MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Jointly with the
PUBLIC AFFAIRS AND LEGISLATION COMMITTEE
September 16, 2019, 8:30 a.m.
Conference Room 101

Committee:
Director Dick, Chair    Staff: R. Hunter, K. Seckel, H. Baez,
Director Thomas        D. Micalizzi, T. Dubuque, T. Baca
Director McVicker

Ex Officio Member: Director Barbre

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

PUBLIC PARTICIPATION
Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING -- Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District’s business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District’s Internet Web site, accessible at http://www.mwdoc.com.

DISCUSSION ITEMS

1. LEGISLATIVE ACTIVITIES
   a. Federal Legislative Report (Barker)
   b. State Legislative Report (BBK)
   c. County Legislative Report (Lewis)
   d. Legal and Regulatory Report (Ackerman)
   e. MWDOC Legislative Matrix
   f. MET Legislative Matrix

2. MWDOC LEGISLATIVE POLICY PRINCIPLES ANNUAL UPDATE
INFORMATION ITEMS (THE FOLLOWING ITEMS ARE FOR INFORMATIONAL PURPOSES ONLY – BACKGROUND INFORMATION IS INCLUDED IN THE PACKET. DISCUSSION IS NOT NECESSARY UNLESS REQUESTED BY A DIRECTOR.)

3. WATER POLICY DINNER RECAP - September 5, 2019

4. CALIFORNIA ENVIRONMENTAL LITERACY INITIATIVE

5. EDUCATION PROGRAM UPDATE

6. PUBLIC AFFAIRS ACTIVITIES REPORT

OTHER ITEMS

7. REVIEW ISSUES RELATED TO LEGISLATION, OUTREACH, PUBLIC INFORMATION ISSUES, AND MET

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.
Congressional Session:

Since our last report, the Congress has been in a prolonged August Recess period. Today is the first day of the fall legislative session since the Senate adjourned on August 2nd. As a result, this Washington Update will be an abbreviated report.

Appropriations:

House and Senate Leaders are now actively working on a short-term spending bill to avoid any kind of a federal shutdown as the fiscal year ends on September 30th. As discussed in previous reports, while a two-year budget agreement was reached earlier this summer, the Senate chose not to move “any” of its appropriations bills until such an agreement was made and is now months behind its process of regular order. The Senate Majority Leader has announced that the major focus of the Senate this month will be moving forward with as many of the regular appropriations bills as possible and then passing a temporary continuing resolution for the outstanding parts of the government before the end of September.

Later this week, the Senate is expected to move its Energy and Water Appropriations Bill along with three other bills through the Appropriations Committee process. No figures have been released yet for the Thursday Committee meeting. We anticipate the Energy and Water Bill will receive a slight increase in funding—similar to the House Bill. We have contacted Senator Feinstein’s Office again regarding the critical Doheny Beach Desal Project Language needed in this bill and they have signaled to us that the Committee should be protecting the $8.3 Million Grant which Doheny is in the process of receiving. We are monitoring this process closely.
A short-term spending bill should be clearing the House and the Senate that will provide funding for all federal departments until late November or December.

**PFAS:**

The House of Representatives passed its version of the National Defense Authorization Act (NDAA) just prior to the beginning of the August Recess period. Legislative efforts aimed at dealing with the PFAS contamination crisis remain as points of controversy between the House and Senate as Conference Committee negotiations on the annual defense bill will begin in earnest this week.

The most controversial issue is the so-called Dingell amendment that passed on the House bill to designate all PFAS as hazardous for the purposes of Superfund cleanups. Virtually all of the national water stakeholder groups have come out strongly opposing the Dingell language. A copy of the major water stakeholder groups letter has been attached to this Report and it outlines the major concerns regarding the PFAS issues contained in the House and Senate versions of the NDAA.

Meanwhile, the White House has detailed its concerns regarding the current drafts of the legislation last week. Many of the Administration’s concerns track very closely with the attached letter.

To summarize some of the key differences between the House and Senate Bills--the House bill mandates Clean Water Act (CWA) discharge limits for PFAS but does not include the Senate’s requirement to promulgate drinking water standards. Most importantly, the House approved an amendment, offered by Reps. Debbie Dingell (D-MI) and Dan Kildee (D-MI), requiring EPA to list all PFAS as hazardous substances under CERCLA. The Senate bill does not include this provision.

The hazardous substance issue is important and controversial because of its liability implications. If PFAS are listed as hazardous substances, they become subject to CERCLA’s broad liability scheme, *which makes past and present owners and operators, transporters, and arrangers jointly and severally liable for the cost of cleanup.*
EPA already has CERCLA authority to clean up PFAS releases (as pollutants or contaminants), but presently cannot hold parties liable under CERCLA for such cleanup. The House provision – by making PFAS hazardous substances – would expand EPA’s ability to recover CERCLA response costs, and also would empower private parties to recover CERCLA response costs for PFAS cleanups.

JCB 9/10/19
Aug. 8, 2019

The Honorable James M. Inhofe  
Chair  
Senate Committee on Armed Services  

and  

The Honorable Adam Smith  
Chair  
House Committee on Armed Services  

Dear Sen. Inhofe and Rep. Smith,

As preparations begin for a conference committee to convene on the 2020 National Defense Authorization Act, the undersigned water organizations want to bring to your attention important issues surrounding provisions in both House and Senate bills addressing per- and polyfluoroalkyl substances (PFAS). Our recommendations are in the interest of protecting public health, facilitating effective science-based regulations, and holding polluters - not innocent local communities - responsible for environmental remediation costs. We stand willing to work with you to achieve these goals.

1. **Liability for PFAS clean-up should rest with PFAS producers.**

   a. Congress should not hold community drinking water and wastewater facilities liable for PFAS contamination caused by PFAS products that we now realize should not have been allowed into commerce in the United States.

   b. Designating PFAS as a CERCLA (“Superfund”) hazardous substance would help communities that have a known responsible party with financial means to pay for cleanup. However, it could also create liability for communities that encounter PFAS in their water treatment activities. Once PFAS is removed from water, it then must be disposed of. A water utility that properly disposes of residuals containing PFAS, in a manner consistent with applicable laws, must not be held liable under CERCLA for future costs associated with PFAS cleanup. Those costs and responsibilities must remain with the original polluters that introduced PFAS into the environment. Failure to protect water utilities from this liability would victimize the public twice: once when they are forced to pay to remove PFAS from their water, and again when they are forced to pay to clean up PFAS elsewhere.

   c. If Congress does designate PFAS as a hazardous substance under CERCLA, an exemption for water and wastewater treatment residuals should be included.
2. Congress should not mandate that EPA set a drinking water standard for per- and polyfluoroalkyl substances (PFAS) as a group or class.
   a. While research exists for legacy PFAS compounds such as PFOA and PFOS, more research is needed to understand the health impacts of other PFAS compounds and whether regulation of PFAS as a group or class would be an effective approach to public health protection.
   b. EPA already has authority under the Safe Drinking Water Act to regulate groups of contaminants when warranted.

3. Congress should not direct EPA to prepare drinking water health advisories for PFAS compounds under the Safe Drinking Water Act.
   a. Health advisories can become de facto maximum contaminant levels without consideration of feasibility (e.g., available analytical methods, effective drinking water treatment options, consideration of benefit-cost analyses, or due process with adequate notice and comment).
   b. The Safe Drinking Water Act gives EPA broad authority to issue drinking water health advisories for unregulated contaminants, and the agency issued such advisories for PFOA and PFOS in 2016.
   c. Health advisories should only be released when they facilitate effective risk management. It is not clear that health advisories issued while primary drinking water standards are in development would be effective mechanisms to guide public water systems toward sound local decisions.

4. Congress must provide EPA with the necessary resources to properly consider future PFAS regulations.
   a. The Safe Drinking Water Act mandates a consistent, transparent, and science-based regulatory process for the consideration of new drinking water regulations. Establishing different regulatory processes for PFAS or any other groups of contaminants, with different deadlines and consideration procedures, would set a troubling precedent would likely lead to premature regulatory decisions that lack public review and scientific validity.
   b. Setting timelines without adequate resources to assist EPA would set up drinking water regulation related to the substances in question on a path to failure. The agency will need resources to
      i. fund research to support decision-making;
      ii. develop policy and associated public engagement;
      iii. help states with rule implementation; and
      iv. provide technical assistance and funding for impacted water systems.
   c. The nation can ill afford the further erosion of public confidence in drinking water and our regulatory system.
5. It is time for Congress to ensure that EPA utilizes the Toxic Substances Control Act to understand the risk posed by PFAS and control that risk before they are introduced into commerce.

If you would like to learn more about how we treat and distribute water, please do not hesitate to contact us.

Sincerely,

G. Tracy Mehan III
Executive Director for Government Affairs
American Water Works Association

Diane VanDe Hei
Chief Executive Officer
American Association of Metropolitan Water Agencies

Rob Powelson
President and Chief Executive Officer
National Association of Water Companies

Sam Wade
Chief Executive Officer
National Rural Water Association

cc/ Members
House and Senate Armed Services committees
The Honorable John Barrasso, Chair
The Honorable Thomas R. Carper, Ranking Member
Senate Committee on Environment and Public Works

The Honorable Frank Pallone, Chair
The Honorable Greg Walden, Ranking Member
House Committee on Energy and Commerce
End of Session Report

The first year of the biennial session will have concluded by the time the PAL Committee meets for September. Ordinarily this wrap up of legislative activities happens in October, but this year was a bit unusual in that all but a few bills related to water were dispensed with well before the end of session. The only outstanding bill at the time this report was prepared was SB 1 (Atkins), which BB&K will report on at the hearing, as well as a general overview of the year. Despite the relatively calm end of session for water policy issues, the year in general was a busy one for the water lobbyists. BB&K tracked almost as many water bills as it did during the height of the drought when water conservation was the dominant policy issue in the Capitol. As detailed in this report, the wins outnumbered the losses by a wide margin but the losses were not trivial.

The Losses

AB 756 (C. Garcia): PFAS/PFOS will be regulated in standalone regulations with little to no science supporting the effort. The bill itself was not the real problem so much as what will follow. The bill set notifications levels for PFAS at incredibly low levels. For practical purposes the limit is the same as detection limits, but it is widely assumed that the Maximum Contaminant Levels (MCLs) will soon follow suit and be similarly lacking in scientific support. This was a no-win situation for the water industry because opposing the bill looked like defending contaminated water and public transparency. Arguing that a bill lacks a scientific basis hardly raises an eyebrow in Sacramento. This is not to say the bill wasn’t lobbied aggressively. PFAS manufactures hired big-name firms and did what they could to point out the unintended consequences of not following established procedures for identifying pollutants, but there was never any traction.

WaterFix: No, the WaterFix isn’t dead, but for all practical purposes we’re starting over…again. One of Governor Newsom’s first acts was to undercut the Brown administration’s two-tunnel proposal in favor of a smaller single tunnel. That wasn’t necessarily the end, but later it was made clear that all new environmental impact reports would be pursued, with a first draft proposed for
some time in 2020. At this time it’s unclear what size tunnel Newsom would support, and his top appointees have indicated that they’ll be open to including an even wider range of issues going forward—as if it wasn’t already complicated enough. A tunnel may be built one day, but it’s hard not to view this as a significant setback.

SB 307 (Roth): The Cadiz Project has been in the crosshairs of powerful voices in D.C. for over two decades and the opposition finally caught up to it. This was easily the most lobbied water bill of the year with some of Sacramento’s political heavyweights making rare public appearances in committee hearings. Despite these impressive efforts, the State Lands Commission and the Dept. of Fish and Wildlife will now get to explore additional environmental impacts as they see fit.

The Wins

Water Tax: The scope of this win cannot be overstated. Water purveyors faced a coordinated effort by two successive administrations and Assembly leadership to impose a tax on water agencies. The year began with bills in both houses that looked ominous: AB 217 (Garcia), AB 134 (Bloom), and SB 200 (Monning). As is the case more often than is recognized, the win came about from surviving long enough to get lucky; the water industry’s opposition held on long enough for larger political forces in the Senate to overtake the issue. In the end, it came down to Senate Pro Tem Atkins not wanting a tax bill on the Senate Floor that would be bad for new members she needed to protect. But what came out of the clash of forces was a surprisingly good solution—a dedicated source of funding and a decent road map for a program to get clean drinking water to California’s disadvantaged communities. It wasn’t just a win for water agencies—the people of California won this time as well.

WaterFix: Yep, it’s both a loss and a win. The project itself may have suffered a setback under the new administration, but that doesn’t mean water industry lobbyists weren’t on the job. Assembly Member Frazier (AB 1194) and Senator Dodd (SB 204) pursued bills that were indirect attacks on the WaterFix and both got blocked. AB 1194 was batted down in what has become an annual tradition, and SB 204 was amended into an arguably good bill on transparency. A third bill may have been intended to be a hurdle for the WaterFix although it wasn’t entirely clear. AB 1580 (Levine) would have imposed additional administrative hurdles on large-scale “publicly funded” projects. Assembly Member Levine is a vocal opponent of the Delta tunnels so it was assumed he meant it to apply to the WaterFix, but the bill was unclear if it applied or not. As a precaution MWD opposed it just in case it did and the bill was held on suspense.

Accessory Dwelling Units: Although this issue wasn’t on point for MWDOC, nor brought up by any member agencies, at least a half dozen bills related to the housing crises touched upon water agencies being able to charge fees for new units. Water industry lobbyists quietly worked to make it
clear that water agencies weren’t part of the problem and that they can only charge fees for the cost of the services they provide. In the end, none of the housing bills significantly impinged on water agency’s ability to provide service.

