



Subcommittee on Long-Term Regional Planning  
Processes and Business Modeling

# Climate Adaptation Master Plan for Water – Draft Year One Progress Report

Item 3b

April 24, 2024

## Item 3b

### Climate Adaptation Master Plan for Water - Draft Year One Progress Report

#### Subject

Climate Adaptation Master Plan for Water – Draft Year One Progress Report

#### Purpose

The CAMP4W Draft Year One Progress Report documents progress since February 2023 and sets up the next steps for 2024. Today's discussion is focused on the next steps for 2024 laid out in Sections 4 through 6 of the Report. This is preparation for a potential concurrence action at the May Finance and Asset Management Board Committee meeting.

# April 24 CAMP4W Task Force

## Agenda

- 1) Review Draft Year One Progress Report Sections 3-6
  - Sections include
    - Development of Adaptation Strategies
    - Business Model and Affordability
    - Policies, Initiatives and Partnerships
    - Adaptive Management
- 2) Discuss proposed Adaptive Management Approach
- 3) Discuss the Business Model components, scope and process
- 4) Review Next Steps



Climate Adaptation  
Master Plan for Water

# Year One Progress Report Sections

CAMP4W Year One  
Progress Report  
April 2024 DRAFT

2024 Next Steps  
→

Executive Summary

Section 1: Background, Need  
and Outcome

Section 2: Climate Decision-  
Making Framework

Section 3: Development of  
Adaptation Strategies

Section 4: Business Model  
and Affordability

Section 5: Policies Initiatives  
and Partnerships

Section 6: Adaptive  
Management



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# Year One Progress Report Sections

CAMP4W Year One  
Progress Report  
April 2024 DRAFT

2024 Next Steps



Executive Summary

Section 1: Background, Need  
and Outcome

Section 2: Climate Decision-  
Making Framework

Section 3: Development of  
Adaptation Strategies

Section 4: Business Model  
and Affordability

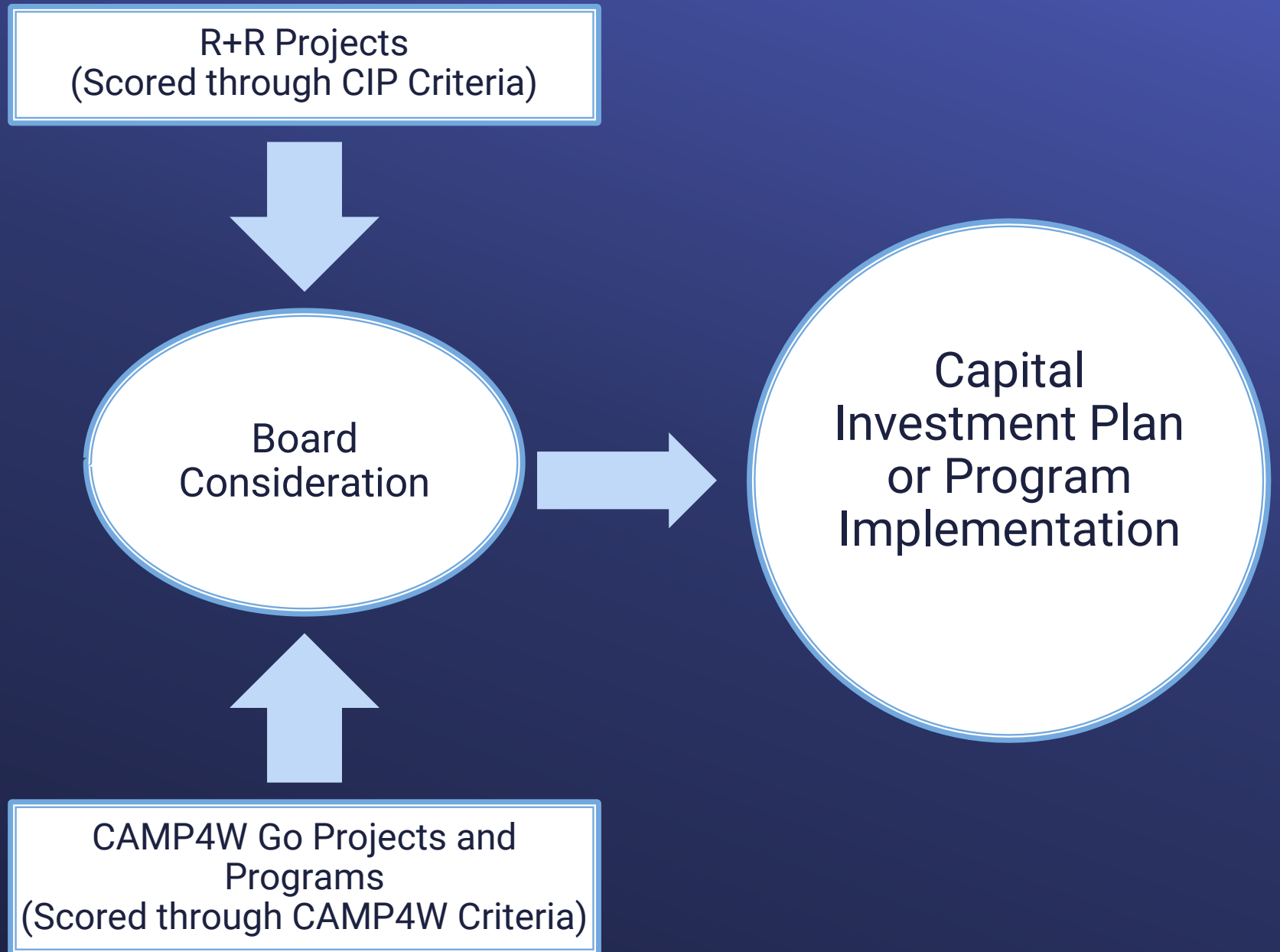
Section 5: Policies Initiatives  
and Partnerships

Section 6: Adaptive  
Management



# Section 3: Development of Adaptation Strategies

## Determining CAMP4W Consideration



# Section 3: Development of Adaptation Strategies

## Determining CAMP4W Consideration

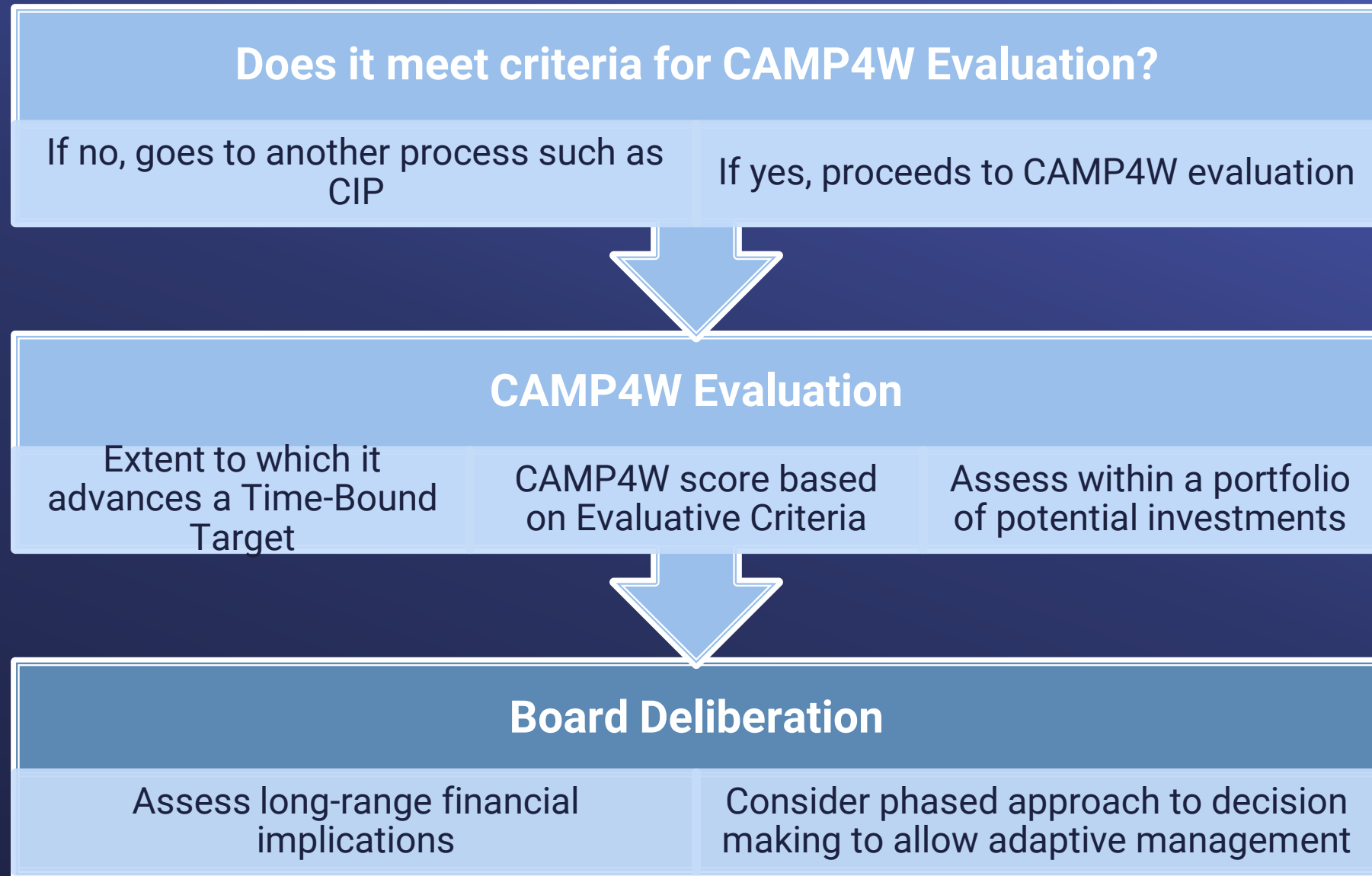


Potential questions where a “yes” answer would mean a project or program will be considered through CAMP4W:

- Is the project or program providing a new core supply, flex supply, or storage, or is the project or program enabling a new core supply, flex supply, or storage?
- Is the project or program addressing a known vulnerability to an asset(s) and does it involve improvements beyond what would be required to perform traditional R&R for that asset?
- Does the project or program exceed a certain flow-based threshold (CFS or AFY) or cost threshold (capital or O&M cost)?

# Section 3: Development of Adaptation Strategies

## Getting to Board Deliberation





New  
Discussion  
Topics for  
Today  
Year One  
Progress Report  
Sections 4, 5, 6

## Section 4: Business Model and Affordability

Identify categories of business model options, new models for financing, propose affordability support measures

## Section 5: Policies, Initiatives and Partnerships

Identify policy areas for focus as well as potential partnership opportunities with and among member agencies and other interested parties

## Section 6: Adaptive Management

Propose process to compile and assess data on each Signpost, compare previous assumptions with real-world conditions, refine/augment Time-Bound Targets

# Section 4: Business Model and Affordability

## Business Model Focus Areas

- Identify **Equity and Fairness** concerns in current rates and charges, including in the treatment surcharge
- **Capture the value** of conservation, water use efficiency and local water resources development
- **Exchange of water** resources and sharing of assets between Member Agencies
- **Expand regional benefits** through Metropolitan co-investing in local resource development
- Provide **regional support to Member Agencies** for affordability strategies for their customers
- Identify **additional revenue streams**
- Explore mechanisms for **expanding financial capacity** and considering the balance between **fixed and volumetric** rates.



# Section 4: Business Model and Affordability

Affordability  
Focus Areas

- Statewide and Federal Advocacy
- Collaboration and Information Sharing
- Leverage Non-Rate Revenue
- Investment in Education and Outreach
- Policy and Program Innovation
- Needs Assessment and Metrics



# Section 5: Policies, Initiatives and Partnerships

Policies and  
Initiatives Focus  
Areas

Equitable Supply Reliability	Local Agency Supply Development	Conservation and Efficiency
Infrastructure Resilience	Sustainability	Surplus Water Management
Ecosystem and Habitat Benefits	Community Equity and Affordability	Workforce Development



# Section 5: Policies, Initiatives and Partnerships

## Member Agency Partnerships Focus Areas



- 1) Demand Management
- 2) Surplus Water Management
- 3) Member Agency Exchange
- 4) Local Resources Program
- 5) Community Engagement
- 6) Grants and Technical Assistance



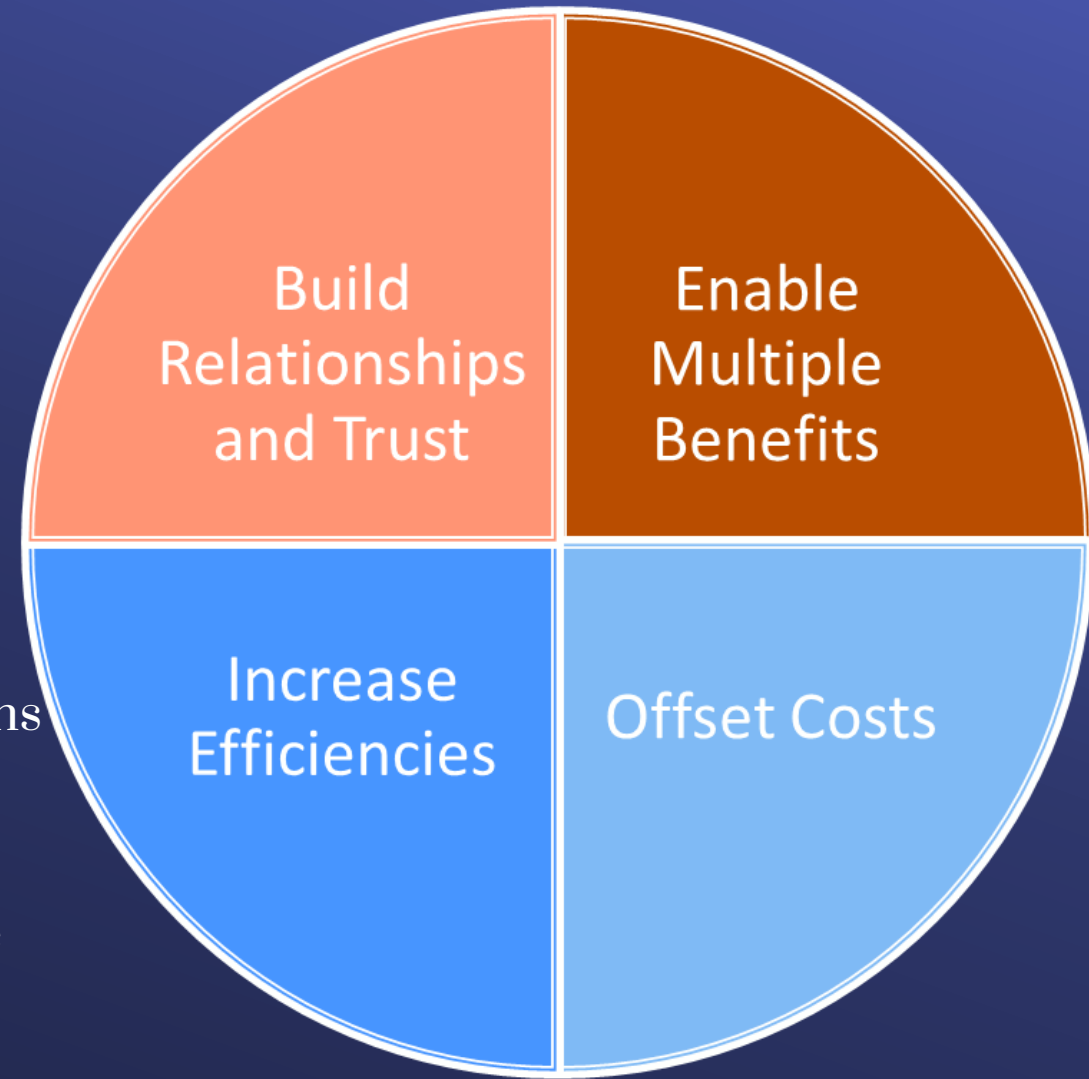
# Section 5: Policies, Initiatives and Partnerships

External  
Partnerships  
Focus Areas

Potential External Project,  
Program and Policy Partners  
Include:

- Water suppliers and water utility trade associations
- State and Federal agencies
- Business and agricultural interests
- Community-based organizations
- Environmental organizations
- Academic institutions

Within Metropolitan's Service Area and within the Bay Delta and Colorado River watersheds



# Section 6: Adaptive Management

## What is Adaptive Management?

Adaptive management is a structured and ongoing process that:

- 1) Promotes flexible decision-making
- 2) Tracks real-world climate impacts and trends that impact water supplies and demands
- 3) Ensures inclusion of up-to-date information
- 4) Facilitates adjustments to planning assumptions and targets
- 5) Enables an iterative and informed climate adaptation plan



# Section 6: Adaptive Management

## Adaptive Management Process Planning for Rapid Change and Adjusting based on Real World Conditions

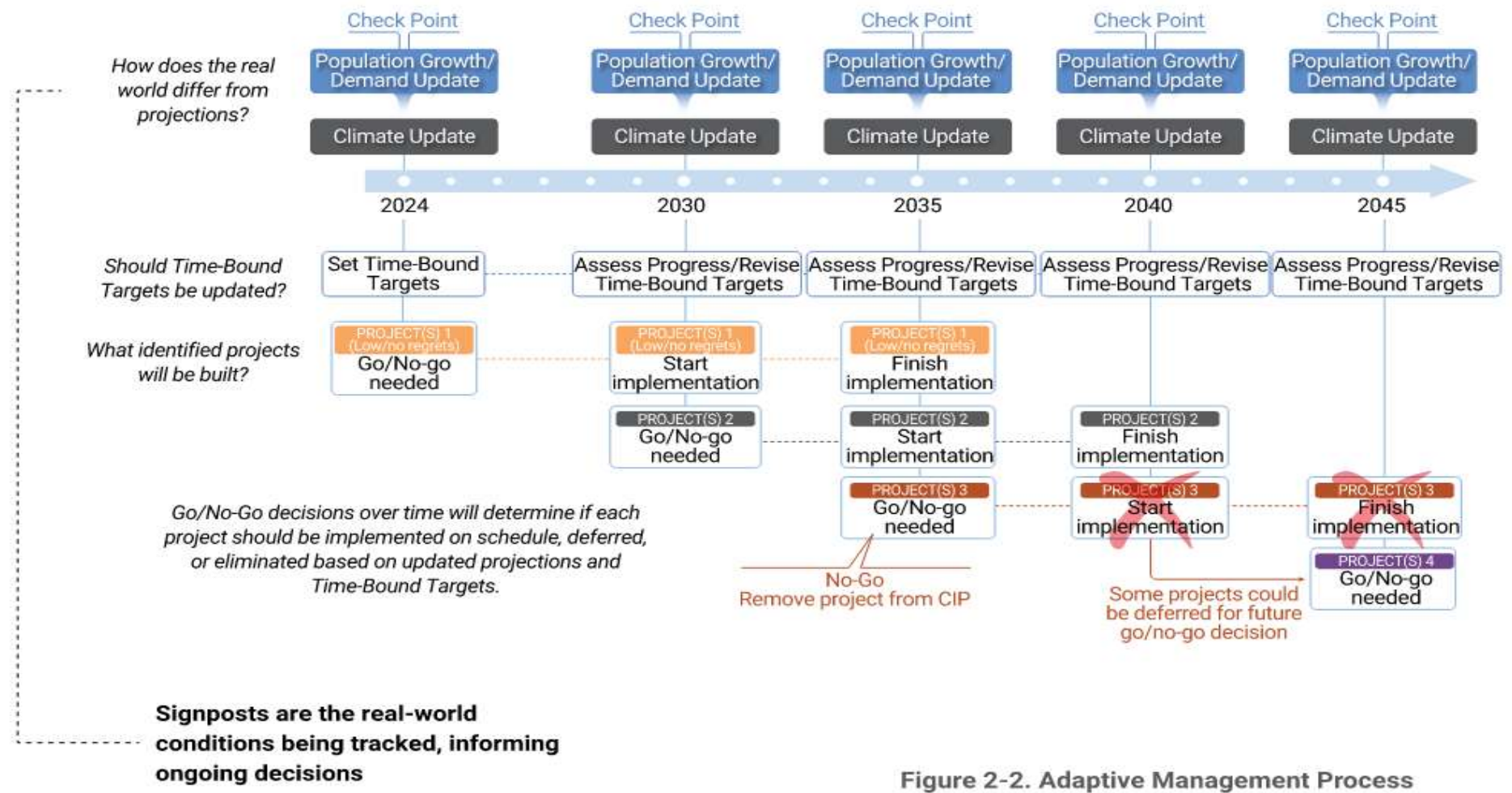


Figure 2-2. Adaptive Management Process

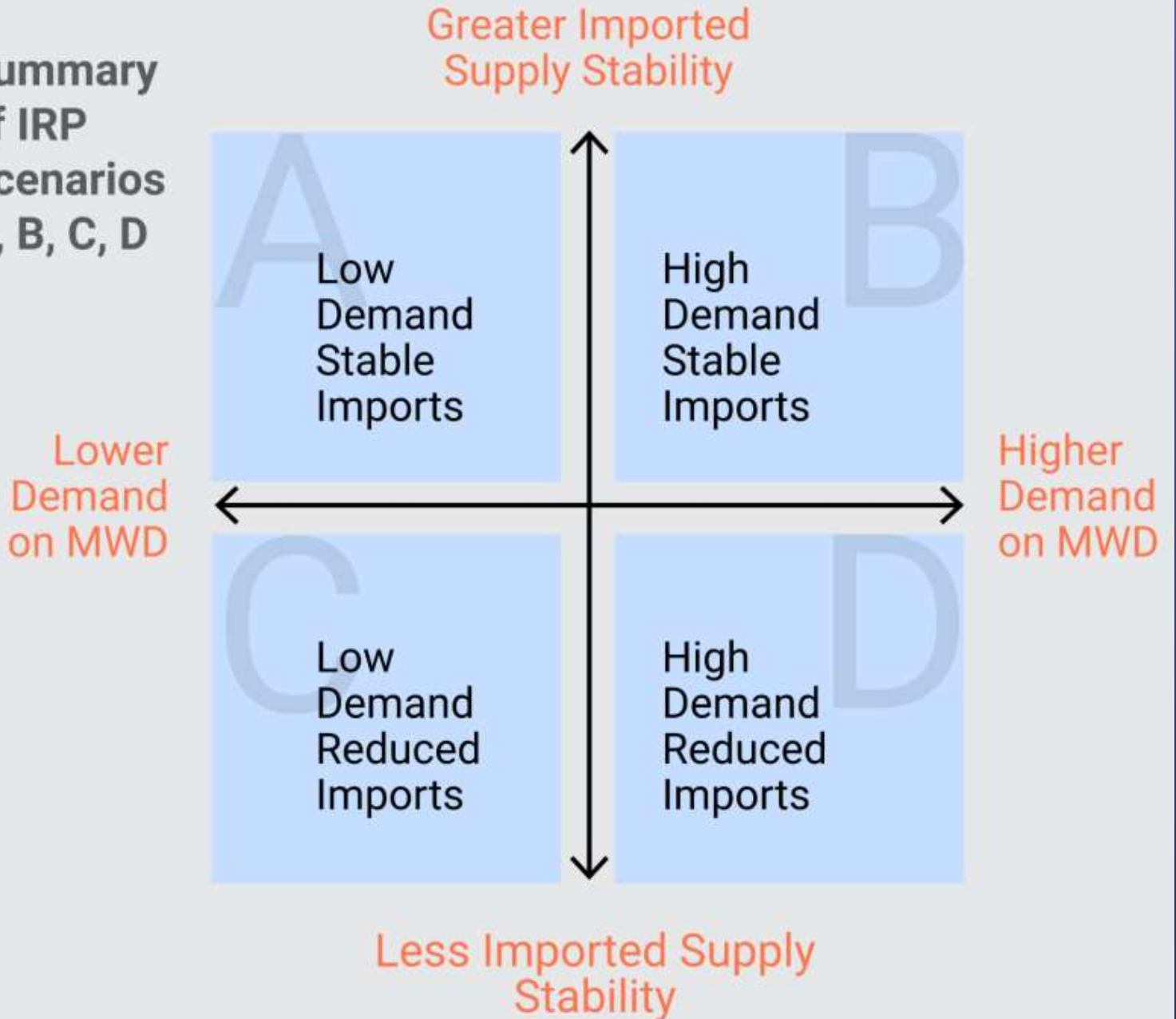




# Section 6: Adaptive Management

The IRP scenarios will continue to be utilized and will be updated based on current real-world conditions.

