



**F&I Committee**

Vacant, Chair  
R. Record, Vice Chair  
S. Blois  
L. Dick  
S. Faessel  
S. Goldberg  
P. Hawkins  
F. Jung  
A. Ortega  
T. Quinn  
M. Ramos  
T. Smith  
S. Tamaribuchi

**Finance and Insurance Committee**

Meeting with Board of Directors \*

**September 13, 2021**

**9:30 a.m.**

**Monday, September 13, 2021  
Meeting Schedule**

09:30 a.m. - F&I  
10:30 a.m. - E&O  
12:30 p.m. - WP&S  
02:00 p.m. - C&L  
03:00 p.m. - OP&T

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**Public Comment Via Teleconference Only:** Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via teleconference only. To participate call (404) 400-0335 and use Code: 9601962.

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\* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

- 1. Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))**

**\*\* CONSENT CALENDAR OTHER ITEMS -- ACTION \*\***

- 2. CONSENT CALENDAR OTHER ITEMS - ACTION**

- A.** Approval of the Minutes of the Adjourned Meeting of the Finance and Insurance Committee held August 16, 2021

[21-425](#)

**Attachments:** [09132021 FI 2A Minutes](#)

- 3. CONSENT CALENDAR ITEMS - ACTION**

None

**\*\* END OF CONSENT CALENDAR ITEMS \*\***

**4. OTHER BOARD ITEMS - ACTION**

None

**5. BOARD INFORMATION ITEMS**

- 9-4** Report on Rate Refinement Workgroup's Review of Demand Management Cost Recovery Alternatives **[21-419](#)**

**Attachments:** [09142021 FI 9-4 B-L.pdf](#)  
[09142021 FI 9-4 Presentation.pdf](#)

- 9-5** Mid-cycle Biennial Budget Review **[21-420](#)**

**Attachments:** [09142021 FI 9-5 BL.pdf](#)  
[09142021 FI 9-5 Presentation.pdf](#)

**6. COMMITTEE ITEMS**

None

**7. MANAGEMENT REPORTS**

- a.** Chief Financial Officer's report **[21-439](#)**

**8. FOLLOW-UP ITEMS**

None

**9. FUTURE AGENDA ITEMS****10. ADJOURNMENT**

**NOTE:** This committee reviews 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 the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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.

**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

**MINUTES**

**ADJOURNED FINANCE AND INSURANCE COMMITTEE**

**August 16, 2021**

Vice Chair Record called the teleconference meeting to order at 9:32 a.m.

Members present: Vice Chair Record, Directors Blois, Dick, Faessel, Goldberg, Jung, Ortega, Quinn, Ramos, Smith, and Tamaribuchi.

Members absent: Hawkins

Other Board Members present: Directors Abdo, Ackerman, Atwater, Butkiewicz, Dennstedt, Erdman, Fellow, Hogan, Kurtz, Lefevre, Morris and Peterson.

Committee Staff present: Atkins, Beatty, Hagekhalil, Kasaine, Scully, and Upadhyay

**1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION**

None

**2. OTHER MATTERS**

5G      Subject:      Report on list of certified assessed valuations for fiscal year 2021/22 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 17, 2021

Presenter:      Samuel Smalls, Manager of Treasury & Debt Management

Ms. Kasaine introduced the item and Mr. Smalls presented the committee with an update of the current assessed valuations. There were no changes to Director entitlements for each Member Agency relative to last fiscal year. The vote entitlement for fiscal year 2021/22 meets the minimum requirement established by AB 1220. Vote entitlements had modest changes among sixteen Member Agencies, ranging from +0.08% to -0.07%.

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| <b>CONSENT CALENDAR ITEMS — ACTION</b> |
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### 3. CONSENT CALENDAR OTHER ITEMS – ACTION

- A. Subject: Approval of the Minutes of the Meeting of the Finance and Insurance Committee held June 7, 2021

### 4. CONSENT CALENDAR ITEMS – ACTION

- 7-1 Subject: Adopt resolution establishing the tax rate for fiscal year 2021/22; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Motion: Adopt resolution establishing the tax rate for fiscal year 2021/22

Presented by: Samuel Smalls, Manager of Treasury & Debt Management

Ms. Kasaine introduced the item and Mr. Smalls presented the committee with an overview of the process by which the ad valorem tax rate is determined and adopted. The tax rate will continue to be maintained at 0.0035 percent as approved in the annual budget by the Board.

The following Director provided comments or asked questions:

1. Goldberg

Director Goldberg stated that the San Diego County Water Authority submitted a letter to Metropolitan on this item and requested it be entered into the record.

Staff responded to Director Goldberg's question.

After completion of the presentations, Director Dick made a motion, seconded by Director Blois, to approve the consent calendar consisting of items 3A and 7-1.

The vote was:

|              |   |
|--------------|---|
| Ayes:        | Directors Blois, Dick, Faessel, Goldberg, Jung, Ortega, Quinn, Ramos, Record, Smith and Tamaribuchi |
| Noes:        | None  |
| Abstentions: | None  |
| Absent:      | Director Hawkins  |

The motion for items 3A and 7-1 passed by a vote of 11 ayes, 0 noes, 0 abstain, and 1 absent.

|                                      |
|--------------------------------------|
| <b>END OF CONSENT CALENDAR ITEMS</b> |
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**5. OTHER BOARD ITEMS – ACTION**

None

**6. BOARD INFORMATION ITEMS**

None

**7. COMMITTEE ITEMS**

- a.     Subject:             Quarterly Financial Report  
Presented by:     Bernadette Robertson, Manager of Treasury and Debt Management

Ms. Kasaine introduced the item and Ms. Robertson presented the committee with the preliminary financial results for 2021. Water transactions and revenues were lower than budget but were offset by tax revenues that were higher than budget. Operating expenses were also lower than budget.

The following Directors provided comments or asked questions:

1. Smith
2. Ortega

Staff responded to Director questions and comments.

- b.     Subject:             Quarterly Investment Activities Report  
Presented by:     Sarah Meacham, PFM Asset Management LLC

Mr. Smalls introduced the item and Ms. Meacham presented the committee with an overview of Metropolitan's liquidity and core portfolios. She discussed the market environment and its impact on Metropolitan's credit quality, sector allocation, maturities, and total returns. Portfolios are performing well due to broad diversification and a long-term strategy that safely generates incremental earnings resulting in our investments beating the benchmark.

The following Director provided comments or asked questions:

1. Dennstedt

Ms. Meacham responded to Director questions and comments.

**8. MANAGEMENT REPORT**

- a. Subject: Chief Financial Officer's report

Ms. Kasaine stated that she had nothing to report. Mr. Smalls submitted to the committee that the investment policy had been compiled with input from the Legal Department to ensure compliance.

**9. FOLLOW-UP ITEMS**

None

**10. FUTURE AGENDA ITEM**

Director Ortega requested a list of non-budgeted items approved by the Board. Director Smith requested Metropolitan consider cost containment measures and explore new revenue streams to combat the reduction in income from lower water sales.

**11. ADJOURNMENT**

Next meeting will be held on September 13, 2021.

Meeting adjourned at 10:26 a.m.

Randy Record  
Vice Chair



- **Board of Directors**  
***Finance and Insurance Committee***

9/14/2021 Board Meeting

9-4

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**Subject**

Report on Rate Refinement Workgroup's Review of Demand Management Cost Recovery Alternatives

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**Executive Summary**

Metropolitan's demand management program consists of the Conservation program, the Local Resources Program (LRP), and the Future Supply Actions program. For the past five years, the total annual demand management revenue requirement budget has been \$96 million on average, made up of approximately \$34 million for conservation, \$38 million for LRP, \$2 million for Future Supply Actions, and \$23 million for departmental operations & maintenance (O&M) net of interest income. The Ten-year forecast in the current biennial budget projects those costs to increase to \$151 million by fiscal year (FY) 2030/31, which does not include the potential increase in conservation due to the present drought emergency. While the Board has discretion to increase or decrease the budget for conservation (except any contractual commitments), Future Supply Actions, and planned LRP that are not yet approved, Metropolitan has a nondiscretionary obligation to pay on LRP agreements that are already under contract.

Currently, Metropolitan is not collecting revenues to fund its demand management costs; those costs are being paid from reserves in the Water Stewardship Fund, which will run out by mid-FY 2022/23. While the Board, staff, and member agency representatives have undergone various processes to evaluate the most appropriate cost recovery method of demand management costs going forward, consensus on one alternative has not yet been reached. In this letter, staff presents a summary of the ongoing Member Agency Rate Refinement Workgroup's review of demand management alternatives for further discussion by the Board.

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**Details**

**Background**

*Demand Management Overview*

Metropolitan's Integrated Resources Plan (IRP) evaluates the total projected need for water within its service area and accounts for all water available within the service area, including water produced or imported by other water agencies and all conservation within the service area. The IRP is a comprehensive view of all water resources and demands within the service area to determine the potential wholesale demand on Metropolitan by the 26 member agencies. The purpose of demand management as it relates to Metropolitan's service was explained in the 1996 IRP, followed by further analysis and support in the 2004, 2010, and 2015 IRP Updates and the 2017 IRP Policy Principles. Local projects and increased conservation were ways to reduce the need for Metropolitan to increase imported supplies and offset the need to transport or store additional water into or within the Metropolitan service area, reducing infrastructure costs. Since 1999, the legislature has also directed Metropolitan to expand conservation, recycling, and groundwater recovery efforts as a result of SB 60 (Hayden), and therefore, Metropolitan's demand management program also serves and meets the legal direction to expand those efforts.

The actual production and use of local resources and conservation of water under Metropolitan's demand management programs takes place at the member agency or end-user level, meaning they produce or conserve water for their own use and the water is not Metropolitan's. Although water produced in local projects is not available for Metropolitan to deliver and water conserved may not necessarily proportionately reduce member agencies' demands on Metropolitan, managing regional demand was intended and has shown to reduce overall

demands on Metropolitan by its member agencies. **As a result, Metropolitan's demand management programs benefit all member agencies regardless of project location. These programs help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on Metropolitan's infrastructure and reduce system costs that would have resulted if Metropolitan were required to import additional water, and free up conveyance capacity to the benefit of all system users.**

Records show that Metropolitan's demand management programs have significantly increased Southern California's ability to manage long-term drought and climate change. Demand management has reduced demand for imported supplies, which reduces the costs to build, expand, operate, maintain, and refurbish facilities. This has a regional benefit for all member agencies throughout Southern California and will continue to be needed going forward as the Board and management have continued to indicate. **However, these programs need a clearly identified funding source, which has not yet been adopted by the Board.**

#### Background of Cost Allocation of Demand Management Costs

Since 2003, the Water Stewardship Rate (WSR) has been a component of: (1) the full-service rate for water purchases; (2) the pre-set wheeling rate effective through August 18, 2020; and (3) until its suspension beginning in 2018, the contractual price for the exchange agreement with San Diego County Water Authority. The WSR has been used to fund Metropolitan's demand management programs, including conservation device rebates, turf removal, customized member agency administered programs, advertising to promote conservation, new programs within disadvantaged communities, pilot programs for stormwater capture, and incentive payments for LRP projects. The WSR rate element was established when the Board adopted a revised unbundled rate structure in 2001, effective 2003. The unbundled rate structure divided costs according to Metropolitan's operational functions and allocated those costs to various rate components: the variable components consist of Supply Rate (Tiers 1 and 2), System Access Rate (SAR), System Power Rate (SPR), and the WSR, and the volumetric-based fixed charges consist of the Readiness-to-Serve (RTS) Charge and Capacity Charge. Each volumetric rate component was assigned to either supply or transportation. Supply rates are recovered only through Metropolitan's full-service rates for sales to its member agencies, and the transportation rates, including the WSR, were previously recovered from transactions using Metropolitan's system, including sales, wheeling, and exchanges. **The assignment of the WSR as a transportation rate was based on Metropolitan's 1996 IRP 25-year capital plan, determining that investment in region-wide demand management would be more cost effective and avoid or defer additional capital investment that would be necessary to meet projected demands.**

In 2018, before the closing of the 1996 IRP 25-year capital planning period and after the decision on the 2011-2014 WSR in *San Diego County Water Authority v. Metropolitan*, 12 Cal.App.5th 1124 (2017), staff proposed, and the Board approved, a cost allocation study for demand management costs going forward. Staff retained consultants and underwent a cost allocation study based on the operational function of demand management for Metropolitan based on the operational and resource circumstances today and going forward.

In December 2019, staff presented demand management cost recovery alternatives to the Board resulting from the consultants' work, but the Board did not select any of those alternatives. Instead, the Board directed staff to use the balance of the Water Stewardship Fund to fund demand management costs for the FYs 2020/21 and 2021/22 biennial budget and to not incorporate into the calendar years (CYs) 2021 and 2022 rates and charges any demand management cost recovery mechanism. The Board directed staff to work with member agency managers in a rate refinement process to address many issues related to budget and rates, including a cost recovery mechanism for demand management. Because the balance of the Water Stewardship Fund is expected to be depleted by January 2023, the rate refinement workgroup prioritized demand management cost recovery and the status of the group's work is provided in this letter.

#### Financial Outlook for Demand Management Funding

Due to the Board's direction to use reserves from the Water Stewardship Fund to fund all demand management program costs in the FYs 2020/21 and 2021/22 Biennial Budget, to determine the financial outlook of demand management funding, it is important to review the projected expenditures from that fund and the forecasted revenues potentially available in CY 2023 to begin replenishing the fund.



Tables 1 and 2 provide information regarding the budgeted and projected demand management expenditures in the budget and the ten-year forecast. Table 1 highlights the LRP expenditures and Table 2 shows expenditures for all demand management programs.

**Table 1. Budgeted and Projected Local Resources Program Expenditures**

based on fiscal years 2020/21 and 2021/22 biennial budget and 10 year financial forecast, in million of dollars

| <b>Fiscal Year Ending</b>                  | <b>2022</b>  | <b>2023</b>  | <b>2024</b>  | <b>2025</b>  | <b>2026</b>  | <b>2027</b>  | <b>2028</b>  | <b>2029</b>  | <b>2030</b>  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Estimated cost of contracted LRP projects  | \$ 18        | \$ 22        | \$ 22        | \$ 26        | \$ 27        | \$ 31        | \$ 31        | \$ 30        | \$ 29        |
| On-Site Retrofit Program                   | 2            | 3            | 3            | 3            | 3            | 3            | 3            | 3            | 3            |
| Future Projects to meet 170,000 IRP Target | -            | 1            | 6            | 11           | 16           | 22           | 27           | 32           | 38           |
| <b>Total Local Resources Program</b>       | <b>\$ 20</b> | <b>\$ 25</b> | <b>\$ 31</b> | <b>\$ 40</b> | <b>\$ 47</b> | <b>\$ 55</b> | <b>\$ 61</b> | <b>\$ 65</b> | <b>\$ 70</b> |

The projected cost for LRP projects is shown on the first line in Table 1, based on estimated production and incentive rate for existing LRP contracts when the FYs 2020/21 and 2021/22 budget was prepared. O&M costs are included in the Table as well. After adoption of the budget, the Board approved two new LRP agreements for a total of 113 LRP projects, and those costs are included in the ten-year projections shown here. The third row in Table 1 shows the estimated cost of future projects (including those approved after the budget was adopted) needed to meet the 170,000 acre-feet (AF) IRP goal. Total LRP costs are expected to increase from \$19 million in FY 2020/21 to \$70 million in FY 2029/30. The LRP budget also includes \$2 million to \$3 million per year for the on-site retrofit program.

