



Subcommittee on Long-Term Regional Planning
Processes and Business Modeling

Status Report on Treatment Surcharge and Recommendations on Reserves, Water Transactions, and Other Fixed Revenues

Item 3b
April 22, 2025

Summary of work completed to-date

Treated Water Cost Recovery

11 Workshops since May 2024

- Key concerns/issues raised by MA's during Budget adoption with the Treatment Surcharge
- Goals and objectives of the Treated Water Cost Recovery Workgroup, including the Policy Principles on Treated Water previously adopted by the Board and past efforts to develop alternative approaches to Treated Water Cost Recovery
- MWD's current treatment operations, plant capacity, utilization (including distribution of historical data by member agency), cost, and cost of service, which included support from MWD's external rate consultant as needed
- Identified a portion of the treated system that provides a regional drought reliability benefit, which included the development of a white paper "Regional Drought Reliability Benefits Due to Flexibility of the Integrated Treated Water System" dated January 17, 2025
- MWD and MA's developed and evaluated treated water cost recovery alternatives for Peaking and Standby Use:
 - Six (6) Treatment Peaking Alternatives
 - Nine (9) Treatment Standby Alternatives
 - Four (4) separate proposals introduced by Member Agencies in January 2025, February 2025, March 2025 and March 14 2025

Board Direction FY 2024/25 & 2025/26 Budget Cycle

Board Direction

On April 9, 2024, the Board took action to adopt the Fiscal Year (FY) 2024/25 and FY 2025/26 Biennial Budget (Option 1), including Recommendation (i) related specifically to the Treatment Surcharge.

“Metropolitan staff will work with member agency staff and the CAMP4Water Task Force to understand and analyze the treatment surcharge and specifically address issues that arise from that analysis including but not limited to modifying the way the charge is calculated. A final method will be prioritized as part of the new business model discussion and recommended for adoption as soon as possible thereafter but no later than approval of the new business model.”

Discussions by Member Agencies in FY 2024/25 & 2025/26 budget cycle:



- Because of the 100% volumetric treated water rate structure, agencies that can only access treated water from Metropolitan pay a **disproportionate cost** to maintain the treatment capacity for those that use treated water on an as-needed basis
- Rate structure best practices involve collecting approximately one-third of revenue through fixed charges and the remainder through volumetric charges. Higher fixed revenues will assist in **rate stability**
- Increases in other fixed revenue sources, such as AV taxes, should not adversely impact the Treatment Surcharge



- The pace of Treatment Surcharge increases presents **affordability challenges** for member agencies, particularly those that only purchase treated water from Metropolitan
- **Rate predictability** is key to financial planning for member agencies and their customers
- Consideration should be given to deferring non-critical capital investments and **decommissioning surplus treatment capacity** to reduce costs and rate increases

2017 Adopted Policy Principles

Policy Principles for Treatment Rates and Charges

1. Treatment rates and charges shall align treatment costs with treatment services and benefits received consistent with cost-of-service principles.
2. Treatment services shall be recognized to include physical water treatment, as well as operational benefits such as available treatment capacity used by member agencies.
3. In an effort to contain overall treatment costs on an on-going basis, MWD shall programmatically identify opportunities to partially or fully decommission unneeded treatment infrastructure and minimize future O&M and capital expenditures. MWD should obtain member agency commitment to utilize new or expanded future treatment capacity.

Guiding Framework for Rate Design Solutions

Consistent with 2017 Adopted Policy Principles and Feedback



Treatment Rates & Charges Should:

1. Be consistent with industry standard cost of service principles

- Provide a clear nexus between member agency cost responsibility and benefits received
 - ... “Rate charged should reflect the cost of having capacity reserved and available for the customer” (AWWA M1 Principles of Water Rates, Fees, and Charges, 7th Edition)

2. Align treatment rates with treatment services received

- a) Align the treated water cost recovery with (1) the service commitments and (2) infrastructure capital investments made by Metropolitan
- b) Reflect the cost to maintain the treatment capacity and the treatment benefits received for average, peaking, and standby uses
- c) Evaluate the portion of standby capacity that provides regional drought reliability

3. Enhance rate stability and predictability

- a) Recover a portion of the treatment cost on fixed charge(s)
- b) Working closely with Member Agencies to continue to identify opportunities to partially or fully decommission unneeded treatment infrastructure & minimize future O&M & capital expenditures
- c) Continue obtaining member agency commitment to utilize new or expanded future capacity