**SB 134 (Hertzberg):** Water loss enforcement. The water conservation bill package from last year had an unresolved issue in that both it and prior legislation established fines for excessive water loss by water providers. It was understood that there would be clean up legislation this year that was supposed to be noncontroversial, but some environmental groups got greedy and lobbied to let the SWRCB choose which scheme it wanted to enforce. This effort was successfully fended off and SB 134 went on to put limits on the Board as to when it can impose fines for water losses.

Several other bills are in the “win” column for water interests that are listed in the Bill Matrix, such as AB 402 (Quirk) and SB 233 (Hertzberg). The only loss that can be fairly laid at the doorstep of the lobbyists in Sacramento is AB 756 on PFAS. But when compared to the wins, 2019 is being scored as a great year for water policy.

**Final Note:** At the start and end of every session, BB&K encourages you to look over the “Watch” list of bills one more time. MWDOC staff and BB&K work hard to anticipate the interests of the board, and we think we do a pretty good job of it, but we’re always looking to improve. If there are bills on the “Watch” list that you think should have been brought to your attention, now would be a great time to point them out so that we can do an even better job next session.
The County of Orange Report
September 10, 2019
by Lewis Consulting Group

Eminent Domain Required for Prado Dam Fix
In what must be a fairly rare occurrence, at the September 10th meeting, the Orange County Flood Control District is condemning and utilizing eminent domain power to acquire property in San Bernardino County. The property is part of the Rancho Santa Ana Del Chino area near Pine & Euclid Avenue.

After recently receiving an appraisal of the property, the County is voting to pay the owners $9,105,000. The property owners requested 13,500,000 and after negotiations, could not come to terms. The property is needed to accommodate additional water storage behind Prado Dam in case of a major flood event.

Prado Dam is undergoing a major $880 million expansion program with a goal of providing Orange County security for up to a 190 year flood. The height of the dam has already been raised to over 594 feet, a recent increase of over 28 feet. In 2021, the spillway will be raised by 20 feet, from 543 to 563 feet.

As a result, ultimately the reservoir area will be increased from 6,695 acres to 10,256 acres, increasing capacity from 217,000 acre feet to 362,000 feet. The improvements will also increase the discharge capacity from 9,000 CFS to 30,000 CFS.

Utilizing eminent domain requires four of the five Supervisors to vote in the affirmative.

Update

County Adopts Airport Plan, Issues RFP
After months of anticipation, the newly revised John Wayne general aviation plan was presented to the Board of Supervisors on September 10, 2019.
The plan reflects months of negotiations primarily between airport staff, the Southern California Pilots Association, the City of Newport Beach, the residents of Newport Beach and individual members of the Board of Supervisors.

The fundamental clash has been between those who wish to modify the airport and accommodate evolving aircraft needs and those who are impacted by environmental nuisance noise and air quality.

In a concession to Newport Beach, the County will only award three contracts, two for full service FBOs (fixed based operators) and one limited FBO. The distinction is that a limited FBO does not provide fueling service.

The city of Newport Beach however is still not happy with the proposal. They have been seeking amendments to limit larger size airplanes to ensure that smaller planes and not jets are the beneficiary of these changes. After a long and spirited debate on the matter, the Board voted 4-0 to issue the RFP, with Supervisor Wagner not present.

**PROPOSED PROJECT**

Note: Green area restricted to aircraft with a wingspan of 49 feet or less
On May 22, 2018, after review of potential bidders qualifications, nine companies were allowed to participate in the RFP process.

The nine companies are:

<table>
<thead>
<tr>
<th>SUBMITTAL</th>
<th>Full-Service FBO</th>
<th>Limited-Service FBO</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACI Jet, dba Aviation Consultants, Inc.</td>
<td>X</td>
<td>N/A</td>
</tr>
<tr>
<td>American Aircraft Maintenance, Inc.</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Clay Lacy Aviation, Inc.</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Jay’s Aircraft Maintenance, Inc.</td>
<td>N/A</td>
<td>X</td>
</tr>
<tr>
<td>Jet Aviation of America, Inc.</td>
<td>X</td>
<td>N/A</td>
</tr>
<tr>
<td>Newport FBO Two, LLC, dba Atlantic Aviation</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Orange County Airport Aviation Partners, dba Million Air John Wayne</td>
<td>X</td>
<td>N/A</td>
</tr>
<tr>
<td>Ross Aviation Holdings, LLC</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Signature Flight Support Corporation</td>
<td>X</td>
<td>N/A</td>
</tr>
</tbody>
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As you can see, seven companies are desirous of bidding on the full-service FBO. Five companies are planning to bid on the limited service FBO. Three companies are planning to bid on both.

The prize:

<table>
<thead>
<tr>
<th>FBO Parcels</th>
<th>Approximate Parcel Area</th>
<th>Annual Ground Rent</th>
<th>Approximate Building Area</th>
<th>Annual Building Rent</th>
<th>Percentage Rent of Gross Receipts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast Full Service FBO</td>
<td>1,358,299 SF</td>
<td>$1.77 PSF</td>
<td>270,393 SF</td>
<td>$8.16 PSF</td>
<td>5%*</td>
</tr>
<tr>
<td>Northwest Full Service FBO</td>
<td>635,178 SF</td>
<td>$1.77 PSF</td>
<td>99,816 SF</td>
<td>$8.76 PSF</td>
<td>5%*</td>
</tr>
<tr>
<td>Southwest Limited Service FBO</td>
<td>558,313 SF</td>
<td>$1.25 PSF</td>
<td>15,014 SF</td>
<td>$2.53 PSF</td>
<td>5%*</td>
</tr>
</tbody>
</table>

The airport RFP timetable requires that completed responses are due on December 19, 2019. The Board of Supervisors are anticipated to vote on the winning bidder in April 2020.
The September 11th LAFCO meeting occurred after our print deadline, so any topics of interest will be presented verbally at PAL.

On the agenda this month:
- #3 Oath of office administrated to certain members
- #8b Final Comprehensive Quarterly report
- #10a OC LAFCO Reserves & Projections
- #10b Proposed revisions to OC LAFCO policy & procedures
- #10c 2019 CAL LAFCO update

**California Democratic Presidential Poll**

Real Clear Politics average of three recent polls:

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biden</td>
<td>23%</td>
</tr>
<tr>
<td>Harris</td>
<td>21%</td>
</tr>
<tr>
<td>Warren</td>
<td>19%</td>
</tr>
<tr>
<td>Sanders</td>
<td>17%</td>
</tr>
</tbody>
</table>

**It’s All Our Fault**

A major fault capable of generating a 6.4 shaker on its own and even higher when combined with other nearby faults looms beneath the Port of Los Angeles and the Port of Long Beach.

The Wilmington blind-thrust fault was considered dormant until recent researchers discovered it is still active. Previously it was thought to be dead for millions of years. Because blind-thrust faults are completely underground, they are much more difficult to study.

Luckily, the fault is slow moving, estimated at 0.16 millimeters a year. Another blind-thrust fault responsible for the deadly 1994 Northridge earthquake moves about 40 times faster. Researchers estimate the Wilmington fault ruptures every 3,000 to 4,000 years, so our odds of avoiding it are pretty good.
**Farewell to El Niño**

Our most recent “weak” El Niño has finally abated and slipped into a neutral reading with a slight bias towards La Niña. In addition to its association with dryer weather in California, it also helps promote hurricanes in the Atlantic Ocean.

![ENSO Meter](image)

The reason the Pacific is beginning to cool is apparent with plumes of cooler water heading westward from the shores of South America.

![UNISYS Current Sea Surface Temperature Anomaly Plot](image)
The following chart shows the El Niño Southern Oscillation chart since 1960.
Legal and Regulatory

September 16, 2019

1. **Agency Divorce:** Two San Diego agencies are trying to separate from the San Diego County Water Authority. Fallbrook Public Utility District and the Rainbow Municipal Water District want a divorce from the Authority. They want to buy water from Eastern Municipal Water District, which would save their customers millions of dollars per year. The Authority is already committed $1 million with a law firm to oppose the effort. It is common knowledge that San Diego has the highest water rates in the nation as a result of past decisions with IID and others. San Diego and Riverside Local Agency Formation Commissions are getting geared up for a large battle. The Authority has not had good luck in recent litigation against various groups including MWD. Just recently, they lost a matter involving five local Indian tribes. The Authority’s current rate is $500 more per acre-foot than MWD. Other member agencies are also making noise, including the City of San Diego, about leaving and reconsidering their relationship with the Authority. Definitely, stay tuned!!

2. **Fires Produce Water:** A recent study by Lawrence Berkeley National Laboratory has shown positive relation between fires and more water. Wildfires in the higher mountains, particularly serious ones, produce an environment that is conducive to more water availability. At higher altitudes, where there trees are wiped out, more snow reaches the ground. When melting occurs, this water enters the groundwater or runs off. This in turn increases the overall water supply much more than, if the trees were still standing. Fires in the valley areas do not produce this same affect. The further upstream the fires occur, the more water ends up downstream. This information is very useful for water managers to factor in when fires occur.

3. **San Clemente Reef:** One half mile off the San Clemente beach is the man made Wheeler North Reef. It is currently the largest man made reef in the world and is still growing. The reef is being constructed by So Cal Edison as a mitigation measure for the expansion of San Onofre Nuclear Generating Station. The plant is now being shut down, but Edison’s obligation still exists. The reef will be about 5 miles long and cover about 380 acres. It is composed of 150 tons of rock from Ensenada and Catalina Island. The average height is 3 feet in a water depth of about 40 feet. Thus far, it is attracting significant fish and other water life although not quite up to projections. Reef construction began in 1974. Recent expansion has been slowed amid concerns that some Native Americans may have lived on the submerged land.

4. **Casino Saves Water:** The Tejon Tribe is building a casino near Bakersfield in Kern County. Concerns have arisen about the water use and compliance with groundwater regulations. County planning staff has determined that the casino and associated development will use 75% less water than the prior agricultural use on the property. The project is being reviewed by the Kern Groundwater Authority to insure compliance.
5. **Brea’s Water Problems:** California Domestic Water is a private water company, which supplies water to the City of Brea. It is one of the oldest water companies in the area. Problems have existed with the company and various city officials. Part of the dispute involves an $8 million water purchase in 2011 as a result of the Obama stimulus package. There is a dispute if the City ever got the actual water or merely stock in an entity that had water rights. Brea and La Habra own about one-half of the stock in CDW. The Orange County DA has looked at the matter, made some findings that looked suspicious and eventually referred it to the FPPC. The FPPC fined one official $500. Accusations continue to go back and forth but nothing has been resolved.

6. **Robot Cleans Plastic:** A San Diego nonprofit, Clear Blue Sea, has teamed up with some young engineers to develop FRED. FRED is a Floating Robot for Eliminating Debris. It is being tested in Mission Bay to take floating debris including plastic out of the water. It is a small sweeper with a conveyor belt, which funnels the catch into a basket. It is operated by remote control and looks like a video game device. Their test case was ping-pong balls which it handled with ease. Their goal is to build a large scale FRED to challenge the Pacific Gyre.

7. **Tahoe Shrimp:** Estimates are that there are a trillion or more mysis shrimp in Lake Tahoe. These shrimp are impacting the clarity of the Lake and the food chain. These shrimp are translucent and less than an inch long. They were introduced to the Lake in the 1960s by the fish and game departments of the states of California and Nevada. The purpose was to be a source of food for game fish in the Lake. Unfortunately, the experiment was a total failure. These shrimp cannot take light, so spend all day at the bottom of the Lake. They only come to the surface at night, so are not good feeding opportunities for the fish. Also, while they stay at the bottom, they eat all the plankton. This further throws off the food chain for everything else. State officials now admit that they should have left Mother Nature alone. There is currently an effort to reduce the number of mysis in the lake but it is a gigantic problem. These shrimp are now being identified as a major cause of the lack of clarity in the Lake, which also started back in the 1960s.

8. **SLO Cloudseeds:** San Luis Obispo County was one of the hardest hit areas for the drought. It continues to be a serious issue there, as they did not get the heavy rain and snow experienced by the rest of the State. The County Board of Supervisors embarked on a cloud seeding program at a starting cost of $300,000. Even though the science is not completely proven, the water managers and the Supervisors were convinced they needed to try every possible alternative. Cloud seeding takes place only when there are existing moisture condition in the atmosphere. Critics are worried about the use of silver iodide (the seeds) which has some level of toxicity. They also want to stress conservation more.

9. **Deadly Blooms:** Green pond sum, toxic algae bloom, red tide, cyanobacteria. These conditions are getting more and more commonplace in fresh and salt water. In addition to the smell, looks and getting people sick, they can and have killed animals and can do the same to humans. They exist in over 100 species that can produce toxins. The most deadly attack the liver and nervous systems. Pet deaths have been reported in North Carolina and Georgia. As of now, we cannot predict the exact conditions that create the various blooms. One common factor is warmer water. The food chain of fish and shellfish often eat the toxins with no ill results. However, when we eat the fish or shellfish, we suffer.
10. **Raining Plastic**: Microplastics are becoming more of a problem. Recently these particles have been discovered in rain in the Denver area which originated in the Rocky Mountains. At a recent WACO meeting, a presentation was made on this subject. Regulations are coming fast at a time when not all the research is complete. We do know that microplastics seem to be everywhere and come from everyday sources like clothing, packaging, liquids, and fire suppression. They are in our bodies at various levels. Many uses of these micro-beads have already been discontinued but there are vast quantities of them already out there. Contamination has been discovered in the water in the Artic and in US National Parks.