**Table 2. Total Budgeted and Projected Demand Management Expenditures**

based on fiscal years 2020/21 and 2021/22 biennial budget and 10 year financial forecast, in million of dollars

| <b>Fiscal Year Ending</b>                    | <b>2022</b>  | <b>2023</b>  | <b>2024</b>   | <b>2025</b>   | <b>2026</b>   | <b>2027</b>   | <b>2028</b>   | <b>2029</b>   | <b>2030</b>   |
|--|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Local Resources Program                      | \$ 20        | \$ 25        | \$ 31         | \$ 40         | \$ 47         | \$ 55         | \$ 61         | \$ 65         | \$ 70         |
| Conservation Program                         | 43*          | 43           | 43            | 43            | 43            | 43            | 43            | 43            | 43            |
| Future Supply Actions / Stormwater Pilot     | 7            | 3            | 2             | 2             | 2             | 2             | 2             | 2             | 2             |
| O&M costs net of interest income             | 23           | 26           | 28            | 30            | 31            | 34            | 34            | 35            | 37            |
| <b>Demand Management Revenue Requirement</b> | <b>\$ 93</b> | <b>\$ 97</b> | <b>\$ 104</b> | <b>\$ 115</b> | <b>\$ 123</b> | <b>\$ 133</b> | <b>\$ 139</b> | <b>\$ 144</b> | <b>\$ 151</b> |

\* The FY 2021/22 conservation budget is \$24M. \$43 reflects the appropriation.

Table 2 shows the total demand management revenue requirement, which refers to all demand management costs including LRP, conservation, Future Supply Actions, Stormwater Pilot Program, and the O&M to support those programs. The O&M component includes costs from Water Resource Management, External Affairs, administrative and general costs from other groups, professional services, and other operating costs offset by interest income. In total, total demand management costs are expected to increase from almost \$93 million in FY 2021/22 to \$151 million in FY 2029/30.

Table 3 shows the overall adopted and estimated rate increases for all rates and charges necessary to meet all revenue requirements at Metropolitan. The second line shows the \$65/AF WSR for 2020 and for CYs 2023-2030, a placeholder rate is used to show recovery of demand management costs (the hypothetical Demand Management Rate). For illustrative purposes, we have assumed a completely variable rate that applies to all forecasted water transactions. The \$53/AF Demand Management Rate in 2023 represents the entire 5 percent overall rate increase for that year (based on 1.60 million acre-feet (MAF) of water transactions). No increases to other rates or charges are reflected for 2023. A \$53/AF rate may not generate enough revenue to recover the full cost of demand management in FY 2022/2023. Establishing a revenue collection mechanism equivalent to the current \$65/AF in 2023 would require a 6.1 percent overall rate increase.

**Table 3. WSR and Placeholder Demand Management Rate (CY)**

| Calendar Year                                   | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Overall Rate Increase for all Rates and Charges |      | 3%   | 4%   | 5%   | 5%   | 4%   | 3%   | 3%   | 3%   | 3%   | 3%   |
| Demand Management Rate* (\$/AF)                 | \$65 | -    | -    | \$53 | \$65 | \$71 | \$73 | \$79 | \$82 | \$84 | \$89 |

\* The 2020 \$65/AF rate is the WSR, for CYs 2023-2030 the rate represent only a placeholder until the Board approves a method to recover demand management costs.

The \$53/AF represents the entire 5% rate increase for 2023.

Table 4 shows the revenues that would be generated from the hypothetical Demand Management Rate shown in Table 3.

**Table 4. Placeholder Demand Management Rate Revenues (FY)**

| Fiscal Year Ending               | 2021  | 2022 | 2023  | 2024  | 2025   | 2026   | 2027   | 2028   | 2029   | 2030   |
|----------------------------------|-------|------|-------|-------|--------|--------|--------|--------|--------|--------|
| Demand Management Revenues (\$M) | \$ 46 | \$ - | \$ 39 | \$ 96 | \$ 115 | \$ 125 | \$ 132 | \$ 140 | \$ 145 | \$ 151 |

Table 4 is in fiscal years so there can be two different calendar year rates in effect during that FY, as forecasted in Table 3.

In Table 5, one can see the impact of the demand management revenue requirements and the projected demand management revenues on the Water Stewardship Fund balance. When subtracting the demand management revenue requirement from the demand management revenues, it shows the amount of over/(under) collection. The June 30, 2021 Water Stewardship Fund balance was \$125 million. For the second year of the current biennial budget period, the \$74 million estimated under-collection will come from the Water Stewardship Fund balance. It is projected that at the end of the current biennial budget period (end of FY 2021/22), the Water Stewardship Fund balance will be only \$50 million. Thereafter, in FY 2022/23, the placeholder Demand Management Rate of \$53/AF is anticipated to not generate enough revenue to fund the demand management programs and there would not be enough funds in the Water Stewardship Fund. As such, in FY 2022/23, there would be an estimated \$26 million shortfall. Under this placeholder scenario, shortfalls would continue through the end of FY 2024/25. This analysis does not account for any additional demand management spending the Board may approve to deal with the present emergency drought.

**Table 5. Water Stewardship Fund (WSF) (FY)**

| Fiscal Year Ending                           | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|--|------|------|------|------|------|------|------|------|------|------|
| Demand Management Revenues (\$M)             | 46   | -    | 39   | 96   | 115  | 125  | 132  | 140  | 145  | 151  |
| Demand Management Revenue Requirements (\$M) | 54   | 93   | 97   | 104  | 115  | 123  | 133  | 139  | 144  | 151  |
| Over/(under) collection (\$M)                | (8)  | (93) | (57) | (8)  | (1)  | 2    | (2)  | 1    | 1    | (0)  |
| End of year WSF Balance (\$M)                | 125  | 31   | -    | -    | -    | 2    | 1    | 2    | 3    | 2    |
|  |      |      | 26   | 8    | 1    | -    | -    | -    | -    | -    |

The Demand Management Rate does not generate enough revenue to fund the entire program and the WSF has been depleted.

Projected shortfalls in the Water Stewardship Fund balance can be met by: (1) taking actions to reduce demand management costs; (2) establishing a higher rate, charge, or other revenue collection mechanism that generates more revenues; or (3) establishing a replacement demand management revenue collection mechanism that goes into effect earlier than CY 2023.

*Review of Demand Management Cost Recovery Alternatives Presented to the Board and to the Rate Refinement Workgroup*

Pursuant to the Board's direction, Metropolitan undertook a demand management cost allocation study. Documents relating to that study are available at <https://www.mwdh2o.com/who-we-are/budget-finance/demand-management-cost-allocation/>. In the first phase of the study, Metropolitan, along with its consultant, Peter Mayer of WaterDM, reviewed and determined the function of demand management within Metropolitan's services.

Managing demand is a core utility function of public water providers. Metropolitan's conservation and local water resource development programs comply with the California State Legislature's unique direction to Metropolitan through Senate Bill 60, signed into law in 1999, to increase local resource efforts. Metropolitan's demand management programs also supported the region's compliance with the requirements of Senate Bill X7-7, passed in 2009, which was enacted to reduce urban per capita water use by 2020. Additionally, demand management helps urban water retail providers in the region comply with the future targets under SB 1668 and SB 606 implementing the Long-Term Efficiency Framework. Demand management is a powerful tool for providing a diverse and reliable water service across the region because the actual dollars spent on demand management expenditures avoid spending even more dollars on infrastructure and resources.

The WaterDM Report recognizes the role of demand management within Metropolitan's wholesale water services and assigns demand management costs (the expenses incurred) to certain functions within Metropolitan's operations. Unlike the operational circumstances in 1996, which were forecast to extend for 25 years, Metropolitan's current operations and projections going forward do not anticipate capital expansion. Instead, Mr. Mayer found that current planning documents reflect the success of past demand management efforts, resulting in a long-term demand reduction. Metropolitan decided to continue to incorporate demand management on an ongoing basis to continue to avoid and reduce the need to import water supplies that would then necessitate improvements, refurbishment, additional operations and maintenance, and expansion of Metropolitan's current integrated system. **It would not be possible under any scenario to import water into the service area without using the statewide system that transports water to the 26 member agencies. Accordingly, Mr. Mayer determined that the operational function of demand management includes the supply, conveyance and aqueduct, distribution, and storage operational functions.**

In the second phase, Metropolitan's consultant, Rick Giardina of The Raftelis Group, reviewed and coincided with the functional assignment of demand management costs proposed in the WaterDM Report. Mr. Giardina proposed four alternatives for demand management cost recovery. **Three of the alternatives (#1, #2, and #3A) apply the functionalization of demand management costs proposed in Mr. Mayer's work, meaning demand management costs are allocated based on the function demand management serves within Metropolitan's operations and recovered based on system utilization.** The fourth alternative (#3B), shown with two different metrics, does not require the functionalization of demand management costs as costs are not recovered based on system usage but other metrics like population or assessed valuation. The alternatives are summarized in Table 1.

**Table 1. Demand Management Cost Recovery Alternatives from Raftelis**

| Cost Recovery Component  | Approx % of DM Costs <sup>1</sup> | Billing Determinant    | Charge / Rate |
|--|-----------------------------------|------------------------|---------------|
| Alt 1 - Existing COS Methodology                                     |                                   |                        |               |
| T1 Supply  | 25%                               | Sales                  | \$/AF         |
| System Access Rate   | 75%                               | All Transactions       | \$/AF         |
| Alt 2 - Modified COS Methodology                                     |                                   |                        |               |
| T1 Supply  | 25%                               | Sales                  | \$/AF         |
| System Access Rate   | 50%                               | All Transactions       | \$/AF         |
| System Power Rate  | 13%                               | All Transactions       | \$/AF         |
| Readiness-to-Serve Charge  | 10%                               | Existing RTS           | \$/M          |
| Capacity Charge  | 2%                                | Existing CC            | \$/cfs        |
| Alt 3A - Functionalized Fixed Charge                                 |                                   |                        |               |
| Supply Portion   | 100%                              | 10-yr Avg Sales        | Fixed \$      |
| Transportation Portion   |                                   | 10-yr Avg Transactions |               |
| Alt 3B - Non-Functionalized Fixed Charge based on Population         |                                   |                        |               |
|  | 100%                              | Population             | Fixed \$      |
| Alt 3B - Non-Functionalized Fixed Charge based on Assessed Valuation |                                   |                        |               |
|  | 100%                              | Assessed Valuation     | Fixed \$      |

<sup>1</sup> Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ

The approximate percentages of demand management costs recovered in the alternatives are hypothetical as the actual functionalization of costs is dependent on the prospective cost-of-service analyses and budgeted expenditures. The approximate percentages are provided so member agencies can get a sense of how the alternatives might impact them. Importantly, when the Board approves a demand management cost recovery method, it will approve a methodology, *not specific percentages or budgeted demand management expenditures*. Under any of the proposed alternatives, there would no longer be a volumetric Water Stewardship Rate component in Metropolitan's rate structure and no alternative proposes a 100 percent allocation to transportation going forward due to changed circumstances going forward.

Table 2 below shows the estimated member agency impacts of the proposed demand management cost recovery alternatives, in thousands of dollars. The analysis is prepared on a hypothetical Demand Management Revenue Requirement of \$100 million. The columns correspond to the alternatives listed in Table 1 above.

For purposes of computing member agency impacts, staff used a five-year average of total transactions and total sales to smooth the year-to-year variability that may occur, rather than data for one specific year, for Alternatives #1 and #2.

The alternatives presented affect member agencies differently, but generally Alternatives #1, #2, and #3A will result in higher allocations of costs to member agencies that purchase relatively more water from Metropolitan, or use the transportation system relatively more, than their share of population or assessed valuation.

**Table 2: Estimated Member Agency Impacts of Demand Management Cost Recovery Alternatives from Raftelis.** In thousands of dollars, based on hypothetical \$100 million demand management revenue requirement.

|                   | Alt #1 - Existing<br>COS | Alt #2 - Modified<br>COS | Alt #3A -<br>Functionalized<br>Fixed Charge | Alt #3B - Fixed<br>Charge,<br>Population | Alt #3B - Fixed<br>Charge, AV |
|-------------------|--------------------------|--------------------------|---|--|-------------------------------|
| Anaheim           | \$ 918                   | \$ 954                   | \$ 1,107                                    | \$ 1,920                                 | \$ 1,578                      |
| Beverly Hills     | 672                      | 680                      | 636   | 230                                      | 1,188                         |
| Burbank           | 933                      | 917                      | 836   | 570                                      | 810                           |
| Calleguas MWD     | 5,932                    | 6,009                    | 6,115                                       | 3,338                                    | 3,495                         |
| Central Basin MWD | 2,545                    | 2,572                    | 2,679                                       | 8,247                                    | 5,056                         |
| Compton           | 0                        | 11                       | 47  | 483                                      | 158                           |
| Eastern MWD       | 5,988                    | 6,053                    | 5,551                                       | 4,355                                    | 2,720                         |
| Foothill MWD      | 524                      | 532                      | 511   | 433                                      | 634                           |
| Fullerton         | 445                      | 458                      | 499   | 715                                      | 680                           |
| Glendale          | 1,005                    | 1,025                    | 1,006                                       | 979                                      | 1,091                         |
| Inland Empire     | 3,599                    | 3,650                    | 3,652                                       | 4,534                                    | 3,883                         |
| Las Virgenes MWD  | 1,296                    | 1,309                    | 1,245                                       | 371                                      | 850                           |
| Long Beach        | 1,963                    | 1,986                    | 1,921                                       | 2,506                                    | 1,724                         |
| Los Angeles       | 16,360                   | 16,726                   | 16,409                                      | 21,258                                   | 20,730                        |
| MWD OC            | 13,703                   | 13,775                   | 13,147                                      | 12,447                                   | 17,067                        |
| Pasadena          | 1,203                    | 1,215                    | 1,146                                       | 877                                      | 1,049                         |
| SDCWA             | 22,442                   | 21,644                   | 24,182                                      | 17,009                                   | 17,368                        |
| San Fernando      | 1                        | 1                        | 2   | 129                                      | 66                            |
| San Marino        | 60                       | 63                       | 51  | 70                                       | 222                           |
| Santa Ana         | 581                      | 599                      | 678   | 1,756                                    | 902                           |
| Santa Monica      | 238                      | 261                      | 335   | 495                                      | 1,276                         |
| Three Valleys MWD | 4,058                    | 4,084                    | 3,820                                       | 2,741                                    | 2,341                         |
| Torrance          | 1,010                    | 1,024                    | 973   | 721                                      | 992                           |
| Upper San Gabriel | 2,635                    | 2,494                    | 2,040                                       | 4,587                                    | 3,580                         |
| West Basin MWD    | 7,472                    | 7,484                    | 7,018                                       | 4,301                                    | 6,929                         |
| Western MWD       | 4,417                    | 4,475                    | 4,392                                       | 4,931                                    | 3,610                         |
| <b>Total</b>      | <b>\$ 100,000</b>        | <b>\$ 100,000</b>        | <b>\$ 100,000</b>                           | <b>\$ 100,000</b>                        | <b>\$ 100,000</b>             |

#### ***Alternative #1: Use Existing Cost-of-Service Methodology***

Alternative #1 uses Metropolitan's existing cost-of-service methodology with the updated functionalization assigning demand management to supply, transportation (conveyance & aqueduct, and distribution), and storage. Demand management expenditures are treated like other O&M expenditures, which are allocated to Fixed Commodity in the cost-of-service process. Fixed commodity costs are then distributed to volumetric rates, so demand management costs would be recovered through the Tier 1 Supply Rate and the System Access Rate (recovering transportation costs).

