay-Delta solution.

q) Provides SWP contractors and their member agencies access to all SWP facilities to facilitate water transfers.

r) Continues state ownership and operation of the SWP as a public resource. Improves efficiency and transparency of all SWP operations.

3. Continue to support the co-equal goals of water supply reliability and environmental restoration embodied in the 2009 Delta bill package.

4. Improve the ability of water-users to divert water from the Delta during wet periods, when impacts on fish and ecosystem are lower and water quality is higher.

5. Encourage the development of a statewide water transfer market that will improve water management.
6. Support improved coordination of Central Valley Project and State Water Project (SWP) operations.

7. Support continued state ownership and operation of the SWP, including WaterFix facilities, as a public resource.

8. Authorize and appropriate the federal share of funding for the long-term Bay-Delta solution, including for the EcoRestore Program.

9. Provide the ongoing state share of funding for the long-term Bay-Delta solution EcoRestore Program.

10. Provide state funding for aquatic toxicity monitoring in the Bay-Delta. Such legislation should not place a surcharge on water supply exports nor should it substantively reduce funding for other measures that protect the environment and public health.

The Water Authority’s policy principles oppose initiatives that:

1. Impose water user fees to fund ecosystem restoration and other public purpose, non-water-supply improvements in the Delta that benefit the public at large.

2. Transfer operational control of the SWP or any of its facilities to MWD, the State Water Project Contractors, Central Valley Project Contractors, the State and Federal Contractors Water Agency, any entity comprised of MWD or other water project contractors, or any other special interest group.

WaterFix

The Water Authority’s policy principles support initiatives that:

1. Are consistent with the Water Authority Board of Directors’ August 9, 2018 adopted Bay-Delta and WaterFix project policy principles, including the following:
   a. The Water Authority Board of Directors supports the WaterFix project, as currently proposed, conditioned upon the Metropolitan Water District (MWD) properly allocating the costs of the project as conservation, or supply charges, as similar facilities historically have been defined in MWD’s SWP contract with DWR.
   b. As reflected in Table 2 of DWR’s Appendix B to Bulletin 132-17, Data and Computation Used to Determine Water Charges, and for which costs are recovered in Article 22(a) of Delta Water Charge of the current MWD SWP Contract; allow for the exemption of north-of-Delta SWP contractors.

2. Support establishment of an independent oversight function to monitor and provide regular updates on WaterFix project implementation progress, including expenditure tracking, construction progress, project participants’ contributions, and all other relevant
activities and developments.

3. Allow access to all SWP facilities, including WaterFix facilities, to facilitate water transfers.
Metropolitan Water District

The Water Authority supports initiatives that require MWD to treat its member agencies equitably in proportion to their financial contributions. The Water Authority supports the protection of the Water Authority’s preferential rights at MWD, and supports initiatives requiring MWD to enter into contractual financial agreements with its member agencies, before it embarks on major capital investments, under which the member agencies would pay an equitable portion of MWD’s fixed costs of capital development and operations regardless of the amount of water the member agencies purchase in any particular year. It also requires MWD to be open and transparent in its governance, and implement policies that ensure its long-term fiscal sustainability.

The Water Authority’s policy principles support initiatives that:

1. Provide an appropriate level of accountability and cost control over MWD spending.
2. Protect and safeguard the Water Authority’s Preferential Rights in the Metropolitan Water District Act.
3. Require MWD to refund or credit to its member agencies revenues collected from them that result in reserve balances greater than the maximum reserve levels established pursuant to state legislation.
4. Require MWD to enter into take-or-pay contracts with its member agencies to assure MWD’s long-term financial viability to pay for major capital investments, including the State Water Project, regardless of whether a member agency buys water from MWD in any particular year, before MWD commits to paying for its share of the costs of a Delta conveyance project. Implement actions that advance and support its long-term financial stability, fiscal sustainability, and that moderate fluctuations in rates and charges for its member agencies from year to year, in a publicly transparent manner.
5. Amend the Metropolitan Water District Act to change voting allocation on its Board of Directors based on a member agency’s total financial contribution to MWD, and in a manner similar to the voting allocation method of the County Water Authority Act.
Imported Water Supply

The Water Authority relies on imported water from the Sacramento-San Joaquin Delta and from the Colorado River for a significant portion of its water supply. This section details the Water Authority’s policies toward initiatives that affect the imported water supply. Policies specifically relating to the Sacramento-San Joaquin Delta are listed in the section entitled “Bay-Delta.”

The Water Authority supports funding and other incentives for ecosystem restoration and other improvements to the Colorado River that improve water supply and water supply reliability. The Water Authority also supports a robust and effective means of transferring water from one part of the state to another as needed, either year-by-year or longer term.

The Water Authority opposes initiatives that would transfer control of the State Water Project from the state to MWD, the State Water Contractors, the Central Valley Project Contractors, the State and Federal Water Contractors Authority, or to any entity comprised of MWD and other water contractors. The Water Authority also opposes initiatives that would jeopardize its independent Colorado River water supplies derived through the IID/Water Authority transfer or canal lining projects.

Colorado River

The Water Authority’s policy principles support initiatives that:

1. Supports implementation and funding of the California Colorado River Water Use Plan, including the Lower Colorado River Multi-Species Conservation Program.

2. Provide funding for Colorado River salinity control projects and other water quality management efforts.

3. Provide for state and federal authorizations and appropriations of non-fee- based funds to implement Salton Sea mitigation and restoration solutions, consistent with its obligations under Chapters 611, 612, and 613 of the Statutes of 2003.

4. Revise the Quantification Settlement Agreement mitigation measures for the Salton Sea to limit the costs imposed on the funding parties to the amount committed in accordance with the QSA legislation.

5. Provide a governing structure and/or specified managing office over the state’s Salton Sea Management Program to provide guidance and oversight of restoration activities.

6. Allow for the option to create an alternate conveyance route, when technically and financially feasible, for reliable delivery of the Water Authority’s independent Colorado River water supplies.
The Water Authority’s policy principles oppose initiatives that:

1. Impose additional mitigation costs or obligations for the Salton Sea on the non-state parties to the Quantification Settlement Agreement.

State Water Project
The Water Authority’s policy principles support initiatives that:

1. Provide for development of a comprehensive state water plan that balances California’s competing water needs and results in a reliable and affordable supply of high-quality water for the San Diego region.

The Water Authority’s policy principles oppose initiatives that:

1. Make urban water supplies less reliable or substantially increases the cost of imported water without also improving the reliability and/or quality of the water.

2. Revise the Central Valley Project Improvement Act to jeopardize the Act’s environmental integrity, compromise State Water Project supply reliability and/or limit the ability of urban agencies to transfer and/or bank CVP water for use both within and outside the CVP service area.

3. Transfer operational control of the State Water Project or any of its facilities to MWD, the State Water Project contractors, Central Valley Project contractors, the State and Federal Contractors Water Agency, any entity comprised of MWD or other water project contractors, or any other special interest group.

Water Transfers
The Water Authority’s policy principles support initiatives that:

1. Encourage and facilitate voluntary water transfers consistent with other Water Authority policies and agreements.

2. Provide appropriate protection or mitigation for the environment, groundwater basins, water-rights holders and third-party impacts within the district transferring water.

3. Create a water transfer clearinghouse that serves as a neutral information resource that focuses on the collection, assembly and dissemination of information on water transfers.
4. Streamline the permitting and approval process for implementing transfers that will improve water management consistent with other Water Authority policies and agreements.

5. Encourage efficient use of existing facilities to advance voluntary transfers of water consistent with other Water Authority policies and agreements.

6. Provide that any water transfer between users within counties, watersheds or other areas of origin shall be deemed not to operate to the injury of any use of water with a point of diversion that is not located within the same hydrologic area as the transferor of the water.

6.7. **Allow for the storage of the Water Authority’s Colorado River water supplies to provide enhanced flexibility with annual transfer volumes.**

The Water Authority’s policy principles oppose initiatives that:

1. Adversely affect water management efforts by granting property rights status for the right to use or receive water and requires compensation for federal actions that impact users of water from federal projects.

2. Create a water transfer clearinghouse that is anything other than a neutral information resource.

3. Increase regulatory or procedural impediments to water transfers at the local or state level.
Local Autonomy

Policy Category: Local Autonomy
Local Autonomy

The Water Authority generally opposes initiatives that interfere with the Water Authority’s Board of Directors’ ability to govern the Water Authority’s affairs or govern relations with its employees, or that would similarly impede the ability of the Water Authority’s member agencies to exercise local authority.

The Water Authority’s policy principles oppose initiatives that:

1. Diminish the power of the Water Authority Board of Directors to govern the Water Authority’s affairs.

2. Modify the committee or board voting structure or member agency board representation unless such changes have been expressly authorized by the Water Authority Board of Directors.

3. Diminish the power or rights of the Water Authority to govern relations with its employees.

4. Diminish the power or rights of the Water Authority’s member agency governing bodies to govern their own affairs.
Local Water Resources

Policy Category: Local Water Resources
- Alternative Sources
- Desalination
- Funding
- Water Recycling & Potable Reuse
Local Water Resources

In recent years, the Water Authority and its member agencies have made great progress in diversifying and improving the reliability of the region’s water supply and developing local water resources to reduce reliance on increasingly unreliable imported water supplies. This section details the Water Authority’s policies toward initiatives that affect local water resources.

Generally, the Water Authority supports initiatives that provide funding for the development of local water supplies. The Water Authority supports initiatives that fund, promote, or facilitate the development of groundwater, potable reuse, recycling, and seawater desalination facilities. The Water Authority supports initiatives that provide local agencies with regulatory flexibility with respect to local water supplies that may raise water quality concerns, such as recycled water, potable reuse, graywater, and storm water runoff.

The Water Authority supports initiatives that provide local decision-making authority for potable reuse, stormwater, conservation, recycling, seawater desalination, and other alternative sources of water. The Water Authority has been very active in shaping state laws that promote water conservation, both indoor and landscape.

The Water Authority generally opposes initiatives that impose unreasonable regulations on local water supplies, or that interfere with the authority of local agencies to regulate the discharge of contaminants into local water sources. The Water Authority opposes initiatives that restrict the ability of local water agencies to capture and manage stormwater runoff, or diminish the water rights of downstream water users through the capture or management of stormwater runoff upstream.

Alternative Sources
The Water Authority’s policy principles support initiatives that:

1. Facilitate and encourage the use of rainwater-capture systems (e.g. rain barrels and cisterns) and alternative water sources (e.g. air conditioner condensate) for use in irrigation.

2. Ensure that decision-making with regard to stormwater management and recapture is kept at the local or regional level through local water agencies, stormwater districts, cities, counties, and regional water management groups.

3. Promote and encourage the use of stormwater management to reduce pollutant loading, increase local municipal water supplies, and improve water quality through low-impact development and watershed-based stormwater treatment systems.

4. Provide incentives for the local or regional use of stormwater management, nutrient management, and recapture.
5. Reduce or remove regulatory hurdles that hinder the use of stormwater management and recapture.

6. Encourage land use practices that promote efficient landscape design, groundwater recharge, and reduce runoff of pollutants into local water supplies.

7. Provide broad local autonomy and flexibility—within the existing Sustainable Groundwater Management Act framework—for local entities to manage and utilize local groundwater resources for local and regional needs.

The Water Authority’s policy principles oppose initiatives that:

1. Restrict the ability of the Water Authority or its member agencies to manage, store, or distribute water supplies through actions to manage or recapture stormwater.

2. Diminish the water rights or legal historical uses of downstream water users through actions to manage or recapture stormwater.

Desalination
The Water Authority’s policy principles support initiatives that:

1. Provide funding for seawater and brackish groundwater desalination studies and facilities, including concentrate disposal facilities.

2. Recognize and support the development of seawater desalination as a critical new water supply for the state and especially, including San Diego County.

3. Streamline permitting of desalination facilities.

4. Preserve and protect potential seawater desalination sites and existing coastal facilities including intake and discharge infrastructure that could be used or reused by a seawater desalination facility.

5. Ensure that desalination intake and discharge regulations are science-based, considering site-specific conditions and recognizing that not all technologies or mitigation strategies are feasible or cost-effective at every site.

Funding
The Water Authority’s policy principles support initiatives that:

1. Provide funding or other incentives for conservation, peak management programs, water recycling, potable reuse, groundwater recovery and recharge, surface water development and management projects, including reservoir
management, source water protection and watershed planning studies and facilities that sustain long-term reliable water resources.

2. Provide financial incentives to assist in the disposal of concentrate, sludge, and other byproducts created in the water treatment process.

3. Provide for the interchangeability of funding for groundwater and surface water enhancements to best fit the hydrogeologic attributes of a particular region.

4. Authorize, promote, and provide incentives or credits for development of local drought-resilient water supply projects such as desalination, non-potable recycling and potable reuse projects.

5. Provide funding for potable reuse demonstration projects and studies.

Water Recycling & Potable Reuse

The Water Authority’s policy principles support initiatives that:

1. Recognize and support the development of potable reuse as a critical new water supply for the State and especially San Diego County.

2. Authorize and facilitate expanded use of local water resources including water recycling, potable reuse, graywater, and rainwater harvesting (e.g., cisterns and rain barrels), and brackish groundwater.

3. Authorize local governmental agencies to regulate the discharge of contaminants to the sewer collection system that may adversely affect water recycling and reuse.

4. Encourage dual plumbing in new development where non-potable recycled water is likely to be available to enable utilization of recycled water.

5. Encourage the use of recycled water in commercial, industrial, institutional, and residential settings.

6. Promote uniform regulatory interpretation of state recycled water system standards.

7. Support beneficial revisions to the California Plumbing Code that facilitate recycled water systems.

8. Streamline regulatory processes and requirements to encourage and support the development of potable reuse and non-potable reuse as a municipal water supply.

9. Define purified recycled water as a source of water supply, and not as a waste.
10. Recognize the entire interconnected urban water cycle, as well as public health and safety, must be taken into consideration in long-term water use efficiency policies, particularly including the unintended consequences of declining flows on water, wastewater, potable reuse and recycled water systems.

The Water Authority’s policy principles oppose initiatives that:

1. Limit the ability of local governmental agencies to regulate the discharge of contaminants to the sewer collection system that may adversely affect water recycling and reuse.

2. Establish unreasonable regulatory requirements or fees relative to the safe use of recycled water which may unreasonably impede or create a disincentive to its further development.

3. Mandate the reduction of wastewater discharges to the ocean absent inclusion of funding to offset the significant costs of implementation.
Right of Way and Property

Policy Category: Right of Way and Property
Right of Way and Property

The Water Authority generally supports initiatives that improve its ability to maintain and protect its property, rights of way, easements, pipelines, and other facilities. The Water Authority generally opposes initiatives that interfere with or increase the cost of obtaining, maintaining, and protecting property and rights of way.

The Water Authority’s policy principles support initiatives that:

1. Improve the Water Authority’s and its member agencies’ efforts to maintain and protect its property, rights of way, easements, pipelines, and related facilities and minimizes liability to the Water Authority.

2. Protect the Water Authority’s and its member agencies’ properties from restrictions when surrounding properties are incorporated into preservation areas.

The Water Authority’s policy principles oppose initiatives that:

1. Impair the Water Authority’s or its member agencies’ efforts to acquire property or property interests required for essential capital improvement projects or acquisition of property to meet pipeline water drain-down needs for existing facilities.

2. Increase the cost of property and right of way acquisition.

3. Restrict the Water Authority’s or its member agencies’ use of public rights of way or increases the cost of using public rights of way.

4. Restrict the transfer of property acquired for purposes of environmental mitigation or environmental mitigation credits to other public or private entities for long-term management.
State Administrative and Regulatory Agencies

Policy Category: State Administrative and Regulatory Agencies
State Administrative and Regulatory Agencies

In recent years, there has been considerable discussion of reorganizing the state government. One proposal that keeps recurring is the elimination of the Colorado River Board. The board is funded entirely by the California public agencies that take water from the river, and it is important because it serves as a liaison to other states and the federal government. The Water Authority generally supports initiatives that preserve the Colorado River Board.

The Water Authority supports initiatives that make the Regional Water Quality Control Boards more consistent in their application of state water quality laws. The Water Authority also supports initiatives that allow non-state water contractors to access the SWP system to convey transferred water.

