



Subcommittee on Long-Term Regional Planning
Processes and Business Modeling

Climate Adaptation Master Plan for Water – Draft Year One Report

Item 3b

March 27, 2024

Item 3b

Climate Adaptation Master Plan for Water - Draft Year One Report

Subject

Climate Adaptation Master Plan for Water – Draft Year One Report

Purpose

The CAMP4W Draft Year One Report documents progress since February 2023 and sets up the next steps for 2024. Progress to date includes work to establish the values and priorities of the Board and Member Agencies, components of a Climate Decision-Making Framework, Time-Bound Targets, and the process for identifying projects and programs for evaluation.

Climate Adaptation
Master Plan for Water

Year One Progress Report Sections

The DRAFT Executive Summary, Section 1 and Section 2 provided. Sections 3-6 will be provided in April.



CAMP4W Year One
Progress Report
April 2024 DRAFT

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

Climate Adaptation
Master Plan for Water

Year One Progress Report Sections

The DRAFT Executive Summary, Section 1 and Section 2 provided. Sections 3-6 will be provided in April.



CAMP4W Year One
Progress Report
April 2024 DRAFT

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

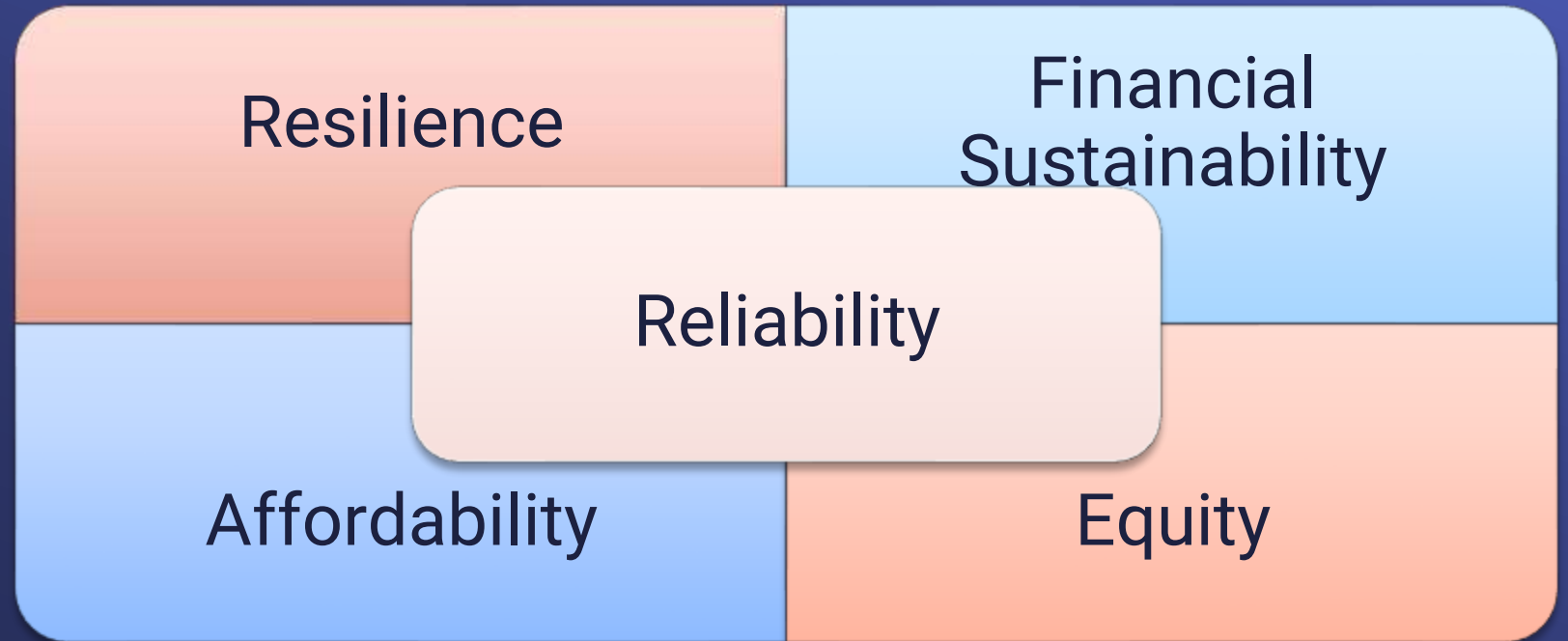
Section 6: Adaptive
Management

Summary of Content in
Submitted Draft:
Executive Summary and
Sections 1-2



Values and Priorities

Task Force Charter defined components of the Master Plan



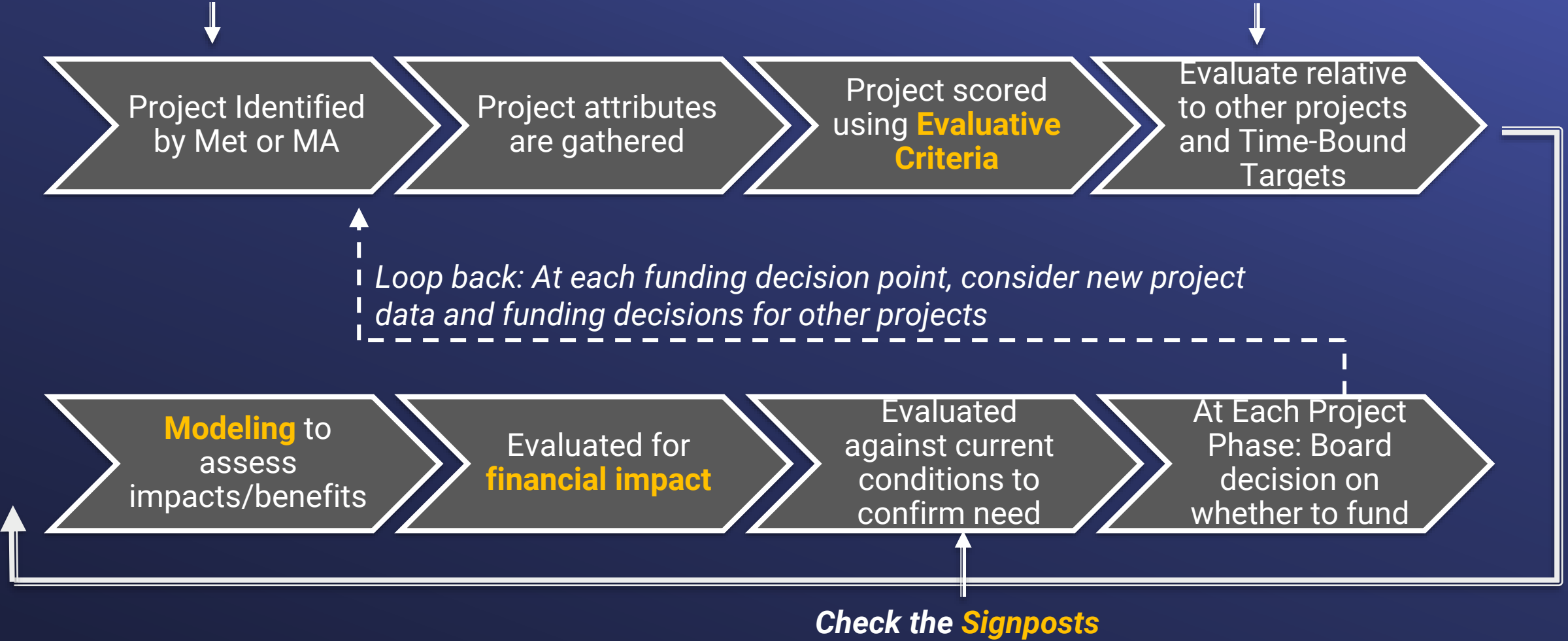
- 1) Climate and Growth Scenarios
- 2) Time-Bound Targets
- 3) Framework for Climate Decision-Making and Reporting
- 4) Policies, Initiatives, and Partnerships
- 5) Business Models and Funding Strategies



