WORKSHOP MEETING OF THE BOARD OF DIRECTORS WITH MET DIRECTORS MUNICIPAL WATER DISTRICT OF ORANGE COUNTY 18700 Ward Street, Board Room, Fountain Valley, California November 7, 2018, 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. 2075)

PRESENTATION/DISCUSSION/INFORMATION ITEMS

1. INPUT OR QUESTIONS ON MET ISSUES FROM THE MEMBER AGENCIES/MET DIRECTOR REPORTS REGARDING MET COMMITTEE PARTICIPATION

Recommendation: Receive input and discuss the information.

2. WATER SUPPLY UPDATE

Recommendation: Review and discuss the information presented.

3. PRESENTATION BY BILL HASENCAMP (METROPOLITAN) ON THE COLORADO RIVER ISSUES

Recommendation: Review and discuss the information presented.

4. CALIFORNIA WATERFIX ACTIVITIES UPDATE

Recommendation: Review and discuss the information presented.

- 5. **MET ITEMS CRITICAL TO ORANGE COUNTY** (The following items are for informational purposes only a write up on each item is included in the packet. Discussion is not necessary unless requested by a Director)
 - 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
 - h. South County Projects

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

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

- a. Summary regarding October Board Meeting
- b. 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.



November 7, 2018

TO: Board of Directors

FROM: Robert Hunter, General Manager

Staff Contact: Kevin Hostert

SUBJECT: WATER SUPPLY CONDITION UPDATE

STAFF RECOMMENDATION

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

REPORT

The 2018-19 Water Year officially began October 1, 2018. Thus far, the Northern California accumulated precipitation (8-Station Index) is reporting 1.02 inches or 36% of normal as of October 29. In the month of September 2018, accumulated precipitation reached 0.0 inches, which is 0.9 inches below normal compared to the historical average. Last water year, the Northern Sierra Snowpack peaked at 12.3 inches on April 1st, which was 43% of normal.

Lake Oroville storage is at 35% of total capacity and 58% of normal. The San Luis Reservoir has a current volume of 74% of the reservoirs total capacity and is 141% of normal.

The Department of Water Resources (DWR) has set the State Water Project (SWP) "Table A" allocation at 35%. This allocation provides Metropolitan with approximately 669,025 AF in SWP deliveries this water year. DWR's approval considered several factors including existing storage in SWP conservation reservoirs, SWP operational regulatory constraints, and the 2018 contractor demands.

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

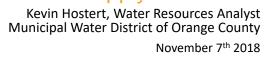
On the Colorado River system, the water level at Lake Powell was 3,592.35 feet with 11.04 million-acre feet (MAF) of storage, or 45% of capacity. The water level at Lake Mead was 1,078.29 feet with 9.87 MAF of storage, or 38% of capacity. As of September 30th, the total system storage was 28.02 MAF, or 47% of capacity, which is about 4.9 MAF less than the system storage at this time last year.

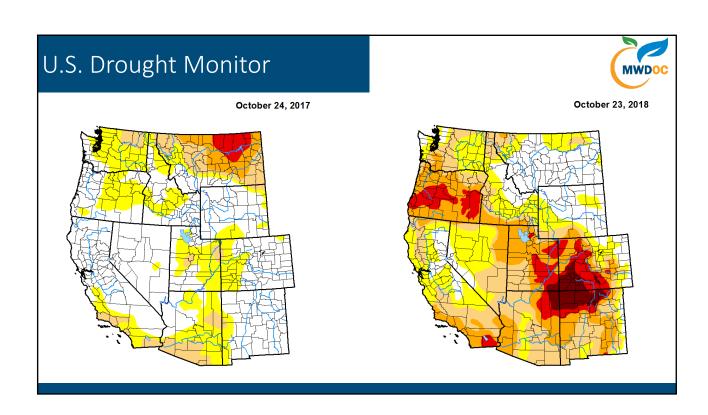
Lake Mead's projected elevation at the end of 2018 is 1,079.5 feet, which indicates that the reservoir will be operated under the Normal or ICS Surplus Condition. Based on the August 2018 24-month study report released by the Bureau of Reclamation, the probability of any level of shortage condition in Lake Mead increased to 57% in 2020 (up from 52%), and may be above 65% in subsequent years.

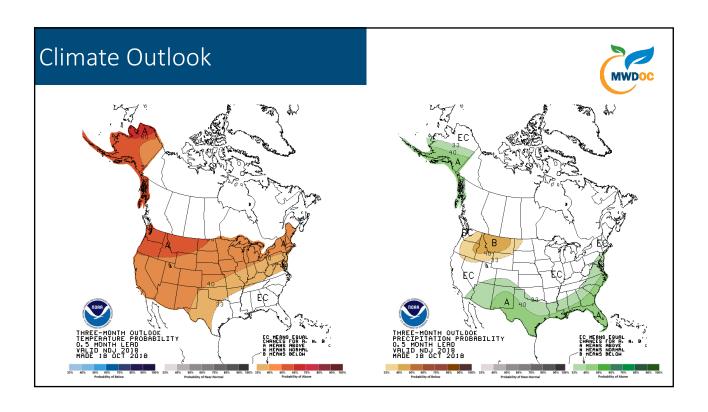
Attachment: Water Supply Conditions Presentation