11. **Blob Gone**: In the water of the West Coast in the Pacific, for many recent years water stagnation known as the Blob was reported. It was primarily blamed on warmer conditions since 2013. Our current cool shift in the oceans has brought the Blob to its end. Normal conditions are returning to our oceans, which is bad news if you are a Blob.
# A. Priority Support/Oppose

<table>
<thead>
<tr>
<th>Measure</th>
<th>Author</th>
<th>Topic</th>
<th>Status</th>
<th>Brief Summary</th>
<th>Position</th>
<th>Priority</th>
<th>Notes 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 292</td>
<td>Quirk</td>
<td>Recycled water: raw water and groundwater augmentation.</td>
<td>7/10/2019-Inactive</td>
<td>Current law requires the State Water Resources Control Board, on or before December 31, 2023, to adopt uniform water recycling criteria for direct potable reuse through raw water augmentation, as specified. Current law defines “direct potable reuse” and “indirect potable reuse for groundwater recharge” for these purposes. This bill would eliminate the definition of “direct potable reuse” and instead would substitute the term “groundwater augmentation” for “indirect potable reuse for groundwater recharge” in these definitions. The bill would revise the definition of “treated drinking water augmentation.”</td>
<td>Support</td>
<td>A. Priority Support/Oppose</td>
<td>It will move next year. More time needed of definitions.</td>
</tr>
<tr>
<td>AB 402</td>
<td>Quirk</td>
<td>State Water Resources Control Board: local primacy delegation: funding stabilization program.</td>
<td>Held on Suspense.</td>
<td>The California Safe Drinking Water Act requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health, including, but not limited to, conducting research, studies, and demonstration programs relating to the provision of a dependable, safe supply of drinking water, enforcing the federal Safe Drinking Water Act, adopting implementing regulations, and conducting studies and investigations to assess the quality of water in private domestic water supplies. This bill would authorize the state board to delegate partial responsibility for the act’s administration and enforcement by means of a local primacy delegation agreement. The bill would authorize the state board, for counties that have not been delegated primary responsibility as of January 1, 2020, to offer an opportunity for the county to apply for partial or primary responsibility if the state board</td>
<td>Oppose unless amended</td>
<td>A. Priority Support/Oppose</td>
<td></td>
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</table>
determines that it needs assistance in performing administrative and enforcement activities, as specified.

<table>
<thead>
<tr>
<th>Bill</th>
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<th>Action</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 756</td>
<td>Garcia, Cristina D</td>
<td>Public water systems: perfluoroalkyl substances and polyfluoroalkyl substances.</td>
<td>Chaptered</td>
<td>Would authorize the State Water Resources Control Board to order a public water system to monitor for perfluoroalkyl substances and polyfluoroalkyl substances. The bill would require a community water system or a nontransient noncommunity water system, upon a detection of these substances, to report that detection, as specified. The bill would require a community water system or a nontransient noncommunity water system where a detected level of these substances exceeds the response level to take a water source where the detected levels exceed the response level out of use or provide a prescribed public notification.</td>
<td>Watch</td>
</tr>
<tr>
<td>ACA 3</td>
<td>Mathis R</td>
<td>Clean Water for All Act.</td>
<td>Not moving</td>
<td>This measure, the Clean Water for All Act, would additionally require, commencing with the 2021–22 fiscal year, not less than 2% of specified state revenues to be set apart for the payment of principal and interest on bonds authorized pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014; water supply, delivery, and quality projects administered by the department, and water quality projects administered by the state board, as provided.</td>
<td>A. Priority Support/ Oppose</td>
</tr>
<tr>
<td>SB 134</td>
<td>Hertzberg D</td>
<td>Water conservation: water losses: enforcement.</td>
<td>Chaptered</td>
<td>Current law requires the State Water Resources Control Board, no earlier than January 1, 2019, and no later than July 1, 2020, to adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. This bill would prohibit the board from issuing an information order, written notice, or conservation order to an urban retail water supplier that does not meet its urban water use objective if the board determines the urban retail water supplier is not meeting its urban water use objective solely because the volume of water loss exceeds the urban retail water supplier’s standard for water loss and the board is taking enforcement action against the urban retail water supplier for not</td>
<td>Support</td>
</tr>
<tr>
<td>SB 200</td>
<td>Monning D</td>
<td>Drinking water.</td>
<td>Chaptered</td>
<td>Would establish the Safe and Affordable Drinking Water Fund in the State Treasury to help water systems provide an adequate and affordable supply of safe drinking water in both the near and the long terms. The bill would authorize the State Water Resources Control Board to provide for the deposit into the fund of certain moneys and would continuously appropriate the moneys in the fund to the state board for grants, loans, contracts, or services to assist eligible recipients.</td>
<td>Watch</td>
</tr>
<tr>
<td>SB 204</td>
<td>Dodd D</td>
<td>State Water Project: contracts.</td>
<td>Held in policy committee</td>
<td>Would require the Department of Water Resources to provide at least 10 days’ notice to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature before holding public sessions to negotiate any potential amendment of a long-term water supply contract that is of projectwide significance with substantially similar terms intended to be offered to all contractors. The bill would require the department, before the execution of a specified proposed amendment to a long-term water supply contract and at least 60 days before final approval of such an amendment, to submit to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature certain information regarding the terms and conditions of a proposed amendment of a long-term water supply contract and to submit a copy of the long-term contract as it is proposed to be amended.</td>
<td>Watch</td>
</tr>
<tr>
<td>SB 205</td>
<td>Hertzberg D</td>
<td>Business licenses: stormwater discharge compliance.</td>
<td>Concurrence in Assembly amendments.</td>
<td>Would require, when applying to a city or a county for an initial business license or business license renewal, a person who conducts a business operation that is a regulated industry to demonstrate enrollment with the NPDES permit program by providing specified information, under penalty of perjury, on the application, including, among other things, the Standard Industrial Classification Code for the business. The bill would apply to all applications for initial</td>
<td>Watch</td>
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</table>
business licenses and business license renewals submitted on and after January 1, 2020.

**SB 307  Roth D**  
Water conveyance: use of facility with unused capacity.  
Chaptered  
Current law prohibits the state or a regional or local public agency from denying a bona fide transferor of water from using a water conveyance facility that has unused capacity for the period of time for which that capacity is available, if fair compensation is paid for that use and other requirements are met. This bill would, notwithstanding that provision, prohibit a transferor of water from using a water conveyance facility that has unused capacity to transfer water from a groundwater basin underlying desert lands, as defined, that is in the vicinity of specified federal lands or state lands to outside of the groundwater basin unless the State Lands Commission, in consultation with the Department of Fish and Wildlife and the Department of Water Resources, finds that the transfer of the water will not adversely affect the natural or cultural resources of those federal or state lands, as provided.  
Opposition  
A. Priority Support/ Oppose

**SB 414  Caballero D**  
Held on Suspense.  
Would create the Small System Water Authority Act of 2019 and state legislative findings and declarations relating to authorizing the creation of small system water authorities that will have powers to absorb, improve, and competently operate noncompliant public water systems. The bill, no later than March 1, 2020, would require the state board to provide written notice to cure to all public agencies, private water companies, or mutual water companies that operate a public water system that has either less than 3,000 service connections or that serves less than 10,000 people, and are not in compliance, for the period from July 1, 2018, through December 31, 2019, with one or more state or federal primary drinking water standard maximum contaminant levels, as specified.  
Support  
A. Priority Support/ Oppose
<table>
<thead>
<tr>
<th>Measure</th>
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</thead>
<tbody>
<tr>
<td>AB 405</td>
<td>Rubio, Blanca D</td>
<td>Sales and use taxes: exemption: water treatment.</td>
<td>5/16/2019-Joint Rule 62(a), file notice suspended. In committee: Held under submission.</td>
<td>Would, on and after January 1, 2020, and before January 1, 2025, exempt from that Sales and Use Tax the gross receipts from the sale in this state of, and the storage, use, or other consumption in this state of, chemicals used by a city, county, public utility, and sanitation district to treat water, recycled water, or wastewater regardless of whether those chemicals or other agents become a component part thereof and regardless of whether the treatment takes place before or after the delivery to consumers.</td>
<td>Watch</td>
<td>B. Watch</td>
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</tr>
<tr>
<td>AB 441</td>
<td>Eggman D</td>
<td>Water: underground storage.</td>
<td>5/17/2019-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 4/24/2019)(May be acted upon Jan 2020)</td>
<td>Under current law, the right to water or to the use of water is limited to that amount of water that may be reasonably required for the beneficial use to be served. Current law provides for the reversion of water rights to which a person is entitled when the person fails to beneficially use the water for a period of 5 years. Current law declares that the storing of water underground, and related diversions for that purpose, constitute a beneficial use of water if the stored water is thereafter applied to the beneficial purposes for which the appropriation for storage was made. This bill would instead provide that any diversion of water to underground storage constitutes a diversion of water for beneficial use for which an appropriation may be made if the diverted water is put to beneficial use, as specified.</td>
<td>Watch</td>
<td>B. Watch</td>
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</tr>
<tr>
<td>AB 591</td>
<td>Garcia, Cristina D</td>
<td>Central Basin Municipal Water District: board of directors.</td>
<td>7/8/2019-Senate amendments concurred in. To Engrossing and Enrolling.</td>
<td>The Municipal Water District Law of 1911 provides for the formation of municipal water districts and grants to those districts specified powers. Current law permits a district to acquire, control, distribute, store, spread, sink, treat, purify, recycle, recapture, and salvage any water for the beneficial use of the district, its inhabitants, or the owners of rights to water in the district. Current law requires the board of directors of the Central Basin Municipal Water District to be composed of 8 directors until the directors elected at the November 8, 2022, election take office, when the</td>
<td>Watch</td>
<td>B. Watch</td>
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</table>
board would be composed of 7 directors, as prescribed. Current law requires the 3 directors appointed by the water purveyors, as specified, to live or work within the district and requires the term of an appointed director to be terminated if the appointed director no longer is employed by or a representative of the appointing entity. This bill would define representative for these purposes to be a consultant to or contractor of an entity, or a governing board member of a mutual water company.

**AB 636**  
Gray D  
**State Water Resources Control Board:**  
water quality objectives.  
4/26/2019-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.S. & T.M. on 3/14/2019)(May be acted upon Jan 2020)  
Would prohibit the State Water Resources Control Board from implementing water quality objectives for which the state board makes a certain finding relating to environmental quality until it has submitted the water quality objectives and a statement of that finding to the appropriate policy committees of the Legislature and each committee has held a hearing on these matters.  
Watch B. Watch

**AB 637**  
Gray D  
**State Water Resources Control Board:**  
disadvantaged communities: drinking water.  
5/17/2019-Failed Deadline pursuant to Rule 61(a)(5). (Last location was APPR. SUSPENSE FILE on 5/1/2019)(May be acted upon Jan 2020)  
Would require the State Water Resources Control Board, before taking an action that significantly impacts drinking water, to use existing information to identify impacted disadvantaged communities and to seek to reduce impacts to those communities to the greatest extent practicable. The bill would also require the board to ensure that disadvantaged communities are provided an opportunity to participate in the public process for a decision that significantly impacts drinking water by holding a public hearing in or near an impacted community.  
Watch B. Watch

**AB 638**  
Gray D  
**Department of Water Resources:**  
water storage: climate change impacts.  
Enrolled to Governor.  
Would require the Department of Water Resources, on or before December 31, 2023, with updates every 5 years thereafter, to identify water storage facilities vulnerable to climate change impacts and the mitigation strategies for anticipated adverse impacts, as provided. The bill would require the department to publish this information on the department’s publicly available internet website and to provide a copy of the information to the appropriate policy committees of the Legislature. The bill would  
Watch B. Watch
<table>
<thead>
<tr>
<th>AB 658</th>
<th>Arambula D</th>
<th>Water rights: water management.</th>
<th>Senate Floor</th>
<th>Would authorize a groundwater sustainability agency or local agency to apply for, and the State Water Resources Control Board to issue, a conditional temporary permit for diversion of surface water to underground storage for beneficial use that advances the sustainability goal of a groundwater basin, as specified.</th>
<th>Watch</th>
<th>B. Watch</th>
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</thead>
<tbody>
<tr>
<td>AB 841</td>
<td>Ting D</td>
<td>Drinking water: contaminants: perfluoroalkyl and polyfluoroalkyl substances.</td>
<td>6/19/2019-In committee: Hearing postponed by committee.</td>
<td>Would require the Office of Environmental Health Hazard Assessment to adopt and complete a work plan within prescribed timeframes to assess which substances in the class of perfluoroalkyl and polyfluoroalkyl substances should be identified as a potential risk to human health, as provided. The bill would require the office, as part of those assessments, to determine which of the substances are appropriate candidates for notification levels to be adopted by the state board. The bill would require the Office of Environmental Health Hazard Assessment, by January 1, 2022, to provide to the Legislature an update on the assessment.</td>
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<td>B. Watch</td>
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<tr>
<td>AB 955</td>
<td>Gipson D</td>
<td>Water replenishment districts: water system needs assessment program.</td>
<td>Held on Suspense</td>
<td>Would require a water replenishment district to offer to conduct a needs assessment program for water systems serving disadvantaged communities within the district, as specified. The bill would make a water system’s participation in the program voluntary. The bill would require the district, upon completion of the needs assessment, to develop and evaluate options to address the findings and recommendations in the needs assessment and prepare an implementation plan for recommendation to the water system.</td>
<td>Watch</td>
<td>B. Watch</td>
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<tr>
<td>AB 1204</td>
<td>Rubio, Blanca D</td>
<td>Public water systems: primary drinking water standards: implementation date.</td>
<td>4/26/2019-Failed Deadline pursuant to Rule 61(a)(2). (Last location was E.S. &amp; T.M. on 3/11/2019)(May be acted upon Jan 2020)</td>
<td>Would require the adoption or amendment of a primary drinking water standard for a contaminant in drinking water not regulated by a federal primary drinking water standard or that is more stringent than a federal primary drinking water standard to take effect 3 years after the date on which the state board adopts or amends the</td>
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<td>Bill</td>
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<tr>
<td>AB 1220</td>
<td>Garcia, Cristina D</td>
<td>Metropolitan water districts.</td>
<td>7/5/2019-Enrolled and presented to the Governor</td>
<td>Out for Analysis</td>
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<td>B. Watch</td>
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<tr>
<td>AB 1414</td>
<td>Friedman D</td>
<td>Urban retail water suppliers: reporting.</td>
<td>Chaptered</td>
<td>Watch</td>
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<tr>
<td>AB 1588</td>
<td>Gloria D</td>
<td>Drinking water and wastewater operator certification programs.</td>
<td>Enrolled to the Governor</td>
<td>Watch</td>
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</table>

The bill would authorize the state board to delay the effective date of the primary drinking water standard adoption or amendment by no more than 2 additional years as necessary for capital improvements to comply with a maximum contaminant level or treatment technique.