The Water Authority generally opposes initiatives that would eliminate the Colorado River Board or the regional water quality control boards without creating other bodies that carry out their functions.

**The Water Authority’s policy principles support initiatives that:**

1. Preserve the California Colorado River Board.
2. Ensure the interests of the members of the California Colorado River Board continue to be addressed in any state government reorganization.
3. Ensure consistent application of the law by the State Water Resources Control Board and the nine Regional Water Quality Control boards.
4. Ensure that any reorganization of the State Water Project, including operations and management, preserves the ability for non-State Water Project contractors to access the facility for transportation of water to a non-State Water Project contractor.

**The Water Authority’s policy principles oppose initiatives that:**

1. Eliminate the California Colorado River Board without providing a comparable structure or forum that ensures the Water Authority’s interests in the Colorado River are preserved.
2. Eliminate the State Water Resources Control Board and/or the nine Regional Water Quality Control boards without ensuring that the functions and expertise of the boards is maintained in any reorganized entity.
Water Facility and Facility Operations

Policy Category: Water Facility and Facility Operations
- Construction
- Funding
- Water System Operations
Water Facilities and Facility Operations

The construction, maintenance, and operation of water facilities is an essential activity of the Water Authority. This section details the Water Authority’s policies toward initiatives that affect water facilities and facility improvement.

Generally, the Water Authority supports initiatives that provide state and federal funding for water storage, watershed protection, treatment and delivery facilities, groundwater recharge, canal lining, and other water infrastructure development, security, maintenance, and rehabilitation. The Water Authority also supports initiatives that prevent the spread of dreissenid mussels and other non-native aquatic species. The Water Authority supports the protection of habitats and cultural resources connected with water facilities or water facility improvements.

The Water Authority generally opposes initiatives that restrict local control and discretion over water facilities and facility operations. The Water Authority also generally opposes initiatives that shift the risks of legal liability from contractors to public agencies. The Water Authority opposes initiatives that restrict the Water Authority from using its own employees on construction projects, and initiatives that interfere with public agencies’ ability to respond to emergencies that would disrupt water service.

Construction
The Water Authority’s policy principles support initiatives that:

1. Provide incentives that encourage contractors to recycle or reduce waste associated with the construction of water facilities.

The Water Authority’s policy principles oppose initiatives that:

1. Limit the Water Authority’s and/or its member agencies’ sole jurisdiction over the planning, design, routing, approval, construction, operation, or maintenance of water facilities.

2. Shift the risks of indemnity for damages and defense of claims from contractors to the Water Authority and/or its member agencies.

3. Impair the Water Authority’s and/or its member agencies’ ability to execute construction projects using its own employees.

4. Prohibit the use of alternative contract procurement methods that can be utilized in the construction of water facilities.
**Funding**

The Water Authority’s policy principles support initiatives that:

1. Fund or otherwise facilitate construction and/or maintenance of public water storage, watershed areas, and treatment and delivery facilities and facilitates maintenance and/or enhancement of groundwater recharge spreading areas and groundwater basin rehabilitation that benefit San Diego County.

2. Fund or otherwise facilitate the operation and maintenance of canal lining projects that enhance water supplies.

3. Provide funding for water infrastructure development, infrastructure security, and infrastructure rehabilitation and replacement projects that benefit San Diego County.

4. Fund enhancements to water treatment, recycling, and potable reuse facilities to meet increased regulations.

5. Fund improvements to water treatment facilities that allow greater use of State Water Project water.

6. Provide funding for the preservation of cultural resources affected by construction or operation of water conveyance and storage facilities.

7. Provide funding for habitat preservation programs that address impacts resulting from construction or operation of water system facilities.

8. Provide funding for projects that enhance security against terrorist acts or other criminal threats to water operations, facilities, or supplies.

9. Provide funding for the control, prevention, or eradication of non-indigenous aquatic species, including dreissenid mussels.

10. Provide incentives that encourage the optimization, expansion, and cooperative use of existing surface reservoirs.

11. Provide funding for projects that improve the security of the facilities and operations of the Water Authority and its member agencies.

12. Provide funding to water agencies for the voluntary retrofit of facilities for on-site generation of chlorine.

13. Permit the use of grant funding for projects implemented under public-private partnerships where the grant provides funding for a public benefit.
Water System Operations
The Water Authority’s policy principles support initiatives that:

1. Recognize water agencies as emergency responders in the event of a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent and mitigate the loss or impairment of life, health, property or essential public services due to natural disasters (e.g., wildfires, earthquakes), power outages as well as terrorist and other criminal activities.

2. Authorize state and federal wildlife agencies to provide assistance to local water agencies in the control, prevention, and eradication of non-indigenous aquatic species, including dreissenid mussels.

3. Exempt owners and operators of water supply facilities from criminal and civil liabilities associated with dreissenid mussel infestations if due diligence requirements are being met.

4. Require mandatory inspections of boats for evidence of potential dreissenid mussel infestation before allowing boat launching in reservoirs.

The Water Authority’s policy principles oppose initiatives that:

1. Impose or mandate recreational activities on drinking water reservoirs and reservoir property where such activities have been determined to be inappropriate by the reservoirs’ owners and operators.

2. Impair the Water Authority’s and/or its member agencies’ ability to provide and operate the necessary facilities for a safe, reliable, and operationally flexible water system.

3. Restrict the Water Authority’s and/or its member agencies’ ability to respond swiftly and decisively to an emergency that threatens to disrupt water deliveries or restricts the draining of pipelines or other facilities in emergencies or for repairs or preventive maintenance.

4. Authorize state and federal wildlife agencies to control, prevent, or eradicate invasive species in a way that excessively interferes with the operations or water supplies of local water agencies.

5. Prohibit or in any way limit the ability of the Water Authority or its member agencies from making full beneficial use of any water, wastewater, or recycling facility and resource investments.

6. Establish prescriptive leak loss control requirements for the operation, maintenance, and asset management of water conveyance and distribution.
systems, that fail to consider full life-cycle costing.

§7. Establish meter testing requirements for source water meters that fail to consider industry standards and cost-effectiveness.

Water Planning

Policy Category: Climate Change  
Funding  
Local Planning

Policy Category: Integrated Regional Water Management Planning  
San Diego County IRWM  
Statewide IRWM  
Funding

Policy Category: Land Use and Water Management  
Local Conditions  
Use of Public Lands  
Water Supply Planning
Climate Change

The potential effects of climate change are an important concern in water management planning. The Water Authority generally supports initiatives that incorporate considerations of climate change into water management planning, as long as the climate change information is developed and provided by the state. The Water Authority also supports initiatives that allow water agencies to partner with energy providers to improve energy efficiency in the conveyance and use of water. The Water Authority supports initiatives that encourage innovation in developing responses to climate change, with maximum control at the local level.

The Water Authority generally opposes initiatives that do not allow local control over responses to climate change. The Water Authority also opposes initiatives that prohibit water agencies from entering into the carbon credits market.

Funding

The Water Authority’s policy principles support initiatives that:

1. Incorporate state provided climate change information into statewide, regional, and local water management planning, and provides funding for projects that assist in adapting to effects of climate change on the state’s water supply.

2. Provide financial support to local projects designed to mitigate or adapt to potential negative impacts of climate change on water supply reliability.

3. Encourage water agencies to partner with energy providers to help fund water conservation and other programs that result in reduction of greenhouse gas emissions and/or provides opportunities and incentives for voluntary implementation of local water and renewable energy projects that directly or indirectly reduce greenhouse gas emissions.

4. Provides incentive, funding, and assistance to water agencies so that they can comply with AB 32 (2006) requirements, and updated statutory requirements imposed pursuant to SB 32 (2016) that even further increase greenhouse gas emission reduction targets by 2030.

5. Investigate and provides financial support to projects designed to mitigate potential negative impacts of climate change on water supply reliability.

The Water Authority’s policy principles oppose initiatives that:

1. Do not allow water agency participation in the carbon credits market.
Local Planning

The Water Authority’s policy principles support initiatives that:

1. Promote public-private partnerships, encourages innovation, and focuses on quantifiable performance goals as opposed to top-down, “one size fits all” mandates.

2. Promote continued development and deployment of more sophisticated and integrated hydrological, water quality, and meteorological water monitoring for the purpose of assessing water supply conditions resulting from climate change.

3. Promote the coordination and integration of local, state and federal climate change policies and practices to the greatest extent feasible.

The Water Authority’s policy principles oppose initiatives that:

1. Require incorporation of climate change considerations into regional, and local water management planning that does not provide flexibility to the local and regional water agencies in determining the climate change impact and identification of adaptation and mitigation measures.

2. Impose top-down, “one size fits all” climate change mandates that fail to account for hydrological, meteorological, economic, and social variation across the state and/or that fail to incorporate local and regional planning and implementation priorities and protocols.

3. Establish a “loading order” for the development of local water supplies based on embedded energy.
Integrated Regional Water Management Planning

The Water Authority, along with the City of San Diego and the County of San Diego, developed the San Diego Integrated Regional Water Management Plan. The Water Authority generally supports initiatives that provide equitable funding for IRWM plans, based on population, and that allow the regions to set their own priorities for funding. The Water Authority also supports initiatives that allow for binational funding for projects along the border.

The Water Authority generally opposes initiatives that establish state criteria and mandate for IRWM plans. The Water Authority also opposes initiatives that exclude or reduce participation by water agencies in local IRWM plans.

San Diego County IRWM

The Water Authority’s policy principles support initiatives that:

1. Define the “San Diego sub-region” and “San Diego county watersheds” as “those portions of the westward-flowing watersheds of the South Coast hydrologic region situated within the boundaries of San Diego County.”

2. Allow for creation of sub-area plans that enhance, but do not duplicate or replace, a larger recognized integrated regional water management plan.

3. Require the state to rely on the local process for selection and ranking of projects included in an approved integrated regional water management plan.

Statewide IRWM

The Water Authority’s policy principles support initiatives that:

1. Require the state agencies responsible for preparing the integrated regional water management grant program guidelines to conduct a comprehensive public outreach process that ensures stakeholders have an opportunity to provide adequate input on preparation of the guidelines and that the state agencies consider and respond to comments received through the outreach process.

2. Establish a task force to provide recommendations to the state on improving the integrated regional water management planning process in California.

3. Ensure discretion for Regional Water Management Groups to determine the composition and structure of their organization, rather than through the imposition of a “one size fits all” mandated structure applied statewide.

The Water Authority’s policy principles oppose initiatives that:

1. Mandate a specific composition and management structure of the regional water management group that oversees integrated regional water management
planning efforts within a region.

2. Preclude water wholesalers from serving on a regional water management group.

3. Dilute public water agency participation on the regional water management group.

**Funding**

The Water Authority’s policy principles support initiatives that:

1. Provide for population-based distribution of funds to ensure adequate distribution of grant funding throughout the state.

2. Provide for the use of state grant funds for binational projects where the projects benefit water supply or water quality in the San Diego region.

3. Improve and streamline the state’s reimbursement process to ensure timely remittance of IRWM funds.

4. Promote the ability of the Regional Water Management Group to more directly administer state grant funds specifically identified for IRWM Programs.

The Water Authority’s policy principles oppose initiatives that:

1. Establish funding criteria that limits local discretion in project selection.
Land Use and Water Management Planning

The Water Authority generally supports initiatives that coordinate land use planning with water management planning. The Water Authority also supports initiatives that protect flood plains and water recharge basins.

The Water Authority generally opposes initiatives that interfere with the Water Authority’s ability to forecast demand and plan for water management.

Local Conditions

The Water Authority’s policy principles support initiatives that:

1. Promote enhanced coordination and linkage of general plans and water management plans.

2. Recognize regional efforts to coordinate land use planning and water management planning in a manner consistent with the goals and objectives established by regional growth management strategies, affordable housing mandates, and local general plans.

3. Discourage piecemeal or uncoordinated land use and water management planning.

4. Require that projected population and other demographic factors utilized in forecasting future water demands in accordance with the Urban Water Management Planning Act and SB 610 and SB 221, be consistent with the regional growth management plans and general plans applicable to the territory within the service area of the supplier.

5. Provide funding for, or otherwise facilitates, development of groundwater management plans pursuant to AB 3030.

6. Encourage consolidation of small non-viable and non-complying water systems without shifting the financial burden to the customers of the agency receiving the consolidation.

The Water Authority’s policy principles oppose initiatives that:

1. Restrict or limit the effectiveness of the Water Authority or its member agencies in its continuing efforts to meet its obligations under SANDAG’s Regional Comprehensive Plan and develop demand forecasts based on SANDAG regional growth forecasts and general plan use information.

Use of Public Lands

The Water Authority’s policy principles support initiatives that:

1. Allow and fund land exchanges between local public agencies and federal or...
state agencies when mutually beneficial to all agencies and enhances water resources for the region.

2. Designate public lands that are tributary to drinking source water reservoirs as wilderness, habitat preserve, open space, or other protected status, provided such designation does not impede current or reasonable future use of those water resources.

3. Protect floodplains and lands over prime groundwater recharge zones for stormwater catchment and bioremediation.

**The Water Authority’s policy principles oppose initiatives that:**

1. Impose land use designations that preclude the use of such lands for public water infrastructure determined necessary to ensure a cost-effective, safe, and reliable water supply.

**Water Supply Planning**

**The Water Authority’s policy principles support initiatives that:**

1. Considers the multiple local variables and priorities that are associated with water supply planning and selection of water resources for implementation.

2. Preserve the local water agency’s ability to establish local priorities for water resources planning decisions.

**The Water Authority’s policy principles oppose initiatives that:**

1. Restrict the Water Authority’s or its member agencies’ ability to utilize a demand forecasting methodology that is best suited for the region.

2. Require the use of specific evaluation criteria in water supply planning and selection of potential water supply projects that fails to take into account or conflicts with existing local and regional planning policies and implementation priorities.

3. Impose mandates requiring specific water resources be developed by water agencies that fail to take into account local factors, such as water reliability, hydrologic and geographic characteristics, and the economic, political, public acceptance, and social environment, which can influence selection of resources and/or fails to take into account or conflicts with existing local and regional planning policies and implementation priorities.

4. Limit the local water agency’s ability to establish local priorities for water resources planning decisions.
Water Quality Issues

Policy Category: Water Quality Issues
Contaminants
Funding
Source Water Protection
Water Quality Issues

Water quality is a major concern of the Water Authority. The Water Authority generally supports initiatives that assist in providing high-quality water to the San Diego region through cleanup and remediation of contaminants and protection of water sources.

The Water Authority generally opposes initiatives that regulate the conveyance, storage, and distribution of water supplies under the Clean Water Act.

Contaminants

The Water Authority’s policy principles support initiatives that:

1. Assure cost-effective remediation and cleanup of contaminants of concern that have impacted groundwater and surface water.

2. Incorporate sound scientific principles in adopting drinking water standards for drinking water contaminants.

3. Exempt the conveyance, storage, or release of water supplies from regulation as a discharge under the Clean Water Act and other water quality control laws.

4. Revise NPDES standards and procedures to facilitate inland discharge and use of recycled water.

5. Establish appropriate quality standards, testing procedures, and treatment processes for emerging contaminants.

6. Alter the definition of “lead free” to reduce the permissible amount of lead in fixtures, plumbing, and pipe fittings to be installed for the delivery of drinking water.

7. Exempt purified wastewater from regulation as a discharge under the Clean Water Act.

8. Protect child public health by requiring schools to undertake lead testing in school drinking water systems.

9. Implement source control for management and prevention of contamination by constituents of emerging concern.

The Water Authority’s policy principles oppose initiatives that:

1. Regulate the conveyance, storage, or release of water supplies as a discharge under the Clean Water Act and other water quality control laws.
2. Make water suppliers financially and legally responsible for mitigation of pollution contamination by third parties.

2.3. Make water suppliers financially and legally responsible for testing or correction of any water quality-related issues associated with private property or on-site plumbing systems.

Funding
The Water Authority’s policy principles support initiatives that:

1. Provide the necessary funding for research on the occurrence, treatment, health effects, and environmental clean-up related to contamination of drinking water sources.

