

The Metropolitan Water District of Southern California

Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

OW&S Committee

T. Quinn, Chair
S. Faessel, Vice Chair
L. Ackerman
D. Alvarez
J. Armstrong
A. Chacon
G. Cordero
D. De Jesus
D. Erdman
L. Fong-Sakai
S. Goldberg
C. Kurtz
R. Lefevre
C. Miller
M. Petersen
G. Peterson
N. Sutley

One Water and Stewardship Committee - Final - Revised 2

Meeting with Board of Directors *

May 8, 2023

1:30 p.m.

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. A listen only phone line is available at 1-877-853-5257; enter meeting ID: 862 4397 5848. Members of the public may present their comments to the Board or a Committee on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference (833) 548-0276 and enter meeting ID: 815 2066 4276 or click <https://us06web.zoom.us/j/81520664276?pwd=a1RTQWh6V3h3ckFhNmduUWpKR1c2Zz09>

**Monday, May 8, 2023
Meeting Schedule**

**09:00 a.m. EOT
11:00 a.m. LRAC
01:00 p.m. Break
01:30 p.m. OWS**

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

1. **Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))**
2. **SUBCOMMITTEE REPORTS**
 - A. Report from Subcommittee on Bay-Delta

**** CONSENT CALENDAR ITEMS -- ACTION ****

3. **CONSENT CALENDAR OTHER ITEMS - ACTION**

- A. Approval of the Minutes of the One Water and Stewardship Committee for April 10, 2023 (Copies have been submitted to each Director, Any additions, corrections, or omissions) [21-2145](#)

Attachments: [05082023 OWS 3A \(04102023\) Minutes](#)

4. CONSENT CALENDAR ITEMS - ACTION

NONE

**** END OF CONSENT CALENDAR ITEMS ****

5. OTHER BOARD ITEMS - ACTION

- 8-3 Adopt a resolution to support an approximately \$20,900,000 grant application to the Sacramento-San Joaquin Delta Conservancy to develop a multi-benefit landscape opportunity on Webb Tract; and authorize the General Manager to accept the grant if awarded; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA. [REVISED SUBJECT 5/1/23] [21-2229](#)

Attachments: [05092023 OWS 8-3 B-L](#)
[05082023 OWS 8-3 Presentation](#)

- 8-4 Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to deliver water to Western's service area through facilities not owned by Metropolitan or Western; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [21-2231](#)

Attachments: [05092023 OWS 8-4 B-L](#)
[05082023 OWS 8-4 Presentation](#)

- 8-5 Review and maintain the General Manager's implementation of the Cyclic Cost-Offset Program effective April 15, 2023 pursuant to the Program terms approved by the Board on April 9, 2019; the Program previously was determined to be exempt or otherwise not subject to CEQA. [REVISED SUBJECT 5/1/23] [21-2232](#)

Attachments: [05092023 OWS 8-5 B-L \(REVISED\)](#)
[05082023 OWS 8-5 Presentation](#)

6. BOARD INFORMATION ITEMS

NONE

7. COMMITTEE ITEMS

- a. Review of Draft Supplemental Environmental Impact Statement for Colorado River Interim Guidelines [Conference with legal counsel – anticipated litigation; based on existing facts and circumstances, including that requiring significant water use reductions in relation to the Draft Supplemental Environmental Impact Statement could lead to litigation among the United States and one or more Colorado River water users; there is a significant exposure to litigation against Metropolitan: unknown number of potential cases; may be heard in closed session pursuant to Gov. Code Section 54956.9(d)(2)]. [REVISED SUBJECT 5/2/23] [21-2245](#)
- Attachments:** [05082023 OWS 7a Presentation](#)
- b. Science update: Salmon update [21-2246](#)
- Attachments:** [05082023 OWS 7b Presentation](#)
- c. Annual Climate Action Plan and Update on Climate Vulnerability and Risk Assessment [21-2248](#)
- Attachments:** [05082023 OWS 7c Presentation](#)
- d. Update on Water Surplus and Drought Management [21-2247](#)
- Attachments:** [05092023 OWS 7d Report](#)
[05082023 OWS 7d Presentation](#)

8. MANAGEMENT REPORTS

- a. Colorado River Manager's Report [21-2148](#)
- Attachments:** [05092023 OWS 8a Report](#)
- b. Bay-Delta Manager's Report [21-2149](#)
- Attachments:** [05092023 OWS 8b Report](#)
- c. Water Resource Management Manager's Report [21-2150](#)
- Attachments:** [05082023 OWS 8c Presentation](#)

9. FOLLOW-UP ITEMS

NONE

10. FUTURE AGENDA ITEMS

11. ADJOURNMENT

NOTE: This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Committee agendas may be obtained on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>.

Requests for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ONE WATER AND STEWARDSHIP COMMITTEE

April 10, 2023

Chair Quinn called the meeting to order at 11:30 a.m.

Members present: Chair Quinn, Directors Ackerman, Alvarez, Armstrong, Cordero, De Jesus, Faessel, Fong-Sakai, Kurtz, Lefevre, Miller, M. Petersen (entered after roll call) Peterson, and Sutley (entered after roll call)

Members Absent: Directors Chacon, Erdman, and Goldberg.

Other Board members present: Directors Abdo, Atwater (teleconference posted location), Camacho, Dennstedt, Dick, Fellow, Garza, Jung (teleconference posted location), Morris, Ortega, Pressman (teleconference posted location), Ramos, Seckel, and Smith.

Committee staff present: Coffey, Hagekhalil, Schlotterbeck, and Upadhyay.

1. Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))

Public speakers included:

1. Charming Evelyn, Sierra Club California spoke in opposition to items 6a, 6b, and 6c.
2. Caty Wagner, Sierra Club California, spoke in opposition to item 6b.
3. Doug Obegi, National Resources Defense Council, spoke in opposition to items 6a and 6b.

Following public speakers, Chair Quinn announced that the meeting would move on to the Consent Calendar and reminded the committee that item 7-7 was deferred to May.

2. CONSENT CALENDAR OTHER ITEMS – ACTION

- A. Approval of the Minutes of the One Water and Stewardship Committee for March 14, 2023.

3. CONSENT CALENDAR ITEMS – ACTION

None

Director Peterson made a motion, seconded by Director De Jesus to approve the consent calendar consisting of item 2A.

The vote was:

Ayes: Directors Ackerman, Alvarez, Armstrong, Cordero, De Jesus, Faessel, Fong-Sakai, Kurtz, Lefevre, Miller, Peterson, and Quinn.

Noes: None.

Abstentions: Sutley

Absent: Directors Chacon, Erdman, Goldberg, and Petersen.

The motion for item 2A passed by a vote of 12 ayes, 0 noes, 1 abstention, and 4 absent.

4. OTHER BOARD ITEMS

None

5. BOARD INFORMATION ITEMS

9-2 Update on Chino Basin Program Development with Metropolitan and Inland Empire Utilities Agency

Presented by: Areeba Syed, Associate Engineer

Mr. Brad Coffey, Manager, Water Resource Management gave background information and introduced Ms. Syed. She gave a presentation on activities pertaining to the Chino Basin Program (CBP) and explained that staff has been working with Inland Empire Utilities Agency to facilitate the CBP. She described how the CBP accomplishes three main goals for how it stores advanced treated recycled water, allows for environmental pulse flows for fishery benefit, and provides a replacement water supply to facilitate the exchange. Ms. Syed concluded her presentation by proving the next steps.

The following Directors provided comments or asked questions:

1. Peterson
2. Fong-Sakai
3. Miller

Staff responded to the Directors questions and comments.

6. COMMITTEE ITEMS

a. Subject: Update on Delta Conveyance Project

Presented by: Dee Bradshaw, Program Manager, Bay-Delta Initiatives

Mr. Randal Neudeck, Manager, Bay Delta Programs provided introductory comments and introduced Ms. Bradshaw. Ms. Bradshaw's presentation discussed updates on the environmental planning and governance structure of the Delta Conveyance Design and Construction Authority and the Delta Conveyance Finance Authority, as well as updates on the Draft Environmental Impact Report and Draft Environmental Impact Statement.

The following Directors provided comments or asked questions:

1. Smith

b. Subject: Update on Voluntary Agreement

Presented by: George Nishikawa, Resource Specialist/ Alison Collins, Sr. Resource Specialist

Mr. Randal Neudeck, Manager, Bay Delta Programs provided introductory comments and introduced Mr. Nishikawa and Ms. Collins. This presentation was given in two parts. The first part was given by Mr. Nishikawa. He provided an overview of the Voluntary Agreements, and he explained the schedule. Next, Ms. Collins provided the results of the 2023 Draft Scientific Basis Report.

The following Directors provided comments or asked questions:

1. Sutley

2. Lefevre

3. Seckel

4. Fong-Sakai

5. Peterson

6. Ortega

7. Quinn

Staff responded to the Directors questions and comments.

c. Subject: Update on results from Household Water Use Study

Presented by: Elise Goldman, Resource Specialist

Mr. Brad Coffey, Manager, Water Resource Management gave background information and introduced Ms. Goldman. Ms. Goldman gave a presentation on the Household Water Use Study and how residential use has changed during the drought. Her presentation detailed the background, methodology, considerations, and analysis of the study.

The following Directors provided comments or asked questions:

1. Faessel
2. Fong-Sakai
3. Armstrong
4. Seckel
5. Quinn
6. Ackerman
7. Dick
8. Petersen

Staff responded to the Directors questions and comments.

d. Subject: Update on Metropolitan's activities related to non-functional turf

Presented by: Krista Guerrero, Resource Specialist

Mr. Brad Coffey, Manager, Water Resource Management gave background information and introduced Ms. Guerrero. Ms. Guerrero provided an update on Metropolitan's activities and how it can manage non-functional turf.

Chair Quinn announced that the committee would skip items 6e and 6f, and would move on to Management Reports.

e. Subject: Update on Water Surplus and Drought Management and Water Shortage
Emergency Condition

Not given.

f. Subject: Update on Conservation

Not given.

7. MANAGEMENT REPORTS

a. Subject: Colorado River Manager's Report

Presented by: Bill Hasencamp, Manager, Colorado River Resources

Mr. Hasencamp provided an update on Colorado River activity including Department of Interior's impending release of a Draft Supplemental Environmental Impact Statement for the 2007 Guidelines.

b. Subject: Bay-Delta Manager's Report

Presented by: Randal Neudeck, Manager, Bay Delta Programs

Mr. Neudeck reported that National Fisheries Service closed salmon fisheries for this coming year, and reported on Bay-Delta Subcommittee activities.

c. Subject: Water Resource Management Manager's Report

This item was given.

d. Subject: Quarterly Update from the Chief Sustainability Resiliency and Innovation Office

Presented by: Liz Crosson, Chief Sustainability, Resiliency and Innovation Officer

Ms. Crosson provided an overview of the new office, and she explained the programmatic vision of sustainability, resiliency, and innovation.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

None.

Chair Quinn announced the naming of the Demand Management Subcommittee, which Director Armstrong will chair and solicited for interest in serving on that subcommittee that will meet for the first time in May.

10. ADJOURNMENT

The next meeting will be held on May 8, 2023

The meeting adjourned at 1:30 p.m.

Tracy Quinn
Chair



● **Board of Directors**
One Water and Stewardship Committee

5/9/2023 Board Meeting

Revised 8-3

Subject

Adopt a resolution to support an approximately \$~~19,740~~20,900,000 grant application to the Sacramento-San Joaquin Delta Conservancy to develop a multi-benefit landscape opportunity on Webb Tract; and authorize the General Manager to accept the grant if awarded; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

In October 2022, Metropolitan’s Board affirmed the revised Bay-Delta Policy Objectives and Framework (Bay-Delta Policies) regarding the Sacramento-San Joaquin Delta. In February 2023, staff submitted a concept grant proposal to the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy) to develop a multi-benefit landscape opportunity on Webb Tract, one of the Metropolitan-owned islands, to support the Board’s Bay-Delta Policies. The Delta Conservancy staff accepted the concept grant proposal and invited Metropolitan to submit an application for a full grant proposal to their board. Metropolitan staff proposes the Board adopt a resolution supporting an approximately \$~~19.74~~20.9 million grant application to the Delta Conservancy’s Nature Based Solutions: Wetland Restoration Grant Program and authorize the General Manager or designated representative to accept the grant if awarded (**Attachment 1**). Though a specific cost share is not specified, Metropolitan is proposing to provide in-kind staff services of approximately \$3.5 million (~~+5.14~~ percent) of the total project cost of approximately \$~~23.2~~4.4 million over a three-year period.

Details

Background

In 2016, Metropolitan’s Board approved the purchase of properties on five islands located in the Sacramento-San Joaquin Delta region. Metropolitan’s portion of Chipps Island was sold to the California Department of Water Resources in 2021, a tidal marsh habitat restoration project. The remaining four islands are currently being leased to farmers, who grow a variety of crops on the fertile peat soils. Farming practices throughout much of the Delta region contribute to subsidence, which lowers the elevation of the islands and contributes to greenhouse gas emissions of carbon dioxide and nitrous oxide through a process called microbial oxidation. Oxidation of the soils occurs when the highly organic peat soil is exposed to the atmosphere during harvesting and tilling activities. As a result of subsidence, over the last century or more, Metropolitan’s islands are currently as much as 12-25 feet below sea level. These islands, like other islands in the Delta, are protected by perimeter levees that prevent flooding of the islands by holding back the water from the surrounding rivers and sloughs. If the current land practices continue, the islands will continue to lose land surface elevation, increasing hydrostatic pressure on levee systems that protect the islands.

In March of 2020, Metropolitan received a Proposition 1 Watershed Restoration Planning Grant for the Delta Islands Adaptation Project from the California Department of Fish and Wildlife. The goal of the Delta Islands Adaptation Project planning grant is to bring together a diverse group of Delta interests to undertake a comprehensive planning-level analysis of opportunities for island-wide improvements that include a mosaic of multiple land uses with the objectives of stopping or reversing subsidence, maintaining sustainable agricultural practices, improving carbon sequestration and water quality, and restoring habitat.

The Delta Islands Adaptation Project planning grant funds a collaborative, two-phase conceptual process that includes the evaluation and selection of one of the islands (Phase 1) to undergo a conceptual design process that results in a recommended island-wide mosaic of pilot projects (Phase 2). In Phase 1, each of Metropolitan's four islands were evaluated by criteria that included its susceptibility to subsidence, water quality and supply impact from levee failure, net potential reduction of greenhouse gas emissions, suitable conditions for conversion of land to wetlands or rice, suitable conditions for conversion of land to terrestrial habitat, opportunities to support sustainable agricultural practices, and economic viability. Phase 2 is currently underway with Bouldin Island selected to undertake the more detailed island-wide mosaic planning effort.

The findings of the Phase 1 analysis recognized that Webb Tract would provide a unique opportunity to develop a multi-benefit habitat restoration opportunity. As a result, staff proposes to submit a grant application to the Delta Conservancy to fund a whole-island, multi-benefit habitat restoration project that would construct up to 3,500 acres of shallow flooded wetland and up to 1,500 acres of rice farming (or other subsidence-reducing crop).

Developing this multi-benefit landscape opportunity would support the Bay-Delta Policies. The benefits include stopping and/or reversing subsidence and reducing greenhouse gas emissions that are released during dry-land farming activities on the island's peat soils. Developing wetlands and rice fields would trap carbon dioxide through carbon sequestration, which could be used to offset emissions under Metropolitan's Climate Action Plan or generate income from carbon credits realized. The wetlands would provide habitat that can be studied and developed to potentially increase production of phytoplankton and zooplankton, which can help address one of the most important needs of the Delta ecosystem, the declining pelagic food web. In addition to the potential carbon credit opportunities, Metropolitan could realize increased revenue from longer-term leases of the rice fields, and development of various habitat or paludiculture projects. Under the terms of the grant, the project may not provide mitigation for any water conveyance project, including the Delta Conveyance Project. If after design and environmental review, Metropolitan approves the Webb Tract project, acceptance and use of the grant funding will require restrictions on the land for a period of 15 years.

Metropolitan staff is proposing to submit an approximately ~~\$19.74~~20.9 million grant application to the Delta Conservancy to fund a three-year project term that includes design, environmental documentation, permitting and construction of wetlands, rice fields, and associated improvements on Webb Tract, as well as quantification of greenhouse gas emissions before and after construction to calculate the carbon credits realized from the project. The grant will also fund a limited-term position for a period of three years during the grant period to assist with project activities. Additional staffing will be provided by consultants and in-house staff. Staff anticipates providing approximately \$3.5 million (~~+5-14~~ percent) of in-kind staff services to match the approximately ~~\$19.74~~20.9 million grant over a three-year period.

Staff will return to the Board to add this project to the Capital Investment Plan and to award agreements for design, environmental documentation and permits, and construction, as well as execute land use and any lease agreements for rice farming activities.

Staff will return to the Board with regular updates.

Project Milestones

May 2023 – Expected grant award notification from Delta Conservancy

June 2023 – Board to consider amending the Capital Investment Plan to include project

Fall 2023 – Board to consider authorizing professional services agreements for planning, design and environmental documentation

Winter 2024 – Board to consider certification of environmental documentation

Spring 2025 – Award construction

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

By Minute 53012, dated October 11, 2022, the Board adopted the Revision and Restatement of Bay-Delta Policies.

California Environmental Quality Act (CEQA)

CEQA determinations for Option #1:

The proposed actions related to the grant application and acceptance of funds are not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because they involve the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). In addition, the proposed actions are not defined as a project under CEQA because they involve organizational or administrative activities of governments that will not result in direct or indirect physical changes in the environment (Section 15378(b)(5) of the State CEQA Guidelines).

If the grant funding is accepted, the proposed design, environmental review, preconstruction data collection, and permitting activities are categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions consist of basic data collection, research, and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed actions qualify as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines). Additionally, the proposed actions are statutorily exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions involve feasibility or planning studies for possible future actions which the agency, commission or board has not yet approved, adopted or funded (Section 15262 of the State CEQA Guidelines).

Prior to formal approval of any proposed construction by the Board, CEQA documentation will be prepared and processed in accordance with CEQA and the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt a resolution to support an approximately \$~~19,740~~20,900,000 grant application to the Sacramento-San Joaquin Delta Conservancy to develop a multi-benefit landscape opportunity on Webb Tract, and authorize the General Manager or designated representative to accept the grant if awarded.

Fiscal Impact: Provide approximately \$3.5 million (~~15-14~~ percent) of in-kind staff services to match the approximately \$~~19.74~~20.9 million grant over a three-year period. The total project cost is approximately \$~~23.2~~4.4 million.

Business Analysis: Metropolitan would leverage a significant funding opportunity to enhance Webb Tract and meet the Board-adopted Bay-Delta Policy Objectives and Framework.