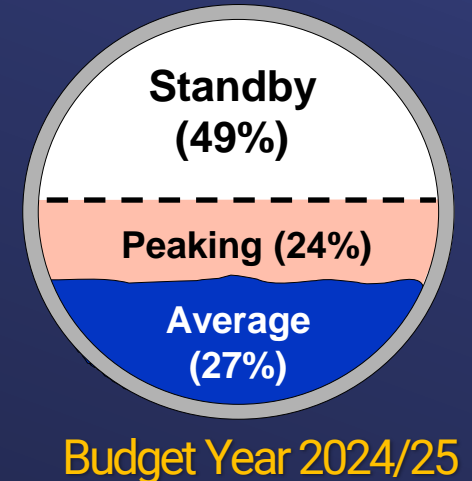
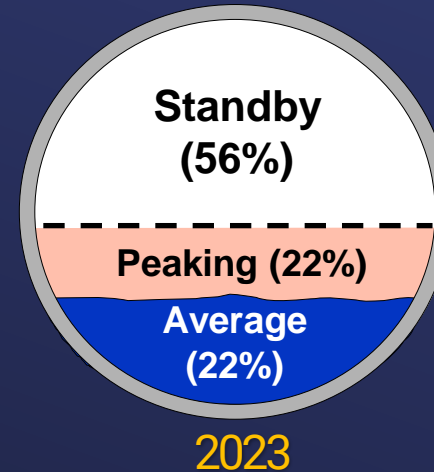
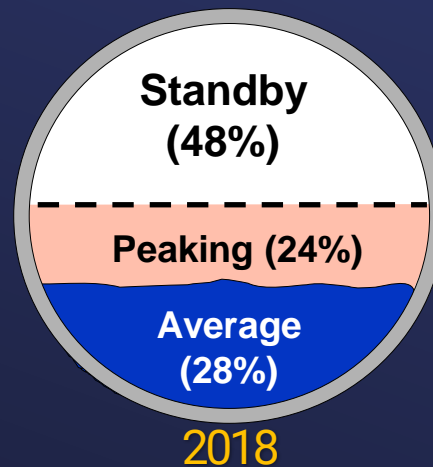
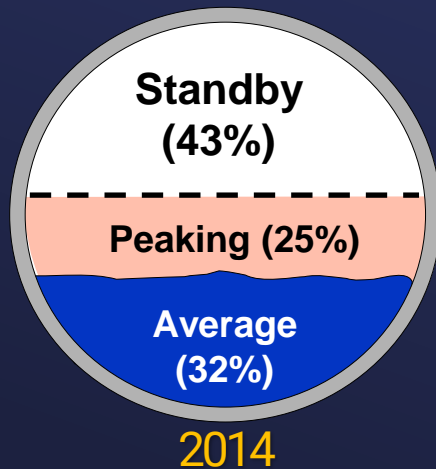
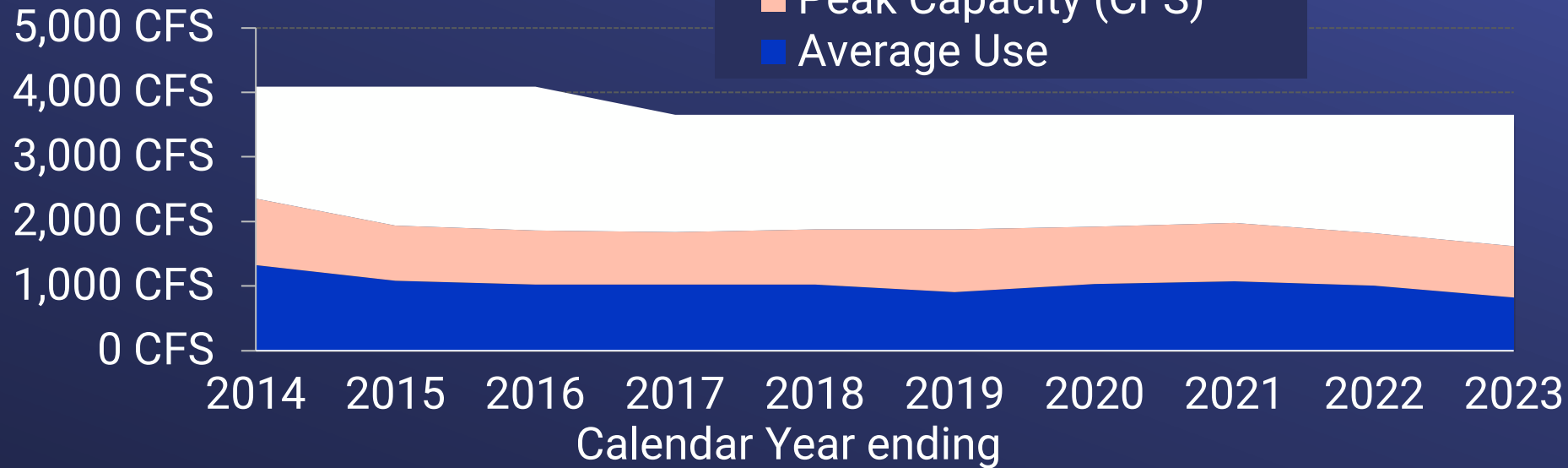
Cost of Service Process

Treated System Capacity

Peaking Analysis

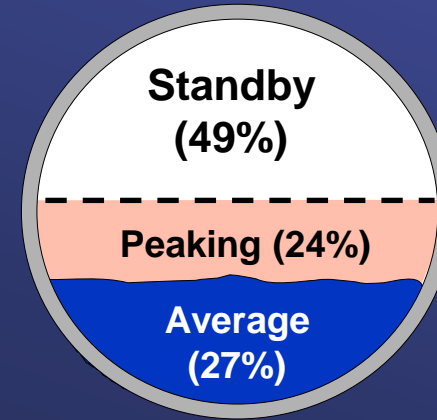
Annual demands, Non-Coincidental
Max Peak Day

- Standby Capacity (CFS)
- Peak Capacity (CFS)
- Average Use



The Cost of Standby and Peaking Capacity

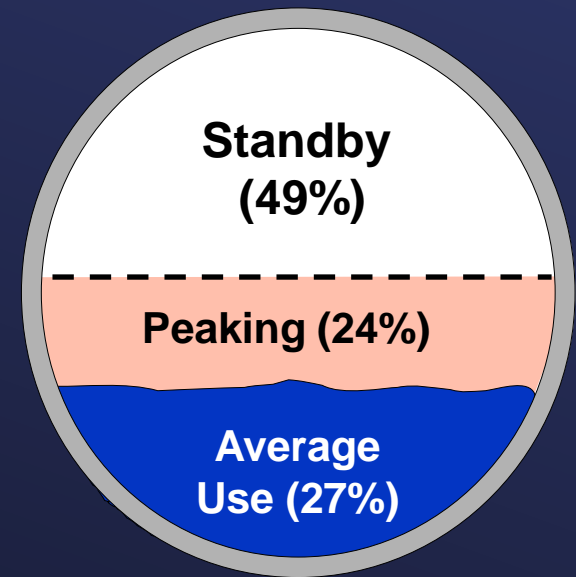
Treatment Cost Allocation for 2024/25 Budget