Under the Metropolitan Water District Act, the board of a metropolitan water district is required to consist of at least one representative from each member public agency, as prescribed. The act authorizes each member public agency to appoint additional representatives not exceeding one additional representative for each 5% of the assessed valuation of property taxable for district purposes within the entire district that is within the boundaries of that member public agency. This bill would prohibit a member public agency from having fewer than the number of representatives it had as of January 1, 2019.

Would require each urban retail water supplier to submit a completed and validated water loss audit report as prescribed by the Department of Water Resources on or before October 1 of each year until October 1, 2023, if reporting on a calendar year basis and on or before January 1 of each year until January 1, 2024, if reporting on a fiscal year basis. The bill would require on or before January 1, 2024, and on or before January 1 of each year thereafter, each urban retail water supplier to submit a completed and validated water loss audit report for the previous calendar year or previous fiscal year as part of an existing report relating to its urban water use.

Current law requires the State Water Resources Control Board to issue a water treatment operator certificate and water distribution operator certificate by reciprocity to any person holding a valid, unexpired, comparable certification issued by another state, the United States, prescribed territories or tribal governments, or a unit of any of these. Current law requires the board to classify types of wastewater treatment.
plants for the purpose of determining the levels of competence necessary to operate them. This bill would require the board to evaluate opportunities to issue a water treatment operator certificate or water distribution operator certificate by reciprocity, or a wastewater certificate by examination waiver, to persons who performed duties comparable to those duties while serving in the United States military, as specified.

**SB 1**  
Atkins D  
Assembly Floor  
Current state law regulates the discharge of air pollutants into the atmosphere. The Porter-Cologne Water Quality Control Act regulates the discharge of pollutants into the waters of the state. The California Safe Drinking Water Act establishes standards for drinking water and regulates drinking water systems. The California Endangered Species Act requires the Fish and Game Commission to establish a list of endangered species and a list of threatened species, and generally prohibits the taking of those species. This bill would require specified agencies to take prescribed actions regarding certain federal requirements and standards pertaining to air, water, and protected species, as specified.

**SB 19**  
Dodd D  
Water resources: streamgages.  
Enrolled to the Governor  
Would require the Department of Water Resources and the State Water Resources Control Board, upon an appropriation of funds by the Legislature, to develop a plan to deploy a network of streamgages that includes a determination of funding needs and opportunities for modernizing and reactivating existing gages and deploying new gages, as specified. The bill would require the department and the board, in consultation with the Department of Fish and Wildlife, the Department of Conservation, the Central Valley Flood Protection Board, interested stakeholders, and, to the extent they wish to consult, local agencies, to develop the plan to address significant gaps in information necessary for water management and the conservation of freshwater species.

**SB 45**  
Allen D  
Wildfire,  
Sen.  
Would enact the Wildfire,  
Watch  
B. Watch  
Not moving,

Appropriations.

Drought, and Flood Protection Bond Act of 2020, which, if approved by the voters, would authorize the issuance of bonds in the amount of $4,300,000,000 pursuant to the State General Obligation Bond Law to finance projects to restore fire damaged areas, reduce wildfire risk, create healthy forest and watersheds, reduce climate impacts on urban areas and vulnerable populations, protect water supply and water quality, protect rivers, lakes, and streams, reduce flood risk, protect fish and wildlife from climate impacts, improve climate resilience of agricultural lands, and protect coastal lands and resources.

but not dead since it’s a bond act.