Option #2

Do not adopt the resolution supporting the grant application and authorizing the General Manager to accept funding if awarded.

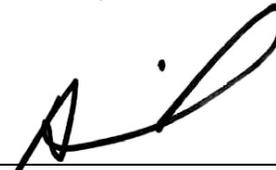
Fiscal Impact: None

Business Analysis: Metropolitan would miss an opportunity to collaborate with the Delta Conservancy and the local Delta interests and obtain an approximately \$~~19.74~~20.9 million in grant funding to reduce or reverse subsidence on Webb Tract, generate carbon credits from carbon sequestration in wetlands and rice, generate increased lease potential from long-term leases on rice fields, and forego potential opportunity to increase the property value for any future property disposition considerations.

Staff Recommendation

Option # 1

	5/1/2023
_____ Nina Hawk Chief, Bay-Delta Initiatives	Date

	5/1/2023
_____ Adel Hagekhalil General Manager	Date

Attachment 1 – Board Resolution

Ref# eo12693016

RESOLUTION _____

**RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
IN SUPPORT OF ITS PROPOSAL FOR FUNDING
UNDER THE DELTA CONSERVANCY NATURE BASED SOLUTIONS:
WETLAND RESTORATION GRANT PROGRAM TO DEVELOP
A MULTI-BENEFIT LANDSCAPE OPPORTUNITY ON WEBB TRACT**

WHEREAS, the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy) is requesting proposals from sponsors to facilitate project development under the Amended Budget Act of 2022 for projects that support Nature Based Solutions: Wetland Restoration; and

WHEREAS, the submittal of a proposal for grant funding and acceptance of funding by Metropolitan has been determined not to be a project under the California Environmental Quality Act (CEQA) under Section 15378(b)(4) and Section 15378(b)(5) of the State CEQA Guidelines; and

WHEREAS, the expenditure of grant funding, if awarded, for design, environmental review, preconstruction data collection and permitting activities by Metropolitan has been determined to be exempt from CEQA under Section 15306 and Section 15262 of the State CEQA Guidelines.

WHEREAS, prior to formal approval of any proposed construction by the Board, CEQA documentation will be prepared and processed in accordance with the CEQA and State CEQA Guidelines; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of The Metropolitan Water District of Southern California that the Board supports the Metropolitan Water District's proposal to Develop a Multi-Benefit Landscape Opportunity on Webb Tract.

BE IT FURTHER RESOLVED that Metropolitan's Board authorizes Metropolitan's General Manager or his/her designee to accept grant funding of approximately ~~\$19,7420,900~~,000.

BE IT FURTHER RESOLVED that Metropolitan's Board delegates legal authority to Metropolitan's General Manager to enter into an agreement with the Delta Conservancy, subject to the approval of the General Counsel, relevant to receipt of the requested proposal to Develop a Multi-Benefit Landscape Opportunity on Webb Tract grant.

BE IT FURTHER RESOLVED that Metropolitan is capable of providing the amount of funding and/or in-kind contributions specified in the funding plan.

BE IT FURTHER RESOLVED that if selected for funding, Metropolitan will work with Delta Conservancy to meet established program deadlines.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held May 9, 2023.

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California



One Water and Stewardship Committee

Adopt a Resolution to Support a Grant Application and Accept Funding if Awarded for a Multi-Benefit Landscape Opportunity on Webb Tract

Item 8-3

May 8, 2023

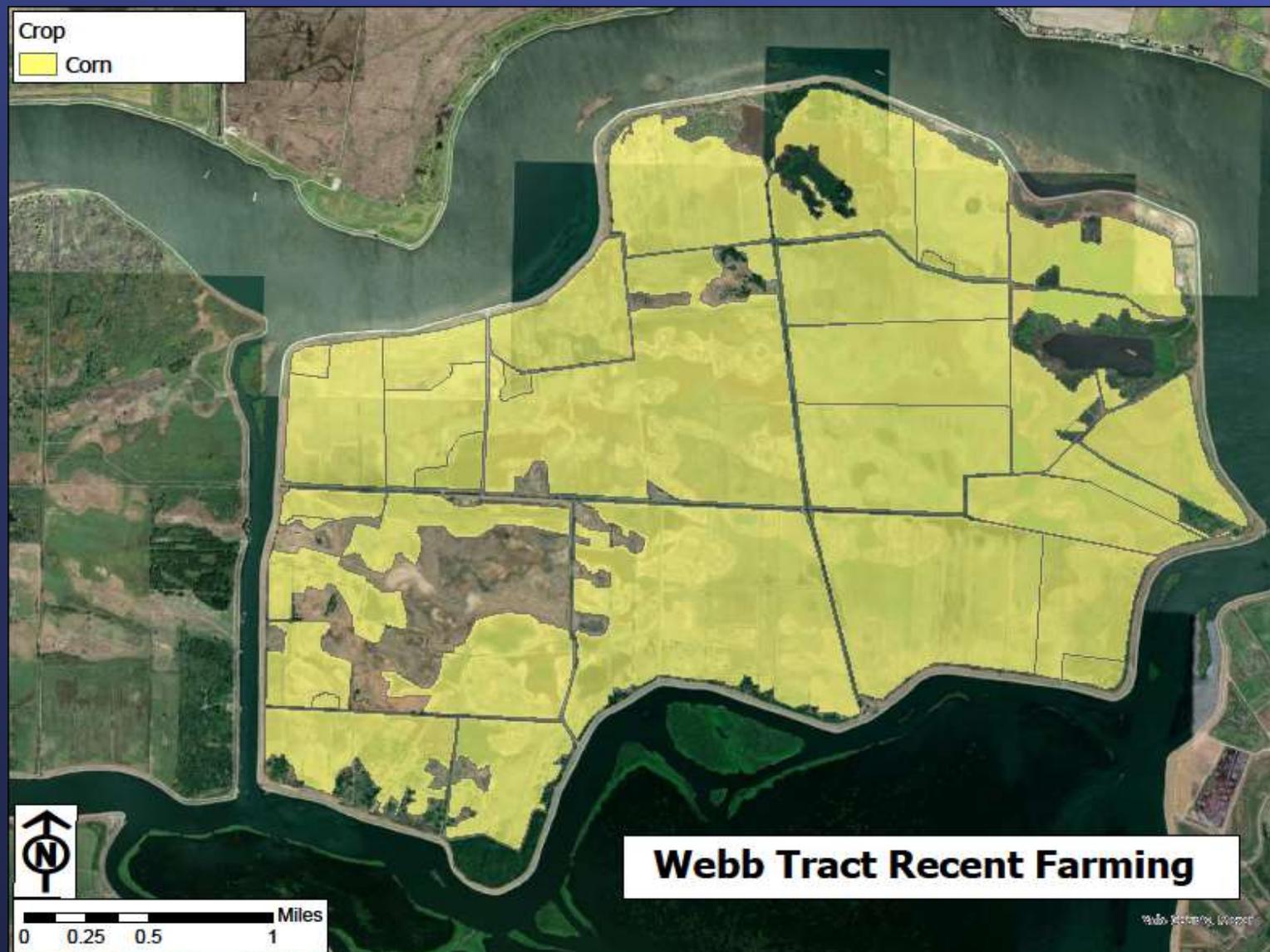
Multi- Benefit Landscape Grant Opportunity

- Adopt a resolution to support a \$20.9 million grant application to the Sacramento-San Joaquin Delta Conservancy to develop a multi-benefit landscape opportunity on Webb Tract
- Authorize the General Manager to accept the grant, if awarded

Webb Tract Location Map



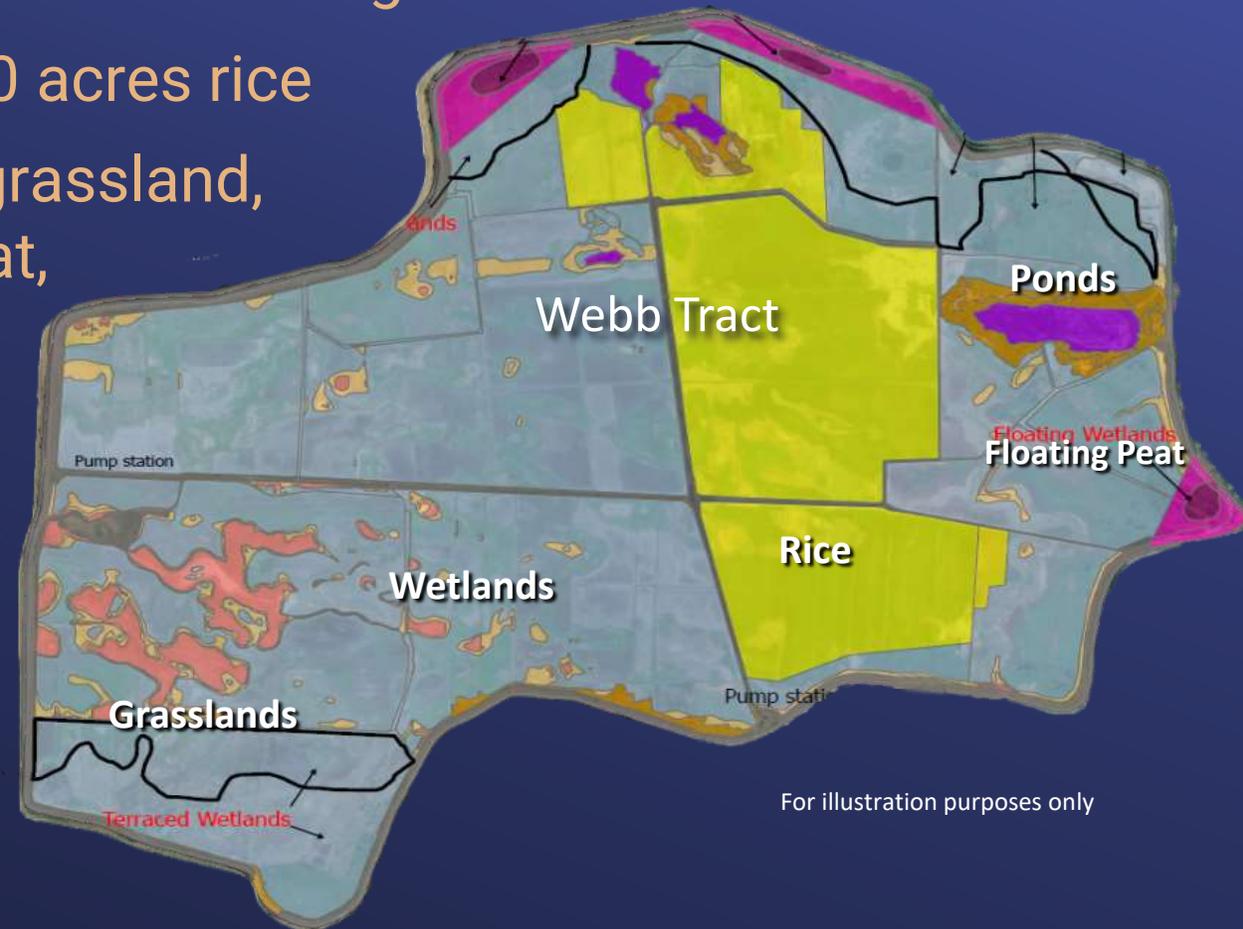
Past Land Use on Webb Tract



Webb Tract Grant Application

- \$20.9M grant proposal to Delta Conservancy
 - At least 3,000 acres managed wetlands
 - At least 1,000 acres rice
 - Will include grassland, upland habitat, willow scrub

Habitat classification	
	Rice / Wet Ag (Paludiculture)
	Managed Impounded Wetlands
	Tidal- Floating Peat Wetland
	Grassland/Upland Habitat
	Open Water
	Open Water (Tidal)
	Urban/Barren
	Willow Scrub/Seasonal Wetland
	Willow Riparian Scrub/Shrub



Webb Tract Grant Goals

- Stop and/or reverse subsidence
- Reduce greenhouse gas emissions and generate carbon offsets
 - Metropolitan's Climate Action Plan
 - Income from carbon credits
- Generate lease income from rice fields
- Investigate sustainable farming and water management
- Augment the Delta pelagic food web

Grant Details

- Grant will fund
 - Design
 - Environmental documentation/permitting
 - Construction
 - Quantification of GHG reductions
 - One limited-term position
 - Grant period – 3 years
- Phase 1
- Phase 2



Photo: Courtesy Department of Food & Ag

Metropolitan Matching

- In-kind services ~ \$3.5 million (~14%)
- Transferable land encumbrance – 15 years



Photo: Malinda Stalvey

Bay-Delta Grant Highlights

- Grants approved (~ \$55 million)
 - \$ 39.9 million - Levee improvements (2016-2023)
 - \$ 9.5 million - Riverine restoration levee setback (2022-23)
 - \$ 3.0 million - Levee maintenance (2016-present)
 - \$ 1.5 million - Emergency response supplies (2022)
 - \$ 1.1 million - Collaborative landscape planning (2022)
- Grant applications in process
 - \$ 20.9 million - Webb Tract landscape mosaic (submitted)
 - \$ 3.7 million - Bouldin Island wetland/carbon sequestration
 - \$ 360,000 - Delta smelt propagation research
 - \$ 7.5 million - Levee improvements (in process)

Next Steps

- Delta Conservancy Board considers grant for funding – May 24, 2023
- If awarded, staff returns to the Board to add project to the CIP – June 2023
- Staff returns to the Board to execute agreements for design, environmental documentation and permit preparation – Fall 2023

Board Options

- Option #1
 - a. Adopt a resolution to support an approximately \$20,900,000 grant application to the Sacramento-San Joaquin Delta Conservancy to develop a multi-benefit landscape opportunity on Webb Tract; and
 - b. Authorize the General Manager or designated representative to accept the grant if awarded.
- Option #2

Do not adopt the resolution supporting the grant application and authorizing the General Manager to accept funding if awarded

Staff Recommendation

- Option #1





● **Board of Directors**
One Water and Stewardship Committee

5/9/2023 Board Meeting

Revised 8-4

Subject

Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to deliver water to Western’s service area through facilities not owned by Metropolitan or Western; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This letter seeks authorization for an agreement with the following:

- Western Municipal Water District (Western), a member agency of Metropolitan,
- Rubidoux Community Services District (Rubidoux), a customer water agency of Western,
- San Bernardino Valley Municipal Water District (Valley District), a State Water Contractor, and
- West Valley Water District (West Valley), a customer agency of Valley District;

collectively referred to as the “Parties” to deliver Metropolitan supplies to Western’s service area through facilities owned and operated by Valley District and West Valley. Under the proposed agreement, Metropolitan would supply up to 2,000 acre-feet of water per year (AFY) to Western through Valley District’s SWP connection on the San Gabriel Valley Devil Canyon – Azusa Pipeline (Azusa Pipeline), provided there is available capacity and through a new interconnection between West Valley and Rubidoux to be constructed by Rubidoux. Water deliveries would move from Valley District’s connection on the Azusa Pipeline, through West Valley’s infrastructure, to reach Western’s service area through the new interconnection at Rubidoux. Under this agreement, Metropolitan would bill the deliveries to Western like other full-service deliveries. Metropolitan will not be responsible for any additional costs incurred by any other party due to this arrangement and no additional operational costs will be incurred by Metropolitan.

Details

Background

Western is a Metropolitan member agency, and Rubidoux is one of Western’s customer water agencies. Rubidoux is fully annexed within Western’s service area and serves approximately 40,000 customers. Currently, Rubidoux relies exclusively on local groundwater and has no connection to a distribution system that delivers Metropolitan supplies. Western requested delivery of Metropolitan’s supplies for Rubidoux’s use. The Board’s approval is required to transport Metropolitan water through facilities not owned by Metropolitan. However, board approval is not required to meet increased demands for supply from Western, a member agency.

Metropolitan has capacity rights in the Azusa Pipeline as part of an existing exchange agreement with San Gabriel Valley Municipal Water District (San Gabriel Valley), a State Water Contractor. San Gabriel Valley owns and operates the Azusa Pipeline, which delivers its State Water Project (SWP) supplies from the Devil Canyon turnout on the East Branch of the SWP. Valley District has an existing connection at Lytle Creek Station on the Azusa Pipeline. West Valley is a customer agency of Valley District and can accept Metropolitan’s SWP supplies through Valley District’s connection. West Valley has facilities and infrastructure in place to deliver a like amount of Metropolitan’s supplies to Western’s service area. With this agreement, West Valley would deliver the supplies to Western’s service area through a future connection between West Valley and Rubidoux.

In April 2022, the Parties requested a long-term agreement for Metropolitan to supply up to 2,000 AFY to Western through Valley District's and West Valley's conveyance and distribution systems. However, the Board authorized only a one-year agreement and requested that staff return and report after assessing alternatives. After the Board's action, Rubidoux did not construct the required interconnection to accept water deliveries from West Valley due to the uncertainty of long-term supplies from Western/Metropolitan with a one-year agreement. Therefore, the Parties did not enter into a one-year agreement with Metropolitan. In March 2023, staff returned to the Board to present alternatives as requested.

On April 10, 2023, the Equity, Inclusion, and Affordability Committee held a panel discussion on the proposed agreement. More information on the panel's discussion is included in **Attachment 2**. Board discussions brought to the forefront three policy topics that extend beyond the current proposal for Rubidoux, but that were posed by the Board relating to Metropolitan's service in general:

1. Providing equal access to Metropolitan supplies throughout Metropolitan's service area, especially for disadvantaged communities.
2. Approving or restricting new and/or existing uses (e.g., blending) of Metropolitan supplies.
3. Reducing reliance on imported supplies from the Delta.

Metropolitan will discuss these policy topics separately from the authorization for this proposed agreement. Staff will address equal access to Metropolitan's supplies ~~in its resiliency planning efforts through its Climate Adaptation Master Plan~~ -and bring further discussions to the Equity, Inclusion, and Affordability Committee. Staff will bring the Board an item for discussion on approving or restricting new and/or current uses of Metropolitan supplies at the One Water and Stewardship Committee, or an alternate committee as directed by the Board. Finally, Metropolitan has invited the Executive Director of the Delta Stewardship Council to speak at the One Water and Stewardship Committee, or an alternate committee as directed by the Board, to describe state policy on reducing reliance on the Delta to meet the state's future water supply needs.

Proposed Agreement

Staff requests authorization to enter into a long-term agreement to deliver up to 2,000 AFY to Western's service area using Valley District's and West Valley's facilities. Metropolitan would supply the requested water through Metropolitan's unused capacity in the Azusa Pipeline. Valley District would deliver Metropolitan's supplies on behalf of Metropolitan to West Valley at Valley District's Lytle Creek connection on the Azusa Pipeline. West Valley would treat and deliver a like amount of requested water to the border of Western through a new interconnection between West Valley and Rubidoux. Western would pay Metropolitan's full-service rate in effect at the time of the delivery of Metropolitan supplies into Western's service area at the new interconnection. The delivery would be subject to the capacity charge, readiness-to-serve charge, and all volumetric water rates in the same manner as any other Metropolitan delivery to Western.