Under Alternative #1, those member agencies that purchase relatively more water or that use the conveyance and distribution system relatively more will pay more of the demand management costs. Alternative #1 utilizes only volumetric rates, so the revenues generated will vary as sales and transaction volumes vary.

#### ***Alternative #2: Modify Existing Cost-of-Service Methodology***

For Alternative #2, Metropolitan would modify its cost-of-service methodology to acknowledge that in the absence of demand management expenditures, Metropolitan would deliver more water and more expenditures would be required for power and capital financing costs, as well as O&M. Therefore, in addition to fixed commodity costs as in Alternative #1, demand management expenditures would also be allocated to fixed demand, fixed standby, and variable commodity. This results in expanding cost recovery to also include the System Power Rate, the Readiness-to-Serve Charge, and the Capacity Charge, as well as the rates in Alternative #1 (Tier 1 Supply Rate and SAR).

Under Alternative #2, those member agencies that purchase relatively more water or that use the conveyance and distribution system relatively more will pay more of the demand management costs. Alternative #2 primarily utilizes volumetric rates, so that a portion of the revenues generated will vary as sales and transaction volumes vary. Some revenue, estimated at 12 percent of demand management costs, will be recovered through the RTS Charge and the Capacity Charge and provide a more assured revenue stream.

#### ***Alternative #3A: Functionalized Fixed Charge***

Demand management costs are largely fixed in nature. The LRP incentives are provided under contractual commitments with terms from 15 to 25 years, and the Board has stated a desire that conservation programs (incentives and messaging) should be funded on a consistent basis, and not ramped up and down. Accordingly, Raftelis provided a fixed charge option.

Under Alternative #3A, Metropolitan would follow its cost-of-service process to functionalize demand management costs to the impacted functions. Those costs could then be aggregated and apportioned to member agencies based on selected metrics, or billing determinants. Under Alternative #3A, the costs are recouped through fixed charges, not volumetric rates. In Tables 1 and 2, costs functionalized as supply have been apportioned to member agencies based on each member agency's ten-year rolling average of all sales; costs functionalized as transportation-related have been apportioned to member agencies based on each member agency's ten-year rolling average of all transactions (sales, wheeling, and exchanges). The two amounts are then added to determine each member agency's total fixed charge.

Under Alternative #3A, those member agencies that have purchased relatively more water or that used the conveyance and distribution system relatively more over the last ten years will pay more of the demand management costs through their fixed charges, as their averages increase. Unlike Alternatives #1 and #2, the charge is fixed and will generate an assured revenue stream.

#### ***Alternative #3B: Non-Functionalized Fixed Charge***

Alternative #3B highlights that demand management costs are a necessary and legislatively directed activity that improves reliability for all water systems in Metropolitan's service area. By providing conservation incentives that reduce the use of local resources and LRP incentives that improve the reliability of local resources, offsetting the need to import water, even water systems without a physical connection to Metropolitan benefit. Therefore, Alternative #3B proposes a fixed charge to member agencies that aligns with the benefits of demand management for all member agencies based on water users in their service areas.

In the two examples for Alternative #3B, demand management costs are aggregated and apportioned to member agencies based first on population and then on assessed valuation. Both metrics provide a measure of the reliance—and potential reliance—for water service on Metropolitan. Other metrics, or a combination of metrics, could be used instead.

#### **2021 Rate Refinement Workgroup**

In December 2020, Metropolitan staff presented on the intent to form a workgroup to review Metropolitan's rate structure and develop recommendations for potential refinements for Board consideration. The priority of the Rate Refinement Workgroup's (Workgroup) meetings has been to establish a mechanism to recover demand management. **Metropolitan and staff from our member agencies have now participated in 12 workgroup meetings in which they prioritized updating the rate refinement principles to guide their review of all rate-related issues and the review of demand management cost recovery.** Through that process, the Workgroup reviewed and evaluated the alternatives presented by Raftelis and presented additional suggestions for cost recovery alternatives. Table 3 summarizes the alternatives developed by the Rate Refinement Workgroup.

**Table 3. Demand Management Cost Recovery Alternatives from Rate Refinement Workgroup**

| Cost Recovery Component  | Approx % of DM Costs | Billing Determinant | Charge / Rate |
|--|----------------------|---------------------|---------------|
| Alt 3B – Non-Functionalized Fixed Charge based on 50/50 Pop/AV | 50%                  | Population          | Fixed \$      |
|  | 50%                  | Assessed Valuation  |               |
| 100% Supply  |                      |                     |               |
| T1 Supply  | 100%                 | Sales               | \$/AF         |
| Variable Costs   |                      |                     |               |
| T1 Supply  | 22% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 78% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Tier 2                               |                      |                     |               |
| T1 Supply  | 58% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 42% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Drought                              |                      |                     |               |
| T1 Supply  | 76% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 24% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Historical Drought                   |                      |                     |               |
| T1 Supply  | 62% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 38% <sup>1</sup>     | All Transactions    | \$/AF         |

<sup>1</sup> Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

Similar to the Raftelis alternatives, the approximate percentages of demand management costs recovered in the Workgroup alternatives are hypothetical as the actual functionalization of costs is dependent on the prospective cost-of-service analyses and budgeted expenditures. The approximate percentages are provided so member agencies can get a sense of how the alternatives might impact them. Importantly, when the Board approves one of the alternatives, it will approve a methodology, not explicit percentages or budgeted demand management expenditures.

**Table 4** below shows the estimated member agency impacts of the proposed demand management cost recovery alternatives suggested by the Rate Refinement Workgroup, in thousands of dollars. The columns correspond to the alternatives listed in **Table 3** above.

For purposes of computing estimated member agency impacts, staff used a five-year average of total transactions and total sales to smooth the year-to-year variability that may occur, rather than data for one specific year, for the 100 percent Supply, Variable Cost, Short-term Marginal Cost – Tier 2 and Short-term Marginal Cost – Drought alternatives.

Each of the alternatives presented below suggested by the Rate Refinement Workgroup are 100 percent volumetric rates, except for the modification of Raftelis Alternative 3B with 50 percent Property Tax and 50 percent Population.

**Table 4: Estimated Member Agency Impacts of Demand Management Cost Recovery Alternatives from Rate Refinement Workgroup.** In thousands of dollars, based on hypothetical \$100 million demand management revenue requirement.

|                   | Alt #3B -<br>50/50<br>AV/Pop | 100%<br>Supply    | Variable<br>Cost  | Short Term<br>Marginal Cost<br>Tier 2 | Short Term<br>Marginal Cost<br>Drought | Short Term<br>Marginal Cost<br>Historical Drought |
|-------------------|------------------------------|-------------------|-------------------|---------------------------------------|--|---|
| Anaheim           | \$ 1,749                     | \$ 988            | \$ 896            | \$ 938                                | \$ 960                                 | \$ 944  |
| Beverly Hills     | 709                          | 724               | 656               | 687                                   | 703                                    | 691   |
| Burbank           | 690                          | 1,005             | 911               | 954                                   | 976                                    | 960   |
| Calleguas MWD     | 3,416                        | 6,387             | 5,793             | 6,064                                 | 6,206                                  | 6,100   |
| Central Basin MWD | 6,651                        | 2,741             | 2,486             | 2,602                                 | 2,663                                  | 2,617   |
| Compton           | 321                          | 0                 | 0                 | 0                                     | 0                                      | 0   |
| Eastern MWD       | 3,537                        | 6,447             | 5,847             | 6,121                                 | 6,265                                  | 6,157   |
| Foothill MWD      | 533                          | 564               | 512               | 536                                   | 548                                    | 539   |
| Fullerton         | 697                          | 479               | 435               | 455                                   | 466                                    | 458   |
| Glendale          | 1,035                        | 1,082             | 981               | 1,027                                 | 1,051                                  | 1,033   |
| Inland Empire     | 4,209                        | 3,875             | 3,515             | 3,679                                 | 3,766                                  | 3,701   |
| Las Virgenes MWD  | 610                          | 1,395             | 1,265             | 1,325                                 | 1,356                                  | 1,332   |
| Long Beach        | 2,115                        | 2,114             | 1,917             | 2,007                                 | 2,054                                  | 2,019   |
| Los Angeles       | 20,994                       | 17,616            | 15,976            | 16,725                                | 17,117                                 | 16,823  |
| MWDOC             | 14,757                       | 14,754            | 13,381            | 14,008                                | 14,337                                 | 14,090  |
| Pasadena          | 963                          | 1,295             | 1,175             | 1,230                                 | 1,258                                  | 1,237   |
| SDCWA             | 17,188                       | 16,491            | 24,261            | 20,715                                | 18,854                                 | 20,249  |
| San Fernando      | 98                           | 1                 | 1                 | 1                                     | 1                                      | 1   |
| San Marino        | 146                          | 64                | 58                | 61                                    | 62                                     | 61  |
| Santa Ana         | 1,329                        | 626               | 567               | 594                                   | 608                                    | 597   |
| Santa Monica      | 885                          | 256               | 232               | 243                                   | 249                                    | 244   |
| Three Valleys MWD | 2,541                        | 4,370             | 3,963             | 4,149                                 | 4,246                                  | 4,173   |
| Torrance          | 856                          | 1,087             | 986               | 1,032                                 | 1,057                                  | 1,038   |
| Upper San Gabriel | 4,084                        | 2,837             | 2,573             | 2,693                                 | 2,756                                  | 2,709   |
| West Basin MWD    | 5,615                        | 8,045             | 7,297             | 7,638                                 | 7,818                                  | 7,683   |
| Western MWD       | 4,271                        | 4,756             | 4,314             | 4,516                                 | 4,622                                  | 4,542   |
| <b>Total</b>      | <b>\$ 100,000</b>            | <b>\$ 100,000</b> | <b>\$ 100,000</b> | <b>\$ 100,000</b>                     | <b>\$ 100,000</b>                      | <b>\$ 100,000</b>                                 |

***Hybrid Alternative 3B: 50 percent Assessed Value/ 50 percent Population***

This alternative builds on the Raftelis Alternative 3B to create a new non-functionalized alternative that has half of the demand management costs collected via share of population and half via share of assessed value. As noted for Alternative 3B, both metrics provide a measure of the reliance—and potential reliance—for water service on Metropolitan. The costs are not functionalized, which is supported by the legislative directive to Metropolitan to engage in demand management programs.

***Alternative: 100 percent Supply***

This alternative functionalizes all demand management costs to the supply function. Based on both internal and external cost of service experts' review, reduction of Metropolitan's need to import water impacts more than its supply functions; it would not be possible to import water to meet additional demands without transporting, storing, and managing that process. Demand management functions to reduce capital costs for system expansion and reduces other O&M costs like power to move the water. This option excludes all other functions from demand management programs, which is not consistent with Metropolitan's consultants' analysis and conclusions regarding cost of service principles. Under this option, member agencies that purchase water would incur all the costs of demand management. There would be no cost recovery from current wheeling or exchange transactions.

***Alternative: Variable Cost***

The Variable Cost Alternative is similar in approach to the Raftelis Alternative #1 in that costs are functionalized. However, based on feedback from the Rate Refinement Workgroup that variable costs are what is avoided year-to-year, this alternative assigns the costs only to variable functions. The only functional costs that vary with water sales are in the water supply rate and System Power Rate. As shown in Table 3, the functionalized costs are very



similar to the results for Raftelis Alternative #1 in terms of the shares collected via transportation rates versus the supply rate.

***Alternative: Short-term Marginal Cost Tier 2***

Member agencies requested an alternative to assign demand management costs only based on marginal costs, based on the idea that drought management's primary purpose is to avoid the purchase of more expensive water. Staff presented three options for such an alternative. The first references the historical marginal supply cost, which is the basis of the current Tier 2 rate, which is based on the Yuba Accord, and the power costs to move water from the Delta. The functionalization of demand management costs for the Short-term Marginal Cost Tier 2 Alternative is based on comparing the Tier 2 Supply Rate to the power costs to move water from the Delta. Using the hypothetical revenue requirements of FY 2021, the Tier 2 Supply Rate is \$285 per AF and the marginal power cost is \$210 per AF which yields a split of 58% of demand management costs to the Tier 1 Supply Rate and 42% of costs to the System Power Rate.

***Alternative: Short-term Marginal Cost Drought***

The second marginal cost alternative uses marginal costs in a drought setting, using the most recent actual cost of supply acquisition for North of Delta transfers that the Metropolitan Board approved in April 2021, and allocates demand management costs based only on those marginal costs. The proposal is based on the idea that the primary purpose of demand management is to avoid purchasing water during times of drought. There are challenges with this approach as demand management is funded in both wet and dry years. The spot market for transfer water is also volatile and dependent on market conditions. It is unclear how this method would be updated and administratively implemented during wet years and whether the most recent drought price is the appropriate measure given the long-term benefits from demand management. For example, conservation and LRP funding pays dividends in terms of offset demand on Metropolitan for upwards of 30 years. The Functionalization of demand management costs for the Short-term Marginal Cost Drought Alternative replaces the Tier 2 rate with the maximum the Board authorized to pay during the current critically dry supply condition. Using the hypothetical revenue requirements of FY 2021, the marginal power cost to move water from the Delta is \$210 per AF and the marginal supply cost is \$675 per AF. This yields a hypothetical split of demand management costs to the Tier 1 Supply rate of 76% and 24% of costs to the System Power Rate.

***Alternative: Short-term Marginal Cost Historical Drought***

The third marginal cost alternative is based on historical marginal costs in a drought setting, using the ten-year average actual cost of supply acquisition for North of Delta transfers from 2008 to 2018 during years with a declared stage of the Water Supply Allocation Plan by the Metropolitan Board, and allocates demand management costs based only on that average cost weighted by the volume of water delivered. The average dry year transfer price during declared allocations was \$346 per AF for 2008 through 2018 and the marginal costs to move the North of Delta water is \$210 per AF. The resulting alternative using FY 2021 hypothetical revenue requirements would be collected from the Tier 1 supply rate for 62 percent of demand management costs and the system power rate for 38 percent of demand management costs.

**August 2021 Rate Refinement Workgroup Top Alternatives**

Among the eleven different alternatives developed thus far, the Rate Refinement Workgroup has provided feedback on their top three choices. Only eight of the eleven alternatives were selected by at least one-member agency as a top 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> choice. The member agencies' top choices are summarized in Table 5 and represents feedback from 24 of the 26 member agencies (two member agencies chose not to participate in the process). After reviewing the results, the Rate Refinement Workgroup provided information on which of the eight remaining alternatives they would like to eliminate. Twenty-three of the 26 member agencies provided feedback and the results of that survey are shown in the far-right column in Table 5.

**Table 5: Summary of Member Agency Top Alternatives and Recommended Eliminations** (compiled August 2021)

| Alternative                        | 1st<br>Choice<br>Count | 2nd<br>Choice<br>Count | 3rd<br>Choice<br>Count | Total | Rank | Eliminate |
|------------------------------------|------------------------|------------------------|------------------------|-------|------|-----------|
| Variable Cost                      | 6                      | 7                      | 6                      | 19    | #1   | 1         |
| Alt #1 - Existing COS              | 3                      | 11                     | 5                      | 19    | #2   | 2         |
| Alt #2 - Modified COS              | 7                      | 1                      | 3                      | 11    | #3   | 1         |
| Short Term MC Historical Drought   | 5                      | 0                      | 2                      | 7     | #4   | 7         |
| Short Term Marginal Cost Drought   | 0                      | 3                      | 1                      | 4     | #5   | 22        |
| 100% Supply                        | 2                      | 1                      | 0                      | 3     | #6   | 13        |
| Short Term Marginal Cost Tier 2    | 0                      | 1                      | 1                      | 2     | #7   | 21        |
| Alt #3B - Fixed Charge, Population | 0                      | 0                      | 1                      | 1     | #8   | 22        |

### Next Steps

Metropolitan's robust demand management programs have been enormously successful and have helped build Southern California's current high degree of water reliability and resilience. Additionally, the successful implementation of demand management has been cost effective and reduced the need for Metropolitan to spend on more costly infrastructure and supplemental water resources. To continue these successful programs will require adoption of a funding mechanism before the existing funding runs out in FY 2022/23. Staff seeks board direction to bring back demand management cost recovery options for approval to incorporate into the FY 2022/23 and FY 2023/24 Budget and Cost of Service analysis.

