WORKSHOP MEETING OF THE BOARD OF DIRECTORS WITH MET DIRECTORS MUNICIPAL WATER DISTRICT OF ORANGE COUNTY 18700 Ward Street, Board Room, Fountain Valley, California July 1, 2015, 8:30 a.m.

AGENDA

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC PARTICIPATION/COMMENTS

At this time members of the public will be given an opportunity to address the Board concerning items within the subject matter jurisdiction of the Board. Members of the public may also address the Board about a particular Agenda item at the time it is considered by the Board and before action is taken.

The Board requests, but does not require, that members of the public who want to address the Board complete a voluntary "Request to be Heard" form available from the Board Secretary prior to the meeting.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Determine need and take action to agendize item(s), which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present or, if less than two-thirds of the Board members are present, a unanimous vote.)

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.

(NEXT RESOLUTION NO. 2017)

PRESENTATION/DISCUSSION/INFORMATION ITEMS

1. PRESENTATION BY BILL HASENCAMP REGARDING COLORADO RIVER ISSUES (Approximate Presentation Time: 25 minutes)

Recommendation: Review and discuss the information presented.

2. MET ITEMS CRITICAL TO ORANGE COUNTY

- a. MET's Water Supply Conditions
- b. MET's Finance and Rate Issues
- c. Colorado River Issues
- d. Bay Delta/State Water Project Issues

- e. MET's Ocean Desalination Policy and Potential Participation by MET in the Doheny Desalination Project and in the Huntington Beach Ocean Desalination Project (Poseidon Desalination Project)
- f. Orange County Reliability Projects
- g. East Orange County Feeder No. 2

Recommendation: Discuss and provide input on information relative to the MET items of critical interest to Orange County.

3. OTHER INPUT OR QUESTIONS ON MET ISSUES FROM THE MEMBER AGENCIES

4. METROPOLITAN (MET) BOARD AND COMMITTEE AGENDA DISCUSSION ITEMS

- a. Summary regarding June MET Board Meeting
- Review items of significance for MET Board and Committee Agendas

Recommendation: Review and discuss the information presented.

ADJOURNMENT

Note: 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.



DISCUSSION ITEM

July 1, 2015

TO: Board of Directors

FROM: Robert Hunter Staff Contact: Harvey De La Torre

General Manager

SUBJECT: Update on Colorado River Activities – Presentation by Bill Hasencamp

of Metropolitan Water District

STAFF RECOMMENDATION

Staff recommends the Board of Directors review and discuss this information

REPORT

The U.S. Bureau of Reclamation reported that Lake Mead and Lake Powell are both at critically low levels. In fact, Lake Mead is currently forecasted to drop below its shortage trigger level of 1,075 feet this summer. Fortunately, recent storms in the month of May have helped push off a declaration of shortage this year and possibly next year.

To further explain the current issues and challenges we are facing on the Colorado River, MWDOC has invited Bill Hasencamp of MWD to our Board Workshop this month.

Budgeted (Y/N): n/a	Budgeted amount: n/a		Core _X _	Choice	
Action item amount: n/a		Line item:			
Fiscal Impact (explain if unbudgeted):					



DISCUSSION ITEM

July 1, 2015

TO: MWDOC Board of Directors and MET Directors

FROM: Robert J. Hunter, General Manager Staff Contact: Harvey De La Torre

SUBJECT: MET Items Critical To Orange County

STAFF RECOMMENDATION

Staff recommends the Board of Directors to review and discuss this information.

SUMMARY

This report provides a brief update on the current status of the following key MET issues that may affect Orange County:

- a) MET's Water Supply Conditions
- b) MET's Finance and Rate Issues
- c) Colorado River Issues
- d) Bay Delta/State Water Project Issues
- e) MET's Ocean Desalination Policy and Potential Participation by MET in the Doheny Desalination Project and in the Huntington Beach Ocean Desalination Project (Poseidon Desalination Project)
- f) Orange County Reliability Projects
- g) East Orange County Feeder No. 2

ISSUE BRIEF # A

SUBJECT: MET's Water Supply Conditions

RECENT ACTIVITY

Estimated SWP and CRA Supplies for 2015

Metropolitan's "Table A" supplies from the State Water Project (SWP) remain at 20%, equaling 382,000 AF. With less than 10% of the precipitation typically occurring in the remaining months of the water year and little to no spring snowmelt anticipated, hydrology is no longer the key driver to increase SWP supplies. Instead, exports from the Delta and storage changes in San Luis Reservoir will guide potential increases to the SWP Allocation later this year.