2. Implement and fund the San Diego Regional Water Quality Control Board’s triennial review of water quality standards.

3. Provide funding and support for Colorado River salinity control projects and other water quality management efforts.

Source Water Protection
The Water Authority’s policy principles support initiatives that:

1. Assist in achieving a year-round blend of imported water supplies that achieve Board-adopted water quality objectives from MWD that helps member agencies comply with drinking water standards and the region to maximize development of recycled water and reduce financial costs to the customer due to high levels of total dissolved solids in imported water supplies.

2. Provide for the protection of source water such as reservoirs and groundwater basins so that the waters can be beneficially used for consumptive purposes.

3. Appropriately protect drinking source water reservoirs as special-purpose, man-made water bodies different in character than natural waterways, rivers, lakes, and coastal waters, while allowing maximum flexibility for operations as part of a managed water supply system.

4. Exempt terminal reservoirs with no significant nexus to the watershed from regulation under the federal Clean Water Act.

5. Direct the state’s participation or assistance in water quality issues related to or threatening the Colorado River water source.
6. Provide for watershed planning, watershed signage, and actions to protect source water - including reservoirs - such as land acquisition around reservoirs, limited land use, and increased buffer areas.

7. Reduce the water quality impacts caused by runoff into local reservoirs using a watershed based approach.

8. Streamline permitting of facilities constructed for the purpose of improving water quality.

The Water Authority’s policy principles oppose initiatives that:

1. Contribute to the degradation of source water quality around reservoirs and groundwater basins.
Water Use Efficiency

Policy Category: Water Use Efficiency
- Fixtures
- Funding
- Irrigation
- Long-Term Water Use Efficiency
- Reporting
Water Use Efficiency

The Water Authority has been a statewide leader in sponsoring legislation to improve water use efficiency. The Water Authority championed statewide requirements for ultra-low-flow toilets, high-efficiency clothes washers, water meters, and sponsored legislation that created a statewide task force on outdoor landscape water use efficiency. The Water Authority’s legacy as a leader in advancing statewide water use efficiency initiatives has continued through today, as the Water Authority has sponsored legislation in recent years to improve demand management measure reporting in urban water management plans, allow for installation of synthetic grass in common interest developments, and require the state to undertake regular updates of the model water efficient landscape ordinance.

The Water Authority generally supports water saving measures, such as graywater use, rainwater capture, submetering, plumbing retrofits, and others. The Water Authority has supported implementation and coordination of Best Management Practices as defined by the California Urban Water Conservation Council and Demand Management Measures under the Urban Water Management Planning Act.

The Water Authority generally opposes statewide requirements for conservation-based water rates that override the rate-setting authority of local agencies. The Water Authority also opposes the promulgation of conservation practices or standards that override the authority of local agencies.

Fixtures
The Water Authority’s policy principles support initiatives that:

1. Encourage the use of graywater where it complies with local guidelines and regulations and is cost-effective.

2. Establish standards for the utilization of high-efficiency commercial coin-operated and residential clothes washers.

3. Require submetering connections to be built in new construction of multiple unit commercial or residential buildings.

4. Encourage plumbing fixture retrofit upon real property resale.
5. Restrict Property Owner Associations from forbidding retrofits of multiple unit facilities for the purpose of submetering, if feasible.

6. Ensure plumbing codes and standards that facilitate the installation and/or retrofit of water efficient devices.

The Water Authority’s policy principles oppose initiatives that:

1. Repeal cost-effective efficiency standards for water using devices.

Funding

The Water Authority’s policy principles support initiatives that:

1. Provide loans and grants to fund incentives for water efficient devices, practices, and demonstration projects and studies.

2. Provide incentives, funding, and other assistance where needed to facilitate market transformation and gain wider implementation of water-efficient indoor and outdoor technologies and practices.

3. Provide incentives, funding, and assistance to water agencies so that they can meet the water demand management measure requirements in the Urban Water Management Planning Act.

4. Provide incentives, funding, and other assistance to facilitate water use efficiency partnerships with the energy efficiency sector.

5. Provide for federal tax exempt status for water use efficiency rebates, consistent with income tax treatment at the state level.

Irrigation

The Water Authority’s policy principles support initiatives that:

1. Encourage implementation of effective water management practices for urban landscape and agricultural irrigation.

2. Encourage stakeholders to implement statewide landscape water conservation standards and regulations.

3. Restrict Property Owner Associations from forbidding the use of California native plants, other low water use plants, or artificial turf in well-maintained landscapes.

Long-Term Water Use Efficiency
The Water Authority’s policy principles support initiatives that:

1. Recognize local control in determining water use efficiency criteria, such as impact of recycled water salinity on irrigation use and efficiency for the application of non-potable recycled water.

2. Recognize local control in determining how to meet an overall efficient water use goal, based on the combined efficient indoor use, outdoor use, and leak loss, as established under the criteria provided for in statute.

The Water Authority’s policy principles oppose initiatives that:

1. Create stranded assets by establishing long-term demand management water use efficiency and water supply requirements that are inconsistent with the Urban Water Management Planning Act.

2. Prescribe statewide mandatory urban and agricultural water use efficiency practices, including, but not limited to, methods, measures, programs, budget allocation, and designation of staff dedicated to water conservation programs, that override the authority of the boards of directors of local water agencies to adopt management practices that are most appropriate for the specific needs of their water agencies.

3. Mandate regulation of the CII Sector in a manner that is discriminatory, sets unachievable Best Management Practices or compliance targets, or would otherwise impair economic activity or the viability of the CII sector.

Reporting

The Water Authority’s policy principles support initiatives that:

1. Further the statewide goal of a 20 percent reduction in per capita water use by 2020 as set forth in SBX7-7, enacted in November 2009, and preserves water agency discretion and options for achieving this objective, or any subsequent state mandated water use efficiency goals or standards.

2. Ensure accurate and meaningful reporting of implementation of water conservation measures.

3. Encourage reasonable tracking of water use and improved efficiency in the Commercial, Industrial, and Institutional (CII) sector.

The Water Authority’s policy principles oppose initiatives that:

1. Mandate that water agencies include an embedded energy calculation for their water supply sources in the Urban Water Management Plan or any other water resource planning or master planning document.
November 28, 2018

Attention: Legislation and Public Outreach Committee

Water Authority Sponsorship of Legislation in the 2019 State Legislative Session. (Action)

Staff recommendation
Sponsor or co-sponsor the following legislative proposals:

• Legislative Proposal #1 to seek grant eligibility for public-private partnership projects, like the Carlsbad desalination intake facility.
• Legislative Proposal #2 to create opportunities for bulk energy storage projects to advance as transmission assets to improve grid reliability.
• Legislative Proposal #3 to provide a path of reciprocity for military veterans to apply their skills and experiences toward water and wastewater system operation certifications.

Alternatives
Do not sponsor or co-sponsor one or more of the recommended legislative proposals.

Fiscal Impact
There is no direct fiscal impact.

Executive Summary

• This proposed action is to allow the Board to authorize the sponsorship of legislation within the State Legislature during 2019.
• Three proposals are recommended for bill sponsorship in 2019, and one proposal is recommended to be addressed only through the State Budget process.
• The recommended legislative proposals relate to Proposition 1 grant eligibility for public-private partnerships, pumped hydropower storage, and transition for military veterans into water and wastewater industry occupations.

Discussion
Staff has considered and evaluated three legislative proposals for possible sponsorship or co-sponsorship of legislation during the 2019 state legislative session. The process to solicit legislative proposals for consideration of possible bill sponsorship in 2019 has involved the solicitation of concepts from Water Authority staff, member agency General Managers, member agency legislative liaisons, and Board members. Staff is recommending Water Authority sponsorship of three proposals identified in the chart below, during the 2019 state legislative
The legislative proposals are identified below and evaluated in more detail in Attachment 1.

<table>
<thead>
<tr>
<th>LEGISLATIVE PROPOSAL</th>
<th>RECOMMENDED FOR BILL SPONSORSHIP IN 2019?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seek grant eligibility for public-private partnership projects, like the Carlsbad desalination intake facility.</td>
<td>YES – Staff recommends the Board sponsor legislation in this area in 2019 and also pursue a parallel effort through the State Budget process to secure a funding appropriation towards construction of the Carlsbad desalination intake facility.</td>
</tr>
<tr>
<td>2. Create opportunities for bulk energy storage projects to advance as transmission assets to improve grid reliability.</td>
<td>YES - Staff recommends the Board sponsor legislation in this area in 2019.</td>
</tr>
<tr>
<td>3. Provide a path of reciprocity for military veterans to apply their skills and experiences toward water and wastewater system operation certifications.</td>
<td>YES - Staff recommends the Board approve co-sponsorship of legislation – with Otay Water District – to provide equivalency and reciprocity standards to improve military veteran transition to civilian employment within the water and wastewater treatment fields.</td>
</tr>
<tr>
<td>4. Require state regulatory agencies to adopt a comprehensive mercury source control program.</td>
<td>NO – Staff recommends that the Board not pursue sponsorship of legislation in this area, but rather direct staff to advance provisions within the context of the State Budget development to address this regulatory issue.</td>
</tr>
</tbody>
</table>

Prepared by: Glenn Farrel, Government Relations Manager
Ivy Ridderbusch, Management Analyst
Approved by: Dennis A. Cushman, Assistant General Manager

Attachment 1: State Legislative Proposals – 2019
STATE LEGISLATIVE PROPOSALS – 2019

PROPOSAL #1 – SEEK GRANT ELIGIBILITY FOR PUBLIC-PRIVATE PARTNERSHIP PROJECTS, LIKE THE CARLSBAD DESALINATION INTAKE FACILITY

Background on Issue
In November 2014, voters approved Proposition 1 on the general election ballot, authorizing the issuance of $7.12 billion in general obligation bonds for a variety of water quality, water supply, and infrastructure improvement projects. Chapter 9 of Proposition 1 allocated $725 million for water recycling and advanced treatment technology projects, including projects related to seawater desalination.

Water Code Section 79712, which was enacted as part of Proposition 1, identifies specific eligible applicants for water bond funds, including “public agencies, nonprofit organizations, public utilities, federally recognized Indian tribes, state Indian tribes listed on the Native American Heritage Commission’s California Tribal Consultation List, and mutual water companies.” In addition, the provisions of Water Code Section 79721 also allow that “To be eligible for funding under this division, a project proposed by a public utility that is regulated by the Public Utilities Commission or a mutual water company shall have a clear and definite public purpose and shall benefit the customers of the water system and not the investors.”

During 2017, the Water Authority submitted a Proposition 1 grant application for Chapter 9 funds for the Carlsbad Desalination Plant Intake Modifications Project. The application sought $10 million in grant funds to assist in construction of the plant’s new intake facility. On October 16, 2017, the Department of Water Resources (DWR) – the state agency charged with administration of desalination project funds under Proposition 1, Chapter 9 – communicated to the Water Authority that the grant application was deemed ineligible. In part, the DWR letter provided that:

“This is the position that is an eligible applicant as defined in Water Code Section 79712(a) must own the facilities purchased or constructed with Proposition 1 grant funds for purposes of the Desalination Round 4 PSP. Based upon information contained in the application, it appears that the grant-funded facilities would be owned by Poseidon Water, which is not the type of entity that is included in the list of eligible applicants in the statute and the Desalination Round 4 PSP. Consequently, the application for the Lewis Carlsbad Desalination Plant Intake Modifications Project appears to be ineligible.”

Subsequent to the October 16, 2017 correspondence from DWR, the Water Authority responded on October 25, 2017 in an effort to resolve the eligibility issue administratively to ensure the San
Diego region can fairly and equitably benefit from the state bond fund opportunity. The Water Authority’s correspondence clearly outlined that the proposed project will provide a public benefit consistent with the intent of the statute and the DWR proposal solicitation package, and the project includes adequate controls through the Water Purchase Agreement between the Water Authority and Poseidon to ensure that any grant funding will solely benefit the Water Authority’s ratepayers and not the private entity. The Water Authority’s grant application package provided substantial detail regarding the partnership between the Water Authority and Poseidon, including information on how the grant funds would benefit only the Water Authority ratepayers and would not benefit Poseidon.

On November 7, 2017, DWR responded to the Water Authority’s correspondence and concluded that: “…I regret to say that DWR has determined that SDCWA’s application for the intake facility is ineligible because it is DWR’s opinion that the bond-funded facility must be owned only by eligible applicant(s).” The November 7, 2017 correspondence concluded the communications between the parties and confirmed DWR’s unwillingness to even consider a grant application submitted by the Water Authority for financial assistance for the desalination intake facility project.

Absent a clarification of the statute that public-private partnerships, where the public agency receives water for public consumption and where the grant funding would be used solely to benefit public agency customers, the Carlsbad desalination intake facility and similarly-structured public-private partnership projects would perpetually remain ineligible to compete for state grant funds.

Recommended Approach
Staff recommends the following course of action:

- Sponsorship of legislation in 2019 that ensures Proposition 1 grant eligibility – and establishes statutory precedence for future water bond measures – for public-private partnership projects, like the Carlsbad desalination intake facility project, where the public would receive the direct benefit of the grant funding.

- Pursue a parallel effort through the State Budget process to secure funding assistance for the Carlsbad desalination intake facility project.
PROPOSAL #2 – CREATE OPPORTUNITIES FOR BULK ENERGY STORAGE PROJECTS TO ADVANCE AS TRANSMISSION ASSETS TO IMPROVE GRID RELIABILITY

Background on Issue
As California rapidly advances toward 100 percent renewables/zero-carbon emission objectives in energy production, the use of more renewables will require investing now in new technologies to make the power grid more robust, because the wind does not always blow and the sun does not always shine when electricity is needed most. In 2017 alone, the state curtailed approximately 400,000 megawatt-hours (MWh) of renewable energy. That lost opportunity could have prevented 650 million pounds of greenhouse gas emissions – the equivalent of removing more than 60,000 cars from the road. To make matters worse, renewable energy production curtailment is poised to grow exponentially. A recent study by the Union of Concerned Scientists projects curtailments expanding 70-fold as renewable energy sources continue to grow.

More clean energy storage is vital to solving this problem. As the grid becomes more dependent on renewables, a huge gap is growing between when energy is needed and when renewables can supply it. Pumped energy storage is one of the lowest-cost proven solutions for bulk energy storage. California has used this technology for decades, and more than 20,000 MW of pumped storage is operational nationwide. Today, pumped storage projects are configured to store excess renewable energy from sun and wind during the day and then discharge when evening energy demands increase.

Pumped energy storage can play an efficient role in integrating renewables into the grid – about 80 percent of the energy used to pump water is regenerated. Batteries, improved grid control technologies, and better markets all have a role to play as well, but pumped storage is unique in its ability to operate at full power for many hours. Well-designed pumped storage projects also provide other critical grid benefits, such as firm capacity, frequency regulation, up-and-down ramping, fast-start capability, inertia, and voltage support.

One of the most promising bulk energy storage solutions in California is the San Vicente Energy Storage Facility, a partnership project involving the Water Authority and the City of San Diego. This project could store 4,000 MWh per day of energy (500 MW of capacity for eight hours) – more MWh than all of the batteries currently operating statewide. This project would have a small new footprint because it would take advantage of the existing San Vicente Reservoir owned and operated by the City of San Diego. The Water Authority owns approximately two-thirds of the reservoir’s storage capacity.

The San Vicente project is being closely examined by the partner agencies to help meet clean energy goals. The existing reservoir is near the terminus of the Sunrise Powerlink, which would allow the project to play a central role in integrating solar and wind energy from across the southwest. The San Vicente project is designed to draw on the strengths of the public and private sectors working together. The Water Authority and the City of San Diego will ensure that San Vicente Reservoir serves its primary mission – supplying clean and reliable water for San Diegans – and the public entities will use the revenues from the project to help offsets the
cost of water services for the region. Private investors will provide the capital, along with the expertise to integrate the project with existing infrastructure for the good of the entire region.

Planning and investing for large-scale energy projects like the San Vicente Energy Storage Facility takes a long time, so it is important to take steps now – including through the creation of a path forward through legislative action – to make sure bulk energy storage projects can help California realize a clean energy future.

**Recommended Approach**
Staff recommends the following course of action:

- Sponsorship of legislation in 2019 to create an opportunity for bulk energy storage projects, like the San Vicente Energy Storage Project, to advance as a transmission asset to improve grid reliability and integration of renewable energy sources into the system.