### **Policy**

Metropolitan Administrative Code Section 5107: Biennial Budget Process

Metropolitan Administrative Code Section 5108: Appropriations

Metropolitan Administrative Code Section 5109: Capital Financing

By Minute Item 51164, on April 10, 2018, the Board approved suspension of billing and collection of the Water Stewardship Rate on exchange agreement deliveries to San Diego County Water Authority for (a) CYs 2019 and 2020 during the Demand Management cost allocation study period, and (b) CY 2018.

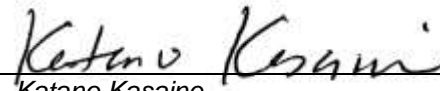
By Minute Item 51828, on December 10, 2019, the Board directed staff: (1) to incorporate the use of the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed fiscal years 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rates or charges to recover demand management costs, with the proposed rates and charges for calendar years 2021 and 2022.

By Minute Item 51962, on April 14, 2020, the Board approved the biennial budget for FYs 2020/21 and 2021/22; adopted resolutions fixing and adopting the water rates and charges for CYs 2021 and 2022; and adopted the resolution finding that for FYs 2020/21 and 2021/22, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation.

**Fiscal Impact**

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None. This is an informational report.



Katano Kasaine  
Assistant General Manager/  
Chief Financial Officer

9/8/2021

*Date*

Adel Hagekhalil  
General Manager

9/8/2021

*Date*

Ref# cfo12675692



# Review of Demand Management Cost Recovery

Finance & Insurance Committee

Item 9-4

September 13, 2021

# What is Demand Management?

- Metropolitan established programs to reduce water demand on Metropolitan by reducing demand in the service area through the Conservation Program and incentivizing the development of local water resources through the Local Resources Program (LRP) and the Future Supply Actions Program.
- The current FY2021/22 budget includes Demand Management expenditures of \$93 million\*.

\* reflecting the \$43M appropriation for conservation

# Why do Demand Management?

- Integrating Demand Management into the resource mix was found to offer long-term reliability at the lowest possible cost to the region as a whole.
- Demand Management provided an alternative to system expansion.

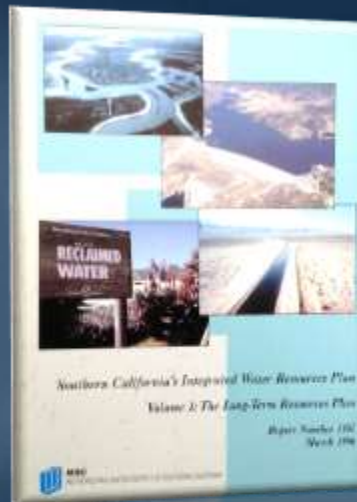
## Started for Metropolitan with the 1996 Integrated Resources Plan

“This plan represents a dramatic shift in the way we look at water management now and into the future. It replaces exclusive dependence on Metropolitan for supplemental water with coordinated approaches developed in conjunction with local resources. It implements water conservation measures together with new supplies. And it searches for solutions that offer long-term reliability at the lowest possible cost to the region as a whole.”



# Demand Management has been an important component of every Integrated Resources Plan since 1996

1996



2004



2010



2015



# For MWD, Demand Management is Both Preferred and Legislated



## Preferred Resource Mix

Demand management is part of the preferred resource mix.

Demand management decreased water demand and increase local supplies thereby reducing and avoiding infrastructure expansion and new construction.

Regional participation necessary to achieve success.



## State conservation laws

SB 60 – Specifically directed Metropolitan to increase conservation and local resource development.

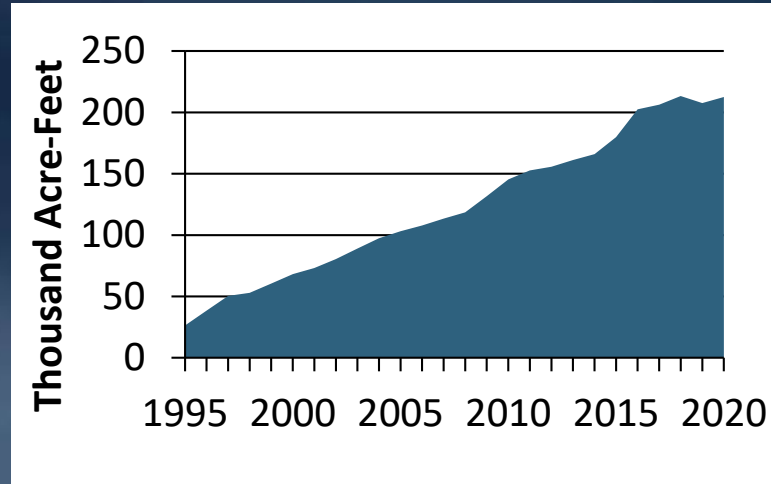
SB X7-7 – Metropolitan supported the region's compliance to reduce per capita water use by 20 percent by 12/31/2020.

SB 606/ AB 1668 – MWD supported the Governor's Long Term Efficiency Framework legislation.

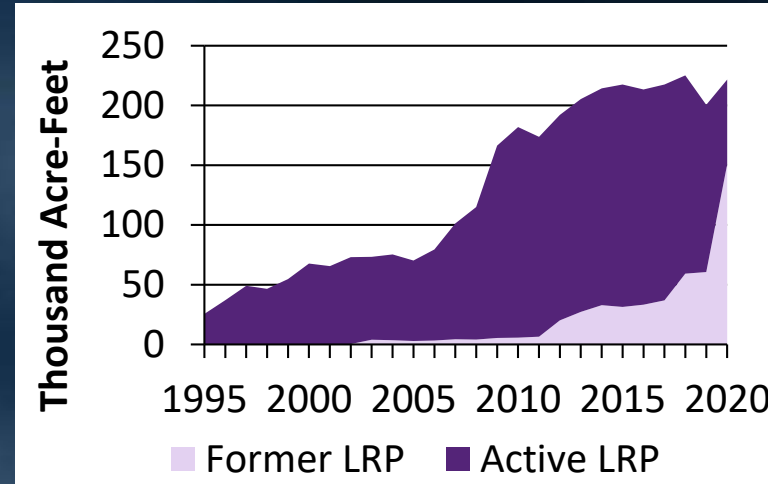


# Demand Management Program Results

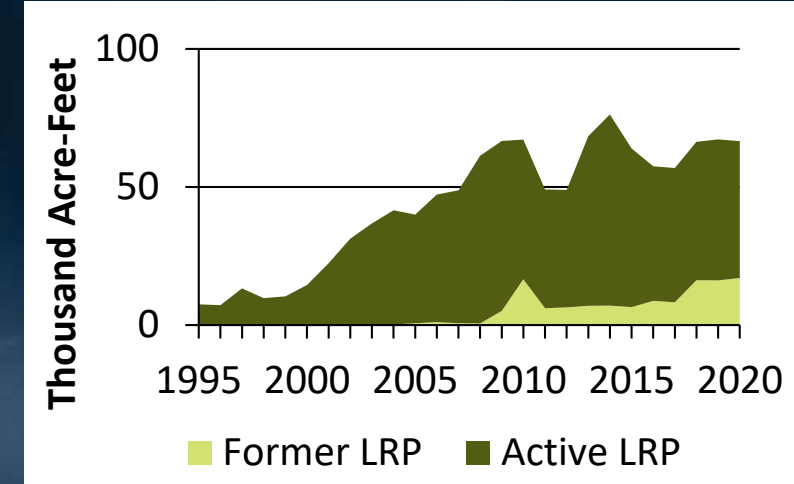
Water Saved by Conservation (1)



Recycled Water LRP Production (2)



Groundwater Recovery LRP Production (2)



## Water Saved and Produced by Demand Management (AF)

| FY 2019/20   | Including Active & Former LRP |
|--|-------------------------------|
| Water saved by Metropolitan Conservation Program (1) | 213,000                       |
| Recycled Water LRP Projects (2)                      | 222,000                       |
| Groundwater Recovery LRP Projects (2)                | 67,000                        |
| <b>Total Conservation + LRP</b>                      | <b>502,000</b>                |

- (1) Water conserved in entire service area, reducing demand on Metropolitan, its member agencies, and other agencies in the area
- (2) Water produced by participating member agency and other participants for their own use

# FY2021/22 LRP Projects

|                    | # of Contracts | Incentives, \$       |
|--------------------|----------------|----------------------|
| Anaheim            | 1              | 5,355                |
| Beverly Hills      | 1              | 50,000               |
| Burbank            | 1              | 80,000               |
| Calleguas          | 3              | 341,237              |
| CBMWD              | 1              | 68,000               |
| Central Basin      | 2              | 432,000              |
| Eastern            | 4              | 1,949,324            |
| Inland Empire      | 1              | 1,914,880            |
| LADWP              | 8              | 792,250              |
| Long Beach         | 1              | 77,000               |
| Los Angeles        | 4              | 599,135              |
| MWDOC              | 12             | 4,569,812            |
| Santa Monica       | 2              | 18,050               |
| SDCWA              | 7              | 2,595,271            |
| Three Valleys      | 4              | 225,600              |
| Torrance           | 2              | 1,130,000            |
| Upper SGVMWD       | 2              | 137,900              |
| West Basin         | 1              | 125,000              |
| Western            | 3              | 2,589,880            |
| <b>Grand Total</b> | <b>60</b>      | <b>\$ 17,700,694</b> |

# Budgeted and Projected Local Resources Program Expenditures

based on fiscal years 2020/21 and 2021/22 biennial budget and 10 year financial forecast  
in millions of dollars

| Fiscal Year Ending                        | 2022         | 2023         | 2024         | 2025         | 2026         | 2027         | 2028         | 2029         | 2030         |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Estimated cost of contracted LRP Projects | \$ 18        | \$ 22        | \$ 22        | \$ 26        | \$ 27        | \$ 31        | \$ 31        | \$ 30        | \$ 29        |
| On-Site Retrofit Program                  | 2            | 3            | 3            | 3            | 3            | 3            | 3            | 3            | 3            |
| Future Projects to Meet IRP Target        | 0            | 1            | 6            | 11           | 16           | 22           | 27           | 32           | 38           |
| <b>Total Local Resources Program</b>      | <b>\$ 20</b> | <b>\$ 25</b> | <b>\$ 31</b> | <b>\$ 40</b> | <b>\$ 47</b> | <b>\$ 55</b> | <b>\$ 61</b> | <b>\$ 65</b> | <b>\$ 70</b> |

# Demand Management Costs

Based on fiscal years 2020/21 and 2021/22 biennial budget and 10-year financial forecast in millions of dollars

| Fiscal Year Ending                               | 2022         | 2023         | 2024         | 2025         | 2026         | 2027         | 2028         | 2029         | 2030         |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Local Resources Program                          | \$ 20        | \$ 25        | \$ 31        | \$ 40        | \$ 47        | \$ 55        | \$ 61        | \$ 65        | \$ 70        |
| Conservation Program                             | 43*          | 43           | 43           | 43           | 43           | 43           | 43           | 43           | 43           |
| Future Supply<br>Actions/Stormwater Pilot        | 7            | 3            | 2            | 2            | 2            | 2            | 2            | 2            | 2            |
| O&M costs net of interest<br>income              | 23           | 26           | 28           | 30           | 31           | 34           | 34           | 35           | 37           |
| <b>Demand Management<br/>Revenue Requirement</b> | <b>\$ 93</b> | <b>\$ 97</b> | <b>\$104</b> | <b>\$115</b> | <b>\$123</b> | <b>\$133</b> | <b>\$139</b> | <b>\$144</b> | <b>\$151</b> |

\* The FY 2021/22 conservation budget is \$24M. The \$43M reflects the appropriation.



# Action is needed because DM is running out of funding.

- December 2019 the Board approved the option to use the Water Stewardship Fund (WSF) to fund demand management costs in the FY2020/21 & FY2021/22 biennial period to allow the Board to consider demand management funding in relation to the upcoming 2020 IRP update and to undergo a rate structure refinement process.
- The WSF is projected to be exhausted in FY2022/23
- The Board must establish a new Demand Management rate, charge or revenue collection mechanism that goes into effect no later than CY 2023.



# WSR and Placeholder Demand Management Rate

| Calendar Year                                    | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|--|------|------|------|------|------|------|------|------|------|------|------|
| Overall Rate Increases for all Rates and Charges |      | 3%   | 4%   | 5%   | 5%   | 4%   | 3%   | 3%   | 3%   | 3%   | 3%   |
| Demand Management Rate* (\$/AF)                  | \$65 | -    | -    | \$53 | \$65 | \$71 | \$73 | \$79 | \$82 | \$84 | \$89 |

\*The 2020 \$65/AF rate is the WSR, for CYs 2023-2030 the rate represents only a placeholder until the Board approves a method to recover demand management costs.

The \$53/AF represents the entire 5% rate increase for 2023

# Water Stewardship Fund (WSF)

in millions of dollars

| Fiscal Year Ending                          | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|---|------|------|------|------|------|------|------|------|------|------|------|
| Demand Management Revenues                  |      |      | -    | 39   | 96   | 115  | 125  | 132  | 140  | 145  | 151  |
| Demand Management Rate Revenue Requirements |      |      | 93   | 97   | 104  | 115  | 123  | 133  | 139  | 144  | 151  |
| Over/(under) collection                     |      |      | (93) | (57) | (8)  | (1)  | 2    | (2)  | 1    | 1    | (0)  |
| End of year WSF Balance                     | 133  | 125  | 31   | -    | -    | -    | 2    | 1    | 2    | 3    | 2    |
| Extra Funds Needed                          |      |      |      | 26   | 8    | 1    | -    | -    | -    | -    | -    |

The demand management rates do not generate enough revenue to fund the entire program and the WSF has been depleted.