As for Colorado River supplies, dry and warm conditions have prompted early snowmelt and below average runoff. As a result, Lake Mead's elevation continues to drop and is causing the Lake to reach its lowest level since it was first filled. However, conditions improved in May, with precipitation measuring 224% of normal for the month; reducing the likelihood of a shortage being declared in 2016.

MET staff estimates that Colorado River supplies for 2015 will total 925,000 AF (not including ICS deliveries or exchanges). Below is a detailed list of MET's 2015 Colorado River supplies:

Colorado River Aqueduct Supply Estimates for 2015			
MET's Basic Apportionment	550,000 AF		
IID/MWD Conservation Program	88,000 AF		
PVID Land Fallowing	85,000 AF		
Transfers to SDCWA (IID Transfer and Canal Lining)	180,000 AF		
Canal Lining Water to MET	16,000 AF		
Lower Colorado River Supply Project	6,000 AF		
TOTAL CRA SUPPLIES	925,000 AF		

Estimated MET Demands for 2015

With the implementation of MET's Water Supply Allocation Plan (WASP) at a level 3, MET set the regional demand of imported water to roughly 1.93 MAF. This reflects a 15% demand reduction over the allocation baseline of 2.2 MAF. Although the WSAP level 3 assumes demands will be reduced to 1.93 MAF over the allocation year (FY 2015-16), this equates to 1.96 MAF over the calendar year of 2015.

MET Storage and Transfer/Exchanges for 2015

With an imported demand of 1.96 MAF for 2015 and base supplies from the CRA and SWP totaling 1.307 MAF, MET estimates a draw from dry-year storage of 489,000 AF and transfers and exchanges of 165,000 AF. As a result of adjustments and accounting for conveyance constraints, approximately 574,000 AF of dry-year storage is available for 2015 at a 20% SWP allocation.

Although recently approved transfer agreements with sellers in the Feather River Basin in Northern California have been reduced due to the drought, discussions are currently on-going with partners on the Colorado River system to secure additional transfers and exchanges to firm up the 165,000 AF target.

Water Supply and Demand Balance for 2015

The table below shows the total water supply and demand balance estimated for 2015:

MET Water Supply and Demand Balance for 2015				
Total CRA Supplies	925,000 AF			
Total SWP Supplies	382,000 AF			
Dry-Year Storage Draw	489,000 AF			
Transfer/Exchanges	165,000 AF			
Total Supplies	1,961,000 AF			
Total Demand and Losses	1,961,000 AF			

ISSUE BRIEF # B

SUBJECT: MET's Finance and Rate Issues

RECENT ACTIVITY

MET Financial Report

At Metropolitan's (MET) June Finance and Insurance Committee, MET staff provided their monthly financial report. For cumulative water sales through the end of May, MET reported 172,200 Acre-Feet (AF) or 10% higher than budget. These additional water sales are expected to generate approximately \$110.4 million in additional revenue. Expenses continue to track under budget at approximately \$50 million. Staff plans to provide a full review of its mid-cycle biennial budget at next month's Committee meeting.

ISSUE BRIEF # C

SUBJECT: Colorado River Issues

RECENT ACTIVITY

Metropolitan stores ICS water for Imperial Irrigation District

Metropolitan will be storing about 18,000 acre-feet of water for the Imperial Irrigation District (IID) that was conserved in 2014. Per the terms of the California Intentionally Created Surplus (CAICS) Agreement which was executed in 2007, IID has the ability to store conserved water in Lake Mead, known as Intentionally Created Surplus (ICS), and request to store water within Metropolitan's service area, recovering the water at a later date. At the end of 2014, IID conserved about 38,000 acre-feet more than it needed to meet its Quantification Settlement Agreement transfer commitments. IID will be storing half of this water in Lake Mead as ICS and half of this water with MET. Per the terms of the CAICS agreement, any of IID's water stored by MET is subject to a 10% storage loss, and MET is not obligated to return the water to IID in years when it has issued its water allocation plan, limiting deliveries to its member agencies.

