Las Virgenes MWD Board Meeting

A Discussion with Metropolitan's Leadership Team

April 16, 2024

Discussion With Metropolitan's Leadership

Adan Ortega
Chair of Board of Directors

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August 2022 Board Resolution – Call to Action

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Water Planning and Stewardship Committee

8/16/2022 Board Meeting

7-13

Subject

Adopt resolution affirming Metropolitan's call to action and commitment to regional reliability for all member agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Metropolitan Water District of Southern California endeavors to provide an adequate and reliable supply of high-quality water to meet the region's present and future needs in an environmentally and economically responsible way. As an example from 1930, Metropolitan's first Board Chair, W.P. Whitsett, provided a guiding principle for developing regional water supply reliability: "Whatever is done should be done for the benefit of the whole, and whatever is done for the benefit of the whole should be shared by all the parts."

Nearly a century after those aspirational words, a record-breaking drought has descended on the Southwest, and Southern California's water reliability is in crisis. This year, supply from the State Water Project (SWP) was cut to 5 percent of Metropolitan's total allocation for the second consecutive year—resulting in a 3-year water supply substantially below the California Department of Water Resources' worst-case projection. These conditions starkly highlight an infrastructure and water supply vulnerability that must now be addressed. Simply put, there is not enough pipeline connectivity or operational flexibility for imported supply and existing regional storage to meet the needs of six member agencies with a combined population greater than six million.

Because of this supply shortage and limits to its infrastructure, Metropolitan cannot provide equivalent supply reliability from one corner of the service area to another. In response, Metropolitan's Board declared a water shortage emergency and imposed a water conservation program in April of this year for the six SWP-dependent agencies. The impacted agencies include Calleguas Municipal Water District, Inland Empire Utilities Agency (IEUA), Las Virgenes Municipal Water District, the City of Los Angeles, Three Valleys Municipal Water District, and Upper San Gabriel Valley Municipal Water District.

These six SWP-dependent agencies have limited connection to Metropolitan's existing infrastructure, storage, and supplies. This constraint forced them to take mandatory and painful water supply cuts from their expected SWP use by an average of 35 percent—with some facing reductions up to 73 percent. If these agencies cannot limit their use of Metropolitan's supply from the SWP, then they face stiff volumetric penalties of $2,000 per acre-foot (AF) or the first-ever total ban on outdoor irrigation. Meanwhile, under statewide regulation, the 20 member agencies outside of this area must implement demand-reduction actions under Level 2 of their Water Shortage Contingency Plans. These actions are locally determined to achieve only a 10 to 20 percent water reduction (without volumetric penalties).

