

Climate Adaptation Master Plan for Water

Beverly Hills Public Works Commission July 13, 2023



SUSTAINABILITY RESILIENCE INNOVATION



Empowering Metropolitan to deliver its core mission by inspiring and implementing solutions that benefit people, nature, and the climate

Stronger together

Metropolitan is developing a long-term Climate Adaptation Master Plan for Water (CAMP4W) to prepare Metropolitan and its Member Agencies for an uncertain future by developing a reliable and resilient supply of water and network of facilities. Founded on financial sustainability and equitable affordability, the plan will guide the region with collaboration and interconnectivity through a "stronger together" approach.

Climate Adaptation Master Plan for Water



SUSTAINABILITY RESILIENCE INNOVATION

CAMP4W Development (2023-2024)

Define the Problem & Process

- Identify Climate Vulnerabilities
- Align leadership on reliability, resilience, financial sustainability & affordability

Assess Climate Impacts

- Identify water resources gap in a changing climate and apply scenario planning
- Develop evaluative criteria

Assess Financial Impacts

- Assess rate impacts
- Discuss revenue models
- Address affordability

Evaluate Adaptation Strategies

- Project and program evaluation
- Identify low regrets projects

Implement, Track, Adjust

- Establish climate adaptation decision making framework
- Continuing evaluation and implementation

CAMP Public Engagement Strategy Objectives

Relationships – Expand and deepen relationships with communities in service area, especially underserved and vulnerable communities

Information Sharing – Provide information about the purpose and goals of CAMP and how it relates to resilient water supply for local communities and customers

Listen – Solicit input from community members to understand community priorities and needs and use it to inform CAMP and its implementation, with particular focus on underserved communities

Report Back – Inform community members about how input was used in CAMP and initial CAMP implementation actions

Public Engagement Rounds

Round 1 Summer & Fall 2023

Share info about
Metropolitan's mission,
seek perspectives on
priorities and concerns
to inform CAMP
development

Round 2 Winter 2023

Provide update on CAMP, what was heard from communities in Round 1, and how input was used in CAMP development; identify initial projects and solicit feedback

Additional Rounds

Share CAMP
implementation updates
and seek input on
projects and evolving
community needs and
priorities

Round 1

Four-Pronged Collaborative Approach



Co-Develop Toolkits for use with communities



Partner with Communitybased Organizations and Member Agencies to convene community meetings



Host Virtual Listening
Sessions to hear input and
perspectives on specific
CAMP topics



Utilize Existing
Engagement Channels to
strengthen ties and build
relationships

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Where we are now

- 1) Identify critical Climate Vulnerabilities
- 2) Align leadership around key terms and priorities on Reliability, Resilience, Financial Sustainability, Affordability and Equity
- 3) Identify water resources gap in a changing climate and apply scenario planning
- 4) Develop evaluative criteria for project and program selection focused on key themes above

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Impacts Beyond Drought

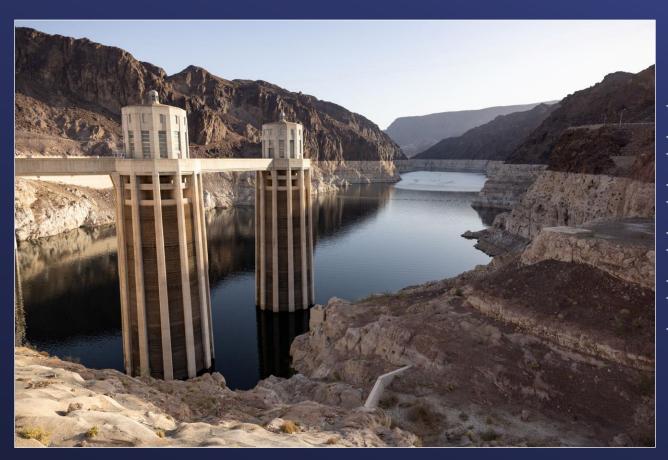








Cascading Impacts Expose Vulnerabilities



Drought + Drought
Drought + Drought + Drought
Drought + Extreme Heat
Drought + Flooding
Drought + Fire