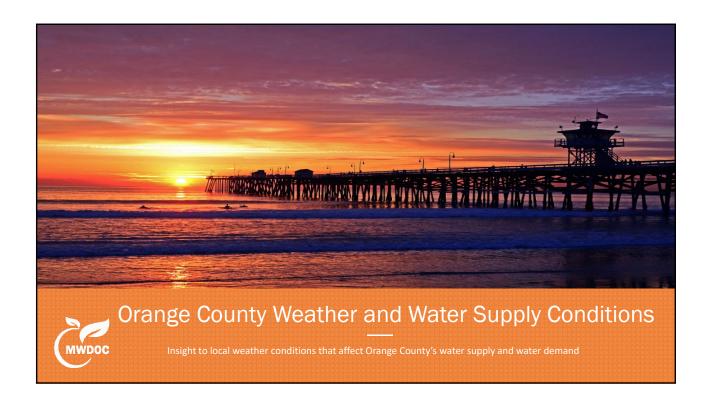


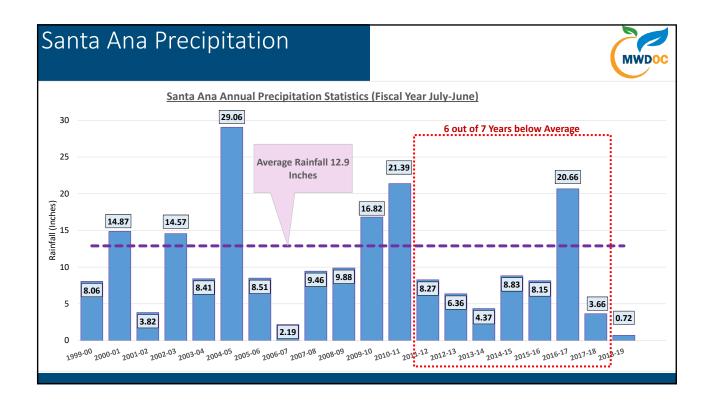
Water Supply Conditions



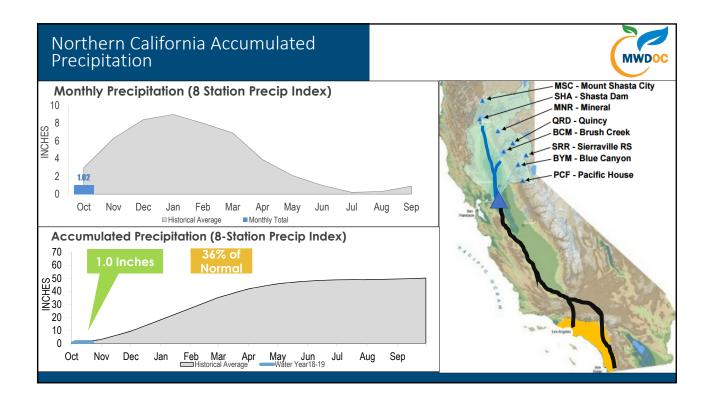


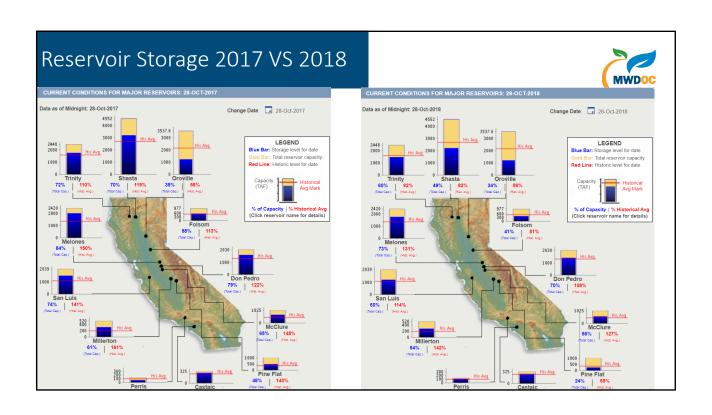


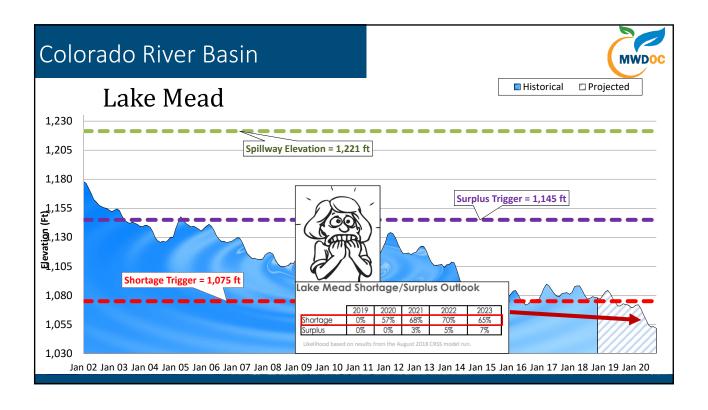


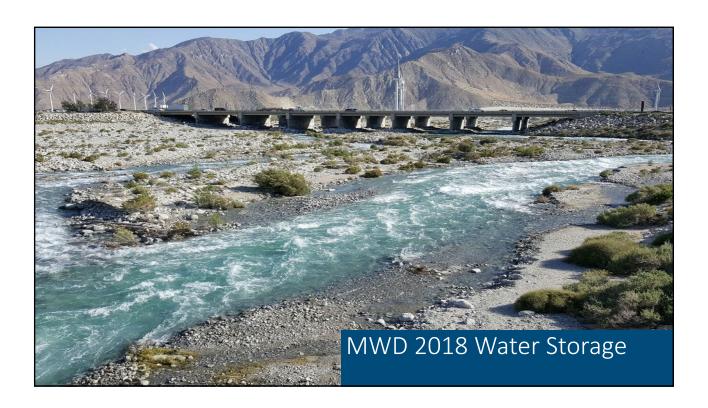


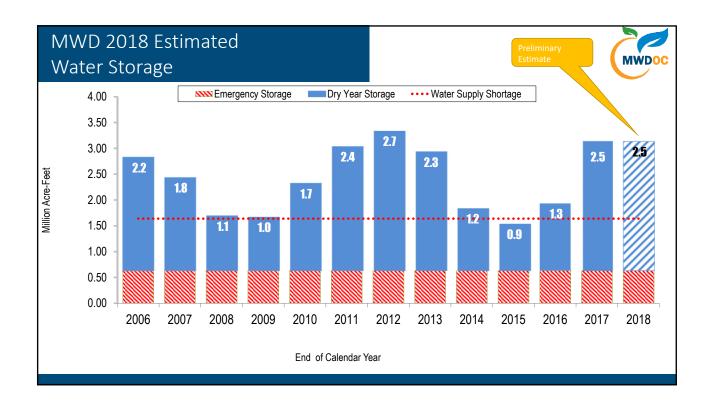




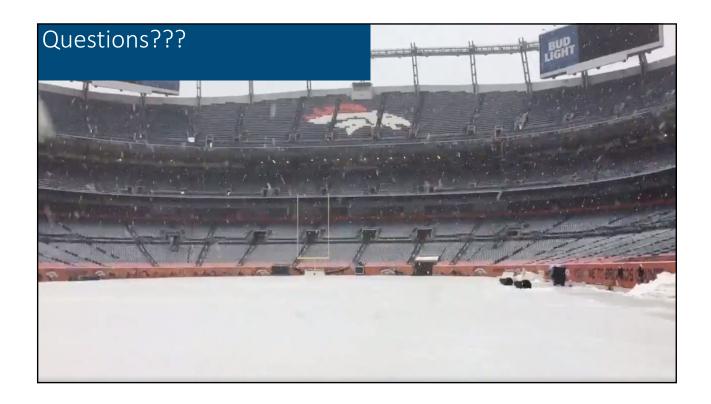














DISCUSSION ITEMNovember 7, 2018

TO: Board of Directors

FROM: Robert Hunter,

General Manager

Staff Contact: Harvey De La Torre Melissa Baum-Haley

SUBJECT: PRESENTATION BY BILL HASENCAMP (METROPOLITAN) ON

COLORADO RIVER ISSUES

STAFF RECOMMENDATION

Staff recommends the Board of Directors review and discuss the information presented.

COMMITTEE RECOMMENDATION

This item was not presented to a Committee.

REPORT

The Colorado River Compact of 1922 apportioned 7.5 million acre-feet of river water annually to the Upper Basin and 7.5 million acre-feet annually to the Lower Basin. The Lower Basin's 7.5 million acre-feet was further apportioned by the Boulder Canyon Project Act to the Lower Division States as follows: 4.4 million acre-feet to California, 2.8 million acre-feet to Arizona, and 300,000 acre-feet to Nevada. Later, the Mexican Water Treaty of 1944 recognized the United States' obligation to annually deliver 1.5 million acre-feet of Colorado River water to Mexico.