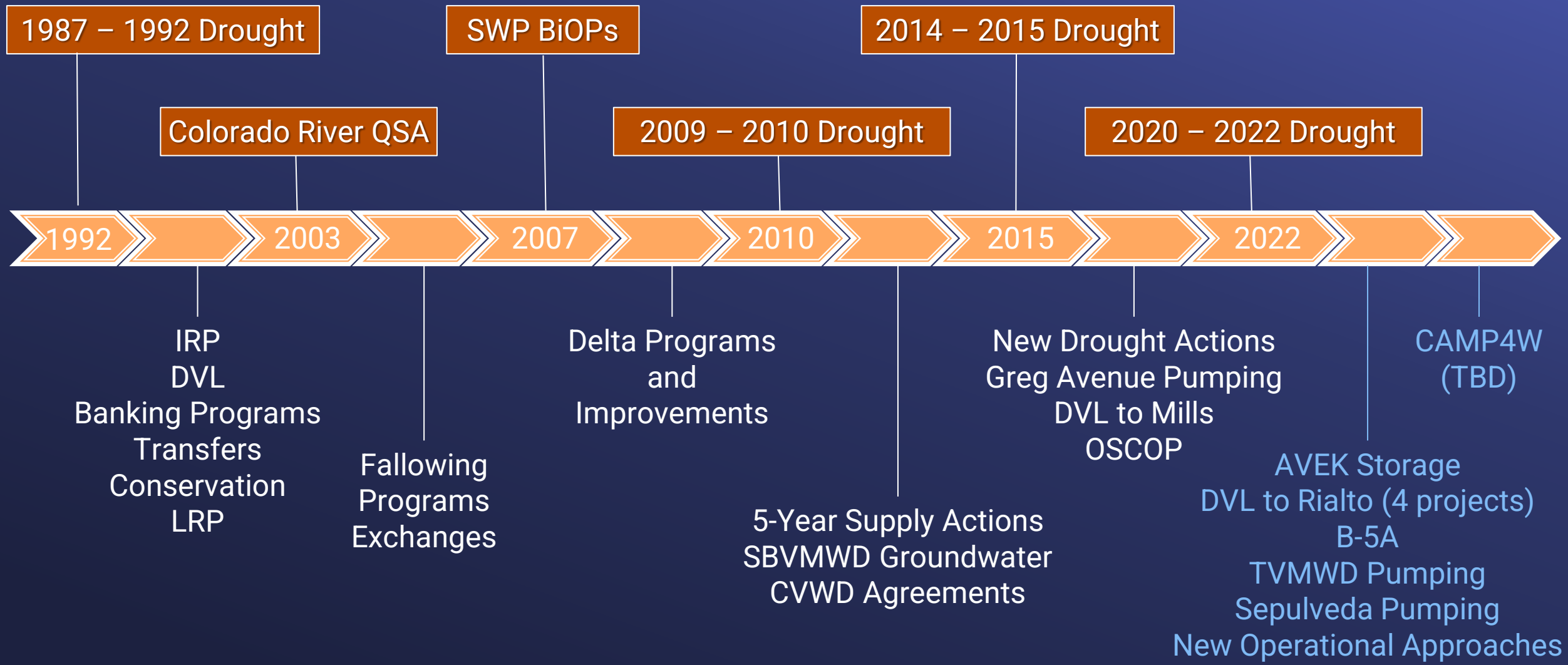
This disparity is unacceptable to Metropolitan and its member agencies. By adopting the proposed Resolution in Attachment 1, the Board would prioritize a policy to provide 100 percent and equitable reliability to all member agencies. Metropolitan would thus commit to taking all necessary actions to give the SWP-dependent member agencies a level of infrastructure and water supply reliability equivalent to that of Metropolitan's other member agencies. Equitable access will be achieved through the expedited and prioritized implementation of a balanced set of projects and programs that improve existing infrastructure, imported and local supplies, and demand management.

Call to Action

Metropolitan commits to ensuring equitable access to supply and storage assets by building infrastructure, increasing local supply availability, expanding partnerships, and advancing water use efficiency.

- ***All member agencies must receive equivalent water supply reliability through an interconnected and robust system of supplies, storage, and programs.***
- ***Metropolitan will reconfigure and expand its existing portfolio and infrastructure to provide sufficient access to the integrated system of water sources, conveyance and distribution, storage, and programs to achieve equivalent levels of reliability to all member agencies.***
- ***Metropolitan will eliminate disparate water supply reliability through a One Water integrated planning and implementation approach to manage finite water resources for long-term resilience and reliability, meeting both community and ecosystem needs.***[23]

History of Continuous "Portfolio" Development



Committed
To Reliability

Questions Worked Through Dozens of Member Agency Meetings

- Can we reoperate our system to get better performance?
- How can near-term actions/infrastructure help?
- What if the next drought is worse?
- How might future innovations in groundwater storage and new regional conveyance help?

Over 200,000 Acre -feet in Dry Year Benefits From New Facilities

New Facilities & Programs Are Already Online

- New investments/programs are online
  - Greg Avenue Pump Station
  - Diamond Valley Lake pump-back to Mills
  - Cost offset program through demand shifting
  - AVEK Storage to east branch (partial)

Surface Storage Can Be Preserved For Use Later In Drought

Reoperating Our System Can Yield Big Benefits

- Maximize San Luis Carryover and Castaic Flex storage to protect SWPDA
- Keep DVL near full in lower SWP allocations
- How is this accomplished?
  - Draft SWP Banking Programs to preserve surface storage
  - Higher CRA diversion
  - Use of transfer supplies to preserve storage levels (not just to meet demands)
- Use pump-back systems and demand shift programs to preserve SWP storage levels