U. S. Bureau of Reclamation (USBR) Study Forecasts Significant Lake Mead Decline

On May 15, USBR updated its water operations study, known as the 24-month study, which forecasts the levels of Lake Mead for the next two years. That study predicted that Lake Mead would reach a low-point of 1,073 feet this summer (the lowest level ever), and finish the year just above 1,075 feet, barely avoiding a shortage declaration for 2016. For 2016, the study forecasted that Lake Mead would drop below 1,055 feet, resulting in a first-ever shortage declaration in 2017. Since the study was completed, however, precipitation in the Colorado River Basin has been well above average, and it is likely that the Lake Mead forecast will increase when USBR updates its 24-month study at the end of June 2015.

ISSUE BRIEF # D

SUBJECT: Bay Delta/State Water Project Issues

RECENT ACTIVITY

Bay Delta Conservation Plan

On April 30, 2015, the state proposed a change in direction for the Bay Delta Conservation Plan (BDCP). State and federal agencies are proposing alternatives to separate the conveyance facility and habitat restoration measures into two separate efforts:

California Water Fix and California Eco Restore. These two efforts would be implemented under a different Endangered Species Act permitting process and would be implemented to fulfill the requirement of the 2009 Delta Reform Act to meet co-equal goals.

Under the Eco Restore Program, the state has outlined an aggressive goal to pursue the restoration of at least 30,000 acres of Delta habitats over the next five years. These restoration actions include new projects as well as actions pursuant to pre-existing regulatory requirements all designed to improve the overall health of the Delta. In addition, the Delta Conservancy will lead a process to identify other priority restoration projects, in collaboration with local governments and with a priority on using public lands in the Delta. Funding for restoration projects will be provided through multiple sources including state bonds and other state-mandated funds, State Water Project/Central Valley Project (SWP/CVP) contractors as part of existing regulatory obligations, and various local and federal partners.

The construction and operations of the new water conveyance facilities is the focus of the California Water Fix. Several changes are being proposed to the new water conveyance facilities that would reduce overall project environmental impacts and minimize local community disruptions. The proposed approach would include three new state-of-the-art intakes along the Sacramento River, each with 3,000 cfs capacity and two 40-foot diameter tunnels up to 150-feet below ground to convey water to Clifton Court Forebay. Engineering configuration improvements to eliminate pumping plants, reduce permanent power lines and power use, reconfigure sediment basins, and reconfigure/relocate construction staging sites would result in reduced environmental and construction impacts and improve long-term operational benefits. Additionally, the California Water Fix would identify mitigation that is required to offset construction-related impacts and address impacts from operations once the new conveyance facility is online.

As part of the State's new proposal, the regulatory approach to obtaining state and federal endangered species compliance would shift from the Habitat Conservation Plan/Natural Community Conservation Plan strategy to an approach that contemplates a Biological Opinion pursuant to the federal Endangered Species Act Section 7 and a corresponding State permit. This approach, as well as the proposed revision to the new water facilities and ecosystem restoration actions are to be evaluated in a partially Recirculated Draft Environmental Impact Report/Environmental Impact Statement expected to be released in the summer of 2015 (July 2015). Met staff plans to fully evaluate the proposed changes

once more information becomes available and assess how this new proposal would address Delta water supply and ecosystem concerns in a manner that meets the Board's policies and Metropolitan's long-term supply needs.

State Water Resources Control Board

Due to dry conditions in the Delta, the State Water Resources Control Board (SWRCB) started issuing curtailment notices directing water diverters in the Delta watershed to cease diversions. On April 23, 2015, the SWRCB issued a curtailment notice for all post-1914 water rights in the San Joaquin River watershed. On April 30, 2015, the SWRCB issued a curtailment notice to the holders of 88 water rights in the Sacramento-San Joaquin Delta watershed with the Term 91 condition in their permit or license. In general, Term 91 requires diverters junior to the SWP and CVP to curtail their water diversions when the Delta is in "balanced conditions" meaning that flow in the Delta is being controlled by project operations rather than by inflow to the Delta. On May 1, the SWRCB issued a curtailment notice for all post-1914 water rights in the Sacramento River watershed. Those who are found to be diverting water beyond what is legally available to them may be subject to administrative fines, cease and desist orders, or prosecution in court. The SWRCB may levy fines of \$1,000 per day, and \$2,500 for each acre-foot diverted or used in excess of a valid water right. Additionally, if the SWRCB issues a cease and desist order against an unauthorized diversion, the violation of such order can result in a fine of \$10,000 per day.