Summary  
of IRP  
Scenarios  
A, B, C, D



# Section 6: Adaptive Management

## Signposting and Monitoring

### Proposed Signposts Metrics Examples

*Signposts should be measurable, updateable, and readily available*

DEMAND	SUPPLY	INFRASTRUCTURE	FINANCIAL
Population	Climate Change Indicators	Unexpected Shutdowns	Debt Capacity & Borrowing Costs
Regulations	Regulations	Infrastructure Loss	Capital Cost Trends
Demand Management	Storage	Emergency Response	Emergency Response Costs
Local Agency Supply	Water Quality	Power Interruptions	O&M Trends
Economy			

# Section 6: Adaptive Management

Institutionalizing  
Adaptive Management

CAMP4W projects  
evaluated with  
other CIP projects  
and programs for  
inclusion in Bi-  
Annual Budget

CAMP4W  
reporting,  
updating, and  
workshops will  
integrate into the  
Board's agenda

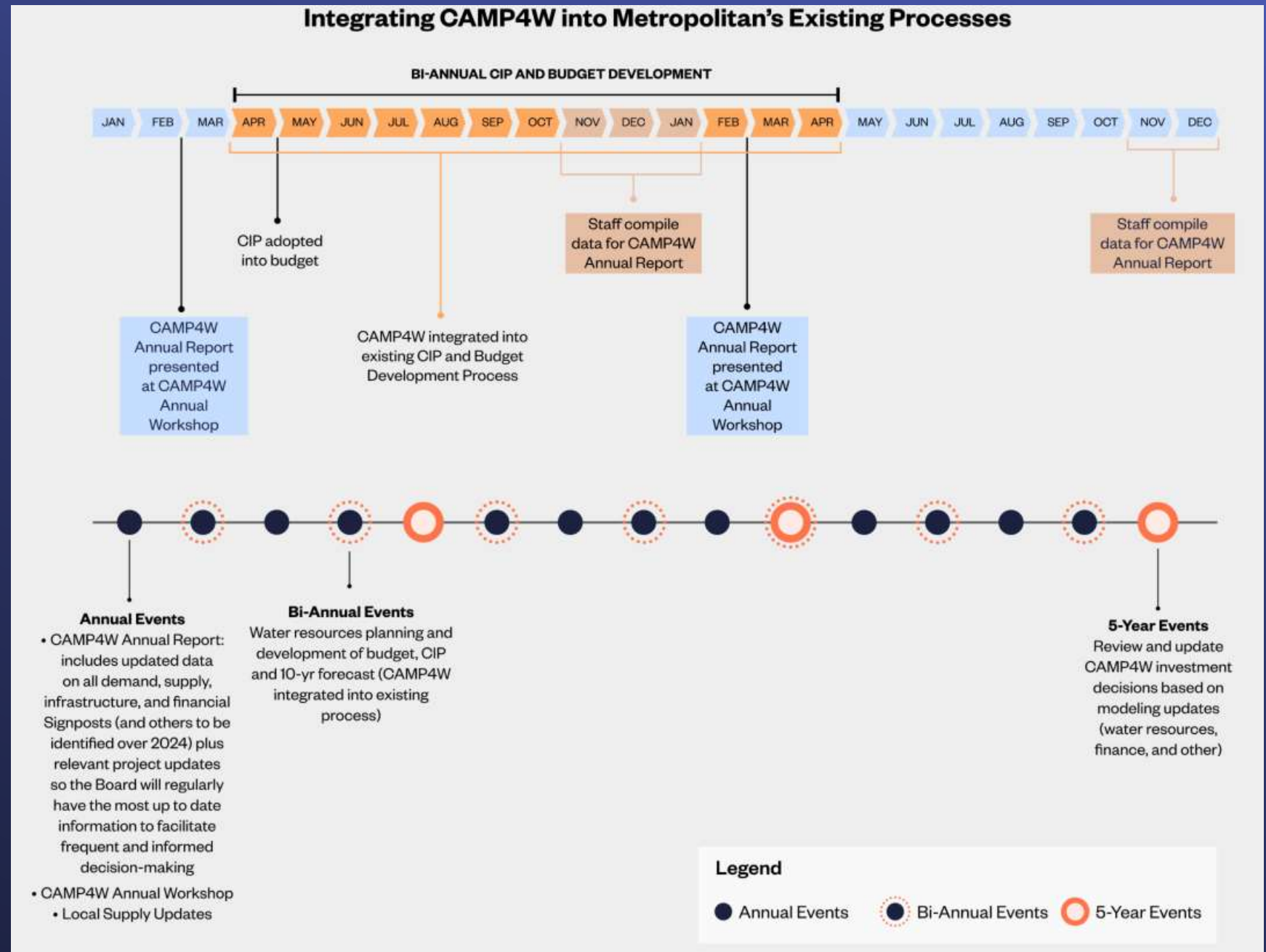
Adaptive  
Management will  
be an integral part  
of the decision  
process

While CAMP4W projects will have additional evaluation requirements, they will be integrated into the existing CIP and other program evaluation processes.



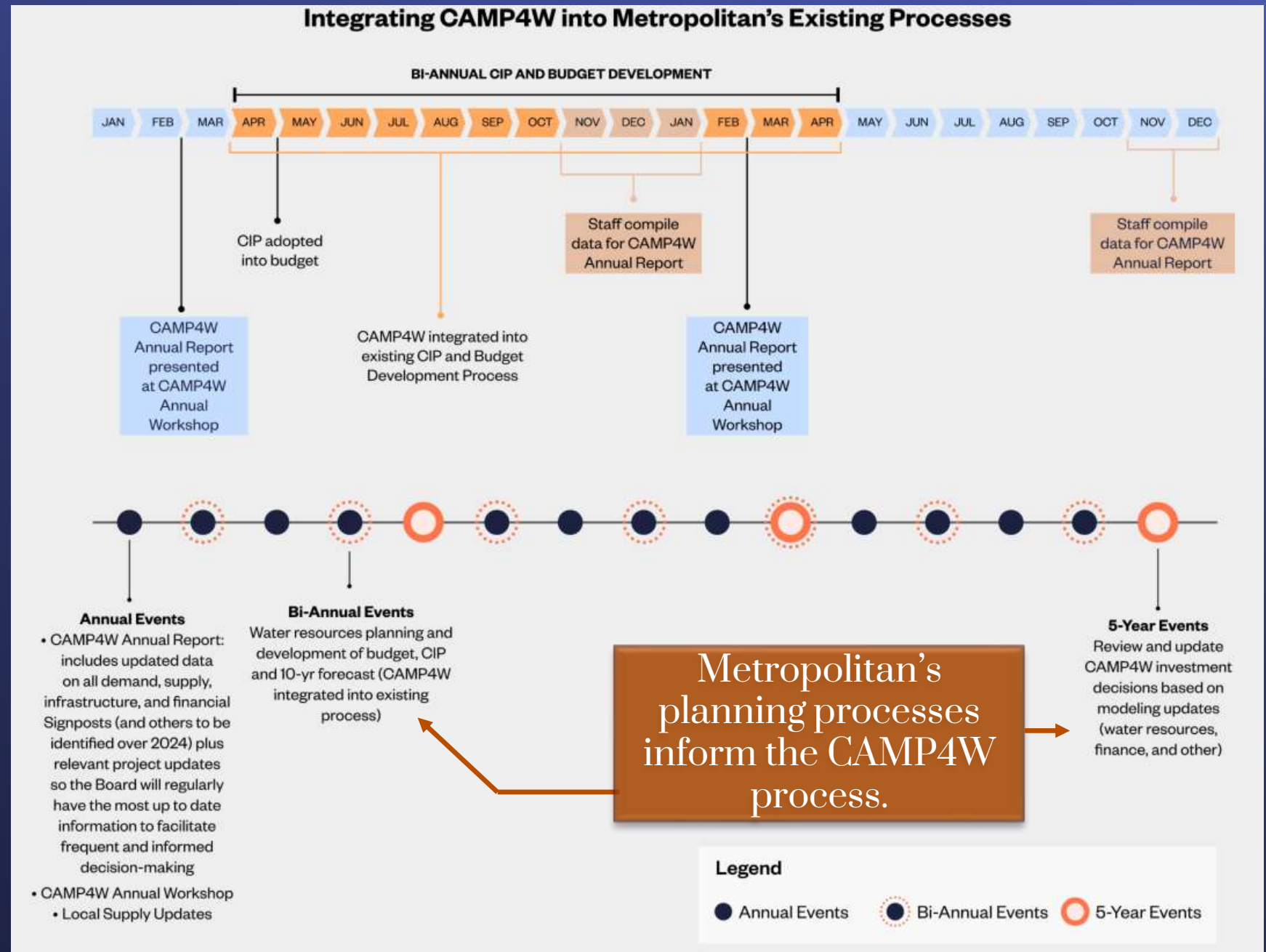
# Section 6: Adaptive Management

## Institutionalizing Adaptive Management



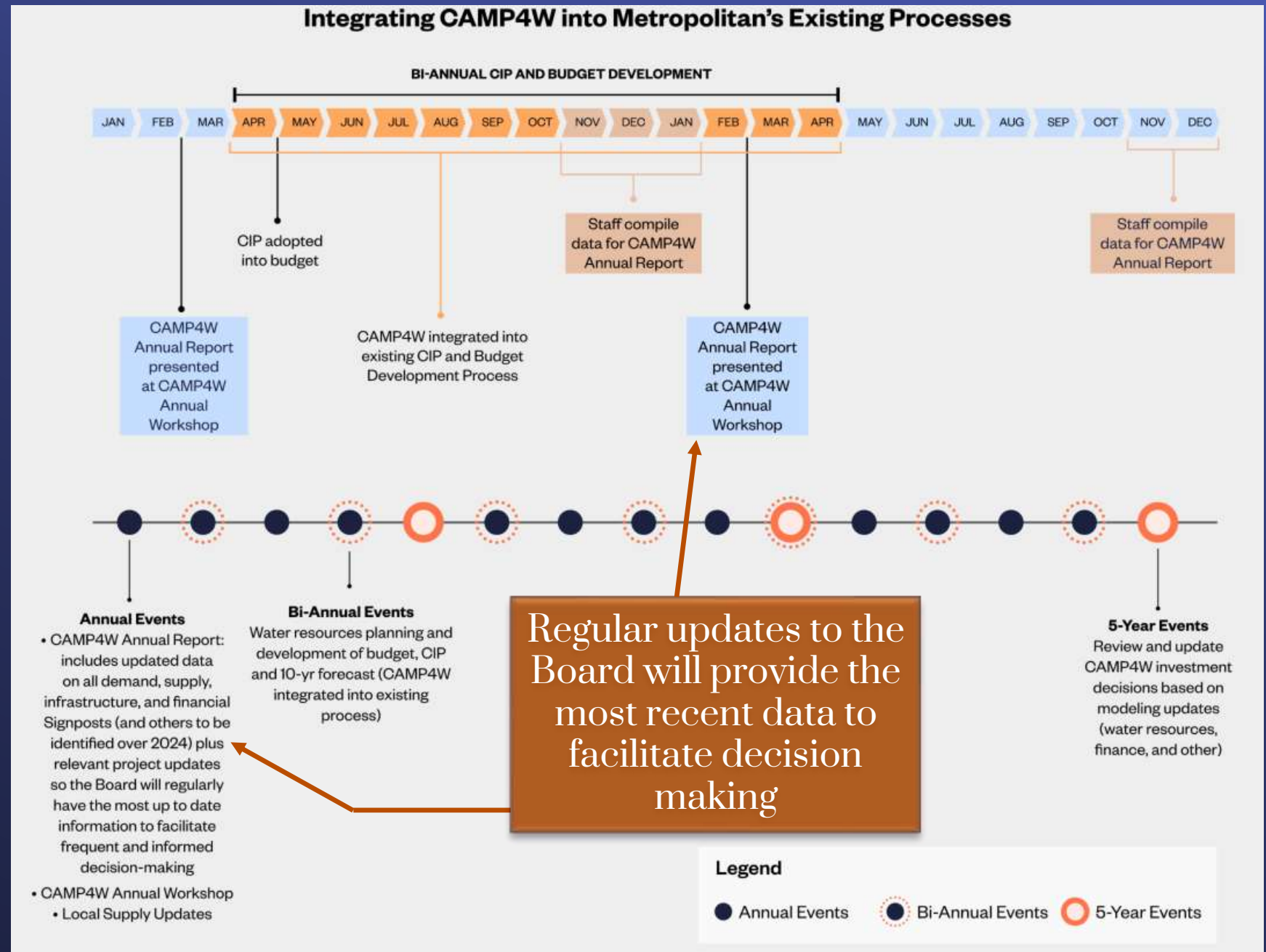
# Section 6: Adaptive Management

## Institutionalizing Adaptive Management



# Section 6: Adaptive Management

## Institutionalizing Adaptive Management



# Example of Adaptive Management in Action:

Trends indicate it may **not** be needed vs. trends indicate project need to be **accelerated**

## Decision 1

Reservoir site identified. Signposts and modeling indicate project may be needed to achieve Time-Bound Targets; project scores well. Board funds **FEASIBILITY STUDY** in Biannual Budget and CIP.

## Decision 2

Signposts check. Demands decline; potential drought conditions. Board funds **UPDATED FEASIBILITY STUDY** with smaller footprint.

## Decision 3

Signposts assessed. Demands plateau; no drought. Board funds **PRELIMINARY DESIGN**.

## Decision 4

Signposts checked. Notable decline in demands. Board decision to **PAUSE PROJECT** to track trends. Not included in Biannual Budget and CIP.

## Decision 5

Signposts assessed. Population plateaus, region is in drought. Portfolio evaluation considers this reservoir, no reservoir, or other project. Board gauges risk tolerance and decides to **fund DESIGN** in Biannual Budget and CIP to be ready if implementation needed, and to make construction decision at a later date.

## Decision 1

Core supply option identified. Signposts and modeling indicate project may be needed to achieve Time-Bound Targets; project scores well. Board funds **FEASIBILITY STUDY** in Biannual Budget and CIP.

## Decision 2

Signposts check. Demands increase; no IPCC climate model updates but region is in drought. Board funds **PRELIMINARY DESIGN**.

## Decision 3

Signposts assessed. Demands increase; drought worsens. Board decision to accelerate **DESIGN and CONSTRUCTION**.

## Decision 4

Signposts checked. Demands plateau but drought continues. **Project becomes part of baseline upon which new projects are evaluated.**

# Today's Business Model Discussion

- 1) Purpose and Need of Business Model Adjustments
- 2) Review of Metropolitan's Current Business Model
- 3) Exercise: Identifying Priorities & Objectives
- 4) Discussion
- 5) Next Steps





# 2024 Next Steps

Draft Year One  
Progress Report  
Sections 4

## Business Model

- Establish the schedule for ongoing integration of long-range finance planning into CAMP4W
- Incorporate risk analysis into the Board's investment decision-making
- Consider business model alternatives
- Identify how Metropolitan can pursue options that advance affordability and equity goals



# 2024 Next Steps

Draft Year One  
Progress Report  
Section 5

## Policies, Initiatives, and Partnerships

- Develop and consider policies and initiatives
- Explore Metropolitan and Member Agency partnership opportunities
- Pursue external partnership and collaboration opportunities
- Continue community engagement



# 2024 Next Steps

Draft Year One  
Progress Report  
Section 6

## Adaptive Management

- Refine Adaptive Management and how to institutionalize it into Metropolitan's processes
- Further develop Signposts and specific metrics
- Develop CAMP4W Annual Report Template
- Refine process for integrating CAMP4W projects into CIP and budget
- Identify early "Go Projects" and program opportunities
- Continue development of dashboard and digital support tools



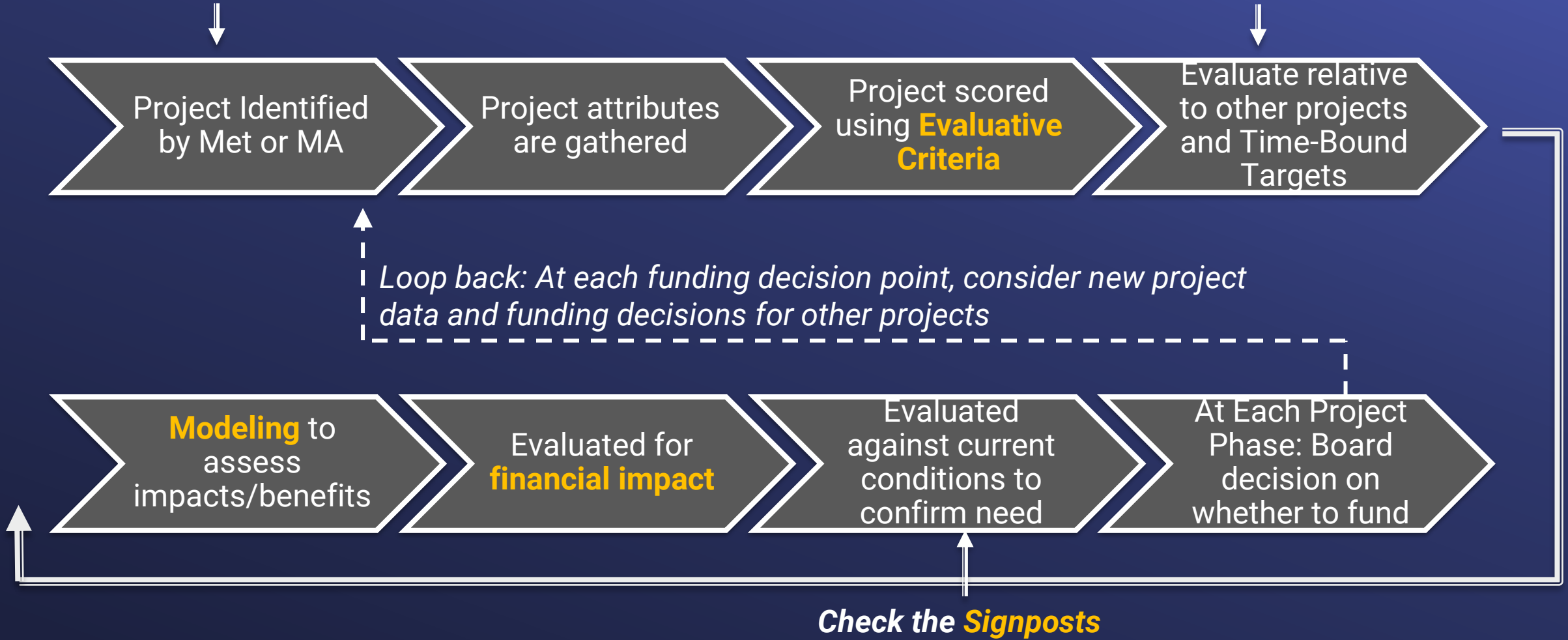


# Supplemental Slides

# Climate Decision-Making Framework

Identify projects/ programs that address Time-Bound Targets

Compare project/program to other "go" projects to ensure portfolio of projects will not exceed/conflict with Time-Bound Targets



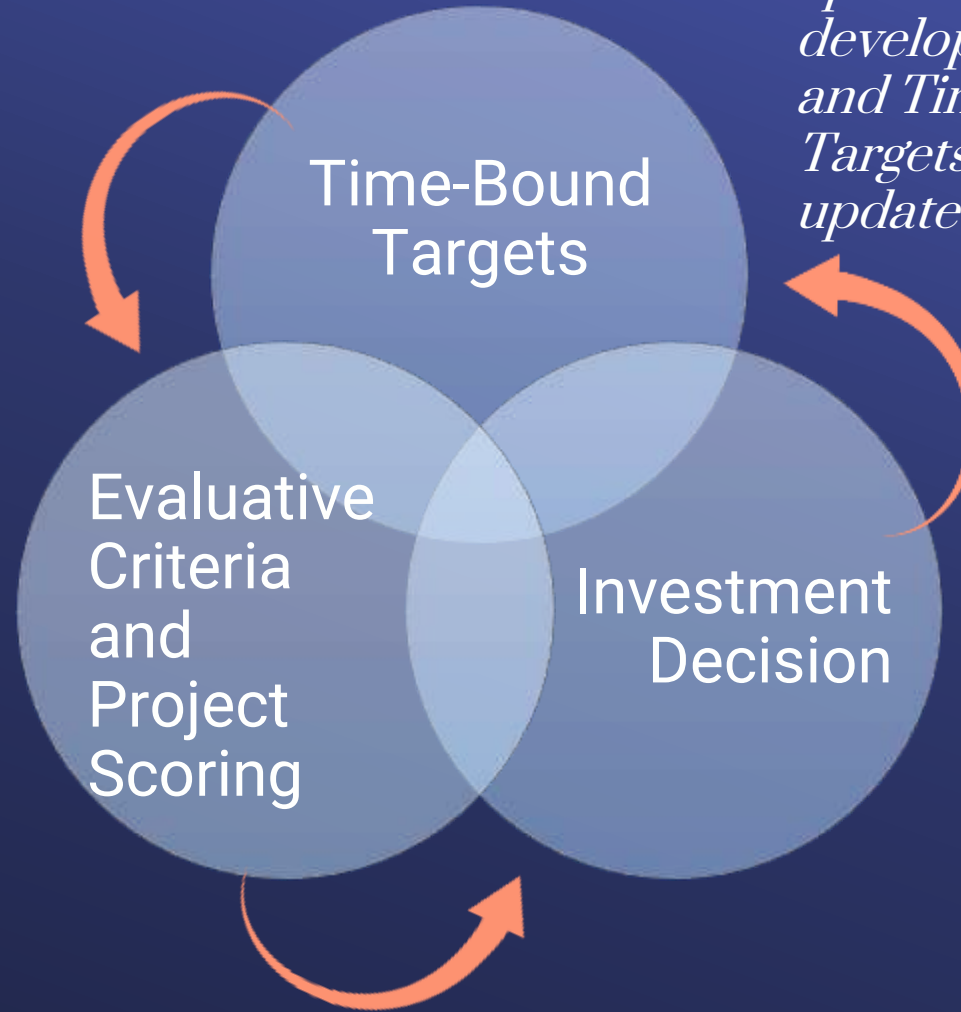
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# Climate Decision Making Framework

Integrated Elements:  
*Time-Bound Targets,  
Evaluative Criteria and  
Investment Decisions  
function together*



*Time-Bound  
Targets guide  
project  
development  
and inform  
scoring of  
projects*



*Adaptive Management:  
update resource  
development needs  
and Time-Bound  
Targets based on  
updated projections*

*Scores and Time-Bound Targets inform decision-making*

# Climate Decision-Making Framework – Evaluative Criteria

 <p><b>RELIABILITY</b> 25 POINTS</p>	 <p><b>RESILIENCE</b> 25 POINTS</p>	 <p><b>FINANCIAL SUSTAINABILITY &amp; AFFORDABILITY</b> 20 POINTS</p>
<p>Supply Performance Equitable Reliability</p>	<p>Addresses known vulnerabilities Project's ability to perform under climate impacts</p>	<p>Bond capacity Unit cost</p>
<p>Assess how a project or program performs under various hydrologic conditions, the extent to which it helps close gaps identified in the IRP Needs Assessment, and how it can address an inequity in supply reliability.</p>	<p>Evaluates how the project or program addresses known vulnerabilities and how it performs under climate impacts.</p>	<p>Considers the ability of a program to be funded through bonds and the overall cost of the program.</p>



# Climate Decision-Making Framework – Evaluative Criteria

 <b>ADAPTABILITY &amp; FLEXIBILITY</b> 10 POINTS	 <b>EQUITY</b> 10 POINTS	 <b>ENVIRONMENTAL CO-BENEFITS</b> 10 POINTS
<p>Flexibility of existing assets Ease / Complexity Scalability</p>	<p>Programs for underserved communities Scale of community engagement Public health benefits Workforce development</p>	<p>Greenhouse gas emissions Benefits Ecosystem services Habitat / wildlife benefits</p>
<p>Considers how a project or program improves operational flexibility, the difficulty of implementation, and if a program is able to be phased. Flexibility addresses the capability of Metropolitan's system to respond to changes in water supply, water quality, treatment requirements, or demands during planned and unplanned facility outages.</p>	<p>Consideration of underserved communities, scale of community engagement, public health, and workforce development.</p>	<p>Measures greenhouse gas emissions, ecosystem services, and benefits to habitat and wildlife.</p>

# Climate Decision-Making Framework – Time-Bound Targets



## Resource-Based Targets

Numbers reflect additional supplies unless indicated otherwise

CATEGORY	NEAR TERM	MID TERM	LONG TERM
Core Supply <sup>1</sup>	N/A	Identify 300 TAF for potential implementation by 2035.  Alternatively, 250 TAF of new storage will reduce core supply need to 200 TAF	Identify 650 TAF for potential implementation by 2045. Alternatively, 250 TAF of new storage will reduce core supply need to 550 TAF or, 500 TAF of new storage will reduce core supply need to 500 TAF
Storage	Identify up to 500 TAF for potential implementation by 2035		
Flex Supply (Dry Year Equivalent)	Acquire capability for up to 100 TAFY		

- Core Supply sub-targets will be considered later this year and may include targets for **groundwater remediation and stormwater capture**.