Staff recommends that the Board authorize the General Manager to enter into an agreement with the Parties consistent with the terms outlined in **Attachment 1**. The terms include an acknowledgment that deliveries are not guaranteed and may face reduction requirements during drought, which is consistent with Metropolitan's service to all member agencies. General terms include:

1. Agreement termination of November 4, 2035.
2. Maximum delivery amount is 2,000 AF per calendar year.
3. Metropolitan water deliveries under this Agreement are subject to the Administrative Code like any other Metropolitan deliveries.
4. Deliveries are not guaranteed and are limited to Metropolitan's unused capacity in the Azusa Pipeline.
5. When the California Department of Water Resources is administering SWP allocations pursuant to Article 18a of the Water Supply Contracts or during a time when Metropolitan's Board of Directors has declared that a shortage is in effect, the same guidelines, procedures, and limitations that Metropolitan applies to its Member Agencies will apply to deliveries made under this Agreement.

The new interconnection between West Valley and Rubidoux will be constructed at no cost to Metropolitan and will be metered in accordance with Metropolitan standards for new service connections.

Authorizing this proposed delivery agreement is consistent with Metropolitan's current policies and similar to authorizations granted in the past. Metropolitan's General Manager is authorized to construct service connections on its facilities for water delivery to member agencies. Special service connections, such as those not on a Metropolitan-owned pipeline, may be presented to the Board for authorization. Previously, Metropolitan's Board authorized the construction of two new service connections off the Azusa Pipeline and authorized a similar agreement for water delivery into Metropolitan's and Inland Empire Utilities Agency's service area using Valley District's Lytle Creek turnout on the Azusa Pipeline.

Policy

Metropolitan Water District Administrative Code, Division IV, Section 4209: Contracts

Metropolitan Water District Administrative Code, Division IV, Section 4401-4403: Rates; Readiness-to-Serve Charge; Capacity Charge

Metropolitan Water District Administrative Code, Division IV, Section 4700: Service Connections

Metropolitan Water District Administrative Code, Division XI, Section 11104: Delegation of Responsibilities

By Minute Item 30524, dated September 17, 1974, the Board authorized a cooperative water exchange agreement to eliminate the overdraft condition in the western portion of the Main San Gabriel Basin; as part of this agreement, Metropolitan is granted conveyance rights to the unused capacity in San Gabriel Valley Municipal Water District's Devil Canyon-Azusa pipeline.

By Minute Item 44267, dated December 12, 2000, the Board authorized the General Manager to execute an agreement to construct a service connection by Three Valleys Municipal Water District on San Gabriel Valley Municipal Water District's pipeline as described in the letter signed by the General Manager on November 20, 2000.

By Minute Item 48111, dated December 8, 2009, the Board authorized the construction of the North Azusa Connection by Three Valleys on San Gabriel District's Azusa pipeline for the deliveries of Metropolitan water using Metropolitan's capacity rights, as set forth in the letter signed by the General Manager on November 20, 2009.

By Minute Item 52439, dated July 13, 2021, the Board authorized the General Manager to enter into an agreement with Inland Empire Utilities Agency, West Valley, and Valley District to provide West Valley assistance with water deliveries in the event of an emergency or planned outage, or the loss of local supply, as set forth in Agenda Item 7-7 board letter.

By Minute Item 52783, dated April 12, 2022, the Board authorized the General Manager to enter into a one-year agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to provide Rubidoux assistance with water deliveries, subject to a possible extension if approved by the Board following a review by the General Manager on alternative means of addressing Rubidoux's needs, as amended at Committee and set forth in Agenda Item 7-10 board letter.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because the proposed action will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment and involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not defined as a project under CEQA because it involves the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). The delivery of water is exempt from CEQA

as it consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features involving negligible or no expansion of existing or former use (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to deliver water to Western’s service area through facilities not owned by Metropolitan or Western.

Fiscal Impact: Potential revenue from water sales. Metropolitan could receive up to \$1.7 million in revenue annually, based on the current water rates, assuming delivery of 2,000 AF of Tier 1 full-service untreated water under this agreement.

Business Analysis: Assist Western in providing water supply reliability to an area of Metropolitan’s service area where Western does not currently deliver Metropolitan water supplies.

Option #2

Do not authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to deliver water to Western’s service area through facilities not owned by Metropolitan or Western.

Fiscal Impact: None.

Business Analysis: Would not assist Western in providing water supply reliability to an area of Metropolitan’s service area where Western does not currently deliver Metropolitan water supplies.

Staff Recommendation

Option #1



Brad Coffey
Manager, Water Resource Management

5/5/2023
Date



Adel Hagekhalil
General Manager

5/5/2023
Date

Attachment 1 – Term Sheet for the Agreement to Deliver Water to Western’s Service Area through Facilities not owned by Metropolitan or Western

Attachment 2 – Equity, Inclusion, and Affordability Committee: Panel discussion on Rubidoux Community Services District, April 10, 2023

Term Sheet for the Agreement to Deliver Water to Western Municipal Water District's Service Area through Facilities not Owned by Metropolitan or Western

Agreement Overview

- Parties: Western Municipal Water District (Western)—a Metropolitan member agency; Rubidoux Community Services District (Rubidoux)—Western's customer agency, San Bernardino Valley Municipal Water District (Valley District)—a neighboring State Water Contractor; West Valley Water District (West Valley)—Valley District's customer agency, and The Metropolitan Water District of Southern California (Metropolitan)
- Effective Date: Upon agreement execution
- Termination Date: November 4, 2035, provided that any party may cancel with 30 days written notice
- Maximum Delivery Amount: 2,000 AF per calendar year

Key Terms

- Western will request delivery of water from Metropolitan.
- Metropolitan will request Valley District to deliver Metropolitan supplies equal to Western's requested amount to West Valley at Valley District's connection (Lytle Creek, Station, 1747+00) on the San Gabriel Valley Devil Canyon – Azusa Pipeline.
- The delivery of water by Metropolitan is not guaranteed and is limited to the unused capacity in the San Gabriel Valley Devil Canyon-Azusa Pipeline.
- West Valley will treat and deliver a like amount of Western's requested amount to an interconnection between West Valley and Rubidoux for use only within Metropolitan's service area.
- The interconnection between West Valley and Rubidoux will be constructed at no cost to Metropolitan and will be metered in accordance with Metropolitan standards for new service connections.
- Metropolitan water deliveries under this Agreement will be subject to the Metropolitan Administrative Code in the same manner as any other Metropolitan delivery to Western.
- Western will pay Metropolitan's full-service untreated rate in effect at the time of delivery. The delivery is subject to the capacity charge, readiness-to-serve charge, and all volumetric water rates in the same manner as deliveries made to Western through Metropolitan's distribution system and connections.
- Valley District or West Valley shall have no responsibility for the cost of water delivered to Valley District's connection for use within Western's service area.
- Metropolitan will be responsible for any charges by the Department of Water Resources for the State Water Project supplies delivered to Western through Valley District's connection, like all other charges associated with the State Water Project.
- If the Department of Water Resources administers a SWP allocation pursuant to Article 18a of the Water Supply Contracts or during a time when Metropolitan's Board of Directors has declared that a regional shortage is in effect, the same guidelines, procedures, and limitations that Metropolitan applies to its Member Agencies will apply to deliveries made pursuant to this Agreement.

Equity, Inclusion, and Affordability Committee:
Panel discussion on Rubidoux Community Services District
April 10, 2023

Link to Equity, Inclusion, and Affordability Committee meeting, 4/10/23:

https://mwdh2o.granicus.com/player/clip/10211?view_id=12&redirect=true&h=e4c6fd0393b71c27ee1b96e1b74277f4

To access a video of the panel discussion, click on the link above or navigate to ‘Document and Meeting Archives’ under the Board of Directors section on Metropolitan Water District’s website. Select the Equity, Inclusion, and Affordability Committee meeting on April 10, 2023 to find the link to the video.

Panelists:

- Sandra Kerl, General Manager of San Diego County Water Authority
- Craig Miller, General Manager of Western Municipal Water District
- Alex Rojas, General Manager of Central Basin Municipal Water District



One Water and Stewardship Committee

Authorize the General Manager to enter into an agreement with Western Municipal Water District, Rubidoux Community Services District, West Valley Water District, and San Bernardino Valley Municipal Water District to deliver water to Western's service area through facilities not owned by Metropolitan or Western

Item 8-4

May 8, 2023

Delivery of MWD Supplies

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Background

Western requests a new connection to Metropolitan supplies using the Azusa Pipeline and West Valley Water District's distribution system

Azusa Pipeline

- East Branch → Azusa Pipeline
- Terminates at San Gabriel Canyon Spreading Grounds in Azusa



Delivery of MWD Supplies

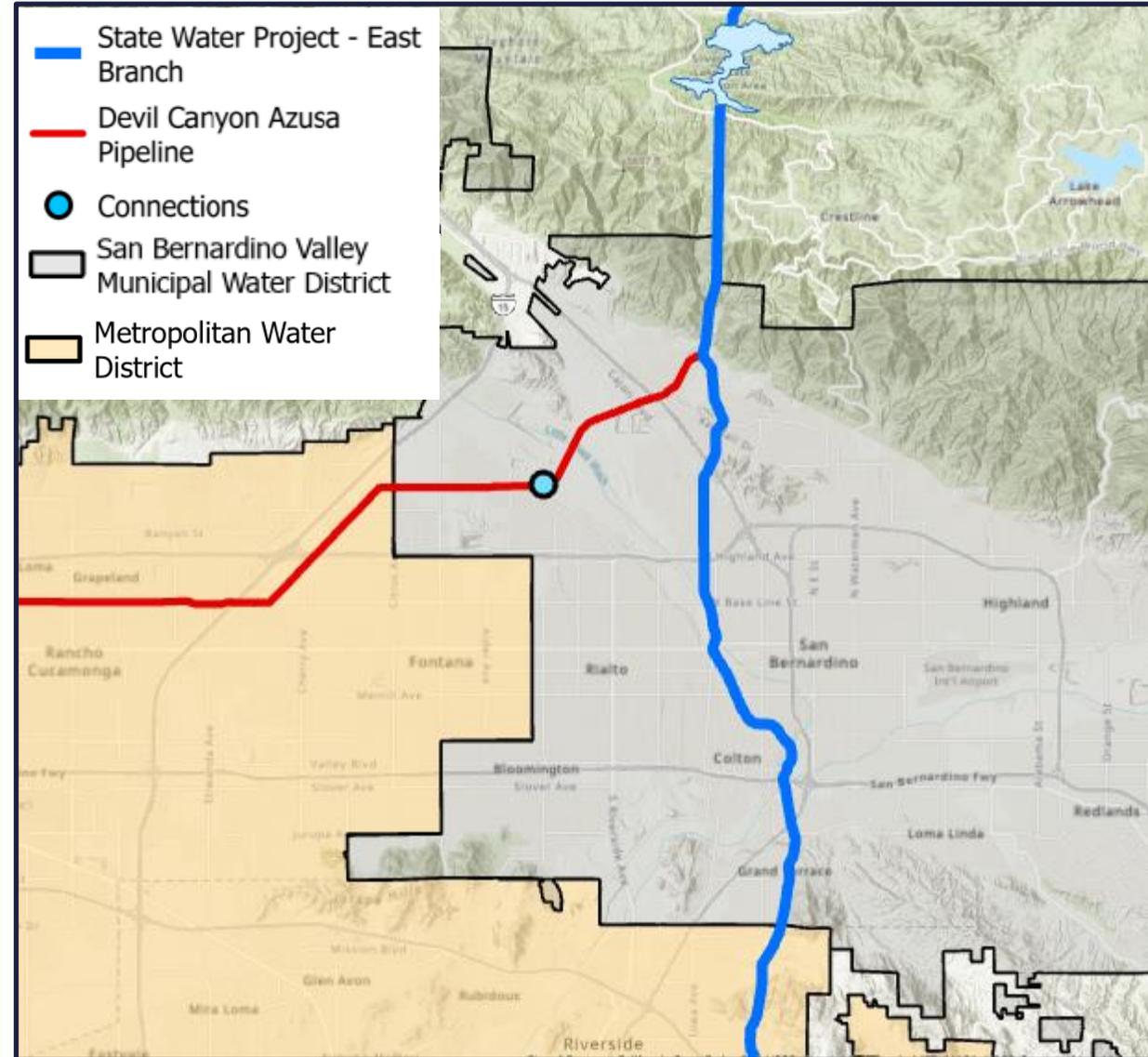
Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Background

Western requests a new connection to Metropolitan supplies using the Azusa Pipeline and West Valley Water District's distribution system

State Water Contractors

- San Gabriel Valley MWD
- Metropolitan
- SB Valley Water District
 - Lytle Creek is the last turnout on Azusa Pipeline



Delivery of MWD Supplies

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

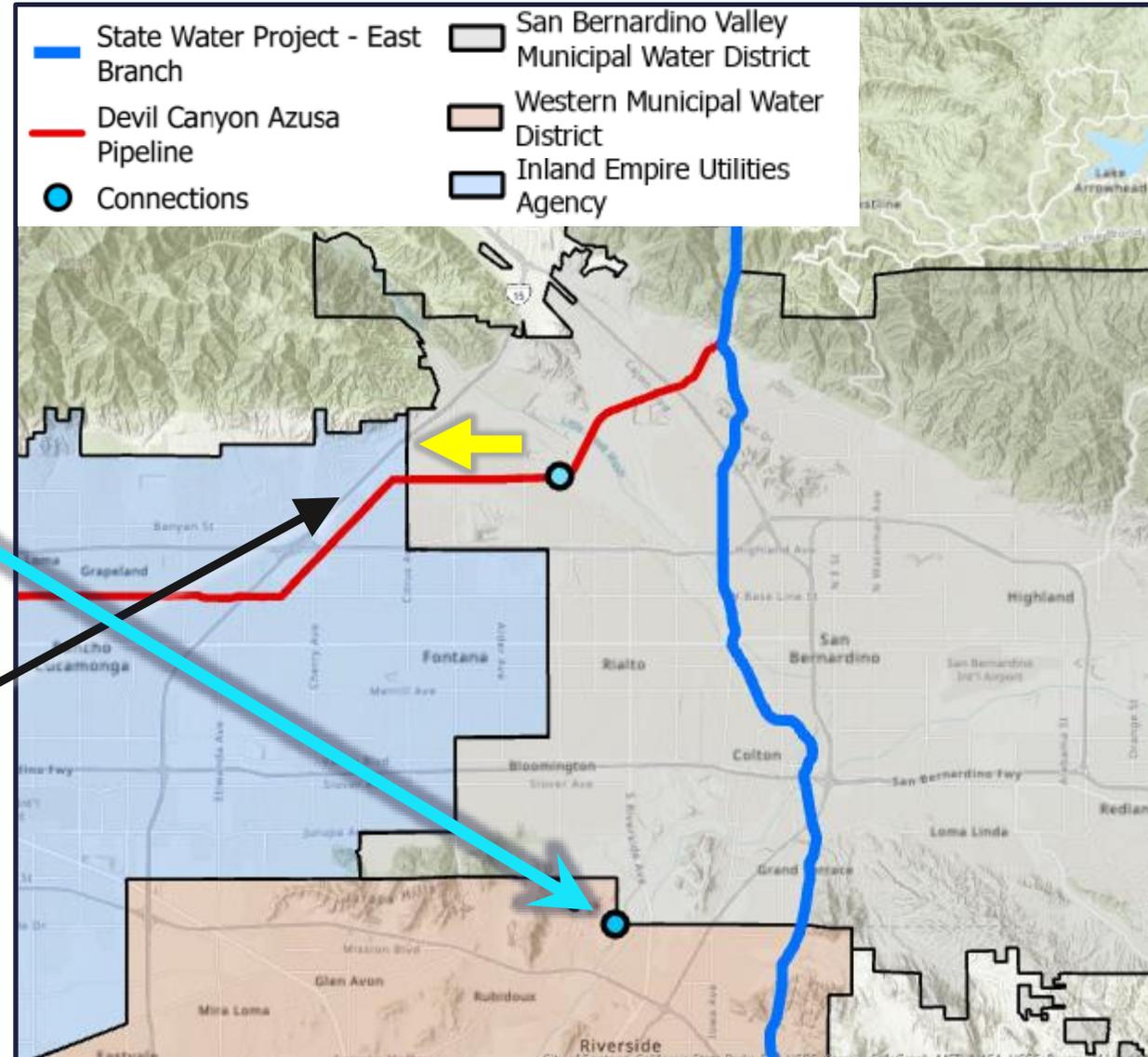
Background

Western requests a new connection to Metropolitan supplies using the Azusa Pipeline and West Valley Water District's distribution system

Metropolitan Member Agencies

- Three Valleys
- IEUA
- Western
 - Proposed interconnection to receive MWD supplies