Drought Mitigation Actions Portfolio
Cost-Effective Projects Providing Timely Relief (for Implementation)

Projects Under Implementation

Project Title	Completion
DVL to Rialto Delivery (4 projects)	2026/2027
Sepulveda Feeder Pumping Phase 1	2026

Projects Recently Added To CIP

Project Title	Completion
Burbank B-5 to B-5A Shift	2026
TVMWD Miramar Pumpback Upgrades	2027/2028
Sepulveda Feeder Pumping Phase 2	2032

Future Drought Operations – East Side of System Won't Need SWP Supplies

Routing SWP Supplies To Westside Agencies

- Pump-back systems will deliver a combination of Colorado and DVL stored supplies
- AVEK storage can augment pump-back systems
- Operation limited by DVL storage and access to Colorado Supplies
  - Droughts of unprecedented length could drain reserves and require additional supply development

These Investments Would Allow Us To Manage The Previous Drought Without Any Mandatory Reductions

Drought Mitigation Actions Portfolio Projects for Further Consideration

Projects for Targeted Improvements

Project Title	Category
AVEK to West Branch	Conveyance
East Valley Feeder Parallel Pipeline	Conveyance
Western SWPDA Reservoir	Surface Storage
In-Region Groundwater Storage	Groundwater Storage

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Additional Projects Warrant Further Investigation

We Continue To Develop Future Options

- Groundwater storage and management
  - Supplemental Water Management Concept
- AVEK connection to West Branch
  - Could increase westside access to storage
- East-West Conveyance
  - Greater pump-back capacity could provide benefits under specific scenarios

We've Come a Long Way, but There's More to be Done

- Recent system upgrades and operational changes could make it through previous drought with no rationing
- Additional regional conveyance projects are being added to CIP
  - Will help avoid geographic-specific rationing in a longer drought, but additional supply may be needed to avoid regional reductions
  - Innovative groundwater management can help improve resilience
- Additional supplies and conveyance may be needed under severe climate change
  - CAMP4W process will evaluate new reliability projects– such as new conveyance, reservoirs, and supply– for implementation decisions