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Key Terminology & Priorities

Reliability (Supply)

Ability to always meet water demands

Resilience (System & Ecosystem)

Ability to withstand & recover from disruptions

Financial Sustainability (Enterprise)

Revenues sufficient to cover expenses over the short- and long- term

Affordability (Customer)

Relative cost burden and elastic ability to access (pay for) service

Equity (for member agencies and communities)

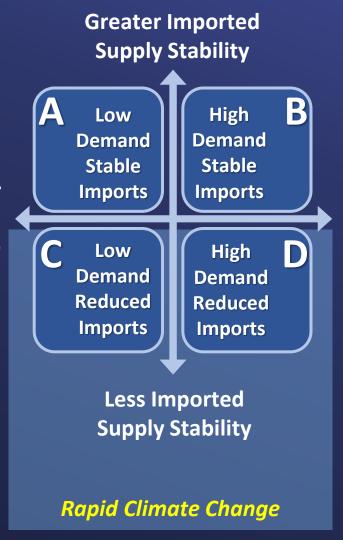
Fair, just and inclusive

Four Planning Scenarios – Defining Potential Problems

Scenario A shows no unmanaged shortages under conditions of continued low demand growth and stable climate change.

Lower Demand on MWD

Scenario C underscores the impacts of rapid climate change even with minimal growth pressures on demands. Without new storage, 50 TAF of new core supply needed by 2045.



Scenario B reveals implications of increased demands even without rapid climate change. Without new storage, 100 TAF of new core supply needed by 2045.

Higher Demand on MWD

scenario D warns of critical reliability challenges when faced with both demand growth and rapid climate change. Without new storage, 650 TAF of new core supply needed by 2045. No amount of new storage would eliminate net shortage.

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Questions?

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Extra Slides



Climate Adaptation Master Plan for Water: Timeline & Framework

				•		•	JII IVIAS									
	2023													2024		2024-'25
	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	
STEPS	Defining the Problem Designing the Process			Terminology & Interests Member Agency Alignment & Gap Analysis				Assessing Financial Costs and Investing Regionally			Pathway to Adaptive Capacity			First Phase Projects Adaptation Roadmap		Implement and Use Decision-Making Framework and Advance Next Steps
MILESTONES	Understanding Climate Risks Process Plan Planning structure Consultant support			CAMP4W Themes Evaluative Criteria Needs Assessment & Scenario Planning Ongoing technical studies (efficiency, storage, reuse, stormwater, conveyance, desal, climate risks)				Provide rate impact and affordability implications of Needs Assessment scenarios			Decision-Making Framework Projects and program evaluation (could include new resources and/or financing models)		identification • Adaptation		Business Model Options Planning parameters w/ Member Agencies Next steps for technical evaluation to support additional project selection	
BOARD	\Diamond			\Q	\Q	☆	\Diamond	\Q	\Diamond	☆	☆	♦	\Q	☆	☆ O	Ongoing
MEMBER AGENCIES	0				0	0	0	0	□ �			0	0	0	0	Ongoing
COMMUNITY IGAGEMENT	Round 1 needs & interests, plan development							Round 2 report back, input on pathways					Additional Rounds implementation engagement & input			
	Board Member and Agency Engagement ♦ Board Workshop							Types of Community Engagement Listening Session Technical Charette Community-led Session Technical Advisory Group							,	

CAMP4W Process Flow

CAMP4W Themes compile Board's and Member Agency's goals for the program

Evaluative Criteria will score and rank projects using Themes as guideposts

Financial Plan will evaluate the impact of risks and investments on rates.

Metropolitan Projects, Member Agency Projects, and results from Technical Studies will identify projects being considered.



selecting projects

Criteria and rate

impacts from the

Financial Plan

considering **Evaluative**

in an unbiased way,