In December 2017, Reclamation Commissioner Brenda Burman called on the seven Colorado River Basin States and water entitlement holders in the Lower Colorado Basin to continue developing Drought Contingency Plans (DCP) in response to ongoing historic drought conditions in the Basin and reduce the likelihood of Colorado River reservoirs – particularly Lake Powell and Lake Mead – further declining to critical elevations.

Budgeted (Y/N): N/A	Budgeted amount: None		Core _X_	Choice
Action item amount: N/A		Line item:		
Fiscal Impact (explain if unbudgeted):				

Based upon the recent discussions among the Basin States, water agencies and the Department of the Interior, it is hoped that the remaining intra- and inter-state discussions, negotiations and agreements can be concluded, and that a final DCP package can be approved by the states and agencies by the end of the year. It is also expected that some form of federal legislation will be required to authorize the Secretary to implement the DCPs in both basins.

The Upper Basin DCP is designed to:

- a) Protect critical elevations at Lake Powell and help assure continued compliance with the 1922 Colorado River Compact
- Authorize storage of conserved water in the Upper Basin that could help establish the foundation for a Demand Management Program that may be developed in the future

The Lower Basin DCP is designed to:

- a) Require Arizona, California and Nevada to contribute additional water to Lake Mead storage at predetermined elevations
- b) Create additional flexibility to incentivize additional voluntary conservation of water to be stored in Lake Mead

Current Bureau of Reclamation modeling indicates that the implementation of the proposed Lower Basin DCP would reduce the risk of Lake Mead declining below elevation 1,020' during the interim period to about 6-7%, like that when the 2007 Interim Guidelines were adopted.

The term of the Lower Basin DCP is through the end of 2026, or when all intentionally created surplus (ICS) and DCP ICS accounts are reduced to zero. The Lower Basin DCP Agreement commits the parties to make DCP contributions, based upon critical water surface elevations in Lake Mead. The Lower Basin DCP Agreement also commits the Secretary to annually create or conserve 100,000 acre-feet of Colorado River System water.

The Lower Basin DCP Agreement also provides increased flexibility for ICS account holders, and establishes the conditions associated with the delivery, borrowing and repayment of DCP ICS. The Agreement also establishes a process for making DCP contributions and ICS capacity-sharing among the Lower Basin States. These provisions allow ICS account holders to access ICS supplies at lower Lake Mead water surface elevations (i.e., below elevation 1,075'). The Agreement also increases the cumulative ICS storage limits for each Lower Basin state by 200,000 acre-feet and extends the utilization of the interstate banking provisions from Lake Mead elevation 1,075' down to elevation 1.045'.

California's DCP agency representatives have been working on various interagency agreements that are being developed among Metropolitan Water District, Palo Verde Irrigation District, Imperial Irrigation District and Coachella Valley Water District regarding potential participation in the Lower Basin DCP, and how California DCP contributions would be made if they are required during the interim period.

For further explanation and clarity, MWDOC staff has invited Bill Hasencamp, the manager of Colorado River Resources for the Metropolitan Water District of Southern California, to provide a presentation on Colorado River issues and DCP status.



DISCUSSION ITEMNovember 7, 2018

TO: Board of Directors

FROM: Robert Hunter,

General Manager

Staff Contact: Harvey De La Torre Melissa Baum-Haley

SUBJECT: CALIFORNIA WATERFIX ACTIVITIES UPDATE

STAFF RECOMMENDATION

Staff recommends the Board of Directors review and discuss the information presented.

COMMITTEE RECOMMENDATION

This item was not presented to a Committee.

REPORT

Joint Powers Authorities

At the Delta Conveyance Design and Construction Authority (DCA) October 18 meeting, the DCA Board approved amendments to the Joint Exercise of Powers Agreements as well as a number of professional services agreements including:

- Geotechnical Engineering Professional Services Authorizing the Executive Director to negotiate and execute a five-year professional services agreement for up to \$75 million with Fugro USA Land Inc.
- Real Estate Professional Services Authorizing the Executive Director to negotiate and execute three contracts with a maximum amount payable of up to \$9 million dollars and a term of seven years per agreement.
- Survey, Mapping, Title and Right-of-Way Engineering Professional Services -Authorize the Executive Director to negotiate and execute three contracts with a term of seven years for each agreement totaling \$25 million.

Budgeted (Y/N): N/A	Budgeted amount: None		Core _X_	Choice	
Action item amount: N/A		Line item:			
Fiscal Impact (explain if unbudgeted):					

There was no Delta Conveyance Finance Authority held in the month of October. The next meeting of the Delta Conveyance Finance Authority Board of Directors will be held on Thursday, November 15, 2018.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) proceedings for the California WaterFix petition for additional point of diversion are continuing. The SWRCB sur-rebuttal phase of the Part 2 hearings resumed on September 26. The sur-rebuttal phase of the hearing is the opportunity to respond to the rebuttal testimony. The SWRCB has not yet scheduled closing briefs for the Part 2 hearings.

On August 21 and 22, 2018, the SWRCB held a public meeting to receive oral public comments and consider adoption of proposed amendments to the Bay-Delta Water Quality Control Plan (WQCP) for the Lower San Joaquin River and Southern Delta as part of the Phase I process. The proposed WQCP amendments would update water flow objectives in the Lower San Joaquin River and its major tributaries, the Stanislaus, Tuolumne and Merced Rivers, and would amend southern Delta salinity objectives. Staff worked with the State Water Contractors to develop and submit comments on the proposed WQCP amendments on July 27, 2018. After two full days of public comment from interest groups including agriculture, local government, water agencies, Native peoples, fishing interests, NGOs, and the general public, the SWRCB announced it will continue the meeting until November 7, 2018. Continuing the meeting and deferring final action on the proposed amendments will provide the SWRCB members with additional time to weigh and consider the information and comments, and also get updated on the status of efforts to develop a voluntary settlement agreement.

The SWRCB is also developing proposed amendments to the WQCP addressing Delta outflows, Sacramento River and Delta tributary flows, cold water habitat and interior Delta flows, as part of the Phase II process. In July, the SWRCB released a framework document to provide information about its staff-proposed Phase II WQCP amendments under development. The SWRCB is preparing to release the proposed Sacramento/Delta WQCP amendments later in 2018 for public comment.

Supplemental EIR

On September 21, the U.S. Bureau of Reclamation (USBR) issued the California WaterFix Draft Supplemental Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for public review under the National Environmental Policy Act (NEPA). USBR's issuance of the California WaterFix Draft Supplemental EIR/EIS is the same exact document as was issued by DWR on July 17, 2018, with the addition of a transmittal document that relates the proposed changes to the alternatives previously analyzed in the 2016 Final EIR/EIS. Public comments for NEPA process purposes are due November 5, 2018.