**PROPOSAL #3 – PROVIDE A PATH OF RECIPROCITY FOR MILITARY VETERANS TO APPLY THEIR SKILLS AND EXPERIENCES TOWARD WATER AND WASTEWATER SYSTEM OPERATOR CERTIFICATIONS**

**Background on Issue**
In 1971, laws and regulations governing the certification of potable water treatment facility operations were enacted. The regulations establish at what level water treatment facilities should be staffed, the minimum qualifications for testing at each of the five grade levels of water treatment system operator, and the criteria for the renewal and revocation of operator certificates.

In 1998, the United States Environmental Protection Agency established guidelines for the certification and re-certification of operators of community and non-transient non-community public water systems. On January 1, 2001, new state regulations were adopted to comply with these guidelines and the existing water treatment operator certification program was modified accordingly. The new regulations also established a water distribution operator certification program. This program became the Drinking Water Operator Certification Program (DWOCP).

In 2014, the DWOCP was transferred to the State Water Resources Control Board (SWRCB) in the Division of Financial Assistance. The DWOCP is responsible for the testing and certification of approximately 35,000 water treatment and water distribution operators throughout the state of California.

The SWRCB also administers the Wastewater Operator Certification program (WWOCP) which provides for Wastewater Treatment Plant Certification examinations, certifications, and certification renewals. Additionally, the WWOCP classifies Wastewater Treatment Plants. Currently, there are approximately 6,000 active certified wastewater treatment plant operators in California. Since 1972, the SWRCB examines and certifies wastewater treatment plant operators for competency to operate facilities.

Water and wastewater treatment is an essential and well-established industry with an aging
infrastructure and workforce. Replacement of critical infrastructure components, like 100-year-old pipes and pumps, while maintaining service to customers, is one of the greatest challenges in the industry today. In addition, the high-level of retirements, new technologies, and increased demand for safe drinking water also contribute to the pressure on the industry to adapt.

Workers in the water and wastewater treatment industry process water from a variety of sources and make it safe for drinking or to be returned to the environment. Water treatment facilities process water from wells, rivers, streams, the ocean, and reservoirs while wastewater treatment plants process wastewater from customers’ sewer pipes. Additionally, the emergence of advanced treatment technologies involving desalination and potable reuse require new approaches for water treatment and advanced treatment personnel. Operators in both types of plants use similar procedures, materials, instruments, computer programs, tools, and knowledge to operate equipment and manage treatment processes.

The water treatment industry is growing in complexity and these changes are putting new, higher demands on industry workers:

- **Security:** The post-9/11 atmosphere has heightened the importance of security throughout the industry. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 placed new reporting, training, and hiring requirements on industry operators.

- **Increased Demand/Inadequate Supply:** California is a semi-arid state with hydrologic cycles of chronic water shortages and drought conditions. As the population continues to increase, the demand for water grows. Life-style choices and manufacturing demands also affect the adequacy of the supply.

- **Technology:** New and innovative technologies provide high levels of treatment, reduce leakage, support conservation, and increase the security of the water supply. Technology has also improved testing and increased standards for treating water. These technologies have converted occupations that used to be based on manual labor to higher levels of skill and knowledge.

- **Regulations:** The industry is becoming highly and stringently regulated. New regulations to ensure protection of public health govern disinfection byproduct control, microbial removal, the treatment of inorganic contaminants, security concerns, and improved analytical methods that can detect constituents of emerging concern at parts-per-trillion levels. These regulations create additional demands on operators of water and wastewater plants.

- **New Processes:** The industry is constantly exploring ways to meet expanding water demands. New advanced water treatment processes focused on desalination and potable reuse are rapidly emerging. The drive to expand supply through these alternative treatment methods offers the possibility of new plants, systems, and jobs (with new skills and knowledge requirements) within the industry.

Projections of demand for water operators are fueled by a high level of expected retirements.
among experienced workers and the continued increase in demand for water by both residential and commercial customers. According to recent industry reports, thousands of water workers are aging and expected to retire from their positions in coming years, leading to a huge gap to fill for utilities and other water employers. Some water occupations are significantly older than the national median (42.2 years old), including water treatment operators (46.4 years old).¹ New entrants to the industry need education and training to obtain state certification and incumbent workers need additional credits when they seek a higher level of state certification.

According to the Department of Defense, more than 250,000 U.S. military members leave military service each year. Dozens of offices and agencies and thousands of private organizations are focused on assisting service members, veterans, and their families to successfully reintegrate after military service. Despite the abundance of available resources, there continue to be missed opportunities – particularly within the water and wastewater treatment operator field – to find, educate, certify, and employ veterans transitioning to civilian employment.

Several states – including Washington, Texas, North Carolina, and Pennsylvania – provide paths for military veterans to navigate the civilian water system operator certification process and allow the application of equivalency standards to credit military experiences toward state or industry certifications in the water and wastewater treatment and distribution fields. However, there is no similar pathway or equivalency standard process for military veterans in California. The California water industry and other similar skilled trade industries would have a much larger pool of highly skilled, motivated, and talented individuals eager to continue their service to the public and the community at large if military veterans were offered experience credit toward state or industry certifications.

**Recommended Approach**

Staff recommends the following course of action:

- Co-sponsorship of legislation with the Otay Water District in 2019 to:
  - Provide a path of reciprocity to military veterans to apply their advanced skills and experience toward state and industry-supplied certifications, or positions within the public or private sectors that specify certifications, within the water and wastewater treatment and distribution operator fields.
  - Ensure that advanced water treatment operators of potable reuse and recycled water facilities have a career advancement path as certified water and/or wastewater treatment plant operators.
  - Ensure that recycled water distribution system operators have a career advancement path as certified water distribution system operators.

¹ “Renewing the Water Workforce: Improving Water Infrastructure and Creating a Pipeline to Opportunity,” Brookings Institute, June 2018
Provide a path to allow consultants and engineers operating pilot advanced treatment technology projects to use their experience to become certified water and/or wastewater treatment operators.

PROPOSAL #4 – REQUIRE STATE REGULATORY AGENCIES TO ADOPT A COMPREHENSIVE MERCURY SOURCE CONTROL PROGRAM

Background on Issue
The State Water Resources Control Board (SWRCB) is developing a mercury program to reduce mercury levels in fish within reservoirs. Mercury does not impair reservoir drinking water quality, however at very low environmental concentrations mercury can bioaccumulate in fish over time. Consuming fish high in mercury can pose a health threat. Due to elevated mercury levels, reservoir owners in San Diego County have posted fish consumption advisories at reservoirs.

Sources of mercury vary statewide. Historic mine sites and atmospheric deposition are the most significant contributors of mercury to state water bodies. Insignificant levels of contribution are derived from waste discharges.

Already within the ongoing regulatory process, the SWRCB has adopted water quality standards for mercury in fish. Based on those standards, the SWRCB has identified 131 water supply reservoirs statewide that do not meet the mercury standards based on samples of fish from those reservoirs and are expected to be listed as impaired. Under the federal Clean Water Act, listing a waterbody as impaired would require the SWRCB to adopt a Total Maximum Daily Load (TMDL) for mercury, which must account for all sources of the pollutant that caused the waterbody to be listed as impaired, and that is followed by a regulatory process to limit the discharge of that particular pollutant to the affected waterbody. For San Diego County reservoirs the source of mercury is believed to be air deposition from national and global sources, which cannot be controlled through a TMDL.

Nationwide, atmospheric mercury pollution has declined significantly since 2000. Globally, mercury emissions are expected to decline under the Minimata Convention on Mercury, which was signed by more than 140 countries, including the United States, China, and India. This multilateral agreement for mercury went into effect in August 2017 and will address human activities contributing to mercury pollution.

The U.S. Environmental Protection Agency has issued guidance related to waterbodies listed as impaired for elevated mercury predominantly caused by atmospheric sources. The guidance provides that, if a state has a comprehensive program for mercury reduction, then adoption of a TMDL for waters impaired by mercury from air deposition can be significantly delayed. The SWRCB does not have authority to develop a comprehensive mercury source control program because it would require the participation and cooperation of other state agencies, such as the California Air Resources Control Board (CARB) and Department of Toxic Substances Control (DTSC). Therefore, lacking necessary statutory guidance, the SWRCB is focused on water
agencies (reservoir owners) to provide the solutions for mercury pollution to be developed through pilot studies.

**Recommended Approach**
Staff recommends the following course of action:

- Pursue provisions within the State Budget process – including budget control language, funding allocation, and statutory direction – that would require the SWRCB, CARB, and DTSC to:
  - Adopt a comprehensive mercury reduction and monitoring program.
  - Delay adoption of mercury TMDLs for those reservoirs where the source of mercury is identified as predominantly from air deposition.
November 28, 2018

Attention: Legislation and Public Outreach Committee

Fiscal Year 2018 Annual Report. (Presentation)

Purpose
The purpose of this presentation is to introduce the Board to the FY2018 Annual Report, an online tool that highlights the major accomplishments of the year and memorializes key financial and water-use data.

Discussion
Following each fiscal year, staff in the Public Outreach and Conservation Department compiles the highlights of the year in the agency’s formal Annual Report. As has been the case in recent years, the FY2018 Annual Report is an interactive online document with photos, videos, text and graphics. In addition, the Water Authority publishes a full-color brochure that summarizes the full report for distribution to key stakeholders around the region. The current report is titled “2018 Brought to You by Water,” echoing the theme of the Water Authority’s successful public outreach and education program that enhanced discussions about the value of safe and reliable water supplies during the year. The Annual Report is accessible through the Water Authority’s homepage at sdcwa.org. It also is archived with past editions of the Annual Report at www.sdcwa.org/publications under the Annual Report tab.

Prepared by: Mike Lee, Public Affairs Supervisor
Reviewed by: Denise Vedder, Director, Public Outreach and Conservation Department
Approved by: Dennis A. Cushman, Assistant General Manager
November 28, 2018

Attention: Legislation and Public Outreach Committee

Government Relations Update. (Information)

Purpose
This report is an update of the Water Authority’s government relations program.

Discussion

The Legislature
The State Legislature is scheduled to convene for an organizational session on December 3, 2018. During the organizational session, legislators will be sworn-in to office, officers will be elected, and bills can be introduced. Legislators will then return during the second week of January to begin the 2019-20 two-year legislative session.

November 2018 General Election
The 2018 general election was held on November 6, 2018. There were a number of important state races that will impact activity in Sacramento. All 80 State Assembly seats and half (20) of the State Senate seats were contested during the November 6 election. Additionally, all of the seats in the U.S. House of Representatives and one of California’s U.S. Senate seats were also contested during the election. California voters also considered 11 statewide ballot measures and numerous local races and propositions. Final certified results are due to the California Secretary of State for all state contests on December 7. The Secretary of State will then certify the statewide results by December 14.

It is important to note that latest reports indicate thousands of late-arriving mail and provisional ballots remain to be counted in California. While this staff memo projects outcomes based on best available information, it is conceivable that outstanding, uncounted ballots could shift some final results.

State Assembly
In the California State Assembly, Democrats gained at least two seats previously held by Republicans, and have retained a two-thirds supermajority in the Assembly. There are still four seats that are undecided due to close contest races, meaning that there is less than a two percent difference between first and second place for candidates. All four of the remaining races are between Democrat and Republican candidates and will have an effect on the final number of party seats in the Assembly.

All seven of the San Diego Assembly delegation seats were contested during the election. There was a change in the party designation of Assembly District 76, which was previously held by Republican Rocky Chavez. Now, Republicans represent three of the San Diego Assembly seats, and Democrats represent four.
State Senate
In the State Senate, Democrats gained two seats previously held by Republicans, and have now achieved a two-thirds supermajority in the Senate. The two-thirds super-majority in both the Assembly and the Senate will make rule waivers and procedural votes easier for the Democrats and will likely have major impacts on policy decisions.

In San Diego County, three of the four seats within the San Diego State Senate delegation were contested during the election. There were no changes in the party designation of those seats, and the two incumbent candidates retained their seats.

Congress
On a national basis, Democrats succeeded in flipping enough Republican-held seats to take control of the House of Representatives, while Republicans maintained control of the U.S. Senate. In the House of Representatives, Democrats achieved at least a net gain of 33 seats previously held by Republicans. Democrats now retain at least 226 seats in the House and the Republicans retain at least 198 seats (218 of 435 seats are needed for majority). There are still 11 undetermined races in the House of Representatives. The Republican candidates are currently leading in six of those races, while the Democratic candidates are currently leading in the other five.
All of the five seats within the San Diego Congressional delegation were contested during the election. With Representative Darrel Issa relinquishing the 49th Congressional seat, Democrat Mike Levin won the previously-Republican seat while receiving 55 percent of the vote, as compared with the challenger Diane Harkey, who received 45 percent of the vote.

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>CANDIDATE #1</th>
<th>CANDIDATE #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 (D)</td>
<td>Mike Levin (D) – 55.0%</td>
<td>Diane Harkey (R) – 45.0%</td>
</tr>
<tr>
<td>50 (R)</td>
<td>Duncan Hunter* (R) – 54.1%</td>
<td>Ammar Campa-Najjar (D) – 45.9%</td>
</tr>
<tr>
<td>51 (D)</td>
<td>Juan Vargas* (D) – 68.1%</td>
<td>Juan Hidalgo Jr. (R) – 31.9%</td>
</tr>
<tr>
<td>52 (D)</td>
<td>Scott Peters* (D) – 61.2%</td>
<td>Omar Quadrat (R) – 38.8%</td>
</tr>
<tr>
<td>53 (D)</td>
<td>Susan Davis* (D) – 66.1%</td>
<td>Morgan Murtaugh (R) – 33.9%</td>
</tr>
</tbody>
</table>

*Denotes incumbent

In the U.S. Senate, Republicans achieved a gain of one seat previously held by Democrats. Republicans now retain 52 seats in the Senate and Democrats retain 44 seats (there are still two undetermined races) (51 of 100 seats are needed for majority).

Incumbent California Senator Dianne Feinstein held on to her U.S. Senate seat that was contested during the election by 54.5 percent of the vote. Her challenger, former California State Senate President Pro Tempore Kevin de León, lost with 45.5 percent of the vote.

**Ballot Measures**

In terms of ballot measures, Californians voted for some progressive causes, including not repealing the state-wide gas tax and strengthening animal confinement standards, but also voted against rent control. Proposition 3, on which the Water Authority Board of Directors adopted a resolution in support at its July 26, 2018 meeting, failed passage with 47.7 percent vote in support of the initiative, and 52.3 percent rejecting the initiative.

<table>
<thead>
<tr>
<th>PROPOSITION</th>
<th>YES VOTES</th>
<th>NO VOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Bonds to Fund Veteran &amp; Affordable Housing</td>
<td>54.2%</td>
<td>45.8%</td>
</tr>
<tr>
<td>2 - Amend Existing Housing Program for Mental Illness</td>
<td>61.2%</td>
<td>38.8%</td>
</tr>
<tr>
<td>3 - Bond for Water and Environmental Projects</td>
<td>47.7%</td>
<td>52.3%</td>
</tr>
<tr>
<td>4 - Bond for Children’s Hospital Construction</td>
<td>60.6%</td>
<td>39.4%</td>
</tr>
<tr>
<td>5 - Senior Property Tax Reduction</td>
<td>41.9%</td>
<td>58.1%</td>
</tr>
<tr>
<td>6 - Repeal of Fuel Tax Approved by Voters</td>
<td>44.7%</td>
<td>55.3%</td>
</tr>
<tr>
<td>7 - Change Daylight Saving Time Period</td>
<td>60.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>8 - Regulates Kidney Dialysis Treatment Charges</td>
<td>38.5%</td>
<td>61.5%</td>
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<tr>
<td>10 - Rental Control on Residential Property</td>
<td>38.4%</td>
<td>61.6%</td>
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<tr>
<td>11 - Emergency Ambulance Employees on-call</td>
<td>60.4%</td>
<td>39.6%</td>
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<tr>
<td>12 - Farm Animals Confinement Standards</td>
<td>61.1%</td>
<td>38.9%</td>
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</tbody>
</table>
Lobbyist Activities
Steve Cruz of Cruz Strategies reports that he performed the following lobbying activities on behalf of the Water Authority over the past month:

- Provided strategic advice and information regarding the Water Authority’s legislative interests.
- Participated in briefings within the Capitol and with state agencies regarding pumped hydropower storage.
- Represented the Water Authority in a variety of venues on Water Authority issues.
- Coordinated with Bob Giroux and Water Authority staff on various legislative issues of importance to the Water Authority.