# Climate Decision-Making Framework – Time-Bound Targets



## Policy-Based Targets

CATEGORY	NEAR TERM	MID TERM	LONG TERM
Equitable Supply Reliability	Add 160 CFS capacity to the SWPDA by 2026	Implement additional 130 CFS capacity to SWPDA by 2032	Implement capacity, conveyance, supply, and programs for SWPDA by 2045
Local Agency Supply <sup>2</sup>	Maintain 2.09 to 2.32 MAF (under average year conditions)	2.12 to 2.37 MAF (under average year conditions)	2.14 to 2.40 MAF (under average year conditions)
Demand Management <sup>3</sup>	Implement structural conservation programs to achieve 300 TAF by 2045		
Regional Water Use Efficiency	Assist Retail Agencies to achieve, or exceed, compliance with SWRCB Water Use Efficiency Standards <sup>4</sup>		
	GPCD target for 2030 <sup>5</sup>	GPCD target for 2035	GPCD target for 2045
Greenhouse Gas Reduction	N/A	40% below 1990 emission levels by 2030	Carbon Neutral by 2045
Surplus Water Management	Develop capability to manage up to 500 TAFY of additional wet year surplus above Metropolitan's Storage Portfolio and WSDM action		

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# Climate Decision- Making Framework

*Time-Bound Targets*



- Local Agency Supply includes existing (and under construction) local agency supplies **and can be augmented later this year** to include new local agency supply.
- Demand Management target is used **to offset the need for additional core supply** and uses 2024 as a baseline.
- Regional Water Use Efficiency: each retail water supplier will report progress to the State Water Board annually through a **Water Use Objective (WUO)** equaling the sum of efficiency budgets for a subset of urban water uses: residential indoor water use, residential outdoor water use, real water loss and commercial, industrial and institutional landscapes with dedicated irrigation meters. Each efficiency budget is calculated using **a statewide efficiency standard and local service area characteristics** (population, climate, etc.)
- Specific GPCD Time-Bound Targets **will be identified later this year** based on final SWRCB standards as well as Metropolitan’s overall demand management target. The target will be designed **to track water use efficiency trends by sector over time** and will take local conditions, including climate, into consideration.

# Development of Adaptation Strategies

*Projects and Programs designed to achieve the Time-Bound Targets*

Resilience Planning,  
Hazard and Vulnerability  
Assessments

Drought Mitigation Action  
Planning

Resource  
Studies/Program  
Development

System  
Capacity  
Planning

Flexibility and  
Supply Planning

Multiple processes will identify projects and programs for CAMP4W evaluation



# Additional 2024 CAMP4W Activities

For December 2024 Climate  
Adaptation Master Plan

## Refine Framework

- Finalize and augment Targets and Adaptive Management

## CAMP4W Evaluation

- Identify and evaluate projects and programs through the CAMP4W

## Business Model Action

- Determine next steps on business and revenue models

## Community Engagement

- Work with Member Agencies on community engagement and partnerships





Finance, Audit, Insurance, and Real Property  
Committee

# Overview of Metropolitan's Finances

Item 7a  
July 11, 2023



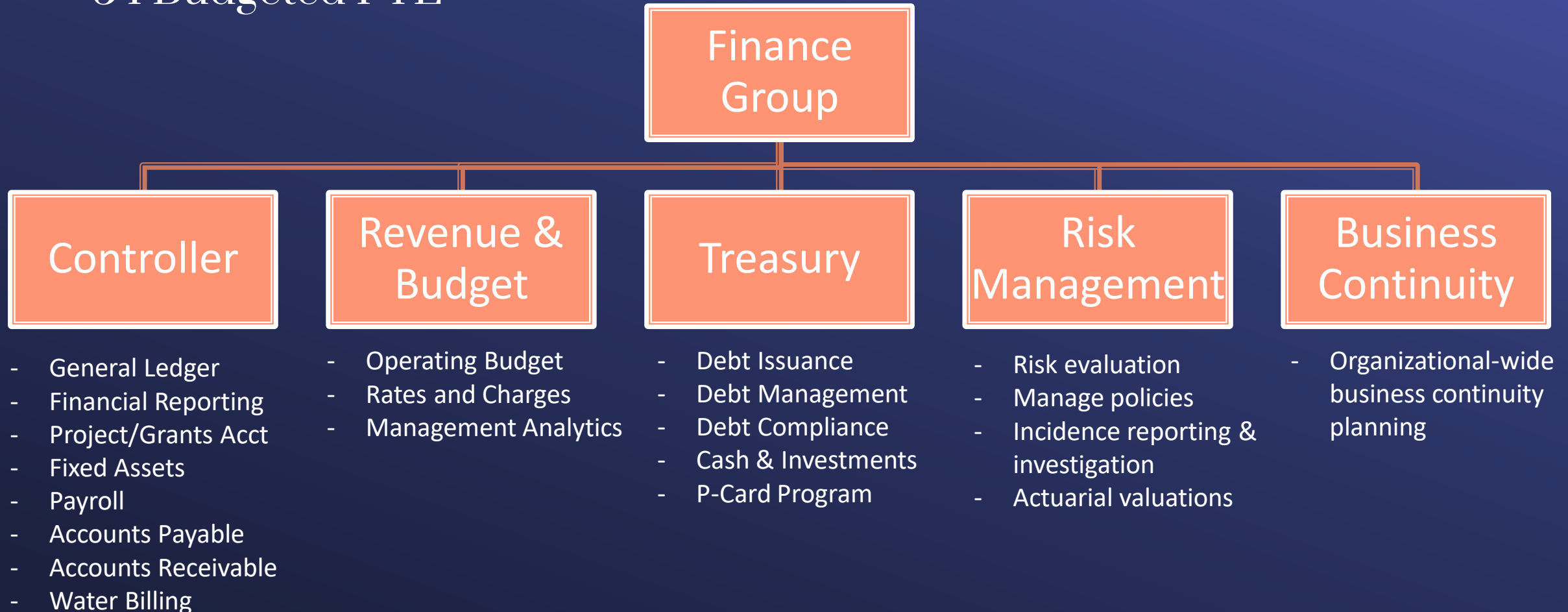
# Agenda

- Financial Overview
- Unrestricted Reserves
- Rate Structure
- Cost-of-Service Process
- Debt profile

# Financial Overview

# Organizational Chart

~54 Budgeted FTE



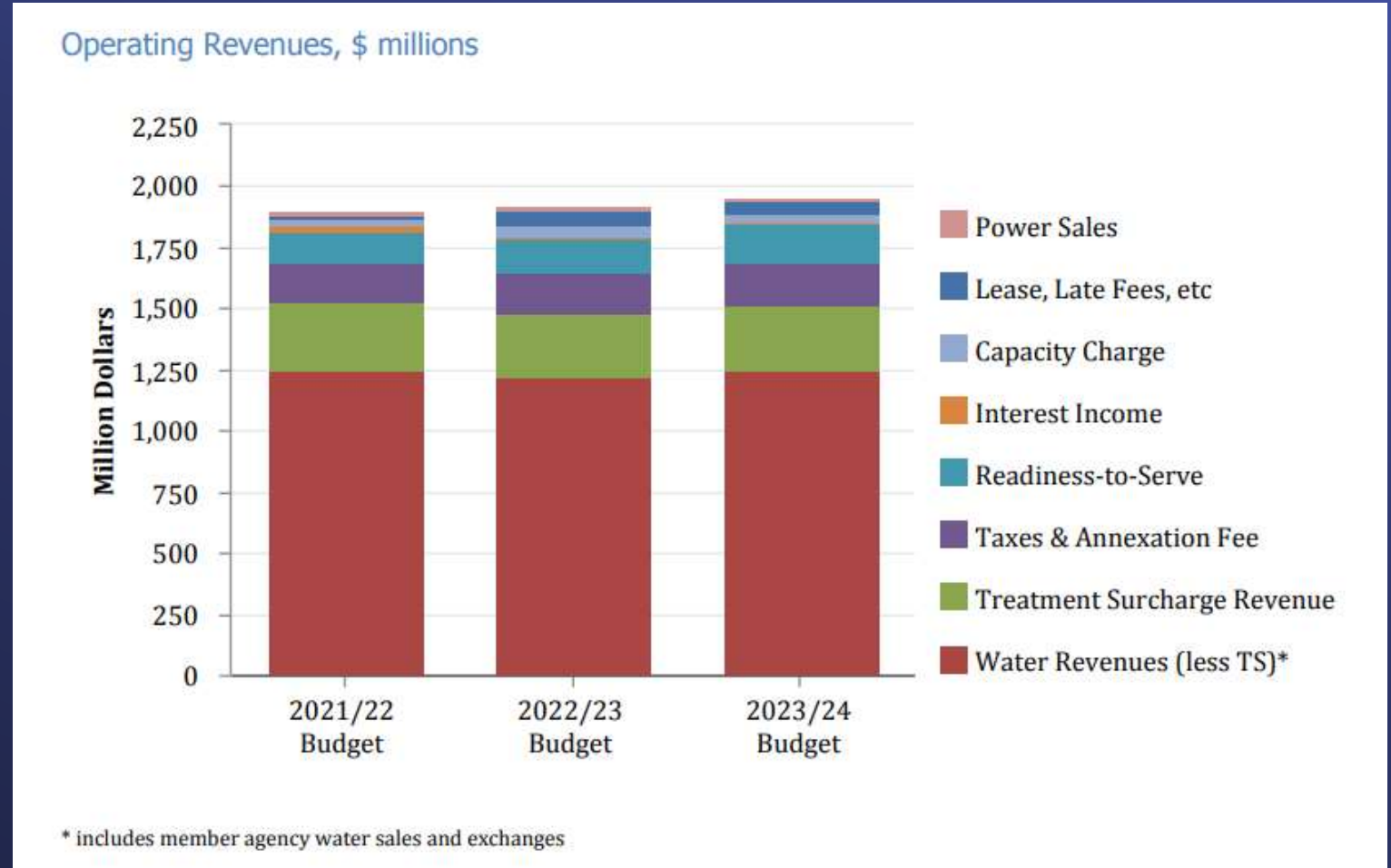
# Financial Structure

## Enterprise Fund Accounting

- Metropolitan operates as a utility enterprise in accordance with generally accepted accounting principles (GAAP) for proprietary funds as required by Governmental Accounting Standards Board (GASB).
- Metropolitan is a single enterprise fund, which GASB labels as a business-type activity (BTA)
- MWD's enterprise (purpose) under the MWD Act is to develop, store, and distribute water, at wholesale, to its member public agencies for domestic and municipal purposes. This is unlike an all-purpose city or county, that engages in various general government and enterprise activities and keeps separate funds for each of those activities, including utilities.
- All operating revenues – unless restricted by Administrative Code – are available to support MWD's enterprise-wide activities.

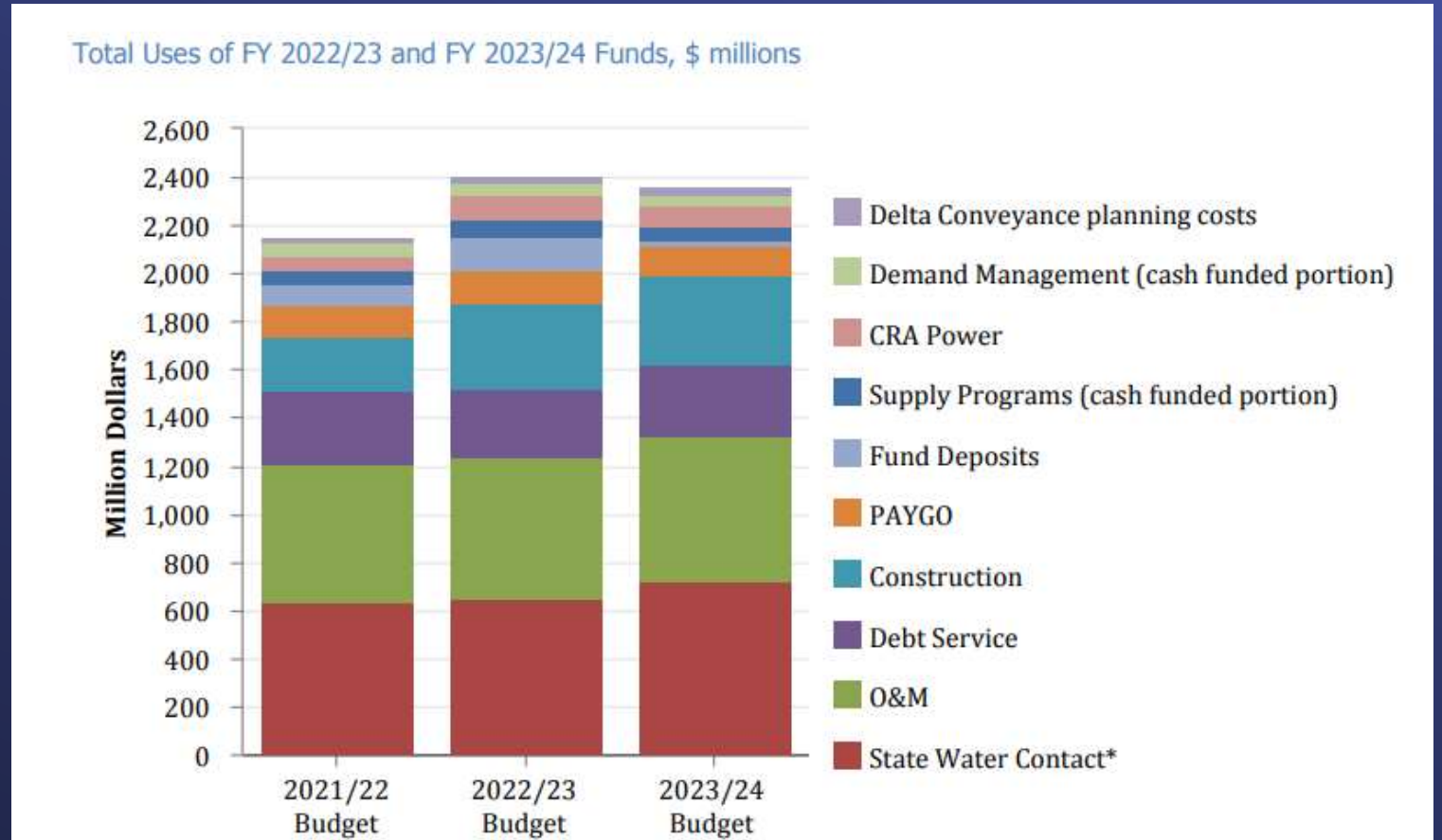
# Operating Revenues - Budget

- Water revenues (including exchanges) make up a significant majority of MWD's operating revenues, followed by water treatment surcharge revenues and property taxes.



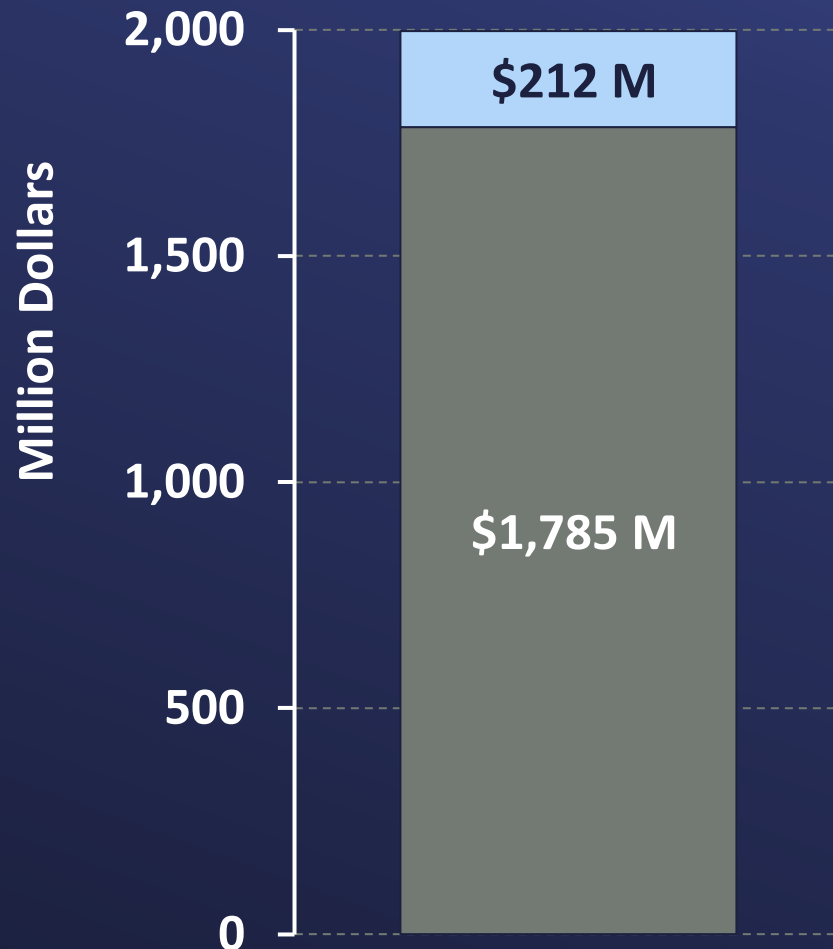
# Uses of Funds – Budget (including CIP)

- MWD's major uses of funds include expenditures for the State Water Contract, Operations & Maintenance, debt service, and capital construction.



# Non-Discretionary Expenditures

## 2022/23 Budget Expenditures



### Discretionary

- PAYGO Funding
- Conservation Credits
- Delta Conveyance Project planning costs
- Future Supply Actions & Stormwater Pilot

### Non-discretionary

- O&M
- State Water Contract
- CRA Power
- Debt Service & Debt Reserve
- Supply Programs
- LRP Incentive Contracts
- Required Reserve Increase

# What are Met's Funds?

June 30, 2022 - \$1.56 B



## Unrestricted Reserves

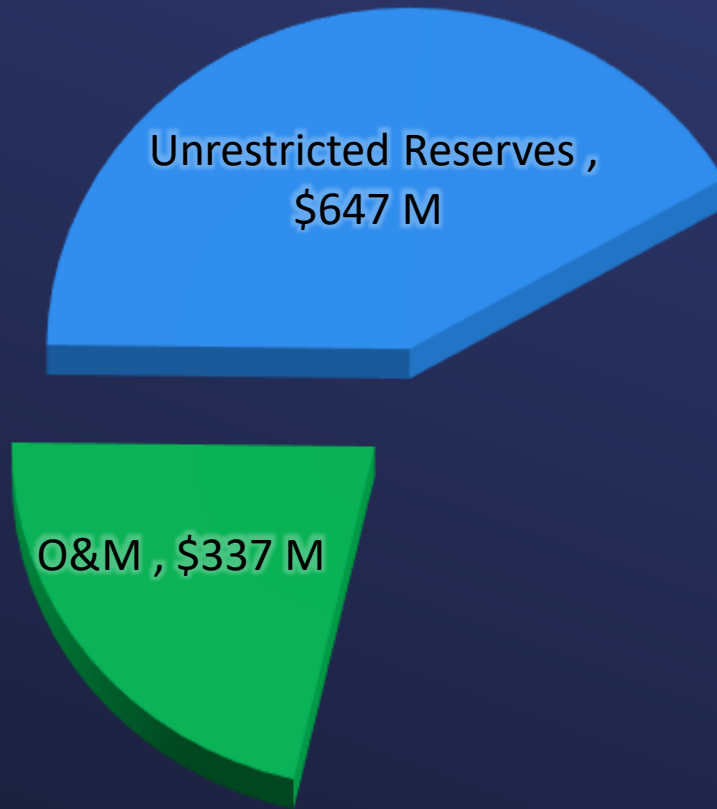
Set up pursuant to Board policy to help provide stable & predictable water rates.

- Revenue Remainder Fund
- Water Rate Stabilization Fund



# What are Met's Funds?

June 30, 2022 - \$1.56 B



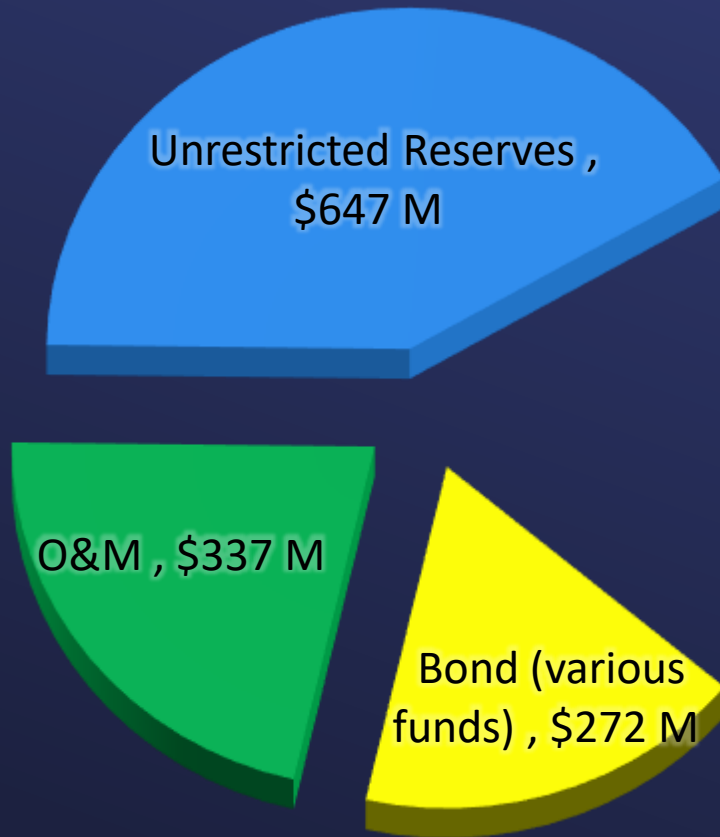
## O&M Fund:

Set up pursuant to Master Senior Revenue Bond Resolution.

Required to maintain two months of Operation and Maintenance expenditures.

# What are Met's Funds?

June 30, 2022 - \$1.56 B

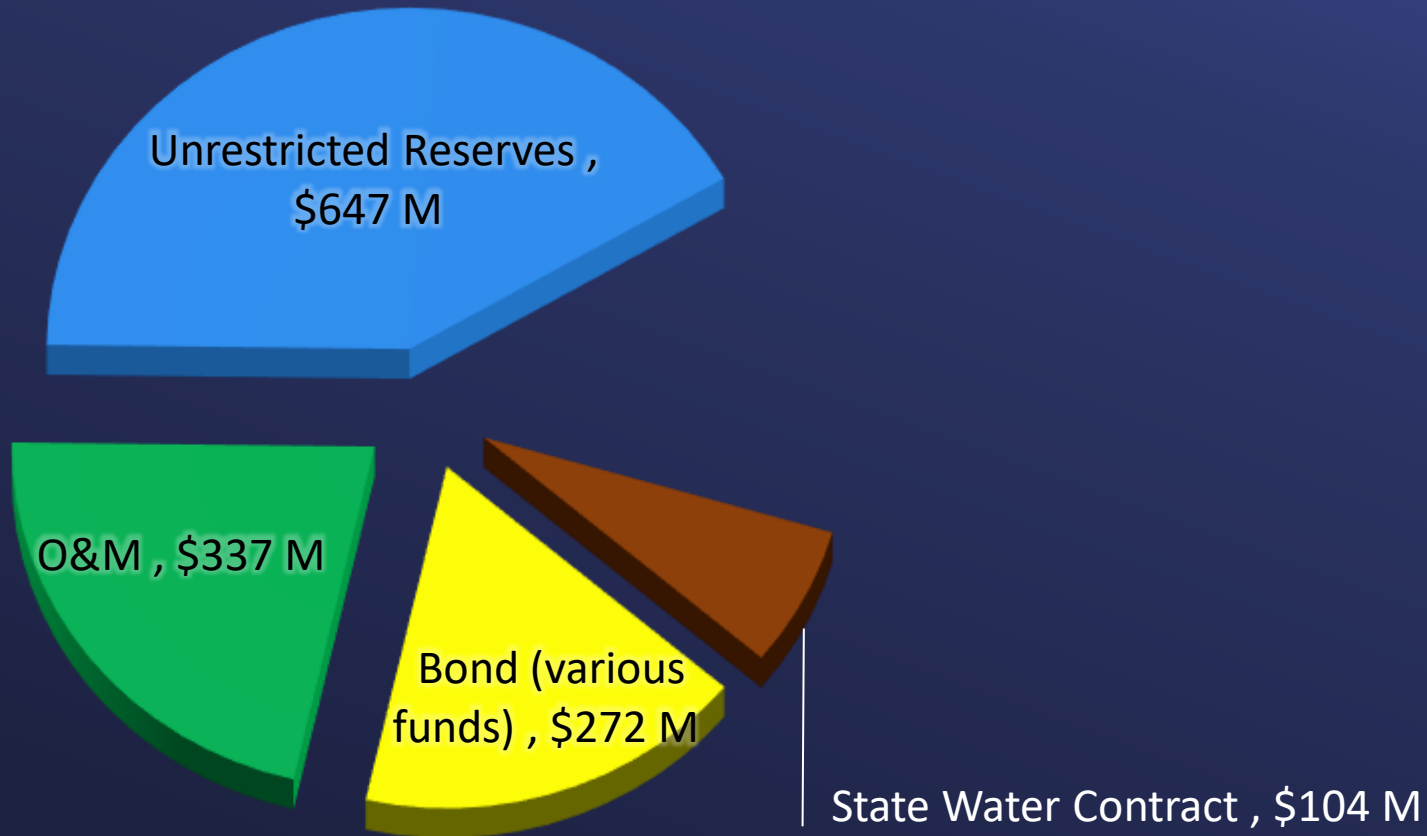


## **Bond Funds:**

Set up pursuant to a bond or other legal obligation.