Delta Stewardship Council

On July 27, 2018, the California Department of Water Resources (DWR) filed a certificate of consistency with the Delta Plan for the California WaterFix project. The Delta Reform Act allows any person who claims that a covered action is inconsistent with the Delta Plan to file an appeal of a certification of consistency submitted to the Delta Stewardship Council. Nine

appeals of the California WaterFix certification were filed by the August 27, 2018 deadline, and a public hearing on those appeals was scheduled for October 24-26, 2018. The appeals allege that the certification of consistency is premature because the California WaterFix supplemental EIR is not final, that the project is inconsistent with coequal goals and with Delta Plan policies, and that California WaterFix does not protect the Delta as an evolving place. Written submissions were due October 15. The Council has 60 days to issue a ruling after the hearing.

DWR Economic Analysis

On September 20, the DWR released an <u>Economic Analysis of the California WaterFix:</u>
<u>Benefits and Costs to Project Participants</u>, detailing the value of the CA WaterFix project to both urban and agricultural contractors who will benefit from investing in the modernization and upgrade of the state's primary water delivery system. Report was prepared by Dr. David Sunding, Professor, UC Berkeley.

The economic analysis summarized in the report goes beyond what is legally required for WaterFix and is consistent with methods described in the department's "Economic Analysis Guidebook." The monetized benefits include: water supply reliability, water quality, seismic safety reliability, and climate change/sea level resiliency.

The report includes cost-benefit analysis to SWP urban and agricultural agencies, and to CVP south of Delta Federal Water Service Contractors for the approved 9,000 cfs CA WaterFix project. The analysis concludes that the WaterFix benefits to SWP water agencies are substantial. SWP urban agencies could see about \$3.1 billion in net benefits. SWP agricultural agencies could see about \$400 million in net benefits.

In summary, the benefit-cost analysis described in this report reaches several main conclusions:

- The California WaterFix passes a benefit cost test for SWP urban and agricultural contractors, with or without the participation of the CVP south of Delta water service contractors;
- For SWP urban contractors, investment in the California WaterFix is substantially less expensive than investing in an equivalent amount of alternative urban water supplies;
- Implementation of SGMA substantially increases the value of the California WaterFix to agricultural water users. In this sense, implementation of the WaterFix is complementary to the State's goal of ensuring the sustainability of groundwater resources;
- Transfer of WaterFix benefits and costs among the State Water Contractors significantly increases the overall benefits of the project by reallocating project capacity toward users with the greatest willingness to pay for water supply reliability;
- The California WaterFix helps mitigate the impacts of climate change on the State's water supply system, particularly by reducing the effects of sea level rise on Delta exports. This feature of the WaterFix alone is worth several billion dollars.

At Metropolitan's October 23 Special Committee on Bay-Delta, Dr. Sunding provided a presentation and discussion with the Metropolitan Board. The discussion included

explanation of assumptions used in the study. A factsheet of the study findings are attached.

Additional Information

Additional information on the Bay-Delta Issues can be found in *Issue Brief D - Bay Delta/State Water Project Issues* of the Discussion Item regarding Metropolitan Water District items critical to Orange County.

Attachment: Factsheet on WaterFix Benefit-Cost Analysis



About the WaterFix Benefit-Cost Analysis

The <u>Economic Analysis of the California WaterFix</u>, released September 20, 2018, evaluates the project's value of water system improvements and the related costs and benefits to potential participants in both the urban and agricultural sectors.

The primary scenario analyzed in the report is for WaterFix as approved (capacity of 9,000 cubic-feet-per-second). It assumes that the State Water Project (SWP) contractors will pay for 67 percent of the capacity of WaterFix in proportion to their Table A allocations, and the Metropolitan Water District of Southern California (MWD), separate from its participation as a SWP contractor, is responsible for the remaining 33 percent that was earmarked for CVP contractor use. The report also considers market-rate financing and low-interest rate financing that may be available under existing and proposed federal law, as well as other participation scenarios.

WaterFix Benefit-Cost Analysis Conclusions

- In every scenario analyzed, WaterFix's benefits are greater than the costs to SWP urban and agricultural agencies—with or without Central Valley Project (CVP) participation. The report also shows a benefit to participating CVP agencies.
- SWP urban agencies would see about \$3.1 billion in net benefits with WaterFix. Higher levels of net benefits occur when agencies can finance costs with federal low interest loans.
- SWP agricultural agencies would see about \$400 million in net benefits with WaterFix. These benefits would increase with the availability of low interest loans but would lessen without participation in transfers of unwanted project capacity.
- Implementation of components of the Sustainable Groundwater Management Act significantly increases the value of WaterFix to agricultural water users and shows that WaterFix is complementary to the state's goal of ensuring the sustainability of groundwater reserves.
- WaterFix helps offset the impacts of climate change by reducing the effects of sea level rise on Delta exports, resulting in a benefit of several billion dollars.
- The cost of WaterFix to urban agencies is significantly less than alternative water supplies such as desalination or recycling.
- Transfer of WaterFix project benefits significantly increases the overall values of the project by reallocating capacity to users with the greatest willingness to pay for water supply reliability.

The table below shows the costs and benefits in dollars as well as the associated ratio of cost compared to benefit. Cost-benefit ratios are considered positive if they are over 1.0.

_	SWP Urban	SWP Ag	CVP
Benefits	\$13,275,882,162	\$2,405,260,992	\$3,367,416,939
Costs	\$10,164,260,463	\$2,005,809,457	\$2,618,411,930
Ratio	1.31	1.20	1.29



Alternative Supplies

The model used to value the urban benefits of WaterFix assumes existing alternative water supplies and values the future shortages avoided by preserving SWP deliveries through WaterFix. The analysis also compares the unit cost of supplies preserved through WaterFix to the unit cost of water supply alternatives.

- Desalination costs from \$2,000 to \$4,000 per acre-foot.
- Recycling costs around \$1,500 to \$2,500 per acre-foot.
- The unit cost of supplies preserved through WaterFix is about \$684 per acre-foot, and the unit cost of conveyance and treatment of that water is up to \$550 per acre-foot depending on point of delivery.

WaterFix is a net benefit to ratepayers because it protects their most cost-effective source of reliable water supplies and billions of dollars of prior investments.

Factors That Influence Costs

The total design and construction costs for WaterFix, including mitigation and a contingency allowance, are conservatively estimated at \$16.73 billion in undiscounted 2017 dollars. Operation and maintenance (O&M) mitigation for the first 15 years is estimated at \$39.1 million per year. O&M costs are \$64.4 million per year for the first 50 years of the project, and \$44.1 million per year thereafter. The construction period is assumed to be 15 years under a maximum possible estimate and the life span of the project is assumed to be 100 years.

The analysis assumes a wheeling rate will be charged by MWD for use of the 33% capacity earmarked for CVP contractor use that is equal to the average cost of the project.

Time Value of Money

Calculating present value is a technique used by economists to evaluate investment.

The present value of costs of a project is the amount of money needed today to pay for these costs in the future. Think of present value as the size of an endowment that will cover future costs. It depends on both the rate of price inflation and the rate of return on the endowment.

Benefits and costs are "present values" calculated using a 3 percent real rate of interest and an assumed 100-year project life. Present value reflects the time value of money. The present value of project costs is calculated assuming that capital costs are financed as expenditures are made. Note that the present value cost of WaterFix is lower than the nominal value. This is typical in project analysis, and is because the assumed rate of return on investment exceeds the rate of price inflation.