July 2021: Delivery agreement for IEUA



Delivery of MWD Supplies

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

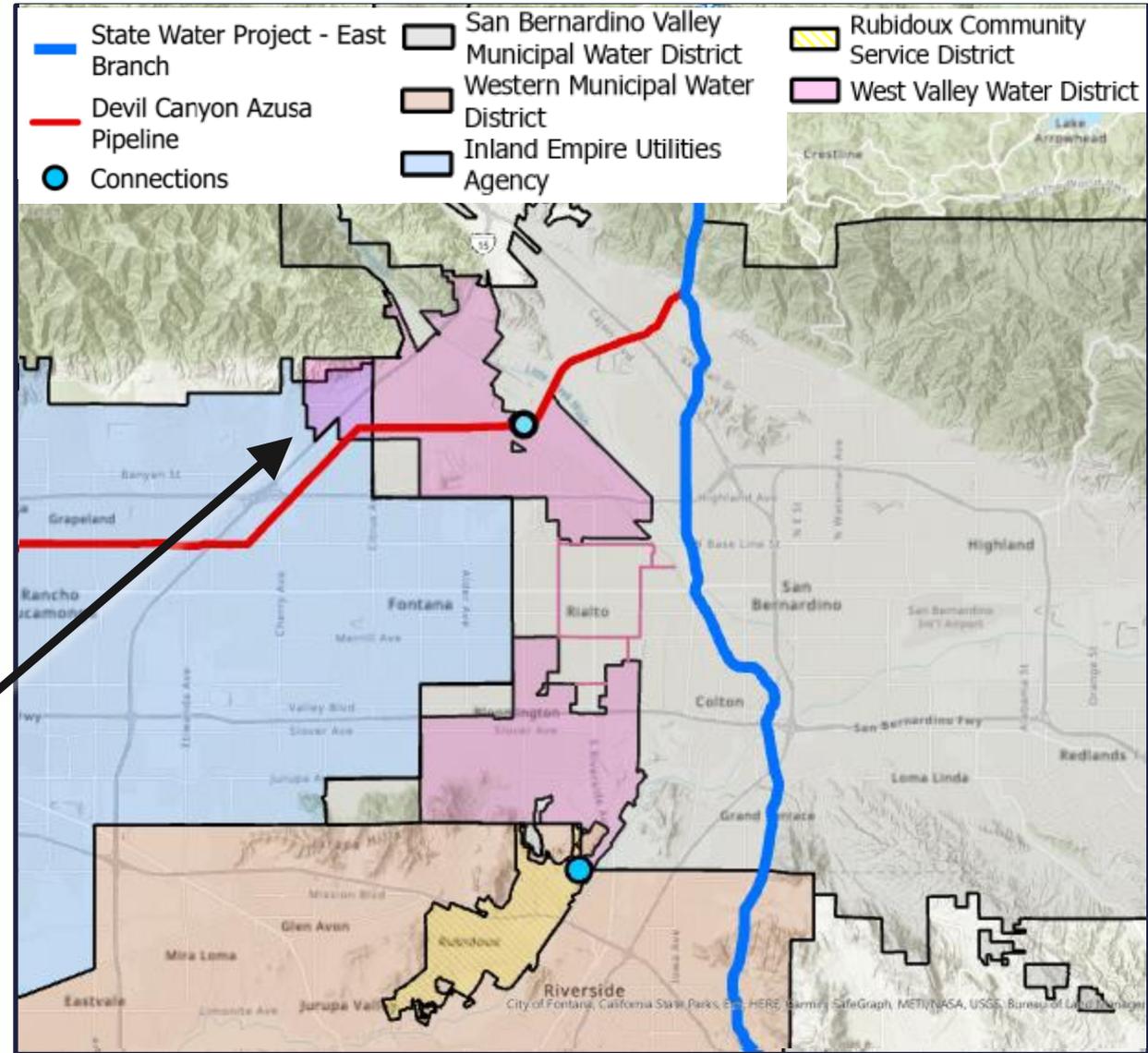
Background

Western requests a new connection to Metropolitan supplies using the Azusa Pipeline and West Valley Water District's distribution system

Customer Agencies

- West Valley Water District (Valley District & IEUA)
- Rubidoux Community Services District (Western)

July 2021: Delivery agreement for IEUA



Delivery of MWD Supplies

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

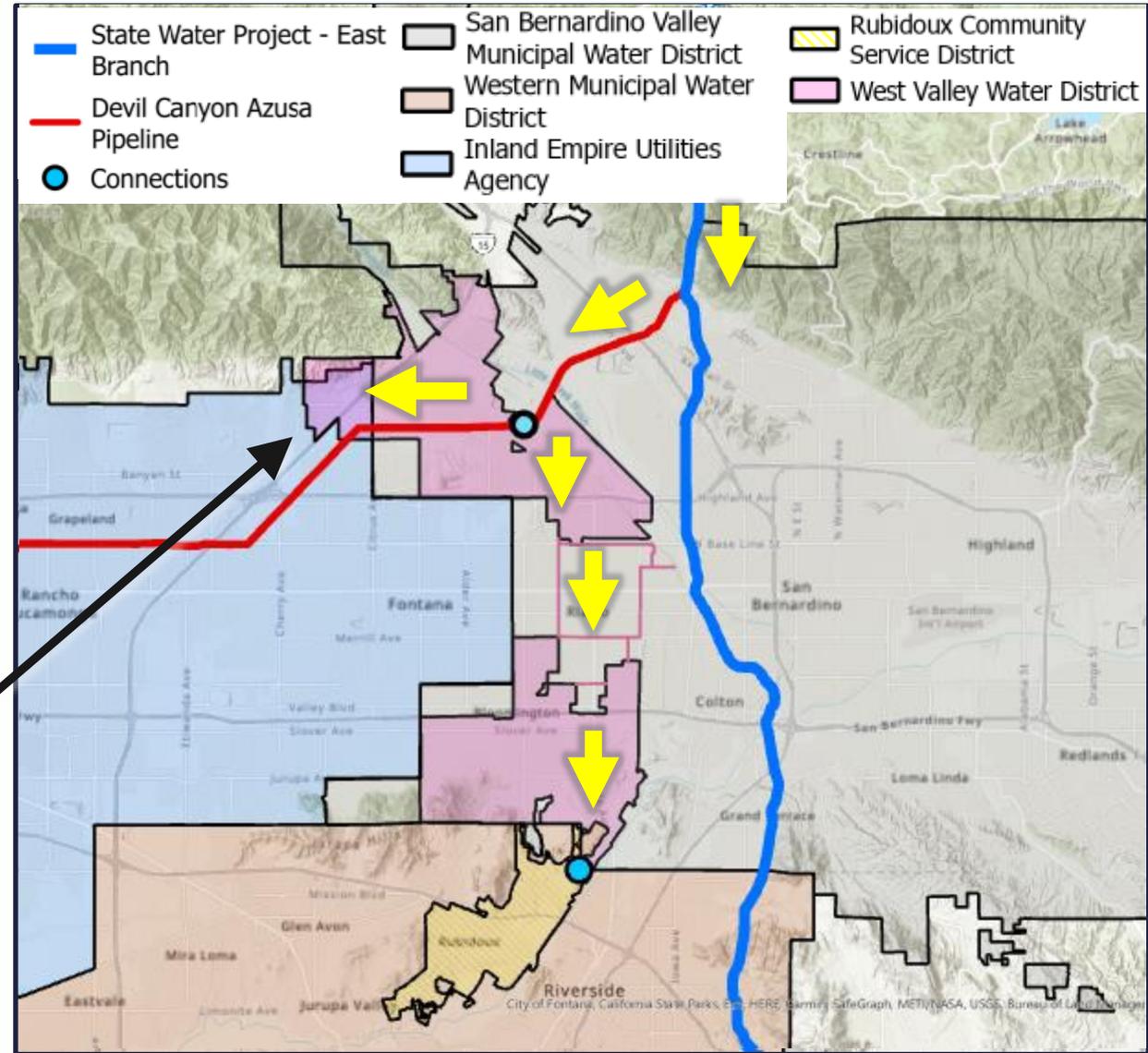
Background

Western requests a new connection to Metropolitan supplies using the Azusa Pipeline and West Valley Water District's distribution system

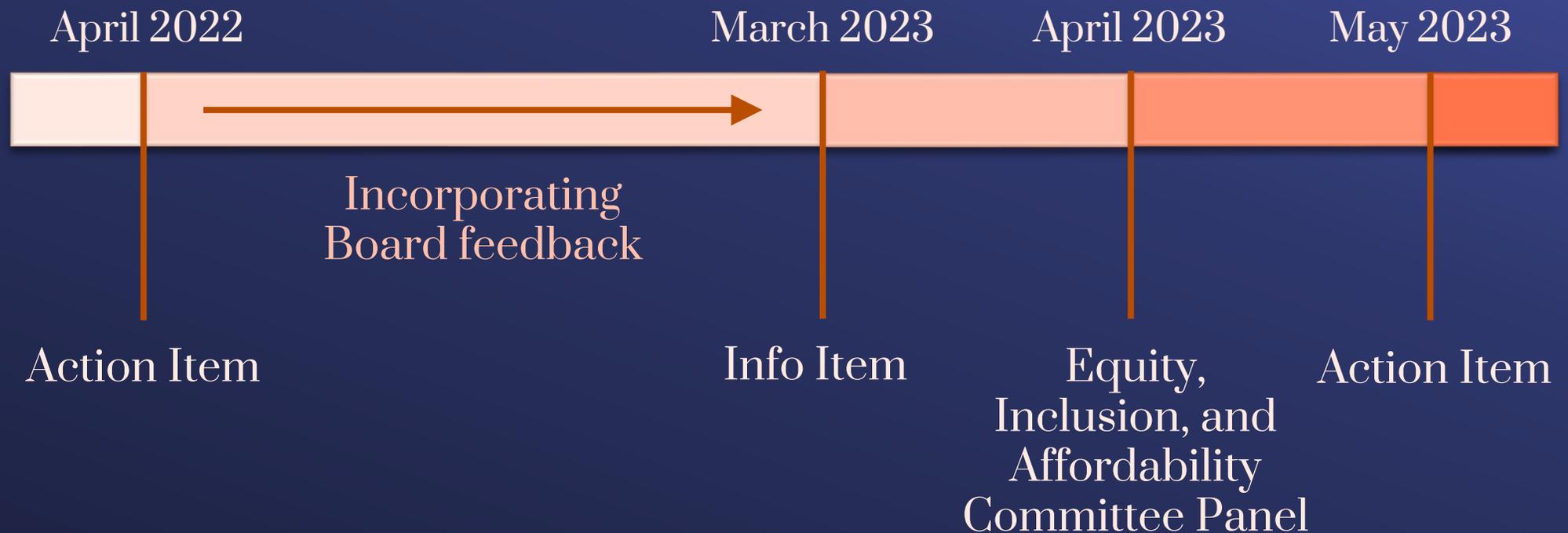
Customer Agencies

- West Valley Water District (Valley District & IEUA)
- Rubidoux Community Services District (Western)

July 2021: Delivery agreement for IEUA



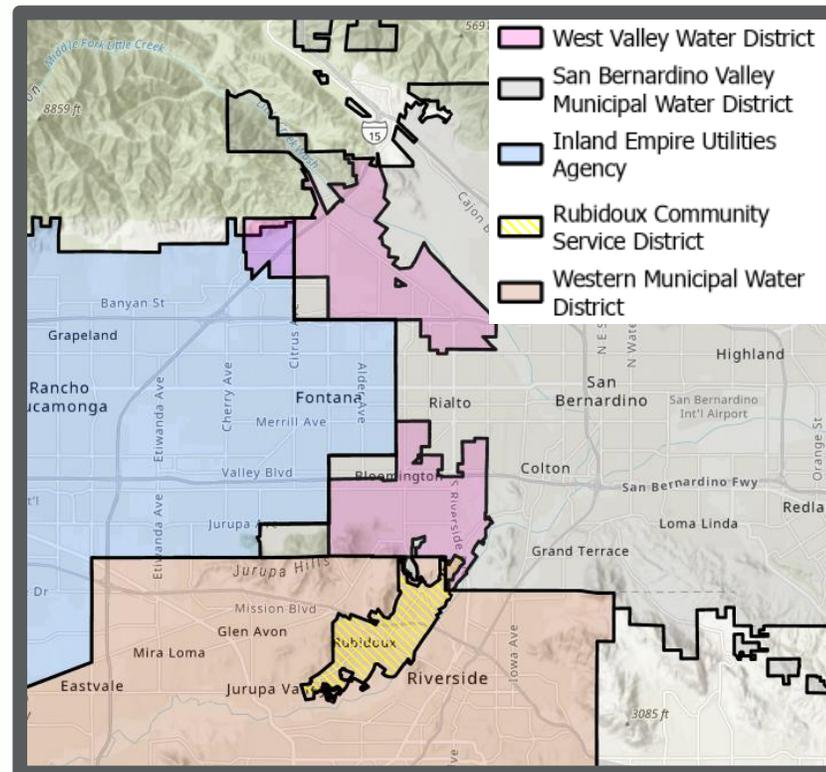
Board History on Proposed Authorization



April 2022 Authorization Request

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Board History



Staff Request

- Long-term agreement
- 2,000 AFY of MWD water deliveries
- Blend MWD deliveries with local GW supplies

Board Direction

- ~~Execute a one year agreement~~
- ~~2,000 AF of water deliveries~~
- Explore alternative solutions
- Return to Board

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Board History

March 2023 Presentation

Alternatives:

Challenges

- Desalination
 - Groundwater treatment
 - Riverside Water Quality Control Plant upgrades
 - Connect to Arlington Desalter
- Connect to Western
- Utilize another Groundwater Source
 - Bunker Hill GW supplies (6 TAF)

Board Feedback:

- Other alternatives?
- When to provide SWP supplies to agencies facing water problems
- Scarcity of SWP supplies
- Equal access to imported supplies throughout service area

Agreement to deliver water to
Western through facilities not
owned by Metropolitan or Western

Board History

April 2023 EIA Committee Panel

- Sandra Kerl
General Manager
San Diego County Water Authority



- Craig Miller
General Manager
Western Municipal Water District



- Alex Rojas
General Manager
Central Basin Municipal Water District



Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Board History

Policy Topics

Policy Topics

- Equal access to Metropolitan supplies throughout service area, especially for DACs
- Approve or restrict new and/or existing uses of Metropolitan supplies (e.g., blending)
- Reduce reliance on imported supplies from the Delta

Staff Response*

- Climate Adaptation Master Plan; Further discussions @ EIA Committee
- Future board discussion
- Delta Stewardship Council Executive Director to present state policy on reducing reliance on the Delta

* To be discussed separately from this authorization

Agreement to deliver water to
Western through facilities not
owned by Metropolitan or Western

Proposed Agreement

Policies

- No new policies required for approval
 - General Manager authorized to construct new service connections
 - Special service connections must receive Board authorization
- Metropolitan has conveyance rights in Azusa Pipeline
 - Metropolitan's Board has authorized:
 - Two new service connections off Azusa Pipeline, and
 - Water delivery agreement to IEUA using Lytle Creek turnout
- Other Policies
 - Mission Statement, Salinity Management Policy, Delivery at or near Member Agency boundary

Agreement to deliver water to
Western through facilities not
owned by Metropolitan or Western

Proposed Agreement

Agreement Terms

- Maximum delivery amount of 2,000 AFY
- Terminates November 4, 2035
- Deliveries by Metropolitan are not guaranteed and are limited by the unused capacity in the Azusa Pipeline
- Deliveries to Western under this agreement are subject to the same guidelines, procedures, and limitations applied to all Member Agencies in times of shortage
- Western will pay Metropolitan's full service untreated water rate in effect at the time of the delivery, including Capacity Charge and Readiness-to-Serve Charge

Agreement to deliver water to
Western through facilities not
owned by Metropolitan or Western

If Approved...

Delivery Process



- Parties enter into agreement



- Rubidoux constructs interconnection at no cost to Metropolitan



- Existing operational procedures for Azusa Pipeline deliveries will apply to this agreement



- Deliveries will be metered according to Metropolitan standards

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Summary



Western requests MWD water from Azusa Pipeline



Delivery infrastructure not owned by MWD or Western



Possible through MWD's capacity rights & partnerships



No additional MWD policy required for approval



Rubidoux constructs interconnection - no cost to MWD



Western pays MWD for water & follows all guidelines

Option #1

- Authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to deliver water to Western's service area through facilities not owned by Metropolitan or Western.

Option #2

- Do not authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to deliver water to Western's service area through facilities not owned by Metropolitan or Western.

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Board Options

Option #1

Agreement to deliver water to Western through facilities not owned by Metropolitan or Western

Staff Recommendation





● **Board of Directors**
One Water and Stewardship Committee

5/9/2023 Board Meeting

8-5

Subject

Review and maintain the General Manager’s implementation of the Cyclic Cost-Offset Program effective April 15, 2023, pursuant to the Program terms approved by the Board on April 9, 2019; the Program previously was determined to be exempt or otherwise not subject to CEQA

Executive Summary

The General Manager has determined that water supply conditions strongly indicate that Metropolitan is at risk of not being able to capture and store all available supplies in calendar year 2023. Given the recent State Water Project (SWP) allocation increase to 100 percent, surplus SWP supplies through Article 21, continued lower demands, and late-season storms that continued to fill replenishment basins, available supplies are projected to exceed Metropolitan’s storage capability this year. Accordingly, the General Manager initiated the Cyclic Cost-Offset Program (Program), effective April 15, 2023, pursuant to the Board’s April 2019 authorization. The implementation of the Program increases Metropolitan’s water management opportunities by helping member agencies offset costs incurred while capturing water they otherwise would not have purchased from Metropolitan. The cost-offset is limited to \$264/acre-foot, which escalates each calendar year using the Consumer Price Index (CPI).

Metropolitan provides the offset as a credit on water purchased above the member agencies’ normal deliveries pursuant to prior arrangement with the member agency and Metropolitan staff, certification, and reconciliation. The procedure to implement and continue the Program was authorized by the Board’s April 2019 action. Therefore, no board vote or action is required to continue the Program as determined and implemented by the General Manager. However, the Board may suspend the current implementation of the Program and stop the use of cost-offset credits, which would take effect no earlier than May 26, 2023. The additional time after the Board’s action to suspend would minimize disrupting deliveries already arranged with member agencies and allow for the 15-day notice of termination required under the agreements.

Details

Background

On April 9, 2019, Metropolitan’s Board authorized the General Manager to enter into agreements to provide a credit to offset costs associated with increased deliveries to cyclic accounts when the General Manager determines that availability of imported supplies exceeds Metropolitan’s ability to manage those supplies for the region. During that wet year, Metropolitan pre-delivered 19,000 AF that could not otherwise be captured by the region. The participating agencies subsequently purchased all that water from their cyclic accounts and reduced demand on Metropolitan over these past drought years.

In addition to increasing the allocation to 100 percent, DWR has also delivered 134,000 acre-feet of Article 21 supplies as of April 19. Article 21 refers to interruptible water DWR makes available to SWP contractors. Article 21 water is in addition to Table A allocation amounts. As a result of the increased SWP allocation, lower forecasted demands, Article 21 supplies delivered, and late-season storms that filled replenishment basins, staff projects up to 419,000 acre-feet of available supplies at risk of loss to the region. The amount of supplies at risk of loss may change as hydrologic conditions develop.

Metropolitan is working to meet member agency requested deliveries, repay supply obligations, and store as much water as possible in a cost-effective manner. The current strategy is to repay the Human Health & Safety water debt, SWP flexible storage, and Reverse Cyclic Program obligations, fill Diamond Valley Lake, maximize contractual storage in Metropolitan's SWP groundwater storage programs, store water in member agency conjunctive use and cyclic programs, maximize SWP carryover, store Colorado River supplies with Desert Water Agency and Coachella Valley Water District, and add water to Lake Mead either through storage in Metropolitan's Intentionally Created Surplus account or a new arrangement with the U.S. Bureau of Reclamation.

Early implementation of the Program maximizes opportunities to capture supplies, and therefore further reduces the potential magnitude of unmanaged supplies in 2023. Delays in Program implementation increase the risk of missed opportunities to capture the projected available supplies. Accordingly, the General Manager exercised the authority provided by the Board pursuant to its April 2019 action to implement the use of cost-offset credits and enter into agreements to implement the Program.