# Demand Management Cost Recovery Alternatives



# Complexity of DM Cost Recovery

- Recovery of DM is complex because Metropolitan does not purchase water supply or build anything with the money it spends on DM.
- The entire purpose of DM is to reduce the need for Metropolitan's services; and
- The Legislature has directed Metropolitan to expand its DM investments, making the investments unavoidable

# Demand Management Cost Recovery: Alternatives from Raftelis

| Cost Recovery Component  | Approx % of DM Costs <sup>1</sup> | Billing Determinant    | Charge / Rate |
|--|-----------------------------------|------------------------|---------------|
| Alt 1 - Existing COS Methodology                                     |                                   |                        |               |
| T1 Supply  | 25%                               | Sales                  | \$/AF         |
| System Access Rate   | 75%                               | All Transactions       | \$/AF         |
| Alt 2 - Modified COS Methodology                                     |                                   |                        |               |
| T1 Supply  | 25%                               | Sales                  | \$/AF         |
| System Access Rate   | 50%                               | All Transactions       | \$/AF         |
| System Power Rate  | 13%                               | All Transactions       | \$/AF         |
| Readiness-to-Serve Charge  | 10%                               | Existing RTS           | \$/M          |
| Capacity Charge  | 2%                                | Existing CC            | \$/cfs        |
| Alt 3A - Functionalized Fixed Charge                                 |                                   |                        |               |
| Supply Portion   | 100%                              | 10-yr Avg Sales        | Fixed \$      |
| Transportation Portion   |                                   | 10-yr Avg Transactions |               |
| Alt 3B - Non-Functionalized Fixed Charge based on Population         |                                   |                        |               |
|  | 100%                              | Population             | Fixed \$      |
| Alt 3B - Non-Functionalized Fixed Charge based on Assessed Valuation |                                   |                        |               |
|  | 100%                              | Assessed Valuation     | Fixed \$      |

(1) Using estimated Revenue Requirement share based on 2020/21 Budget; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# Demand Management Cost Recovery: Alternatives from Rate Refinement Workgroup

| Cost Recovery Component  | Approx % of DM Costs | Billing Determinant | Charge / Rate |
|--|----------------------|---------------------|---------------|
| Alt 3B – Non-Functionalized Fixed Charge based on 50/50 Pop/AV | 50%                  | Population          | Fixed \$      |
|  | 50%                  | Assessed Valuation  |               |
| 100% Supply  |                      |                     |               |
| T1 Supply  | 100%                 | Sales               | \$/AF         |
| Variable Costs   |                      |                     |               |
| T1 Supply  | 22% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 78% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Tier 2                               |                      |                     |               |
| T1 Supply  | 58% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 42% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Drought                              |                      |                     |               |
| T1 Supply  | 76% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 24% <sup>1</sup>     | All Transactions    | \$/AF         |
| Short Term Marginal Cost- Historical Drought                   |                      |                     |               |
| T1 Supply  | 62% <sup>1</sup>     | Sales               | \$/AF         |
| System Power Rate  | 38% <sup>1</sup>     | All Transactions    | \$/AF         |

(1) Using estimated Revenue Requirement share based on 2020/21 Budget; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# Member Agency Top Alternatives and Recommended Eliminations (compiled August 2021)

| Alternative                        | 1st<br>Choice<br>Count | 2nd<br>Choice<br>Count | 3rd<br>Choice<br>Count | Total | Rank | Eliminate |
|------------------------------------|------------------------|------------------------|------------------------|-------|------|-----------|
| Variable Cost                      | 6                      | 7                      | 6                      | 19    | #1   | 1         |
| Alt #1 - Existing COS              | 3                      | 11                     | 5                      | 19    | #2   | 2         |
| Alt #2 - Modified COS              | 7                      | 1                      | 3                      | 11    | #3   | 1         |
| Short Term MC Historical Drought   | 5                      | 0                      | 2                      | 7     | #4   | 7         |
| Short Term Marginal Cost Drought   | 0                      | 3                      | 1                      | 4     | #5   | 22        |
| 100% Supply                        | 2                      | 1                      | 0                      | 3     | #6   | 13        |
| Short Term Marginal Cost Tier 2    | 0                      | 1                      | 1                      | 2     | #7   | 21        |
| Alt #3B - Fixed Charge, Population | 0                      | 0                      | 1                      | 1     | #8   | 22        |

# Summary of 8 Alternatives selected by Member Agencies

# Variable Costs

based on 2020/21 Budget, O&M Costs that vary as a function of water sales

- DM functionalized based on avoided variable costs excluding fixed O&M and capital costs.
  - Supply Programs -- \$68.7M
  - CRA Power Costs less power sales -- \$44.2M
  - SWC Variable Power Costs -- \$201.3M
  - Variable Treatment has been excluded from functionalization. It's unclear if variable treatment costs are saved as operating treatment plants at very low flow rates has required higher chemical usage per AF.

Functionalization based on avoided variable costs

|     |           |  |
|-----|-----------|--|
| 22% | \$68.7 M  | Supply Programs --> Supply Function --> Tier 1 Supply Rate |
| 78% | \$245.5 M | Power Costs --> C&A Function --> SPR                       |

| Cost Recovery Component | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|-------------------------|-----------------------------------|---------------------|---------------|
| Variable Costs          |                                   |                     |               |
| T1 Supply               | 22%                               | Sales               | \$/AF         |
| System Power Rate       | 78%                               | All Transactions    | \$/AF         |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.



# Alternative 1: Existing COS Methodology

- DM functionalized based relative share of revenue requirements of impacted functional categories.
- DM costs functionalized per WaterDM recommendation
- Consistent with Metropolitan's existing cost of service methodology
- DM costs allocated like other fixed O&M costs to average system demand
- DM costs recovered by the T1 Supply Rate and System Access Rate

| Cost Recovery Component          | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|----------------------------------|-----------------------------------|---------------------|---------------|
| Alt 1 - Existing COS Methodology |                                   |                     |               |
| T1 Supply                        | 25%                               | Sales               | \$/AF         |
| System Access Rate               | 75%                               | All Transactions    | \$/AF         |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# Alternative 2: Modified COS Methodology

- DM functionalized based relative share of revenue requirements of impacted functional categories.
- DM costs functionalized per WaterDM recommendation
- Modified Metropolitan cost of service methodology in recognition that DM expenditures not only avoid fixed O&M costs associated with average system demand but avoids fixed and variable O&M and capital costs associated with average, demand and standby capacity
- DM costs recovered from variable rates and fixed charges

| Cost Recovery Component          | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|----------------------------------|-----------------------------------|---------------------|---------------|
| Alt 2 - Modified COS Methodology |                                   |                     |               |
| T1 Supply                        | 25%                               | Sales               | \$/AF         |
| System Access Rate               | 50%                               | All Transactions    | \$/AF         |
| System Power Rate                | 13%                               | All Transactions    | \$/AF         |
| Readiness-to-Serve Charge        | 10%                               | Existing RTS        | \$/M          |
| Capacity Charge                  | 2%                                | Existing CC         | \$/cfs        |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated



# Short Term MC– Historical Drought

Based on 2020/21 Budget and historical North of Delta transfers

- DM functionalized based on avoided marginal costs -- the cost of the next increment of water service. The supply costs reflects MWD's 10-year average cost of acquiring transfers from north of the Delta during MWD declared Water Supply Allocation Plan (2009, 2010, 2015). And the power cost to move the water is based on the budgeted SWC variable power rate.
  - Marginal Supply Cost -- \$346/AF
  - Marginal Power Cost -- \$210/AF

Functionalization based on short term avoided marginal cost

|     |          |   |
|-----|----------|---|
| 62% | \$346/AF | Marginal Supply Cost --> Supply Function --> Tier 1 Supply Rate |
| 38% | \$210/AF | Marginal Power Cost --> C&A Function --> SPR                    |

| Cost Recovery Component                      | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|--|-----------------------------------|---------------------|---------------|
| Short Term Marginal Cost- Historical Drought |                                   |                     |               |
| T1 Supply                                    | 62%                               | Sales               | \$/AF         |
| System Power Rate                            | 38%                               | All Transactions    | \$/AF         |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# Short Term Marginal Cost –Drought

Based on 2020/21 Budget and recent Board action on max transfer price

- DM functionalized based on avoided marginal costs -- the cost of the next increment of water service. The supply costs is based on the maximum the board authorized to pay (\$675/AF) during the current critically dry supply condition. And the power cost to move the water is based on the budgeted SWC variable power rate.
  - Marginal Supply Cost -- \$675/AF
  - Marginal Power Cost -- \$210/AF

Functionalization based on short term avoided marginal cost

|     |          |   |
|-----|----------|---|
| 76% | \$675/AF | Marginal Supply Cost --> Supply Function --> Tier 1 Supply Rate |
| 24% | \$210/AF | Marginal Power Cost --> C&A Function --> SPR                    |

| Cost Recovery Component           | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|-----------------------------------|-----------------------------------|---------------------|---------------|
| Short Term Marginal Cost- Drought |                                   |                     |               |
| T1 Supply                         | 76%                               | Sales               | \$/AF         |
| System Power Rate                 | 24%                               | All Transactions    | \$/AF         |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# 100% Supply

- DM functionalized 100% to supply.
- 100% of demand management costs would be recovered by the Tier 1 Supply Rate.
- DM costs would be recovered from 100% variable rate.

| Cost Recovery Component  | Approx % of DM Costs | Billing Determinant | Charge / Rate |
|--------------------------|----------------------|---------------------|---------------|
| 100% Supply<br>T1 Supply | 100%                 | Sales               | \$/AF         |

# Short Term Marginal Cost –Tier 2

Based on 2020/21 Budget

- DM functionalized based on avoided marginal costs -- the cost of the next increment of water service. The supply costs is based on historic North of Delta transfers (the Tier-2 rate) representing the average cost of transfer water during wet/avg/dry supply conditions. And the power cost to move the water is based on the budgeted SWC variable power rate.
  - Marginal Supply Cost -- \$285/AF
  - Marginal Power Cost -- \$210/AF

Functionalization based on short term avoided marginal cost

|     |          |   |
|-----|----------|---|
| 58% | \$285/AF | Marginal Supply Cost --> Supply Function --> Tier 1 Supply Rate |
| 42% | \$210/AF | Marginal Power Cost --> C&A Function --> SPR                    |

| Cost Recovery Component          | Approx % of DM Costs <sup>1</sup> | Billing Determinant | Charge / Rate |
|----------------------------------|-----------------------------------|---------------------|---------------|
| Short Term Marginal Cost- Tier 2 |                                   |                     |               |
| T1 Supply                        | 58%                               | Sales               | \$/AF         |
| System Power Rate                | 42%                               | All Transactions    | \$/AF         |

(1) Using a hypothetical Revenue Requirement share; the actual relative shares will be calculated as a part of each cost of service analysis and will differ.

# Alternative 3B: Non-Functionalized Fixed Charge based on Population

- Functionalization of DM costs is not necessary as costs are not recovered based on system usage but rather based on a Member Agency's population.
- DM allocated to a new fixed charge.
- DM costs are largely fixed in nature and this approach provides a fixed revenue source
- All member agencies would be subject to the DM Fixed Charge based on their share of population in Metropolitan's service area.

| Cost Recovery Component                                      | Approx % of DM Costs | Billing Determinant | Charge / Rate |
|--|----------------------|---------------------|---------------|
| Alt 3B - Non-Functionalized Fixed Charge based on Population |                      |                     |               |
|  | 100%                 | Population          | Fixed \$      |



# Estimated 2021 Member Agency Impacts of Demand Mgt Cost Recovery Alternatives vs Prior WSR

Red = increase > 5%  
Green = decrease > 5%  
White = change < 5%

|                   | Raftelis Financial Consultants |           |                   | Rate Refinement Workgroup |               |                        |                         |   |
|-------------------|--------------------------------|-----------|-------------------|---------------------------|---------------|------------------------|-------------------------|---|
|                   | Alt #1                         | Alt #2    | Alt 3B Population | 100% Supply               | Variable Cost | Short Term MC – Tier 2 | Short Term MC – Drought | Short Term Marginal Cost Historical Drought |
| Anaheim           | 5%                             | 10%       | 121%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Beverly Hills     | 5%                             | 7%        | -64%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Burbank           | 5%                             | 4%        | -36%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Calleguas MWD     | 5%                             | 7%        | -41%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Central Basin MWD | 5%                             | 7%        | 242%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Compton           | 5%                             | 3601%     | 162037%           | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Eastern MWD       | 5%                             | 7%        | -23%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Foothill MWD      | 5%                             | 7%        | -13%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Fullerton         | 5%                             | 8%        | 69%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Glendale          | 5%                             | 8%        | 3%                | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Inland Empire     | 5%                             | 7%        | 33%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Las Virgenes MWD  | 5%                             | 6%        | -70%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Long Beach        | 5%                             | 7%        | 35%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Los Angeles       | 5%                             | 8%        | 37%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| MWDOC             | 5%                             | 6%        | -4%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Pasadena          | 5%                             | 6%        | -23%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| SDCWA             | -15%                           | -18%      | -36%              | -38%                      | -8%           | -22%                   | -29%                    | -23%  |
| San Fernando      | 5%                             | 12%       | 10184%            | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| San Marino        | 5%                             | 11%       | 24%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Santa Ana         | 5%                             | 9%        | 219%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Santa Monica      | 5%                             | 16%       | 120%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Three Valleys MWD | 5%                             | 6%        | -29%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Torrance          | 5%                             | 7%        | -25%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Upper San Gabriel | 5%                             | 0%        | 84%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| West Basin MWD    | 5%                             | 6%        | -39%              | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| Western MWD       | 5%                             | 7%        | 18%               | 14%                       | 3%            | 8%                     | 10%                     | 8%  |
| <b>Total MWD</b>  | <b>0%</b>                      | <b>0%</b> | <b>0%</b>         | <b>0%</b>                 | <b>0%</b>     | <b>0%</b>              | <b>0%</b>               | <b>0%</b>                                   |

# Estimated 2021 Member Agency Impacts vs Prior Water Stewardship Rate

Thousand of Dollars

|                   | Raftelis Financial Consultants |            |                      | Rate Refinement Workgroup |               |                           |                            |   |
|-------------------|--------------------------------|------------|----------------------|---------------------------|---------------|---------------------------|----------------------------|---|
|                   | Alt #1                         | Alt #2     | Alt 3B<br>Population | 100% Supply               | Variable Cost | Short Term MC<br>– Tier 2 | Short Term MC<br>– Drought | Short Term<br>Marginal Cost<br>Historical Drought |
| Anaheim           | \$ 47                          | \$ 83      | \$ 1,049             | \$ 118                    | \$ 26         | \$ 68                     | \$ 90                      | \$ 73   |
| Beverly Hills     | 35                             | 43         | (408)                | 86                        | 19            | 50                        | 66                         | 54  |
| Burbank           | 48                             | 32         | (315)                | 120                       | 26            | 69                        | 91                         | 74  |
| Calleguas MWD     | 305                            | 383        | (2,289)              | 761                       | 166           | 438                       | 580                        | 473   |
| Central Basin MWD | 131                            | 158        | 5,833                | 326                       | 71            | 188                       | 249                        | 203   |
| Compton           | 0                              | 11         | 483                  | 0                         | 0             | 0                         | 0                          | 0   |
| Eastern MWD       | 308                            | 374        | (1,325)              | 768                       | 168           | 442                       | 585                        | 478   |
| Foothill MWD      | 27                             | 35         | (65)                 | 67                        | 15            | 39                        | 51                         | 42  |
| Fullerton         | 23                             | 35         | 292                  | 57                        | 12            | 33                        | 44                         | 36  |
| Glendale          | 52                             | 72         | 26                   | 129                       | 28            | 74                        | 98                         | 80  |
| Inland Empire     | 185                            | 236        | 1,121                | 461                       | 101           | 265                       | 352                        | 287   |
| Las Virgenes MWD  | 67                             | 80         | (858)                | 166                       | 36            | 96                        | 127                        | 103   |
| Long Beach        | 101                            | 124        | 643                  | 252                       | 55            | 145                       | 192                        | 157   |
| Los Angeles       | 842                            | 1,208      | 5,741                | 2,098                     | 459           | 1,207                     | 1,599                      | 1,305   |
| MWDOC             | 705                            | 778        | (550)                | 1,757                     | 384           | 1,011                     | 1,339                      | 1,093   |
| Pasadena          | 62                             | 74         | (263)                | 154                       | 34            | 89                        | 118                        | 96  |
| SDCWA             | (3,993)                        | (4,791)    | (9,427)              | (9,945)                   | (2,174)       | (5,721)                   | (7,581)                    | (6,187)   |
| San Fernando      | 0                              | 0          | 128                  | 0                         | 0             | 0                         | 0                          | 0   |
| San Marino        | 3                              | 6          | 14                   | 8                         | 2             | 4                         | 6                          | 5   |
| Santa Ana         | 30                             | 48         | 1,205                | 75                        | 16            | 43                        | 57                         | 46  |
| Santa Monica      | 12                             | 36         | 269                  | 30                        | 7             | 18                        | 23                         | 19  |
| Three Valleys MWD | 209                            | 234        | (1,109)              | 520                       | 114           | 299                       | 397                        | 324   |
| Torrance          | 52                             | 66         | (237)                | 129                       | 28            | 74                        | 99                         | 81  |
| Upper San Gabriel | 136                            | (5)        | 2,088                | 338                       | 74            | 194                       | 258                        | 210   |
| West Basin MWD    | 385                            | 397        | (2,787)              | 958                       | 209           | 551                       | 730                        | 596   |
| Western MWD       | 227                            | 285        | 741                  | 566                       | 124           | 326                       | 432                        | 352   |
| <b>Total MWD</b>  | <b>\$0</b>                     | <b>\$0</b> | <b>\$0</b>           | <b>\$0</b>                | <b>\$0</b>    | <b>\$0</b>                | <b>\$0</b>                 | <b>\$0</b>  |

# Next Steps

- Metropolitan's robust DM programs have been enormously successful and have helped build Southern California's current high degree of water reliability and resilience.
- The successful implementation of DM has been cost effective and reduced the need for Metropolitan to spend on more costly infrastructure and supplemental water resources.
- Continuing these successful programs will require adoption of a funding mechanism before the existing funding runs out in FY2022/23.
- Staff seeks board direction to bring back DM cost recovery options for approval to incorporate into the FY2022/23 and FY2023/24 Budget.