As reported previously, the SWRCB considered a Temporary Urgency Change Petition (TUCP) submitted by the California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR) in January 2015, requesting temporary changes to the terms of the water rights permits for operation of the SWP/CVP for February and March 2015. On March 24, 2015, DWR and USBR submitted a request to modify the TUCP order to be effective from April through September 2015. On April 6, 2015, the SWRCB issued a revised order for the April through June 2015 time period. The need for a salinity barrier was identified in the TUCP. DWR decided to install the salinity barrier at the False River location in the western Delta. DWR initiated construction, although a lawsuit challenging the decision to construct the barrier was filed by the Center for Environmental Science, Accuracy & Reliability on May 6, seeking an injunction to stop construction of the barrier.

Status of Delta Emergency Preparedness

DWR reported that the funding agreement to improve levees on Old River, along the western portion of Bacon Island, is expected to be executed by mid-2015. This work would enhance levee reliability for a substantial part of the Old River levee system by providing levee crown and slope fill, and waterside levee armoring. These levee improvements would add to conveyance and emergency response capabilities being implemented in the south Delta. DWR also reported that they will raise the elevation of their major emergency preparedness storage facility in Stockton to provide additional protection in the event of flood emergencies.

DWR recently performed a department-wide exercise that assumed a major earthquake on the Hayward Fault west of the Delta region. The exercise activated all major emergency response components described in their Delta Flood Emergency Management Plan, including a coordinated Flood Operations Center (FOC) and a Department Operations Center (DOC). The DOC is designed to ensure adequate resources are provided to the

FOC in a major emergency and to fully integrate emergency communication functions. DWR is using the results of the exercise to determine where improvements are needed to fully integrate emergency communication functions.

ISSUE BRIEF # E

SUBJECT: MET's Ocean Desalination Policy and Potential Participation by MET in

the Doheny Desalination Project (formerly South Orange Coastal Ocean Desalination Project) and in the Huntington Beach Ocean Desalination

Project (Poseidon Desalination Project)

RECENT ACTIVITY

Doheny Desalination Project

Work continues under the MET Foundational Action Plan with the baseline monitoring work required for the coastal lagoon and the lower portion of San Juan Creek. South Coast Water District is proceeding with hiring a Project Manager and Owner's Rep Consultant to help them complete the CEQA and preliminary design work for the Doheny Desalination Project. This should help them maintain their efforts with Laguna Beach and others in proceeding with an initial 5 mgd facility, expandable to 15 mgd.

<u>Huntington Beach Ocean Desalination Project (Poseidon Project)</u>

OCWD has continued work on evaluating where the product water produced from the Poseidon Project would be utilized, either for the seawater barrier operations, injection or replenishment in the groundwater basin, for direct delivery to other agencies or some combination thereof. MWDOC has been assisting OCWD in these efforts. Over the past month, the following meetings have been held with MET, MWDOC and OCWD:

- With MET water quality personnel to discuss water quality concerns.
- With MET operations personnel to discuss the operations of the EOCF#2, the Irvine Cross Feeder and the Orange County Feeder to ascertain operational issues that might arise with Poseidon water flowing into the fourth reach of the EOCF#2.
- With MET Local Resources Program staff members to discuss how the Poseidon Project LRP Agreement provisions would be used to measure the additional production from the Poseidon Project or from the groundwater basin. While no formal commitments could be made by the MET staff members involved, the group felt comfortable that one or more baseline measurements could be developed to demonstrate compliance with the LRP provisions for use of the Poseidon water either for seawater barrier operations, direct delivery or injection or percolation in the groundwater basin. In fact, the current method for determining withdrawal of water from MET's Conjunctive Use Storage Account could possibly be utilized. The final LRP Agreement is always subject to final confirmation by the MET Board and cannot be brought forward until such time as Poseidon has received all permits for the project.

ISSUE BRIEF # F

SUBJECT: Orange County Reliability Projects

RECENT ACTIVITY

Central Pool Augmentation Program

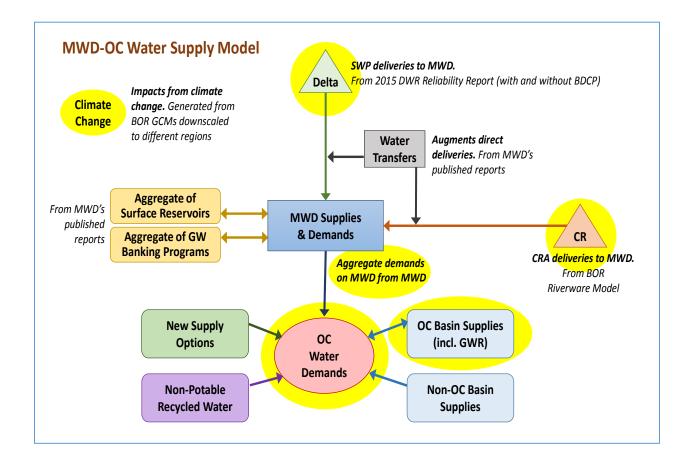
There are no updates to report.