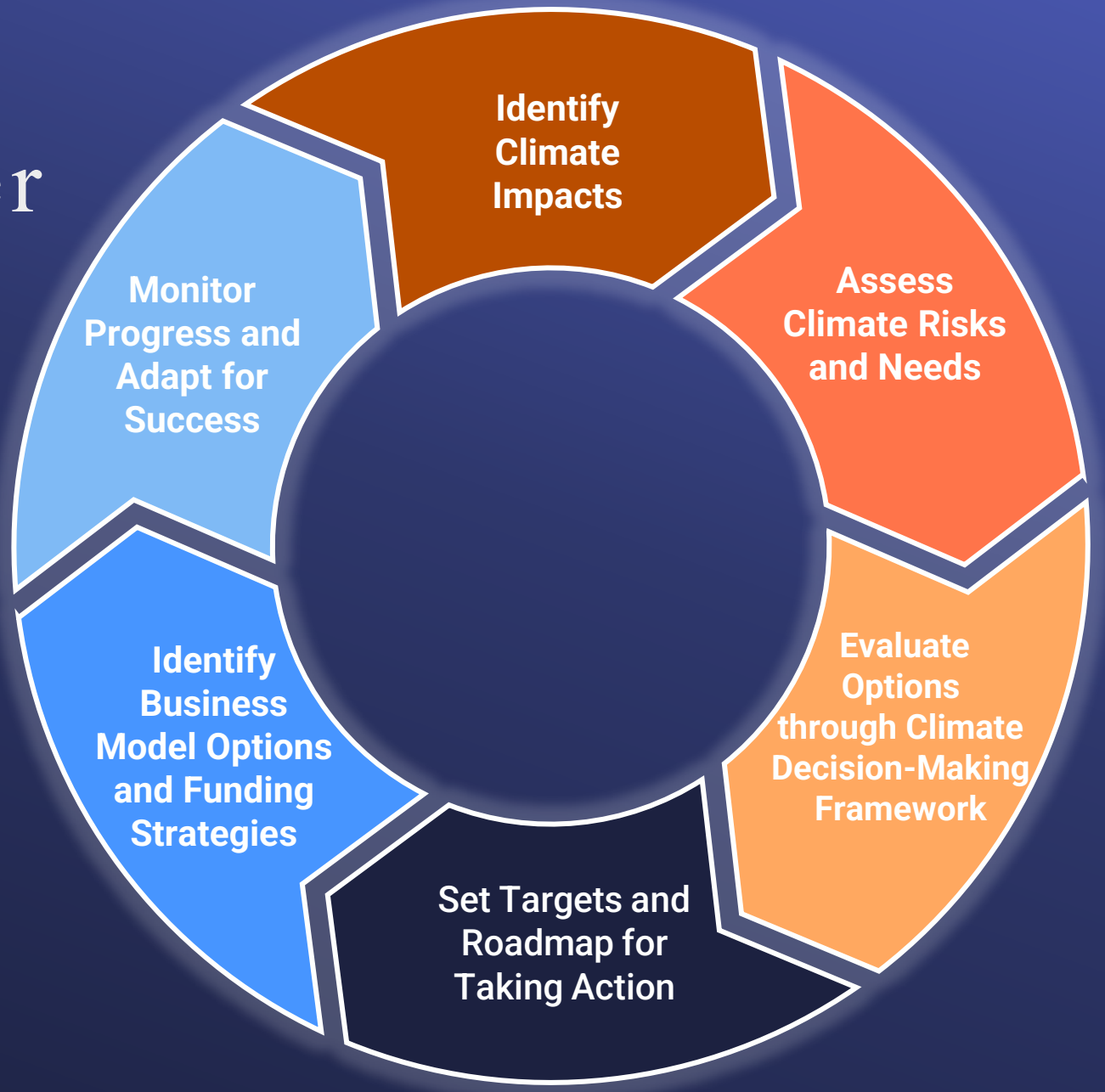
Climate Adaptation Master Plan For Water