Bob Giroux of Lang, Hansen, O’Malley & Miller reports that he performed the following lobbying activities on behalf of the Water Authority over the past month:

- Provided strategic advice and information regarding the Water Authority’s legislative interests.
- Communicated with legislative leadership, the Administration, and stakeholders regarding the San Diego region’s interests relative to bulk energy storage, long-term water use efficiency, and the Carlsbad intake funding issue.
- Coordinated with Steve Cruz and Water Authority staff on various legislative issues of importance to the Water Authority.

Audra Hartmann of Smith, Watts & Hartmann reports that she performed the following regulatory advocacy activities on behalf of the Water Authority over the past month:

- Coordinated meetings with SWRCB members and staff relative to the issue of the Carlsbad Desalination facility intake modifications.
- Participated in SWRCB meetings regarding emerging water quality issues of interest to the Water Authority.
- Provided strategic advice and information regarding the Water Authority’s regulatory interests.
- Coordinated with Water Authority staff on various regulatory issues of interest to the Water Authority.
Washington, D.C.
Ken Carpi of Carpi & Clay will provide an in-person report for the LPO Committee and will submit a separate written report of the firm’s monthly activities in Washington, D.C.

Prepared by: Glenn A. Farrel, Government Relations Manager
            Ivy Ridderbusch, Management Analyst
Approved by: Dennis A. Cushman, Assistant General Manager
AGENDA
FORMAL BOARD OF DIRECTORS’ MEETING

The mission of the San Diego County Water Authority is to provide a safe and reliable supply of water to its member agencies serving the San Diego region.

DECEMBER 6, 2018
2:30 p.m.

1. Call to Order.

2. Salute to the flag.

3. Roll call, determination of quorum.
   3-A Report on proxies received.

4. Additions to Agenda. (Government code Sec. 54954.2(b)).

5. Approve the minutes of the Formal Board of Directors’ meeting of October 25, 2018, Special Board meeting of November 8, 2018, and Special Engineering and Operations Committee meeting of November 8, 2018.

6. Opportunity for members of the public who wish to address the Board on matters within the Board’s jurisdiction.

7. PRESENTATIONS & PUBLIC HEARINGS

   7-A Recognition of Sabrina Garner, Administrative Assistant, Employee of the 1st Quarter.

8. REPORTS BY CHAIRS

   8-A Chair’s Report: Chair Madaffer

   8-B Report by Committee Chairs
      Engineering and Operations Committee Director Heinrichs
      Water Planning Committee Director Cherashore
      Administrative and Finance Committee Director Saxod
      Imported Water Committee Director Fong-Sakai
      Legislation and Public Outreach Committee Director Guerin
9. CONSENT CALENDAR

9-1. Amendment 3 to the services contract with Baker Electric, Inc., for electrical preventative maintenance, inspection, testing, and repair services. Authorize the General Manager to approve Amendment 3 with Baker Electric, Inc., for $400,000 to provide additional electrical preventative maintenance, inspection, testing, and repair services, increasing the contract amount from $965,000 to $1,365,000.

9-2. Construction contract with Kiewit Infrastructure West, Inc., for the Northern First Aqueduct Structures and Lining Rehabilitation Project. Authorize the General Manager to award a construction contract to Kiewit Infrastructure West, Inc., in the amount of $30,400,000 for the Northern First Aqueduct Structures and Lining Rehabilitation Project.

9-3. Resolution setting preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation. Adopt Resolution No. 2018-___ establishing preliminary, informal terms and conditions for the Lakeside Water District’s proposed Yerba Valley Annexation, and requesting that the Metropolitan Water District of Southern California set formal terms and conditions.


   a. Authorize the General Counsel to amend the legal services agreement with Hawkins Delafield & Wood LLP as special counsel to include new transactional legal work for the Claude “Bud” Lewis Carlsbad Desalination Plant (CDP) project intake and discharge system modifications phased implementation. This will add $318,000 to the contract, increasing the authorized cumulative amount from $180,000 to $498,000.

   b. Authorize the General Manager to amend the professional services contract with Clean Energy Capital Securities LLC to include work for the CDP project intake and discharge system modifications phased implementation. This will add $257,500 to the contract, increasing the authorized cumulative amount from $140,000 to $397,500 and extend the term from its current end date of December 31, 2018 to June 30, 2020.

   c. Authorize the General Manager to amend the professional services contract with Louis Berger Group to include work for the CDP project intake and discharge system modifications phased implementation. This will add $250,400 to the contract, increasing the authorized cumulative amount from $1,287,692 to $1,538,092 and extend the term from its current end date of December 31, 2018 to June 30, 2021.

9-6.  **Vote Entitlement and Representation Resolution for Calendar Year 2019.**
Adopt Resolution No. 2018-____ establishing the vote and representative entitlements of each member agency effective January 1, 2019.

9-7.  **Adopt Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.**
Adopt the Annual Statement of Investment Policy, as amended, and continue to delegate authority to the Treasurer to invest Water Authority funds for calendar year 2019.

9-8.  **Approve the Refinancing of the Claude “Bud” Lewis Carlsbad Desalination Project Conveyance Pipeline and approve related debt management activities.**

a.  Adopt Resolution No. 2018____ approving the refunding of California Pollution Control Financing Authority $203,215,000 Water Furnishing Revenue Bonds, Series 2012 (San Diego County Water Authority Desalination Project Pipeline) via a negotiated sale; a Preliminary Limited Offering Memorandum, a Bond Purchase Agreement and other documents and agreements necessary to accomplish tax exempt project refinancing through the California Pollution Control Financing Authority (CPCFA); and

b.  Approve the amendment to the Legal Services Agreement with Polsinelli LLP, Bond Counsel to increase the amount by $175,000 from $344,000 for as-needed services, Pipeline Refunding bond counsel services and disclosure counsel services to $519,685.

c.  Approve the amendments to the Financial Advisory Services agreements with Montague DeRose and Associates, LLC and Acacia Financial Group, Inc to increase the amount by $260,000, from $976,250 for Carlsbad Desalination debt and debt refinancing transaction fees to $1,236,250.

9-9.  **Water Conservation Authority Amended and Restated Joint Powers Agreement.**
Approve the Amended and Restated Joint Powers Agreement creating the Water Conservation Authority. Authorize the Water Authority’s representative to the Water Conservation Authority to sign the final agreement on behalf of the Water Authority Board of Directors.

9-10. **Proposed 2019 Legislative Policy Guidelines.**
Adopt the proposed 2019 Legislative Policy Guidelines.

9-11. **Water Authority Sponsorship of Legislation in the 2019 State Legislative Session.**
Sponsor or co-sponsor the following legislative proposals:

- Legislative Proposal #1 to seek grant eligibility for public-private partnership projects, like the Carlsbad desalination intake facility.
- Legislative Proposal #2 to create opportunities for bulk energy storage projects to advance as transmission assets to improve grid reliability.
- Legislative Proposal #3 to provide a path of reciprocity for military veterans to apply their skills and experiences toward water and wastewater system operation certifications.

10. ACTION / DISCUSSION

10-A Audit Committee Annual Report.
Audit Committee recommendations:

a. Accept and file the Audit Committee Annual Report pursuant to the Administrative Code, Section 2.00.066.


10-B Defer Biennial Review of Representatives to the Metropolitan Water District of Southern California to the January 24, 2019 Board meeting. (Action)

11. SPECIAL REPORTS

11-A GENERAL MANAGER’S REPORT – Ms. Stapleton
11-B GENERAL COUNSEL’S REPORT – Mr. Hattam
11-C SANDAG REPORT – Director Muir
   SANDAG Subcommittees: Borders Committee – Vice Chair Croucher
   Regional Planning Committee – Director Gallo
11-D AB 1234 Compliance Reports – Directors

12. CLOSED SESSION(S)

12-A Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; CPF-18-516389; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case Nos. S243500; and S251025

12-B Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   California Department of Water Resources v. All Persons Interested; Sacramento Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and JCCP 4942

12-C Conference with Legal Counsel – Existing Litigation
   Government Code §§54956.9(d)(1)
   Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested in the Matter; Los Angeles Superior Court Case No. BC 720692
13. ACTION FOLLOWING CLOSED SESSION

14. OTHER COMMUNICATIONS

15. ADJOURNMENT

NOTE: The agendas for the Formal Board meeting and the meetings of the Standing Committees held on the day of the regular Board meeting are considered a single agenda. All information or possible action items on the agenda of committees or the Board may be deliberated by and become subject to consideration and action by the Board.

Melinda Nelson
Clerk of the Board
MINUTES OF THE FORMAL BOARD OF DIRECTORS’ MEETING
OCTOBER 25, 2018

ADMINISTRATIVE AND FINANCE COMMITTEE
CALL TO ORDER / ROLL CALL
Chair Saxod called the Administrative and Finance Committee meeting to order at 9:04 a.m. Committee members present were Chair Saxod, Vice Chair Arant and Wilson*, and Directors Ayala, Cherashore*, Gallo, Guerin, Hall, Hedberg, Murtland, and Watkins. Committee members absent were Directors Croucher, Heinrichs, and Simpson. Also present were Directors Barnum, Boyle, Butkiewicz, Cate, Evans, Fong-Sakai, Hilliker, Hogan, Kennedy, Leonard, Lewinger, Madaffer, Miller, Smith and Steiner. At that time, there was a quorum of the Board and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Managers Cushman and Denham, Director of Finance/Treasurer Harris, Director of Administrative Services Foster, Budget and Analysis Manager Whyte, Controller Woidzik, and Senior Management Analyst Gore. Also present was John Houlberg of JP Morgan.

ADDITIONS TO AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no members of the public who wished to speak.

CHAIR’S REPORT
Chair Saxod announced that the Water Authority would host a Cash Flow Analysis training for our member agencies and Water Authority staff on November 19, 2018. The training would cover impact of revenues, expenditures, CIP, and reserve policies when projecting the level of cash available for investments. The training would also explore portfolio structures that maintain liquidity while optimizing returns. All interested were directed to contact Ms. Harris.

DIRECTORS’ COMMENTS
There were no Directors’ comments.

* Vice Chair Wilson and Director Cherashore arrived at 9:07 a.m.

I. CONSENT CALENDAR
   Staff recommendation: Note and file the Treasurer’s report.
2. Establish 2019 Board meeting dates.
Staff recommendation: Combine the November and December Board meeting dates to November 21, 2019 and approve the 2019 Board meeting dates calendar.

Director Ayala moved, Director Murtland seconded and the motion to approve staffs’ recommendation passed unanimously.

II. ACTION/DISCUSSION/PRESENTATION
1. Approve the Policy Framework for Reducing the Water Authority’s Unfunded Pension Liability.
Staff recommendation: Establish a pension funding policy framework that:
   a. Achieves a target pension funded ratio range;
   b. Determines the number of years to reach target range;
   c. Establishes a funding source to achieve the target range; and
   d. Establishes the funding vehicle.

Ms. Harris, Mr. Woidzik, and Mr. Gore gave a presentation on the Water Authority pension fund that included key and historical data, pension funding policy parameters, potential funding vehicles, and a review of the staff recommendation.

Directors asked questions and made recommendations. Staff provided answers.

Vice Chair Arant moved, Vice Chair Wilson seconded, and the motion to approve staffs’ recommendation passed unanimously.

2. Ordinance making updates to chapters 2.00, 2.20, 4.00, 4.08, 7.00, and 8.00 of the Administrative Code.
Staff recommendations: Adopt Ordinance No. 2018-05, an ordinance of the board of directors of the San Diego County Water Authority making updates and other amendments to chapters 2.00, 2.20, 4.00, 4.08, 7.00, and 8.00 of the Administrative Code.

Mr. Hattam introduced the item and stated the associated board memo was on page 24 of the Board Packet.

Director Murtland moved, Director Gallo seconded, and the motion to approve staffs’ recommendation passed unanimously.


Ms. Stapleton provided a presentation which included the Business Plan history and process and reviewed the 2017-2021 Business Plan highlights and performance. She introduced
the updated 2019-2023 Business Plan and reviewed the plan’s key focus areas, programs, management strategies, objectives, tactics, and key performance indicators. In closing, Ms. Stapleton stated the Business Plan document was available on the Water Authority website.


Ms. Harris and Mr. Houlberg provided a presentation that included background on pipeline refunding bonds, a municipal bond market update, and a calendar of next steps.

III. INFORMATION

The following information items were received and filed:
2. Reimbursements to Board Members and Staff.
4. Board Calendar.

IV. CLOSED SESSION

There were no Closed Session items.

V. ADJOURNMENT

There being no further business to come before the Administrative and Finance Committee, Chair Saxod adjourned the meeting at 10:15 a.m.

ENGINEERING AND OPERATIONS COMMITTEE

CALL TO ORDER / ROLL CALL

Vice Chair Miller called the Engineering and Operations Committee meeting to order at 10:20 a.m. Committee members present were Vice Chairs Hilliker and Miller, and Directors Butkiewicz, Fong-Sakai, Hogan, Preciado*, Smith, and Watkins. Committee members absent were Chair Heinrichs, and Directors Bebee, Boyle, Katz, Morrison, and Simpson. Also present were Directors Arant, Barnum, Cate, Cherashore, Evans, Gallo, Guerin, Hedberg, Kennedy, Leonard, Lewinger, Madaffer, Muir, Saxod, Scalzitti, and Wilson. At that time, there was a quorum of the Board, and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Manager Denham, Director of Operations and Maintenance Fisher, Director of Engineering Reed, Senior Engineering Manager Bousquet, Principal Engineer Kuzmich, Senior Engineers Fountain and Whitaker, Engineer P.E. Oleksyn, and Operations and Maintenance Manager Castaing.

ADDITIONS TO AGENDA

There were no additions to the agenda.
PUBLIC COMMENT
There were no members of the public who wished to speak.

DIRECTORS’ COMMENTS
There were no Directors’ comments.

CHAIR’S REPORT
There was no Chair’s Report.

I. CONSENT CALENDAR
1. Notice of Completion for the San Vicente Dam Joint Sealing Project.
   Staff recommendations: Authorize the General Manager to accept the San Vicente
   Joint Sealing project as complete, record the Notice of Completion, and release
   funds held in retention to Carpi USA Inc. following the expiration of the retention
   period.

   Director Fong-Sakai moved, Vice Chair Hilliker seconded, and the motion approve the
   Consent Calendar passed unanimously. Director Scalzitti was not present for the vote.

2. Change Order with Granite Construction, Inc. for the Moosa Canyon Erosion
   Control Project.
   Staff recommendations: Authorize the General Manager to execute Change Order 3
   in the amount of $351,000 for costs associated with the differing site condition
   related to unanticipated groundwater increasing the authorized cumulative contract
   amount to $1,806,889.

   Director Fong-Sakai moved, Vice Chair Hilliker seconded, and the motion approve the
   Consent Calendar passed unanimously. Director Scalzitti was not present for the vote.

II. ACTION/DISCUSSION/PRESENTATION
   1-A Task Force Update.
   Director Hogan provided an update on the San Vicente Energy Task Force activities
   including the upcoming October 25, 2018, Task Force meeting and the Special Engineering and
   Operations workshop on November 8, 2018.

   1-B Project Status Update.
   Mr. Bousquet gave an update on project purpose, project description, background,
   California energy landscape, project activities and budget, and next steps.

2. Water Quality improvement project.
2-B  **Service contract with Univar USA Inc. for purchase and delivery of sodium hypochlorite.**
Staff recommendation: Authorize the General Manager to award a service contract to Univar USA Inc., for purchase and delivery of sodium hypochlorite for a period of one year, with an option to extend the contract for an additional two years, for a total not-to-exceed amount of $465,000.

Mr. Castaing gave an update on treated water demand, treated water delivery – nitrification, adaptation strategies, system monitoring, pilot test, Mission Trails chlorine injection system, sodium hypochlorite, and reviewed the staff recommendation.