# What are Met's Funds?

June 30, 2022 - \$1.56 B

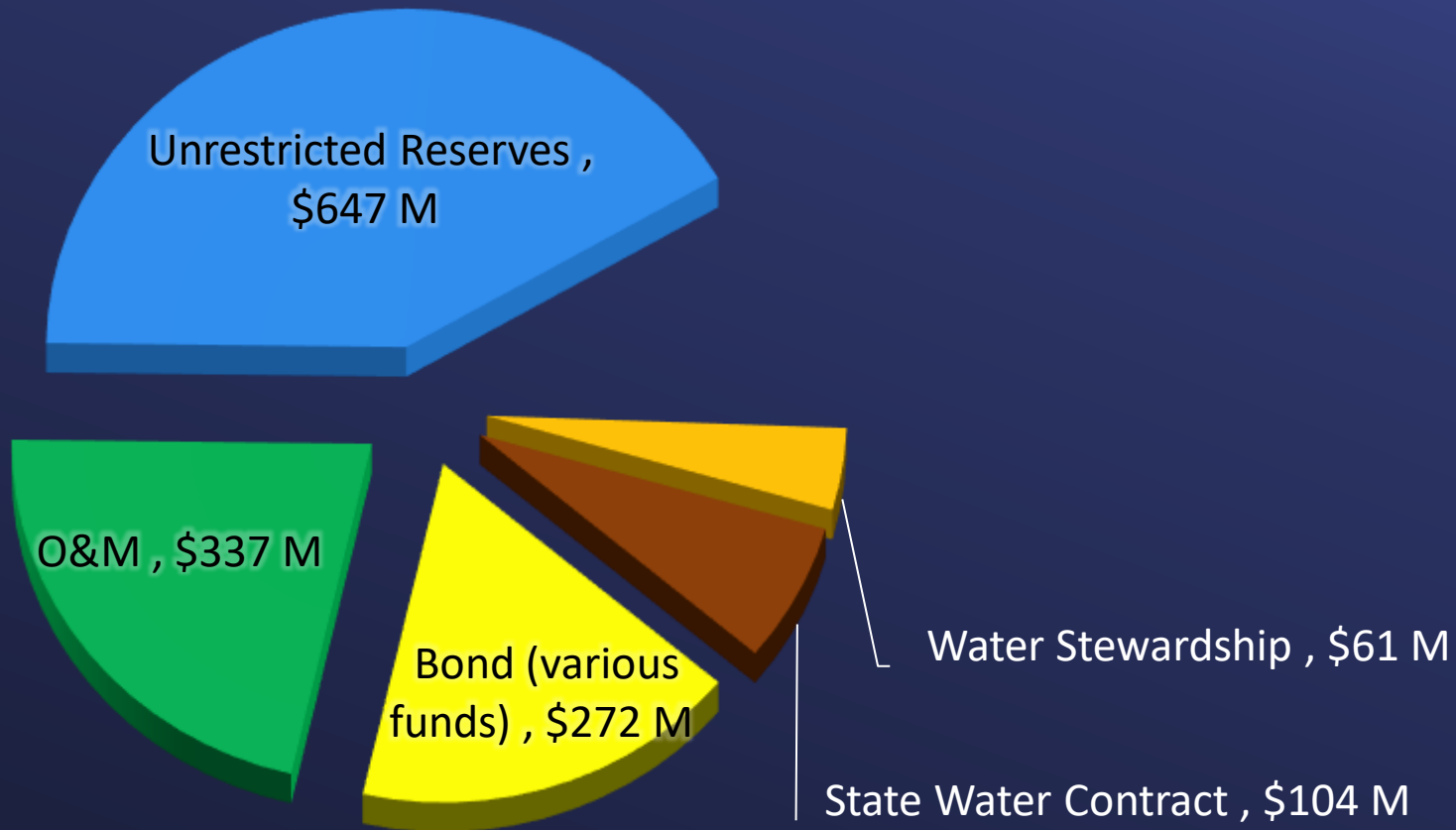


## State Water Contract Fund:

Set up pursuant to Board policy to ensure adequate funds are available to make the July 1st and Jan 1st SWC capital payments.

# What are Met's Funds?

June 30, 2022 - \$1.56 B



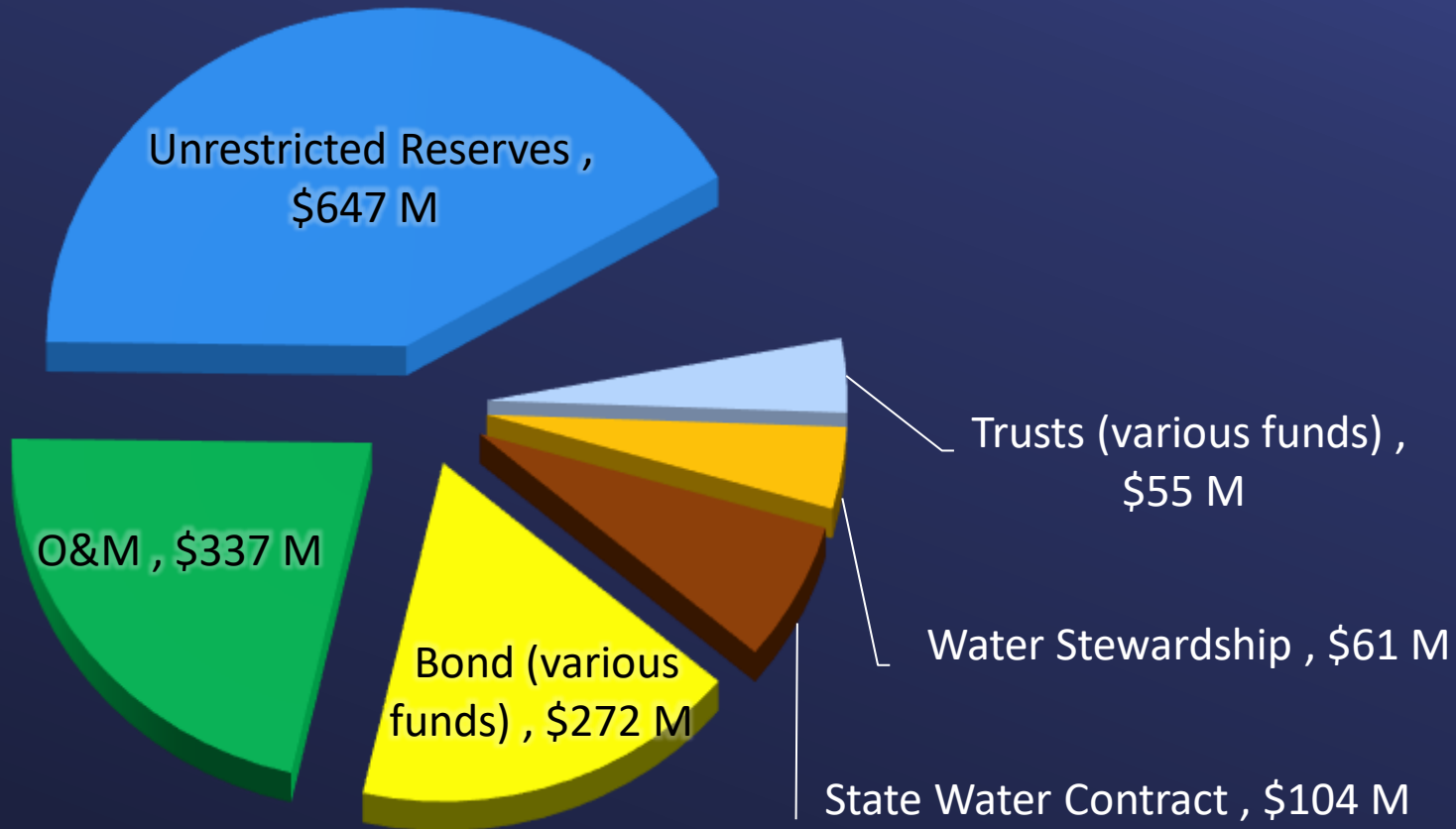
## Water Stewardship:

Set up pursuant to Board policy.  
*Administrative Code Section* to collect revenue from the Water Stewardship Rate and to pay demand management programs.

April 30, 2023 balance is \$0

# What are Met's Funds?

June 30, 2022 - \$1.56 B

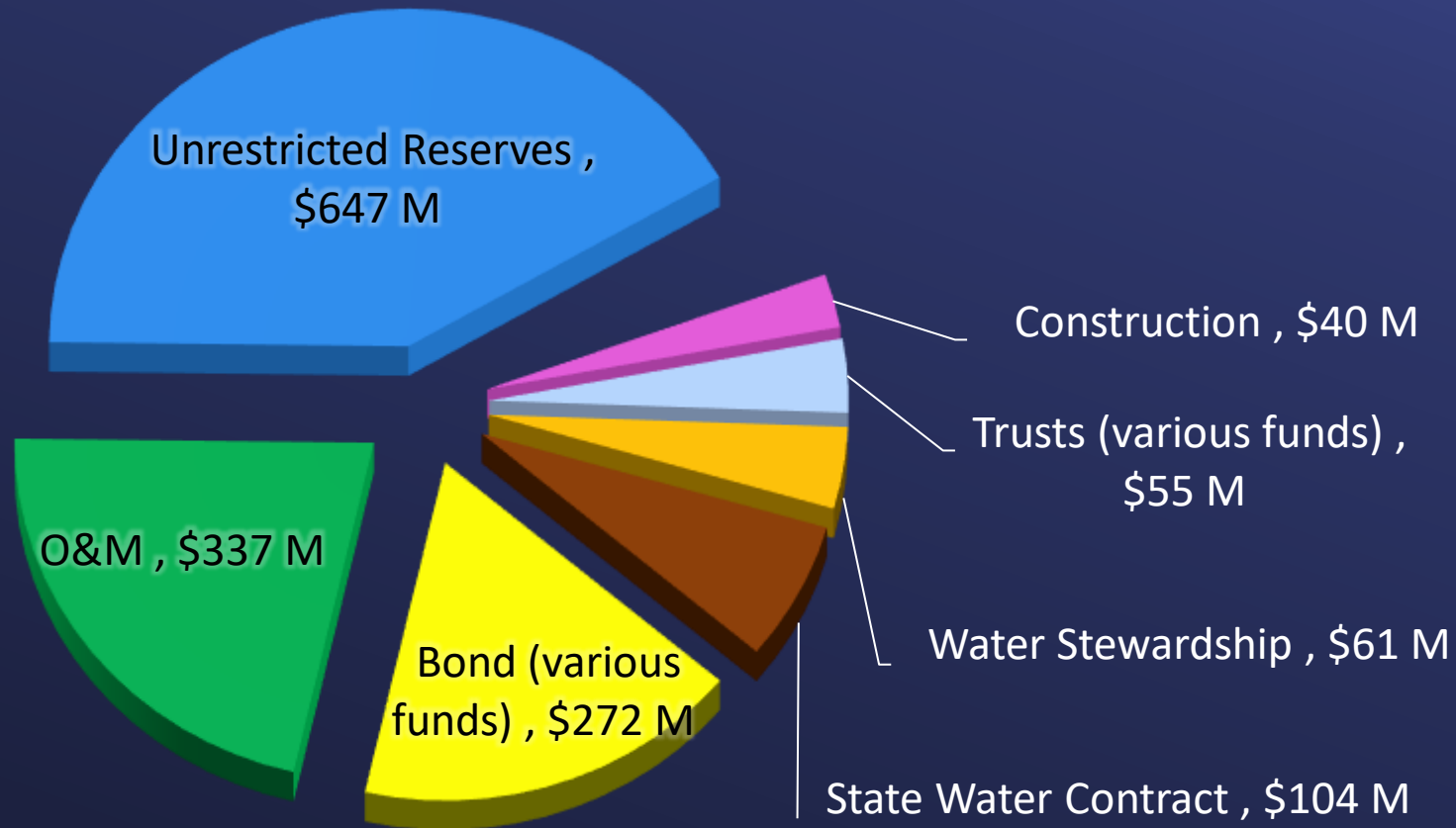


## Trust Funds

Trust funds are monies held by Metropolitan in a trustee or custodial capacity pursuant to legal obligations.

# What are Met's Funds?

June 30, 2022 - \$1.56 B



## Construction Funds:

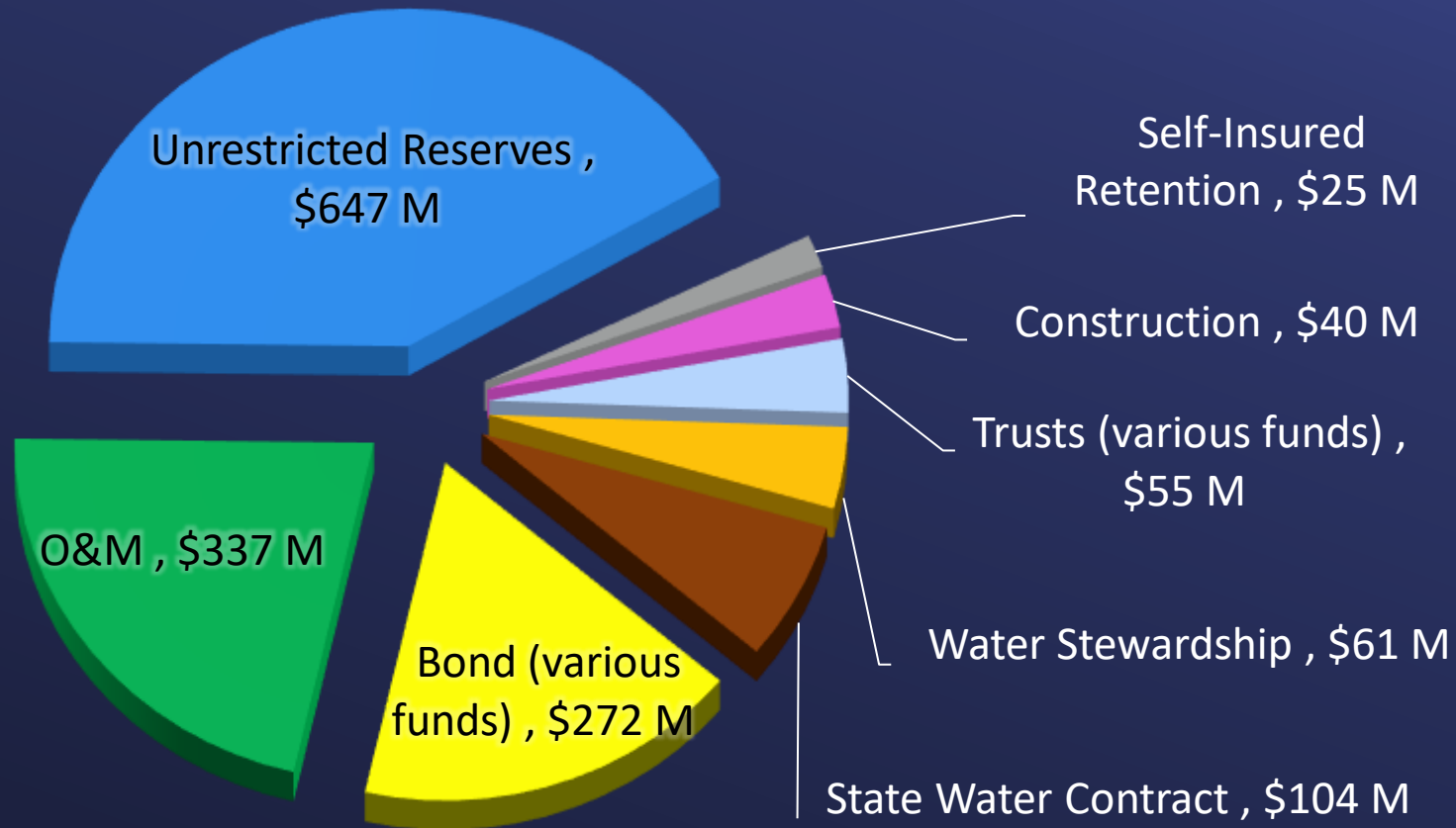
Set up pursuant to Board policy.

*Administrative Code Section 5201(d)*

Holds bond proceeds available for capital expenditures.

# What are Met's Funds?

June 30, 2022 - \$1.56 B



## Self-Insured Retention Fund:

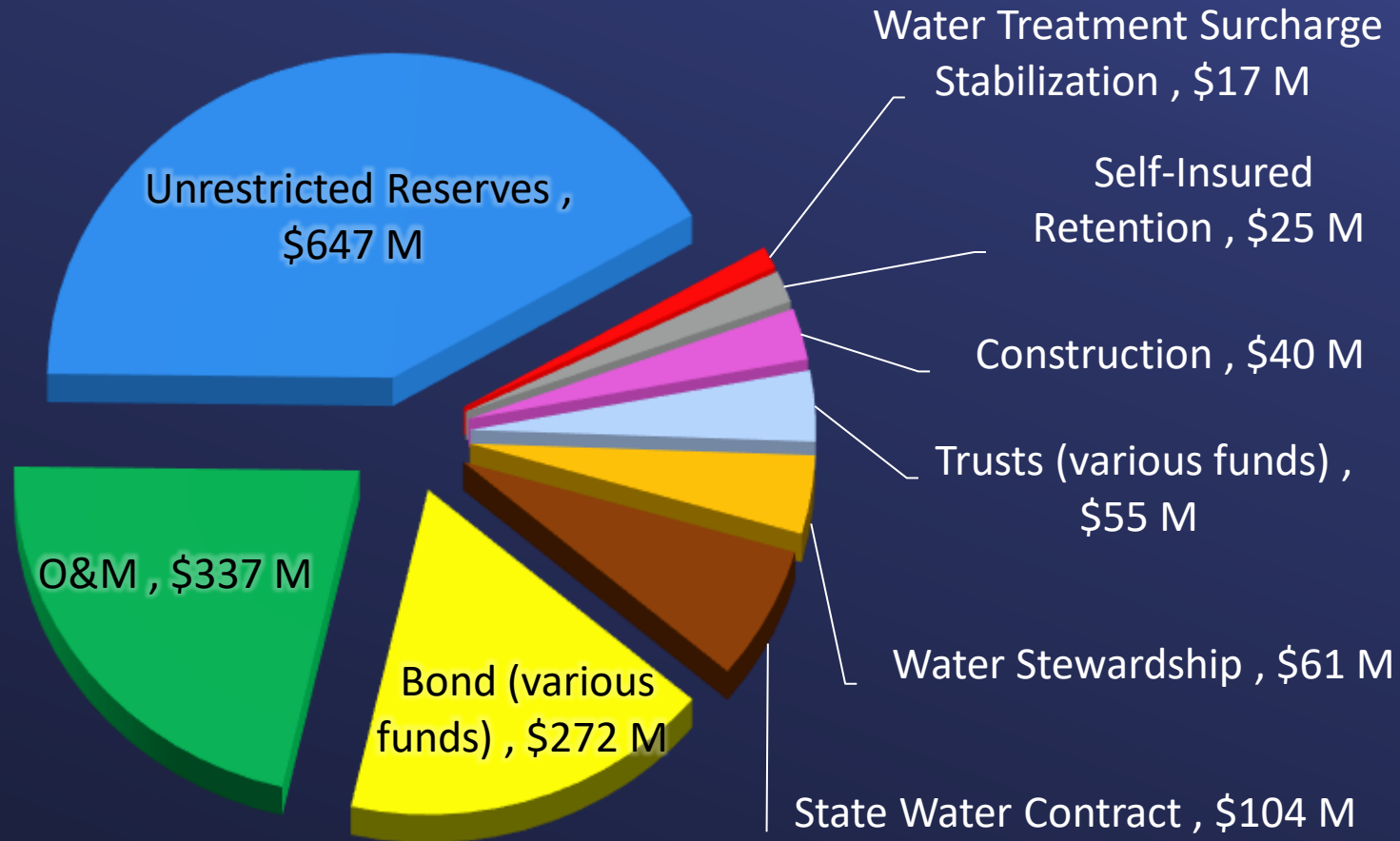
Set up pursuant to Board policy.

*Administrative Code Section 5201(p):*

\$25 million set aside for emergency repairs and claims against the District.

# What are Met's Funds?

June 30, 2022 - \$1.56 B



## Water Treatment Surcharge Stabilization Fund:

Set up pursuant to Board policy.  
*Administrative Code Section 5202(d)*

Holds treatment surcharge revenues in excess of water treatment costs.

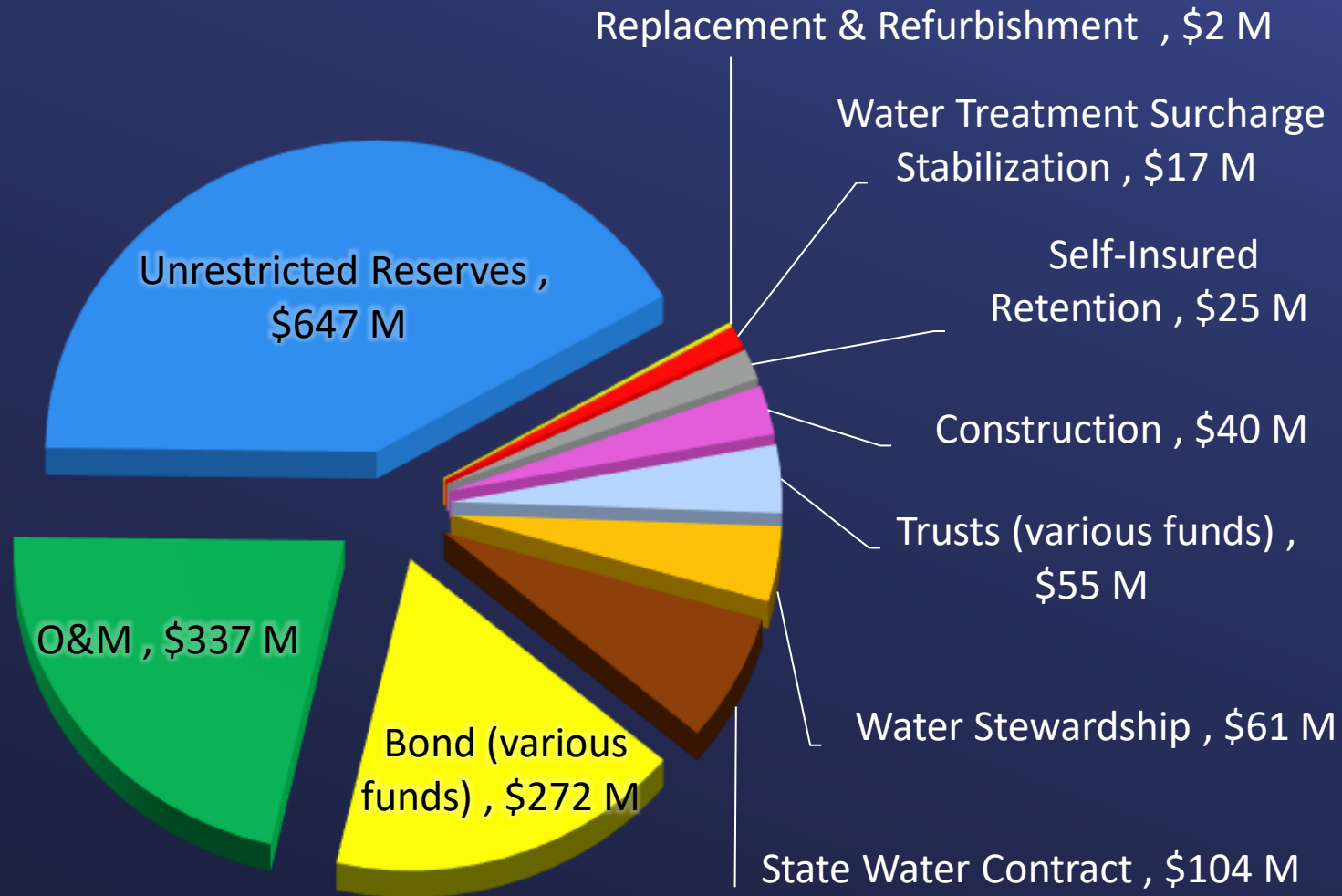
Available for the principal purpose of mitigating required increases in the treatment surcharge.