A comprehensive, adaptive planning process

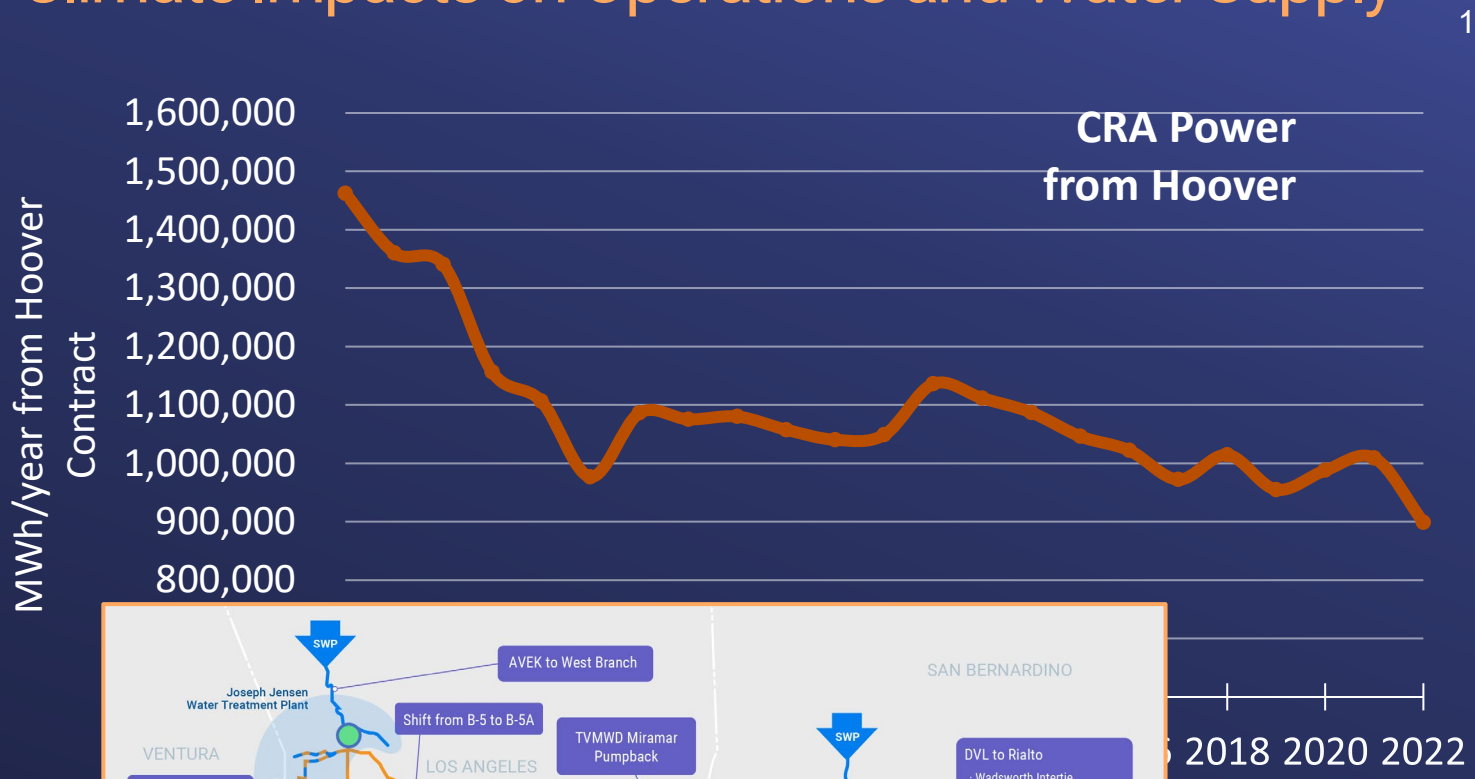
The CAMP4W integrates

- water resources planning
- infrastructure development
- climate adaptation
- finance planning

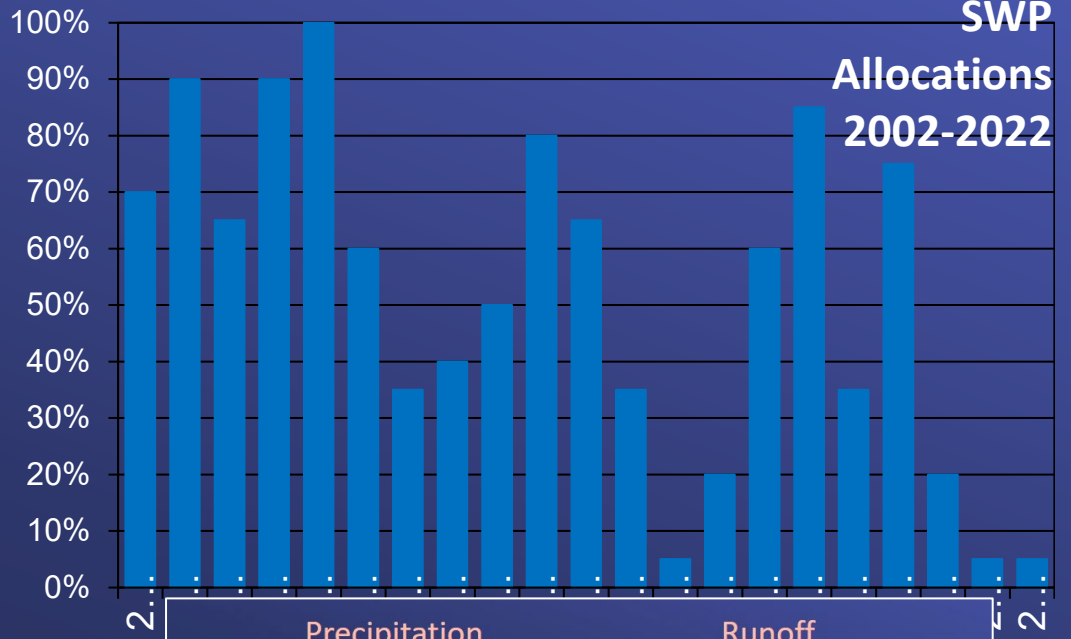
into one interconnected and iterative process.