**Total Measures: 26**

**Total Tracking Forms: 26**
<table>
<thead>
<tr>
<th>Bill Number</th>
<th>Author</th>
<th>Amended Date; Location</th>
<th>Title-Summary</th>
<th>MWD Position</th>
<th>Effects on Metropolitan</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB 292</td>
<td>Quirk (D)</td>
<td>Amended 6/20/2019</td>
<td>Recycled water: raw water and groundwater augmentation. Would modernize definitions from AB 574 (Quirk, 2017), which Metropolitan supported. Seeks to further clarify terminology related to recycled water that more accurately reflects current uses and practices.</td>
<td>SUPPORT</td>
<td>Providing outreach and education on process and benefits of recycled water is essential as California encourages increased development of recycled water supplies. AB 292 will help reduce confusion as water agencies work to increase public’s comfort level with use of recycled water.</td>
</tr>
<tr>
<td>AB 296</td>
<td>Cooley (D)</td>
<td>Amended 8/30/2019</td>
<td>Climate Innovation Grant Program: voluntary tax contributions. Establishes the Climate Innovation Fund to provide grants for the development of new technologies that reduce greenhouse gas emissions or address climate change. This measure also authorizes voluntary tax contributions as a revenue source to support the Climate Innovation Fund.</td>
<td>SUPPORT</td>
<td>The Metropolitan Board has formally adopted policies supporting research related to the effects of climate change on water supply and water quality. This measure provides funding to develop science-based climate adaptation technologies, inclusive of improving agricultural practices.</td>
</tr>
<tr>
<td>AB 409</td>
<td>Limón (D)</td>
<td>Amended 8/12/2019</td>
<td>Climate Change: Agricultural Climate Adaptation Tools Program. Establishes a pilot program in the Central Valley, Central Coast and desert regions of the state where grant funding is available for the purposes of developing planning tools for adapting to climate change within the agricultural sector.</td>
<td>SUPPORT</td>
<td>The Metropolitan Board has formally adopted policies supporting research related to the effects of climate change on water supply and water quality. This measure provides funding and guidance to support resilient agricultural practices.</td>
</tr>
<tr>
<td>AB 441</td>
<td>Eggman (D)</td>
<td>Amended 3/27/2019</td>
<td>Water: underground storage. Provides that certain uses of stored water while underground will constitute a beneficial use.</td>
<td>OPPOSE</td>
<td>Fails to provide sufficient safeguards to ensure that permanent underground storage is implemented in a reasonable manner. Unchecked, diversion of water for underground storage, whether new or existing appropriation, may adversely impact other beneficial uses of water for fish and wildlife, recreation, commerce, or use by downstream diverter.</td>
</tr>
<tr>
<td>Bill Number</td>
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<tr>
<td>AB 533</td>
<td>Amended 4/4/2019</td>
<td>Income taxes: exclusion: water conservation or efficiency programs: turf removal water conservation program. Would exclude from gross income, under both personal and corporate income tax laws, amounts received as rebate, voucher, or other financial incentive issued by local water agency for participation in a turf removal water conservation program.</td>
<td>CO-SPONSOR</td>
<td>Water providers need broad array of tools to increase participation in water use efficiency programs to further achieve water use savings. Utility-sponsored financial incentives are effective measures, and their appeal increases if rebates are excluded from taxable income.</td>
<td></td>
</tr>
<tr>
<td>AB 654</td>
<td>Introduced 2/15/2019</td>
<td>Public records: utility customers: disclosure of personal information. Authorizes local agency to voluntarily release customer information to another governmental agency for scientific, research, or educational purposes, and if receiving agency agrees to maintain information as confidential.</td>
<td>SUPPORT</td>
<td>Data sharing is state policy objective, with intent to improve decision making. Measure will facilitate voluntary exchange of customer data information for prescribed uses to further improve customer programs and projects, while providing protections to ensure information remains confidential.</td>
<td></td>
</tr>
<tr>
<td>AB 658</td>
<td>Amended 7/11/2019</td>
<td>Water Rights: Water Management. Will facilitate groundwater storage during high flow times through an expedited temporary permit.</td>
<td>SUPPORT</td>
<td>Under the Water Code, surface water can be stored underground if it is subsequently removed for a beneficial use. AB 658 would create a temporary permit to store groundwater during high flow times. Metropolitan amendments incorporated to ensure protection for existing water right holders, other beneficial uses, and the ability to meet water quality objectives.</td>
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<tr>
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<td>Title-Summary</td>
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<tr>
<td>AB 756</td>
<td>C. Garcia (D)</td>
<td>Amended 6/24/2019</td>
<td>Public water systems: perfluoroalkyl substances and polyfluoroalkyl substances. Authorizes the State Water Resources Control Board to order a public water system to monitor for perfluoroalkyl substances and polyfluoroalkyl substances (PFAS) and report detection. If the detection level exceeds the response level, requires the public water system to take the water supply out of use or follow prescribed public notification requirements.</td>
<td>OPPOSE</td>
<td>Under the Health and Safety Code, the State Water Resources Control Board follows a procedure to notify customers in case of a response level exceedance for all contaminants based on the nature of the exceedance and the urgency. AB 756 circumvents the current regulatory process and creates separate notification requirements specific to PFAS via mail, email, internet, and other additional postings that will confuse consumers about the quality of their drinking water.</td>
</tr>
<tr>
<td>AB 1180</td>
<td>Friedman (D)</td>
<td>Amended 6/18/2019</td>
<td>Water: recycled water. Requires the State Water Resources Control Board (SWRCB) to update the uniform statewide criteria for nonpotable recycled water uses by January 2023. Also, would update a policy handbook to allow the use of swivel or changeover devices to supply potable water to a dual-plumbed system during an interruption in recycled water service by January 2020.</td>
<td>SUPPORT</td>
<td>As California continues to incentivize and increase the use and access to recycled water supplies, proper regulations and guidance documents are necessary to ensure both public health protections and efficient cost-effective means to establish dual-plumbed facilities.</td>
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<tr>
<td>AB 1194</td>
<td>Frazier (D)</td>
<td>Introduced 2/21/2019</td>
<td>Sacramento-San Joaquin Delta: Delta Stewardship Council. Will increase membership of Delta Stewardship Council from seven members to 13 members, with all six proposed new members to represent in-Delta interests.</td>
<td>OPPOSE</td>
<td>Fails to recognize the importance of statewide approach to advancing progress in Sacramento-San Joaquin Delta as encompassed in comprehensive package of reforms embedded in Delta Reform Act of 2009.</td>
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<td>Bill Number Author</td>
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<td>AB 1204 B. Rubio (D)</td>
<td>Introduced 2/21/2019 2-Year Bill</td>
<td>Public water systems: primary drinking water standards: implementation date. Requires State Water Resources Control Board (SWRCB) to allow water providers time to complete work required to comply with new Maximum Contaminant Levels (MCLs) without being found in violation. Proposes that any drinking water standards adopted or amended by SWRCB will only be effective three years after initial date of adoption. Also, grants SWRCB authority to allow up to two additional years to comply if capital improvements are needed.</td>
<td>SUPPORT</td>
<td>Based upon Board-adopted 2019 State Legislative Priorities and Principles</td>
<td>Positive impact to Metropolitan and its member agencies as it would establish fair and reasonable compliance period similar to that of U.S. Environmental Protection Agency.</td>
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<tr>
<td>AB 1220 C. Garcia (D)</td>
<td>Amended 7/10/2019 CHAFTERED</td>
<td>Metropolitan Water Districts. Amends Metropolitan Water District Act to set a floor where number of representatives would not drop below current level.</td>
<td>SUPPORT</td>
<td>Based upon Board action on 3/12/19</td>
<td>Addresses potential loss of representation in densely-populated communities with slower relative increases in assessed property values.</td>
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<tr>
<td>AB 1580 Levine (D)</td>
<td>Amended 7/1/2019 2-Year bill</td>
<td>Major infrastructure construction projects: oversight committees. Requires a state agency undertaking a publicly-funded infrastructure project of $1 billion or more to form an oversight committee and develop a risk management plan to minimize cost overruns.</td>
<td>OPPOSE</td>
<td>Based upon Board-adopted 2019 State Legislative Priorities and Principles</td>
<td>To the extent the bill is aimed at proposed Delta conveyance, it is duplicative of the Delta Conveyance Design and Construction Authority (DCA). At the direction of the Department of Water Resources, the DCA is tasked to provide oversight and risk management in order to protect the ratepayers who will pay for and benefit from the project.</td>
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<td>AB 1588</td>
<td>Gloria (D)</td>
<td>Amended 8/20/2019</td>
<td>Drinking water and wastewater operator certification programs. This measure authorizes the State Water Resources Control Board to evaluate opportunities for providing certificate by reciprocity or certificate by examination waiver for properly qualified and experienced applicants with applicable military experience.</td>
<td>SUPPORT</td>
<td>Would increase the number of certified water and wastewater operators by providing opportunities for qualified veterans. This measure is consistent with Metropolitan’s own activities and support for the professional transition of individuals with applicable military experience into California’s water workforce.</td>
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<tr>
<td>AB 1752</td>
<td>Petrie-Norris (D) Brough (R)</td>
<td>Amended 8/12/2019</td>
<td>South Coast Water District. Authorizes the South Coast Water District to contract for the Doheny Ocean Desalination Project as specified, and will facilitate the use of Proposition 1 funding approved for the project. The authorization is in existence until January 1, 2025.</td>
<td>SUPPORT</td>
<td>Metropolitan is committed to diversifying its water portfolio through an Integrated Water Resources Plan that emphasizes conservation and development of local supplies. This bill would help advance a local water supply project.</td>
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<tr>
<td>AJR 8</td>
<td>Quirk (D)</td>
<td>Amended 6/4/2019</td>
<td>Invasive species: Federal Nutria Eradication and Control Act of 2003. Requests that U.S. Congress add California to Nutria and Eradication and Control Act of 2003, and appropriate $4 million for nutria eradication in California.</td>
<td>SUPPORT</td>
<td>Invasive species create significant, long-term burdens that require significant investments to either control and/or eradicate. Presence of nutria within Delta represents significant threat to water supply and quality, and levee stabilization.</td>
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<tr>
<td>SB 1</td>
<td>Atkins (D)</td>
<td>Amended 9/3/2019</td>
<td>California Environmental, Public Health, and Workers Defense Act of 2019. Would prevent weakening of California environmental and worker safety standards that may result from weakening federal law during the tenure of the Trump Administration.</td>
<td>OPPOSE UNLESS AMENDED</td>
<td>Could have unnecessary and unintended consequences on State Water Project operations by locking in federal standards based on old science that was in place before January 2017. Limits opportunities for public input on decisions to lock in federal standards.</td>
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<td>SB 19</td>
<td>Dodd (D)</td>
<td>Amended 6/11/2019 Assembly Floor</td>
<td>Water resources: stream gages. Requires Department of Water Resources and SWRCB to develop plan to implement network of stream gages that includes determination of funding and opportunities to modernize existing network of gages, in consultation with other stakeholders.</td>
<td>SUPPORT</td>
<td>Currently no comprehensive or authoritative database on gage locations exists, and ability to link measurements to water quantity and water quality is essential for sound, informed water management decisions statewide. Metropolitan supported the Open and Transparent Water Data Act (AB 1755 Dodd, 2016), and improving gage data is consistent with purpose of Act.</td>
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<td>SB 45</td>
<td>Allen (D)</td>
<td>Amended 8/30/2019 Senate Appropriations Committee</td>
<td>Wildfire, Drought, and Flood Protection Bond Act of 2020. Would place a wildfire and water bond totaling $3.99 billion on the 2020 ballot for voter approval.</td>
<td>SUPPORT AND AMEND</td>
<td>Would create statewide funding to restore areas damaged by wildfires, mitigate future wildfires, create healthy forests and watersheds, protect water supplies and water quality, and protect and restore rivers, streams and lakes. Seeking amendments to ensure adequate funding for safe drinking water, restoration projects that would benefit Voluntary Agreements for managing the Bay – Delta and the tributaries, and recycled water projects.</td>
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<td>SB 62</td>
<td>Dodd (D)</td>
<td>Amended 4/3/2019 CHAPTERED</td>
<td>Endangered species: accidental take associated with routine and ongoing agricultural activities: state safe harbor agreements. Extends exemption from California Endangered Species Act (CESA) for accidental take of endangered species resulting from agricultural and ranching activities.</td>
<td>SUPPORT</td>
<td>Under CESA, farmers and ranchers are granted exemption from incidental take for accidentally taking or harming state-listed species during routine agricultural activities. Metropolitan’s amendments incorporated to set a sunset date, require reporting, and clarify exemption applies to farmers and ranchers not public agencies.</td>
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<td>SB 69</td>
<td>Wiener (D)</td>
<td>Amended 7/11/2019</td>
<td><strong>Ocean Resiliency Act of 2019.</strong> Seeks to bolster the resilience of the state’s marine and coastal environments to climate change and improve conditions for salmon and other commercially valuable species.</td>
<td>WATCH</td>
<td>Would replace existing forestry, fishery and water quality regulatory processes with entirely different approaches in the hope of improving conditions for fish upstream of the Delta and in the ocean along the California coast.</td>
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<td>SB 200</td>
<td>Monning (D)</td>
<td>Amended 6/27/2019</td>
<td><strong>Drinking Water.</strong> Create the Safe and Affordable Drinking Water Fund and continuously appropriate $130 million each year from the Greenhouse Gas Reduction Fund until 2030. Requires the State Water Resources Control Board (SWRCB) to develop a fund expenditure plan to identify failing water systems and provide assistance to those systems.</td>
<td>SUPPORT</td>
<td>SB 200 would create a fund to help water systems in disadvantaged communities provide an adequate and affordable supply of safe drinking water in the near- and long-term. The funds can be used to support operations and maintenance, consolidation, replacement water, design and implementation of safe drinking water projects and SWRCB administrative costs.</td>
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<td>E. Garcia (D)</td>
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<td>Bloom (D)</td>
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<td>SB 204</td>
<td>Dodd (D)</td>
<td>Amended 5/17/2019</td>
<td><strong>State Water Project: contracts.</strong> Revises the notification requirements for pending State Water Project (SWP) contract negotiations and contract amendments. Additionally, requires the California Water Commission to review and report on the progress of the design, construction, and operation of any new Delta conveyance facility as a part of its annual review of the SWP.</td>
<td>WATCH</td>
<td>Amendments adhere to the author’s stated purpose and delete objectionable provisions related to the Delta Conveyance joint powers authorities. Bill provides for further transparency on any future amendments to State Water Project contracts as described in Water Code Section 147.6 (c) and construction of future Delta conveyance improvements.</td>
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<td>SB 414</td>
<td>Caballero (D)</td>
<td>Amended 6/25/2019 2-Year Bill</td>
<td>Small System Water Authority Act of 2019. Authorizes State Water Resources Control Board (SWRCB) to merge small, non-noncompliant public water systems into regional water authority that will directly benefit from increased economies of scale and access to public financing.</td>
<td>SUPPORT</td>
<td>As introduced, SB 414 sets deadline for small water systems to comply with safe drinking water standards or consolidate into regional authority managed by SWRCB-appointed contractor until water system achieves self-sufficiency, complies with drinking water standards, and can reliably provide access to safe drinking water.</td>
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<td>SB 559</td>
<td>Hurtado (D)</td>
<td>Amended 7/3/2019 2-Year Bill</td>
<td>Department of Water Resources: grant: Friant-Kern Canal. Seeks to address problems of land subsidence on the federally-owned Friant Kern Canal.</td>
<td>SUPPORT IF AMENDED</td>
<td>Addresses land subsidence in the Central Valley but only focuses on impacts to the Friant Kern Canal. Metropolitan seeking amendments to include the need to address subsidence problems on the California Aqueduct to ensure a reliable water supply for southern California as well.</td>
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<tr>
<td>SB 669</td>
<td>Caballero (D)</td>
<td>Introduced 2/22/2019 2-Year Bill</td>
<td>Water Quality: Safe Drinking Water Fund. Establishes irrevocable Safe Drinking Water Trust as a perpetual source of funding to assist chronically noncompliant community water systems in disadvantaged communities gain access to safe drinking water.</td>
<td>SUPPORT</td>
<td>Would create Water Trust funded by general fund appropriation during surplus years. Earnings from Trust would be continuously appropriated to Safe Drinking Water Fund administered by State Water Resources Control Board to assist chronically noncompliant community water systems in disadvantaged communities achieve self-sufficiency.</td>
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<td><strong>SB 785</strong> Senate Natural Resources and Water Committee</td>
<td>Amended 9/3/2019 Assembly Floor</td>
<td><strong>Public resources: parklands, freshwater resources, and coastal resources.</strong> Committee omnibus bill to extend current sunset date for requirement and enforcement of quagga control plans, and qualified liability coverage for agencies that are compliant with approved control plan.</td>
<td><strong>SUPPORT</strong> Based upon Board adopted 2019 State Legislative Priorities and Principles</td>
<td>Would extend current sunset date from January 1, 2020, to January 1, 2030, for requiring quagga mussel control plans and ensuring extension of qualified immunity for operators of water delivery and storage facilities.</td>
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TO: Public Affairs and Legislation Committee  
(Directors Dick, McVicker and Thomas)

FROM: Robert Hunter, General Manager  
Staff Contact: Heather Baez

SUBJECT: MWDOC LEGISLATIVE POLICY PRINCIPLES ANNUAL UPDATE

STAFF RECOMMENDATION

Staff recommends the committee discuss the policy principles and provide feedback to staff on any suggested or requested updates.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

MWDOC maintains a set of legislative policy principles that serve as guidelines for staff and our legislative advocates on issues that are of importance to the District. The policy principles here are a culmination of current policies and initial changes recommended by staff from all departments within the agency.

In addition, staff has begun soliciting input from the member agencies through the general managers and their legislative staff. MWDOC staff will coordinate feedback from the Board and any input received from the member agencies, as well as any additional input from MWDOC Department Managers, and bring the proposed Policy Principles to the Board for review at the October PAL committee meeting.
The focus of this month’s discussion is for staff to receive input from the committee and update the policy principles to advance the Board’s objective of establishing legislative and regulatory policy principles to help guide for both our federal and state legislative programs.

Attached: **Legislative Policy Principles**
Municipal Water District of Orange County
Legislative and Regulatory Policy Principles

IMPORTED WATER SUPPLY

It is MWDOC’s policy to support legislation and regulation that:

1) Balances California’s competing water needs and results in a reliable supply of high-quality water for Orange County.

2) Facilitates the implementation of the California WaterFix and EcoRestore, the co-equal goals of reliable water supply and ecosystem restoration, and related policies that provide long term, comprehensive solutions for the San Francisco Bay/Sacramento-San Joaquin River Delta that:

   a) Provides reliable water supplies to meet California's short- and long-term needs;
   b) Improves the ability to transport water through the Delta either for, or supplemental to, State Water Project deliveries;
   c) Improves the quality of water delivered from through the Delta; (Staff)
   d) Enhances the Bay-Delta's ecological health in a balanced manner;
   e) Employs sound scientific research and evaluation to advance the co-equal goals of improved water supply and ecosystem sustainability.
   f) Expedites the California WaterFix and EcoRestore.

3) Funds a comprehensive Bay-Delta solution in a manner that equitably apportions costs to all beneficiaries.

4) Provides conveyance and storage facilities that are cost-effective for MWDOC and its member agencies, while improving the reliability and quality of the water supply.

5) Authorizes and appropriates the federal share of funding for the California WaterFix and EcoRestore.

6) Authorizes and appropriates the ongoing state share of funding for the California WaterFix and EcoRestore.

7) Provides funding for Colorado River water quality and supply management efforts.
8) Promotes continued federal funding and coordination between states for the Colorado River Basin Salinity Control Program under the departments of Agriculture and Interior.

9) Protects and preserves Metropolitan’s interest in binational water conservation programs.

It is MWDOC’s policy to oppose legislation or regulation that:

1) Would make urban water supplies less reliable, or would substantially increase the cost of imported water without also improving the reliability and/or quality of such water.

2) Imposes water user fees to fund non-water supply improvements in the Delta region or user fees that are not proportional to the benefits received from a Delta region water supply improvement.

3) Delays or impedes implementation of the California WaterFix and EcoRestore.

LOCAL WATER RESOURCES

It is MWDOC's policy to support legislation and regulation that:

1) Supports the development of, provides funding for, and authorizes and/or facilitates the expanded use of, cost effective, water recycling, potable reuse, conservation, water use efficiency, groundwater recovery and recharge, storage, brackish and ocean water desalination and surface water development projects where water supply is improved and the beneficiaries of the project pay for the portions of the project not funded by state or federal funds.

2) Recognizes that recycled water for both potable and non-potable reuse is a valuable resource that should be promoted and encouraged, while considering total cost elements, and regulated and permitted in a manner which promotes greater reuse throughout the county and state.

3) Reduces and/or streamlines regulatory burdens on augmented or alternative water supply projects, and provides protections for the use of these supplies during water supply shortages, through exemptions or provisions of credit during state mandated reductions.

4) Supports ecosystem restoration, increased stormwater capture where the capture avoids impact to others, and sediment management activities that are cost-effective and enhance the quality or reliability of water supplies.

5) Authorizes, promotes, and/or provides incentives for indirect and direct potable reuse projects and provides protections for the use of local supply projects during water shortages by exempting them from state mandated reductions.

6) Recognizes that the reliability and high quality of supplies to the end user is the primary goal of water suppliers.
7) Keeps decision-making, with regard to stormwater management and recapture, at the local or regional level.

8) Recognizes stormwater management and recapture as important tools in a diversified water portfolio that can help to achieve improved water quality in local surface and groundwater supplies, and can augment surface and groundwater supplies.

9) Reduces or removes regulatory hurdles that hinder the use of augmented or alternative water supplies.

10) Provides incentives for local or regional use of augmented or alternative water supplies.

11) Support the evaluation of reservoirs to provide an enhancement in water supplies.

12) Support administrative/legislative action and funding to add surface and/or groundwater Storage statewide.