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



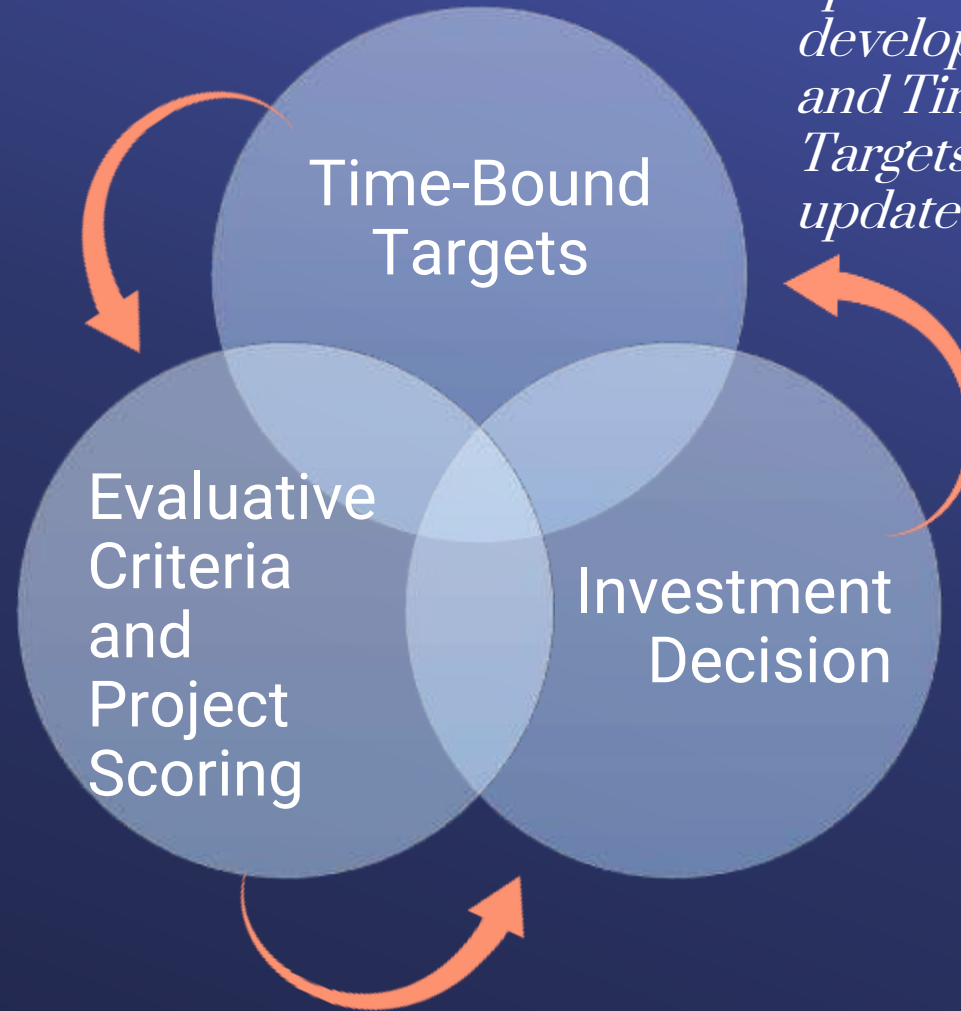
Climate Adaptation
Master Plan for Water

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



RELIABILITY 25 POINTS

Supply Performance
Equitable Reliability

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.



RESILIENCE 25 POINTS

Addresses known vulnerabilities
Project's ability to perform under
climate impacts

Evaluates how the project or program addresses known vulnerabilities and how it performs under climate impacts.






FINANCIAL SUSTAINABILITY & AFFORDABILITY 20 POINTS

Bond capacity
Unit cost

Considers the ability of a program to be funded through bonds and the overall cost of the program.

Climate Decision-Making Framework – Evaluative Criteria

 ADAPTABILITY & FLEXIBILITY 10 POINTS	 EQUITY 10 POINTS	 ENVIRONMENTAL CO-BENEFITS 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 ¹	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 ²	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 ³	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 ⁴		
	GPCD target for 2030 ⁵	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		

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.

Climate Decision-Making Framework

Signposts

Metrics must be:
Measurable
Updatable
Readily accessible
Reporting frequency: Annual

DEMAND

Population

Demand Management

Economy

Regulations

Local Agency Supply

Throughout 2024, Signposts will be further developed, and additional Signposts may be included.

