

Wastewater & One Water Connection Fees
and Service Rates Study
Workshop 4 – August 1, 2019



Workshop Agenda

1. Project Status
2. Wastewater
 - Connection Fee Overview
 - Monthly EDU Rate Overview
3. Water
 - Connection Fee Overview
 - Monthly MEU Rate Overview

IEUA Funding Strategy: Based upon a comprehensive and integrated approach

- ✓ Draft Analysis Complete
- ✓ Tech Memo Distributed
- Recycled and Recharge analysis in progress



- On hold pending sampling study



- ✓ Draft Analysis Complete
- ✓ Tech Memo Distributed



- ✓ Draft Analysis Complete
- On hold pending sampling study



Connection Fees Overview

What is a connection fee? One-time charge imposed on new or upsized meters or connections to compensate for the cost of providing system capacity

- Assessed per unit of capacity required:
 - Wastewater per Equivalent Dwelling Unit (EDU)
 - Water per Meter Equivalent Unit (MEU)

Adopted Fees

Wastewater
Connection Fees

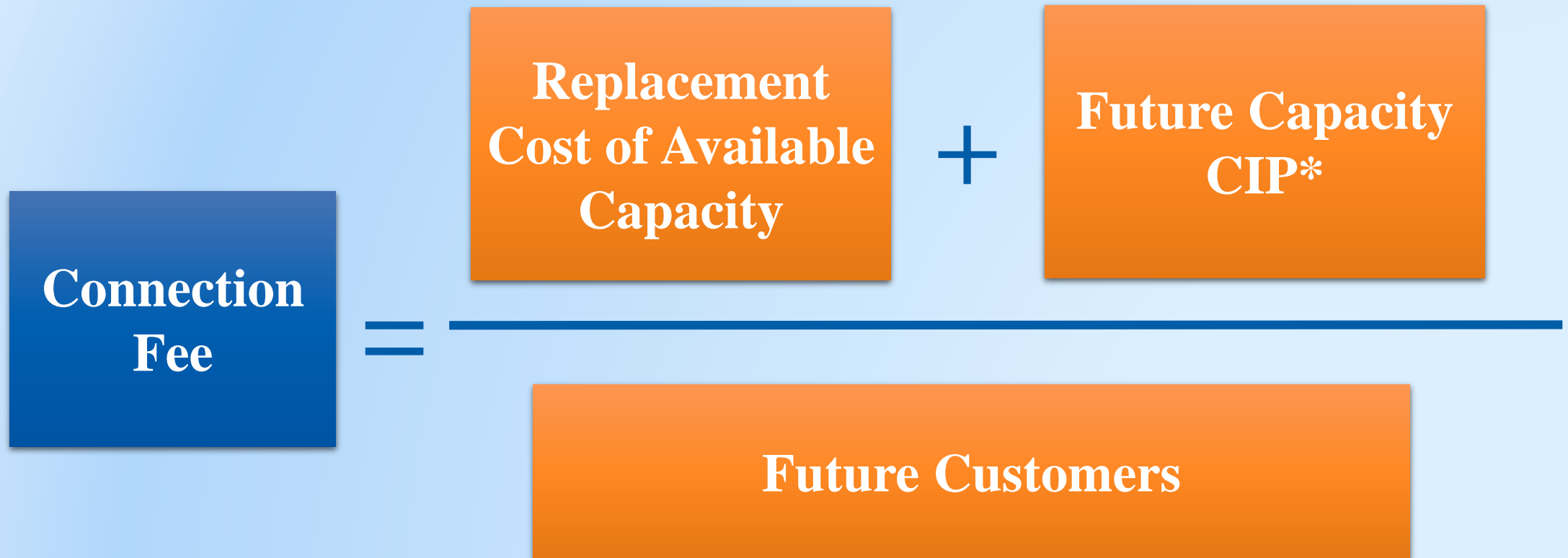
FY 2019/20: \$6,955 per EDU

One Water
Connection Fees

FY 2019/20: \$1,684 per MEU

Hybrid Connection Fee Methodology:

Recovers proportionate share of capacity for existing system and planned future improvements



*CIP: Capital Improvement Program

System Value and Cost Components: Hybrid connection fees account for existing assets as well as future improvements.