13) Support administrative/legislative action and funding to add South of Delta above ground and ground water storage that is able to receive supplies from the State Water Project and Colorado River Aqueduct.

14) Support “beneficiaries pay” for water storage that ensure full cost recovery.

15) Support the inclusion of environmental infrastructure projects the Army Corps of Engineers must consider in its Report to Congress.

16) Allows Investor Owned Utilities to invest in redundancy and reliability projects.

17) Provides funding for seawater and brackish groundwater desalination studies and facilities.

18) Streamlines permitting of desalination facilities.

**It is MWDOC's policy to oppose legislation or regulation that:**

1) Restricts a local governmental agency's ability to develop their local resources in a manner that is cost-effective, environmentally sensitive, and protective of public health.

2) Imposes barriers or increases costs to the safe application of recycled water and continues to define recycled water as a waste or resource of lesser value than traditionally defined potable water.

3) Would make urban water supplies less reliable, or would substantially increase the cost of imported water without also improving the reliability and/ or quality of such water.

4) Restricts or limits a local governmental agency’s ability to establish local priorities for water resources planning decisions.

5) Reduces a local agency’s ability to benefit from local investments in drought-proof or emergency water supplies during water shortages.
6) Would impose conservation mandates that do not account for the unique local water-supply circumstances of each water district.

7) Would 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.

**WATER USE EFFICIENCY**

It is MWDOC's policy to support legislation and regulation that:

1) Furthers the statewide goal of increasing water use efficiency, as opposed to water conservation throughout the state.

2) Would allow flexibility and options for compliance in achieving statewide water reduction goals.

3) Seeks to cost-effectively improve water efficiency standards and policies for water-using devices.

4) Provides loans and grants to fund incentives for water conserving devices or practices.

5) Legislatively set water efficiency standards provided the standards are reasonable, cost effective for Orange County agencies, and consider unintended consequences, such as impacts to wastewater systems, reductions in recycled water supplies, demand hardening, and impacts to regional reliability and drought preparedness.

6) Reasonably improves landscape water use efficiency and Commercial, Institutional and Industrial (CII) water use efficiency programs while preserving community choice and the local economy.

7) Encourages regionally appropriate statewide landscape water efficiency-standards and regulations that consider land use, plant material, irrigation efficiency and climate factors.

8) Provides financially appropriate incentives, funding, and other assistance where needed to facilitate market transformation and gain wider implementation of water-efficient indoor and outdoor technologies and practices.

9) Provides incentives, funding, and other assistance where needed to facilitate water use efficiency partnerships with the energy efficiency sector.

10) Recognizes past investments in water use efficiency measures, especially from the demand hardening perspective.

11) Recognizes community growth and development when developing comparative standards for water use efficiency year-over-year.
12) Provides tax exemptions for water conservation or efficiency incentives for measures including, but not limited to, turf removal, devices, and other measures to reduce consumption of water or enhance the absorption and infiltration capacity of the landscape.

13) Creates 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.

It is MWDOC's policy to oppose legislation or regulations that:

1) Fails to ensure balance in the implementation of water efficiency practices throughout the state and requirements for both urban and agricultural use.

2) Would repeal cost-effective efficiency standards for water-using devices.

3) Diminishes local agency control or flexibility in implementing water efficiency practices or standards.

4) Places unreasonable conservation measures on commercial, industrial and institutional customers that would negatively impact or limit the potential for economic growth.

5) Fails to recognize the importance of both water use efficiency and water supply development.

6) Fails to recognize augmented or alternative water supplies as an efficient use of water, or that fails to provide an adequate incentive for investments in such water, for potable or non-potable reuse.

7) Fails to consider regional and local reliability when establishing any reduction targets during water shortages.

8) Requires water efficiency standards or performance measures that are infeasible, not practical or fail to have a positive cost-benefit ratio when comparing the cost of meeting the standard or implementing the performance measure with the value of the volume of water saved.

9) Creates 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.

WATER QUALITY AND ENVIRONMENTAL IMPACTS

It is MWDOC’s policy to support:

1) Legislation that protects the quality of surface water and groundwater including the reduction of salt loading to groundwater basins.
2) Funding that helps agencies meet state and federal water quality standards.

3) The establishment and/or implementation of standards for water-borne contaminants based on sound science and with consideration for cost-effectiveness.

4) Administrative/legislative actions to improve clarity and workability of CEQA, and eliminate other duplicative state processes.

5) Streamlining or exempting water, recycled water, wastewater projects, and/or environmental restoration projects, from the California Environmental Quality Act (CEQA). Provides liability protections to public water districts, and related wholesale water providers, seeking to consolidate troubled water systems that cannot consistently demonstrate that they are able to provide safe, clean and reliable water supplies to their customers.

It is MWDOC's policy to oppose:

1) Legislation that could compromise the quality of surface water and groundwater supplies.

2) Legislation that establishes and/or implements standards for water-borne contaminants without regard for sound science or consideration for cost effectiveness.

3) Projects that negatively impact the water quality of existing local supplies.

**METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

It is MWDOC's policy to oppose legislation or regulation that:

1) Compromises the existing governance structure and the representation of member agencies on the Metropolitan Water District Board of Directors.

2) Would restrict MET's rate-making ability.

**WATER TRANSFERS**

It is MWDOC's policy to support legislation and regulation that:

1) Encourages and facilitates voluntary water transfers.

2) Provides appropriate protection or mitigation for impacts on the environment, aquifers, water-rights holders and third-parties to the transfer including those with interests in the facilities being used.

3) Encourages transfers which augment existing water supplies, especially in dry years.

It is MWDOC's policy to oppose legislation or regulation that:
1) Undermines the operations and maintenance of the conveyance system conveying the water.

2) Interferes with the financial integrity of a water utility or compromises water quality.

3) Increases regulatory or procedural barriers to water transfers at the local or state level.

**WATER INFRASTRUCTURE FINANCING AND PROJECT FUNDING**

It is MWDOC's policy to support legislation and regulation that:

1) Employs a "beneficiary pays" principle that establishes a clear nexus between the costs paid to the direct benefit received. Likewise, those who do not benefit from a particular project or program should not be required to pay for them.

2) Establishes grants or other funding opportunities for local and regional water projects, including but not limited to infrastructure projects.

3) Considers local investments made in infrastructure, programs, mitigation and restoration in determining appropriate cost shares for water infrastructure, and project investments.

4) Reduces the cost of financing water infrastructure planning and construction, such as tax-credit financing, tax-exempt municipal bonds, Water Resources Development Act (WRDA), Water Infrastructure Finance Innovation Act (WIFIA), the Environmental Infrastructure Accounts, the Title XVI Water Reclamation and Reuse Project, and other funding mechanisms.

It is MWDOC's policy to oppose legislation or regulation that:

1) Establishes a fee or tax that does not result in a clear and proportional benefit to the District, its member agencies, and their customers.

2) Would reduce the total available water infrastructure financing measures such as WIFIA, state-revolving funds, and others.

**ENERGY**

It is MWDOC's policy to support legislation or regulation that:

1) Facilitates the development and expansion of clean, and cost effective renewable energy in California, including hydropower.

2) Supports water supply reliability as the primary focus of water agencies and energy intensity of water supplies as a secondary factor.
3) Recognizes the role and value of the water industry investment in water use efficiency and therefore recognizes WUE efforts towards greenhouse gas reduction, including funding such activities.

4) Recognizes hydroelectric power as a clean, renewable energy source and that its generation and use meets the greenhouse gas emission reduction compliance requirements called for in the Global Warming Solutions Act of 2006 (AB 32).

5) Facilitates voluntary and cost effective local investments in renewable energy, energy management and storage, and energy efficiency which improve the water-energy nexus and reduce local agency costs.

FISCAL POLICY

It is MWDOC's policy to support legislation or regulation that:

1) Requires the federal and state governments to provide a subvention to reimburse local governments for all mandated costs or regulatory actions.

2) Allows member agencies to offer localized Water Rate Assistance Programs that comply with Proposition 218 of California's Constitution and/or are funded either voluntarily or via non-restricted/non-water-rates revenues.

It is MWDOC's policy to oppose legislation or regulation that:

1) Is inconsistent with the District's current investment policies and practices.

2) Pre-empts the District's ability to impose or change water rates, fees, or assessments.

3) Impairs the District's ability to maintain levels of reserve funds that it deems necessary and appropriate.

4) Impairs the District's ability to provide services to its member agencies and ensure full cost recovery.

5) Makes any unilateral reallocation of District revenues, or those of its member agencies, by the state unless the state takes compensatory measures to restore those funds.

6) Would impose mandated costs or regulatory constraints on the District or its member agencies without reimbursement.

7) Mandates a specific rate structure for water agencies.

8) Imposes a “public goods charge” “water user fee”, or “water tax” on public water agencies or their ratepayers.
GOVERNANCE

It is MWDOC's policy to support legislation or regulation that:

1) Advances good government practices and public transparency measures in a manner that does not take a "one-size fits all" approach, respects local government control, and facilitates technological efficiencies to meet state reporting and disclosure requirements.

It is MWDOC's policy to oppose legislation or regulation that:

1) Imposes unnecessarily broad burdens upon all local governments.

2) Shifts state programs, responsibilities and costs to local governments without first considering funding to support the shift.

3) Seeks to limit or rescind local control.

4) Reduces or diminishes the authority of the District to govern its affairs.

5) Imposes new costs on the District and the ratepayers absent a clear and necessary benefit.

6) Resolves state budget shortfalls through shifts in the allocation of property tax revenue or through fees for which there is no direct nexus to benefits received.

PUBLIC EMPLOYEE PENSION REFORM

It is MWDOC's policy to support legislation that:

1) Seeks to contain or reform public employee pension and other post-employment benefit (OPEB) cost obligations that are borne by public agencies via taxpayers and ratepayers.

EMERGENCY RESPONSE

It is MWDOC’s policy to support legislation that:

1) Increases coordination on Homeland Security and emergency response efforts among the federal, state, and local governments with clearly defined roles and responsibilities for each.

2) Provides continued funding to enhance and maintain local Homeland Security infrastructure, including physical and cyber protection of critical infrastructure.

3) Ensures adequate funding for expenditures related to disaster response and all phases of emergency management; including the earthquake early notification system and efforts to enhance water infrastructure resiliency.

4) Strengthens intergovernmental planning and preparation coordination for emergency response and drills.
5) Enhances protection of information and cyber security for critical infrastructure through policy and funding for local efforts.

6) Supports water utility capability to notify customers of emergency protective measures through reverse notification systems.

It is MWDOC’s policy to oppose legislation or regulation that:

1) Reduces a water utility’s ability to represent itself in any component of the disaster preparedness cycle, especially the response and recovery section staff.

1) Negatively impacts water and wastewater utility’s ability to prepare, mitigate or respond to emergencies in order to provide fire suppression, drinking water and wastewater services.
TO: Public Affairs & Legislation Committee  
(Directors Dick, Thomas, McVicker)

FROM: Robert Hunter, General Manager  
Staff Contact: Damon Micalizzi

SUBJECT: Water Policy Forum & Dinner - September 5, 2019

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

Nearly 150 people attended MWDOC’s September 5th Water Policy Dinner featuring William Bourdeau, Executive Vice President at Harris Ranch Inc. and Board Member at Westlands Water District at the Westin in Costa Mesa. This forum was the second installment of our 2019 speakers series looking at issues and challenges facing the Central Valley.

Initial feedback during and after the event from attendees was positive. At the time of this report, final financials are not complete, though preliminarily it is anticipated that revenues will be close to expenses. A more detailed financial analysis along with results of the post event satisfaction survey will be reported on at the next Committee Meeting.

The next MWDOC Water Policy Dinner will tentatively be in December and will focus on water reliability here in Southern California.
TO: Public Affairs & Legislation Committee  
(Directors Dick, Thomas, McVicker)

FROM: Robert Hunter, General Manager  
Staff Contact: Tiffany Baca

SUBJECT: California Environmental Literacy Initiative

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

People depend on resources from the environment for everything we need to survive and for our communities to thrive. This includes the water we drink and use for cooking, hygiene, fighting fires, growing food, manufacturing essential and non-essential consumer goods, and much more. By using the environment around us as the context in which we live, students have access to a relatable, motivating framework for learning.

The California Environmental Literacy Initiative (CAELI) was initially formed as the State Superintendent’s Environmental Literacy Steering where it was charged with implementation of California’s Blueprint for Environmental Literacy. CAELI is guided by a Leadership Council that represents a public–private partnership working to increase access to relevant and impactful environment-based learning for all of California’s K–12 students.

Earlier this year, the Municipal Water District of Orange County (MWDOC or District) Public Affairs (PA) staff was invited by Ten Strands, the Orange County Department of Education
(OCDE), and the State Education and Environment Roundtable (SEER) to participate in several trainings that included a community-based organization training and a professional learning course for teachers.

Through this work, MWDOC PA Manager Tiffany Baca, was invited to interview for, and ultimately join, the CAELI Leadership Council. On August 8, Ms. Baca participated as a panelist at the Statewide Next Generation Science Standards (NGSS) Rollout hosted by OCDE, a two-day professional learning conference where attendees experience grade specific learning sequences with an environmental literacy focus. The purpose of the session, “Train the Trainer,” was to provide guidance, strategies, and real-world examples to approximately 250 teachers, administrators, and other organizations to help them understand, identify, and seek out impactful community-based partners.