Projected June 30, 2023 balance = \$0



# What are Met's Funds?

June 30, 2022 - \$1.56 B



## Replacement & Refurbishment:

Set up pursuant to Board policy.

*Administrative Code Section 5202(d)*

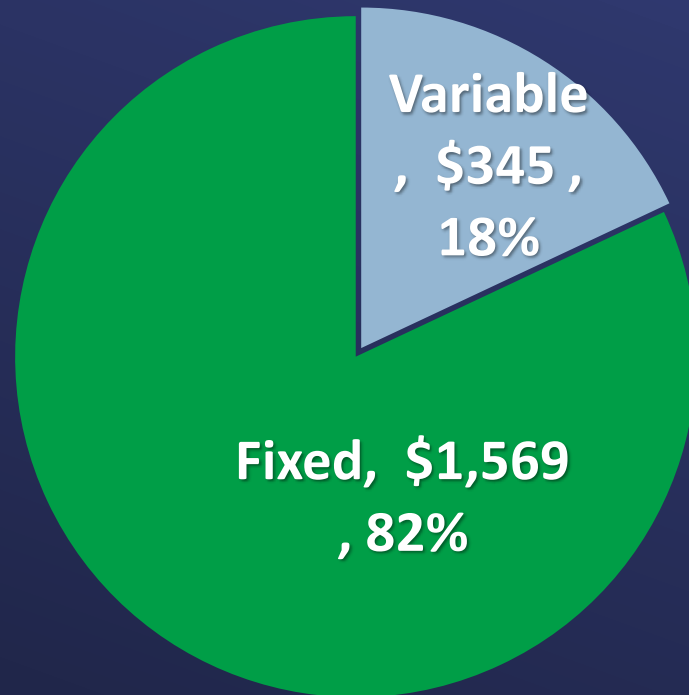
Funds available for capital expenditures

Projected June 30, 2023 balance = \$0

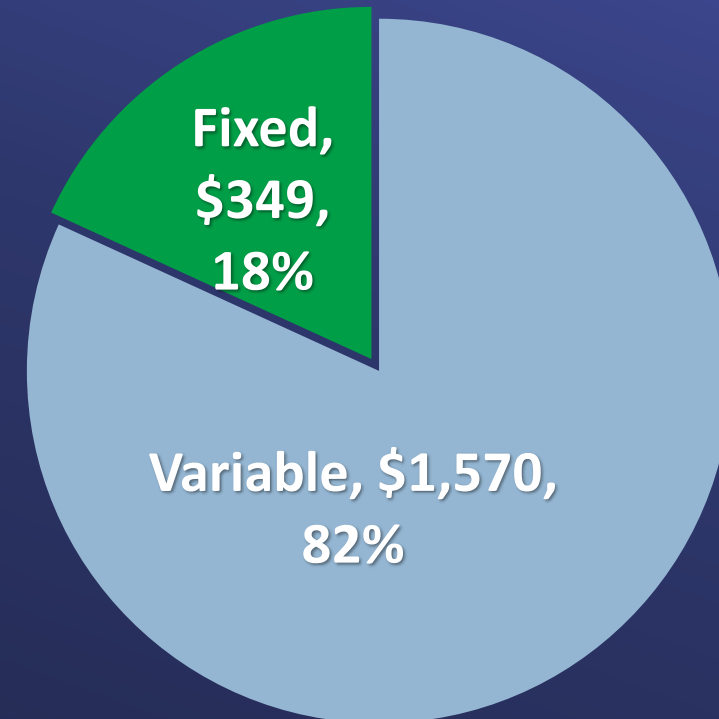
# Challenge: Fixed Costs vs. Variable Revenues

## 2022/23 Budget (\$ in Millions)

### Expenditures

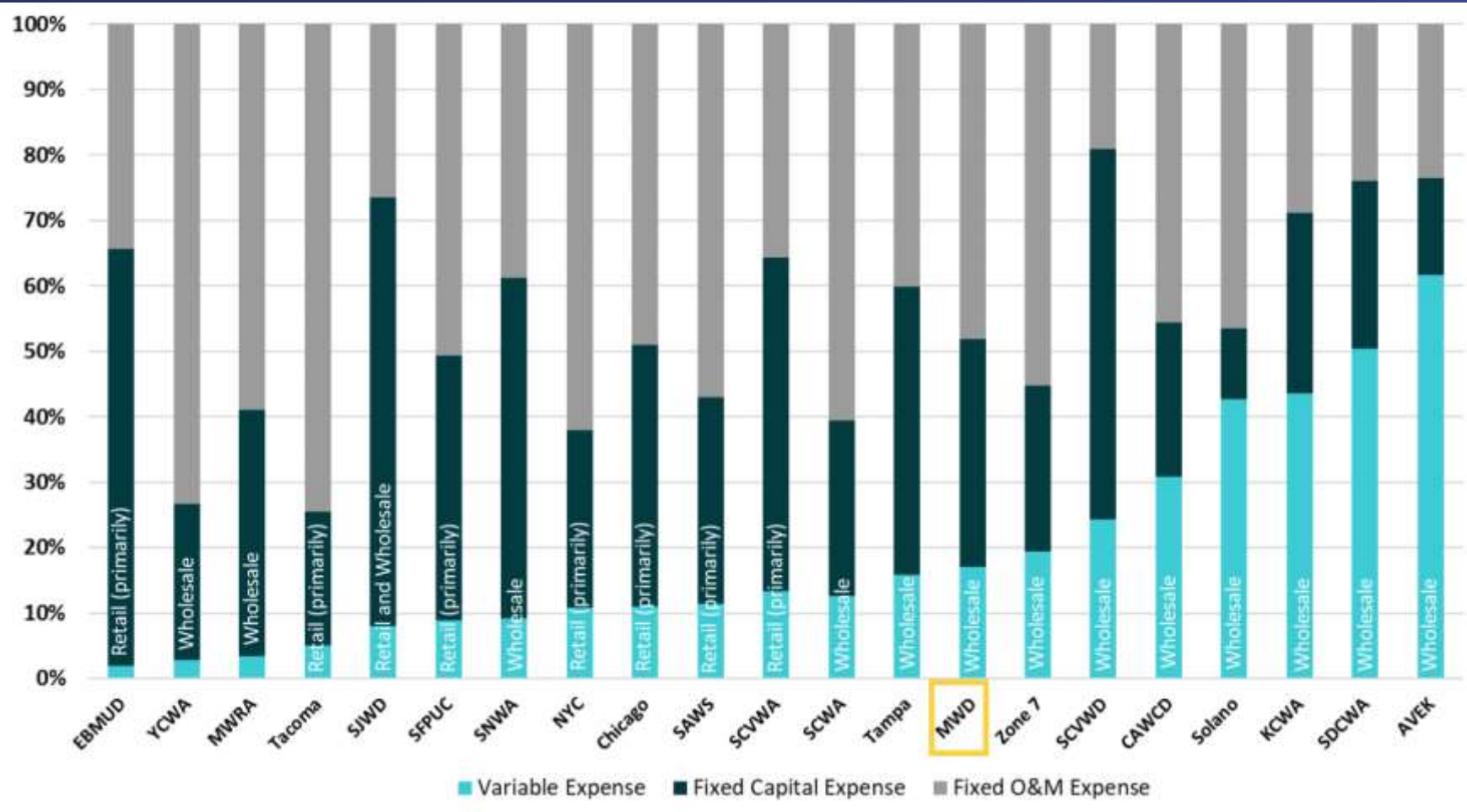


### Revenues \*



\* For purposes of this presentation, variable revenues include all revenues that are dependent upon volumetric transactions over a one-year period (Sales, Wheeling and Exchanges), power sales, interest income and miscellaneous. This includes water sales to Member Agencies with Purchase Order commitments to purchase a designated amount of water over a 10-year period. Fixed revenues includes Readiness-to-Serve Charge, Capacity Charge, and property taxes.

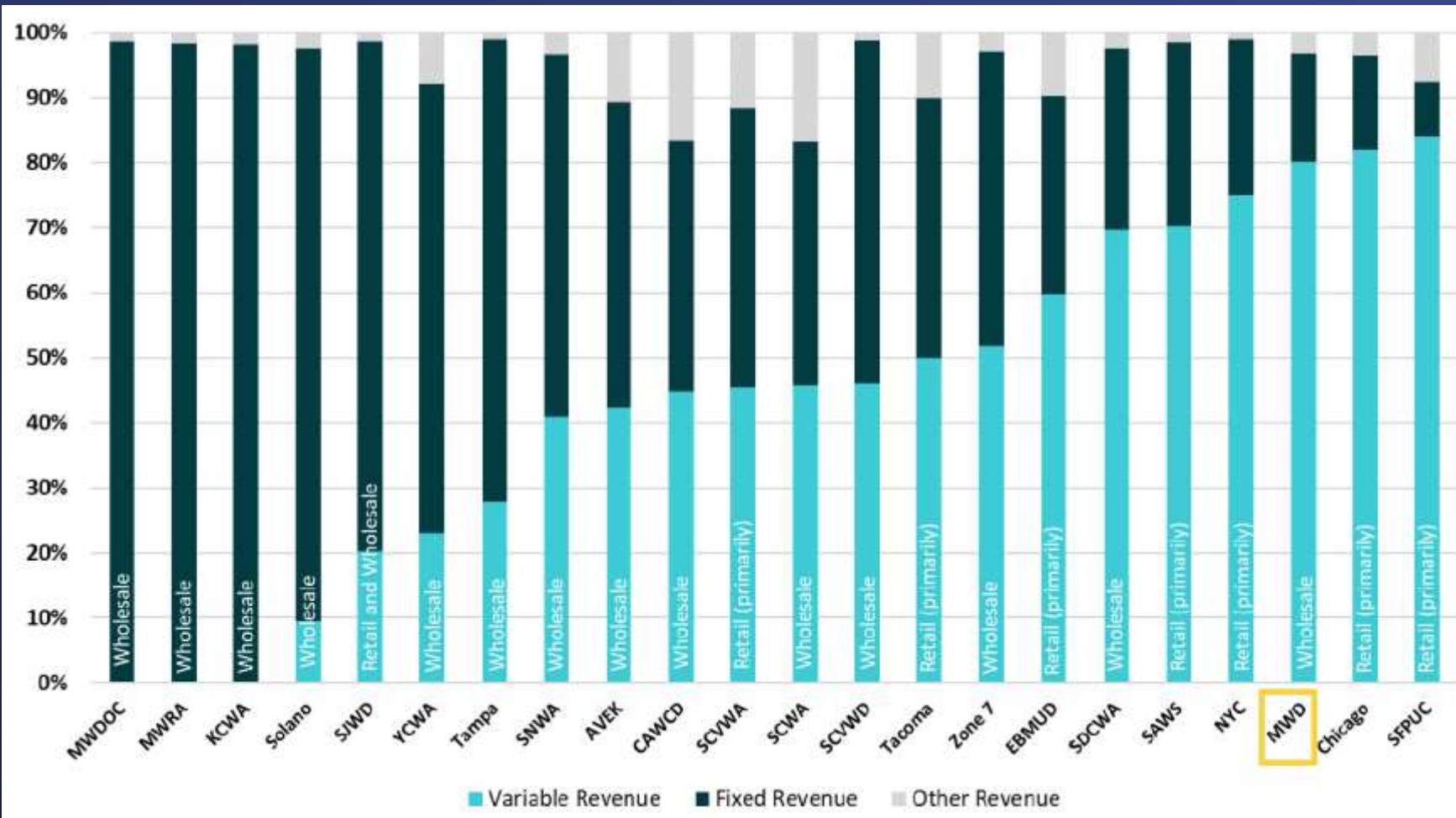
# Fixed and Variable Expense Composition for Wholesale Water Agencies



- Antelope Valley East Kern Agency (AVEK)
- Central Arizona Water Conservation District (CAWCD)
- Chicago Water Department
- East Bay Municipal Utility District (EBMUD)
- Kern County Water Agency (KCWA)
- Massachusetts Water Resources Authority (MWRA)
- Metropolitan Water District of Orange County (MWDOC)
- Metropolitan Water District of Southern California (MWD)
- New York City Water Board
- San Antonio Water System (SAWS)
- San Diego County Water Authority (SDCWA)
- San Francisco Public Utilities Commission (SFPUC)
- San Juan Water District
- Santa Clara Valley Water District (SCVWA)
- Santa Clarita Valley Water Agency (SCV)
- Solano County Water Agency (Solano)
- Sonoma County Water Agency (SCWA)
- Southern Nevada Water Authority (SNWA)
- Tacoma Water
- Tampa Bay Water
- Yuba County Water Agency (YCWA)
- Zone 7 Water Agency

2023 survey conducted by Raftelis Financial Consultants

# Fixed and Variable Revenue Composition for Wholesale Water Agencies



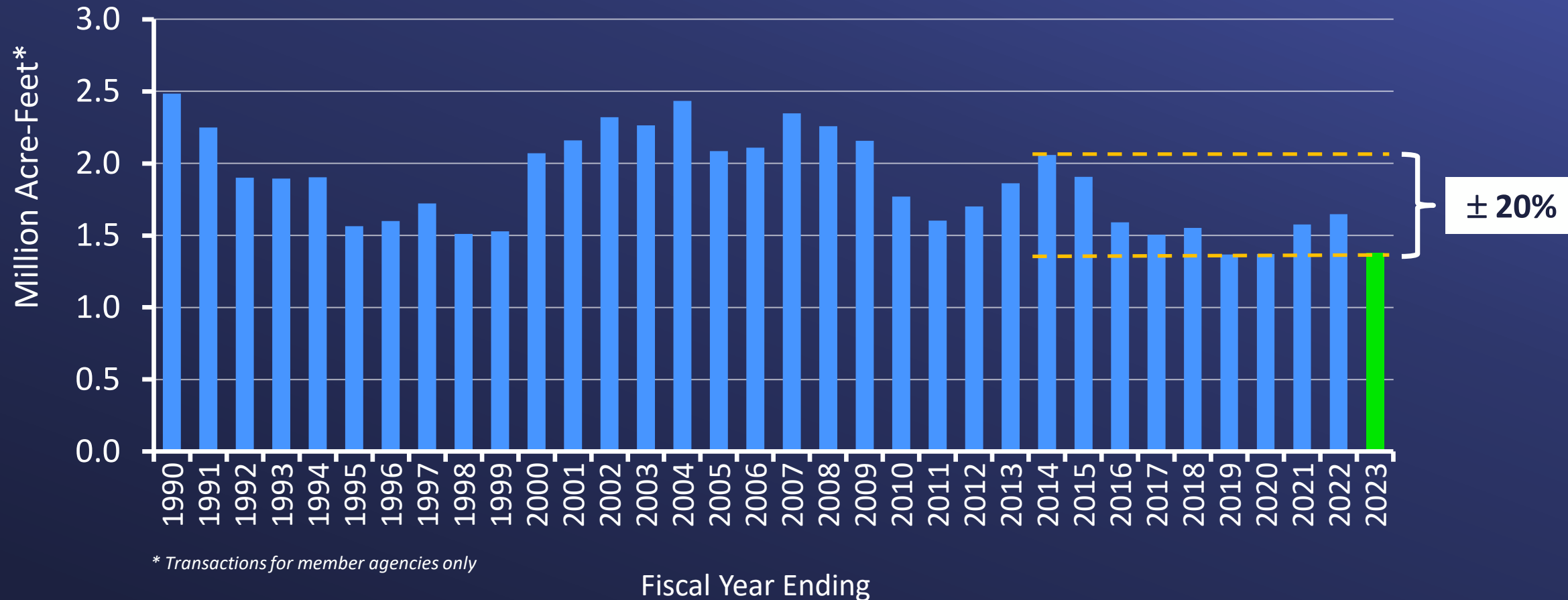
- Antelope Valley East Kern Agency (AVEK)
- Central Arizona Water Conservation District (CAWCD)
- Chicago Water Department
- East Bay Municipal Utility District (EBMUD)
- Kern County Water Agency (KCWA)
- Massachusetts Water Resources Authority (MWRA)
- Metropolitan Water District of Orange County (MWDOC)
- Metropolitan Water District of Southern California (MWD)
- New York City Water Board
- San Antonio Water System (SAWS)
- San Diego County Water Authority (SDCWA)
- San Francisco Public Utilities Commission (SFPUC)
- San Juan Water District
- Santa Clara Valley Water District (SCVWA)
- Santa Clarita Valley Water Agency (SCV)
- Solano County Water Agency (Solano)
- Sonoma County Water Agency (SCWA)
- Southern Nevada Water Authority (SNWA)
- Tacoma Water
- Tampa Bay Water
- Yuba County Water Agency (YCWA)
- Zone 7 Water Agency

