

Board of Directors Workshop Long-Term Regional Planning Processes and Business Modeling

Climate Adaptation Master Plan for Water: Terminology and Interests

Item 5a May 23, 2023

Potential Climate Adaptation Master Planning Process

Defining the Problem • Board Retreat • Initiate mutual understanding of climate vulnerabilities, MA needs and interests, values and challenges	Readiness & Structure Discuss planning and schedule Start to discuss key terms Hire climate, planning consultants	Resilience & Reliability • Board Workshop • Mutual understanding of terms • Discuss climate risks • Water Supply Gap Analyses • Align MWD planning with MA plans	Affordability & Financial Sustainability • Board Workshop • Mutual understanding of terms • Test criteria • Identify vulnerable / high risk areas • Discuss tradeoffs and	Resilient Water Supply Pathways • Board Workshop • Consider potential pathways • Discuss tradeoffs and co-benefits • Estimate costs associated	Water Resilience & Business Model• Consider potential pathways• Explore financing models for regional and local projects	Water Resilience & Financial Sustainability • Test pathways • Consider "no regrets" projects • Explore connection to CIP and Biennial Budget	Decision Making Framework - Consider an adaptive framework for decision- making - Refine CIP and Biennial Budget
		planning with MA plans • Consider evaluative criteria	• Discuss tradeoffs and co-benefits	costs associated with potential pathways		Biennial Budget	

Member Agency and Public Engagement

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Today's Discussion: Terminology & Interests

Reliability Resilience Affordability Financial Sustainability

- How does Metropolitan define these terms now?
- How are they used in practice?
- How do evolving climate conditions impact our understanding of these terms?

Reliability & Resilience

• (Supply) Reliability Always meet water demands

 (System) Resilience Withstand & recover from disruptions Working Definition How Metropolitan defines...

Supply Reliability denotes the importance of developing a diversified portfolio of projects/programs to meet projected water demands

Reliability Source: Integrated Resources Plan

Early goal

• Avoid shortages for firm demand in all but the most severe drought (1 in 50 years)

Later goal (with buffer)

- Full capability to meet all retail-level water demands under all foreseeable hydrologic events (100% reliability)
- Through integrating imported and local water resources

Future goal (expanded "foreseeable")

• Full capability to meet all retail-level water demands under all foreseeable hydrologic events (test through scenarios)

Reliability in Practice Source: Integrated Resources Plan

Working Definition

How Metropolitan defines...

DITCH YOUR GRASS. CLAIM YOUR REBATE. bewaterwise.com RAKE IN S2 OR MORE PERSOLFE

Water Use Efficiency



Local Supply



Imported Supply



Water Storage

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Combination of actions by both retail and wholesale water providers



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Working Definition How Metropolitan defines...

Most efforts to address resilience have focused on system reliability and seismic resilience

Resilience

The capacity to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.



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Resilience in Practice



Working Definition How Metropolitan defines...



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Financial Sustainability & Affordability

- (Enterprise) Financial Sustainability Revenues sufficient to cover expenses over the short- and long- term
- (Customer) Affordability Relative cost burden and elastic ability to access (pay for) service

Working Definition

How Metropolitan defines...

Financial Sustainability

- Enterprise-wide assessment of Metropolitan's financial health
- Revenues sufficient to cover expenses over the short- and long-term
 - Maintain adequate monetary reserves to withstand unforeseen expenditures and revenue declines due to variations in economic and hydrologic conditions
 - Ensure business model remains viable into the future

Working Definition

How Metropolitan defines...

Financial Sustainability in Practice

- Remaining cost competitive
 - Efficient use of resources
 - Cost-containment strategies
- Maintain creditworthiness for access to capital markets / debt financing
 - Operational liquidity
 - Reserve sufficiency and sustainability
 - Debt Coverage Ratios
 - Net position / debt capacity

Working Definition

How Metropolitan defines...

Financial Sustainability in Practice

- Long-term planning...
 - Invest to maintain our targeted water supplies
 - Fund replenishments and refurbishments of core system
 - Maintain highly skilled workforce
 - Forecast impact on projected average rates
- ...Incorporating climate change
 - Rating agencies are developing more robust models to assess the risk exposure of climate change on their portfolio of credits
 - Increased uncertainty and variability due to climate change requires Metropolitan to update its projected financial outlook

Affordability

- Economy of scale concept
 - Met was created to deliver regional projects (CRA/SWP) more affordably for Member Agencies
- Relative cost concept
 - <u>Comparative Cost</u> to other source of water (\$/AF)
 - <u>Cost Value</u> ROI as a metric may help assess cost value and scalability of a project or program (can include multiple benefits)
 - <u>Lifecycle Cost</u> What is the value over the long-term? O&M in addition to upfront capital costs

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Working Definition

Metropolitan

defines...

How

Member Agency Perspective

Affordability Is Complex

It has different implications for Metropolitan vs. Wholesale Member Agencies and Retail Member Agencies

Affordability in Practice

- Member Agencies have distinct profiles of financial capacity
 - Large and small
 - Growing and established
 - Different levels of financial capacity
 - Different levels of rate capacity
 - Varying levels of reliance on Metropolitan supplies
- Retail customer capacity to pay (income as a measure of capacity to pay)
 - Disposable income
 - Household vs. per capita income
 - Research on metrics and overlapping rate burden

System Perspective

Affordability Is Local

As a wholesaler, Metropolitan doesn't control how its Member Agencies pass on Metropolitan's costs to its member agencies and/or their customers Retail customer ability to access water service is based on their overlapping rate burden and capacity to pay