Cyclic Cost-Offset Credit Program

In order to receive the cost-offset in the form of a credit, the member agency must take an action to increase the capture of additional supplies at Metropolitan's request. Since such requests would require agencies to take deliveries beyond their normal operations, agencies may incur additional costs associated with capturing the increased supplies. Capturing additional supplies in the region may be limited if Metropolitan does not offset these additional agency costs.

The cost-offset credit helps member agencies manage the additional unplanned costs associated with capturing increased volumes of water. To qualify for the credit, the member agency must:

- (1) Receive more water from Metropolitan than it originally projected; and
- (2) Purchase the delivered water on an agreed-upon schedule at the then-applicable full-service rate within five years.

Pursuant to the General Manager's determination to implement the Program as of April 15, 2023, Metropolitan staff is working with member agencies to execute new agreements and to amend existing agreements to incorporate the 2023 credit rate. Existing cyclic agreements allow Metropolitan to manage up to 545,000 acre-feet. Metropolitan will deliver water under the Program only when there is a need to do so. Metropolitan is not required to deliver the maximum amount of water in each agreement and may terminate deliveries under the Program upon 15 days' notice if there is no longer a need.

For those agencies without existing cyclic agreements, staff is working to complete agreements as soon as possible. Like all other deliveries from cyclic accounts, the purchase of water received under the Program does not incur a Capacity Charge because the delivery is at Metropolitan's discretion. Metropolitan charges the member agency all other components of Metropolitan's full-service water rate, and the deliveries are included in the calculation of the agencies' Readiness-to-Serve Charge at the time the agency purchases the water. To determine the amount of the credit for each agency, staff considers additional costs the agency incurs to capture supplies beyond the amount originally expected. The approved increased costs then become eligible for the cost-offset credit, up to \$264/acre-foot, which was escalated from 2019 by the CPI as authorized by the Board in its original action approving the Program. To ensure Metropolitan gives credits only for deliveries of water exceeding the agency's projections, Metropolitan in its sole discretion will certify that the surplus delivery to an agency is in addition to normal deliveries. Metropolitan will void any credits given for uncertified deliveries.

Summary

Given the recent SWP allocation increase to 100 percent, the delivery of Article 21 supplies, and lower demands, water available in 2023 may exceed Metropolitan's capability to store. By initiating the cost-offset credit for deliveries into cyclic accounts, member agencies increase the amount of water delivered to the region. By increasing deliveries to the region, Metropolitan frees up future water supplies to ensure reliable deliveries to all member agencies. This water will be managed locally, which enhances supplies available either during an emergency or future dry year and increases Metropolitan's future water sales pursuant to the agency's agreement to buy that water.

Pursuant to the Board's April 9, 2019, action, continuing the implementation of the Program requires no action and, therefore, no vote by the Board. However, if the Board elects to stop the use of cost-offset credits, the Board may vote to suspend the General Manager's implementation of the Program. Staff recommends that any such suspension be effective no earlier than May 26, 2023, to avoid disrupting deliveries staff has already arranged with member agencies and allow for the 15-days' notice of termination required under the agreements. The alternative to suspend the Program's April 15, 2023 implementation, however, does not rescind the Board's April 9, 2019, action to authorize the General Manager to implement the Program, and the General Manager may implement the Program again in the future.

Policy

Metropolitan Water District Administrative Code Section 4209: Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 50793, dated April 10, 2017, the Board authorized the General Manager to enter into cyclic agreement with Metropolitan's member agencies.

By Minute 50888, dated July 11, 2017, the Board authorized the General Manager to enter into cyclic agreements providing a credit of up to \$225 per acre-foot for in-lieu deliveries.

By Minute Item 51563, dated April 9, 2019, the Board approved the General Manager to enter into Cyclic Cost-Offset Credit Program Agreements providing a credit of up to \$225 per acre-foot for deliveries, to be escalated per CPI.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1 and #2:

The Program was previously determined to be categorically exempt under the provisions of CEQA and the State CEQA Guidelines. More specifically, the General Manager found the Program to be exempt under Class 1, Section 15301 of the State CEQA Guidelines on April 9, 2019. The proposed action involves review and consideration of current Program activities and whether to suspend them but does not involve any substantial changes to the Program itself. Accordingly, no further CEQA documentation or determination is necessary for the Board to act with regard to the proposed action.

Board Options

Option #1

Review and maintain the General Manager's implementation of the Cyclic Cost-Offset Program effective April 15, 2023, pursuant to the Program terms approved by the Board on April 9, 2019 (No motion or vote is required for this option; the Report will be received and filed.)

Fiscal Impact: Up to \$264 per acre-foot cost-offset credit to participating member agencies in 2023. The total cost to Metropolitan will depend on the duration of the Program and the deliveries actually made pursuant to the Program. Though the use of this Program was not budgeted for in this biennium, the combined Water Supply and State Water Project budget remain under budget, which can be used to pay for the Program.

Business Analysis: Metropolitan would improve regional reliability through the delivery of water to the region that would have otherwise been lost. The additional cost to manage such water at an amount not to exceed \$264 per acre-foot is less than Metropolitan's average cost of approximately \$300 per acre-foot to store water in its SWP storage programs. Further, the delivery of the supplies to the region incurs lower power costs in wet years than in dry years because of higher hydroelectric generation on the State Water Project. Metropolitan will also generate additional revenue from its ability to sell the additional water it is able to receive and store pursuant to the Program.

Option #2

Suspend the Cyclic Cost-Offset Credit Program implementation by the General Manager on April 15, 2023, effective no earlier than May 26, 2023.

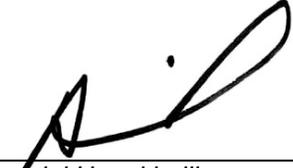
Fiscal Impact: The cost of the credits will be limited to eligible deliveries made under the Program between April 15, 2023, and May 26, 2023. Thereafter, fiscal impact includes potential loss of water that may be sold in the future and an increase in costs to acquire additional water for the region in the future through other means.

Business Analysis: Suspending the credit in cyclic agreements would decrease the water supplies available to the region in 2023 and in the future.

Staff Recommendation

Option #1, which requires no vote by the Board.

	5/2/2023
_____ Brad Coffey Manager, Water Resource Management	Date

	5/3/2023
_____ Adel Hagekhalil General Manager	Date

Ref# 12696833



One Water and Stewardship Committee

Review and maintain the General Manager's implementation of the Cyclic Cost-Offset Program effective April 15, 2023 pursuant to the Program terms approved by the Board on April 9, 2019; the Program previously was determined to be exempt or otherwise not subject to CEQA

Item 8-5

May 8, 2023

Cyclic Cost-Offset Program (CCOP)

Background

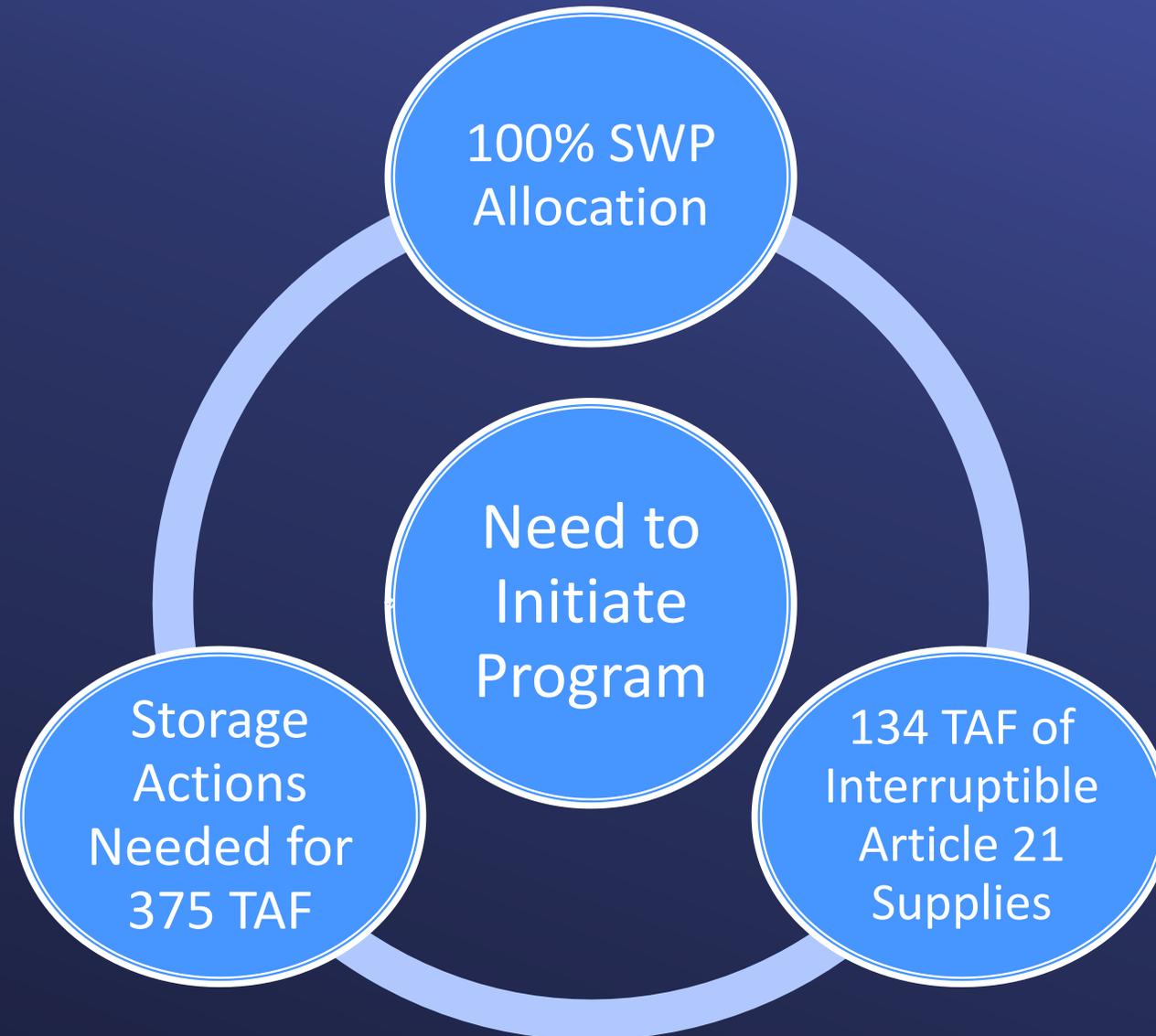
- Board Authorization April 2019
- General Manager authority to:
 - Issue cost offset in form of a credit to member agencies to capture additional water in cyclic accounts when
 - Risk of not capturing all available imported supplies
 - Member agency increases capture and incurs costs above normal supplies

Cyclic Cost-Offset Program (CCOP)

Terms

- Member agency must:
 - Receive more water than originally projected
 - Purchase the delivered water on an agreed-upon schedule within five years
- Deliveries at Metropolitan's discretion
 - No capacity charge
- Water purchased at full-service water rate in effect at time of purchase
- Cost offset up to \$264 per acre-foot

2023 Water Supply Conditions



Cyclic Program

Background

- Existing cyclic agreements
 - 24,000 acre-feet balance as of Jan. 2023
 - 545,000 acre-feet total capacity
- Metropolitan working to maximize puts to cyclic accounts
 - 144,000 acre-feet planned to deliver in 2023

Burbank	Pasadena
Calleguas MWD	Municipal Water District of OC
Three Valleys MWD	Upper San Gabriel Valley MWD
Eastern MWD	Western MWD
Rancho California Water District via EMWD and/or WMWD	San Diego County Water Authority

Cyclic Cost-Offset Program (CCOP)

Cyclic Cost-Offset Program

- Nine (9) agreements and drafting new agreements with three (3) member agencies
 - Establishing operating plans with member agencies
 - Deliver water when needed
 - Regularly report to OWS committee
- Coordinating pre-deliveries with member agencies
 - Plan to deliver 22,000 acre-feet
 - Additional deliveries expected

Cyclic Cost-Offset Program (CCOP)

Summary

- Water available in 2023 exceeds Metropolitan's capability to store
- Member agencies help increase the amount of water brought to the region
 - Supplies managed locally within five years
 - Dry-years
 - Emergencies
- Staff will monitor water supply conditions
 - Will stop when risk of exceeding storage ability greatly reduced

Board Options

Options

Option #1:

Review and maintain the General Manager's implementation of the Cyclic Cost-Offset Program effective April 15, 2023, pursuant to the Program terms approved by the Board on April 9, 2019 (No motion or vote is required for this option; the Report will be received and filed.)

Option #2:

Suspend the Cyclic Cost-Offset Credit Program implementation by the General Manager on April 15, 2023, effective no earlier than May 26, 2023.

Board Options

Staff Recommendation

- Review and maintain
- No motion or vote needed





One Water and Stewardship Committee

Review of Draft Supplemental Environmental Impact Statement for Colorado River Interim Guidelines

Item 7a

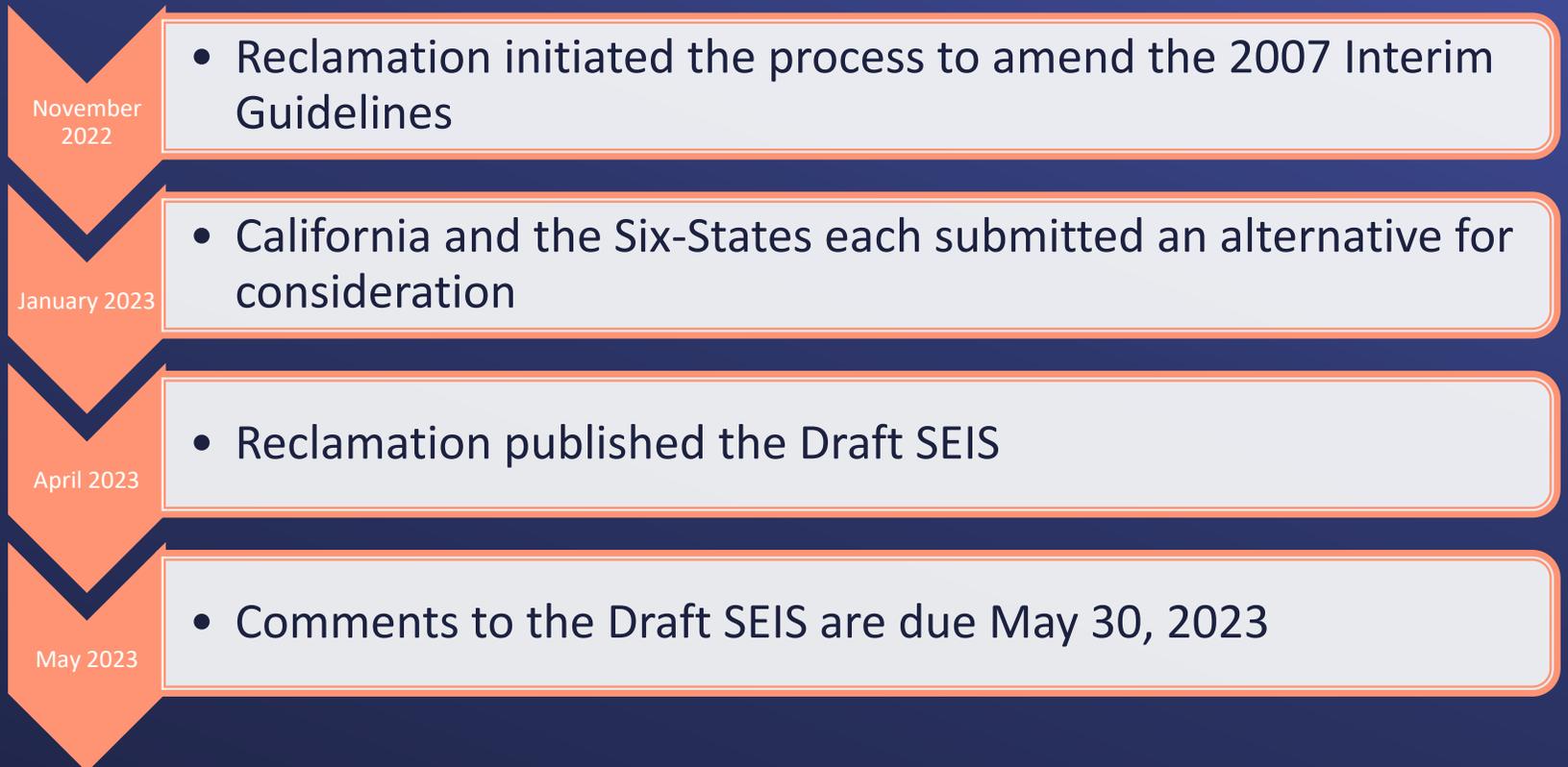
May 8, 2023

Draft SEIS

2007 Interim Guidelines SEIS

The Bureau of Reclamation (Reclamation) is developing a Supplemental Environmental Impact Statement (SEIS) under the National Environmental Protection Act (NEPA)

Progress to Date



Draft SEIS

Draft SEIS Alternatives

The Draft SEIS notes the alternatives submitted by the Colorado River Basin States, but developed its own alternatives for analysis in this SEIS process.

Three Alternatives Analyzed

- **Alternative 1:** reduces deliveries in the Lower Basin according to priority
- **Alternative 2:** reduces deliveries to all Lower Basin water users on a pro-rata basis
- No Action Alternative
- *Draft SEIS did not identify a preferred alternative*

Proposed Federal Action

- Reclamation proposes revisions of the 2007 Interim Guidelines for the near-term operation of Glen Canyon and Hoover Dams starting in 2024.
- The Draft SEIS noted that modified operating guidelines would also inform potential operations in 2025–2026.

Draft SEIS

Draft SEIS Alternatives

Reclamation did not identify a preferred alternative in the Draft SEIS, and may modify the alternatives analyzed in the Final SEIS and Record of Decision

Impacts on Metropolitan

- Alternative 1: Priority
 - Metropolitan takes increasingly large shortages when Lower Basin shortages are 2.083 – 4 maf
 - All of Metropolitan's Priority 3a and Priority 4 entitlements are shorted when Lower Basin shortages reach 3.67 maf
- Alternative 2: Pro-rata basis
 - Metropolitan takes pro-rata shortages when Lake Mead elevation is below 1,090 feet
 - The highest percentage of reduction, 15.5%, occurs at Lake Mead elevation 1,035 – 1,040 feet

Draft SEIS

Alternatives 1 & 2

No new shortages were modeled for Mexico.

Common Elements

- **Make changes to operations of Lake Powell/Glen Canyon Dam:**
 - Reduce releases when Lake Powell is at or below elevation 3,575 feet to protect elevation 3,500 feet
- **Increase Lower Basin shortages**
- **Model maximum shortages and Drought Contingency Plan Contributions**
 - 2.083 maf in 2024
 - 4.0 maf in 2025-26

Changes to Coordinated Reservoir Operations

Draft SEIS

Under both action alternatives, releases from Lake Powell decline below elevation 3,575 feet.