2023 survey conducted by Raftelis Financial Consultants

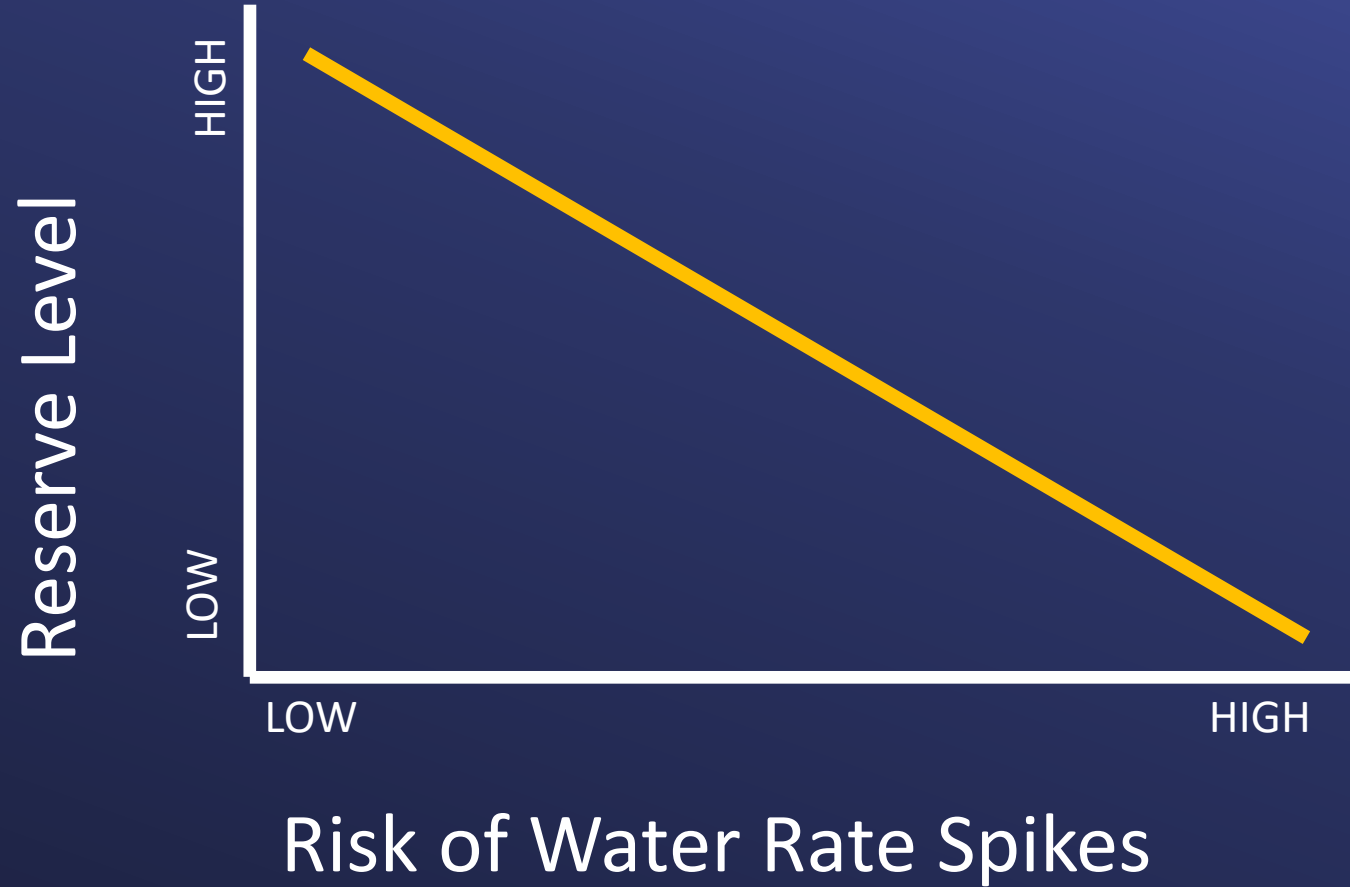
# Unrestricted Reserves

# Metropolitan's Historic Water Transactions

Water Transactions are Variable



# Unrestricted Reserve Level vs. Rate Spikes

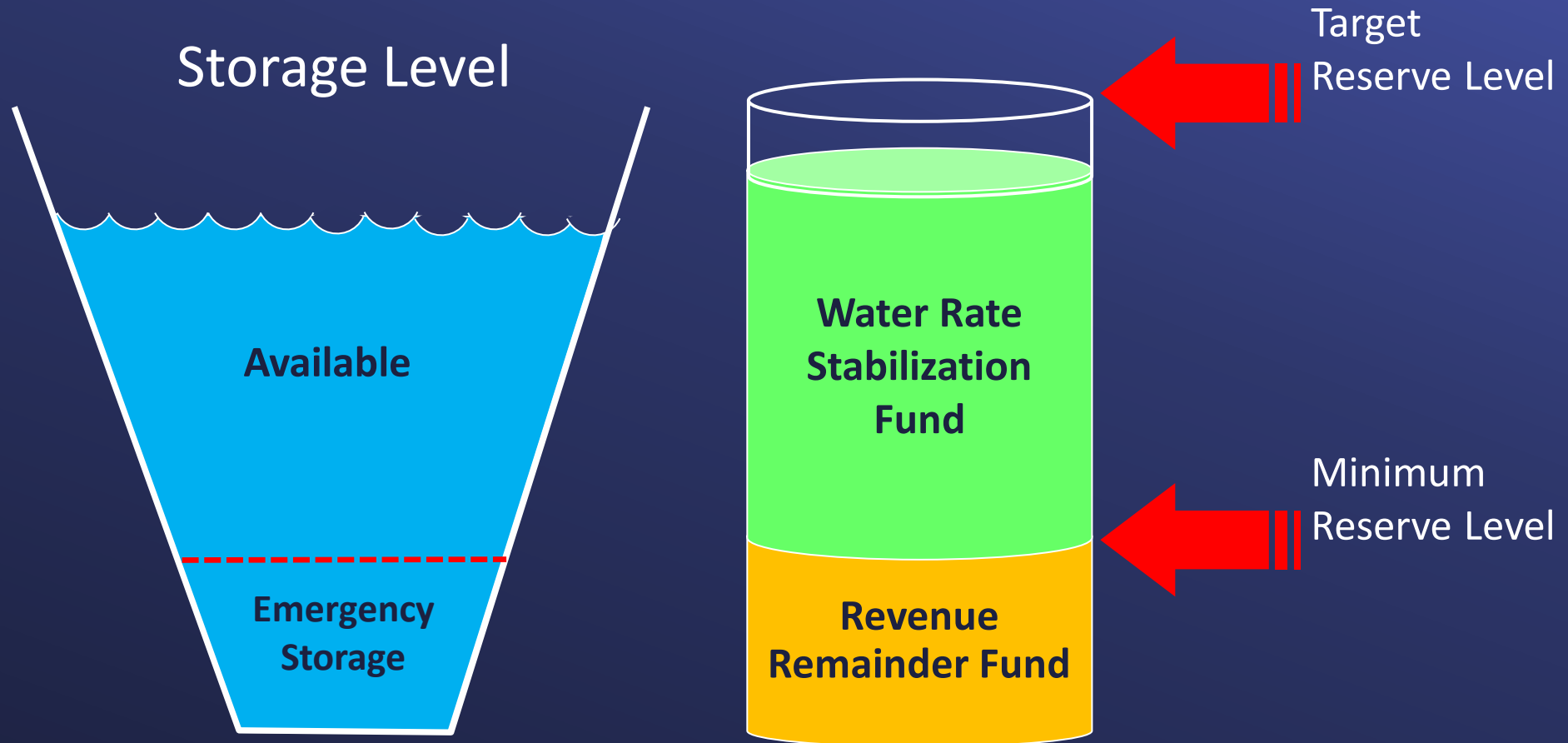


# Unrestricted Reserve Fund Principles

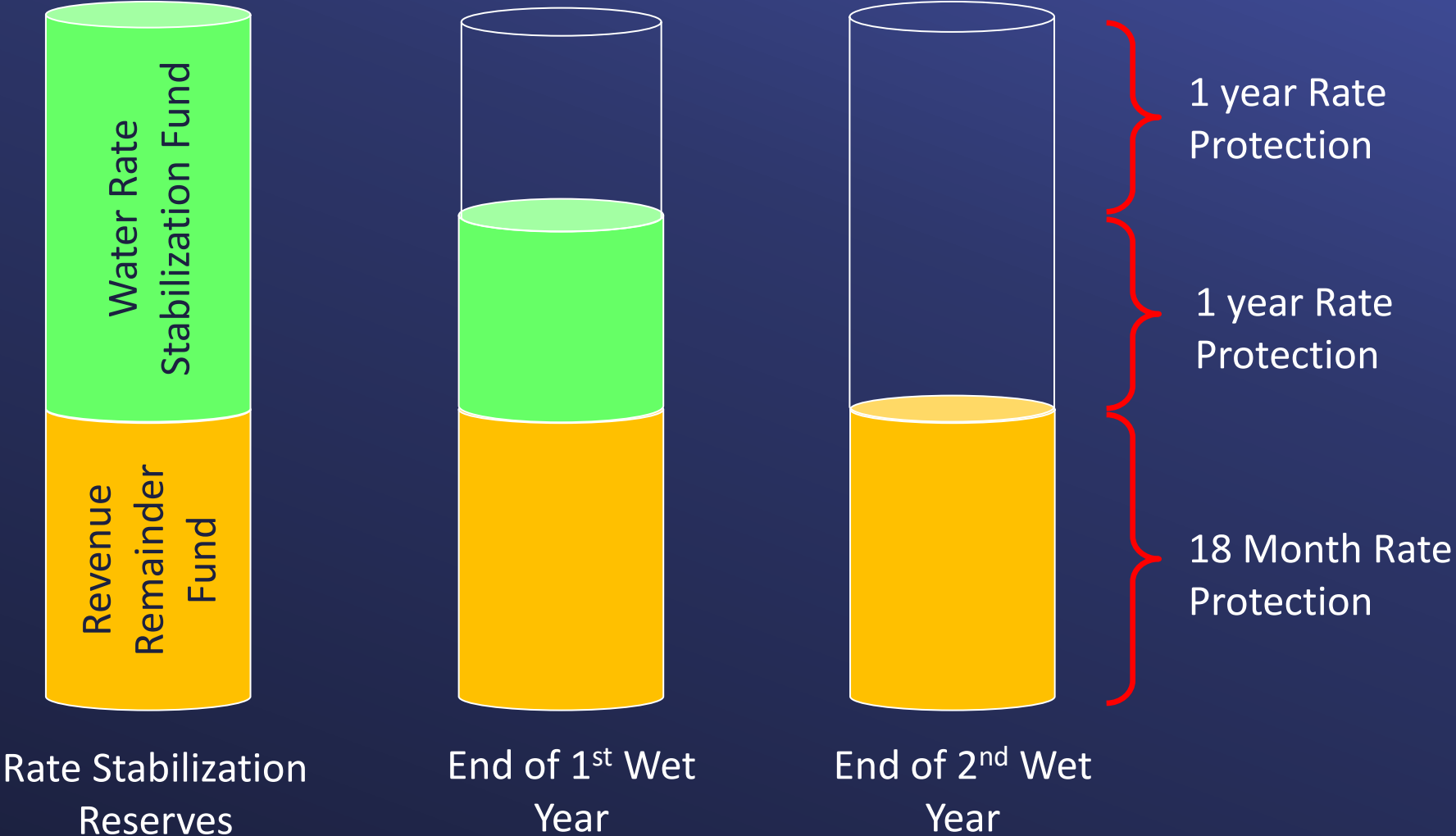
- Current method was adopted with the 1999 Long Range Finance Plan
- MWD Administrative Code § 5202
  - Established to smooth out and/or mitigate future water rate increases
  - Provides funds to cover revenue shortfall resulting from 20% reduction in water sales
    - Minimum fund level provides 18 months of rate protection
    - Target fund level provides additional 2 years of rate protection for a total of 3.5 years
  - Provide stable & predictable water rates
  - Provide stable rates for local water resource investment planning
    - MWD rate used as a benchmark



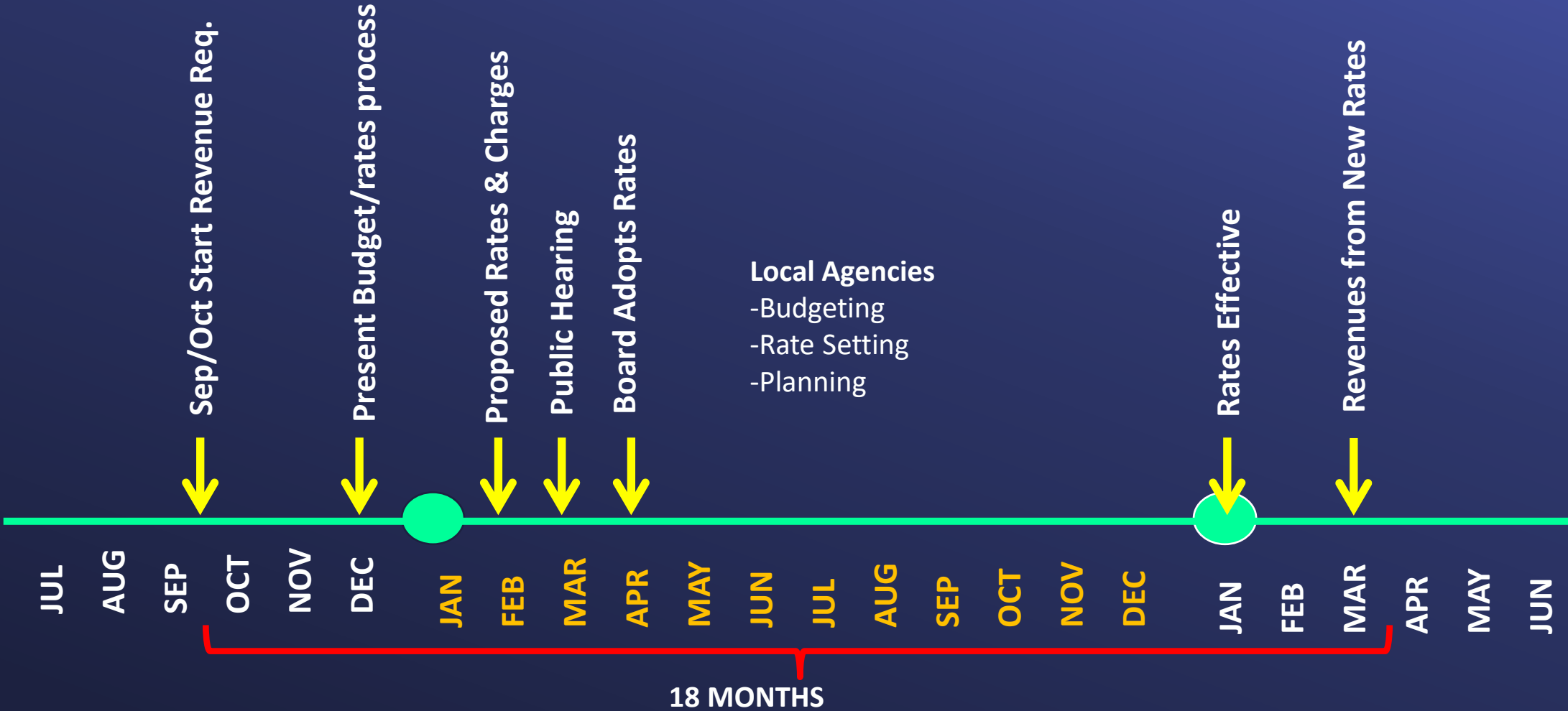
# Unrestricted Reserve Fund



# Use of Unrestricted Reserve Fund



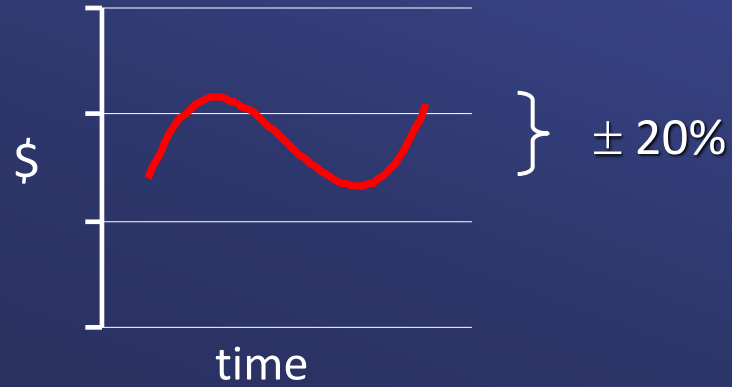
# Rate Setting Timeline



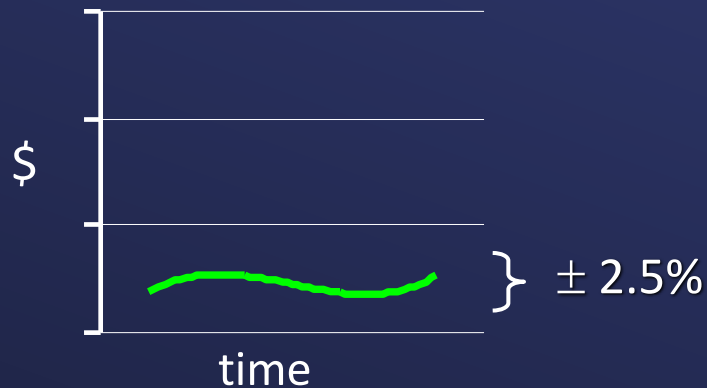
# Unrestricted Reserve Calculation

Hydrologic Risk estimated per 1999 LRFPP

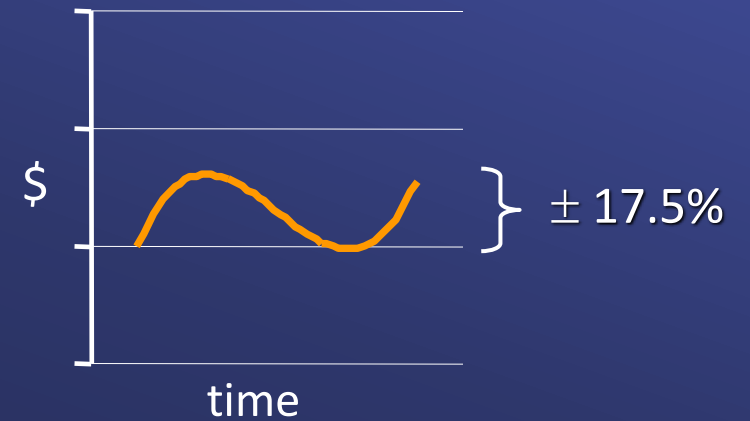
### Volumetric Water Sales Revenue



### Variable Costs



### Fixed Costs Recovered by Water Rate



# Unrestricted Reserve Calculation

## for June 30<sup>th</sup>, 2023 in millions of dollars

	2023/24 Budget	2024/25 Forecast	2025/26 Forecast	2026/27 Forecast
Revenue Requirement	\$1,764	\$1,862	\$1,941	\$2,038
Less RTS Charge	161	167	167	167
Less Capacity Charge	35	39	43	46
<b>Water Rate Revenue Requirements</b>	<b>1,568</b>	<b>1,656</b>	<b>1,731</b>	<b>1,825</b>
Less Variable Costs				
Treatment Surcharge Rev Req.	273	298	303	310
SWC Variable Power Costs	254	287	295	299
CRA Power Costs	86	75	77	79
<b>Fixed Costs Recovered by Water Rate</b>	<b>956</b>	<b>996</b>	<b>1,055</b>	<b>1,137</b>
Percent Reserved	17.5%	17.5%	17.5%	17.5%
<b>Annual Amount Reserved</b>	<b>\$167</b>	<b>\$174</b>	<b>\$185</b>	<b>\$199</b>

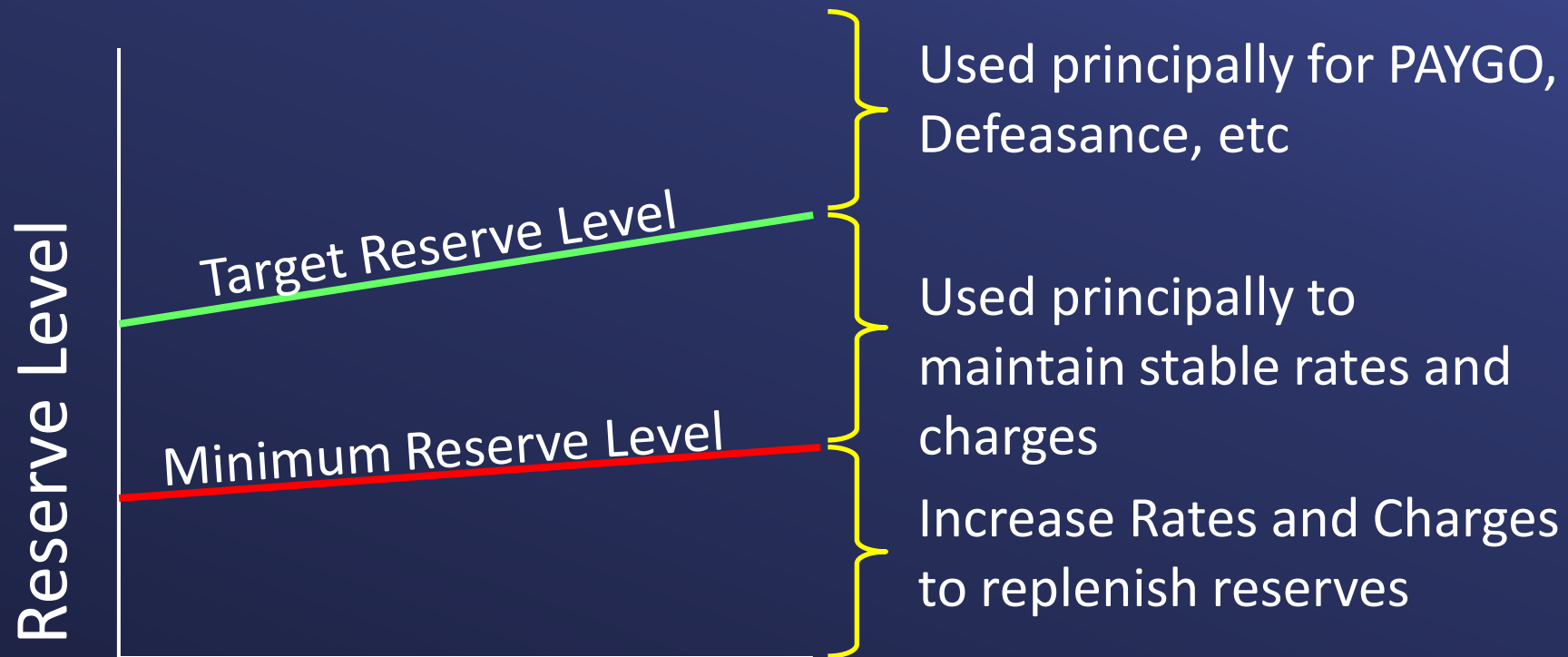
**Minimum Reserve Level =  $167 + 174 / 2$  = \$254.5 million**

**Target Reserve Level =  $167 + 174 + 185 + 199 / 2$  = \$625.8 million**

# Unrestricted Reserve Policy

## Reserve Fund Principle:

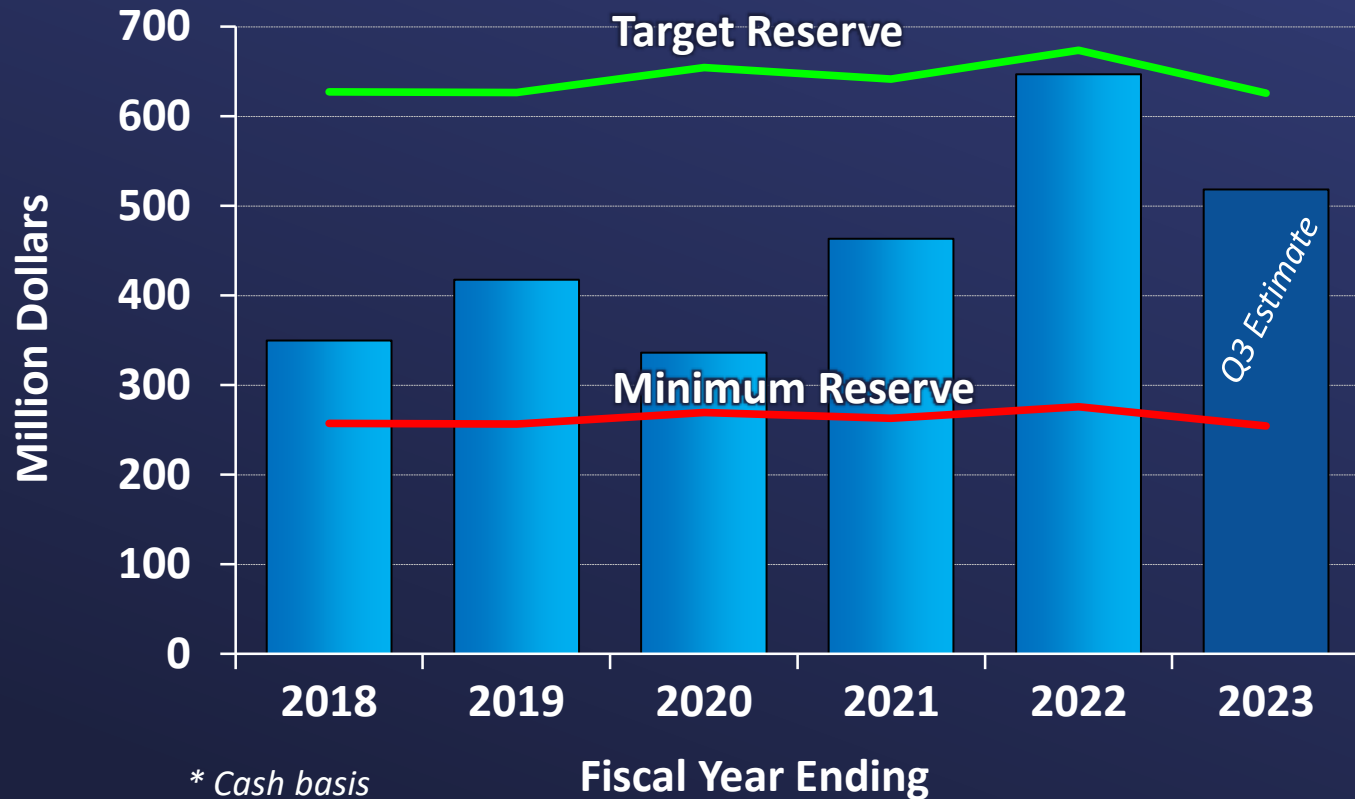
Provide stable & predictable water rates



# Unrestricted Reserves

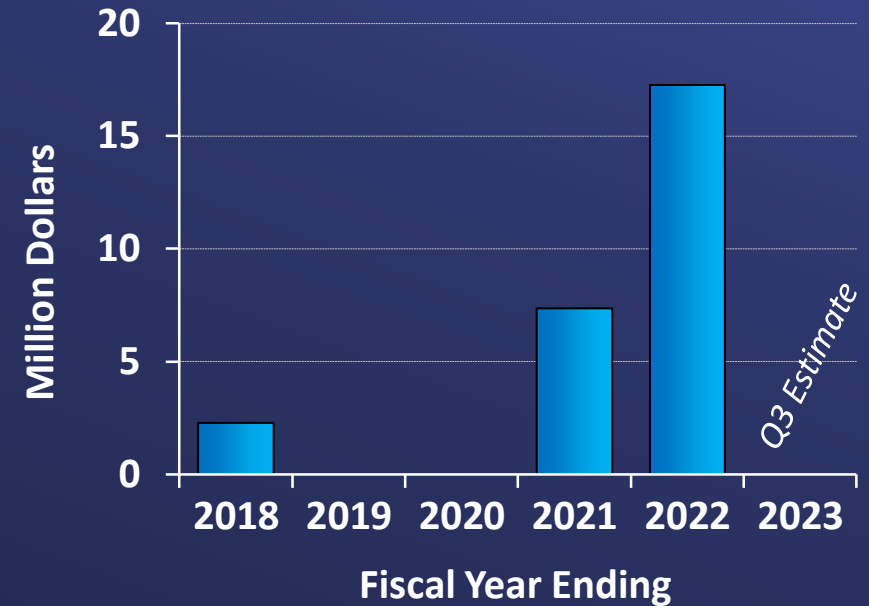
## 5-Year Historical Perspective

### Unrestricted Reserves\*



\* Cash basis

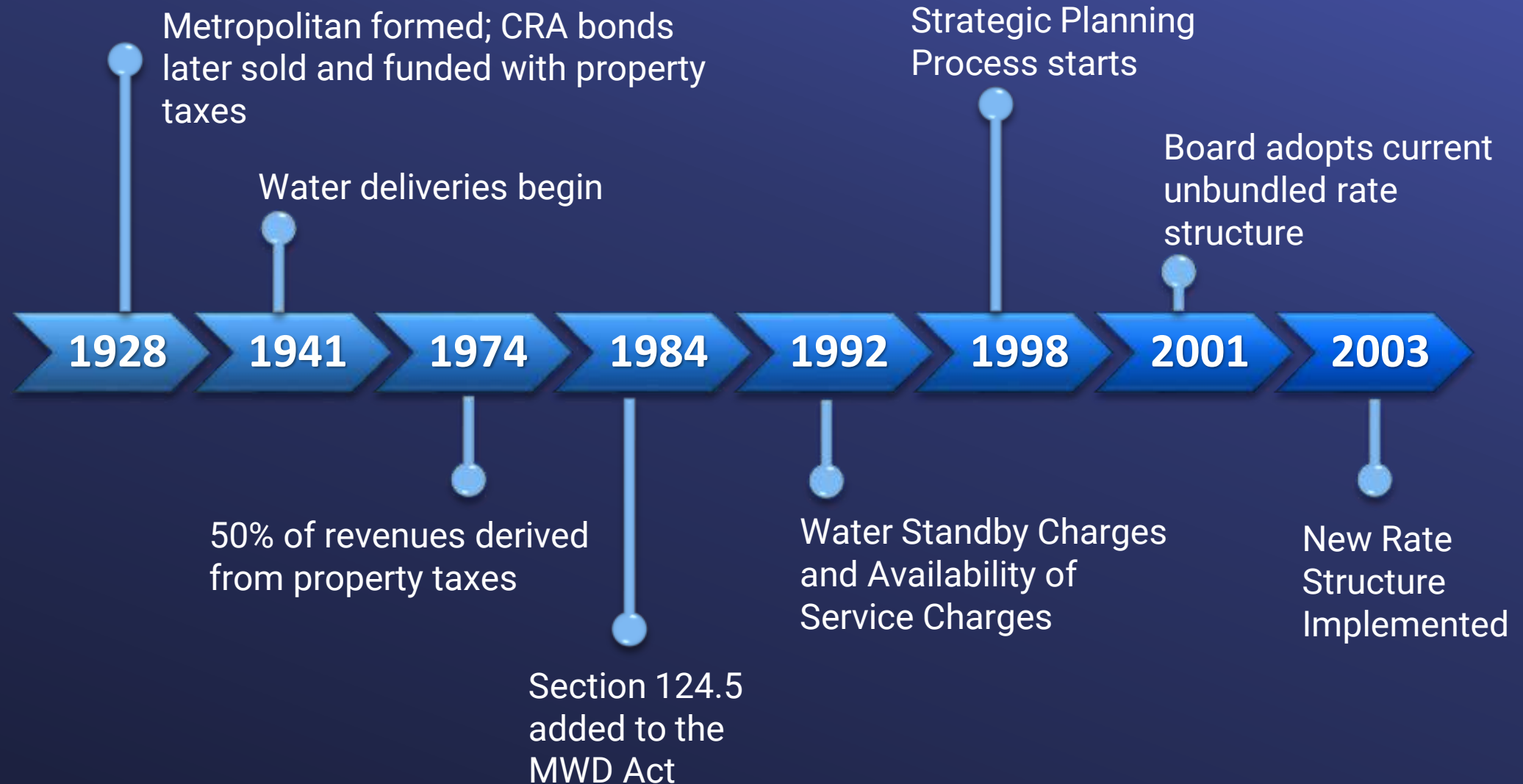
### Water Treatment Surcharge Stabilization Fund\*



# Rate Structure



# History of Rate Structure



# Metropolitan Water Service

## Full-Service Untreated Water Service

Unbundled rates and charges apply

Rate Elements	Charges
Supply Rate (Tier 1/ Tier 2)	RTS Charge (Standby Charge offset)
System Access Rate	Capacity Charge
System Power Rate	

## Full-Service Treated Water Service

Unbundled rates and charges apply

Rate Elements	Charges
Supply Rate (Tier 1/ Tier 2)	RTS Charge (Standby Charge offset)
System Access Rate	Capacity Charge
System Power Rate	
Treatment Surcharge	

## Wheeling and Exchanges

Set by agreement

# Rate Elements and Charges Overview

**Tier 1 Supply Rate** – recovers the cost of developing and maintaining a reliable water supply.

**Tier 2 Supply Rate** – set at Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the maintenance of existing local supplies and the development of cost-effective local supply resources and conservation.