Director Smith moved, Director Hogan seconded, and the motion to approve staffs’ recommendation passed unanimously.

3. **Construction contract with Kiewit Infrastructure West, Inc. for the Vallecitos Water District 11/Vista Irrigation District 12 Flow Control Facility project.**
Staff recommendations:
   a. Determine the bid protest is valid, and Orion Construction Corporation, and SCW Contracting Corporation’s bids are non-responsive.
   b. Authorize the General Manager to award a construction contract to Kiewit Infrastructure West, Inc. in the amount of $4,977,000 for the Vallecitos Water District 11/Vista Irrigation District 12 Flow Control Facility project.

Vice Chair Miller and Director Evans recused themselves from Action item II-3.

Mr. Whitaker presented information on bid results and reviewed staffs’ recommendations.

Director Boyle moved, Director Watkins seconded, and the motion to approve staffs’ recommendations passed unanimously.

4. **Agreement with Valley Center Municipal Water District and Yuima Municipal Water District for the Emergency Water Storage Project Improvements in Valley Center and Yuima Water Districts.**
Staff recommendation: Authorize the General Manager to execute an agreement with Valley Center Municipal Water District and Yuima Municipal Water District for the design of infrastructure improvements providing emergency water supplies to Valley Center and Yuima Water Districts for an amount not-to-exceed $580,000.

Directors Arant and Watkins recused themselves from Action item II-4.

* Director Preciado arrived at 11:12 a.m.
Mr. Fountain presented information on emergency storage/carryover storage projects, North County ESP pump stations project, project components, project delivery, agreement benefits, project schedule, and reviewed the staff recommendation.

Vice Chair Hilliker moved, Director Boyle seconded, and the motion to approve staffs’ recommendation passed unanimously.

III. INFORMATION
There were no Information items.

IV. CLOSED SESSION
There were no Closed Session items.

V. ADJOURNMENT
There being no further business to come before the Engineering and Operations Committee, Vice Chair Miller adjourned the meeting at 11:21 a.m.

IMPORTED WATER COMMITTEE
CALL TO ORDER / ROLL CALL
Chair Fong-Sakai called the Imported Water Committee meeting to order at 11:26 a.m. Committee members present were Chair Fong-Sakai, Vice Chair Kennedy, and Directors Barnum, Hogan, Leonard, Lewinger, Madaffer, Miller, Murtland, Saxod, Scalzitti, Steiner, and Wilson. Committee members absent were Director Katz, and Supervisor Roberts. Also present were Directors Arant, Boyle, Butkiewicz, Cate, Cherashore, Evans, Gallo, Guerin, Hall, Hedberg, Hilliker, Muir, Preciado, Smith, and Watkins. At that time, there was a quorum of the Board, and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Managers Cushman and Denham, MWD Program Director Chen, and Colorado River Program Director Rodgers.

ADDITIONS TO AGENDA
Chair Fong-Sakai announced the Consent Calendar item had been pulled and a presentation would be provided. She stated that the committee would go into Closed Session following the Chair’s report.

PUBLIC COMMENT
There were no members of the public who wished to speak.

CHAIR’S REPORT
Chair Fong-Sakai gave an update on Bay-Delta Issues and the memo President Trump issued “Promoting the Reliable Supply and Delivery of Water in the West.” She also briefed the
Board on the October 16, 2018 State Water Resources Control Board meeting on the Salton Sea.

DIRECTORS’ COMMENTS
There were no Directors’ comments.

IV. CLOSED SESSION
Mr. Hattam took the committee into Closed Session at 11:30 a.m.

1. Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   SDCWA v. Metropolitan Water District of Southern California;
   San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; California County of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case No. S243500, S251025; and Los Angeles Superior Court Case No. BS 173868

2. Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   California Department of Water Resources v. All Persons Interested; Sacramento Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and JCCP 4942

3. Conference with Legal Counsel – Existing Litigation/Anticipated Litigation
   Government Code §§54956.9(d)(1) and/or (d)(4)
   Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested in the Matter; Los Angeles Superior Court Case No. BC 720692

Mr. Hattam brought the committee out of Closed Session at 1:00 p.m. and stated there was no reportable action.

At that time the committee recessed for lunch. Chair Fong Sakai resumed the meeting at 1:34 p.m.

I. CONSENT CALENDAR.
1. Amend agreement for Consulting Services with M Strategic Communications.
   Staff recommendation: Amend the agreement with M Strategic Communications for continued consulting services to the Water Authority through June 30, 2019 by $140,000, for a period of six additional months, with total contract funding not to exceed $1,012,000.

   Ms. Chen provided a presentation regarding M Strategic Communications and the importance of their consulting work for the Water Authority.
Formal Board
Agenda Item Number 5
December 6, 2018
(October 25, 2018 minutes)

Director Steiner moved, Director Lewinger seconded, and the motion to approve staffs’ recommendation passed with Scalzitti voting in opposition.

II. ACTION/DISCUSSION/PRESENTATION
1. MWD issues and activities update.
   1-A Metropolitan Water District Delegates’ Report.

   Due to time constraints, the Delegates requested the Board refer to the Board packet for an update.

2. Colorado River Programs.
   2-A Colorado River Board Representative’s report

   Due to time constraints, Director Wilson requested the Board refer to the Board packet for an update.

   2-B Colorado River Issues – Part 3.

   Ms. Rodgers presented Part 3 on Colorado River Issues. The update included Drought Contingency Plan, Intentionally Created Surplus (ICS) Program participation, and next steps.

   Staff responded to questions and comments posed by the Board.

III. INFORMATION
The following information item was received and filed:
1. Metropolitan Water District Program Report.

V. ADJOURNMENT
There being no further business to come before the Imported Water Committee, Chair Fong-Sakai adjourned the meeting at 2:09 p.m.

LEGISLATION AND PUBLIC OUTREACH COMMITTEE
CALL TO ORDER/ROLL CALL
Chair Guerin called the Legislation and Public Outreach Committee to order at 2:12 p.m. Committee members present were Chair Guerin, Vice Chairs Butkiewicz and Hall, and Directors Arant, Cate, Croucher, Evans, Gallo, Hilliker, Madaffer*, Morrison, Muir, Scalzitti and Steiner. Committee member absent was Supervisor Roberts. Also present were Directors Ayala, Boyle, Cherashore, Fong-Sakai, Hedberg, Hogan, Kennedy, Leonard, Lewinger, Miller, Murtland, Preciado, Saxod, Smith, Watkins, and Wilson. At that time, there was a quorum of the Board, and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Managers Cushman and Denham, Director of Public Outreach
and Conservation Vedder, Government Relations Manager Farrel, and Public Affairs Representatives Balben and Jenkins. Also present was legislative representative Ken Carpi.

ADDITIONS TO AGENDA

There were no additions to the agenda.

PUBLIC COMMENT

There were no members of the public who wished to speak.

CHAIR’S REPORT

Chair Guerin reported that she traveled to Washington, D.C. in September with the Board officers and Assistant General Manager Denham. The reason for the trip was attendance at the San Diego Regional Chamber of Commerce’s annual delegation to update members of Congress and the Administration on important issues in the San Diego region.

She also reported that staff completed a successful round of Brought to You by Water outreach events which celebrated the Manufacturing industries in San Diego County.

DIRECTORS’ COMMENTS

There were no Directors’ comments.

I. CONSENT CALENDAR

1. Amendment to extend the advocacy services contracts with the firms of Cruz Strategies; Lang, Hansen, O’Malley & Miller; Carpi & Clay; and Smith, Watts & Hartmann.

Staff recommendation: Authorize the General Manager to extend agreements with the following firms for a period of 24 months, from January 1, 2019 through December 31, 2020.

- Cruz Strategies (formerly known as Gonzalez, Quintana, Hunter & Cruz): 2019 monthly retainer of $14,163 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $177,456; 2020 monthly retainer of $14,588 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $182,556; increasing the total contract maximum amount by $360,012, from $636,000 (former maximum) to $996,012 (new maximum).

- Lang, Hansen, O’Malley & Miller: 2019 monthly retainer of $11,937 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $150,744; 2020 monthly retainer of $12,295 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $155,040; increasing the total contract maximum amount by $305,784, from $568,164 (former maximum) to $873,948 (new maximum).
• Carpi & Clay: 2019 monthly retainer of $11,355 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $143,760; 2020 monthly retainer of $11,696 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $147,852; increasing the total contract maximum amount by $291,612, from $1,397,492 (former maximum) to $1,689,104 (new maximum).

• Smith, Watts & Hartmann: 2019 monthly retainer of $7,725 and reimbursable expenses of $7,500 for a total first-year amount not to exceed $100,200; 2020 monthly retainer of $7,957 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $102,984; increasing the total contract amount by $203,184, from $138,500 (former maximum) to $341,684 (new maximum).

Director Muir moved, Director Evans seconded, and the motion to approve staffs’ recommendations passed unanimously.

II. ACTION/DISCUSSION/PRESENTATION
1. Legislative issues.

   Mr. Carpi provided a Washington report which included updates related to issues of interest of the Water Authority.

   * Director Madaffer arrived at 2:22 p.m.

   1-B Sacramento Report.

   Mr. Farrel provided a Sacramento report which included an update on status of Water Authority Sponsored bills and other key measures.


   Mr. Farrel provided an update on the process of revising the 2019 Legislative Policy Guidelines. He reported on key content changes and reported that staff would bring the final proposed Legislative Policy Guidelines to the Board for approval at the December 6, 2018 meeting.

3. Citizen’s Water Academy program update.

   Ms. Jenkins and Mr. Balben provided the Board with an update on the Citizens Water Academy program and the improvements that have been made since inception. Staff provided the Board with information regarding the growing alumni program that has resulted from participation in the Citizens Water Academy and stated that they graduated 543 participants.
Director Hogan asked staff to report back on the number of Citizens Water Academy alumni that have also gone on MWD tours.

III. INFORMATION
The following Information items were received and filed:
1. Government Relations Update.

IV. CLOSED SESSION
There were no Closed Session items.

V. ADJOURNMENT
There being no further business to come before the Legislation and Public Outreach Committee, Chair Guerin adjourned the meeting at 2:54 p.m.

WATER PLANNING COMMITTEE
CALL TO ORDER/ROLL CALL
Chair Cherashore called the Water Planning Committee meeting to order at 2:57 p.m. Committee members present were Chair Cherashore, Vice Chairs Boyle and Evans, and Directors Ayala, Cate, Hedberg, Kennedy, Leonard, Lewinger, Muir, Preciado and Smith. Committee members absent were Directors Barnum and Bebee. Also present were Directors Arant, Butkiewicz, Croucher, Fong-Sakai, Gallo, Guerin, Hall, Hilliker, Hogan, Madaffer, Miller, Muir, Murtland, Saxod, Scalzitti, Steiner, and Watkins. At that time, there was a quorum of the Board, and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Managers Cushman and Denham, Acting Director of Water Resources Roy, Operations and Maintenance Manager Faber, Principal Engineer Crutchfield, Principal Water Resources Specialist Stadler, and Water Resources Specialist Schnell.

ADDITIONS TO THE AGENDA
There were no additions to the agenda.

PUBLIC COMMENT
There were no members of the public who wished to speak.

CHAIR’S REPORT
Chair Cherashore welcomed everyone in attendance.

DIRECTORS’ COMMENTS
There were no Directors’ comments.
I. CONSENT CALENDAR
There were no Consent Calendar items.

II. ACTION/DISCUSSION/PRESENTATIONS
1. Resolution setting preliminary, informed terms and conditions for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation.
   Staff recommendation: Adopt Resolution No. 2018-18 (Attachment 1), establishing preliminary, informal terms and conditions for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation, and requesting that the Metropolitan Water District of Southern California set formal terms and conditions.
   
   Director Watkins recused himself on Action item II-1.
   
   Ms. Schnell provided a presentation on the staff recommendation for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation. She reviewed water quality health and safety issues, and policies and procedures of board adoption.
   
   Director Kennedy moved, Vice Chair Evans seconded, and the motion to approve staffs’ recommendation passed unanimously.
   
   
   Mr. Stadler gave an update on the San Diego Integrated Regional Water Management Program needs assessments that would be performed, and an upcoming grant opportunity in Proposition 1. He stated phase 1 of the IRWM plan would be brought to the Board for review and consideration in January 2019 and phase 2, the final draft, would be released May 2019, and would be brought to the Board for review and consideration of adoption. He concluded by announcing the Proposition 1 Grant Program round 1 project list would be brought to the Board for approval and used to build the application to present to DWR by mid-2019.
   
3. Aqueduct Seismic Assessment Strategy.
   
   Mr. Crutchfield provided an update on seismic risks of the Aqueduct System pipelines. He stated that staff would continue participation in MWD’s ESRP efforts and technical review of pipeline vulnerability to seismic hazards, secure necessary funding to conduct analysis, and report the next annual update on storage reserves to the Board.
   
4. Carlsbad Desalination Water Quality Integration.
   
   Mr. Faber gave a presentation of overall integration result in benefits for the Carlsbad Desalination water quality and Water Research Foundation study.

III. INFORMATION
The following Information item was received and filed:
IV. CLOSED SESSION
There were no Closed Session items.

V. ADJOURNMENT
There being no further business to come before the Water Planning Committee, Chair Cherashore adjourned the meeting at 3:21 p.m.

FORMAL BOARD OF DIRECTORS’ MEETING OF OCTOBER 25, 2018

1. CALL TO ORDER Chair Madaffer called the Formal Board of Directors’ meeting to order at 3:28 p.m.

2. SALUTE TO THE FLAG Director Smith led the salute to the flag.

3. ROLL CALL, DETERMINATION OF QUORUM Secretary Guerin called the roll. Directors present were Arant, Ayala, Boyle, Butkiewicz, Cate, Cherashore, Croucher, Evans, Fong-Sakai, Gallo, Guerin, Hall, Hedberg, Hilliker, Hogan, Kennedy, Leonard, Lewinger, Madaffer, Miller, Morrison, Muir, Murtland, Preciado, Saxod, Scalzitti, Smith, Steiner, and Watkins. Directors absent were Barnum, Bebee(p), Heinrichs, Katz, Simpson, Wilson and Supervisor Roberts.

3-A Report on proxies received. Director Arant was the proxy for Director Bebee.

4. ADDITIONS TO AGENDA
There were no additions to the agenda.

5. APPROVAL OF MINUTES Director Evans moved, Director Saxod seconded, and the motion carried at 93.08% of the vote to approve the minutes of the Formal Board of Directors’ meeting of September 27, 2018.

6. OPPORTUNITY FOR MEMBERS OF THE PUBLIC WHO WISH TO ADDRESS THE BOARD ON MATTERS WITHIN THE BOARD’S JURISDICTION. There were no members of the public who wished to speak.

7. PRESENTATIONS & PUBLIC HEARINGS
7-A Retirement of Director. Adopt Resolution honoring Mark Weston upon his retirement from the Board of Directors.

7-B Retirement of Director. Adopt Resolution honoring Vic Bianes upon his retirement from the Board of Directors
Chair Madaffer announced the retirement of Directors Weston and Bianes and thanked them for their service.

Director Cate moved, Director Smith seconded, and the motion carried at 93.08% of the vote to approve Resolutions 2018-19 and 2018-20, honoring Mark Weston and Vic Bianes upon retirement from the Board of Directors.

* Director Kennedy left the meeting at 3:58 p.m.

8. REPORTS BY CHAIRS

8-A Chairs report: Chair Madaffer reminded the Board of the Special Engineering and Operations Committee meeting on Thursday, November 8, 2018 at 1:30 p.m. to discuss the San Vicente Energy Project, and the Special Board Meeting directly preceding at 1:00 p.m.

Chair Madaffer spoke briefly on a proposal letter sent to MWD which requested to work collaboratively and bring a close to lengthy litigation with the agency.

8-B Report by Committee Chairs:
Administrative and Finance Committee. Director Saxod reviewed the meeting and the action taken.
Engineering and Operations Committee. Director Miller reviewed the meeting and the action taken.
Imported Water Committee. Director Fong-Sakai reviewed the meeting and the action taken.
Legislation and Public Outreach Committee. Director Guerin reviewed the meeting and the action taken.
Water Planning Committee. Director Cherashore reviewed the meeting and the action taken.