Existing Assets (Buy-In)

- **Existing Physical Assets** (Replacement Cost New Less Depreciation, RCNLD)
- **Plus:** Construction in Progress
- **Plus:** Cash Reserves
- **Less:** Adjustment for grants and property tax revenues used for capital projects

Future Improvements (Incremental)

- Capital Improvements Attributable to Growth



Wastewater Connection Fees

Wastewater Connection Fee: Developed based on the total number of customers expressed as Equivalent Dwelling Units (EDUs)

- EDUs are calculated based on the same projected flows and loads that are the basis of the Agency's long-term capital planning;
 1. Determine the system flow and loadings.
 2. Determine the EDU flow and loading assumptions.
 3. Allocate assets to existing customers and future users.
 4. Allocate assets to the billable constituents of Flow, Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS).
 5. Determine the asset allocation factors.
 6. Calculate the number of EDUs.

System Flow Forecast: Flow projections developed through the 2015 Integrated Water Resources Plan (IRP)

- Actual flows have decreased due to water use efficiency and changes to plumbing code
- IRP flow projections were updated to reflect actual flows in recent years

	Start of Study Period (2020)	Increase by 2040	Future (2040)
<i>2015 IRP Flow Projection (MGD)</i>	59.2	17.1	76.3
Updated IRP Flow Projection (MGD)	50.0	18.7	68.7

- Consistent with projections used for the One Water Connection and Meter Equivalent Unit (MEU)

System Loading Forecast: Load projections developed through the 2015 Integrated Water Resources Plan (IRP)

- Unlike flows, projected mass loads are expected to remain consistent with the 2015 Facilities Master Plan (FMP)
 - Per capita loads into the system have not decreased as they are not impacted by indoor conservation and water use efficiency
- Loading concentrations can vary amongst different user types (residential v. non-residential)
 - Sampling data is not available to determine BOD and TSS loading assumptions by user type

EDU Flow and Loading Assumptions: Three scenarios were developed for the connection fee analysis.

- Scenarios tested the sensitivity of EDUs and connection fees to mass loading assumptions

Component	Regional Contract	2015 Study	2020 Study Baseline Scenario	2020 Study Scenario 1	2020 Study Scenario 2
Flow (gpd)	270	195	180	180	180
BOD Concentration (mg/L)	230	318	345	310	380
BOD Mass Loading (lb/day)	0.52	0.52	0.52	0.47	0.57
TSS Concentration (mg/L)	220	304	330	295	365
TSS Mass Loading (lb/day)	0.50	0.50	0.50	0.44	0.55

EDU Flow and Loading Assumptions

- Values assumed for Flow, BOD and TSS for a single-family resident, vary from Regional Contract, Exhibit J
- Updated values are necessary to tie the number of EDUs for the connection fee analysis to the Agency's long-term capital planning efforts.
- Exhibit J needs to be updated to appropriately calculate the number of EDUs for non-residential users when they connect to the system as required by Prop 26

Wastewater Connection Fees: Proposing a 3-percent increase consistent with the adopted biennial budget.

	Fee per EDU
Current Fee (7/1/2019)	\$6,955
<u>Preliminary Draft Fees Presented 5/2/2019</u>	
Baseline Scenario -Mass loading matched to Regional Contract	\$7,700
High Loading Scenario -Increased Mass Loading	\$8,200
<u>Refined Calculations (updated CIP allocations & ENR)</u>	
Baseline Scenario -Mass loading matched to Regional Contract	\$7,679
Low Loading Scenario 1 -Mass loading decreased from Regional Contract	\$7,233
High Loading Scenario 2 -Mass Loading increased from Regional Contract	\$8,086

- Allow time to complete flow and loads study to update EDU assumptions
- Facilitate update of Exhibit J in unison with connection fees
- Proposed Fees:
 - FY 2020/21 \$7,164
 - FY 2021/22 \$7,379



Monthly Wastewater EDU Rates

Wastewater Monthly EDU Rates: Proposing a 3-percent increase consistent with the adopted biennial budget.