**System Access Rate** – recovers costs associated with the interconnected regional delivery network necessary to deliver water to meet member agencies' average annual demands. Included are the costs of conveyance and distribution facilities.

**System Power Rate** – recovers Metropolitan's power costs for pumping supplies to Southern California.

# Rate Elements and Charges Overview (cont'd)

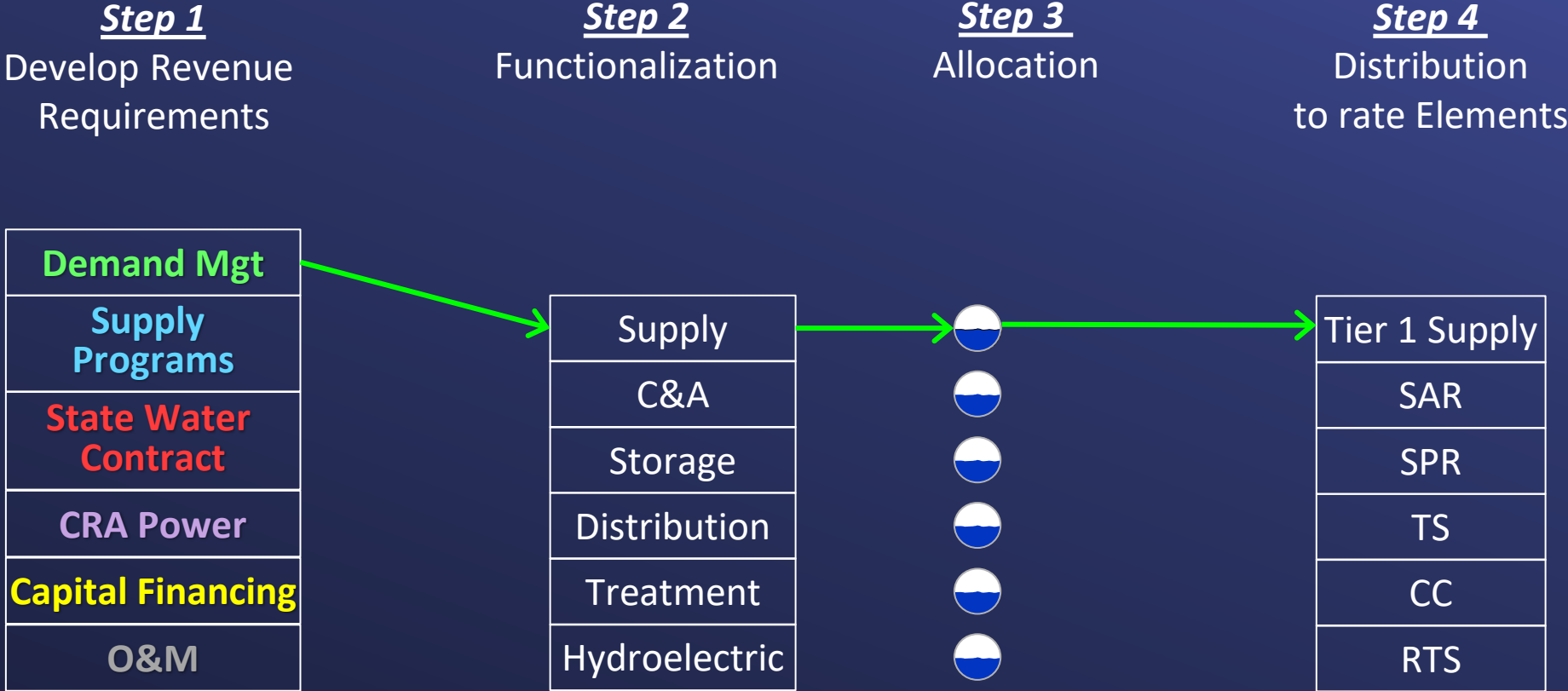
**Treatment Surcharge** – recovers the costs of treating imported water.

**Readiness-to-Serve Charge** – a fixed charge that recovers the capital costs of providing emergency service and available capacity to meet outages, emergencies and hydrologic variability. The Standby Charge collection for 22 participating member agencies offsets their RTS Charge obligation.

**Capacity Charge** – the Capacity Charge recovers the capital cost of providing peaking capacity within the distribution system which Metropolitan owns or has the right to use.

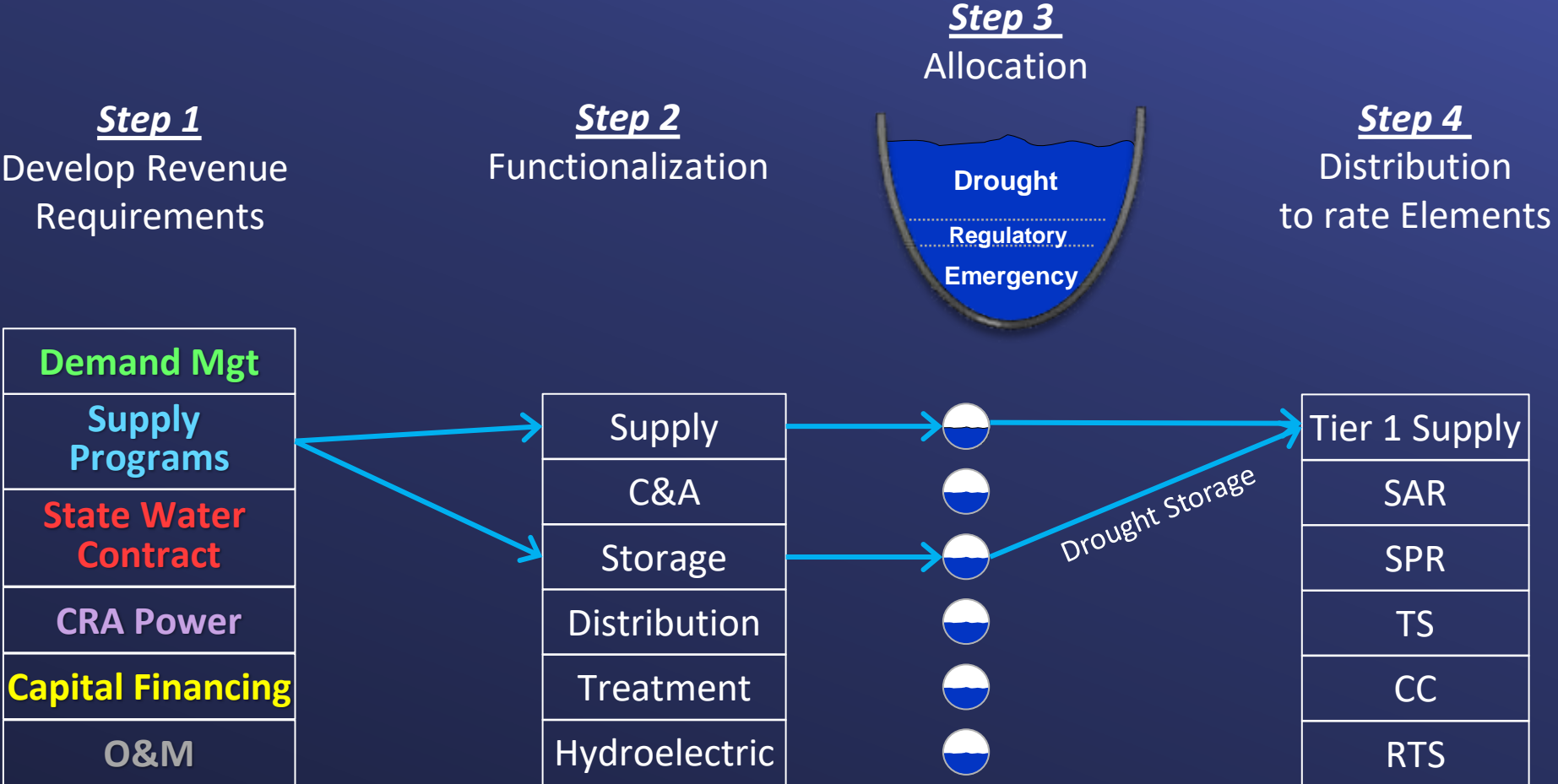
# Cost-of-Service Process

# Simplified Metropolitan COS Process



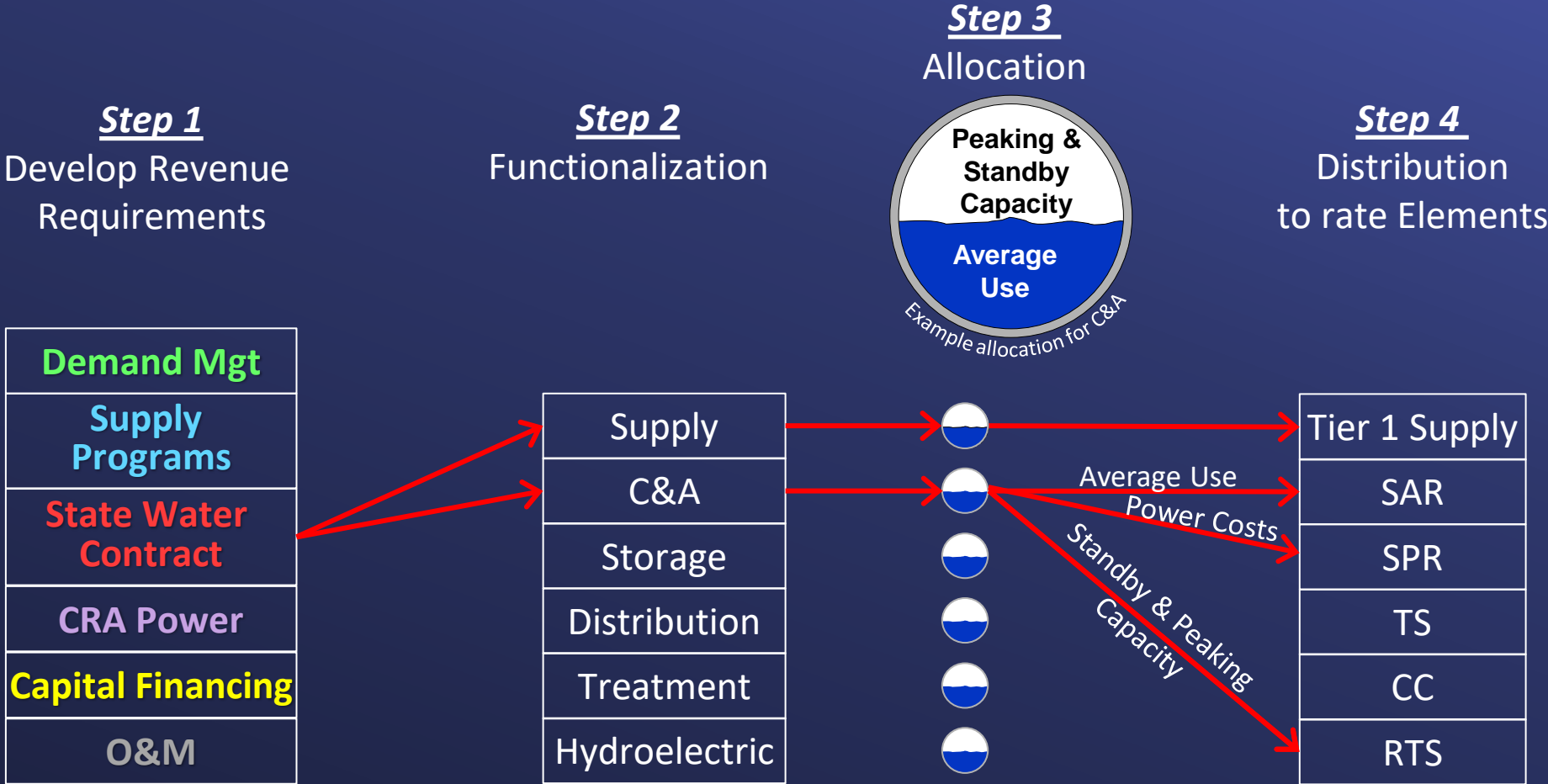
*Ignoring A&G and Revenue Offsets (property tax, etc)*

# Simplified Metropolitan COS Process



Ignoring A&G and Revenue Offsets (property tax, etc)

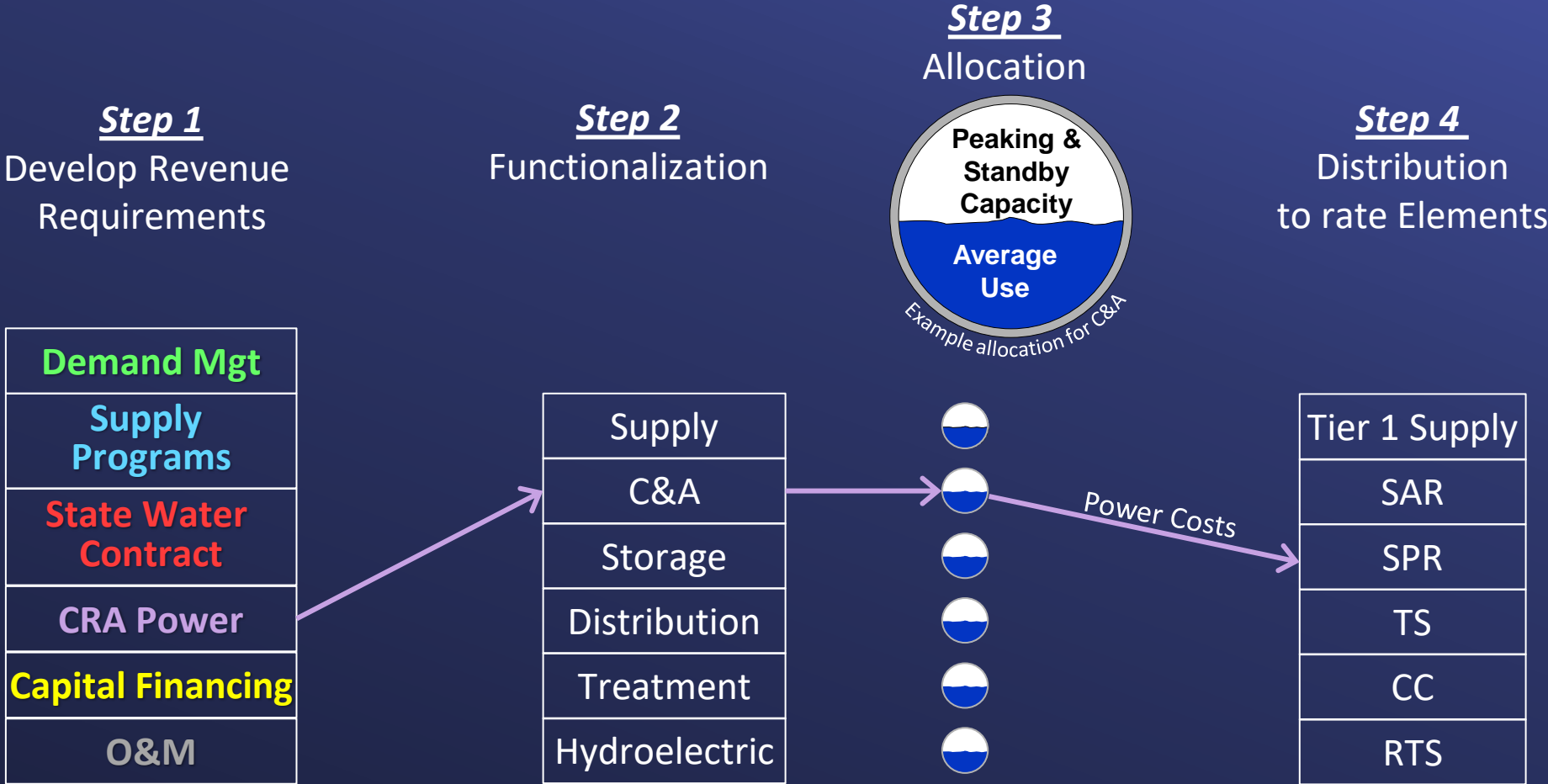
# Simplified Metropolitan COS Process



*Ignoring A&G and Revenue Offsets (property tax, etc)*

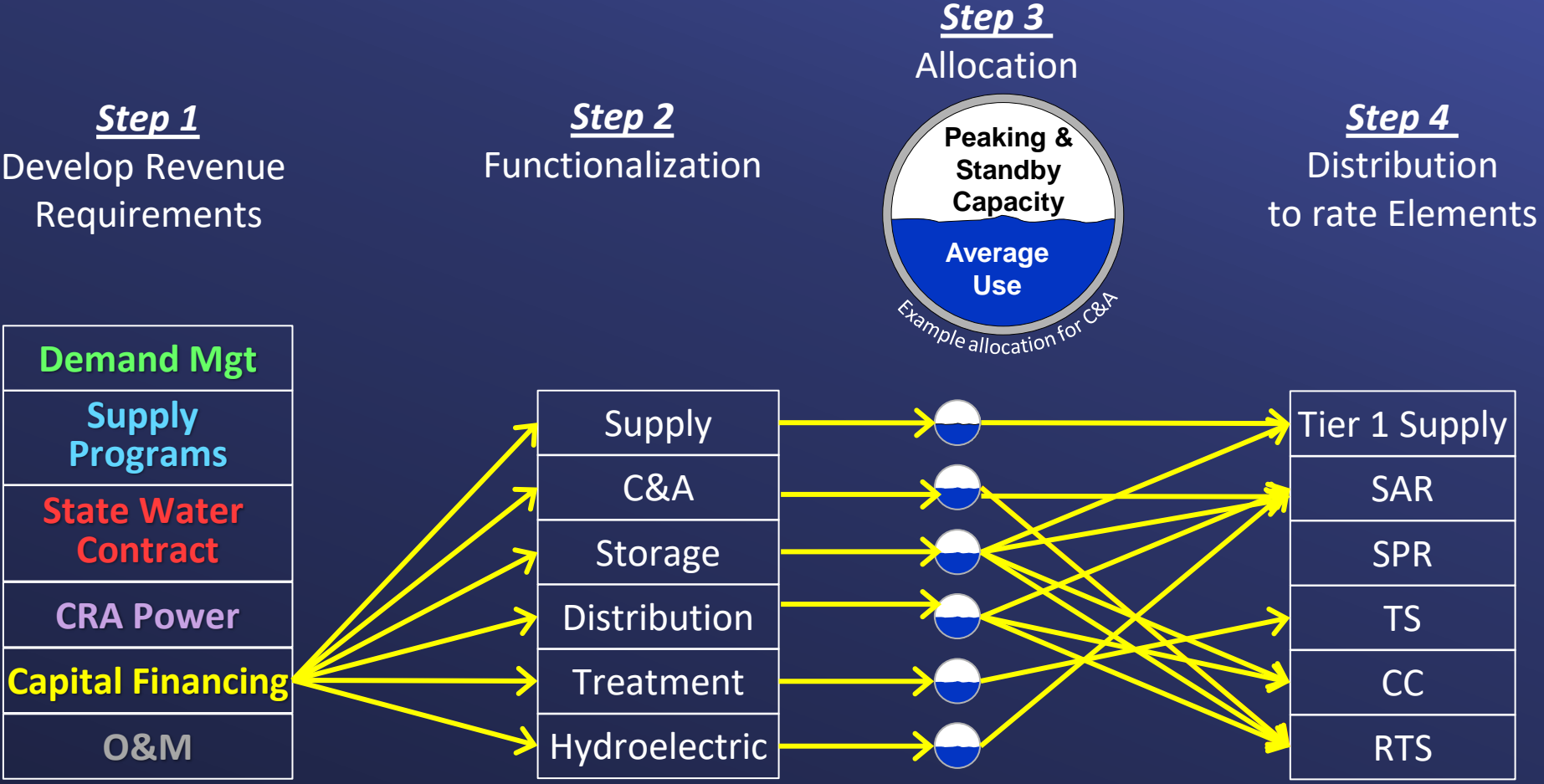


# Simplified Metropolitan COS Process



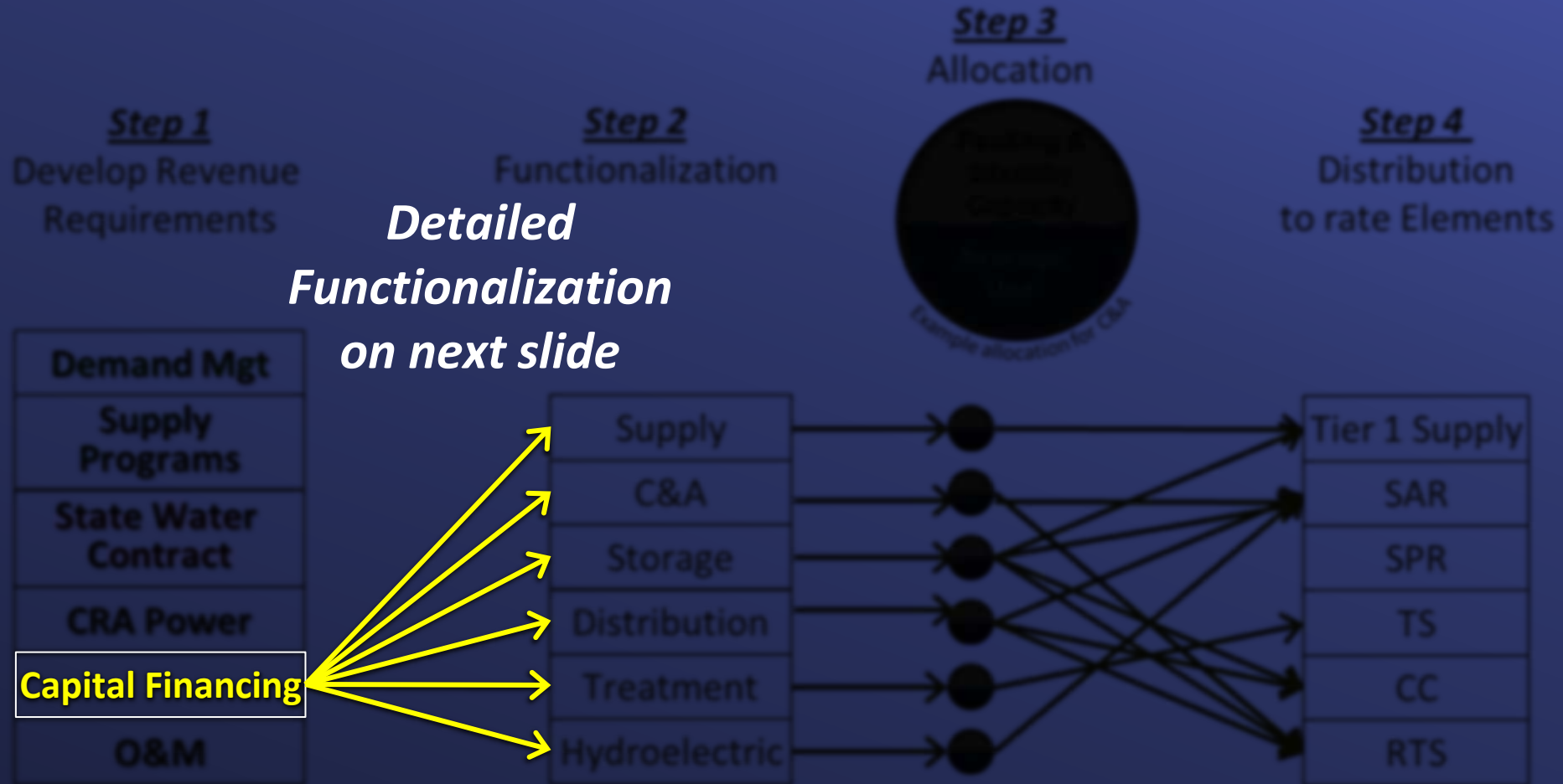
*Ignoring A&G and Revenue Offsets (property tax, etc)*