	Variable Treatment Costs	Other Operating Costs	Planning Costs	Capital Financing Costs	Required Reserves	Total	
Standby Capacity			✓	✓	✓	\$74M	22%
Demand (Peaking)			✓	✓	✓	\$36M	10%
Commodity (Average Use)	✓	✓	✓	✓	✓	\$238M	68%
							\$348M

Treatment Plant Capacity, Use and Cost

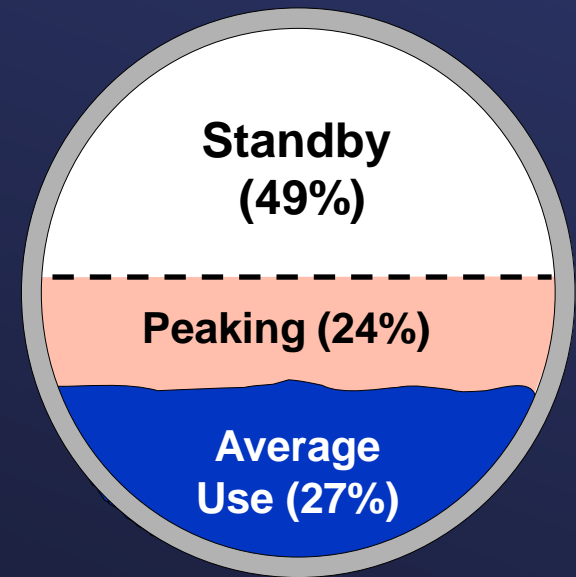
Estimated for 2024/25 Budget Year



Designed Capacity for	CFS	% of Designed Capacity	% of Standby	Estimated 2024/25 Costs	
Regional Drought Reliability	650	18%	36%	\$27M	} \$74M
Treatment Standby	1,142	31%	64%	\$47M	
Peaking Use	863	24%		\$36M	
Average Use	996	27%		\$238M	
Total Designed Capacity	3,651	100%		\$348M	

2025 Treatment Costs & Treatment Surcharge

Estimated for 2024/25 Budget Year & CY 2025 Treatment Surcharge



Treatment Allocated Costs for Budget 2024/25	Costs A	Treated Water Transactions B	Current Treatment Surcharges (\$/AF) C = A / B
Regional Drought Reliability	\$27M	720,869 AF	\$37
Unused Treatment Standby	\$27M	720,869 AF	\$37
Used Treatment Standby	\$20M	720,869 AF	\$28
Peaking Use	\$36M	720,869 AF	\$50
Average Use	\$238M	720,869 AF	\$331
Treatment Allocated Costs	\$348M	720,869 AF	\$483

Workgroup Status Report on Treatment Cost Recovery

Workgroup Status Report

- Broad recognition that action is needed, as the current 100% volumetric approach is inconsistent with the Board's previously adopted Policy Principles on Treated Water
- After 11 months of analysis, two (2) Member Agency proposals remain for Treated Water Cost Recovery
 - Both establish a component of fixed treatment revenues through Peaking and Standby fixed charges
 - Both would created fixed charges equal to approximately 30% of total Treatment revenues
 - Both would be phased-in to minimize initial impacts
 - Differences exist in billing determinants and allocation of the peaking fixed cost component that require further discussion

February MA Proposal

Alternate proposal to the March 14 2025, MA Proposal

Treatment Peaking Charge

- The Peaking Charge would be capped at 10% of total treatment costs
- Peaking would be collected based on Alternative 2 (3-yr trailing max annual peak day demand)

Treatment Standby Charge

- The Standby Charge would be capped at 20% of total treatment costs
- Standby would be collected based on Alternative C (10-yr trailing annual standby max annual usage minus average in AF)

Treatment Volumetric Rate

- All remaining treatment cost will continue to be recovered on a volumetric rate

Items to be further reviewed before the FY2028/29 budget process

- Regional Drought Reliability Charge
- Incremental Peaking

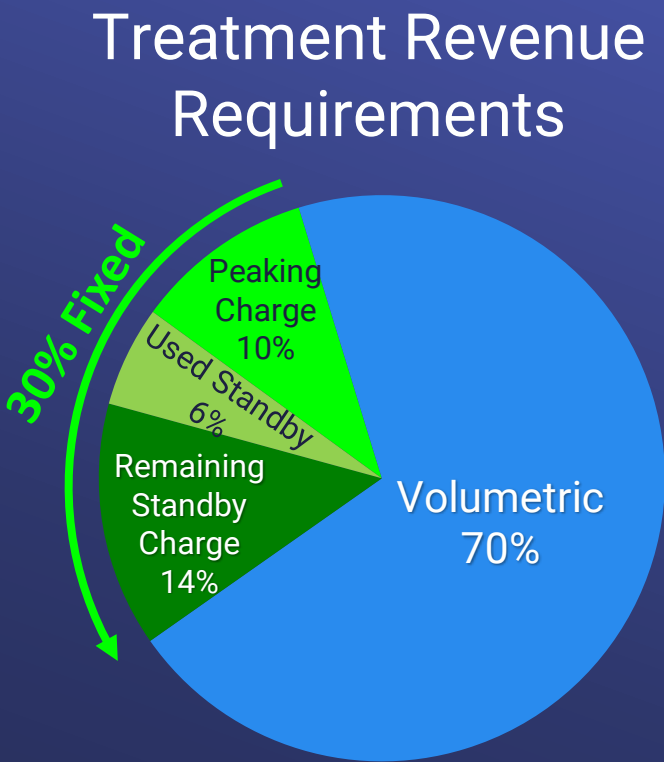
Adjustments / Certifications to Peaking Flows for All Alternatives