- Allow time to complete flow and loads study to update EDU assumptions
- Facilitate update of Exhibit J in unison with monthly rates
- Proposed Fees:
 - FY 2020/21 - \$20.60 per EDU/month
 - FY 2021/22 - \$21.22 per EDU/month



One Water Connection Fees

One Water Connection Fees: Refined based on updated CIP, asset, and MEU information.

	Fee per MEU
Current Fee (7/1/2019)	\$1,684
Preliminary Draft Fees Presented 5/30/2019	\$2,100
Refined Draft Fees	\$1,791
Change From Current Fees	\$107

MEU Calculations: MEU projections have been updated to reflect the latest member agency MEU survey.

Current Connections and MEUs

Meter Size	MEU Ratio	Potable Connections	Recycled Connections
5/8" & 3/4"	1.0	141,321	
1"	2.5	45,067	122
1.5"	5.0	5,280	214
2"	8.0	8,006	458
3"	17.5	592	117
4"	31.5	306	36
6"	70.0	135	30
8"	120.0	172	11
10"	150.0	22	23
12"	175.0	1	
Total Connections		200,902	1,011
MEUs		398,000	15,091

MEU Calculation	
Current MEUs	
Potable	398,000
Recycled	15,091
Total	413,091
2020 Usage (AFY)	220,671
AFY per MEU	0.534
2040 Usage*	287,533
2040 MEUs	538,255
New MEUs	125,164
Percent	23%

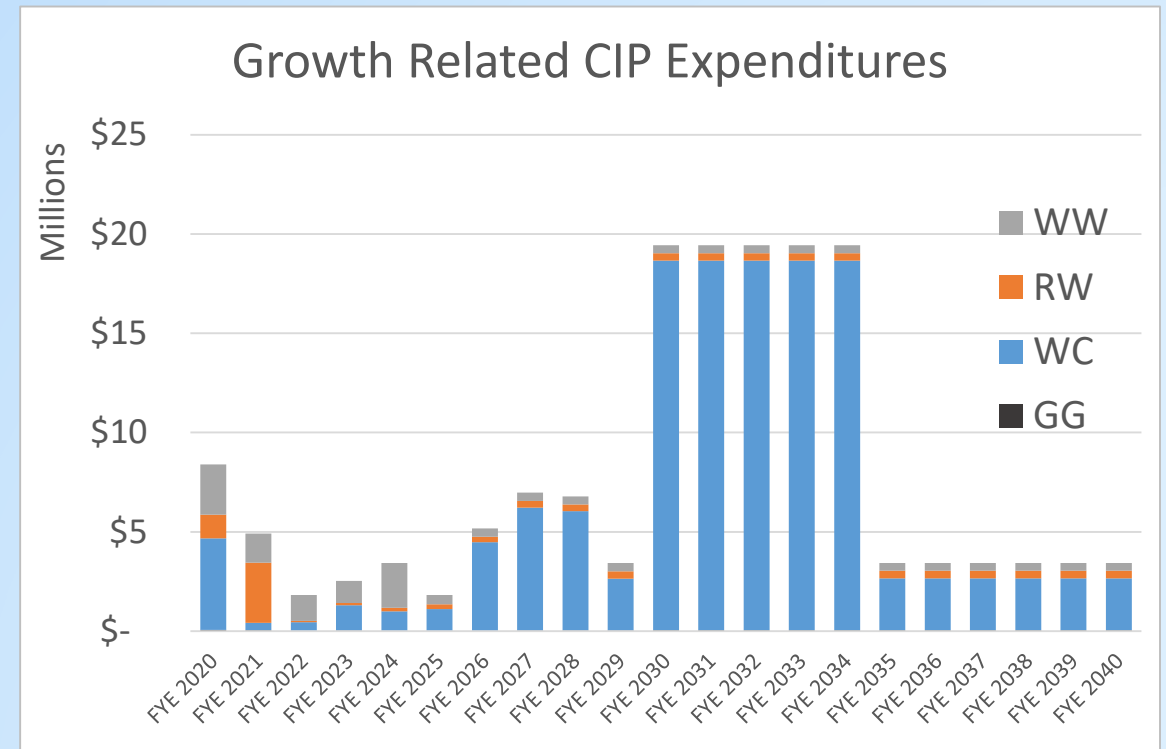
*2040 usage based on 2015 UWMPs and confirmed by member agencies.