The initial release would be 6.0 maf, with April adjustments up to 8.23 maf.

Replaces the Lower Elevation Balancing Tier with “Protection Level”.

Table 2-10
Comparison of Coordinated Reservoir Operations by Alternative

Lake Powell Elevation (feet)	No Action Alternative	Action Alternatives 1 and 2	Lake Powell Active Storage (maf) ¹
3,700	Equalization Tier Equalize, avoid spills, or release 8.23 maf	Equalization Tier Equalize, avoid spills, or release 8.23 maf	23.31
3,636–3,666 (see Table 2.3-1 in the 2007 FEIS)	Upper Elevation Balancing Tier Release 8.23 maf; if Lake Mead <1,075 feet, balance contents with a minimum/maximum release of 7.0/9.0 maf	Upper Elevation Balancing Tier Release 8.23 maf; if Lake Mead <1,075 feet, balance contents with a minimum/maximum release of 7.0/9.0 maf	14.65–18.36 (2008–2026)
3,575	Mid-Elevation Release Tier Release 7.48 maf; if Lake Mead <1,025 feet, release 8.23 maf	Lower Elevation Release Tier Set initial release: 6.0 maf; adjust releases based on April Lake Powell end-of-water-year elevation projection: ≥3,575 feet, release 8.23 maf <3,575 feet AND ≥3,550 feet, release 7.48 maf <3,550 feet AND ≥3,525 feet, release 7.0 maf	8.90
3,525	Lower Elevation Balancing Tier Balance contents with a minimum/maximum release of 7.0/9.5 maf	<3,525 feet AND ≥3,500 feet, maintain release of 6.0 maf <3,500 feet, then reduce releases (gains equals losses) such that Lake Powell ends the operating year at 3,500 feet	5.55
3,500		Protection Level <3,500 feet in any month, reduce releases (gains equals losses) such that Lake Powell ends the operating year at 3,500 feet	4.22
3,370			0

¹Active storage values have been updated from 2007 based on the 2018 bathymetry.

Draft SEIS

Alternative 1: Priority

California begins to share in shortage when no Arizona fourth priority Colorado River water is available. The Central Arizona Project and other post-1968 rights are fourth priority.

Lower Basin Shortage Modeling Assumptions

- Stage 1 shortages:
 - Nevada: 4%
 - Arizona: 96%
 - California: take no Stage 1 shortages
- Stage 2 shortages:
 - Nevada: 4%
 - Arizona: 19.6%
 - California: 76.4%

**Table 2-4
Lower Division States' Shortages and DCP Contributions by State, Action Alternative 1
(2024)**

Lake Mead Elevation (feet)	2007 ROD Shortage + 2019 DCP Contributions (1,000 af)				2024 Action Alternative 1 Additional Shortage* (1,000 af)				2024 Total Shortages + Contributions (1,000 af)			
	AZ	NV	CA	Total	AZ	NV	CA	Total	AZ	NV	CA	Total
1,090 – >1,075	192	8	0	200	192	8	0	200	384	16	0	400
1,075 – 1,050	512	21	0	533	511	22	0	533	1,023	43	0	1,066
<1,050 – >1,045	592	25	0	617	593	24	0	617	1,185	49	0	1,234
1,045 – >1,040	640	27	200	867	1,025	42	0**	1,067	1,665	69	200	1,734***
1,040 – >1,035	640	27	250	917	1,098	56	12	1,166	1,738	83	262	2,083
1,035 – >1,030	640	27	300	967	1,098	56	0**	1,154	1,738	83	300	2,083***
1,030 – 1,025	640	27	350	1,017	1,098	56	0**	1,154	1,738	83	350	2,083***
<1,025 – 1,000	720	30	350	1,100	1,018	53	0**	1,071	1,738	83	350	2,083***
<1,000 – 975	720	30	350	1,100	1,018	53	0**	1,071	1,738	83	350	2,083***
<975 – 950	720	30	350	1,100	1,018	53	0**	1,071	1,738	83	350	2,083***
<950	720	30	350	1,100	1,018	53	0**	1,071	1,738	83	350	2,083***

Table 3-1
Lower Division States' Shortages and Contributions by State, Action Alternative 1
(2025–2026)
(All volumes in 1,000 af)

Lake Mead Elevation (feet)	2007 ROD Shortage + 2019 DCP Contributions				2025–2026 Action Alternative 1 Additional Shortage*				2025–2026 Total Shortages and Contributions			
	AZ	NV	CA	Total	AZ	NV	CA	Total	AZ	NV	CA	Total
1,090 – >1,075	192	8	0	200	192	8	0	200	384	16	0	400
1,075 – 1,050	512	21	0	533	511	22	0	533	1,023	43	0	1,066
<1,050 – >1,045	592	25	0	617	593	24	0	617	1,185	49	0	1,234
1,045 – >1,040	640	27	200	867	1,025	42	0**	1,067	1,665	69	200	1,734***
1,040 – >1,035	640	27	250	917	1,098	56	12	1,166	1,738	83	262	2,083
1,035 – >1,030	640	27	300	967	1,131	63	89	1,131	1,771	90	389	2,250
1,030 – 1,025	640	27	350	1,017	1,180	73	230	1,180	1,820	100	580	2,500
<1,025 – 1,000	720	30	350	1,100	1,198	90	612	1,900	1,918	120	962	3,000
<1,000 - 975	720	30	350	1,100	1,263	103	867	2,233	1,983	133	1,217	3,333
<975 - 950	720	30	350	1,100	1,329	117	1,122	2,567	2,049	147	1,472	3,667
<950	720	30	350	1,100	1,394	130	1,376	2,900	2,114	160	1,726	4,000

Draft SEIS

Alternative 2: Pro-Rata

In Alternative 2, reductions would be made on all Lower Basin water users on a pro-rata basis. The percentage of reduction is based on Lake Mead elevations.

Lake Mead Elevation (feet)	2007 ROD Shortages + 2019 DCP Contributions (1,000 af)				2024 Additional Shortage* (1,000 af)				
	AZ	NV	CA	Total	Percentage Additional Reduction**	AZ	NV	CA	Total
1,090 – >1,075	192	8	0	200	2.67%	75	8	117	200
1,075 – 1,050	512	21	0	533	7.11%	199	21	313	533
<1,050 – >1,045	592	25	0	617	8.23%	230	25	362	617
1,045 – >1,040	640	27	200	867	11.56%	324	35	509	867
1,040 – >1,035	640	27	250	917	15.55%	435	47	684	1,166
1,035 – >1,030	640	27	300	967	14.88%	417	45	655	1,116
1,030 – 1,025	640	27	350	1,017	14.21%	398	43	625	1,066
<1,025 – 1,000	720	30	350	1,100	13.11%	367	39	577	983
<1,000 – 975	720	30	350	1,100	13.11%	367	39	577	983
<975 – 950	720	30	350	1,100	13.11%	367	39	577	983
<950	720	30	350	1,100	13.11%	367	39	577	983

Draft SEIS

Changes in Conditions

The September CRMSS was
used for modeling the Draft
SEIS

Unregulated Inflow Forecasts into Lake Powell

- In September 24-Month Study
 - 8.30 maf
 - 86% of average
- In April 24-Month Study
 - 14.47 maf
 - 151% of average

Draft SEIS

Changes in Conditions

The most probable inflow forecast, the April 2023 24-Month Study projects a balancing release of 9.50 maf from Lake Powell in WY 2023

Forecasts for Reservoir Elevation

- September 24-Month Study Most Probable scenario end of 2023 projected elevations:
 - Lake Powell - 3,525 feet
 - Lake Mead - 1,023 feet
- April 24-Month Study Most Probable scenario end of 2023 projected elevations:
 - Lake Powell - 3,573 feet
 - Lake Mead - 1,068 feet

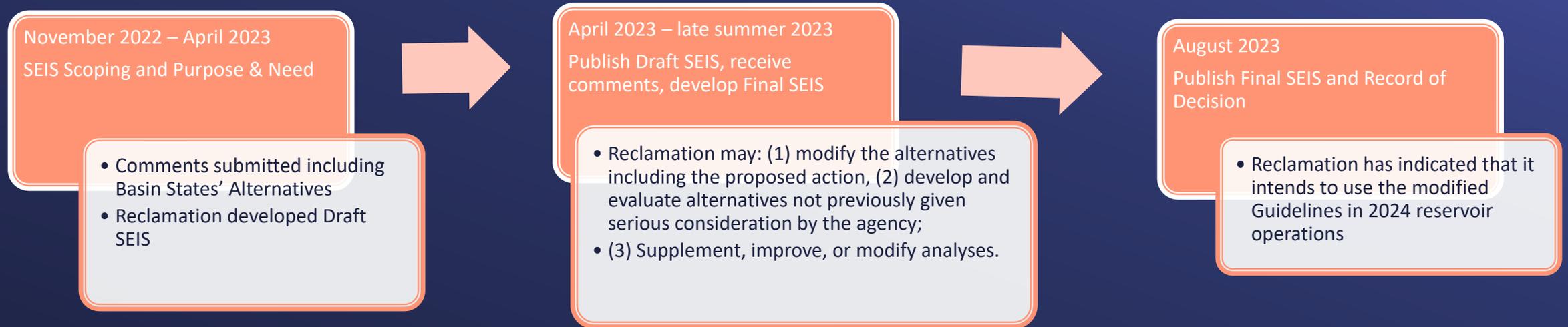
Changes in Conditions

5-Year Probabilistic Projections that Lake Powell and Lake Mead will fall below certain critical reservoir elevations

Chance of Reaching Critically Low Reservoir Elevations

- Lake Powell reaching 3,525 feet
 - January 2023 CRMSS
 - WY 2024: 37%
 - WY 2025: 30%
 - WY 2026: 23%
 - April 2023 CRMSS
 - WY 2024: 0%
 - WY 2025: 0%
 - WY 2026: 3%

SEIS Process and Proposed Schedule



Recent Developments & Next Steps

- Provide updates and receive Board input and direction
- Continue discussions with Basin States and the Interior Department regarding options for agreement about how to operate the Colorado River reservoirs through 2026
- Develop comments to Draft SEIS in advance of the comment deadline





One Water and Stewardship Committee

Science Update – Salmon Update

Item 7b

May 8, 2023

Salmon Fishery Closure Draws Local and National Attention

“No California salmon: Fishery to be shut down this year”

-- Cal Matters, 3/15/2023

“Salmon fishing banned along California coast as population plummets”

-- Los Angeles Times, 3/15/2023

“California Salmon Stocks Are Crashing. A Fishing Ban Looks Certain”

-- New York Times, 4/3/2023

Pacific Fishery Management Council

Council Develops Fishery Management Plan

- Council – state & tribal representatives, commercial & recreational fishing interests
- Management measures recommended to the National Marine Fisheries Service



Closure applies to Chinook salmon fishery south of Cape Falcon

California salmon stocks

Target stocks

- Klamath River Fall Chinook
 - declared overfished in 2018
- Sacramento River Fall Chinook
 - declared overfished in 2018; rebuilt in 2021

Protected stocks

- California Coastal Chinook
 - Threatened
- Sacramento River Winter Chinook
 - Endangered
- Central Valley Spring Chinook
 - Threatened



This map is for reference only and is not intended for use in navigation or fishery regulation.

2023 Preseason Conditions

Klamath River Fall Chinook

- 26,238 predicted potential spawners prior to fishing (goal 40,700)
- Max harvest rate of 10% when predicted spawners <54,267
- 3-year spawner abundance mean is 25,857 (<30,525 is considered overfished)

2023 Preseason Conditions

Sacramento River Fall Chinook

- Pre-season forecast of 169,000 salmon in ocean
- 122,000 – 180,000 target escapement
 - Escapement is the number of fish that "escape" the fishery to return to the rivers to spawn
- Spawner abundance below escapement floor of 122,000 in six of last eight years
- 3-year spawner abundance mean is 96,613 (<91,500 is considered overfished)

Chronic Forecast Bias

Sacramento River Fall Chinook

- Pre-season forecasts of salmon in the ocean have been higher than post-season estimates in 6 of the last 8 years by 41%
- Harvest rates estimated post-season higher than projected pre-season harvest rates by 31%
- Post-season estimates of escapement below pre-season forecasts in 7 of the last 8 years

Council Decision

Management alternatives

- Highly constrained fishery with risk of not meeting escapement goals and contributing to overfished status

OR

- Close fishery for 2023

"Given this information, both California & Oregon representatives from all sectors recommended a full closure of all Chinook directed fisheries before September 1."

– PFMC 03/06/23

Why were there so few salmon at sea this year?

Consecutive Years of Low Escapement & Poor Freshwater Conditions in Sacramento River

Spawning Escapement (t=0)	Incubation Temperature (Oct-Dec t=0)	February Median Flow (t+1)	Seabird Marine Predation Index (t+1)	Chinook Age in Fall 2023
2018: 71,689 (low)	11.7°C (poor)	21,700 cfs (high)	Near average	5
2019: 121,600 (met goal)	11.3°C (suboptimal)	6,030 cfs (very low)	Near average	4
2020: 100,100 (low)	11.5°C (poor)	6,015 cfs (very low)	Near average	3
2021: 73,230 (low)	13.0°C (very poor)	4,925 cfs (very low)	Near average	2

Table 3.2; 2022-2023 California Current Ecosystem Status Report

Salmon Recovery is Important

Build Capacity To Weather Future Droughts

- Sacramento and Klamath Chinook salmon stocks are in depressed state
- Drought is hard on salmon
- Little room for error
- Recovering salmon populations promotes reliability of the fishery, water supply, healthy waterways, and their cultural value





One Water and Stewardship Committee

Annual Climate Action Plan and Update on Climate Vulnerability and Risk Assessment

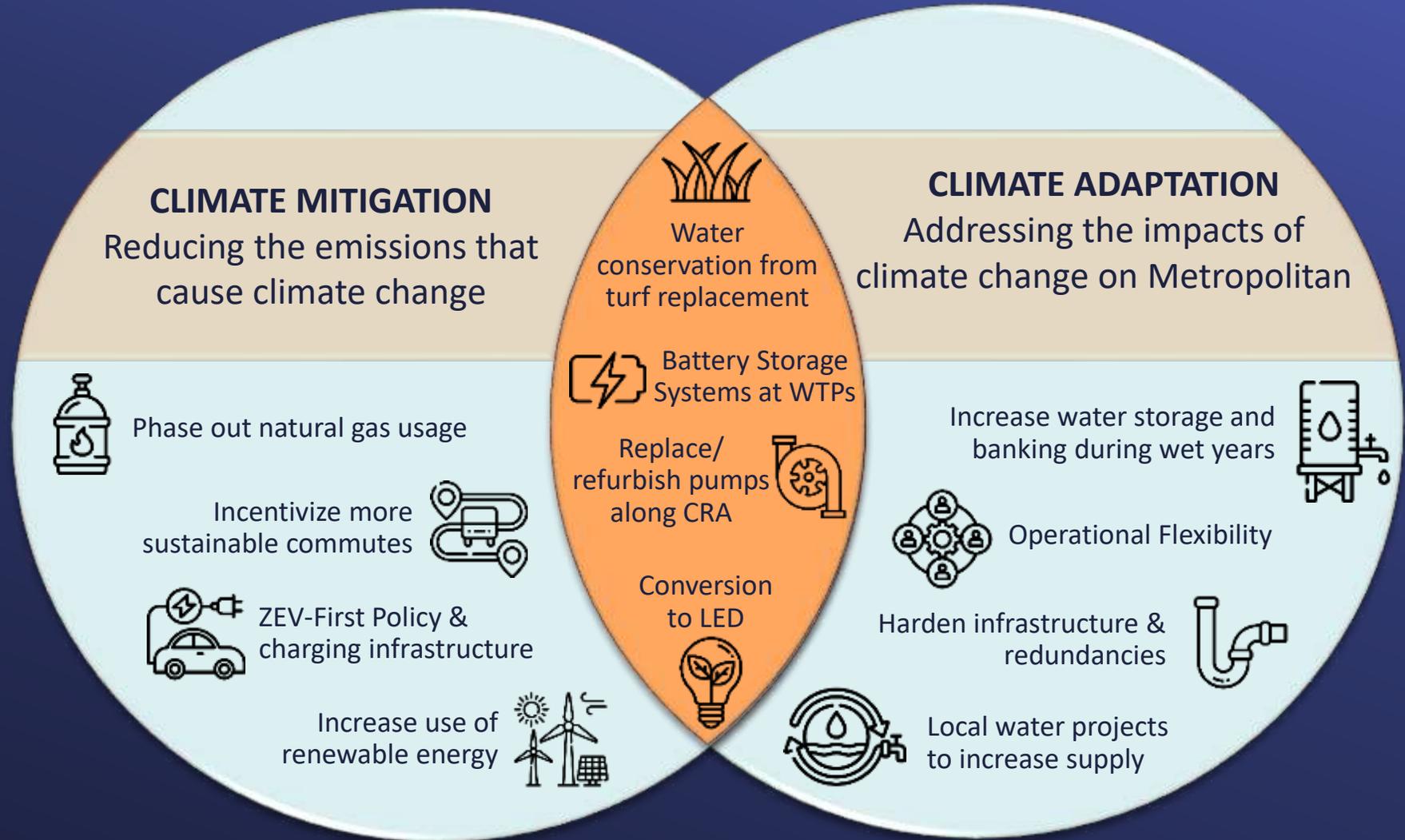
Item 7c

May 8, 2023

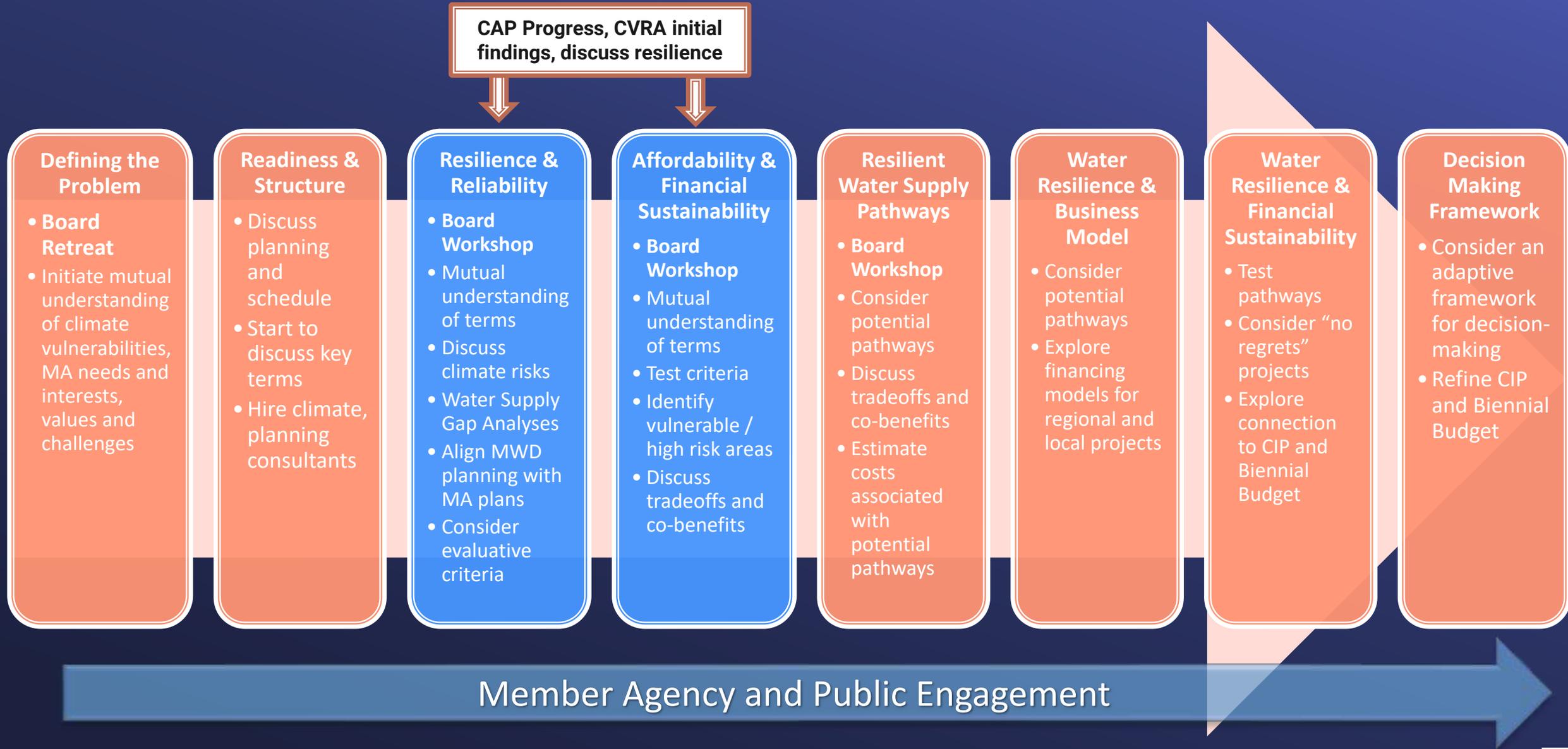
Increasing **Climate** Resilience

Resilience

Metropolitan builds climate resilience by continuing to reduce its GHG emissions & by investing to manage more frequent & severe climate hazards.