Factors that Influence Benefits

- Yield assumptions: The analysis utilizes operational modeling, the results that show WaterFix protects about 1 million acre-feet of water per year for urban and agricultural contractors of both the SWP and CVP.
- Baseline: The benefits and costs of WaterFix are evaluated in relation to the projected future baseline conditions that would likely occur if WaterFix were not built, which includes additional regulatory criteria designed to minimize harmful reverse flows and additional amendments to the existing biological opinions for the SWP and CVP.
- Water supply benefits to urban agencies: The analysis looks at more than 200 wholesale and retail agencies throughout California, reflecting variation in real-world water rates among utilities under 81 sets of forecasted hydrologic time series and data, and corresponding supply availability.
- Water supply benefits to agricultural agencies: The analysis accounts for reductions in groundwater pumping and cost, decreases in fallowing, and increases in net returns from crop production. It also incorporates estimated effects of the Sustainable Groundwater Management Act and acknowledges that groundwater limitations can be expected to significantly increase the marginal value of surface water used for crop irrigation.
 - o Where groundwater is a substitute for surface water, and when groundwater usage is constrained, the value of surface water increases.
 - o By stabilizing surface water deliveries to agriculture, WaterFix is complementary to the state's objective of sustainable groundwater management.
- Water quality: WaterFix produces water quality benefits lower salinity of water supplies exported from the Delta benefits farmers and urban water users.
- Earthquake reliability: By adding redundancy, WaterFix helps protect against numerous levee failures that could lead to island flooding, significant saltwater intrusion, and extended supply disruptions.
- Climate change mitigation: A notable feature of this report is that it monetizes the costs of climate change impacts and the benefits of offsetting those impacts. WaterFix maintains SWP and CVP deliveries at roughly their current levels, while without WaterFix, SWP and CVP yields fall significantly in response to sea-level rise. This feature of WaterFix is worth several billion dollars and is an important rationale for implementing the project.

The Economic Analysis of the California WaterFix is consistent with the Department of Water Resources' "Economic Analysis Guidebook."

For more information, visit: www.CaliforniaWaterFix.com.



DISCUSSION ITEM November 7, 2018

TO: Board of Directors

FROM: Robert Hunter, General Manager

Staff Contact: Karl Seckel

Harvey De La Torre Melissa Baum-Haley

SUBJECT: METROPOLITAN WATER DISTRICT (MET) ITEMS CRITICAL TO

ORANGE COUNTY

STAFF RECOMMENDATION

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

DETAILED REPORT

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 in the Doheny and Huntington Beach Ocean (Poseidon) Desalination Projects
- f) Orange County Reliability Projects
- g) East Orange County Feeder No. 2
- h) South Orange County Projects

Budgeted (Y/N): NA	Budgeted amount: None		Core _X_	Choice	
Action item amount: N/A		Line item:			
Fiscal Impact (explain if unbudgeted):					

ISSUE BRIEF # A

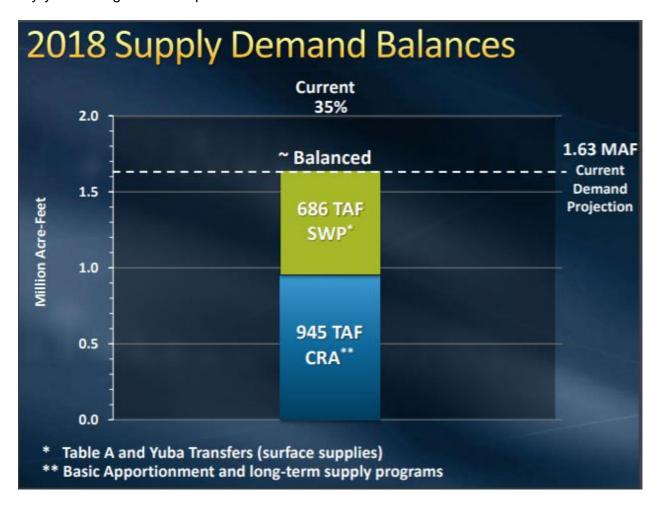
SUBJECT: MET's Water Supply Conditions

RECENT ACTIVITY

In May, the Department of Water Resources (DWR) increased the State Water Project (SWP) "Table A" allocation to 35%, giving Metropolitan approximately 686 thousand acrefeet (TAF) in SWP deliveries plus Yuba transfers.

The Colorado River Aqueduct apportionment and long-term supply programs is expected to remain at 945 TAF.

With estimated total demands and losses of 1.63 million acre-feet (MAF), Metropolitan is projecting that demands will equal supply levels in CY 2018. Based on this, estimated total dry-year storage for Metropolitan at the end of CY 2018 will be 2.5 MAF.



ISSUE BRIEF # B

SUBJECT: MET's Finance and Rate Issues

RECENT ACTIVITY

As of September 30, the short-term portfolio balance is \$618.6 million and has returned 0.15%, which is equal to the benchmark. Since inceptions, the short-term portfolio have yielded of total return of 1.86%, which is an out performance of 0.54% compared to the benchmark.

The long-term portfolio balance is \$346.8 million, a \$1.1 million decline from last month, and thus returned -0.22%, however, approximately equal the benchmark. Since inceptions, the long-term portfolio have yielded of total return of 3.26%, which is an out performance of 0.29% compared to the benchmark.

Water transactions through August were 62.5 TAF (12%) lower than budget and 46.7 TAF (11%) higher than the 5-year average. At this early point in the year, Metropolitan is planning to end the year on budget.

ISSUE BRIEF # C

SUBJECT: Colorado River Issues

RECENT ACTIVITY

Drought Contingency Plan Development

The Principals of the seven Colorado River Basin States and the Commissioner of the U.S. Bureau of Reclamation (Reclamation) met in Las Vegas on September 17 and 18. The meetings focused on the remaining policy decisions and to finalize the Lower Basin Drought Contingency Plan (DCP) and Upper Basin DCP. Progress was also made in the development of necessary intrastate agreements within California and Arizona.

A small drafting group has been tasked with finalizing drafts of the various agreements required to implement the DCP. The small drafting group is also tasked with developing draft legislative language for anticipated Congressional authorization of the DCPs. Work on the package of agreements is being done with a goal to seek approvals from the governing bodies of the respective agencies later this year.

At the September 17 and 18 meetings, the parties to the agreements, including Metropolitan, discussed seeking board approvals for the package as early as November of this year.

Colorado River Water Order

In September, Reclamation acknowledged receiving Metropolitan's Colorado River Diversion Request (Water Order) for calendar year 2019. In the Water Order, Metropolitan estimates having a basic available supply of 952,000 acre-feet of Colorado River water and has approval to store up to 299,000 acre-feet of Intentionally Created Surplus (ICS) in Lake Mead in 2019. Metropolitan preserved the option to divert additional water, develop additional water conservation programs, or make interstate storage and release arrangements with Nevada or Arizona agencies if needed as conditions develop throughout the year.