Note: Totals may not tie due to rounding.

Capital Improvement Plan: Approximately 30 percent of CIP costs through 2040 are considered to be growth related.

Water System Capital Improvement Plan

Fund	2020 - 2040 Project Costs (M)	Future Users' Share (M)
Recycled Water (WC)	\$421.3	\$136.8
Recharge Water (RW)	\$44.8	\$10.3
Water Resources (WW)	\$65.8	\$15.1
Administrative Services (GG)	<u>\$3.5</u>	<u>\$0.8</u>
Total	\$535.4	\$163.0



The previous analysis (5/30/2019) included a total of \$189.8 million in growth related CIP

Note: Totals may not tie due to rounding.

Draft One-Water Connection Fees

Component	5/2/2019 Prelim. (M)	Refined Results (M)
RCNLD (Existing Physical System)	\$61.7	\$61.7
Construction in Progress	\$3.3	\$3.4
Reserves	\$12.4	\$10.2
Less: Grants and Reimbursements Offset	n/a	(\$14.3)
Subtotal Buy-In Portion	\$77.3	\$61.0
Incremental Portion (Growth Related CIP)	\$189.8	\$163.0
Expected Future Users (MEUs)	130,056	125,164
Buy-In Fee (\$ per MEU)	\$600	\$488
Incremental Fee (\$ per MEU)	\$1,500	\$1,303
Total Connection Fee per MEU	\$2,100	\$1,791

- Results of the draft analysis suggest a fee of **\$1,791 per MEU**
 - The current fee for FY 2019/20 is \$1,684 per MEU*

Note: Totals may not tie due to rounding.



Water Resources Rates Overview

Water Resources Fund: Records activities associated with water deliveries and water resources planning

- Manages delivery of imported water from MWD
- Implements water use efficiency programs throughout the service area
- Provides water resources planning and stewardship in the region
- Supports compliance with State Statutes (Urban Water Management Plan (UWMP) / Water Use Efficiency (WUE) regulations)
- Supports regional water supply programs
 - Recycled Water
 - Groundwater Recharge
 - Storm Water Management

MEU Rate and RTS Pass-through Update:

- MEU Rates
 - Developed draft rates for FY 2020/21 through FY 2024/25
 - No change in the existing rate structure
- RTS Pass-Through
 - Continue phase in until full pass-through in FY 2022/23