DETAILED REPORT

CALIFORNIA EDUCATION STANDARDS

Academic standards are ultimately the learning goals for what students should be able to understand, know, and be able do at each grade level. Standards-based education reform in the United States began back in the early 1980s with the publication of a report by President Ronald Reagan's National Commission of Excellence in Education titled *A Nation at Risk*. It wasn't until 2002, however, that the state boards of education from California and Pennsylvania became the only two states in the nation to formally adopt academic standards for English Language Arts, Mathematics, Science, and History-Social Science.

Just a year later, California recognized that these standards contained very little academic content about the state’s environmental resources, challenges, and biological riches, and called for state agencies to develop and implement several initiatives to increase environmental literacy of students in K-12. Instead of requiring additional education standards, *AB1548* - the Education and the Environment Initiative (EEI) - was signed into law.

In 2004, with input from over 100 scientists and technical experts, a set of statewide *Environmental Principles and Concepts (EP&Cs)* were developed and adopted. EP&Cs are the foundation of the environmental content taught in the model EEI Curriculum and focus on the interactions and interdependence of human societies and natural systems. Between 2006 and 2010, curriculum was developed to teach EP&Cs to students throughout the K-12 system. In 2016, EP&Cs were integrated into the revised California History-Social Science and new California Science frameworks.

ENVIRONMENTAL LITERACY

CAELI is a public-private partnership that was established to ensure that all California teachers and students in grades K-12 have the tools needed, and a pathway towards, important and impactful environment-based learning. A primary goal of the initiative is to develop and guide students to become environmentally literate citizens who are able to examine real-world issues, think cognitively about the relationship between people and natural systems, and make informed decisions about the challenges affecting their communities, the State, and the world. By using the environment as context, students are engaged in the places that matter to them and that can be observed directly gaining a firm
grasp of the lesson plans and the ability to answer the all too common question of youth, “Why do I have to learn this?”

By implementing environmental literacy into a standards-based education program, students can learn key academic content while also learning about big environment ideas. From wildfires, drought and earthquakes, to protecting aging infrastructure and building critical infrastructure projects, Californians will continue to face significant challenges and must have the skills necessary to find reasonable solutions. Environment-based education provides the necessary context that our future leaders can use as reference to create a sustainable, healthy, thriving future.

MWDOC’S SCHOOL PROGRAMS AND COMMITMENT TO EDUCATION

For nearly 70 years, MWDOC has provided valuable expertise and information about water quality, water supply sources, reliability projects, water use efficiency, and more to water industry professionals, the general public, and to key decision makers across the State. Forty-seven years ago, MWDOC launched it’s well-respected, and wildly successful school program. Since 1973, more than 3 million Orange County students have been educated about good water stewardship and the importance and value of water. Today, MWDOC PA staff still hears from excited adults that remember attending a MWDOC school program assembly featuring Ricki the Rambunctious Raindrop.

Fast forward to the 2019-2020 school year. For the first time ever, MWDOC is offering a school program that targets all grade levels from K-12, bridging the gaps from basic water knowledge to biology and water quality, and ultimately, to water resources management and water supply projects. At each grade level, MWDOC school programs offer lessons and messaging that align with MWDOC’s mission, goals, and objectives, while also supporting California NGSS and any other applicable, established State standards.

CAELI takes a new approach to learning by guiding students to identify patterns and systems in their own back yards, amplifying the ideas of interconnectivity and interdependency between people and natural systems while also gathering evidence to argue points and solve problems. Many Orange County students may never visit the Sacramento-San Joaquin Bay Delta or Colorado River, however, by making connections with students to their local environmental challenges, bigger issues such as Delta Conveyance, capturing and storing water, ensuring water quality and reliability for the State, and addressing the impacts of growing populations will make more sense.

NEXT STEPS

RECENT AND UPCOMING CAELI EVENTS

On July 16, 2019, Ten Strands published an article by MWDOC PA Manager Tiffany Baca titled The California Literacy Initiative from a Regional Municipality Perspective. This article was also repurposed for MWDOC’s July 2019 eCurrents Newsletter and published by the Association of California Water Agencies. Inquires about the initiative, as well as how to participate, were received from MWDOC and Metropolitan Water District of Southern California (Metropolitan) member agencies, community partners, and the Orange County Transportation Authority.
On August 5, 2019, MWDOC PA Manager Tiffany Baca was asked to interview for, and ultimately join, the CAELI Leadership Council. The Leadership Council was formed to guide the implementation of California's Blueprint for Environmental Literacy, and represents a public–private partnership working to increase access to relevant and impactful environment-based learning for all of California's K–12 students. Ms. Baca participated in her first Leadership Council meeting on August 19, 2019. CAELI Leadership Council meetings are held monthly.

On August 8, 2019, Ms. Baca was invited by OCDE and SEER to participate as a panelist at the Statewide NGSS Rollout 6 hosted by OCDE, a two-day professional learning conference where attendees experience grade specific learning sequences with an environmental literacy focus. The purpose of the session, “Train the Trainer,” was to provide guidance, strategies, and real-world examples to approximately 250 teachers, districts and other organizations to help them understand, identify, and seek out impactful community-based partners.

On September 9, 2019, MWDOC PA staff and strategic digital communications contractor HashtagPinpoint filmed a promotional video for the upcoming Imagine a Day Without Water Campaign with Dr. Gerald Lieberman, Director of SEER, who read and contributed to all three recently published academic frameworks – Science, History-Social Science, and Health (bio at http://www.seer.org/pages/galbio.html).

“I think one of the key takeaways here is that all of this work whether it’s in science, history-social science, or health are intended to help students learn how to think; learn how to observe the world around them; learn how they connect to it, but also learn how to engage in problems in their local community and in resolving those problems. We don’t want activists, we want people who are thinkers and who can engage in decision making.”

- Dr. Gerald Lieberman, Director of SEER

On December 12, 2019, Ms. Baca will again participate on a speakers’ panel for the Statewide CA NGSS Rollout 6 hosted by OCDE. The panel is part of a two-day professional training geared toward K-12 academic coaches, administrators, curriculum leads, and teacher leaders. Additionally, MWDOC PA staff will have the opportunity to host an informational table for attendees.

NEXT STEPS

Currently, as part of the Statewide NGSS Rollout, school districts across California are participating in pilot programs to implement environmental literacy plans that can be replicated in other districts. The pilot districts include Alameda, Pajaro Valley, Petaluma, Evergreen, and San Francisco in the Bay Area, Montebello in Los Angeles County, Rialto and Fontana in San Bernardino County, San Diego, and Anaheim in Orange County.

Using MWDOC's school program as a catalyst for achieving environmental literacy for all Orange County students not only allows MWDOC to assume a leadership role in education, but also aligns with all three (3) goals outlined in the MWDOC Strategic Communications Program and Plan:

GOAL #1: SECURE LONG TERM WATER RELIABILITY FOR ORANGE COUNTY AND THE REGION
OBJECTIVE 1.1: Provide recognized, effective leadership and sound representation across all District organizational roles…

GOAL #2: EXAMINE, DEVELOP, AND IMPLEMENT SOUND POLICIES AND PROGRAMS THAT SUPPORT ORANGE COUNTY WATER INVESTMENTS, AND PROVIDE RECOGNIZED VALUE TO THE REGION

- OBJECTIVE 2.3: Educate, inform, and involve California civic, business, and community leaders of today and tomorrow…

GOAL #3: PROVIDE EFFECTIVE COMMUNICATION AND ADVOCACY PROMOTING MWDOC PROGRAMS, POSITIONS, AND SERVICES

- OBJECTIVE 3.1 Expand and refine communications efforts to ensure stakeholders, partners, employees, and other decision makers have the information and education they need to make judicious decisions regarding water-saving opportunities and best practices...

MWDOC PA staff continues to work with CAELI, OCDE, and SEER to build a comprehensive, water-centric education plan for Orange County students that addresses the instructional shifts required by CA NGSS, and implements EP&Cs (see attachment 1.) into the lesson plans. A recommended plan of action that includes providing formal training to all current MWDOC program contractors is being reviewed for content and feasibility.
## Matrix of Environmental Principles and Concepts in CANGSS

<table>
<thead>
<tr>
<th>K-2</th>
<th>3-5</th>
<th>6-8</th>
<th>9-12</th>
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<tbody>
<tr>
<td><strong>Principle I:</strong> The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services.</td>
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<tr>
<td>• Humans need food, clean air, and water from healthy natural systems in order to live, grow, and survive.</td>
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<tr>
<td>• Everything that humans do, such as building and moving from place-to-place, depends on natural resources from healthy natural systems.</td>
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<tr>
<td>• The health of natural systems influences the amount of food, clean air, water and other resources available to meet human needs.</td>
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<td>• Ecosystem goods obtained from healthy natural systems, such as timber, fuels, water, and clean air are essential to human life and to the functioning of our economies and cultures.</td>
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<tr>
<td>• Ecosystem services from healthy natural systems, such as water filtration, decomposition, cycling of nutrients, oxygen production, and pollination are essential to human life and to the functioning of our economies and cultures.</td>
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<tr>
<td>• Human lives, communities, societies, and activities (e.g., agriculture, industry) depend on matter (e.g., timber, water, carbon, nitrogen, phosphorus) produced by natural systems.</td>
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<tr>
<td>• The quality, quantity, and reliability of the ecosystem goods and services humans obtain from Earth’s land, ocean, atmosphere, and biosphere are directly affected by the health of those natural systems.</td>
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<tr>
<td>• The health, viability, and biological diversity of the natural systems on which humans depend are directly affected by human population growth, human activities, and per-capita consumption of ecosystem goods and services.</td>
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<tr>
<td>• Human lives, communities, societies, and activities (e.g., agriculture, fisheries, and industry) depend on and benefit from the biodiversity of Earth’s natural systems.</td>
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<tr>
<td>• The biodiversity of natural systems influences the quality, quantity, and reliability of the ecosystem goods and ecosystem services that human lives, communities, societies, and activities depend on.</td>
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<tr>
<td>• The availability and reliability of the ecosystem goods and ecosystem services that natural systems provide humans are directly affected by the size and growth of human populations, and their consumption rates, as well as the operation of human communities.</td>
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</table>

| **Principle II:** The long-term functioning and health of terrestrial, freshwater, coastal and marine ecosystems are influenced by their relationships with human societies. |
| • Human activities cause changes to natural systems (habitats) where plants and animals, including humans, get what they need to live, grow, and survive. |
| • Human activities that change natural systems influence which plants and animals can survive in an area, and may cause some species to disappear. |
| • Human activities can have major effects on natural systems by decreasing the amount of water, polluting air and water, and removing native vegetation. |
| • Changes to natural systems due to human activity can affect how organisms interact with the environment and their chances for survival. |
| • Growing human communities can result in habitat destruction, changes to the numbers and kinds of organisms living in an area, and the overall health of ecosystems. |
| • Human population growth, consumption of ecosystem goods and services, and the operation of human communities directly and indirectly affect the health, viability, and biological diversity of natural systems. |
| • Human practices such as methods used to extract, transport, and consume resources, and social systems (e.g., laws, economics, and politics) directly and indirectly influence the geographic extent, composition, biological diversity, and viability of natural systems. |
| • Human-caused changes to natural systems can occur at rates that can cause species to die, move away, or go extinct. |
| • Human social systems (e.g., laws, economics, and politics) and practices (e.g., methods used to extract, transport, and resource consumption) can alter natural systems processes and cycles, thereby influencing the carrying capacities of ecosystems and their geographic extent, composition, biological diversity, health, viability, and functioning. |
| • Human population growth and associated anthropogenic changes (e.g., habitat destruction, pollution, climate change, invasive species) result from extracting, harvesting, transporting, and consuming natural resources, and can lead to the disruption of natural systems, thereby influencing the functioning and geographic extent, composition, biological diversity, and viability of ecosystems and threatening the survival of some species. |

| **Principle III:** Natural systems proceed through cycles that humans depend upon, benefit from and can alter. |
| • Not applicable |
| • Humans depend on and benefit from cycles (e.g., water, carbon, nitrogen, life cycles) and processes (e.g., erosion, decomposition, soil formation) that occur in Earth’s systems (biosphere, hydrosphere, atmosphere, and geosphere). |
| • Human activities and practices (e.g., mining, manufacturing, and management, energy production and use) alter the cycles and processes that occur in natural systems. |
| • Human-caused changes to natural systems cycles and processes affect the functioning of those systems and the organisms that depend on them. |
| • Humans depend on and benefit from the repeated cycling of matter between living and nonliving parts of ecosystems. |
| • Human activities and practices alter cycles and processes in natural systems, disrupting physical and biological components of ecosystems, and causing shifts in populations of organisms. |
| • Human lives, communities, and societies (e.g., agriculture, fisheries, and industry) depend on and benefit from natural systems cycles among the biosphere, hydrosphere, atmosphere, and geosphere. |
| • Human-caused changes to natural systems cycles and processes can affect the health, viability, and functioning of those systems and the organisms that depend on them. |
| • Human practices, including the methods used to extract, harvest, transport and consume natural resources alter the cycles and processes that operate within natural systems, directly and indirectly influencing the quality, quantity, and reliability of ecosystem goods and ecosystem services available to support human lives, communities, and societies. |
| • Human activities can alter Earth’s major cycles and processes influencing the geographic extent, composition, biological diversity, health, viability, and functioning of natural systems. |
| • Human-caused changes to cycles and processes in natural systems can diminish supplies of fresh water and clean air and may also result in global-scale changes such as: desertification, climate change, and decreased availability of arable soil. |

**Principle IV:** The exchange of matter between natural systems and human societies affects the long-term functioning of both.