- Board of Directors  
*Finance and Insurance Committee*

9/14/2021 Board Meeting

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9-5

## Subject

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Mid-cycle Biennial Budget Review

## Executive Summary

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This mid-cycle update of the Board-approved biennial budget for fiscal year (FY) 2020/21 and FY 2021/22 (the “Adopted Budget”) provides an opportunity to review results of the first year of the two-year budget. This update will help the Board to better understand the key drivers of change, particularly as it concerns the impact of COVID-19. This update also provides an opportunity to review the outlook for the second year of the two-year budget. A reflective and a prospective analysis herein highlights key financial areas to be addressed in the next biennial budget and rate-setting process that formally begins in February 2022. As a reminder, the Adopted Budget includes overall rate increases of 3 percent in calendar year (CY) 2021 and 4 percent in CY 2022, which the Board has approved. The Adopted Budget also reflects modifications made by staff in March 2020 to further reduce costs and overall rate increases as a result of the anticipated financial impact of the COVID-19 pandemic. In addition to the expense modifications proposed by staff, the Board directed staff to revisit and consider additional potential cost-cutting measures. In September 2020, the Board approved additional cost-containment measures, and in December 2020, the Board approved a payment deferral program for its 26 member agencies. To date, no member agency has utilized the deferment program.

At the midpoint of the biennial budget period, water transactions<sup>1</sup> for FY 2020/21 are 1.57 million acre-feet (MAF), 30 thousand acre-feet (TAF) less than the FY 2020/21 budgeted amount of 1.60 MAF. Revenues are \$26.0 million under budget due to lower water transactions. Expenditures are \$202.2 million under budget primarily due to lower State Water Project (SWP) power costs resulting from the low SWP allocation and cost savings in departmental O&M attributed to board-directed cuts, cost savings due to the impact of COVID-19, and other factors.

Unrestricted reserves provide a buffer against rate spikes resulting from lower water sales but, in practice, also provides a funding source for unforeseen expenditures. The reserves help to provide stable and predictable water rates while minimizing emergency rate increases.

As of June 30, 2021, the balance in unrestricted reserves, which are held in the Water Rate Stabilization Fund and the Revenue Remainder Fund, was \$595 million on a modified accrual basis. The unrestricted reserves balance was \$146.9 million higher than the beginning of the budget period. These reserves are \$331 million over the minimum reserves level and \$47 million below the target reserves level.

For the second year of the budget, there is a high probability that water demands on Metropolitan will be below the budgeted 1.6 MAF, reducing revenues and potentially reducing the reserves. When combined with potential unbudgeted expenses for dry-year transfers, increased demand management funding, operational impacts due to ongoing dry conditions, and increased power costs due to the drought’s impacts on the electric market, there are many things that could cause a draw on reserves in the second budget year.

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<sup>1</sup> Includes water sales, exchanges and wheeling.

Given the current status of unrestricted reserves, which are currently within the range of the established policy minimum reserves levels and target reserves levels, staff does not recommend any changes to the approved 4 percent rate increase for CY 2022. Moreover, staff does not recommend any changes to the second year of the current biennial budget.

## Description

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### Prior Board Actions

The originally proposed budget for the current biennial period (the “Proposed Budget”) had been reviewed and discussed in workshops with the Board prior to the onset of the COVID-19 pandemic. The Proposed Budget called for 5 percent rate increases in CYs 2021 and 2022. When Metropolitan declared an emergency to respond to the pandemic, staff rapidly changed the budget proposal to reduce expenditures, revised the approach to capital program funding, and reduced the overall rate increases to 3 percent in CY 2021 and 4 percent in CY 2022.

In April 2020, the Board approved the revised biennial budget for FY 2020/21 and FY 2021/22 (the Adopted Budget) and the supporting overall rate increases of 3 percent in CY 2021 and 4 percent in CY 2022. The Board also directed the following:

1. Board review of the Adopted Budget and rates at the September 2020 meeting to consider the impacts resulting from the COVID-19 crisis.
2. Staff review and consideration of six specific issues for the biennial budget cycle of FYs 2020/21 and 2021/22 by August 31, 2020.

In September of 2020, the Board received an update on the requested six areas of review for cost containment and approved the following cost-containment measures to address the COVID-19 financial impacts:

1. Continue to track COVID-19 impacts to the member agencies with a focus on retail payment delinquencies. If there is interest from the member agencies, develop a payment deferral program that also exempts penalties or interest for those agencies that record and report significant delinquencies and likewise grant deferrals to their customers. Bring back any deferral program criteria to the Board for review and consideration.
2. Monitor water demands, sales and expenditures, and prepare additional cost-containment measures, as needed, for mid-cycle budget review.
3. Maintain the current rates adopted by the Board to address the impacts of lower water sales and lower revenues while maintaining current credit ratings.
4. Include in the mid-year budget review new revenue generation options, including a groundwater replenishment program.
5. A moratorium on non-emergency, unbudgeted proposals for the remaining part of the fiscal year that have not been anticipated in the budget.

### FY 2020-21 Review

The Adopted Budget was preceded by circumstances that resulted in lower revenues and lower available reserves to mitigate future rate increases. In the prior biennial budget period, Metropolitan had the lowest water transactions in nearly 40 years, with transactions of approximately 1.40 MAF each year.

As presented recently at the Finance and Insurance Committee meeting of August 16, 2021, water transactions for FY 2020/21 were 1.57 MAF, 30 TAF less than the FY 2020/21 budget of 1.6 MAF, resulting in revenues that are \$26.0 million under budget.

Expenditures were under budget by \$202.2 million, driven primarily by the low State Water Contract on-aqueduct power costs as a result of the low Table A allocation (20 percent in 2020 and 5 percent in 2021) and \$62 million in lower O&M expenditures. Demand Management also came in lower due to reductions in advertising per board direction in response to COVID-19. Additionally, due to favorable market conditions and Metropolitan’s strong financial position, Metropolitan refinanced approximately \$478.9 million in debt, remarketed \$1.06 billion of

variable rate bonds, and issued \$207.4 million of new money debt at pricing levels lower than expected or budgeted, saving \$13 million in debt service costs for FY 2020/21.

Unrestricted reserves provide a buffer against rate spikes resulting from lower water sales but, in practice, also provides a funding source for unforeseen expenditures. The reserves help to provide stable and predictable water rates while minimizing emergency rate increases. The reserves have a minimum level and a target reserve level.

As of June 30, 2021, the balance in unrestricted reserves, which are held in the Water Rate Stabilization Fund and the Revenue Remainder Fund, was \$595 million on a modified accrual basis. The unrestricted reserves balance was \$146.9 million higher than the beginning of the budget period. These reserves are \$331 million over the minimum reserves level and \$47 million below the target reserves level.

The coverage ratio for FY 2020/21 was 2.02 times for Revenue Bond Debt Service coverage (Senior and Subordinate liens), which meets the target bond coverage level of 2.0 times. Similarly, the coverage ratio for FY 2020/21 was 2.22 times for Fixed Charge coverage, above the target level of 1.2 times.

### **Payment Deferral Program and Delinquencies**

In December of 2020, the Board approved the COVID-19 Member Agency Payment Deferment Program. The program provided the member agencies a process to potentially defer payment obligations for water transactions occurring from January 1, 2021, through June 30, 2021. There were no delinquencies related to COVID, and no member agencies utilized the deferment program.

### **O&M Expenditures and Cost Containment**

The Board directed staff to revisit and consider the following specific cost-containment budget areas: suspension of the director inspection trip program and fleet vehicle purchases. Efforts to contain costs were instituted early in the crisis as management directed staff to cut all non-essential travel and put in place a process that requires review of all operating equipment requests as to urgent need and elevated approval by the Chief Operating Officer. Staff has implemented the specified cost-containment strategies directed by the Board, which successfully reduced costs.

Expenditures were lower than budget for several additional reasons. Operations and Maintenance expenditures, which were \$473.7 million, came in \$62 million under budget primarily due to prudent management of expenses, reduced costs of employee benefits from the projection in the budget, and the impact of COVID-19. As a result of COVID-19 restrictions, the Director Inspection trip program and travel, training, and seminars were suspended; community outreach events were canceled, rescheduled, or shifted to virtual events; and the level of building security services was reduced. Many maintenance projects were deferred or delayed, which resulted in reduced professional, non-professional, expensed equipment, and repairs and maintenance costs; and employee-related work expenses such as transit reimbursements, management and employee events, and office supplies were cut or reduced.

### **Review of New Revenue Generation Options**

The request to look at new revenue generation options, including a groundwater replenishment program, was included in the issues to be taken up by the Rate Refinement Workgroup. The Rate Refinement Workgroup, which is made up of member agency representatives, was established on January 13, 2021, to evaluate potential refinements to Metropolitan's rate structure. The focus of discussions over the past nine months in the workgroup has been on establishing proposed changes to Metropolitan's Rate Structure Framework Principles that will serve as a benchmark to compare refinements as well as discussions on demand management cost recovery alternatives. Metropolitan staff are committed to continuing rate refinement discussions to evaluate potential refinements, such as a new groundwater replenishment program.

### **Moratorium on Non-Emergency, Unbudgeted Proposals**

Unbudgeted expenditures that were approved by the Board after the Board adopted the budget include: the work of the Shaw Law Group to review Metropolitan's Equal Employment Opportunity processes, battery energy storage systems at Joseph Jensen Water Treatment Plant, Robert A. Skinner Water Treatment Plant, F. E. Weymouth Water Treatment Plant, and OC-88 Pumping Plant; dry-year transfers to support Metropolitan's



reliable service in a historic dry year, and participation in the Sites Reservoir project. Although these expenditures were not budgeted, the funding source came from savings within the FY 2020/21 budget.

### **Drought Impacts on Water Storage and Future Cost to Replenish Storage Reserves**

For the first time in six years, Metropolitan is drawing down its storage accounts as part of its Water Surplus and Drought Management Strategy to meet regional water demands. This is required due to ongoing dry conditions, especially in the Western Sierra Nevada Mountains, with a 5 percent Table A allocation for CY 2021. Current projections for 2021 call on a nearly 700,000 AF draw on storage by Metropolitan. Replenishing storage will come at a considerable cost. At a conservative cost of \$200 per AF, it would cost \$140 million in power cost just to move the water into the service area. Additionally, approximately 400,000 AF of that total is withdrawn from SWP storage accounts, leaving approximately 600,000 AF in SWP storage accounts. Due to operational constraints, a 15 percent SWP Table A allocation is needed to meet the demands in 2022 for the service areas where Metropolitan meets demands primarily with SWP resources. Therefore, there is a high likelihood that Metropolitan will need to take extraordinary actions to maintain reliable service through 2022 that will necessitate expenditures beyond those budgeted for FY 2021/22. As a reference point for participation in dry-year transfer markets, Metropolitan paid approximately \$630 per AF for north of Delta transfers in 2021. When Metropolitan is able to refill its water storage, it will incur an unbudgeted power and supply program expense that will cause a substantial draw on unrestricted reserves.

### **FY 2021/22 Outlook**

Depending on the continued severity of COVID-19 restrictions, we can expect some departmental O&M savings to continue in FY 2021/22. This includes possible savings for: Director inspection trip program and travel, training and seminars, community outreach events, building security, professional and non-professional services, expensed equipment, and employee-related work expenses such as transit reimbursements, management and employee events, office supplies, vanpool lease, and copier charges.

Despite these anticipated departmental O&M savings in FY2021/22, there are many areas in which we expect to see increased costs and lower revenues resulting from lower water sales. These include higher power, conservation and demand management costs in FY2021/22.

The current hydrologic conditions have led to unprecedented impacts on the California electricity market. For the first time since the Oroville Reservoir was initially filled, the lake is too low to generate hydropower. In July, the power operations and planning team presented to the Engineering and Operations Committee on the potential impacts to Metropolitan's power costs during FY 2021/22. Based on the current impacts to the wholesale electricity market and the need to operate the Colorado River Aqueduct (CRA) at the full 8-pump flow, ***Metropolitan may see costs for operating the CRA increase from approximately \$58 million budgeted to nearly \$100 million.*** These are unavoidable costs needed to maintain reliable service to our member agencies.

The conservation activity in FY 2020/21 was below budget primarily due to reduced conservation advertising activity in response to COVID-19. However, conservation and other demand management program funding is anticipated to increase in FY 2021/22. In August 2021, the Board declared a Water Supply Alert and called for consumers and businesses to voluntarily reduce their water use and help preserve the region's storage reserves. The dry conditions have motivated additional interest in boosting expenditures for demand management programs and advertising. At the adjourned August 2021 committee meetings, staff provided an update to the Board to increase conservation advertising in response to the Governor's statewide call for a voluntary reduction of 15 percent of water use. **Since the Board has not approved a collection mechanism for demand management, funds available for demand management is limited to funds in the Water Stewardship Fund. These funds are projected to be exhausted in FY 2022/23.** As such, the Board must establish a new demand management rate, charge or other revenue collection mechanism that goes into effect no later than CY 2023 to ensure continued funding of the demand management programs approved by the Board.

**In the first year of the biennial budget, Metropolitan realized an increase in unrestricted reserves with an ending balance below the target.** For the second year of the budget, there is a high probability that water demands on Metropolitan will be below the budgeted 1.6 MAF, reducing revenues and potentially reducing reserves. Also, when combined with potential unbudgeted expenses for dry year transfers, increased demand

management funding, operational impacts due to ongoing dry conditions and increased power costs due to the drought's impacts on the electric market, there are many things that could cause a draw on reserves in the second budget year.

Given the current status of unrestricted reserves, which are currently within the range of the established policy minimum reserves levels and target reserves levels, staff does not recommend any changes to the approved 4 percent rate increase for CY 2022. Moreover, staff does not recommend any changes to the second year of the current biennial budget.