Adopted MEU Rates

FY 2019/20: \$1.04 per MEU/Month

Adopted RTS Pass-Through

FY 2019/20: 60% of MWD RTS

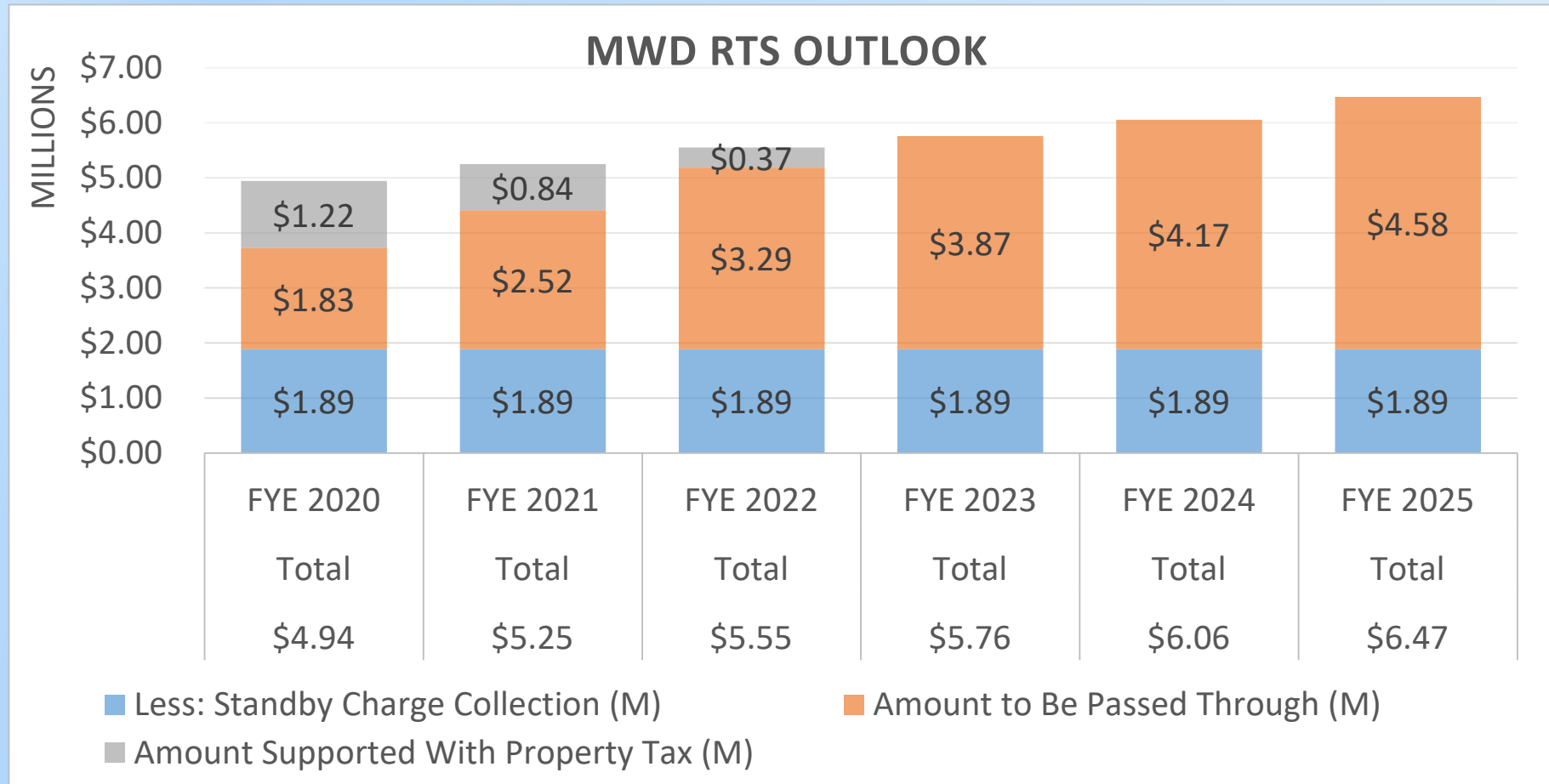