- Similar to the existing Capacity Charge, treated water peaking flows resulting from MWD's operational requests (e.g., shutdowns, service disruptions, wet year operations, dry year operations) will not be included in an agency's peaking calculations
- All data and adjustments would be fully documented and validated by each agency, following the existing process for RTS and Capacity Charges

March 14 2025, MA Proposal

Proposed by MA after March 12, 2025, Workshop

- 1. Peaking Charge: Recovered on 3-yr trailing max annual peak day demand (Alt 2)
- 2. Used Standby Charge: Recovered on 10-yr max annual usage minus 10-yr average (Alt C)
- 3. Remaining Standby Charge
 - Recovered on 5-year max annual use
 - Ensures up to 30% fixed revenue recovery, including Peaking and used standby allocated costs



	Billing Determinants	Units	Description
Peaking Charge	3-yr trailing maximum annual peak day demand	CFS	Consistent with Alt 2: Represents member agencies’ peak use throughout the year.
Used Standby Charge	10-yr max annual usage minus 10-yr average	AF	Consistent with Alt C: Represents MA’s standby use in the past 10-yrs beyond seasonal peak and average use
Remaining Standby Charge	5-yr max annual demand	AF	This charge inclusive of the Peaking and Used Standby Charge adds up to 30% of the Treatment Revenue Requirements.

March 14 2025, MA Proposal

Treatment Peaking Charge

- Peaking Costs recovered on 3-year trailing maximum annual peak day demand in CFS (Alternative 2)

Treatment Standby Charge

- Used Standby – Recovered based on 10-year trailing annual standby use, i.e. 10-year maximum annual use minus average use in acre-feet (Alternative C)
- Remaining Treatment Standby – Recovered based on 5-year rolling maximum annual use in acre-feet
 - This charge inclusive of the Peaking and Used Standby Charge would add up to 30% of the Treatment Revenue Requirements

Treatment Volumetric Rate

- All remaining treatment cost will continue to be recovered on a volumetric rate

Implementation

- There was broad support for phased-in implementation of the Peaking and Standby fixed charges to minimize initial member agency impacts and provide opportunities for member agencies to adjust operations accordingly:
 - Peaking = 3-year phase-in
 - Standby:
 - Used = 10-year phase-in
 - Remaining = 5-year phase-in

March 14 2025, MA Proposal

Other Details

MA support for this proposal requires consensus on language for adjustments and certifications

- Before the adoption of the new treatment fixed charges, MWD Staff would work with MAs to refine the language for the Adjustments to Peaking Flows, ensuring equitable modifications for extraordinary operation activities that benefit MWD's system.
- All data and adjustments would be fully documented and validated by each agency, following the existing process for RTS and Capacity Charges

Items to be further reviewed before the FY2028/29 budget process

- Potential Regional Drought Reliability Charge (i.e., a portion of treated standby capacity that benefits both treated and untreated users)
- Incremental Peaking (i.e. 3-year max daily minus 3-year average daily flows)
- Unused Standby Charge refinement to capture potential use of the unused standby capacity more closely than volumetric usage basis
- MWD shall work closely with MAs to continue to identify opportunities to partially or fully decommission unneeded treatment infrastructure

March 14 2025, MA Proposal

Adjustments / Certifications to Peaking Flows for All Alternatives

- MWD staff, including legal counsel, collaborated with Member Agencies on the language for proposed adjustments to Peaking Flows used to determine the peaking charge. However, staff was unable to identify an adjustment that would both meet cost of service requirements and comply with Proposition 26 (pursuant to a recent trial court ruling that its requirements apply to Metropolitan's wholesale rates and charges, which is currently on appeal)
- At the April 10, 2025 meeting, an alternative was proposed using the Summer Peak as the billing determinant (previously considered as Alternative 1). However, this option did not receive broad support from the Member Agencies based on prior questionnaire responses
- **Staff recommends continuing discussions with MAs through additional meetings in May, with the goal of reaching consensus on a proposal to be forwarded to the Board for consideration**

Workgroup Recommendations on Unrestricted Reserve Policy

Recommendations: Unrestricted Reserve Policy Changes

Technical Changes:

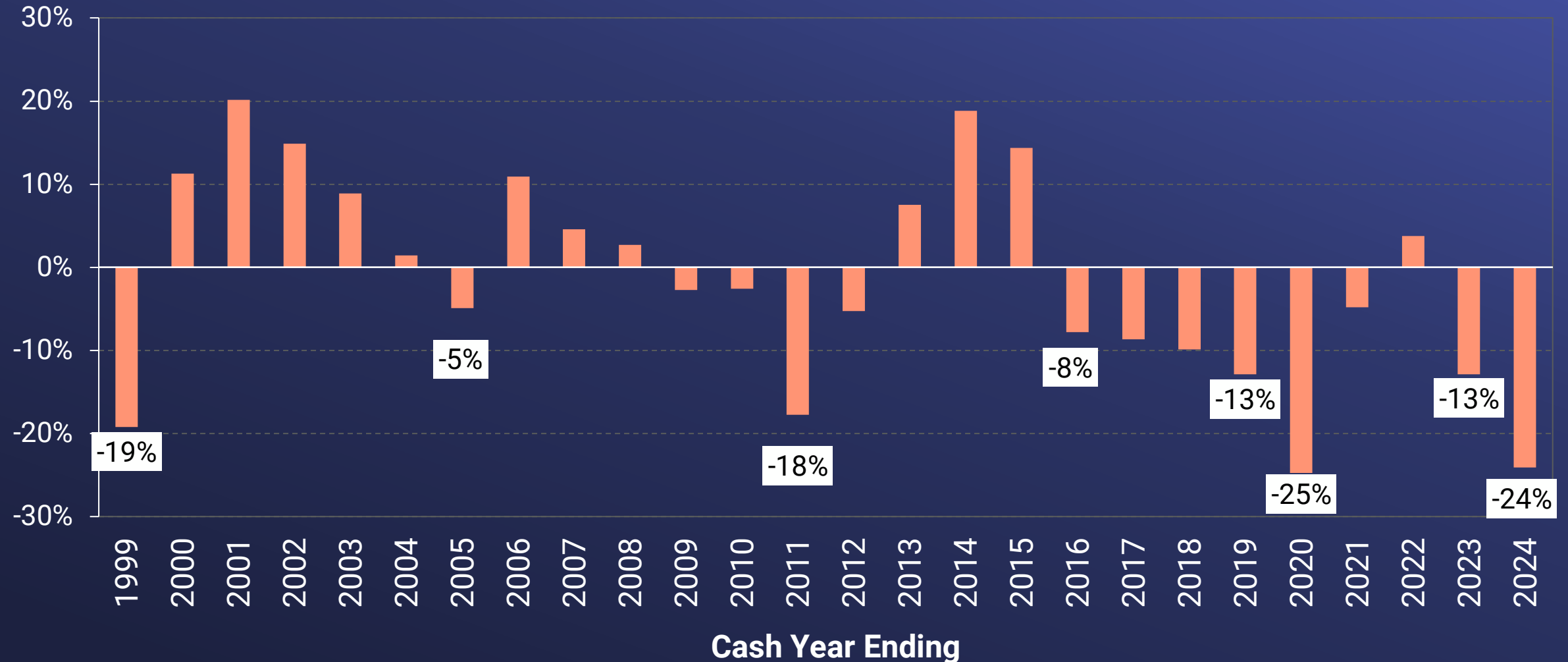
1. Update the Percent Reserves to reflect recent water sales volatility
 - ✓ Incorporate conservative demand assumptions in rate setting into the calculation
 - Adopt policy to set water demand at 70% exceedance for rate setting with a long-term target of 80%.
2. Recognize the disconnect between supplies and sales
 - ✓ Exclude variable costs from reserve calculations
 - ✓ No correlation between water sales and variable costs
3. Incorporate protection for treated water sales volatility
 - ✓ Include Treatment revenue requirements in the Unrestricted Reserve Minimum and Target Levels to enhance volatility protection for treated water sales revenues → Treatment Surcharge Stabilization Fund would be combined into unrestricted reserves
4. Adjust required reserve calculation to exclude one-time revenues and unawarded grants

Policy Changes

1. Update Admin Code language regarding the appropriate use of reserves in excess of target levels
2. Add language specifying the intentional use of reserve for one-time expenditures, unforeseen revenue shortfalls or increases in existing expenditures

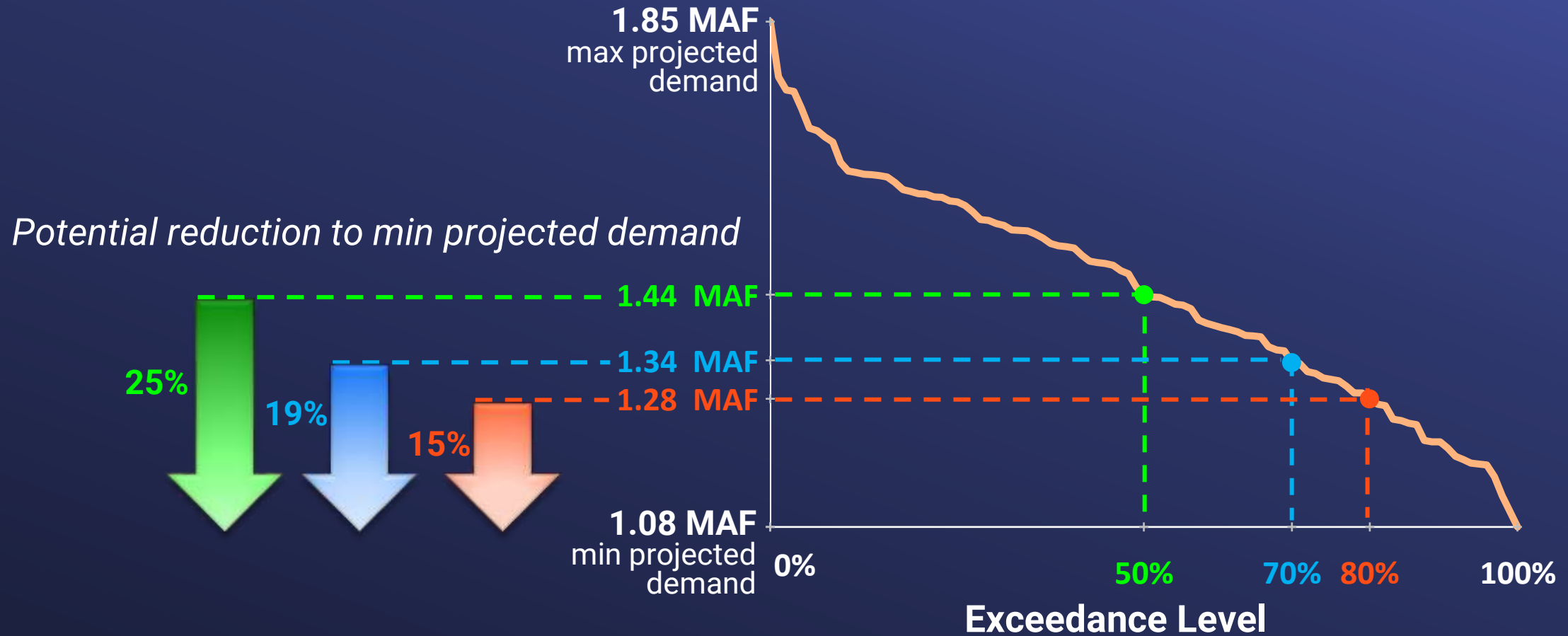
Variability Metropolitan's Historic Water Transactions