9. CONSENT CALENDAR

Director Ayala moved, Director Muir seconded, and the motion carried at 89.08% of the vote to approve the Consent Calendar. Directors voting no or abstaining are listed under the item.

The Board noted and filed the Treasurer’s report.

9- 2. Establish 2019 Board meeting dates.
The Board combined the November and December Board meeting dates to November 21, 2019 and approved the 2019 Board meeting dates calendar.
9-3. **Approve the Policy Framework for Reducing the Water Authority’s Unfunded Pension Liability.**

The Board established a pension funding policy framework that: a) achieves a target pension funded ratio range; b) determines the number of years to reach target range; c) establishes a funding source to achieve the target range; d) establishes the funding vehicle; and e) to present the updated pension funded ratio and recommendations for one-time contributions to the Board annually.

9-4. **Ordinance making updates and other amendments to chapters 2.00, 2.20, 4.00, 4.08, 7.00, and 8.00 of the Administrative Code.**

The Board adopted Ordinance No. 2018-05, an ordinance of the board of directors of the San Diego County Water Authority making updates and other amendments to chapters 2.00, 2.20, 4.00, 4.08, 7.00, and 8.00 of the Administrative Code.

9-5. **Notice of Completion for the San Vicente Dam Joint Sealing Project.**

The Board authorized the General Manager to accept the San Vicente Joint Sealing project as complete, record the Notice of Completion, and release funds held in retention to Carpi USA Inc. following the expiration of the retention period.

9-6. **Change Order with Granite Construction, Inc. for the Moosa Canyon Erosion Control project.**

The Board authorized the General Manager to execute Change Order 3 in the amount of $351,000 for costs associated with the differing site condition related to unanticipated groundwater increasing the authorized cumulative contract amount to $1,806,889.

Director Scalzitti abstained on 9-6.

9-7. **Service contract with Univar USA Inc. for purchase and delivery of sodium hypochlorite.**

The Board authorized the General Manager to award a service contract to Univar USA Inc., for purchase and delivery of sodium hypochlorite for a period of one year, with an option to extend the contract for an additional two years, for a total not-to-exceed amount of $465,000.

9-8. **Construction contract with Kiewit Infrastructure West, Inc. for the Vallecitos Water District 11/Vista Irrigation District 12 Flow Control Facility project.**

The Board determined the bid protest is valid, and Orion Construction Corporation, and SCW Contracting Corporation’s bids are non-responsive and authorized the General Manager to award a construction contract to Kiewit Infrastructure West, Inc. in the amount of $4,977,000 for the Vallecitos Water District 11/Vista Irrigation District 12 Flow Control Facility project.

Directors Evans and Miller abstained on 9-8.

The Board authorized the General Manager to execute an agreement with Valley Center Municipal Water District and Yuima Municipal Water District for the design of infrastructure improvements providing emergency water supplies to Valley Center and Yuima Water Districts for an amount not-to-exceed $580,000.

Directors Arant and Watkins abstained on 9-9.

9-10. Amend agreement for Consulting Services with M Strategic Communications.

The Board amended the agreement with M Strategic Communications for continued consulting services to the Water Authority through June 30, 2019 by $140,000, for a period of six additional months, with total contract funding not to exceed $1,012,000.

Directors Arant and Scalzitti voted No on 9-10.

9-11. Amendment to extend the advocacy services contracts with the firms of Cruz Strategies; Lang, Hansen, O’Malley & Miller; Carpi & Clay; and Smith, Watts & Hartmann.

The Board authorized the General Manager to extend agreements with the following firms for a period of 24 months, from January 1, 2019 through December 31, 2020:

- Cruz Strategies (formerly known as Gonzalez, Quintana, Hunter & Cruz): 2019 monthly retainer of $14,163 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $177,456; 2020 monthly retainer of $14,588 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $182,556; increasing the total contract maximum amount by $360,012, from $636,000 (former maximum) to $996,012 (new maximum).

- Lang, Hansen, O’Malley & Miller: 2019 monthly retainer of $11,937 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $150,744; 2020 monthly retainer of $12,295 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $155,040; increasing the total contract maximum amount by $305,784, from $568,164 (former maximum) to $873,948 (new maximum).

- Carpi & Clay: 2019 monthly retainer of $11,355 and total annual reimbursable expenses of $7,500 for a total first-year amount not to exceed $143,760; 2020 monthly retainer of $11,696 and total annual reimbursable expenses of $7,500 for a total second-year amount not to exceed $147,852; increasing the total contract maximum amount by $291,612, from $1,397,492 (former maximum) to $1,689,104 (new maximum).

- Smith, Watts & Hartmann: 2019 monthly retainer of $7,725 and reimbursable expenses of $7,500 for a total first-year amount not to exceed $100,200; 2020 monthly retainer of $7,957 and total annual reimbursable expenses of $7,500
Formal Board
Agenda Item Number 5
December 6, 2018
(October 25, 2018 minutes)

for a total second-year amount not to exceed $102,984; increasing the total contract amount by $203,184, from $138,500 (former maximum) to $341,684 (new maximum).

9-12. Resolution setting preliminary, informed terms and conditions for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation.
The Board adopted Resolution No. 2018-18, establishing preliminary, informal terms and conditions for the Yuima Municipal Water District’s proposed Rancho Corrido Annexation, and requesting that the Metropolitan Water District of Southern California set formal terms and conditions.

Director Watkins abstained on 9-12.

10. ACTION/DISCUSSION
10-A Recommend Deferral of Biennial Review of Representatives to the Metropolitan Water District of Southern California.

Director Evans moved, Director Scalzitti seconded, and the motion carried at 89.08% of the vote to approve deferral of the biennial review of the representatives to the Metropolitan Water District of Southern California to the December 6, 2018 meeting.

11. SPECIAL REPORTS
11-A GENERAL MANAGER’S REPORT – Ms. Stapleton stated she had nothing further to report.

11-B GENERAL COUNSEL’S REPORT – Mr. Hattam stated he had nothing further to report.

11-C SANDAG REPORT – Director Muir reported on his attendance at the recent SANDAG Strategic Active Transportation Workshop.
SANDAG Subcommittees:
Borders Committee – Vice Chair Croucher reported on the recent SANDAG Borders Committee Meeting.
Regional Planning Committee – Directors Gallo and Hedberg collaboratively reported on the recent SANDAG Regional Planning Committee meeting.

11-D AB 1234 Compliance Reports – Vice Chair Croucher reported on meetings with Member Agency General Managers, and prior Board Chair Muir.

12. CLOSED SESSION(S)
Mr. Hattam stated there was no need for Closed Session.
12-A Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)
SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case Nos. S243500; S251025; and Los Angeles Superior Court Case No. BS 173868

12-B Conference with Legal Counsel – Existing Litigation
Government Code §54956.9(d)(1)
California Department of Water Resources v. All Persons Interested; Sacramento Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and JCCP 4942

12-C Conference with Legal Counsel – Existing Litigation/Anticipated Litigation
Government Code §§54956.9(d)(1) and/or (d)(4)
Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested in the Matter; Los Angeles Superior Court Case No. BC 720692

13. ACTION FOLLOWING CLOSED SESSION

14. OTHER COMMUNICATIONS

15. ADJOURNMENT
There being no further business to come before the Board, Chair Madaffer adjourned the meeting at 3:47 p.m.

Jim Madaffer, Chair           Christy Guerin, Secretary

_______________________________  _______________________________
Jim Madaffer, Chair               Christy Guerin, Secretary

_______________________________
Melinda Nelson, Clerk of the Board
MINUTES OF THE SPECIAL BOARD OF DIRECTORS’ MEETING
November 8, 2018

1. **CALL TO ORDER** Chair Madaffer called the Special Board of Directors’ meeting to order at 1:07 p.m.

2. **SALUTE TO THE FLAG** Director Lewinger led the salute to the flag.

3. **ROLL CALL, DETERMINATION OF QUORUM**

   Secretary Guerin called the roll. Directors present were Arant, Bebee, Boyle, Butkiewicz, Cherashore, Bebee, Baines, Boyle, Butkiewicz, Cate, Evans, Fong-Sakai, Gallo, Guerin, Hedberg, Heinrichs, Hilliker, Katz, Kennedy, Lewinger, Madaffer, Miller, Murtland, Saxod, Scalzitti, Smith, Steiner, and Watkins. Directors absent were Ayala, Barnum, Cate, Croucher, Hall (p), Hogan, Morrison, Muir, Preciado, Simpson, Wilson and Supervisor Roberts.

   Staff present included General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, Assistant General Manager Cushman, and MWD Program Director Chen.

   3-A **Report on proxies received.** Director Lewinger was the proxy for Director Hall.

4. **PUBLIC COMMENT**

   There were no members of the public who wished to speak.

5. **CLOSED SESSION(S)**

   Mr. Hattam took the Board into Closed Session at 1:09 p.m.

   5-A Conference with Legal Counsel – Existing Litigation

   Government Code §54956.9(d)(1)

   SDCWA v. Metropolitan Water District of Southern California; San Francisco Superior Court Case Nos. CPF-10-510830; CPF-12-512466; CPF-14-514004; CPF-16-515282; CPF-16-515391; CGC-17-563350; California Court of Appeal (1st District) Case Nos. A146901; A148266; A154325; California Supreme Court Case Nos. S243500; S251025; and Los Angeles Superior Court Case No. BS 173868
5-B  Conference with Legal Counsel – Existing Litigation
   Government Code §54956.9(d)(1)
   California Department of Water Resources v. All Persons Interested; Sacramento
   Superior Court Case No. 34-2017-00215965-CU-MC-GDS; and JCCP 4942

5-C  Conference with Legal Counsel – Existing Litigation/Anticipated Litigation
   Government Code §§54956.9(d)(1) and/or (d)(4)
   Food & Water Watch and Center for Food Safety v. Metropolitan Water District of
   Southern California and All Persons Interested in the Matter; Los Angeles Superior
   Court Case No. BC 720692

Mr. Hattam brought the Board out of Closed Session at 1:58 p.m. and reported that the
Board of Directors authorized General Counsel to engage counsel and participate in Los Angeles
Superior Court Case No. BC 720692 Food and Water Watch v. All Persons Interested as to
Proposition 26 issues, including seeking to dismiss the Proposition 26 claim against
Metropolitan.

6.   ACTION FOLLOWING CLOSED SESSION
   There was no action following Closed Session.

7.   OTHER COMMUNICATIONS
   There were no other communications.

9.   ADJOURNMENT
   There being no further business to come before the Board, Chair Madaffer adjourned the
   meeting at 2:00 p.m.

Jim Madaffer, Chair  Christy Guerin, Secretary

Melinda Nelson, Clerk of the Board
CALL TO ORDER / ROLL CALL

Chair Heinrichs called the Engineering and Operations Committee meeting to order at 2:05 p.m. Committee members present were Chair Heinrichs, Vice Chairs Hilliker and Miller, and Directors Bebee, Boyle, Butkiewicz, Fong-Sakai, Katz, Smith, and Watkins. Committee members absent were Directors Hogan, Morrison, Preciado, and Simpson. Also present were Directors Arant, Cherashore, Evans, Gallo, Guerin, Hedberg, Kennedy, Leonard, Lewinger, Madaffer, Murtland, Scalzitti, Steiner, and Wilson. At that time, there was a quorum of the Board, and the meeting was conducted as a meeting of the Board; however, only committee members participated in the vote.

Staff present was General Manager Stapleton, General Counsel Hattam, Deputy General Manager Kerl, and Senior Engineering Manager Bousquet.

ADDITIONS TO AGENDA

There were no additions to the agenda.

PUBLIC COMMENT

There were no members of the public who wished to speak.


Ms. Kerl began the presentation by introducing Ms. Kuzmich, who presented an update on the City of San Diego, and Water Authority, staff efforts relative to the project. Ms. Kuzmich continued the presentation with an overview of regulatory processes, and federal and state legislation. She reported the President had signed the Water Resources Development Act, and FERC issued a four-year preliminary permit for the project on October 29, 2018. Ms. Kuzmich concluded the presentation by reviewing details related to SB 100, and regional storage benefits.

CLOSED SESSION

Mr. Hattam took the committee into Closed Session at 2:16 p.m.

Conference with Real Property Negotiator

Government Code §54956.8


Agency Negotiators: Black & Veatch Corporation on behalf of the San Diego County Water Authority and City of San Diego
Negotiating Parties: Brookfield US Generation LLC
Under Negotiation: Price and terms

Mr. Hattam brought the committee out of Closed Session at 3:09 p.m. and stated there was no reportable action.

ADJOURNMENT
There being no further business to come before the Engineering and Operations Committee, Chair Heinrichs adjourned the meeting at 3:10 p.m.
November 28, 2018

Attention: Board of Directors

Audit Committee Annual Report (Action)

Audit Committee recommendations:
1. Accept and file the Audit Committee Annual Report pursuant to the Administrative Code, Section 2.00.066.

Alternative:
Do not accept and file the Audit Committee’s Annual Report and CAFR for the Fiscal Year ended June 30, 2018. This alternative will cause the Committee to be out of compliance with the Administrative Code’s requirements, as well as cause delays in submission of the CAFR to required recipients, namely the state and other governmental agencies, grantors, rating agencies, bond investors and the public.

Fiscal Impact
There is no fiscal impact associated with these recommended actions.

Executive Summary
- The Audit Committee is required to submit an annual report summarizing the business it conducted each fiscal year and this report fulfills that requirement.
- The Audit Committee is also submitting the Water Authority’s Fiscal Year 2018 Comprehensive Annual Financial Report for Board acceptance.

Background
On August 27, 2009 the Board approved the establishment of an Audit Committee. The action was driven by the desire to separate oversight responsibilities for the audit function from the Administrative & Finance Committee, which is responsible for oversight of financial policy such as budgeting, financing, rates and charges.

Previous Board action: On August 27, 2009 the Board adopted Ordinance No. 2009-05 establishing the Audit Committee.

Discussion
The Committee’s work during the year focused on oversight of the annual financial audit for Fiscal Year 2018. The Water Authority’s auditor, Davis Farr, LLP, provided the Water Authority with an unmodified (or clean) opinion on the financial statements for the fiscal year ended June 30, 2018. There were no difficulties encountered during the audit and internal controls were tested and operated as designed. Two capital asset audit adjustments were noted and recorded into the financial statements. The first being a prior period adjustment to reclass storage rights first recorded in FY2013 as a non-depreciable asset into a depreciable asset category and the second involved the reclass of a completed project placed into service before the end of the fiscal year, but not recognized until a later date.
Audit Committee Annual Report
In discharging its responsibilities, the Audit Committee held three public committee meetings and there was one independent telephonic meeting with Davis Farr, LLP partner Jennifer Farr. Following are descriptions of the business conducted at the various meetings.

- April 19, 2018: The FY2018 draft Audit Calendar was presented and a discussion on the audit and CAFR timeline was held. The future Audit Committee meeting dates were set at the meeting. Staff introduced Shannon Ayala, Senior Manager with Davis Farr, LLP. The main topics for the meeting included discussion regarding the 2018 work plan, audit process, roles & responsibilities, required auditor communications, and internal controls, as well as interim fieldwork and deliverables and future audit developments. Mrs. Ayala gave a brief discussion on data mining procedures that they will utilize this year which will include application of Benford’s Law which states, “in any large set of natural numbers, around 30% will begin with the digit 1, 18% with the digit 2, and so on.” The application of this method will assist with the identification of any potential anomalies to include in the testing plan. This data mining testing is to augment other audit procedures to be performed.

- October 10, 2018: Vice Chair Barnham and Director Smith shared the results of the independent phone call held prior to the Audit Committee meeting on the same date with Davis Farr, LLP partner Jennifer Farr, CPA, as a sub-committee of the Audit Committee. A summary of the discussion included the following:
  - Update on the Audit Process to date noting that all field work is complete for fiscal year 2018
  - Auditor reported that staff was well prepared and responded to all inquiries
  - Auditor recommendation and discussion regarding a change in the treatment of storage rights from a non-depreciated asset (land) to a depreciated asset (capital infrastructure) resulted in a post-close entry adjustment and a delay in the completion of the final CAFR

Additionally, at the Audit Committee meeting, Chair Cherashore announced that Director Evans joined the Committee and replaced Director Weston, who retired. Lastly, a brief overview of the remaining 2018 Work Plan Calendar items was discussed.