FY 2020/21: 75% of MWD RTS

FY 2021/22: 90% of MWD RTS

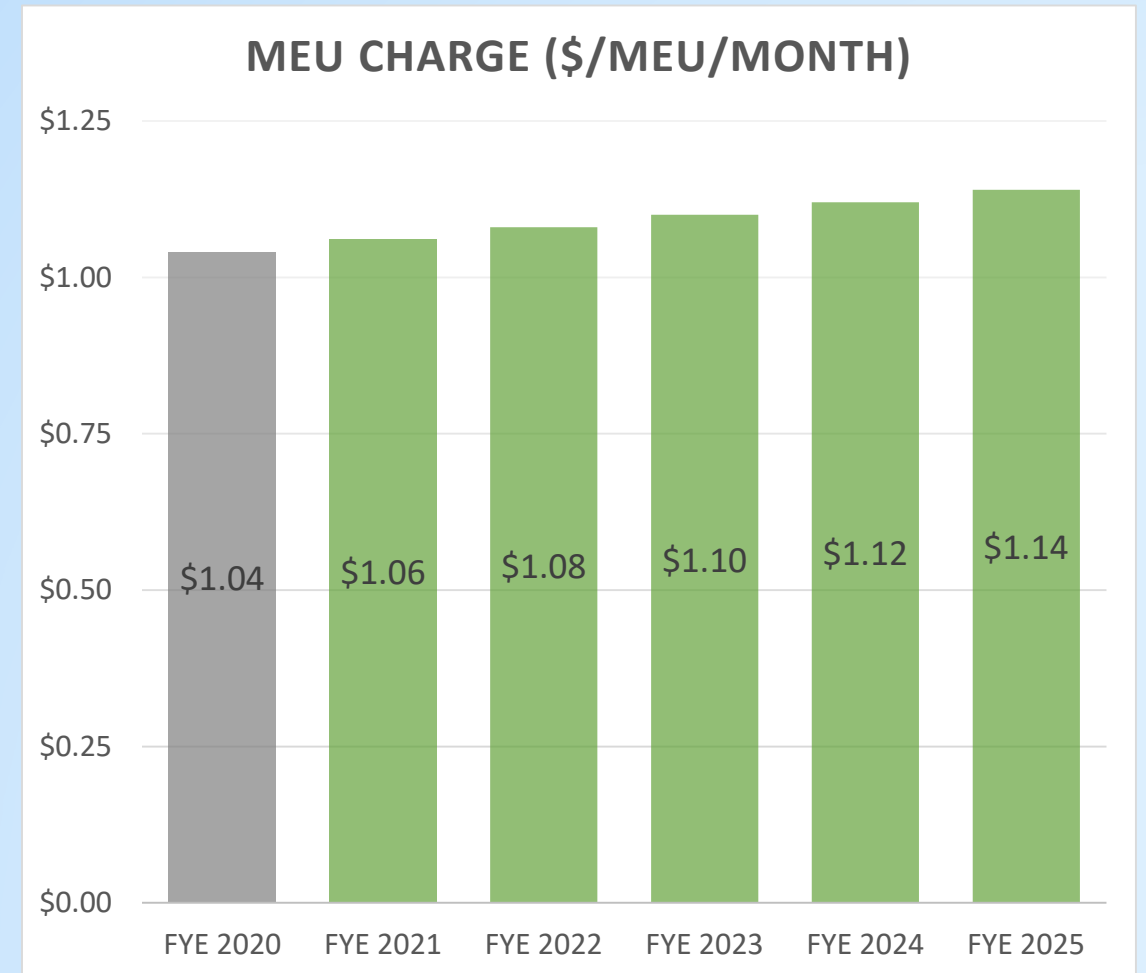
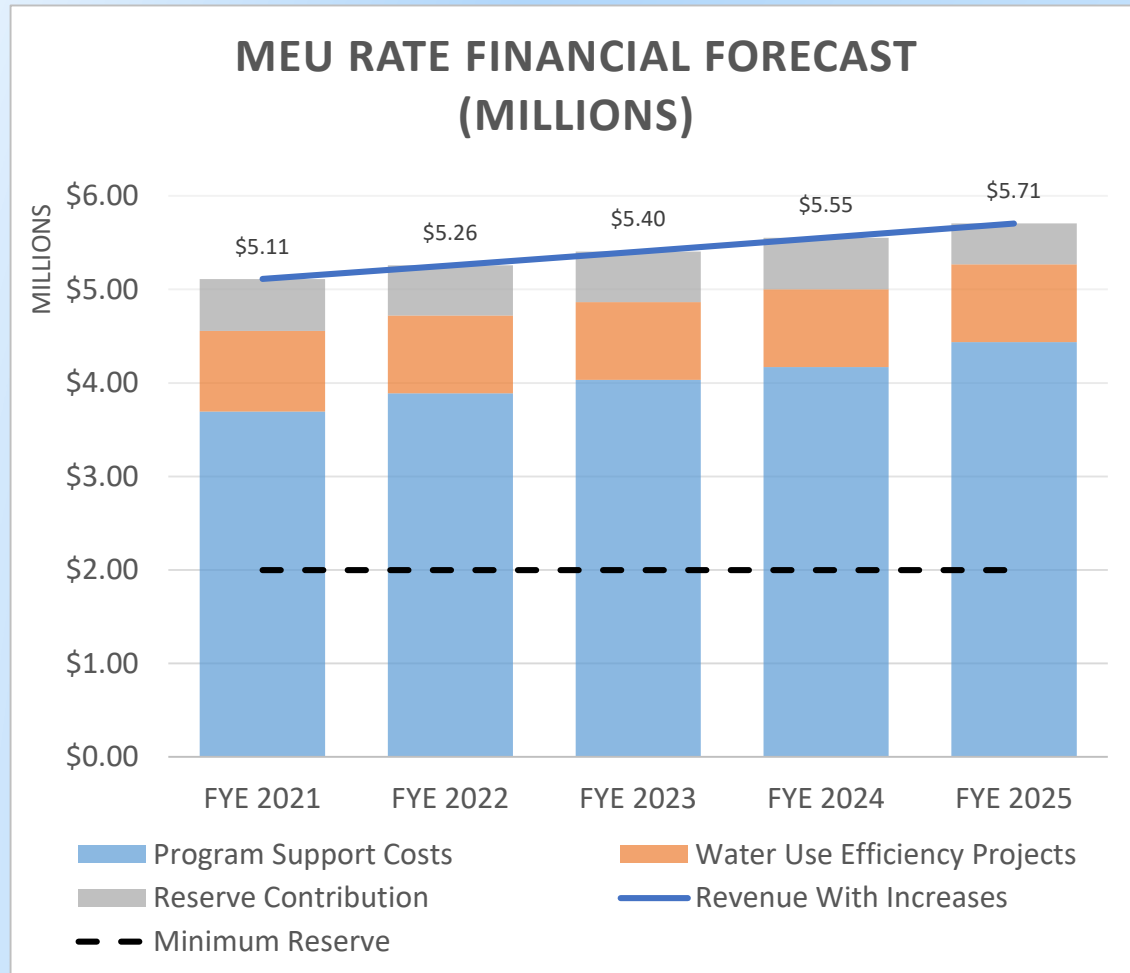
FY 2022/23: 100% of MWD RTS