Minute 323 Binational Work Group Meeting

Metropolitan staff, along with staff from the Colorado River Basin States, participated in a field trip with representatives from Mexico to inspect projects in Mexico funded by water agencies in the United States, including Metropolitan. Metropolitan provided \$2.5 million of the \$10 million total provided by the U.S. agencies to fund canal lining projects and other water conservation measures in the Mexicali Valley. These projects, which are in varying stages of completion, will save water in Mexico for many decades. In exchange for its share of funding, Metropolitan received just over 23,000 acre-feet of ICS credits in Lake Mead.

ISSUE BRIEF # D

SUBJECT: Bay Delta/State Water Project Issues

RECENT ACTIVITY

Science Activities

Metropolitan taff attended the 10th Biennial Bay-Delta Science Conference held in Sacramento, September 10-12. The conference is sponsored by the Delta Science Program and the U.S. Geological Survey, and it features three days of oral and poster presentations that provide scientific information concerning fish ecology, modeling and decision support, habitat restoration, climate change, water quality, and science collaboration and communication.

Metropolitan staff chaired a conference session on recent developments in longfin smelt science, which was received constructively. Several scientific studies conducted by Metropolitan staff or supported by Metropolitan were well represented at the conference. The science presentations for Metropolitan supported studies (described below) addressing longfin smelt and Delta smelt biology, analysis of fish survey data and environment-recruitment relationships, factors affecting predation of salmon, and development of a model to analyze incidental take.

- Corey Phillis (Metropolitan staff): Go West (and South) Young Smelt: Mapping the Habitats Associated with Juvenile Longfin Smelt and their Prey
- Shawn Acuna (Metropolitan staff): Indicators of Reproductive Health of Delta Smelt
- James Peterson (Oregon State University): Multistate Occupancy Estimation for Longfin Smelt
- Lenny Grimaldo (ICF Consultants): Examining Variability in Hatching and Rearing Habitat for Key Forage Fish in the Upper San Francisco Estuary During Wet and Dry Periods from an Unmined IEP Dataset
- Natascia Tamburello (ESSA consultants): Durability of Environment-Recruitment Relationships in Aquatic Ecosystems: Insights from Long-term Monitoring in a Highly Modified Estuary and Implications for Management
- Steve Zeug (Cramer Fish Sciences): Experimental Quantification of Piscivore Density and Habitat Effects on Juvenile Chinook Salmon Survival
- Mike Tillotson (ICF consultants): A Machine Learning Model for Predicting Salmonid Take at the SWP and CVP in Real-Time

A scientific paper co-authored by David Fullerton in collaboration with Joe Kirsch, at the U.S. Forest Service, was accepted for publication in the peer-reviewed *Journal of Fish and Wildlife Management*. The paper presents findings from a study Metropolitan is supporting to evaluate rates of fish misidentification and analyze the rate at which experienced biologists misidentified fish species in a lab setting. The researcher found that rates of misidentification were high enough to distort distribution and abundance conclusions. Misidentification of species could complicate analysis of past fish survey data, particularly during the 1960's – 1980's when quality control was limited.

Metropolitan staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). In September, the CSAMP Policy Group approved a set of priorities for 2019-2020 focused on Delta smelt and salmon actions, development of integrated science plans for Delta smelt and salmon and continuing the development of structured decision making tools. The Policy Group also discussed the status of funding for Delta science related activities and the status of Salmon Resiliency Strategy actions. Metropolitan staff participated in the September 18 CAMT meeting, which focused on the Delta Smelt Science Plan and how to incorporate adaptive decision-making into the plan and identify the entities responsible for the decisions.

Delta Flood Emergency Management Plan

The Department of Water Resources (DWR) has assigned additional support staff to their Flood Emergency Office to address agency comments and help finalize the Delta Flood Emergency Management Plan (DFEMP). DWR has stated the DFEMP is expected to be final by late-October 2018.

Most relevant to the DFEMP is the inclusion of the emergency freshwater pathway that has been placed in the response category of emergency operations implementation, meaning it will receive immediate action in the initial stages of an emergency of the scale warranting pathway use (for example, a major earthquake in or near the Delta causing levee failures and threats to water supply delivery).

ISSUE BRIEF # E

SUBJECT: MET's Ocean Desalination Policy and Potential Participation in the Doheny and Huntington Beach Ocean (Poseidon) Desalination Projects

RECENT ACTIVITY

Doheny Desal

The details of this have been moved to briefing Issue H as it pertains only to South Orange County.

Poseidon Huntington Beach

Poseidon continues working with the Santa Ana Regional Water Quality Control Board (SARWQCB) to renew and update its existing National Pollution Discharge Elimination System permit and comply with new regulations (referred to as the Ocean Plan Amendment) which were approved by the State Water Resources Control Board in May 2015.

On October 1, 2018 SARWQCB notified Poseidon that their application for the revised ocean discharge diffuser design, which was required by the Ocean Plan Amendment, was complete. The Permit Streamlining Act (PSA) requires a responsible agency to approve or disapprove of an application within 180 days. Poseidon maintains that their application is subject to the PSA, while SARWQCB contends that this application is not subject to the PSA.

Poseidon expects the SARWQCB to act on its permit in the next four to six months. Assuming approval, Poseidon would then seek a permit from the California Coastal Commission in 2019.

ISSUE BRIEF # F

SUBJECT: Orange County Reliability Projects

RECENT ACTIVITY

Orange County Water Reliability Study

MWDOC staff and CDM Smith completed the QC (Quality Control) version of the 2018 OC Water Reliability Study. The QC draft provided information to get initial reactions and to determine if we had missed anything or mischaracterized any of the project concepts or project evaluations before we complete the report.

On September 20, a 3½ hour workshop was held on the study that included 26 attendees from among 20 of our agencies. Staff discussed the report at the October 1 MWDOC P&O Committee, as well as presented the study to WACO and to multiple member agency Boards who requested a presentation. The comment period on the study remained open until Friday October 26. Staff has compiled a summary of study comments for analysis and will incorporate them, as appropriate, into the final report.

Next Steps

The next steps include the following:

- 1. Final Draft of the study is anticipated by December 2018.
- 2. Complete additional work on the Carson Project and its reliability implications in Orange County (includes work between MWDOC and OCWD)
- Complete additional analysis on the Strand Ranch Integrated Water Banking Program using the results of the study
- 4. Develop a list of items to advocate for at MET with respect to the next MET IRP update based on comments coming out of our study
- Complete additional work on systems integration for local water in SOC (includes water quality issues, chloramination facilities, reversing flow of systems, building in redundancies, metering of low flow water, base-loading of projects, etc.)
- 6. Integrate the results of the recent workshop regarding integration of local projects into the Orange County water system.
- Work with OCWD on the SARCCUP Project to determine the potential uses of the extraordinary supplies developed through the project and how they can best be used in Orange County.