- November 8, 2018: Lisa Marie Harris presented the summary of the staff’s work developing a pension plan funding policy that led to the final recommendations for setting (1) a pension plan target funding range of 75% to 85%, (2) a twenty-year period to reach the target, (3) budgeting an additional $1 million annually to apply to the pension liability, (4) making payments directly to CalPERS, and (5) annual reporting back to the Board on progress of the funding strategy. The Committee acknowledged their initiation of the topic and subsequent in-depth evaluation by the Administration and Finance Committee that led to its adoption. The Committee thanked staff for the work completed on the adopted Pension Plan Funding Strategy.
Jennifer Farr, CPA, from Davis Farr, LLP then gave a presentation on the Fiscal Year 2018 audit results and explained the different auditor reports. She stated that the Water Authority received an unmodified (clean) opinion for Fiscal Year 2018. Included in the presentation were the results from the Benford’s Law testing which stated that the Water Authority did not have any significant anomalies with respect to accounts payable type payments issued. Please see summary results in Exhibit I.

Additionally, Controller Woidzik gave a brief presentation on the Fiscal Year financial results and commented on the storage rights reclass entry and the change to the capitalization policy such that projects will be reclassed from construction in progress to completed once they are placed in service, rather than the prior practice of waiting until Board acceptance.

The Committee further commented that they did a review of the CAFR and were appreciative of the responses to their questions. They asked additional questions concerning the financial results and other items in the CAFR document. They also had a discussion on Other Post-Employment Benefits (OPEB), specifically retiree medical benefits. They noted that a funding policy framework does not exist for this benefit and setting up such a framework similar to the recently established Pension Plan Funding Strategy adopted by the Board would be researched. The Committee expressed their appreciation for the work of Davis Farr and staff that went into completing the annual audit as well as the CAFR. The Audit Committee accepted the draft CAFR and directed staff to deliver the audited CAFR to the Board of Directors.

Comprehensive Annual Financial Statements
The Audit Committee directed staff to deliver the Fiscal Year 2018 CAFR to the Board along with the Audit Committee Annual Report. The CAFR includes the Letter of Transmittal from the General Manager and Director of Finance/Treasurer, Auditor’s Opinion Letter, Management’s Discussion and Analysis, Financial Statements, Notes to the Financial Statements, Required Supplementary Information, Other Supplementary Information, Statistical Section, and Continuing Disclosure. A hard copy will be presented to the Board and an electronic copy will be posted on our website on November 28, 2018.

Prepared by: David Cherashore, Audit Committee Chair

Attachment 1 - Independent Auditor’s Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards
Attachment 2 - Independent Auditor’s Letter on Communication with Those Charged with Governance at the Conclusion of the Audit
Attachment 3 - Water Authority Comprehensive Annual Financial report for the Fiscal year ended June 30, 2018 in PDF format (physical copy to be provided at the Board meeting)
Exhibit I shows the pattern of all accounts payable payments (checks, ACH and wires) issued by the Water Authority in Fiscal Year 2018. The application of Benford’s Law allows a comparison between actual payments and the predicted pattern of payments based on the population as a whole. A typical flow of payments will see fewer and fewer checks being issued with a higher first digit and this is seen in the above. The vertical bars show the Water Authority’s actual check counts by digit, the first lower line shows the lower predictability band associated the calculation, the middle line shows the expected results for the Water Authority based on application of Benford’s Law, and the highest line shows the upper predictability band. As can be seen above, the Water Authority’s results fall within the predicted band range and follows an expected decreasing glide path. Exhibit II shows the application of Benford’s Law relating to Enron Corporation as noted.
Board of Directors
San Diego County Water Authority
San Diego, California

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

Independent Auditor's Report

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States the financial statements of San Diego County Water Authority (“Authority”) as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the Authority’s basic financial statements, and have issued our report thereon dated October 26, 2018.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity’s financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the following matter to conform to that definition.

Capital Asset Adjustments

As a result of our audit procedures, the Authority recorded an adjustment to reclassify Storage Rights previously considered to have an indefinite life to a capital asset category that is
amortized because the underlying assets providing access to the Storage Rights do not have an indefinite life. This adjustment also resulted in a prior period adjustment. Additionally, as a result of our audit procedures, one construction in progress project was moved to depreciable assets as the asset was already in use as of June 30, 2018.

Recommendation

We recommend the Authority continue to move assets out of construction in progress once the asset is in use, which is not necessarily when all final project invoices have been received.

Management’s Comments Regarding Corrective Actions Planned

The capitalization of storage rights costs and determination of them as being non-depreciable was made in FY2013 and that treatment continued thereafter. While the storage rights themselves have an indefinite life, the corresponding improvements required in the agreements to obtain them do not, and so the Water Authority agreed to the recommendation to amortize these costs and began doing so in FY2018. Additionally, the Water Authority had a policy to reclassify projects from construction in progress to completed once a project was completed and formally accepted by the Board. The project in question was completed on June 24, 2018 but was not accepted by the Board until after fiscal year end. The Water Authority has changed its policy to reclassify projects based on date placed in service.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority’s financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity’s internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity’s internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Irvine, California
October 26, 2018
Communication with Those Charged with Governance at the Conclusion of the Audit

We have audited the financial statements of San Diego County Water Authority ("Authority") for the year ended June 30, 2018. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and Government Auditing Standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated March 28, 2018. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by San Diego County Water Authority are described in Note 1 to the financial statements. The Water Authority early adopted Statement of Governmental Accounting Standards (GASB Statement) No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period. We noted no transactions entered into by the Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management’s knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

Examples of significant judgments and estimates reflected in the Authority’s financial statements include:

- Judgments involving the useful lives and depreciation methodology to use for capital assets
- Judgments concerning which capital project expenditures should be capitalized and depreciated versus expensed in the financial statements and judgments concerning which projects should be placed in service
- Estimates involving the calculation of the net pension liability and related transactions
- Estimates involving the calculation of the other post-employment benefit (OPEB) liability and related transactions
Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosure of pensions in note 11 to the financial statements
- The disclosure of commitments and contingencies related to litigation in note 16 to the financial statements

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. There was one material adjustment made as a result of the audit process to reclassify storage rights capital assets to an amortizable category and record the related prior period adjustment.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor’s report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated October 26, 2018.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a “second opinion” on certain situations. If a consultation involves application of an accounting principle to San Diego County Water Authority’s financial statements or a determination of the type of auditor’s opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as San Diego County Water Authority’s auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.
Other Matters

We applied certain limited procedures to Management’s Discussion and Analysis, Schedule of Changes in the Net Pension Liability and Related Ratios, Schedule of Pension Contributions, Schedule of Changes in the Net OPEB Liability and Related Ratios, and Schedule of OPEB Contributions, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management’s responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the Budgetary Comparison Schedule, which accompanies the financial statements but is not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the Introductory and Statistical Sections which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the use of Board of Directors and management of San Diego County Water Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

Irvine, California
October 26, 2018
November 28, 2018

Attention:  Board of Directors

From:  Jim Madaffer, Chair

Recommended Deferral of Biennial Review of Representatives to the Metropolitan Water District of Southern California. (Action)

Under Section 9.00.060 of the Water Authority’s Administrative Code, all Metropolitan Water District Delegates are to be reviewed in October of even-numbered years by the newly elected chair, in consultation with the Vice Chair and Secretary. At my request, at its October 25 meeting, the Board deferred this review to our December 6, 2018 meeting.

As I reported in October, Director Fern Steiner provided notice of her intent to resign her MWD delegate position effective at the end of January 2019. I have received expressions of interest from several members of the Board in being appointed as a Water Authority delegate to MWD. Given the critical importance of the selection, I wish to very carefully consider the skills and experience of each candidate, and weigh those against the myriad of issues we face at MWD to determine the candidate best suited to serve – along with our other three delegates -- our agency at MWD in the months and years ahead. These issues include, among others, potential settlement of the rate litigation and the disposition of pending Water Authority and member agencies’ Local Resource Program (LRP) agreements at MWD.

Accordingly, I respectfully request the Board defer the Biennial Review of the MWD Delegates to the January 24, 2019 Board meeting. Upon approval of the Board, the new delegate would begin his or her term on MWD’s Board effective February 1, 2019.

If you have any questions, please call me. I welcome feedback from all Directors. Thank you.
November 28, 2018

Attention: Board of Directors

General Counsel’s Report – October/November 2018

Purpose
This report discusses certain meaningful legal matters receiving attention during the months of October/November 2018.

Significant Developments in Pending Litigation

MWD Rate Cases

*2010/2012 Rate Cases*: After being remitted to the trial court in San Francisco by the Court of Appeal on October 24, 2017, these cases are now pending before Judge Mary Wiss.

On July 25, 2018, Judge Wiss issued an order defining the scope of the case on remand. In that order, she ruled that (1) on its contract claim, the Water Authority is entitled to damages of $28,678,191, plus prejudgment interest; (2) the Water Authority is entitled to declaratory relief, and may be entitled to monetary restitution, for MWD's imposition of its illegal RSI clause and termination of Water Authority-related Local Resource Project contracts; and (3) the Water Authority waived, and thus may not litigate in the 2010/2012 case, the issue whether MWD was required to provide the Water Authority with a credit against Exchange Water wheeling charges for the offsetting benefits to MWD provided by the Exchange Water. The Water Authority and MWD subsequently filed briefs discussing, respectively, the factual and legal basis for the Water Authority’s claims for restitution and other RSI relief and MWD’s defenses and counter-arguments to those theories.

At the November 5, 2018 hearing, Judge Wiss set a schedule for deciding the scope of RSI relief as detailed in a November 7, 2018 order. On December 7, 2018, the Water Authority shall submit its witness list and list of exhibits that it will present at the restitution hearing. On January 18, 2019, MWD must submit its witness list, list of exhibits, and any discovery that it believes is needed prior to the hearing. Judge Wiss will then hold a further case-management conference on January 25, 2019. On February 18, 2019, the parties will file simultaneous pre-hearing briefs. The RSI relief hearing is set for one week, starting on April 8, 2019.

*2014 Rate Case*: The case filed on May 30, 2014 challenging MWD’s rates adopted in 2014 for 2015 and 2016 was transferred to San Francisco Superior Court, assigned to Judge Karnow, and remains stayed.

*2016 Rate Case*: The case filed on April 13, 2016 challenging MWD’s rates adopted in 2016 for 2017 and 2018 was transferred to San Francisco Superior Court and, following MWD’s exercise of a peremptory challenge against Judge Karnow, assigned to Judge Wiss. The 2016 case was
initially stayed by the parties pending resolution of the 2010/2012 case appeal. The parties then agreed to a further stay pending resolution of post-remand proceedings in the 2010/2012 cases, which stay was entered by the Court on July 31, 2018.

2017 Rate Case: The case was filed in Los Angeles Superior Court on June 9, 2017, following MWD’s April 2017 approval of Readiness-to-Serve and Capacity Charges to be charged in 2018, and amended on July 18, 2017, after the MWD Board approved an amended RTS Charge for 2018. The case was transferred to San Francisco Superior Court, assigned to Judge Wiss, and stayed by stipulation of the parties on July 31, 2018.

2018 Rate Case: The case was filed in Los Angeles Superior Court on June 8, 2018, following MWD’s April 2018 approval of its rates and charges. The case was then transferred to San Francisco Superior Court, which transfer was formally received on November 2, 2018. The parties are expected to agree to stay this case until the conclusion of post-remand proceedings in the 2010/2012 cases.

Public Records Act Case

In late October, Californians Aware and the California News Publishers Association submitted amicus letters urging the California Supreme Court to grant review in the Water Authority's case. This was in addition to letters filed earlier by the Project on Government Oversight and Howard Jarvis Taxpayers Association. Despite widespread support for the Water Authority’s position, the California Supreme Court denied the petition for review on October 31. All appellate options have now been exhausted and the Public Records Act case is concluded. The case does not address the Water Authority's right to obtain copies of MWD's rate models through discovery in the pending rate cases, but only the scope of the Public Records Act.

Department of Water Resources v. All Persons Interested

The parties are working on administrative record and case management issues. The Water Authority continues to seek concurrence by DWR that the Water Authority’s issues of concern are not at issue in the case so that it may dismiss its Answer.

Food & Water Watch and Center for Food Safety v. Metropolitan Water District of Southern California and All Persons Interested

On November 26 the Water Authority filed a Demurrer to the Complaint by Food and Water Watch, challenging the Complaint’s Proposition 26 claim against MWD. The hearing is currently set for December 24, 2018, but may be changed.

Conveyance Agreement Arbitration

The San Luis Rey River Indian Water Authority filed a motion for summary judgment and a motion to dismiss our case, both of which were opposed by the Water Authority. The hearing was on November 15, 2018. The parties are awaiting a decision.
Kimball Matter

This dispute over a real property conveyance is subject to a Demurrer filed by the Water Authority and set to be heard on December 7, 2018 in San Diego Superior Court.

Amicus Issues

No new issues to report.

Requests Pursuant to the Public Records Act

<table>
<thead>
<tr>
<th>Requestor</th>
<th>Documents Requested</th>
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<tbody>
<tr>
<td>Voice of San Diego</td>
<td>b2g Data Advisory Group’s PRA Request of 10/11/2018 and responsive documents</td>
</tr>
<tr>
<td>Center for Contract Compliance</td>
<td>Bid documents for manhole and appurtenance raising services</td>
</tr>
<tr>
<td>Center for Contract Compliance</td>
<td>Bid documents for the San Diego 28 Flow Control and Alvarado Hydroelectric Project</td>
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<tr>
<td>Center for Contract Compliance</td>
<td>Bid documents for the Kearny Mesa Headquarters Roof Rehabilitation</td>
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<tr>
<td>Diskriter.com</td>
<td>Proposals for Temporary Staffing Services of Senior Engineering Technician</td>
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<tr>
<td>Chris Hicks</td>
<td>Bid documents for San Vicente Dam Raise and Olivenhain Dam Projects</td>
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Prepared by:  Mark J. Hattam, General Counsel

Attachment:  Special Counsel Expenditure Report
### On-going Litigation

<table>
<thead>
<tr>
<th>Special Counsel</th>
<th>Project</th>
<th>Total $ Expended for Oct/Nov-18 (Fees &amp; Costs)</th>
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<tbody>
<tr>
<td>Brownstein Hyatt Farber Schreck</td>
<td>MWD Rate Litigation</td>
<td>Privileged</td>
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<tr>
<td></td>
<td>Public Records Litigation</td>
<td>Privileged</td>
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<tr>
<td></td>
<td>QSA Implementation</td>
<td>Privileged</td>
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<tr>
<td>Daley &amp; Heft</td>
<td>Kimball Matter</td>
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<td>Pipeline 3 Relining Project</td>
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<tr>
<td>Keker Van Nest &amp; Peters</td>
<td>Metropolitan Rates</td>
<td>Privileged</td>
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<tr>
<td>Procopio Cory Hargreaves &amp; Savitch</td>
<td>DWR Validation Matter</td>
<td>Privileged</td>
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### Non-Litigation

<table>
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<tbody>
<tr>
<td>Allen Matkins</td>
<td>San Vicente Pumped Storage Project</td>
<td>$12,810.15 (CIP)</td>
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<tr>
<td>Brownstein Hyatt Farber Schreck</td>
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<td>$393.30 (OP)</td>
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<tr>
<td>Liebert Cassidy Whitmore</td>
<td>Personnel Issues</td>
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<td>Pillsbury Winthrop Shaw Pittman LLP</td>
<td>Intellectual Property</td>
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<td>Procopio Cory Hargreaves &amp; Savitch</td>
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<td>Van Ness Feldman</td>
<td>San Vicente Water Storage Facility Project</td>
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1 The California Supreme Court has held that the amounts of monthly legal bills for ongoing litigation have privileged status, as they may disclose litigation strategy. *Los Angeles County Bd. of Supervisors v. Superior Court*, (2016) 2 Cal. 5th 282, 286.