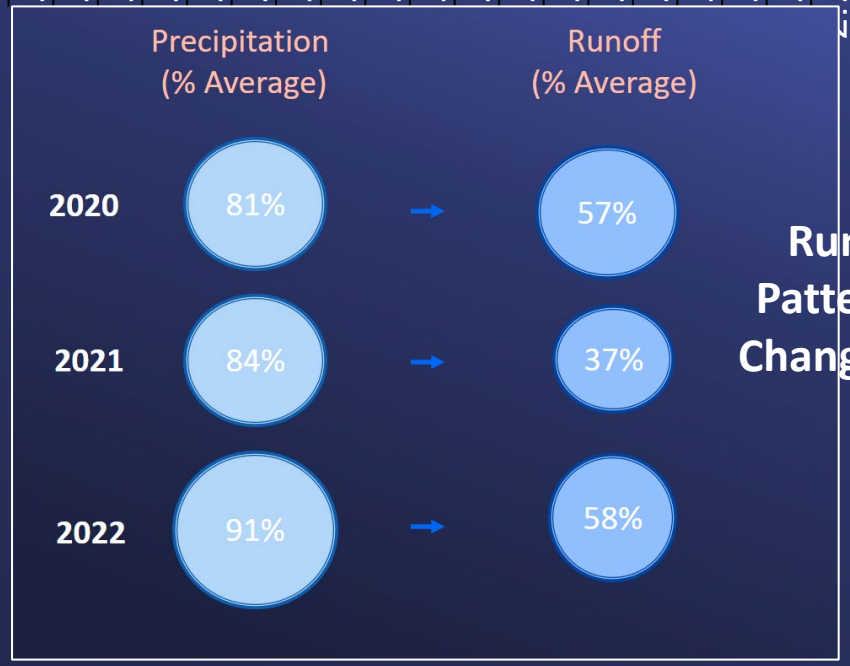


Climate Impacts on Operations and Water Supply



System Vulnerabilities Exposed





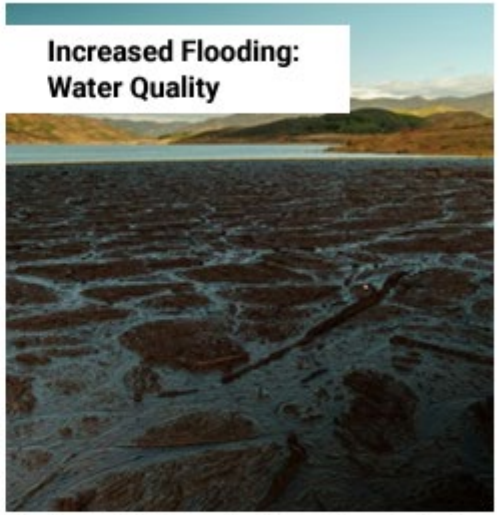
Runoff Patterns Changing

CAMP4W Addresses Climate Change Impacts Beyond Drought

Roaring River levees overtop at Grizzly Island in Solano County located in the Sacramento-San Joaquin River Delta

(Photo: Department of Water Resources)

Flood damages at the Whitewater River near the Colorado River Aqueduct.



Mud and dirt washed into Castic Lake due to heavy rains.

Wildfires near Diemer Water Treatment Plant, Yorba Linda, CA

Department of Water Resources Snow Survey 2024.

Extreme heat and other risks impact Metropolitan's workforce.

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Board Priorities Influence Multiple CAMP4W Outcomes

RELIABILITY

RESILIENCE

FINANCIAL SUSTAINABILITY

AFFORDABILITY

EQUITY

Climate Decision-Making Framework and Evaluative Criteria

Policies, Initiatives and Partnerships

Business Model and Funding Strategies

Time-Bound Targets

Evaluative Criteria:
Metrics used to score and rank projects

Time-Bound Targets:
Resource and Policy-based targets that establish goals to be achieved in the near-, mid- and long-term.