Orange County Water Reliability Study

At the June meeting of the OC Water Reliability Workgroup, CDM initiated discussions on the following topics as they began sharing preliminary information from their modeling work:

- Reviewed the structure of their OC Reliability Model, as shown below.
- Previewed preliminary demand forecasts for OC, including future impacts from WUE investments
- The features of the model have the ability to provide:
 - Probability and Magnitude of MET Water Shortages and Allocation Levels under 93 years of hydrology (1922 to 2014)
 - Probability and Magnitude of Water Shortages for:
 - Total OC County
 - North County
 - OC Basin
 - MWDOC
 - Three Cities
 - South County
 - OC Basin storage levels, under different BPP assumptions, differing levels of Santa Ana River baseflows and stormflows tied to historical and projected hydrology
 - Analysis of New Options/Operations
 - Test new water supplies
 - Test different Basin operations and storage targets
 - With and without the Delta Fix
 - With and without climate variability
- MWDOC asked for members of the Workgroup to volunteer to work with CDM on the detailed modeling and formulation of Planning Scenarios and to make

recommendations back to the full workgroup. These modeling meetings are expected to take place in July and August.



ISSUE BRIEF # G

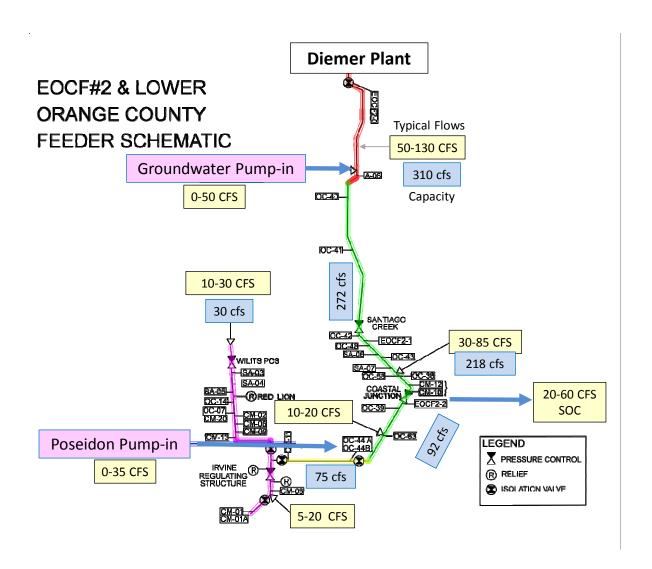
SUBJECT: East Orange County Feeder No. 2

RECENT ACTIVITY

<u>Use of East Orange County Feeder No. 2 for Conveyance of Groundwater and Poseidon Water</u>

This is a new item to be added to the tracking matrix. The opportunity presented by the East Orange County Feeder No. 2 (EOCF#2) is that it is an existing conveyance facility in Orange County that typically carries treated water from the Diemer Treatment Plant in Yorba Linda and it transects the County delivering water all the way to the coast. Along the way, it supplies water to two facilities that deliver water into South Orange County. The facility does not run at full capacity and what has often been discussed is that it provides an opportunity to convey sources of water throughout the county, other than imported water from MET. The 4th reach of the facility is also envisioned as a potential conveyance facility to deliver Poseidon water to South Orange County.

Recently MWDOC and OCWD convened a meeting with MET operations staff to get a detailed look at how the collection of facilities shown in the schematic below, the EOCF#2, the Irvine Cross Feeder and the lower section of the Orange County Feeder are operated today, what controls and settings are utilized, what operating parameters are of most concern to MET staff and how the operations might be changed by Poseidon water being pumped into the 4th reach of the EOCF#2. The schematic served to focus the discussions with the MET operations staff. The information exchange was good and provided great insights into how future operations could occur. The next steps are to digest the information and develop more detailed engineering and operations plans to further the discussions.