RTS Outlook: MWD expects the RTS to increase by up to 30 percent over the next five years

- Average annual increase of approximately 5.4%



Financial Forecast: Based on the analysis, 2-percent rate revenue increases are needed in each year



User Rates: Need to collect all annual revenue requirements less offsetting revenues



The monthly MEU rate does not currently support capital projects

Offsetting Revenues: Special project and WUE costs are offset using Connection Fees, Property Taxes, Grants, and Reimbursements

Water Use Efficiency Projects (Millions)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Project Costs	\$1.60	\$1.56	\$1.56	\$1.56	\$1.56
Less: Offsetting Revenues					
One Water Connection Fees	(0.37)	(0.36)	(0.36)	(0.36)	(0.36)
Conservation Credit Reimbursements	(0.36)	(0.36)	(0.36)	(0.36)	(0.36)
Grants	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Supported By MEU Rates	\$0.86	\$0.83	\$0.83	\$0.83	\$0.83

Other Projects (Millions)	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Project Costs	\$1.15	\$0.55	\$0.25	\$0.25	\$0.50
Less: Offsetting Revenues					
One Water Connection Fees	(0.26)	(0.13)	(0.06)	(0.06)	(0.12)
Property Taxes	(0.88)	(0.42)	(0.19)	(0.19)	(0.39)
Supported By MEU Rates	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Note: Totals may not tie due to rounding.

MEU Rate Calculation:

	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Program Support (Millions)	\$3.70	\$3.90	\$4.04	\$4.18	\$4.45
Other Projects Supported By Rates (Millions)	0.00	0.00	0.00	0.00	0.00
WUE Projects Supported By Rates (Millions)	0.86	0.83	0.83	0.83	0.83
Reserve Contribution (Millions)	<u>0.56</u>	<u>0.54</u>	<u>0.54</u>	<u>0.55</u>	<u>0.44</u>
Total Requirements (Millions)	\$5.12	\$5.27	\$5.41	\$5.56	\$5.72
Less: Offsetting Revenues					
Other Revenues (Millions)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)	(\$0.01)
Supported by MEU Rate (Millions)	\$5.11	\$5.26	\$5.40	\$5.55	\$5.71
Monthly Rate Calculation	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Projected MEUs	401,583	405,197	408,844	412,523	416,236
Monthly Rate Per MEU	\$1.06	\$1.08	\$1.10	\$1.12	\$1.14

Note: Totals may not tie due to rounding.



Next Steps

Next Steps:

- Complete analyses for other service rates
 - Recycled Water Rates
 - Recharge Water Rates
- Incorporate scenarios to assess the impact of the Chino Basin Program
- Start planning for flow and load study and analysis
- Next workshop scheduled tentatively for 09/05/2019