Climate Adaptation Master Planning **Process**



CAP Progress Update

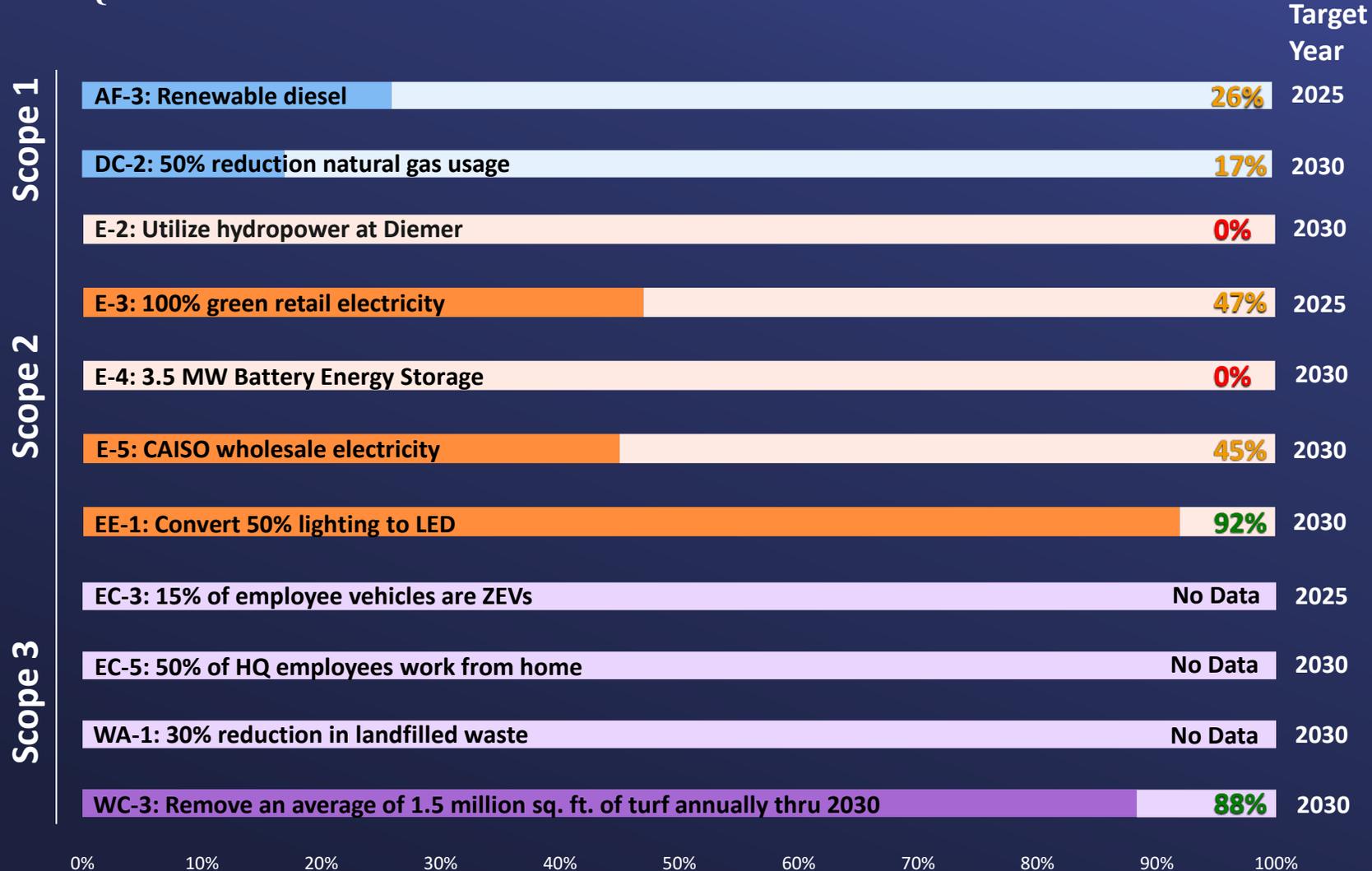
Climate Mitigation

Key Actions & Successes

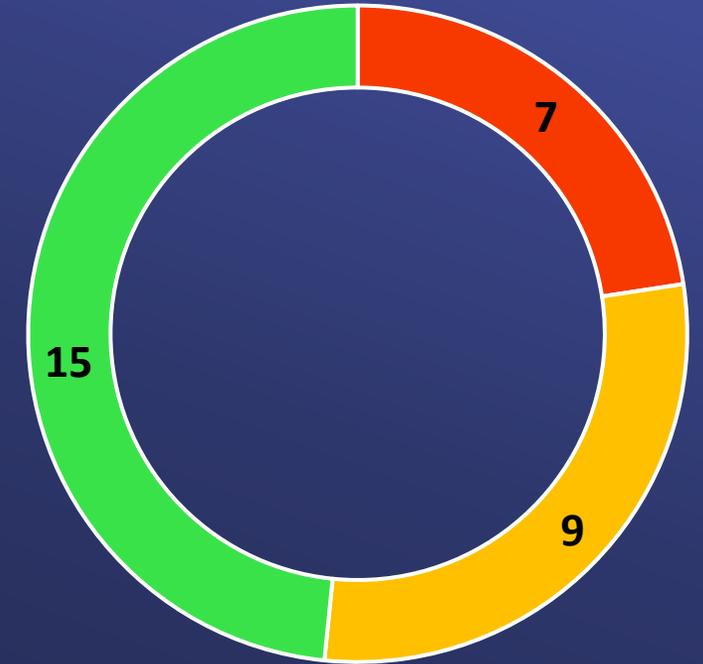
- SRI Office and SRI Council formed to ensure CAP success
- Formed the Zero Emission Vehicle Executive Task Force
- Saved 93,500 MT CO₂e in 2021 by implementing green energy procurement measures due to Measure E-5
- Significantly outperforming the turf replacement and water savings targets set in Measure WC-3
- Ahead of schedule in retrofitting lighting to LED technologies
- Renewable diesel pilot project completed in 2021 at Lake Mathews fuel depot
- Three Battery Energy Storage System (BESS) projects have been planned with completion date targets of late 2023 (Weymouth WTP) and early 2025 (Skinner and Jensen WTPs)

Summary of Implementation Progress

Quantifiable Measures



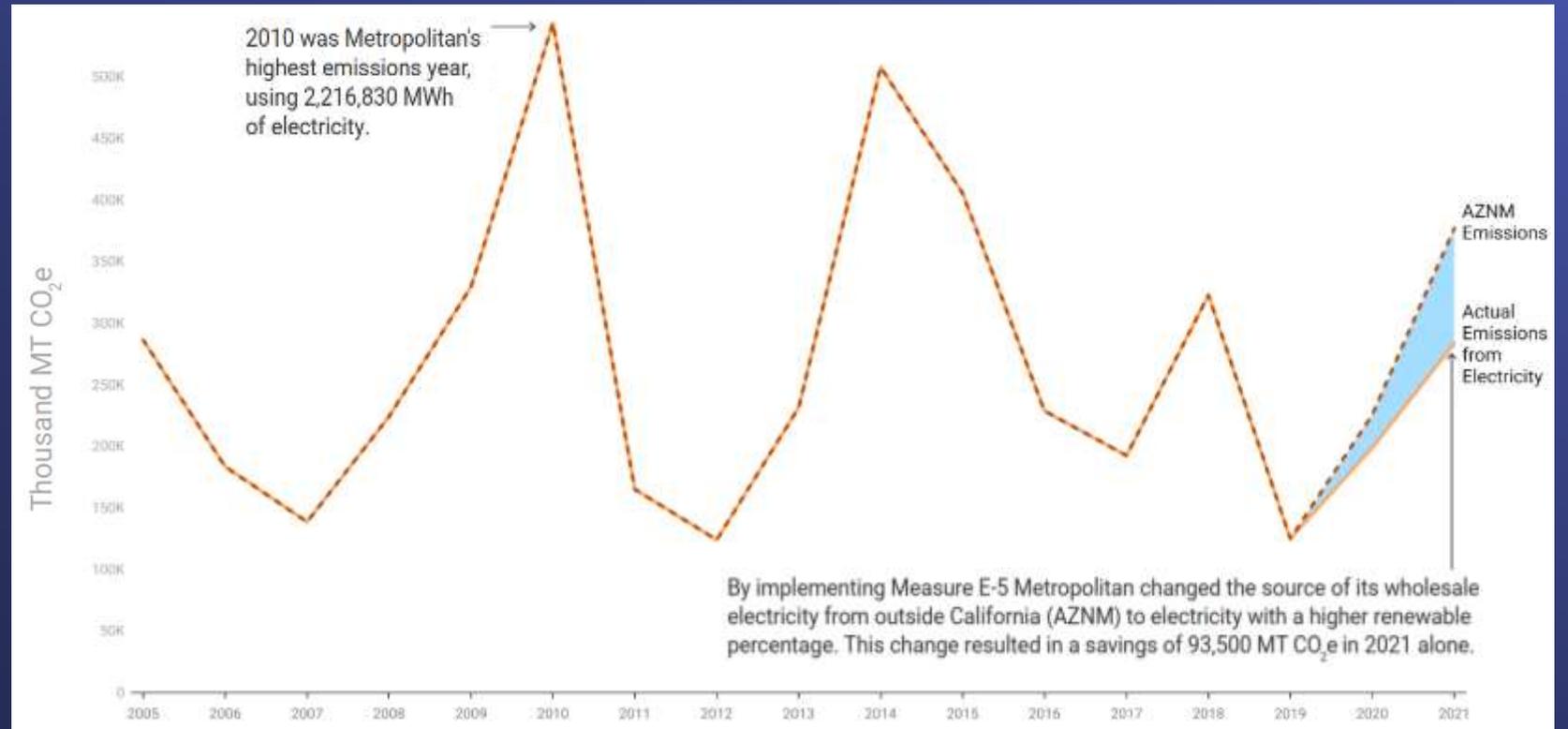
Supportive Measures



- No Action or Pending
- Underway
- Complete or Ongoing

Measure E-5

Switching to CAISO from AZNM electricity for CRA pumping led to emissions savings

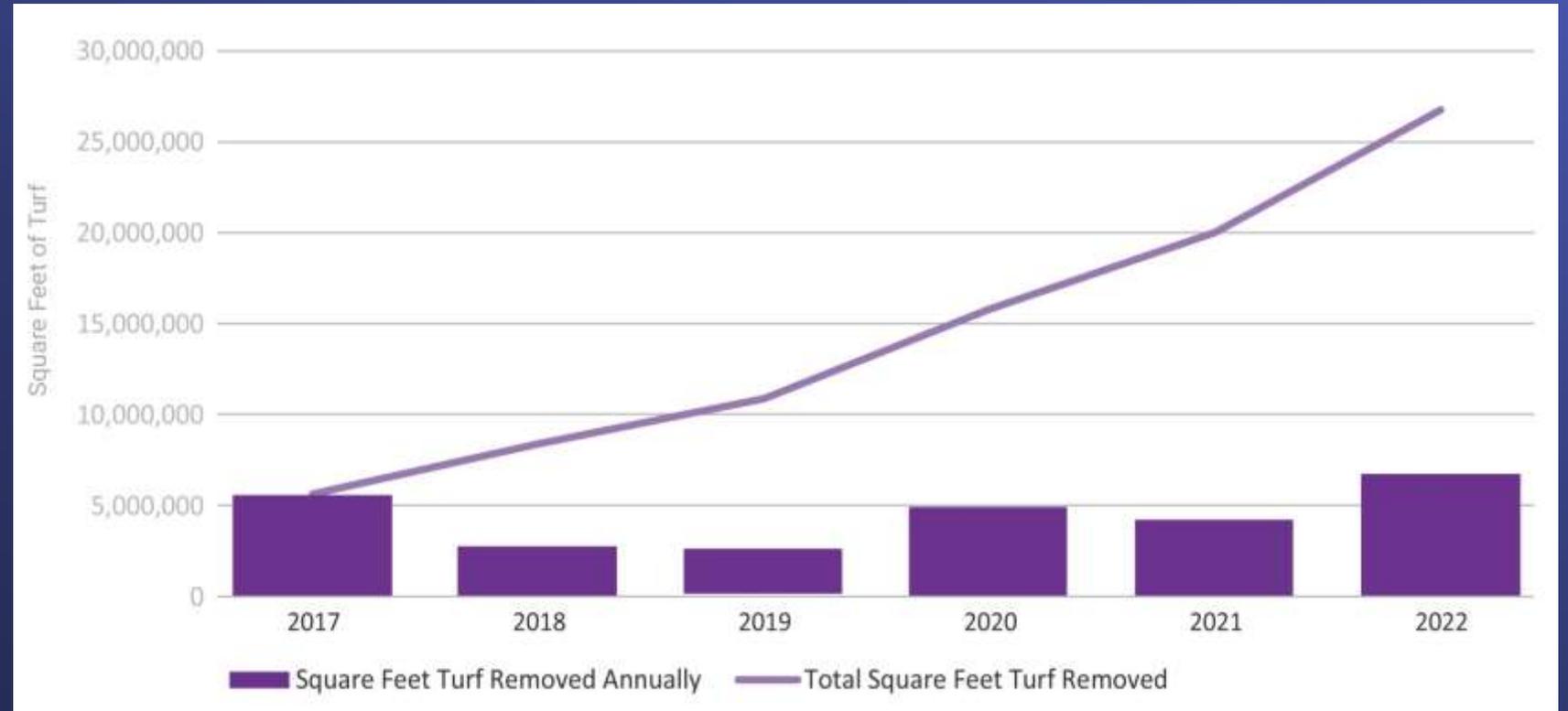


Saved **93,500 MT CO₂e** in 2021 by implementing energy procurement measures due to Measure E-5.

This is equivalent to taking **20,807 gasoline-powered cars** off the road for one year.

Measure WC-3

Achieved 88% of the 2030 turf removal target



The estimated water savings from turf replacement projects in Metropolitan’s service area from 2017 through 2022 is approximately **9,393 acre-feet**, which translates to saving an average of 855 MT CO₂e per year.

This is equivalent to saving over **4,600 Olympic-sized swimming pools** of water since 2017 and taking 190 cars off the road per year.