ISSUE BRIEF # G

SUBJECT: East Orange County Feeder No. 2

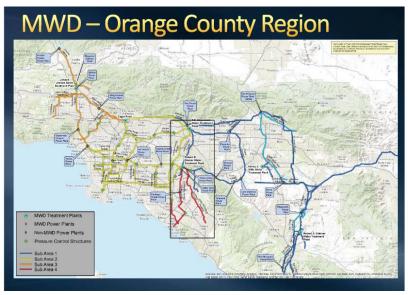
RECENT ACTIVITY

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

MWDOC has been meeting with MET staff to discuss various aspects of using the EOCF#2 to convey other sources of local water. This concept can include ocean desalination projects, and/or other local projects such as the groundwater pump-in to the EOCF#2.

On August 31, 2018, MWDOC hosted a Water System Operations and Integration Workshop attended by technical staff from: MET's Water Quality team, MWDOC member agencies, and consultants. The workshop focused on the possible integration of multiple treated water sources into the OC water distribution system; particularly in the lower reaches of EOCF#2. The collaborative discussion identified a number of potential issues for follow-up. Staff and our consultant, Ed Means, are working through the workshop recommendations to develop a plan to address these issues.

On October 17, 2018 MWDOC staff met with members of MET's Facilities Planning team to discuss the capabilities of and experiences with MET's water distribution system model (which is principally a hydraulic model). MWDOC staff began a discussion about the possibilities of leveraging the existing MET model data for inclusion into an OC water distribution model. The OC model concept is envisioned to include distribution pipelines in OC such as EOCF#2, AMP, Joint Regional Water Supply System (JWRSS), and South County Pipeline. The OC model concept would also include a water quality module to assist with the development of solutions to the issues identified during the Water Systems Operations and Integration Workshop. MET staff was generally favorable to the idea of sharing information, and are currently evaluating a number of possible alternatives that will be discussed with MET executive management.



ISSUE BRIEF # H

SUBJECT: South Orange County Projects

RECENT ACTIVITY

Doheny Desal Project

South Coast WD submitted a grant application for up to \$20 million for project construction through Bureau of Reclamation 'Water SMART: Desalination Construction Projects under the WIIN Act'. Applications are currently being reviewed. MWDOC participated in a phone conference call with South Coast Water District to provide a briefing to the Deputy Commissioner Harrison and to make her aware of the grant application.

South Coast staff and consultants are in the process of responding to comments submitted regarding the EIR for the project. They anticipate adopting the response to comments in December 2018.

SMWD Trampas Canyon Recycled Water Reservoir

This project involves the construction of a 5,000-acre-foot recycled water storage reservoir and the various complementary facilities to support this reservoir. The construction of the Trampas Canyon Recycled Water Seasonal Storage Reservoir consists of three main components:

- 1) Trampas Canyon Dam (Dam)
- 2) Conveyance facilities to transport recycled water into and out of the Reservoir (Pipelines)
- 3) Trampas Canyon Pump Station (Pump Station)

The construction of the facilities is being completed in three phases:

- 1) Preconstruction/Site Preparation for the Dam and Pump Station Construction
- 2) Dam and Pipelines
- 3) Pump Station

PROJECT STATUS

Preconstruction/Site Preparation

The work to relocate various facilities integral to the existing mining operation was completed in December 2017. The relocation of the high-tension power lines that feed an existing major communication facility was completed in April 2018. The final relocation of AT&T facilities was completed in May 2018, which was the final remaining activity for this phase.

Dam and Pipelines

The \$81M Construction Contract was awarded in December 2017 and is approximately 25% complete.

Pump Station

The preliminary design of this facility has been completed. Final design began on May 30, 2018 when the final hydraulic requirements for this facility were finalized. AECOM has recently provided a 30% Design package which the District reviewed. The design process is likely to continue thru the end of this year and we anticipate starting the construction bidding process in January 2019. Completion of the construction is expected to be in January 2020, about 3 months ahead of the Reservoir and Dam completion.

San Juan Watershed Project

No new information to report.

Other Information on South County Projects:

If any agencies would like to have updates included herein on any projects within your service area, please email the updates to Karl Seckel at kseckel@mwdoc.com.

Summary Report for The Metropolitan Water District of Southern California Board Meeting October 9, 2018

COMMITTEE ASSIGNMENTS

None. (Agenda Item 5C)

FINANCE AND INSURANCE COMMITTEE

Approved amendments to the Administrative Code set forth in Attachment 2 of the board letter to reflect the changes recommended by the letter. (**Agenda Item 8-1**)

ENGINEERING AND OPERATIONS COMMITTEE

Appropriated a total of \$290 million for projects identified in the Capital Investment Plan (CIP) for Fiscal Years (FYs) 2018/19 and 2019/20; authorized the General Manager to initiate or proceed with work on all capital projects identified in the CIP for FYs 2018/19 and 2019/20 subject to any limits on the General Manager's authority and CEQA requirements; and amended the Administrative Code to (a) allow for an appropriation of planned CIP expenditures following the adoption of the biennial budget, require review of the proposed CIP by the Engineering and Operations Committee prior to the adoption of the biennial budget and appropriation of planned CIP expenditures, and authorize work on all capital projects identified in the CIP subject to the requirements of CEQA and limits on the General Manager's authority; and delegated responsibility to the General Manager to determine whether a project is exempt from CEQA. (Appropriation No. 15509) (Agenda Item 8-2)

Appropriated \$56.4 million; awarded \$38,539,196 contract to Environmental Construction, Inc. to rehabilitate the west treatment basins and filter building at the Diemer plant; awarded \$3,532,700 contract to Flowserve Corporation to refurbish filter valve actuators; authorized construction of water sampling system improvements at the Diemer plant; authorized increase of \$300,000 to an agreement with Ninyo & Moore, for a new not-to-exceed total of \$736,000, to provide environmental support. (Appropriations Nos. 15380 and 15436) (Agenda Item 8-3)

Appropriated \$6.5 million; and awarded \$4,674,444 million contract to Bosco Constructors, Inc. to replace concrete panels along the Colorado River Aqueduct and at Iron Mountain Reservoir. (Appropriation No. 15483) (**Agenda Item 8-4**)

WATER PLANNING AND STEWARDSHIP COMMITTEE

Approved an interim Local Resources Program target yield of 170,000 AFY of new water. (**Agenda Item 8-5**)

LEGAL AND CLAIMS COMMITTEE

Authorized the General Counsel to increase the amount payable under its agreement with Ryan & Associates by \$100,000 to an amount not to exceed \$200,000. (**Agenda Item 8-6**)

CONSENT CALENDAR

In other actions, the Board:

Authorized preparation of a Climate Action Plan; and authorized agreement with Rincon Consultants, Inc.