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<thead>
<tr>
<th>K-2</th>
<th>3-5</th>
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<tbody>
<tr>
<td>• Not applicable</td>
<td>• Human activities (e.g., manufacturing, energy production, agriculture) require matter from natural systems and produce byproducts.</td>
<td>• When byproducts (e.g., chemicals, waste products, other materials) of human activities enter natural systems they cause changes to local conditions that directly can affect the growth of plants and animals, which in turn can affect the health, viability, and functioning of the overall system, and the other organisms that depend on them.</td>
<td>• The increasing consumption of resources (matter and energy) from growing human populations and associated activities is resulting in global-scale changes to natural systems (e.g., increased amounts of atmospheric carbon dioxide, overfishing, loss of tropical rainforests) which influence the capacity of Earth’s natural systems to adjust to human-caused alterations.</td>
</tr>
<tr>
<td></td>
<td>• The byproducts of human activities are not readily prevented from entering natural systems where they may result in beneficial, neutral, or detrimental effects.</td>
<td>• Energy is released as a byproduct of many human activities (e.g., power production, manufacturing) and enters natural systems where it causes changes to and affects the functioning of terrestrial, freshwater, coastal, and marine ecosystems.</td>
<td>• The byproducts of human activities (e.g., pollution, waste products) that result from the expansion and operation of human communities and the use of natural resources, influence the functioning and geographic extent, composition, biological diversity, and viability of ecosystems and can threaten the survival of some species.</td>
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<td></td>
<td>• Human use of matter from natural systems and resulting byproducts can affect the health, viability, and functioning of those systems and the organisms that depend on them.</td>
<td>• The capacity of natural systems to adjust to the matter and energy entering from human activities depends on the nature of the system as well as the scope, scale, and duration of the activity and the types of byproducts.</td>
<td>• The scope, scale, and duration of human activities that consume natural resources and produce byproducts, influence the capacity of natural systems to recover from human-caused alterations and directly influence both the long-term viability of associated natural systems and the sustainability of human societies.</td>
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**Principle V:** Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes.

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<tr>
<td>• There are many different factors to consider when making choices and decisions about human activities that can cause changes to natural systems.</td>
<td>• There are many different things to consider when thinking about and making choices about activities that can affect natural systems, including how to minimize the impacts on natural systems and the living things that depend on them.</td>
<td>• There are many different things to consider when thinking about and making choices about activities that can affect natural systems, including how to minimize the impacts on natural systems and the living things that depend on them.</td>
<td>• The spectrum of what is considered in making decisions about natural systems and resources, and how those factors influence decisions, should take into account sustaining biodiversity and natural system function, as well as human dependence on the living world for the resources and other benefits provided by biodiversity.</td>
</tr>
<tr>
<td>• When designing and choosing a solution to a problem, it is important to understand how different solutions might affect natural systems and the plants and animals that live there.</td>
<td>• Criteria for success and design constraints should take into account potential effects on natural systems.</td>
<td>• Research on engineering design problems and solutions should include determining potential impacts on natural systems.</td>
<td>• Established criteria and design constraints should take into account potential impacts on natural systems and should be quantified to the extent possible and stated in such a way that one can tell if a given design minimizes those impacts.</td>
</tr>
<tr>
<td></td>
<td>• Research on engineering design problems and solutions should include determining potential impacts on natural systems.</td>
<td>• Systematic processes for evaluating possible solutions, and the legal, economic and political systems that govern them, should consider criteria for success and design constraints that account for potential impacts on natural systems.</td>
<td>• Global challenges can impact natural systems and resources, as well as social, economic, and political conditions in local communities, therefore engineering design solutions should take into account the full spectrum of these factors when evaluating and engineering design solutions.</td>
</tr>
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<td></td>
<td>• The spectrum of what is considered in making decisions about natural systems and resources, and how those factors influence decisions, should take into account sustaining biodiversity and natural system function, as well as human dependence on the living world for the resources and other benefits provided by biodiversity.</td>
<td></td>
<td>• Decisions about the priority of certain criteria over others (trade-offs) should assess social, economic, and political factors, with particular emphasis on environmental factors that can influence the long-term functioning of affected ecosystems and the survival of the organisms that depend on them.</td>
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</tbody>
</table>
TO: Public Affairs & Legislation Committee  
(Directors Dick, Thomas, McVicker)

FROM: Robert Hunter, General Manager  
Staff Contact: Sarah Wilson

SUBJECT: Education Programs Update

STAFF RECOMMENDATION

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

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

DETAILED REPORT

Contractors for the Municipal Water District of Orange County’s (MWDOC) Water Education School Programs—Shows That Teach, Discovery Cube Orange County, and Bolsa Chica Conservancy—have started booking visits for the 2019/2020 school year. Public Affairs (PA) staff is working with contractors on a shard Google Calendar to allow the MWDOC Board of Directors and participating member agencies to view scheduled school program visits in real-time. Currently, PA staff is providing individual notifications until the calendar is ready to go live.

SCHOOL PROGRAM GOALS AND OBJECTIVES

To administer a water-focused education program that offers Orange County students in grades K-12 an opportunity to connect with and learn from their local ecosystems. Program contractors for all grade levels will use a Next Generation Science Standards (NGSS) three dimensional learning model to guide students to solve problems related to their local

<table>
<thead>
<tr>
<th>Budgeted (Y/N): Y</th>
<th>Budgeted amount: $437,561</th>
<th>Core</th>
<th>Choice X</th>
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<tbody>
<tr>
<td>Action item amount:</td>
<td>Line item: 63-7040</td>
<td></td>
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</table>

Fiscal Impact (explain if unbudgeted):
surroundings, linking them to their communities, and enhancing their ability to become responsible environmental stewards. Students will also able to identify California water supply sources, and implement water efficient practices at home and at school.

- **Elementary School Program (K-2) Objective:** Students will understand the relationship between natural and human social systems and how humans affect, depend on, and benefit from natural resources, like water. Healthy ecosystems are critical to sustain all life.

- **Elementary School Program (3-6) Objective:** Students will understand the connection between humans and natural systems and how human activities and decisions can alter the water cycle, habitats, and the overall health of ecosystems. Healthy ecosystems are essential to all life.

- **Middle School Program (7-8) Objective:** Students will learn that the quality, quantity, and reliability of water is directly and indirectly influenced by human activity and the health of natural systems. Students will understand the challenges in delivering a safe and reliable source of drinking water to Orange County.

- **High School Program (9-12) Objective:** Students will understand that the health and care of natural systems are essential to all life and to the functioning of our economies and cultures. Students will also learn how to make informed decisions that can affect and drive changes in opinions, policies, and laws, as well as be introduced to career pathways in the water industry.

**SHOWS THAT TEACH – ELEMENTARY SCHOOL (K-2)**

Shows That Teach has begun making visits to schools across the county. To date, more than 2,300 students have booked to receive the MWDOC Elementary School Program (K-2) for the 2019/2020 school year. As visits continue, PA staff will share upcoming dates as well as teacher and observer surveys with the Board and participating member agencies.

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

Discovery Cube Orange County has begun scheduling visits for the MWDOC Elementary School Program, and has booked nearly 6,000 students for the 2019/2020 school year so far. Contractors have received significant interest in the MWDOC Middle School Program, and are working with schools to schedule dates. As visits continue to be scheduled, PA staff will notify the Board and participating member agencies.

**BOLSA CHICA CONSERVANCY – HIGH SCHOOL (9-12)**

Bolsa Chica Conservancy has already received interest in the MWDOC High School Program from the following high schools: El Toro High School, Edison High School, Tesoro High School, Mission Viejo High School, and Santa Ana High School. Both Santa Ana High School and Mission Viejo High School have started scheduling dates for the three visits offered through this program. As visits are scheduled, PA staff will notify the Board and participating member agencies.
<table>
<thead>
<tr>
<th>Member Agency Relations</th>
<th>Public Affairs Staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Prepared and accompanied Director Thomas to present Charley Wilson with a resolution for his retirement from the Santa Margarita Water District Board of Directors</td>
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<tr>
<td></td>
<td>• Prepared and distributed the MWDOC Emergency Response and Disaster Recovery Media Kit for National Preparedness Month</td>
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<td></td>
<td>• Hosted a Public Affairs Workgroup workshop on effective presentational speaking lead by Marion MacKenzie Pyle, President of Legacy Media Lab</td>
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<td></td>
<td>• Prepared and organized printing &amp; distribution of Fall 2019 bill inserts for 10 member agencies</td>
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<th>Governmental Affairs Staff:</th>
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<tbody>
<tr>
<td>• Coordinated with Nick Norvell of BB&amp;K who drafted guidelines to assist our member agencies in implementing SB 998 (water shutoffs)</td>
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<tr>
<td>• Sent information to member agencies re: SB 998 (water shutoffs) Working Group to encourage the appropriate staff person at their agency/city to join the group</td>
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<tr>
<td>• Led the SB 998 (water shutoffs) working group meeting for MWDOC member agencies</td>
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<th>Community Relations</th>
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<td></td>
<td>• Attended the Festival of Children event at South Coast Plaza with Bolsa Chica Conservancy on September 7</td>
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<td></td>
<td>• Provided Orange County Sanitation District with information on MWDOC’s branded materials and apparel</td>
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<td></td>
<td>• Created and sent 2019 August eCurrents Newsletter</td>
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<td>• Participated and hosted a meeting with State Education and Environment Roundtable and Orange County Department of Education on the California Environmental Literacy Initiative (CAELI)</td>
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<tr>
<td></td>
<td>• Attended and participated as a panelist for the “Train the Trainer” workshop for the Next Generation Science Standards Rollout hosted by Orange County Department of Education</td>
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</table>
• Accepted a position on the CAELI Leadership Council and participated in the first monthly meeting
• Participated in a Girl Scouts of Orange County STEM Consortium conference call
• Coordinated and recognized the Voice for the Planet video contest students at the MWDOC August 21 Board meeting
• Provided West Basin Municipal Water District information on all MWDOC school programs and the RFP process
• Reviewed all school program curriculum for grades K-12
• Shared the Environmental Storytelling Contest for middle school students with school program contractors Discovery Cube Orange County
• Provided MWDOC Water Education School Program information to Rancho Santa Margarita Intermediate teacher
• Worked with school program contractors to develop after visit surveys for participating school teachers
• Created an observer survey for Board members and participating member agencies that attend school program visits
• Worked with designer to complete final draft of the Ricky Raindrop Education Booklets
• Worked with Girl Scouts of Orange County (GSOC) on details for the new program year of the MWDOC Water Resources and Conservation Patch Program
• Provided three (3) GSOC Troop Leaders with information related to the MWDOC Patch Program
• Provided Elementary and High School Program information to Moulton Niguel Water District
• Worked with school program contractors on building a shared Google Calendar to track school program visits in real-time
• Provided Elementary School Program information to the cities of Brea, Buena Park, and Orange
• Notified President Barbre, Director Dick, Director Thomas, and Director Schneider about upcoming school program visits in their service areas
• Notified the cities of La Palma, Anaheim, Santa Ana, Garden Grove, Fullerton, and Santa Margarita Water District about upcoming school program visits in their service areas
• Provided participating member agencies an opportunity to submit a slide for school program presentations
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<td>• Coordinated and filmed Dr. Gerald Lieberman, Director of State Education and Environment Roundtable for an Imagine a Day Without Water campaign video</td>
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<td>• Provided a Public Affairs update at the monthly Water Use Efficiency Workgroup</td>
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<td>• Designed three (3) flyers and updated the website for the Landscape Design Assistance Program, Landscape Maintenance Assistance Program, and the Turf Removal Program</td>
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<td>• Hosted the September 5 Water Policy Forum &amp; Dinner featuring keynote speaker William Bourdeau</td>
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<td>• Attended MET Orange County tabletop exercise at Diemer Treatment Plant</td>
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<td>• Currently working on itineraries, trip logistics, guest and Director requirements for the following inspection trips:</td>
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<tr>
<td></td>
<td>o September 27-29 Hoover Dam and Colorado River Aqueduct</td>
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<td></td>
<td>o October 4-6 State Water Project and Central Valley Agriculture</td>
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<tr>
<td></td>
<td>o October 18-19 State Water Project</td>
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<td></td>
<td>o November 8-10 State Water Project and Central Valley Agriculture</td>
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<td></td>
<td>o November 15-17 Hoover Dam and Colorado River Aqueduct</td>
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<td>• 2 Westminster pocket park meetings</td>
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<td>• Visited potential locations to host the upcoming Delta Stewardship Council (DSC) meeting on September 26, 2019</td>
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<td>• Coordinated with the Orange County Sanitation District to secure their Board Room for the DSC meeting</td>
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<tr>
<td>• Coordinated with MWDOC staff on documents and input needed for the upcoming Municipal Service Review</td>
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<td>• Staffed the ISDOC Executive Committee meeting</td>
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<td>• Staffed the WACO meeting featuring Jason Dadakis of Orange County Water District speaking on PFAS</td>
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<tr>
<td>Legislative Affairs</td>
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<td>Coordinated a meeting of member agency legislative staff to review pending legislation and identify areas to assist one another as needed</td>
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<td>Participated in the Southern California Water Coalition (SCWC) Legislative Task Force meeting</td>
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<td>Proposed that the SCWC Legislative Task Force approve a support position on AB 1752 (Petrie-Norris) – the Doheny Desalination project legislation. The SCWC ultimately approved this and joined MWDOC’s coalition letter</td>
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<td>Met with the County of Orange’s legislative office to discuss pending legislation and county issues</td>
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