% change from budget



Projected Demand Variability

Projected Demands (MAF) for Calendar Year 2025



Current Unrestricted Reserve Calculation

for June 30th, 2025, in millions of dollars

	2025/26 Budget	2026/27 Forecast	2027/28 Forecast	2028/29 Forecast
Gross Revenue Requirement	\$2,274	\$2,408	\$2,597	\$2,773
Less Property Tax	\$334	\$342	\$351	\$359
Less Interest Income, Power Sales & Misc. Revenues	\$120	\$97	\$84	\$86
Less Unawarded Grants & One-time Revenues	\$127	\$20	\$20	\$20
Less Fixed Charges				
<i>RTS Charge</i>	\$185	\$188	\$202	\$219
<i>Capacity Charge</i>	\$46	\$48	\$52	\$56
Net Water Rate Revenue Requirements	\$1,462	\$1,713	\$1,889	\$2,033
Less Variable Costs				
Treatment Surcharge Rev Req.	\$342	\$342	\$362	\$369
SWC Variable Power Costs	\$238	\$236	\$235	\$233
CRA Power Costs	\$93	\$97	\$99	\$102
Fixed Costs Recovered by Water Rate	\$789	\$1,037	\$1,193	\$1,329
Percent Reserved	17.5%	17.5%	17.5%	17.5%
Annual Amount Reserved	\$138	\$181	\$209	\$232

Minimum Reserve Level = 138 + 181 / 2 = \$229 million ← 18 months

Target Reserve Level = 138 + 181 + 209 + 232 / 2 = \$645 million ← 42 months

Proposed Refinements to Unrestricted Reserve Calc.

for June 30th, 2025, in millions of dollars

	2025/26 Budget	2026/27 Forecast	2027/28 Forecast	2028/29 Forecast
Gross Revenue Requirement	\$2,274	\$2,408	\$2,597	\$2,773
Less Property Tax	\$334	\$342	\$351	\$359
Less Interest Income, Power Sales & Misc. Revenues				
Less Unawarded Grants & One-time Revenues				
Less Fixed Charges				
<i>RTS Charge</i>	185	\$188	\$202	\$219
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Fixed Costs Recovered by Water Rate	\$789	\$1,037	\$1,193	\$1,329
Percent Reserved	17.5%	17.5%	17.5%	17.5%
Annual Amount Reserved	\$138	\$181	\$209	\$232

Adjust required reserve calculation to exclude one-time revenues and unawarded grants

Maintain current flexibility to automatically adjust unrestricted reserves for new fixed charges

Incorporate protection for the treated water sale volatility

Recognize the disconnect between supplies and sales

Update % Reserved to reflecting 70% exceedance demand used for rate setting

Updated Unrestricted Reserve Policy - 70% Exceedance Demand

for June 30th, 2025, in millions of dollars

	2025/26 Budget	2026/27 Forecast	2027/28 Forecast	2028/29 Forecast
Gross Revenue Requirement	\$2,274	\$2,408	\$2,597	\$2,773
Less Property Tax	\$334	\$342	\$351	\$359
Less Interest Income, Power Sales & Misc. Revenues*	\$120	\$97	\$84	\$86
Less Fixed Charges				
<i>RTS Charge</i>	\$185	\$188	\$202	\$219
<i>Capacity Charge</i>	\$46	\$48	\$52	\$56
Net Water Rate Revenue Requirements	\$1,590	\$1,733	\$1,909	\$2,053
Percent Reserved	19%	19%	19%	19%
Annual Amount Reserved	\$302	\$329	\$363	\$390

Minimum Reserve Level = \$302 + \$329 / 2 = \$467 million ← 18 months

Target Reserve Level = \$302 + \$329 + \$363 + \$390/2 = \$1,189 million ← 42 months

for 70%
Exceedance
Demand

* Misc. Revenues – Lease, Non-MA Sales, \$80M State Fund Use and Awarded Grants, excluding one-time revenues such as IRA Following Revenues, \$60M Stored Water Sales, Sales of Assets

Updated Unrestricted Reserve Policy

for June 30th, 2025, in millions of dollars



Implementation Strategy

Adopt reserve policy to set water demand at 70% exceedance for rate setting with a long-term target of 80%

Unrestricted Reserve Policy Refinements

Policy Change – Modify language in Admin Code for appropriate use of reserves in excess of target levels

Funds in excess of the target level shall be utilized as directed by the Board for:

- Funding capital expenditures of the District in lieu of the issuance of additional debt,
- Redemption, defeasance, or purchase of outstanding bonds or commercial paper,
- Addressing the District's pension or OPEB (other post-employment benefit) liabilities (including but not limited to the establishment or funding of a pension trust fund), or
- Meeting other legal or financial obligations.