# Simplified Metropolitan COS Process

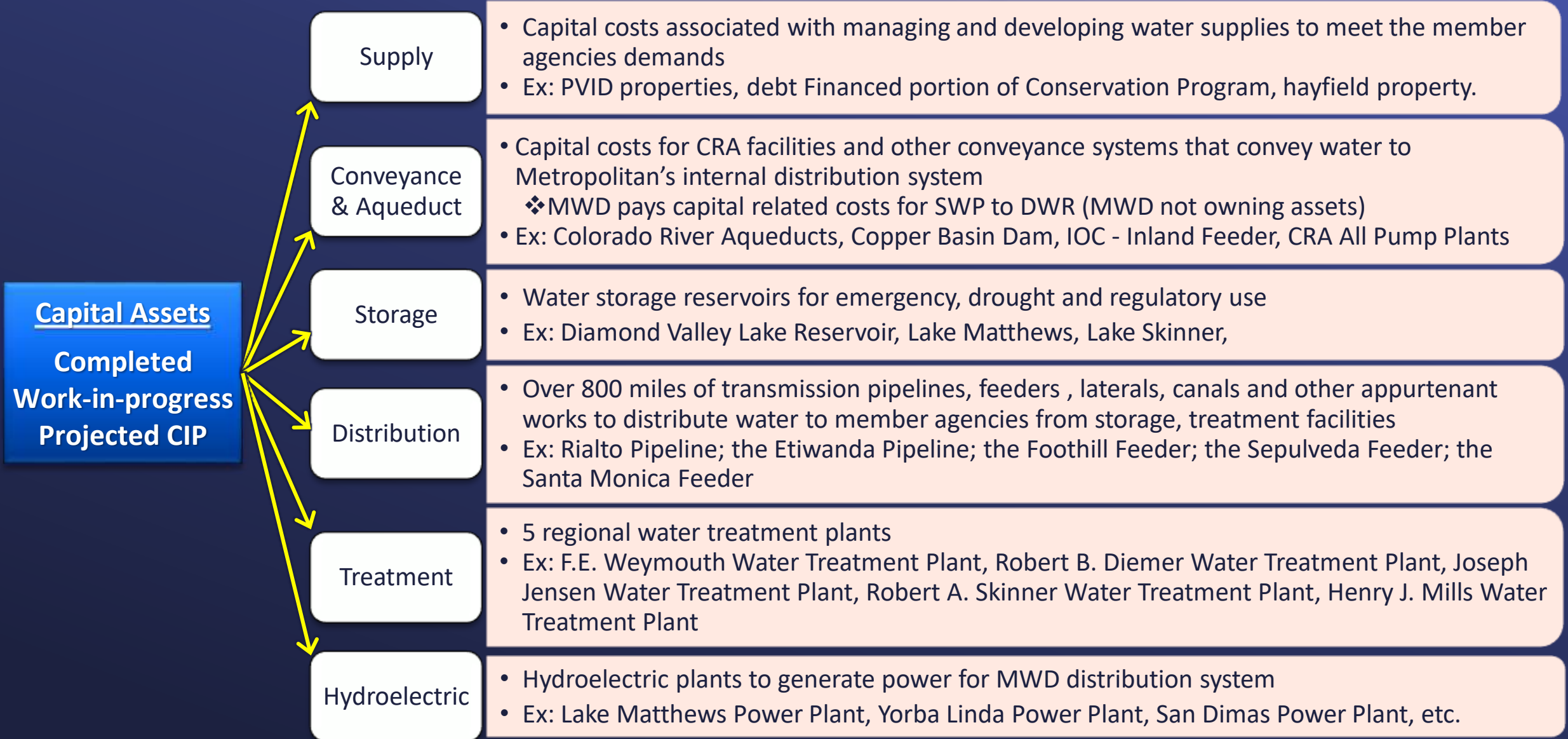


*Ignoring A&G and Revenue Offsets (property tax, etc)*

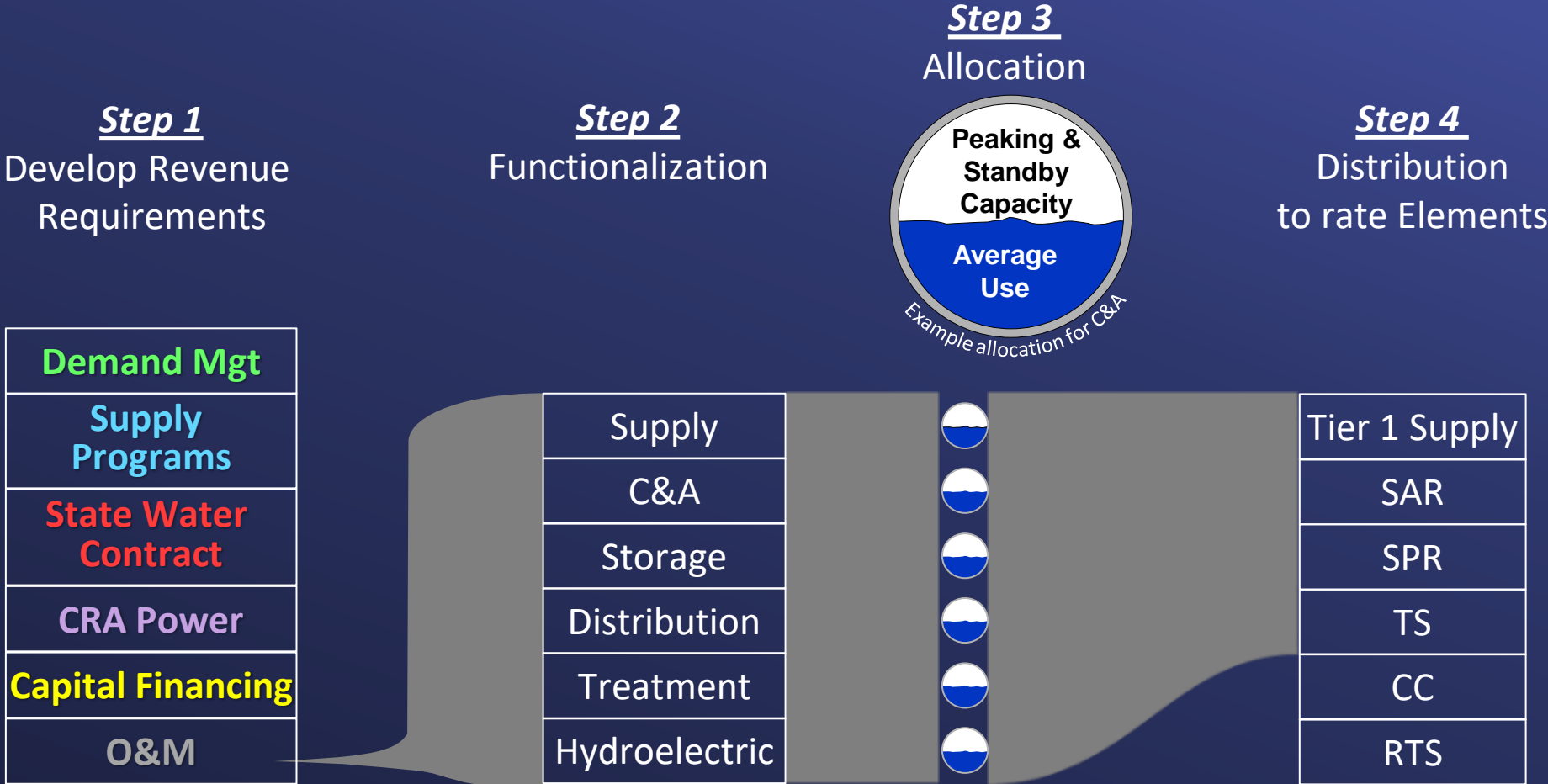
# Simplified Metropolitan COS Process



# Functionalization of Capital Assets



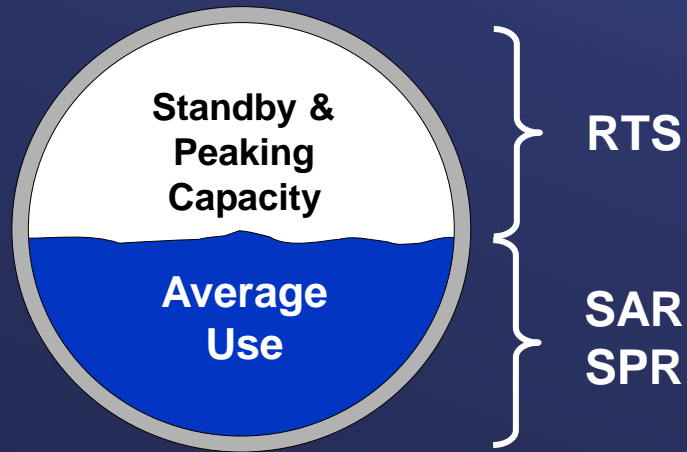
# Simplified Metropolitan COS Process



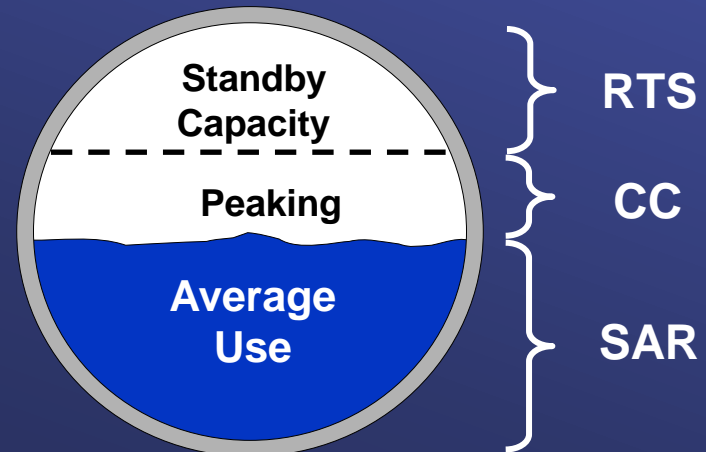
*Ignoring A&G and Revenue Offsets (property tax, etc)*

# Metropolitan COS Allocation

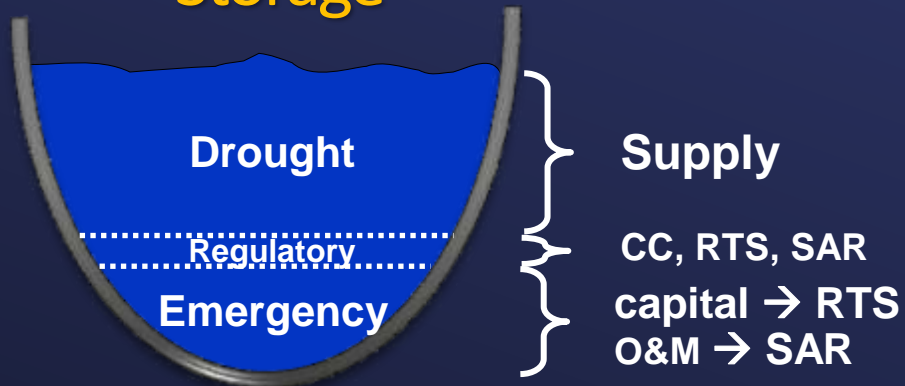
## Conveyance & Aqueduct



## Distribution System



## Storage



## Other Functions

Supply → Tier 1 Supply Rate  
Treatment → TS  
Demand Management → Tier 1 Supply Rate

# Adopted 2023 and 2024 Water Rates and Charges

Rates & Charges Effective January 1st	2022	2023	% Increase (Decrease)	2024	% Increase (Decrease)
Tier 1 Supply Rate (\$/AF)	\$243	\$321	32%	\$332	3%
Tier 2 Supply Rate (\$/AF)	\$285	\$530	86%	\$531	0%
System Access Rate (\$/AF)	\$389	\$368	(5%)	\$389	6%
System Power Rate (\$/AF)	\$167	\$166	(1%)	\$182	10%
Treatment Surcharge (\$/AF)	\$344	\$354	3%	\$353	(0%)
<b>Full Service Untreated Volumetric Cost (\$/AF)</b>					
Tier 1	\$799	\$855	7%	\$903	6%
Tier 2	\$841	\$1,064	27%	\$1,102	4%
<b>Full Service Treated Volumetric Cost (\$/AF)</b>					
Tier 1	\$1,143	\$1,209	6%	\$1,256	4%
Tier 2	\$1,185	\$1,418	20%	\$1,455	3%
<b>RTS Charge (\$M)</b>	\$140	\$154	10%	\$167	8%
<b>Capacity Charge (\$/cfs)</b>	\$12,200	\$10,600	(13%)	\$11,200	6%
<b>Overall Rate Increase</b>			<b>5.0%</b>		<b>5.0%</b>

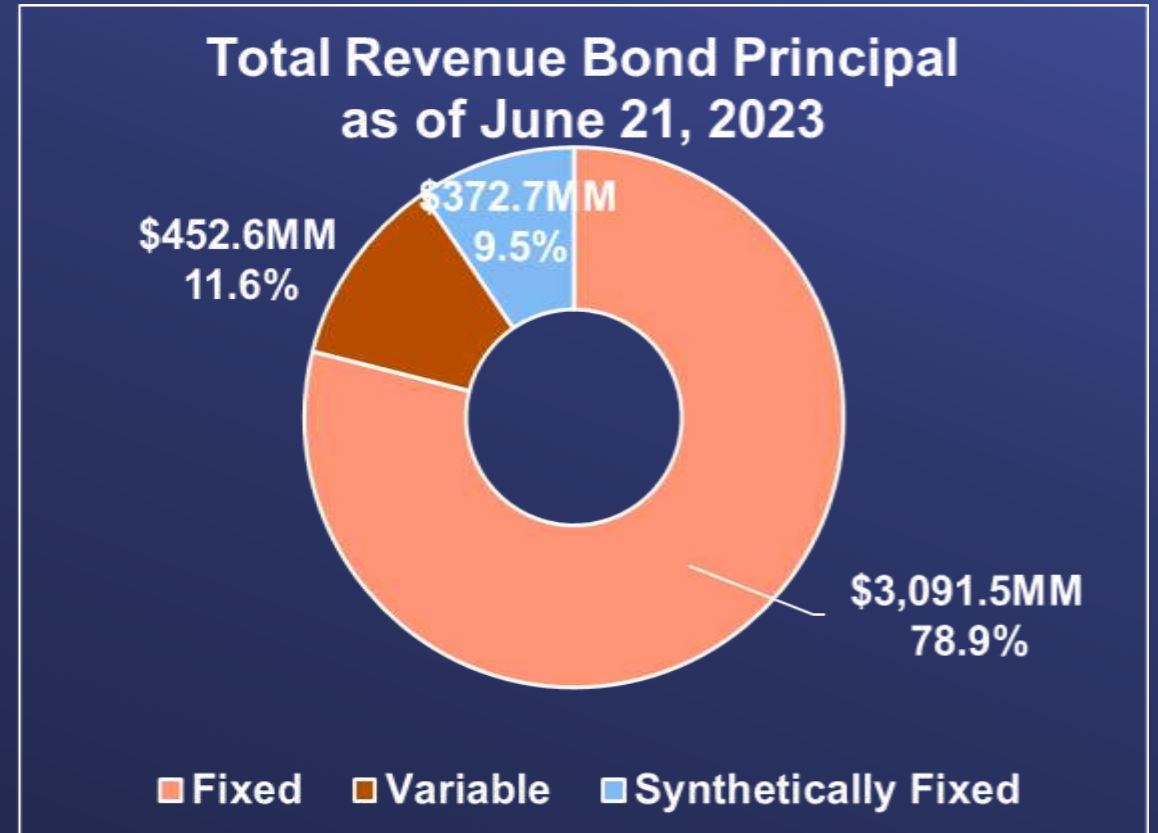
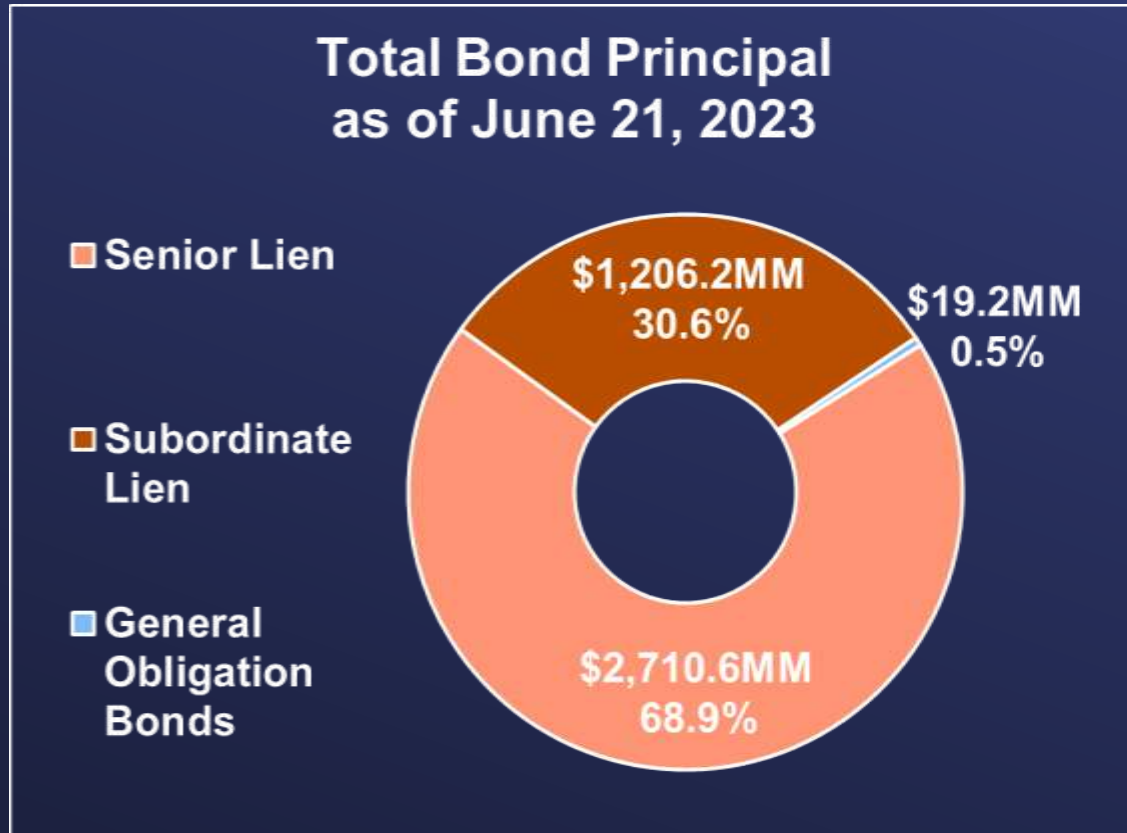
*Full Service Cost means the Full Service Rate, consisting of the following rate components: the applicable Supply Rate, the System Access Rate, the System Power Rate, and if applicable the Treatment Surcharge for treated water service.*

# Debt Profile



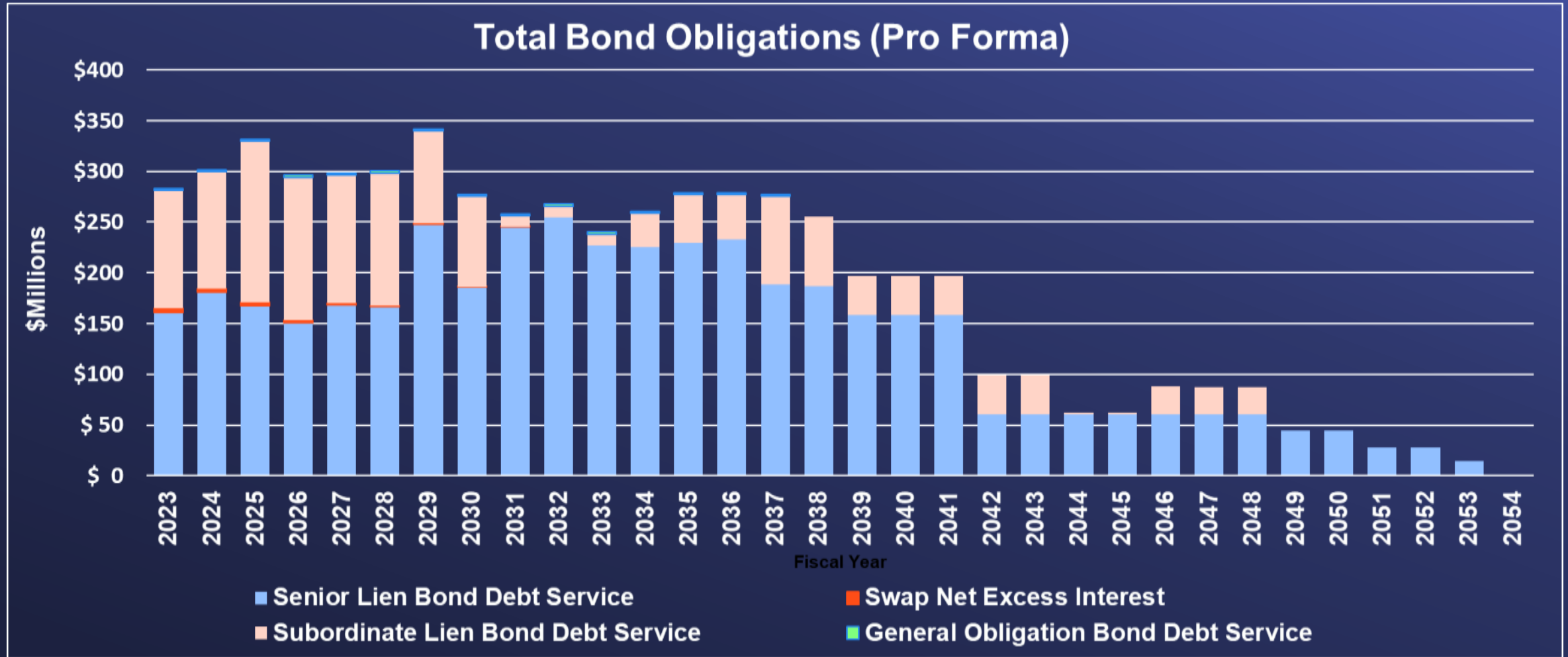
# Debt Profile

## Outstanding Debt by Type



# Debt Profile

## Debt Service by Fiscal Year



# Third Quarter Financial Report

- The Quarterly Financial Review (Q3 2023) was presented to the FAIRP Committee in May 2023. In addition to the Quarterly Financial Review, staff produces a quarterly basic financial statement as part of Metropolitan's continuing disclosure requirements.
- As requested by the Board, Finance staff is providing a link to the Basic Financial Statements (Unaudited) for the Nine (9) Months Ended March 31, 2023:
  - <https://www.mwdh2o.com/media/ketfucvs/mar-23-quarterly-bfs-final.pdf>