SUPPLY

Climate Change Indicators

Regulations

Storage

**Imported Supply
Performance**

Climate Adaptation
Master Plan for Water

Year One Progress Report Sections

The DRAFT Executive Summary, Section 1 and Section 2 provided. Sections 3-6 will be provided in April.



CAMP4W Year One
Progress Report
April 2024 DRAFT

Executive Summary

Section 1: Background, Need
and Outcome

Section 2: Climate Decision-
Making Framework

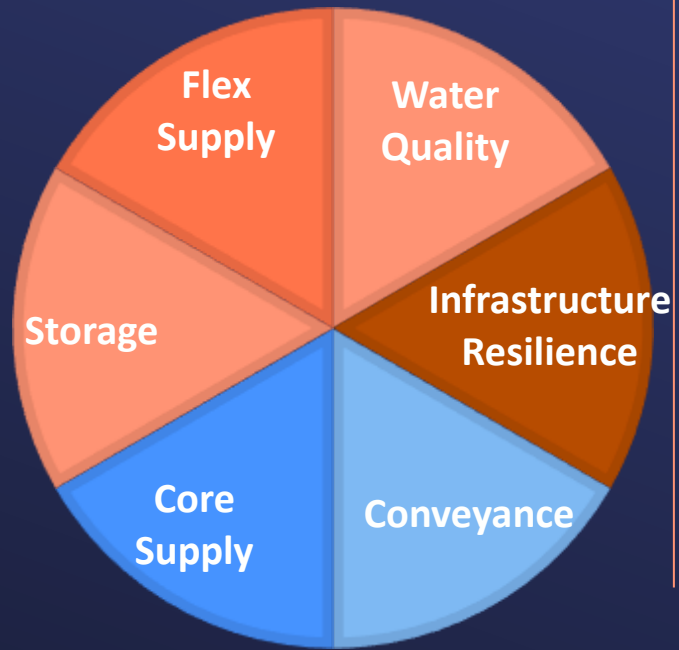
Section 3: Development of
Adaptation Strategies

Section 4: Business Model
and Affordability

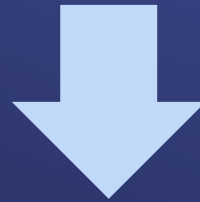
Section 5: Policies, Initiatives
and Partnerships

Section 6: Adaptive
Management

What projects are assessed in CAMP4W?



R+R Projects
(Scored through CIP Criteria)



Board
Consideration



Capital
Investment Plan
or Program
Implementation

CAMP4W Go Projects and
Programs
(Scored through CAMP4W Criteria)



What projects are assessed in CAMP4W?

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?



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



What
projects are
assessed in
CAMP4W?

Should there be a size, cost or other threshold for CAMP4W evaluation?

- Cubic feet per second (CFS) / Acre-feet per year (AFY)
- Total or max annual cost of project / program



Year One Progress Report Sections

*Sections 4-6 will lay out
next steps for 2024*

CAMP4W Year One
Progress Report
April 2024 DRAFT

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



Discussion Topics for April Task Force

Year One Progress
Report Sections 4, 5, 6



Business Model and Affordability

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

Policies, Initiatives and Partnerships

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

Adaptive Management

Propose process to check the signposts, review assumptions with real-world conditions, refine/augment Time-Bound Targets

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

Task Force Meeting Schedule and Discussion Topics

March 27 9:30-12:30	CAMP4W Task Force (LTRPPBM Subcommittee)	Draft Year One Progress Report (Exec Summary, Purpose and Need, Climate Decision-Making Framework, Developing Adaptation Strategies)
April 9 10:30 am	Finance and Asset Management Committee	Draft Year One Progress Report (Info Item)
April 23 11:30 am	Equity, Inclusion and Affordability Committee	Report on Water Affordability Panels and Recommended Actions
April 24 9:30-12:30	CAMP4W Task Force (LTRPPBM Subcommittee)	Draft Year One Progress Report (Business Model and Affordability, Policies, Partnerships, Adaptive Management)
May 13/14	Finance and Asset Management Committee	Draft Year One Progress Report (Action Item)

CAMP4W Task Force Meetings (LTRPPBM Subcommittee) are currently scheduled for the fourth Wednesday, 9:30 am - 12:30 pm throughout 2024.