Additional proposed policy: *“Reserves, by nature, are one-time funds, fiscal prudence dictates that they should not be used to cover ongoing expenditures”*

Unrestricted Reserve Technical Refinements

Strengths

- ✓ Revised % reserve to reflect recent water sale volatility using a more conservative exceedance water transaction assumption for rate settings
 - ✓ Updated policy to account for higher sale volatility due to climate change
 - ✓ 70% exceedance water transaction assumption in rate settings provides a mechanism to achieve target reserve levels over time
- ✓ Including treatment sale volatility as part of the reserve calculation
 - ✓ Combines Treatment Surcharge Stabilization Fund (TSSF) into unrestricted reserves
- ✓ Automatic adjustments for new fixed charges (existing feature)
- ✓ Excludes uncertain revenues → reducing the risk of revenue shortfalls
- ✓ Higher unrestricted reserve balance → more favorable with credit ratings agencies

Potential Challenges

- ☐ Higher minimum to maintain every year
- ☐ Does not include reserves to fund filling of storage
- ☐ Does not include reserves to fund unforeseen one-time expenditures

Workgroup Recommendations on Conservative Water Transactions Assumptions for Water Rate Settings

Conservative Water Transactions Assumptions

Recommendations

Set policy to set water demand at 70% exceedance for rate setting with a long-term target of 80%

- ✓ This approach creates a mechanism to maintain reserves at the target level, providing additional protection against rate spikes

Workgroup Recommendations on Other Fixed Revenues

Recommendations for Other Fixed Revenues

1. Continue to discuss with MA on the two (2) proposals for Treated Water Cost Recovery Recommendations
2. Continue to assess other fixed revenues
 - Metropolitan will collaborate with member agencies to review and assess other fixed revenues. The goal is to develop recommendations for the Board before April 2027
 - Potential fixed revenues include:
 - Voluntary Level Pay Plan
 - Fixed charge for Demand Management
 - Expansion of current RTS and Capacity Charge to also recover O&M costs
 - Ad Valorem Property Taxes
 - Evaluate the impacts of increasing the ad valorem property tax rate on future budgets, rates, charges, and reserves, with the potential to offset additional State Water Contract costs

Recommendations Summary

Recommendations

Treated Water Cost Recovery

- Continued discussion with MA on two (2) proposals in May

Unrestricted Reserve Policy

- Adopt the recommended technical and policy changes
 - Adopt reserve policy calculations for the FY 2026/27 and FY 2027/28 biennium using 70% exceedance demand with a long-term target of 80%

Recommendations

Conservative Water Transaction Assumptions

- Establish a policy to use 70% exceedance water demand for rate settings during budget development, without relying on one-time revenues or reserve draws with a long-term target of 80%

Fixed Revenues

- Adopt and implement the proposed fixed treatment charges as outlined in the Treated Water Cost Recovery Recommendations
- Continue to assess other fixed revenues
 - Voluntary Level Pay Plan
 - Fixed charge for Demand Management
 - Expansion of current RTS and Capacity Charge to also recover O&M costs
 - Increase Ad Valorem Property tax to cover additional State Water Contract costs and increase Metropolitan's share of fixed revenues

Next Steps

June 2025	Information Presentations to the FAAME Committee <ul style="list-style-type: none">• Workgroup recommendations for Treated Water Cost Recovery, Fixed versus Volumetric Revenues and Reserves
July 2025	Presentations to the Board of Directors <ul style="list-style-type: none">• Workgroup recommendations for Treated Water Cost Recovery, Fixed versus Volumetric Revenues and Reserves



Regional Benefit Analysis

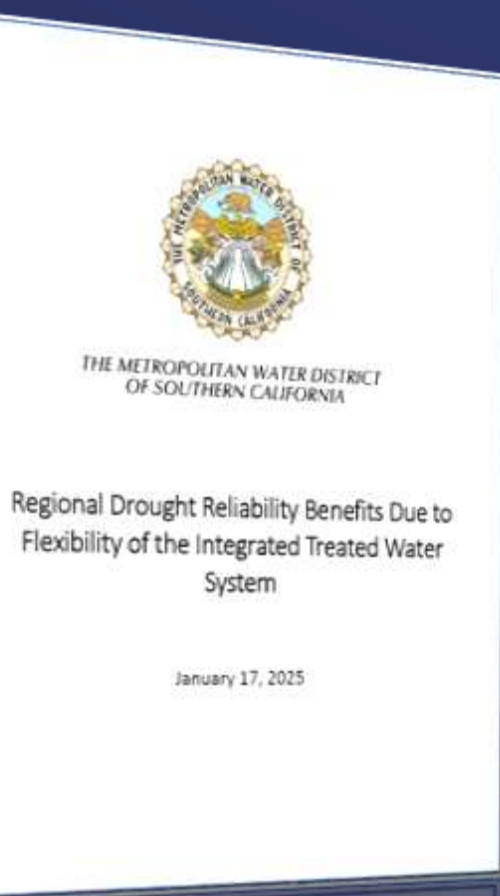
Regional Benefit of Flexible Treatment Plant Operations

High SWP allocation (wet) years

- Maximize deliveries to storage (including DVL) to support SWP Dependent Area
- Maximize West Branch and expand Jensen treatment into Common Pool
 - Reduced flows at Weymouth and Diemer allows storage of CRW at Lake Mead and DWCV
- Maximizes overall storage for region and minimizes SWP Table A “left behind”

Low SWP allocation (dry) years

- Maximize CRW deliveries and increase Weymouth/Diemer treatment into Common Pool; minimize Jensen treatment
 - Preserves SWP supply for SWP Dependent Area
- Minimizes potential for allocation, particularly for SWP Dependent Area agencies