### **Items that May Impact the Next Biennial Budget, FY 2022/23 and FY 2023/24**

Metropolitan will begin work in the fall on its next biennial budget, covering FY 2022/23 and FY 2023/24, and rates and charges effective January 1, 2023, and January 1, 2024. Significant issues to consider for the next biennial budget include:

- Lower Water Transactions: Metropolitan's fiscal year average water transactions over the last twenty years is about 1.9 MAF. However, the average over the last five fiscal years (FY 2015/16 thru FY 2020/21) is about 1.5 MAF. Changing demographics, demand management, and improved hydrologic conditions from FY 2016/17 through FY 2018/19 have contributed to Metropolitan's lower water transactions. While hydrologic conditions are unpredictable and cycles of low sales are expected, it may be that Metropolitan is moving to a new lower level of average water transactions. The current ten-year forecast assumes fiscal year transactions of 1.6 MAF to 1.75 MAF from FY 2021/22 through FY 2029/30. Metropolitan will evaluate whether to lower budgeted water transactions for the next budget and for the ten-year forecasts.
- Higher Costs due to Drought: Water Year 2022 will start with a 0 percent SWP Table A allocation, and the Colorado River will have the first-ever declared allocation. There may be a need to take unbudgeted actions to continue to provide reliable water service to our member agencies, especially to meet the needs of the service areas in the distribution system where Metropolitan uses primarily SWP water to meet demands. Additionally, based on the current electric market, a prolonged drought will increase electricity prices.
- Demand Management Cost Recovery: **Currently, Metropolitan's demand management programs are projected to run out of funding in FY 2022/23.** As such, the Board must establish a new demand management rate, charge or other revenue collection mechanism that goes into effect no later than CY 2023 to ensure continued funding of demand management.
- Cost of Resiliency Projects: Currently, only planning dollars are included for the Regional Recycled Water Project and Delta Conveyance Project. Inclusion of the full construction costs for either would necessitate additional rate increases above the current ten-year forecast.

### **Next Steps**

The development of the next biennial budget is underway. In February 2022, the Board will be presented with a proposed biennial budget and revenue requirements for FY 2022/23 and 2023/24; proposed water rates and charges for calendar years 2023 and 2024; and an updated 10-year forecast.

### **Policy**

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Metropolitan Administrative Code Section 5107: Biennial Budget Process

Metropolitan Administrative Code Section 5108: Appropriations

Metropolitan Administrative Code Section 5109: Capital Financing

Metropolitan Administrative Code Section 5200: Funds Established

Metropolitan Administrative Code Section 5202: Fund Parameters

By Minute Item 51828, on December 10, 2019, the Board directed staff: (1) to incorporate the use of the 2019/20 fiscal-year-end balance of the Water Stewardship Fund to fund all demand management costs in the proposed

fiscal years 2020/21 and 2021/22 Biennial Budget; and (2) to not incorporate the Water Stewardship Rate, or any other rates or charges to recover demand management costs, with the proposed rates and charges for calendar years 2021 and 2022.

By Minute Item 51962, on April 14, 2020, the Board approved the biennial budget for FYs 2020/21 and 2021/22; adopted resolutions fixing and adopting the water rates and charges for CYs 2021 and 2022; and adopted the resolution finding that for FYs 2020/21 and 2021/22, the ad valorem property tax rate limitation of Metropolitan Water District Act Section 124.5 is not applicable because it is essential to Metropolitan's fiscal integrity to collect ad valorem property taxes in excess of the limitation.

By Minute Item 51987, on May 12, 2020, the Board approved the continuance of Metropolitan's Water Standby Charge for FY 2020/21.

By Minute Item 52116, on September 15, 2020, the Board approved cost-containment measures recommended in Board Letter 8-1, as amended by the Board, to address the COVID-19 financial impacts.

By Minute Item 52204, on December 8, 2020, the Board adopted the COVID-19 Member Agency Payment Deferral Program and amend the Administrative Code to add Section 4519 delegating authority to the General Manager to administer the Program.



By Minute Item 52327, on April 13, 2021, the Board approved resolutions fixing and adopting a Readiness-to-Serve Charge and a Capacity Charge for calendar year 2022.

By Minute Item 52372, on May 11, 2021, the Board approved the continuance of Metropolitan's Water Standby Charge for FY 2021/22.

### **Fiscal Impact**

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None. This is an informational report.

|  |          |
|--|----------|
|  | 9/1/2021 |
| Katano Kasaine<br>Assistant General Manager/<br>Chief Financial Officer              | Date     |
|  | 9/1/2021 |
| Adel Hagekhalil<br>General Manager   | Date     |





# Mid-cycle Biennial Budget Review

Finance & Insurance Committee

Item 9-5

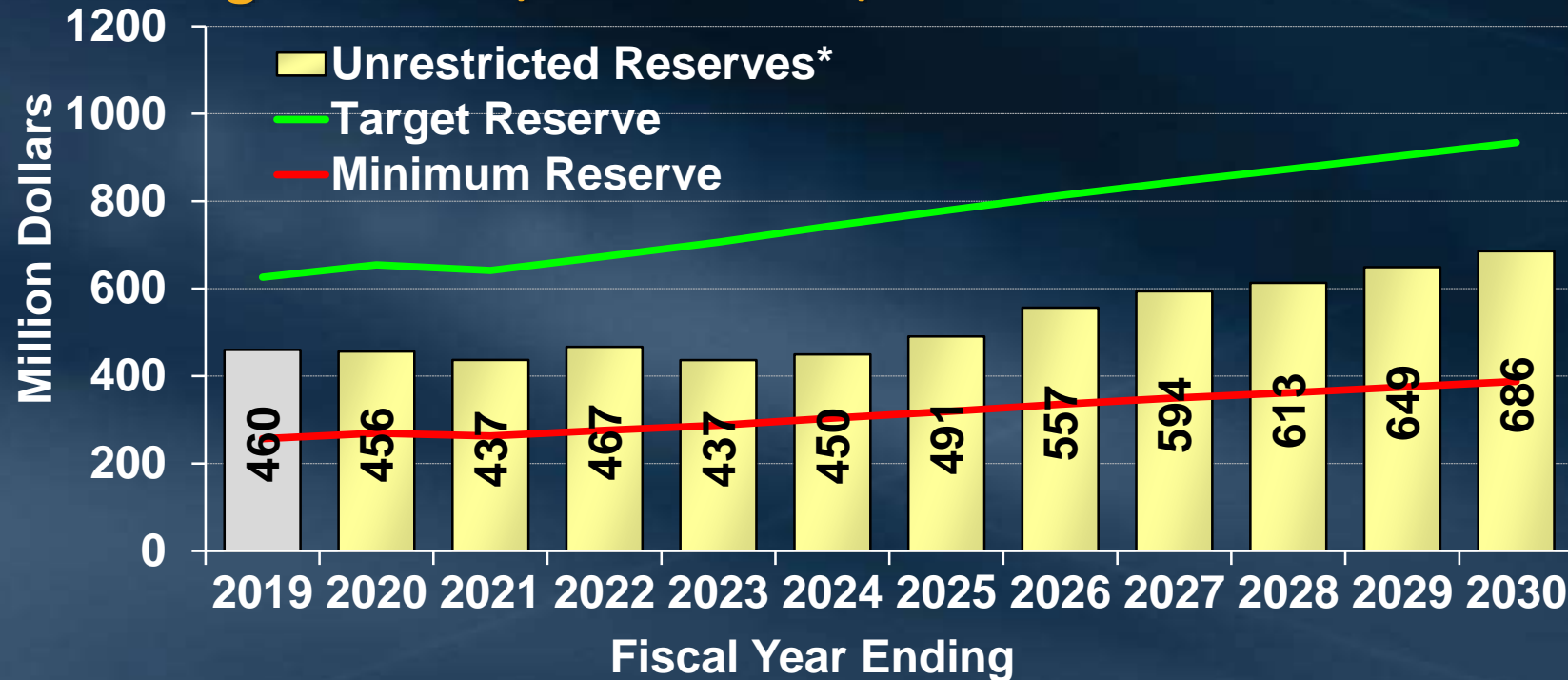
September 13, 2021

# Key Biennial Budget Goals and Underlying Assumptions FY 2020/21

- Fund key priorities while keeping water rates low
- Fund capital expenditures with emphasis on replacement and refurbishment
  - \$500M appropriation for the biennium
- Financial targets
  - Revenue bond coverage = 2.0x (budget est. was 1.5x)
  - Fixed charge coverage = 1.2x (budget est. was 1.5x)
  - Ratings AAA/AA+/Aa1 for Senior Lien
- Budgeted transactions of 1.60 MAF
  - 50% SWP allocation; 745 TAF from CRA

# Projected Rate Increases & Financial Metrics

## Biennial Budget FY 2020/21 and 2021/22 and Ten-Year Forecast



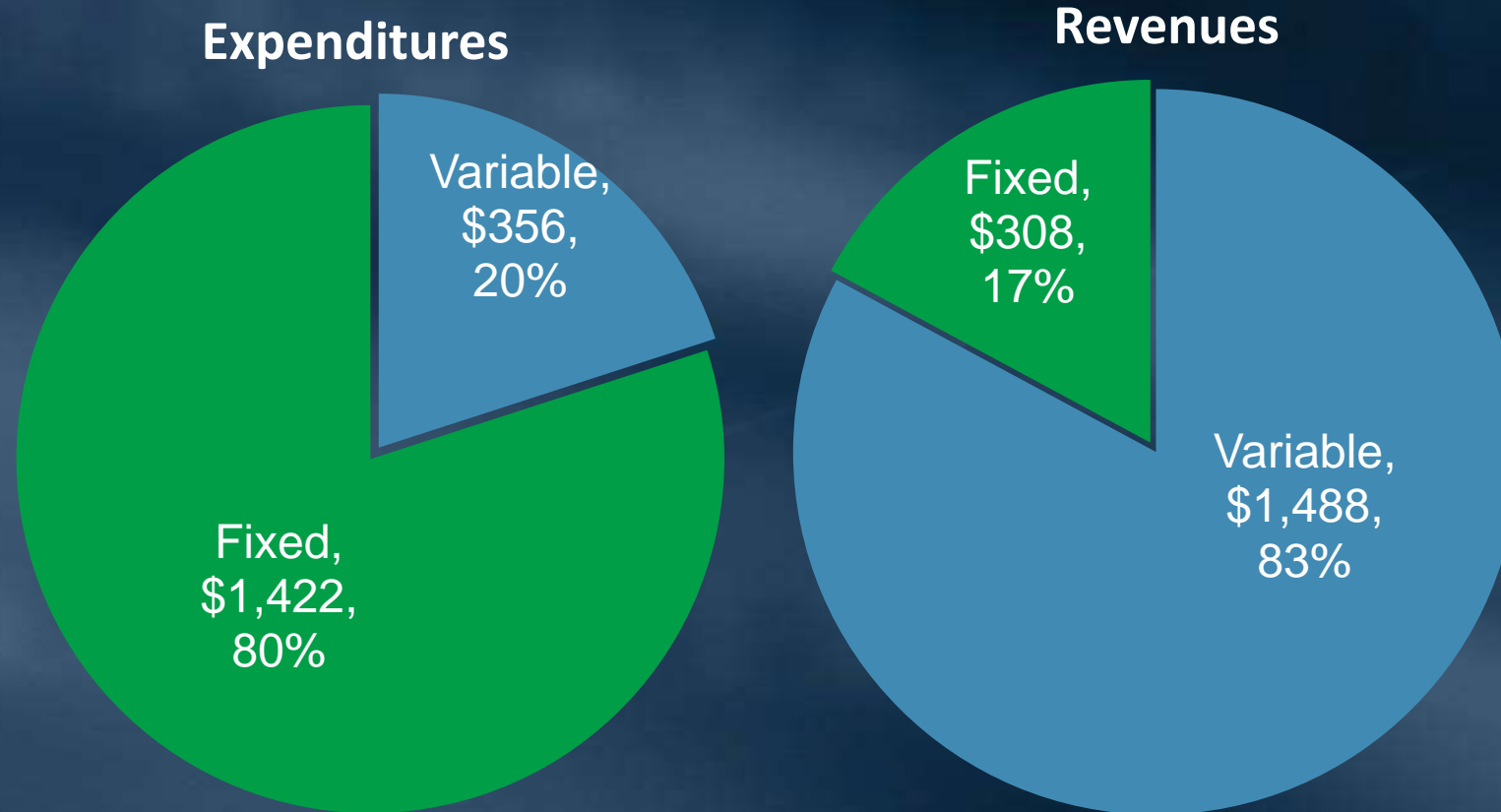
| Overall Rate Inc.          | 3.0% | 3.0% | 3.0% | 4.0% | 5.0% | 5.0% | 4.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Water Transactions (MAF)** | 1.42 | 1.55 | 1.60 | 1.60 | 1.60 | 1.64 | 1.69 | 1.74 | 1.74 | 1.74 | 1.75 | 1.75 |
| Rev. Bond Cvg              | 1.4  | 1.5  | 1.5  | 1.5  | 1.5  | 1.7  | 2.0  | 2.1  | 2.1  | 2.1  | 2.2  | 2.3  |
| Fixed Chg Cvg              | 1.4  | 1.4  | 1.5  | 1.5  | 1.5  | 1.7  | 1.9  | 1.9  | 1.8  | 1.6  | 1.7  | 1.7  |
| PAYGO, \$M                 | 126  | 30   | 110  | 135  | 180  | 180  | 210  | 210  | 210  | 210  | 210  | 210  |