Summary Report for The Metropolitan Water District of Southern California Board Meeting June 9, 2015

INDUCTION OF DIRECTORS

Induction of Director Stephen J. Faessel, representing City of Anaheim. (Agenda Item 5C)

COMMITTEE ASSIGNMENTS

Director Galleano was assigned to the Audit and Ethics Committee, Communications and Legislation Committee, Engineering and Operations Committee, and Integrated Resources Planning Committee. Director Faessel was assigned to the Engineering and Operations Committee, Finance and Insurance Committee, Integrated Resources Planning Committee, and Organization, Personnel and Technology Committee. (Agenda Item 5E)

FINANCE AND INSURANCE COMMITTEE

Approved Metropolitan's Statement of Investment Policy and delegated authority to invest to the Treasurer for fiscal year 2015/16. (**Agenda Item 8-1**)

Approved and authorized execution and distribution of the Official Statement in connection with the issuance of the Special Variable Rate, Water Revenue Refunding Bonds 2015 Series A-1 and 2015 Series A-2, and authorized the payment of costs of issuance from bond proceeds. (Agenda Item 8-2)

WATER PLANNING AND STEWARDSHIP COMMITTEE

Authorized the General Manager to make payment of \$2.38 million to the State Water Contractors; and authorized the General Manager to make payment up to \$760,859 to the State Water Project Contractors Authority. (**Agenda Item 8-3**)

Authorized the General Manager to execute the Six Agency Committee agreement's amendment to extend the cost-sharing formula through June 30, 2020; and make payment of up to \$875,782 for the Colorado River Board, Six Agency Committee and Colorado River Authority for FY 2015/16. (Agenda Item 8-9)

ENGINEERING AND OPERATIONS COMMITTEE

Appropriated \$3,530,802 for final payment to Southern California Edison for costs of the F. E. Weymouth Water Treatment Plant incoming Electrical Service. (Approp. 15369) (**Agenda Item 8-4**)

Appropriated \$12.67 million; and awarded \$10,534,920 contract to Kana Engineering Group, Inc. for construction of the La Verne Solar Power Plant. (Approp. 15391) (**Agenda Item 8-5**)

Deferred acting on adoption of a Mitigated Negative Declaration for planned upgrades to Palos Verdes Reservoir. (**Agenda Item 8-6 was Deferred**)

COMMUNICATIONS AND LEGISLATION COMMITTEE

Authorized the General Manager to express support for AB 888 (Bloom, D-Santa Monica) - Waste Management: Plastic Microbeads. (**Agenda Item 8-7a-1**)

Authorized the General Manager to express support for H.R. 1321 (Pallone, D-New Jersey) - Microbead-Free Waters Act of 2015, if amended to (1) ban biodegradable plastics in addition to synthetic plastics, and (2) ensure there is no preemption of state law. (Agenda Item 8-7a-2)

Authorized the General Manger to express support for H.R. 1278 (Capps, D-CA) – Water Infrastructure Resiliency and Sustainability Act of 2015. (**Agenda Item 8-8**)

CONSENT CALENDAR

In other action, the Board:

Approved up to \$1.168 million to renew the expiring excess liability and specialty insurance policies, maintain the same retentions and coverage limits for Metropolitan's Property and Casualty Insurance Program, and change the limit on Excess Workers' Compensation coverage from \$50 million to the statutory limit. (Agenda Item 7-1)

Appropriated \$650,000; and authorized construction of copper sulfate storage facilities at Lake Mathews and Lake Skinner. (Approp. 15441). (**Agenda Item 7-2**)

Appropriated \$1.9 million; and authorized design to complete the lining repairs on the Etiwanda Pipeline. (Approp. 15441) (**Agenda Item 7-3**)

Approved amendments to the Metropolitan Water District Administrative Code to conform to current laws and practices and make corrections. (**Agenda Item 7-4**)

Approved amendments to Metropolitan Water District Administrative Code to revise the Department Head Evaluation process and timeline. (**Agenda Item 7-5**)

OTHER MATTERS:

In other action, the Board:

Approved preparation of Commendatory Resolution for former Director Thomas Evans. (**Agenda Item 5D**)

Approved 30-day leave of absence for Director Tu, commencing July 1, 2015. (Agenda Item 5E)

THIS INFORMATION SHOULD NOT BE CONSIDERED THE OFFICIAL MINUTES OF THE MEETING.

Board letters related to the items in this summary are generally posted in the Board Letter Archive approximately one week after the board meeting. In order to view them and their attachments, please copy and paste the following into your browser http://edmsidm.mwdh2o.com/idmweb/home.asp.