Regional Benefit of Flexible Treatment Plant Operations

Under High SWP Allocation

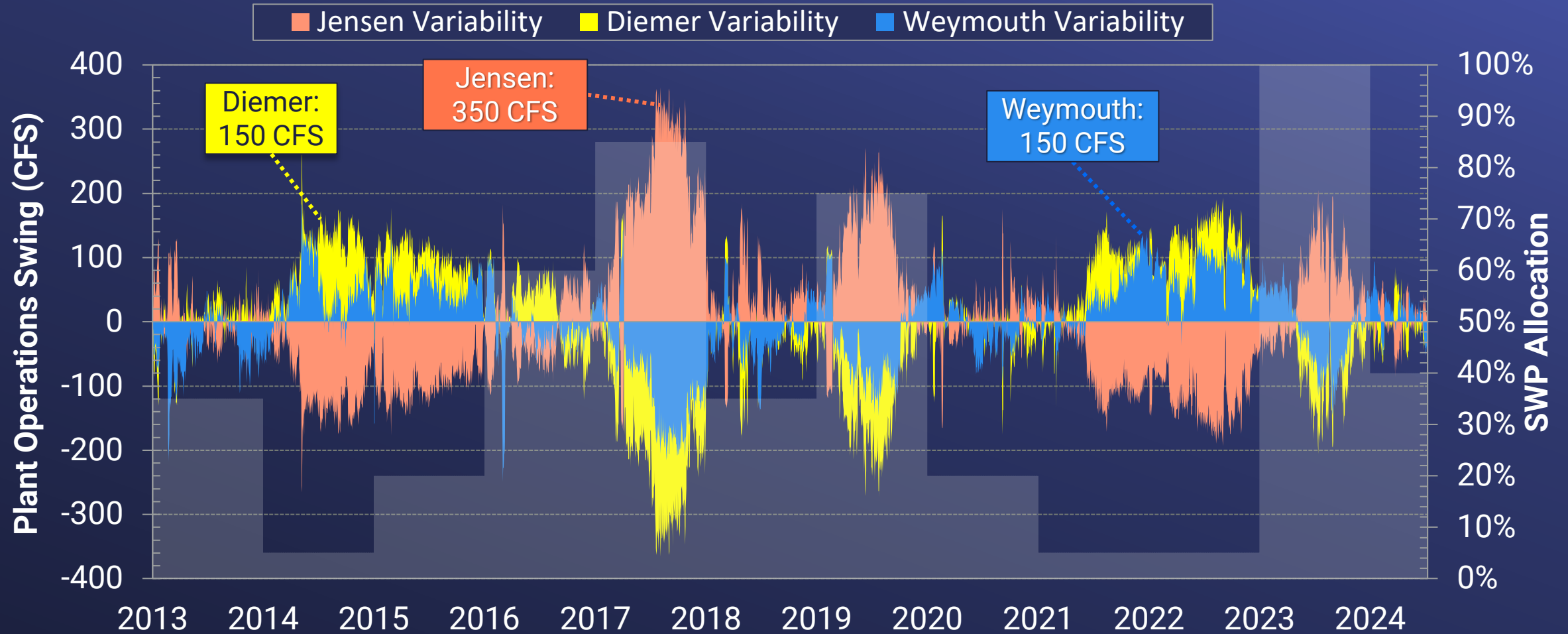


Under Low SWP Allocation



Treatment Plant Regional Drought Reliability Analysis

Swings in Treatment Plant Operations to Meet Demands in Common Pool



Metropolitan Treatment Plant Capacities

Plant	Area Served	Current Capacity		Capacity for:	
		MGD	CFS	Regional Drought Reliability	Treatment
Mills	Local Mills Area	220 MGD	340 CFS	-	340 CFS
Skinner	Local Skinner Area	350 MGD	541 CFS	-	541 CFS
Jensen	Common Pool and Local Jensen Area	750 MGD	1,160 CFS	350 CFS	810 CFS
Diemer	Common Pool and Local Diemer Area	520 MGD	804 CFS	150 CFS	654 CFS
Weymouth	Common Pool and Local Weymouth Area	520 MGD	804 CFS	150 CFS	654 CFS
Total		2,360 MGD	3,651 CFS	650 CFS (18%)	3,001 CFS (82%)

Tr. Peaking Charge Implementation Strategy

Billing Determinants assuming CY 2027 as 1st year of implementation

	Year 1	Year 2	Year 3
CY 2027 Charge	Actual FY 2025 Avg Daily Demand		
CY 2028 Charge	FY 2026 data	Actual FY 2025 Avg Daily Demand	
CY 2029 Charge	FY 2027 data	FY 2026 data	Actual FY 2025 Avg Daily Demand
CY 2030 Charge	FY 2028 data	FY 2027 data	FY 2026 data

Tr. Standby Charge Implementation Strategy

Billing Determinants Example

	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10
CY 2027	Actual FY 2025 Treated Demand					
CY 2028	FY 2026 data	Actual FY 2025 Treated Demand				
CY 2029	FY 2027 data	FY 2026 data	Actual FY 2025 Treated Demand			
CY 2030	FY 2028 data	FY 2027 data	FY 2026 data	Actual FY 2025 Treated Demand		
CY 2031	FY 2029 data	FY 2028 data	FY 2027 data	FY 2026 data	Actual FY 2025 Treated Demand	
... CY 2037	FY 2035 data	FY 2034 data	FY 2033 data	FY 2032 data	FY 2031 data	FY 2026-2030 data