\* Revenue Remainder and Water Rate Stabilization Fund

\*\* Includes water sales, exchanges and wheeling

# Fixed Costs vs. Variable Revenues

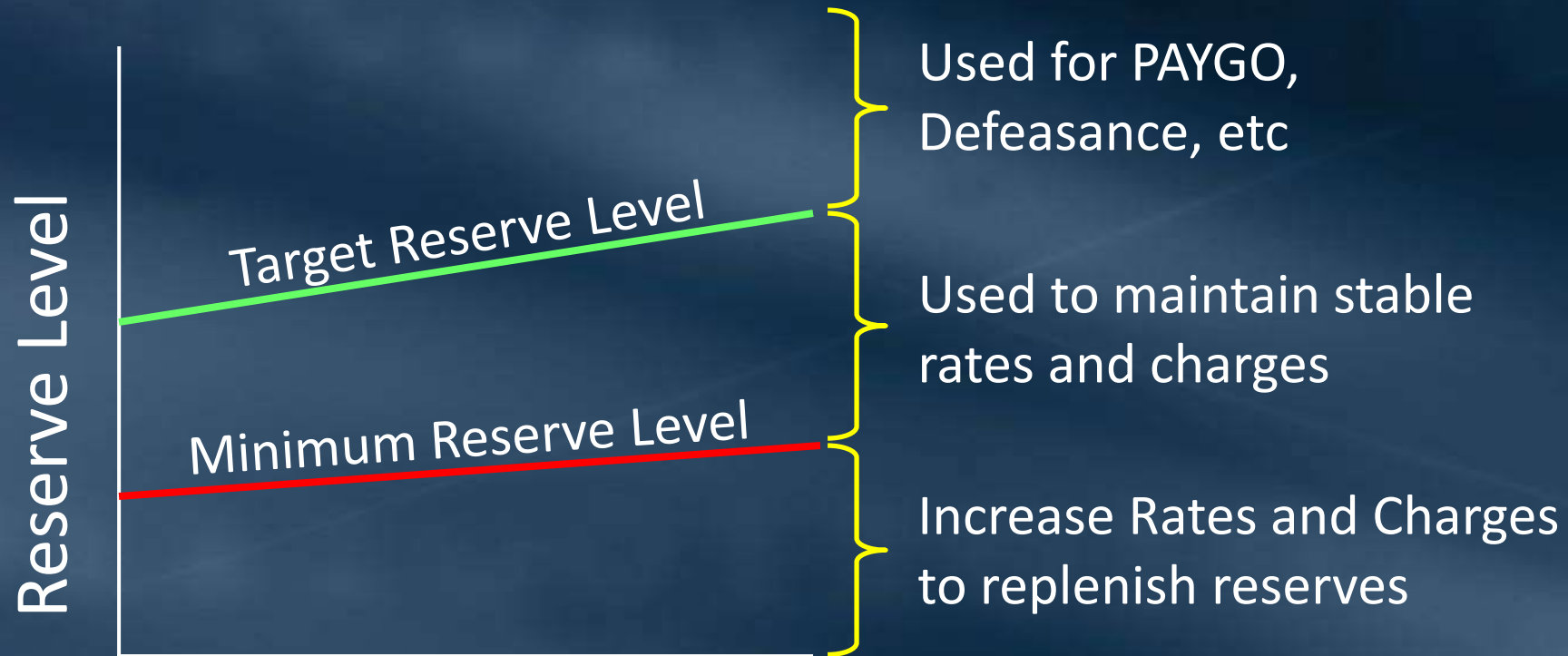
## FY 2020/21 Budget



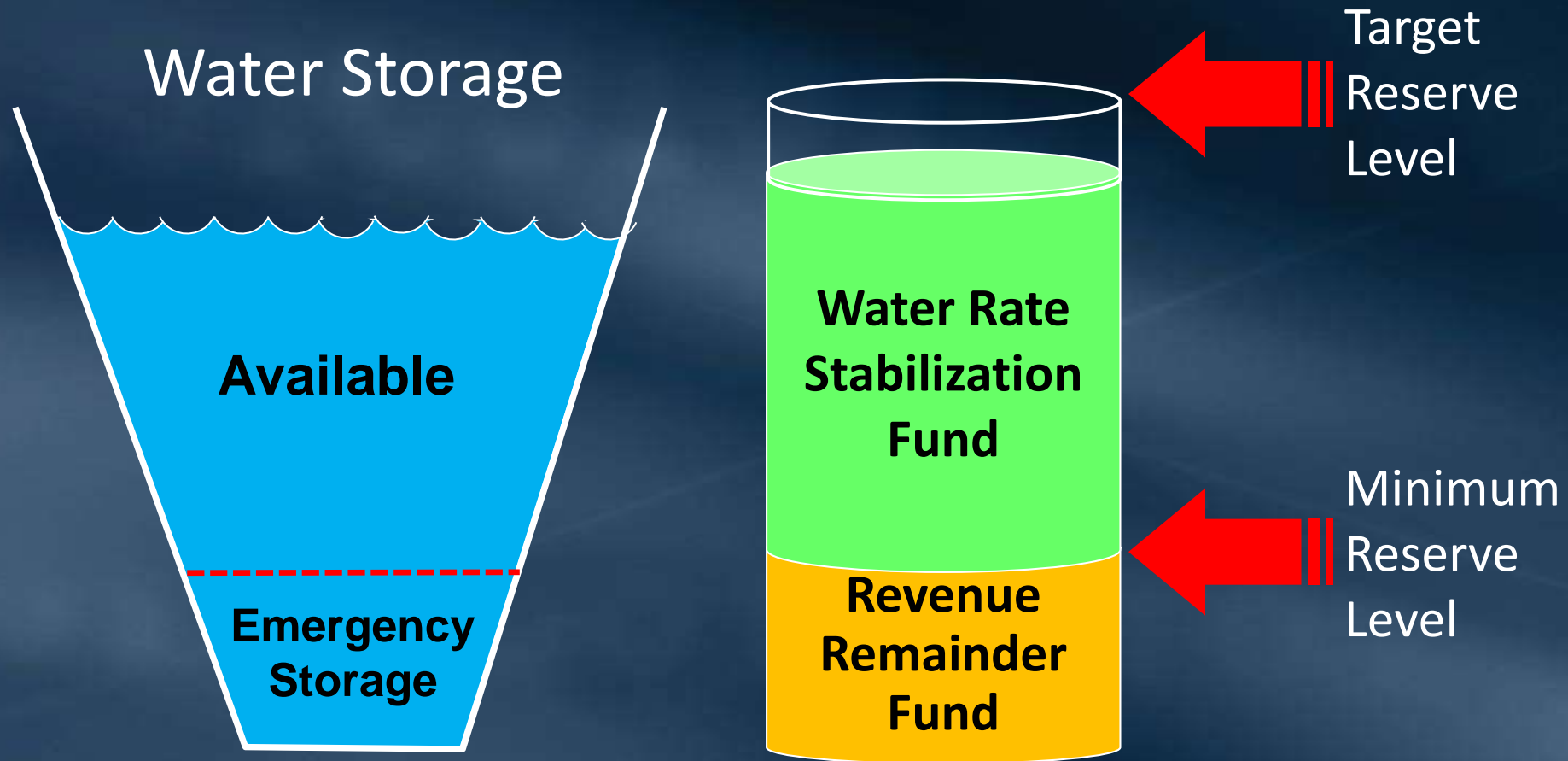
# Unrestricted Reserve Policy

## Reserve Fund Principle:

Provide stable & predictable water rates



# Reserve Fund



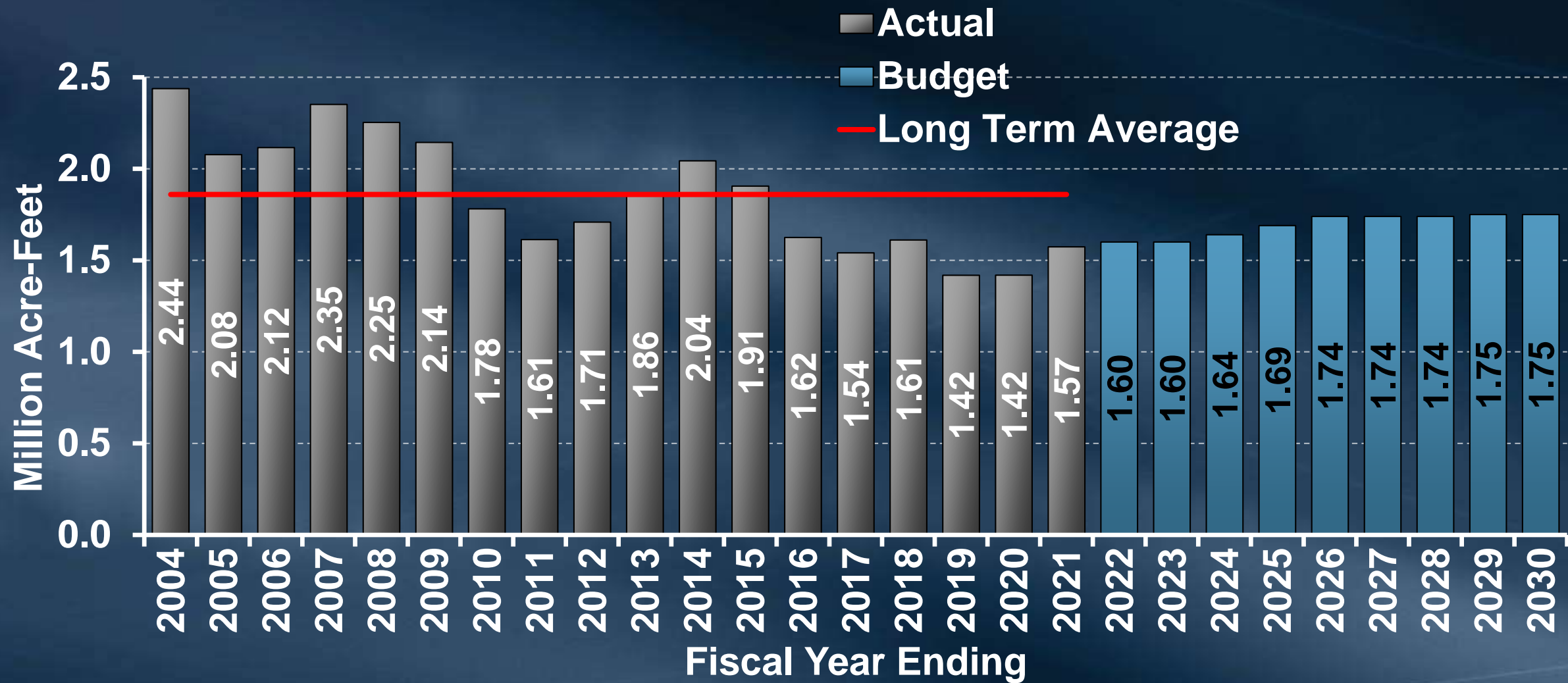


# September 2020 Budget Board Action

- Track COVID-19 impacts and payment deferral program
  - There were no delinquencies related to COVID, and no member agencies utilized the deferment program.
- Monitor water demands, sales and expenditures, and prepare additional cost-containment measures; maintain adopted rates
- New revenue generation options include a groundwater replenishment program
  - For discussion in rate refinement workgroup
- Moratorium on non-emergency, unbudgeted proposals
  - Shaw Law Group, battery energy storage systems, dry-year transfers



# Water Transactions\*



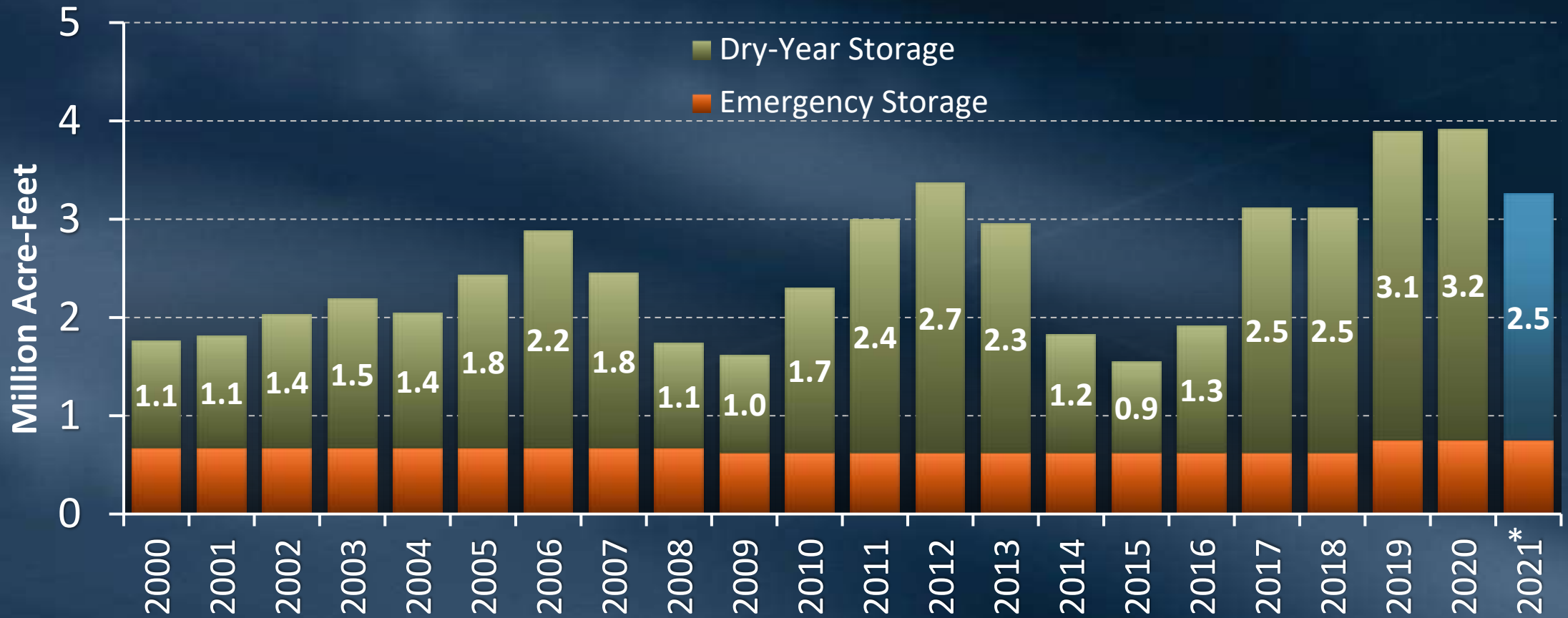
\* Includes water sales, exchanges and wheeling

# FY2020/21 Actual vs Budget

|  | Preliminary<br>Actuals | FY2020/21<br>Budget | Variance       |
|--|------------------------|---------------------|----------------|
| Water Transactions                     | 1,404.7                | 1,444.5             | (39.7)         |
| RTS Charge                             | 133.0                  | 133.0               | -              |
| Capacity Charge                        | 31.7                   | 34.7                | (3.1)          |
| Taxes                                  | 160.8                  | 139.9               | 20.9           |
| Interest Income                        | 9.8                    | 17.9                | (8.2)          |
| Power Sales                            | 19.0                   | 20.8                | (1.8)          |
| Other                                  | 10.6                   | 4.6                 | 6.0            |
| <b>Total Revenues</b>                  | <b>1,769.5</b>         | <b>1,795.5</b>      | <b>(26.0)</b>  |
| State Water Contract                   | 521.8                  | 615.8               | (94.0)         |
| Departmental O&M                       | 479.2                  | 544.1               | (64.9)         |
| CRA Power                              | 50.5                   | 52.2                | (1.7)          |
| Supply Programs                        | 66.2                   | 68.7                | (2.4)          |
| Demand Management                      | 34.7                   | 48.5                | (13.8)         |
| Debt Service                           | 287.1                  | 298.7               | (11.6)         |
| PAYGO                                  | 110.0                  | 110.0               | -              |
| Delta Conveyance Planning Costs        | 25.0                   | 25.0                | -              |
| Regional Recycled Planning Costs       | 1.2                    | 15.0                | (13.8)         |
| <b>Total Expenses</b>                  | <b>1,575.8</b>         | <b>1,778.0</b>      | <b>(202.2)</b> |
| <b>Net Revenue</b>                     | 193.7                  | 17.5                | 176.3          |
| <b>Increase in Required Reserves</b>   | (46.8)                 | (36.5)              | (10.3)         |
| <b>Change in Unrestricted Reserves</b> | <b>146.9</b>           | (19.0)              | 165.9          |

# Metropolitan Storage Balances

## End of Year Balances



\* Estimate – May change based on supply/demand conditions

# Outlook for FY 2021/22

- Some continued departmental O&M savings
- Uncertain level of water transactions
  - Budget is based on 1.6MAF
- Power costs
  - Lower SWP Allocation --> lower SWC power
  - Higher CRA power costs due to high CRA flows with high market power prices
- Supply Programs
  - Expect higher unbudgeted expenses for dry year transfers
- Demand Management Costs
  - MWD is ramping up the conservation program in response to the drought.

# Biennial FY 2023 and FY 2024 Budget Outlook

- Water Transactions
  - Review 10-year forecast for water transactions
- Drought
  - Potential additional supply and power costs
- Demand Management Cost Recovery
  - New demand management rate, charge, or other revenue collection mechanism needed no later than CY 2023
- Cost of Resiliency Projects
  - Regional Recycled Water Program
  - Delta Conveyance

# Next Steps

- December F&I Committee: Review Proposed FY 2022/23 & FY 2023/24 Biennial Budget and Rates Process
- January 2022: Mailing of Budget, Revenue Requirements and Water Rates & Charges Board Letter
- February through March 2022 F&I Committee: Workshops on Biennial Budget & Rates and Charges
- April 2022 Board Meeting: Consider action on FY 2022/23 & FY 2023/24 Budget, 2023 and 2024 rates and 2023 charges