(Agenda Item 7-1)

Appropriated \$1.15 million; authorized design to upgrade the audiovisual systems in the board and committee rooms at Metropolitan's Headquarters Building; and authorized increase of \$610,000 to an agreement with IBI Group, for a new not-to-exceed total of \$1.5 million, for specialized design services. (**Agenda Item 7-2**)

Appropriated \$1.5 million; authorized design to replace sodium hypochlorite tanks at Lake Mathews; authorized preliminary design to rehabilitate the interconnection between the Sepulveda Feeder and the West Basin Feeder; and authorized design of electrical upgrades at the interconnection between the Sepulveda Feeder and the East Valley Feeder. (Appropriation No. 15503) (Agenda Item 7-3)

Appropriated \$200,000; and authorized preliminary design to improve hazardous waste storage at the La Verne site. (Appropriation No. 15505) (**Agenda Item 7-4**)

OTHER MATTERS

The Board:

Reported from Executive Committee on nominations for Board Chairman. (Agenda Item 5E)

Director Gloria Gray was elected Board Chair for two-year term effective January 1, 2019. (**Agenda Item 5F**)

Discussed Department Head Performance Evaluations. (Agenda Item 10-1)

Reported on Department Head 2018 Salary Survey. (Agenda Item 10-2)

Discussed and approved Compensation Recommendations for General Manager, General Counsel, and General Auditor. (**Agenda Item 10-3**)

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

All current month materials, before they are moved to the Board Letter Archive, are available on the public website here: http://mwdh2o.com/WhoWeAre/archived-board-meetings





Revision No. 1

Adjourned Board Meeting

November 6, 2018

12:00 p.m. - Boardroom

November 6, 2018 Adjourned Meeting Schedule			
9:00 a.m.	ADJ L&C	Rm. 2-145	
10:00 a.m.	ADJ WP&S	Rm. 2-456	
12:00 p.m.	ADJ Board Mtg	Boardroom	

MWD Headquarters Building

700 N. Alameda Street

Los Angeles, CA 90012

1. Call to Order

(a) Invocation: Ron Dominguez, Senior IT Infrastructure Administrator, Information Technology

(b) Pledge of Allegiance: Director Tim Smith,

San Diego County Water Authority

2. Roll Call

3. Determination of a Quorum

4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Gov. Code § 54954.3(a)

5. OTHER MATTERS

- A. Approval of the Minutes of the Meeting for October 9, 2018 (A copy has been mailed to each Director)
 Any additions, corrections, or omissions
- B. Report on Directors' events attended at Metropolitan expense for month of October
- C. Approve committee assignments
- D. Chairman's Monthly Activity Report

- E. Induction of new Director Yazden Emrani from the City of San Fernando
 - (a) Receive credentials
 - (b) Report on credentials by General Counsel
 - (c) File credentials
 - (d) Administer Oath of Office
 - (e) File Oath
- F. Approve Commendatory Resolution for Director Sylvia Ballin representing the City of San Fernando
- G. Authorize preparation of Commendatory Resolution for Association of California Water Agencies Executive Director Tim Quinn for his service to the water community
- H. Report from Executive Committee on nominations for Board Secretary
- I. Nomination and Election for Board Secretary for two-year term effective January 1, 2019

6. DEPARTMENT HEADS' REPORTS

- A. General Manager's summary of activities for the month of October
- B. General Counsel's summary of activities for the month of October
- C. General Auditor's summary of activities for the month of October
- D. Ethics Officer's summary of activities for the month of October

7. CONSENT CALENDAR ITEMS — ACTION

- 7-1 Approve The Metropolitan Water District of Southern California's salary schedules pursuant to CalPERS regulations; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA
- 7-2 Review and consider the Lead Agency's adopted Mitigated Negative Declaration and adopt the Lead Agency's findings, and adopt resolution for Eastern 109th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan. (F&I)
- 7-3 Adopt Resolution for Eastern 110th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (F&I)

END OF CONSENT CALENDAR

8. OTHER BOARD ITEMS — ACTION

- 8-1 Approve and authorize the distribution of Appendix A for use in the issuance and remarketing of Metropolitan's Bonds; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (F&I)
- Award \$43,998,000 contract to Bernards Bros., Inc. for seismic upgrades and building improvements for Metropolitan's Headquarters Building; award \$620,713 contract to R&F Rolapp Enterprises, Inc. for staff relocation services; and authorize: (1) agreement with Lee & Ro, Inc. for a not-to-exceed amount of \$2.5 million, for specialized inspection support; (2) increase of \$3.98 million to an agreement with ABS Consulting, Inc., for a new not-to-exceed total of \$11.58 million for technical support; and (3) increase of \$245,000 to an agreement with IBI Group, for a new not-to-exceed total of \$1,135,000, for technical support; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA. (E&O)

- 8-3 Review and consider Addendum No. 2 to the 2017 Program Environmental Impact Report, and award \$14,536,130 contract to J. F. Shea Construction, Inc. to rehabilitate a portion of the Second Lower Feeder. (E&O)
- 8-4 Review and consider Addendum No. 2 to the 2014 Mitigated Negative Declaration, and award \$6,967,500 contract to Michels Pipeline Construction to replace the lining in a portion of the Orange County Feeder. (E&O)
- 8-5 Adopt CEQA determination that the proposed action was previously addressed in the certified Program Environmental Impact Report and award \$2,606,700 contract to Minako America Corporation for electrical upgrades at 15 structures. Authorize an agreement with Kennedy/Jenks Consultants, Inc., with a not-to-exceed amount of \$2,037,000, for technical support of electrical upgrades at 290 structures within the Orange County operating region; the General Manager has determined that this proposed action is exempt or otherwise not subject to CEQA. (E&O)
- Approve amendments to the Water Use Efficiency Guidelines for proposed annexations in Metropolitan's Administrative Code Sections 3107 and 2700; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (WP&S) [To be mailed separately]
- 8-7 Approve amendments to the Administrative Code to clarify the Ethics Officer Reporting Structure and Duties and to establish the Audit and Ethics Committee as a Standing Committee of the Board; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (A&E)

9. BOARD INFORMATION ITEMS

- **9-1** Update on Conservation Program
- 9-2 Overview of agreements related to drought contingency planning in the Colorado River Basin. (WP&S) [To be mailed separately]

9-3 Information on proposed approach to increasing conservation in Disadvantaged Communities. (WP&S)

10. OTHER MATTERS

Added

a. Review of Settlement Proposal received from SDCWA and Report on San Diego County Water Authority v. Metropolitan Water District of Southern California, et al., San Francisco County Superior Court Case Nos. CPF-10-510830, CPF-12-512466, CPF-14-514004, CPF-16-515282, CPF-16-515391 and CGC-17-563350; the appeal of the 2010 and 2012 actions, Court of Appeal for the First Appellate District Case Nos. A146901 and A148266 and California Supreme Court Case No. S243500; the petition for extraordinary writ in the 2010 and 2012 actions, Court of Appeal for the First Appellate District Case No. A155310; the petition for extraordinary writ in the second 2016 action, Court of Appeal for the First Appellate District Case No. A154325 and California Supreme Court Case No. S251025; and Los Angeles County Superior Court Case No. BS173868. [Conference with legal counsel - existing litigation; to be heard in closed session pursuant to Gov. Code Section 54956.9(d)(1)]

11. FOLLOW-UP ITEMS

12. FUTURE AGENDA ITEMS

13. ADJOURNMENT

NOTE: Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parentheses at the end of the description of the agenda item e.g., (E&O, F&I). Committee agendas may be obtained from the Board Executive Secretary.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site http://www.mwdh2o.com.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.