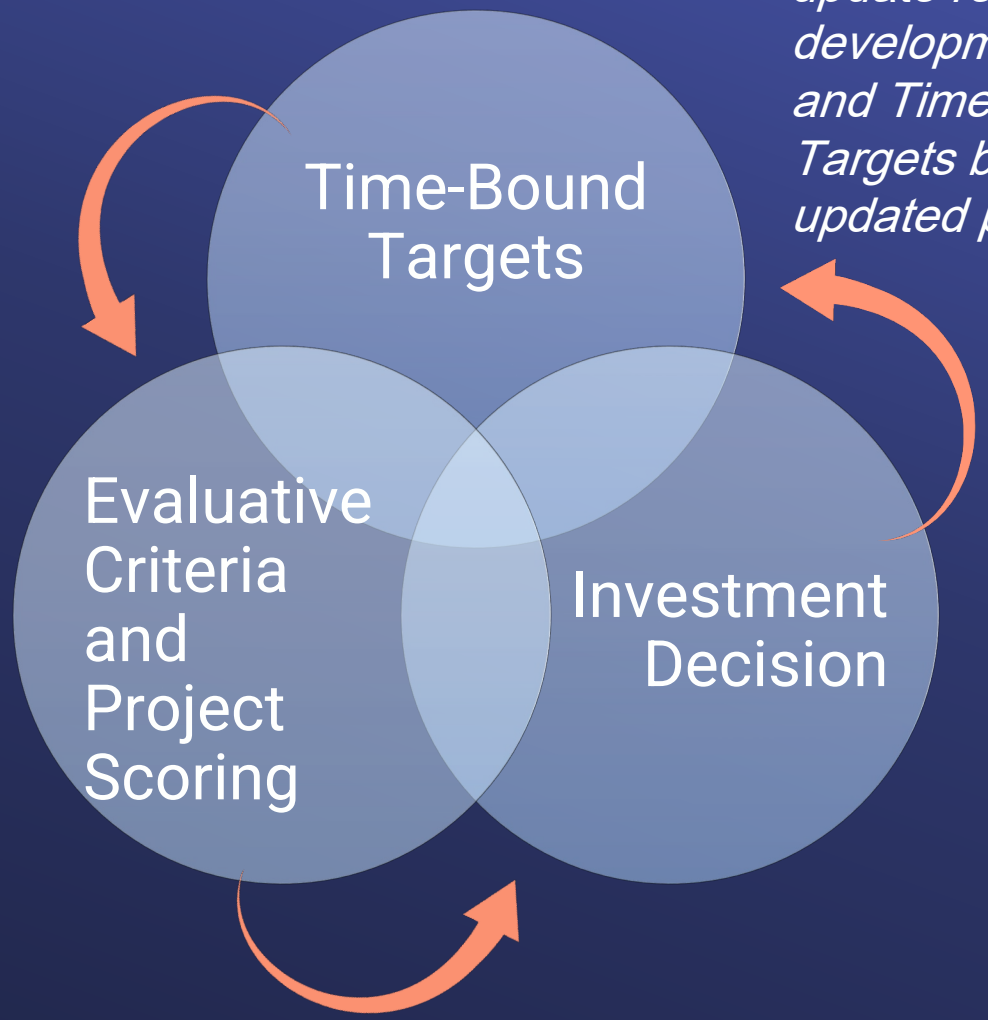
Concurrent CAMP4W Activities

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

CAMP4W
Climate Adaptation Master Plan for Water

CAMP4W: Preparing Metropolitan for the Decisions of Today and Tomorrow

CAMP4W Evolution

Feb-July 2023	Aug 2023- April 2024	2024 → Future
Value-Based Foundation	*Data-Driven decisions*	*Integrated climate planning across Metropolitan*
Identify Board Priorities	**Climate Decision-Making Framework to Support Board Decisions**	**Implementation- Long-Term Adaptive Management**

2024 CAMP4W Next Steps

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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1928