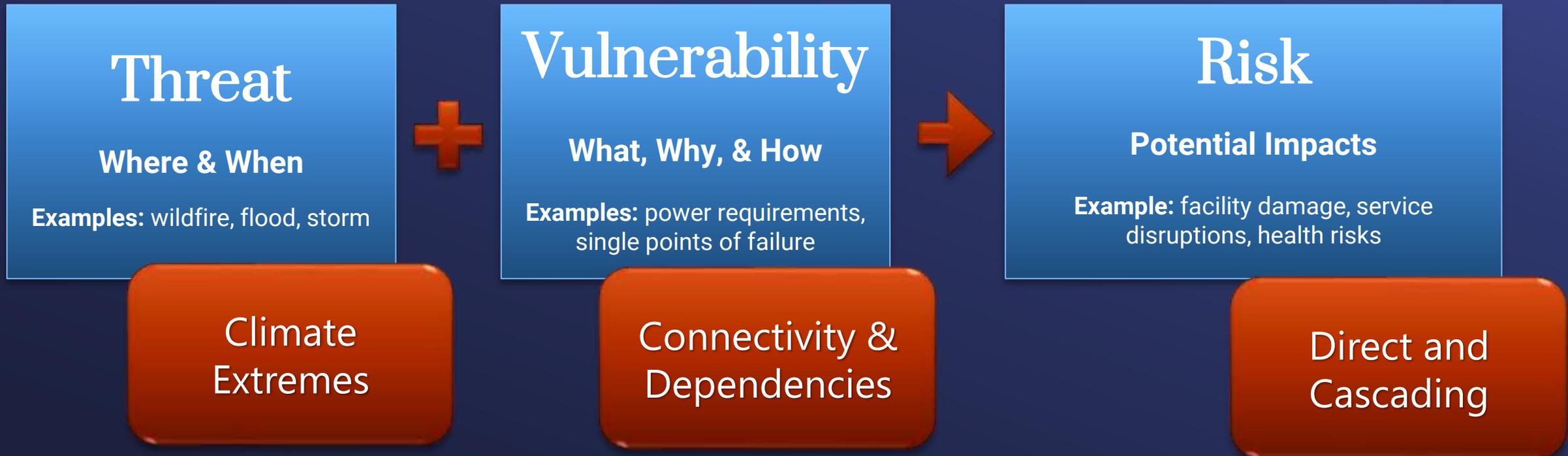
Climate Vulnerability & Risk Assessment

Climate Adaptation



Lake Mead Reservoir

Climate Vulnerability & Risk Assessment



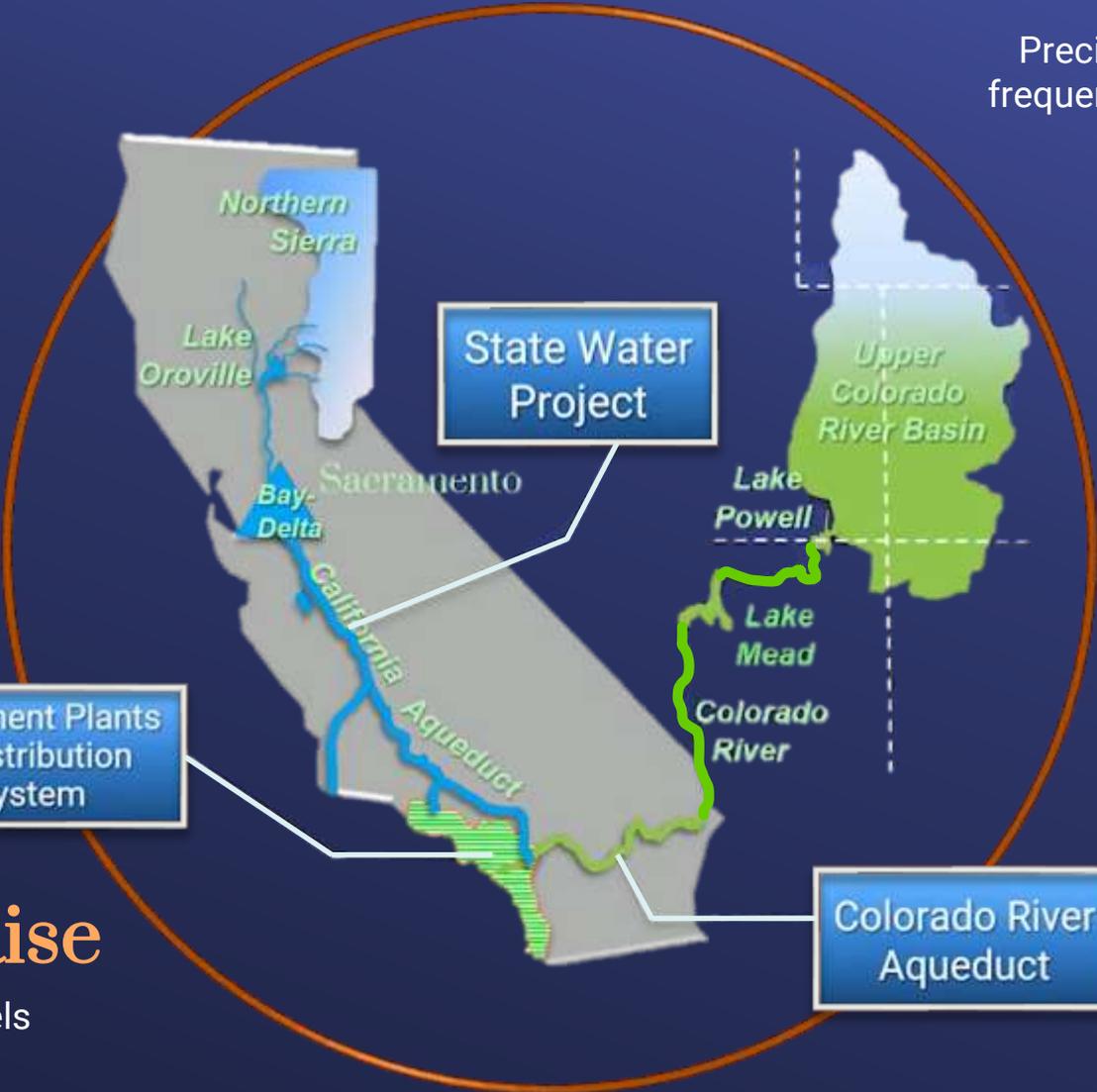
Severe Storms

Precipitation from larger and less frequent events (Climate Whiplash)



Wildfire

Larger and more intense



Drought

More frequent and extended



Sea Level Rise

Increased global sea levels

Extreme Heat

High temperatures over extended periods

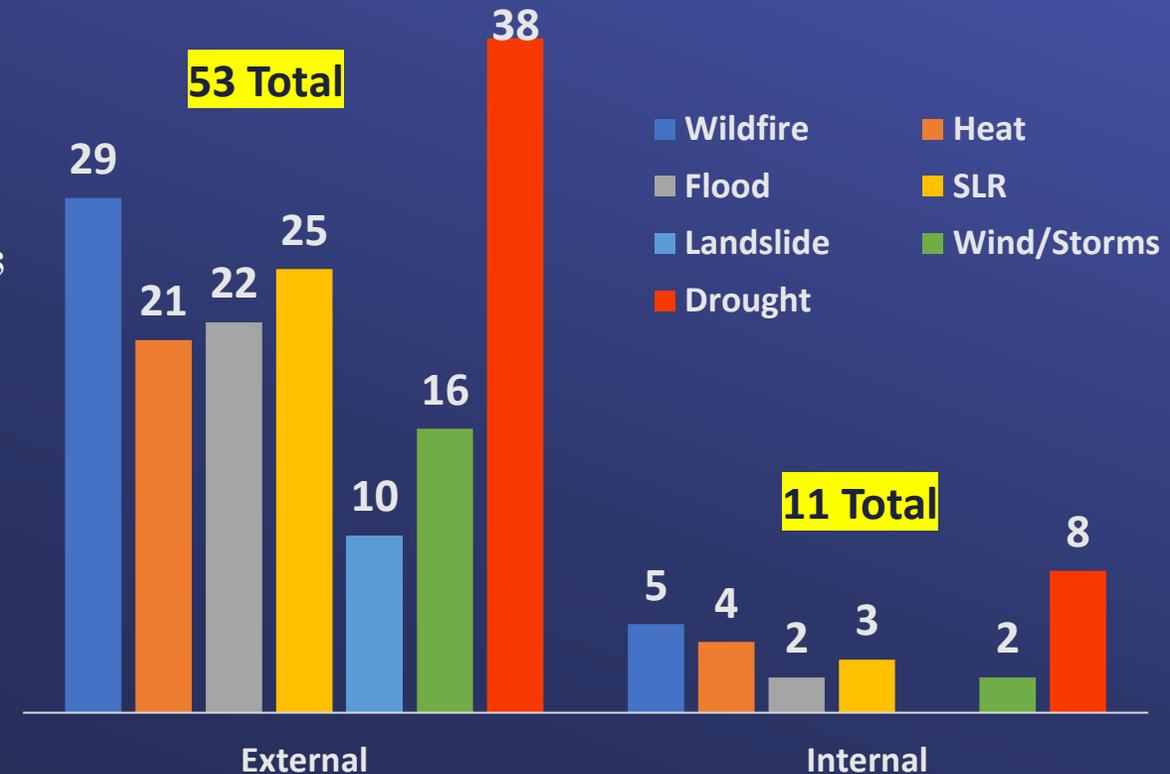


Literature Review

64 Total Documents:
11 Internal and 53 External

Cited:
Municipal Water Agencies
Ground Water Agencies
Energy Utilities
Counties
CA State Agencies
Federal Agencies
Fire Departments
Academic

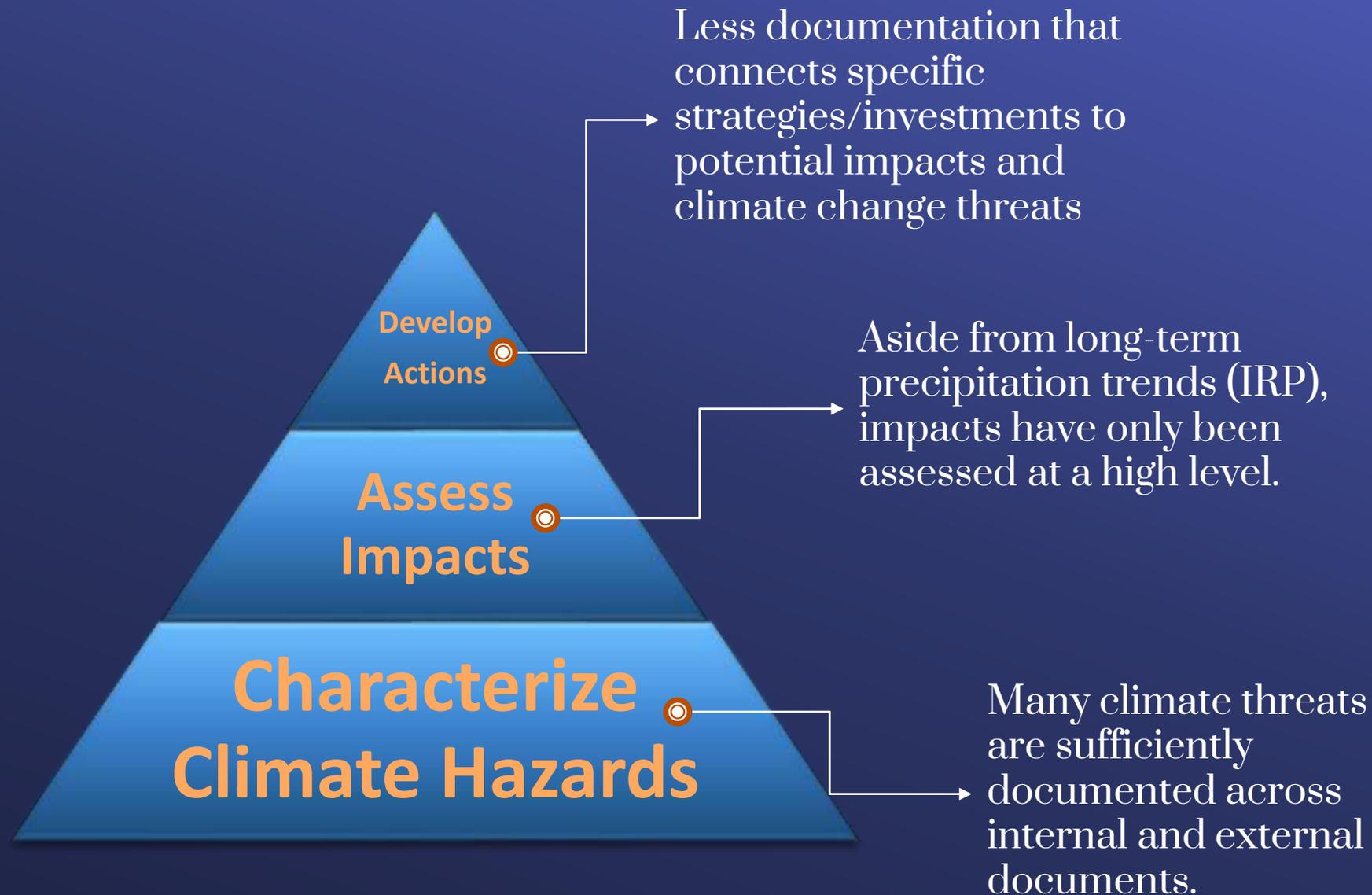
Identified Climate Hazards



- Drought and Wildfire were the most assessed climate hazards
- Energy-related documents thoroughly identified climate hazards

Initial Findings

Documentation **decreases** across the spectrum of characterizing hazards, assessing impacts, & developing adaptation actions



Castaic Lake Turbidity Event

Metropolitan is already
managing climate
extremes

Characterize
Climate Hazards

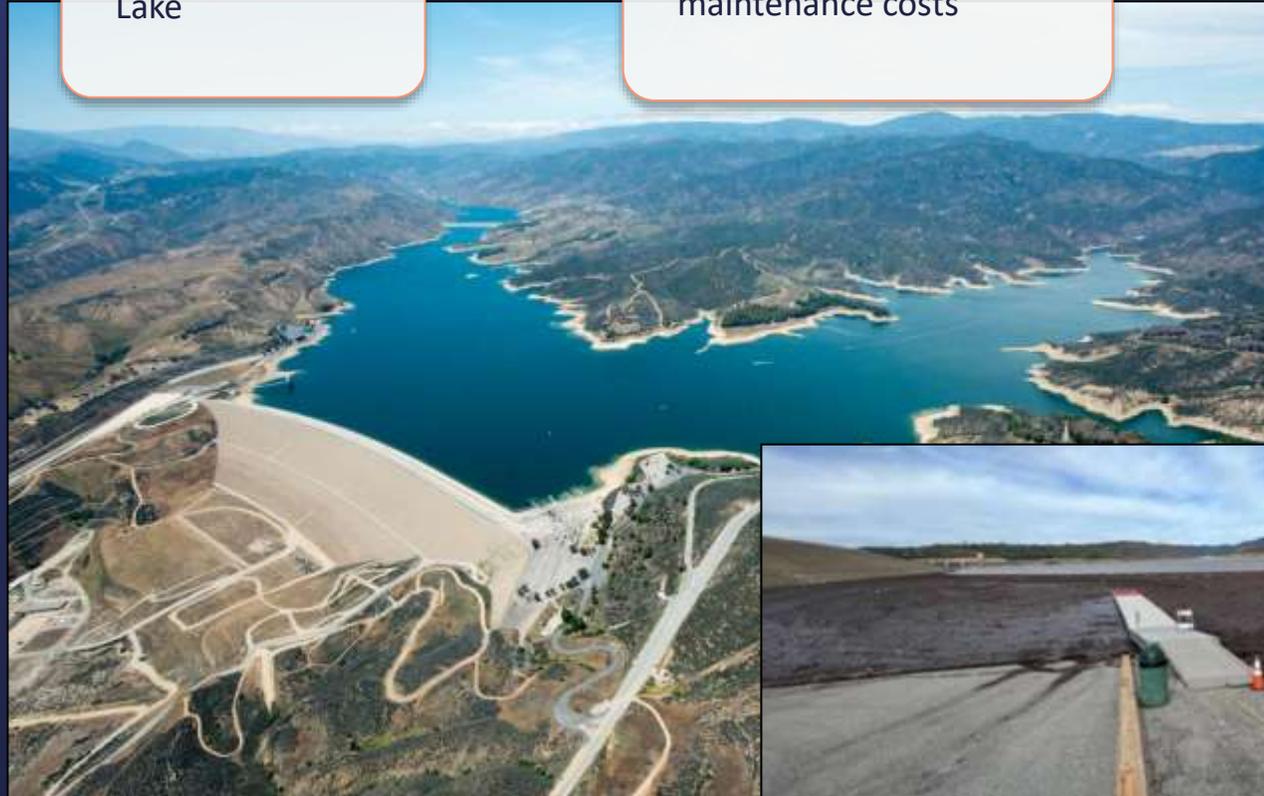
- Heavy rain event in January caused debris and silt to flow into Castaic Lake

Assess Potential
Impacts

- Stresses the ability of the plant to meet compliance requirements
- Increases operation & maintenance costs

Identify Adaptation
Strategies

- Reduce flow
- Repurposed out of service basins
- Increase coagulant dose
- Combined chlorine and ozone



Delta Island Projects

Metropolitan is securing grant funds to support new adaptation investments

Characterize Climate Hazards

- Drought, severe storms, sea level rise and extreme heat all impact the delta and are expected to increase over time.

Assess Potential Impacts

- Land subsidence, flooding, increased salinity, levee failure, species decline, water supply issues.

Identify Adaptation Strategies

- Convert farms to wetlands and rice production
- Habitat Restoration activities



Energy- Water Nexus on the CRA

Metropolitan is
exploring adaptation
options along the CRA

Characterize
Climate Hazards

- Drought, extreme heat, and extreme flooding are expected to become more frequent and extreme.

Assess Potential
Impacts

- Increased energy costs, greater risk of grid instability, health & safety issues, equipment failure, water supply disruptions

Identify Adaptation
Strategies

- Infrastructure upgrades, hardened facilities, power generation facilities, transmission investments



Next Steps

Integrate work into the
Climate Adaptation
Master Planning
Process

Climate Mitigation

- Continue implementation of GHG reduction measures
- Develop ZEV Fleet Transition Roadmap
- Renewable energy and storage investments
- Pursue carbon sequestration opportunities
- Initiate quantification of Scope 3 emissions

Climate Adaptation

- Complete Climate Vulnerability Risk Assessment
- Develop Economic Consequence Matrix to connect assessments of hazards & impacts to CAMP4W, adaptation projects, CIPs, and budget





● **Water Surplus and Drought Management Update** *Conditions as of 4/13/2023*

Summary

This report provides an accounting for water supply, demand, and storage conditions for calendar year (CY) 2023 as of April 13, 2023. This report also tracks the hydrologic conditions for water year (WY) 2022-2023. Updated supply and hydrologic information will be provided during the oral report in May.

On March 24, 2023, the California Department of Water Resources (DWR) increased the State Water Project (SWP) Table A allocation to 75 percent reflecting the improved hydrologic conditions and the record-breaking Sierra snowpack accumulation. DWR is also making additional water available to any SWP contractor that can take delivery of supply beyond scheduled Table A deliveries, known as Article 21 supply. Metropolitan’s total SWP supply to manage is estimated at 1.57 million acre-feet (MAF) and shown in detail on page 3.

Metropolitan’s Colorado River supply is currently estimated to be 962 thousand acre-feet (TAF). This reflects the United States Bureau of Reclamation’s (USBR) daily forecast of water use for California’s Colorado River water users for this year. Water usage by the higher priority water users impacts Metropolitan’s supply. Metropolitan’s combined SWP and Colorado River supplies are estimated to be 2.532 MAF for CY 2023 at the 75 percent SWP allocation.

The current trend demand on Metropolitan for CY 2023 is estimated to be 1.575 MAF. This includes a consumptive demand estimate of 1.18 MAF with the remaining demand reflecting replenishment deliveries, obligations, losses, and cyclic pre-deliveries, details shown on page 4. Metropolitan will deliver water to member agencies who deferred deliveries through the Reverse Cyclic Program and return water to DWR for human health and safety supply received in CY 2022. In addition, Metropolitan will pre-deliver water to local storage managed by its member agencies through the Cyclic Program. These pre-deliveries are sold on an agreed-upon schedule over five years. All of these actions are tracked in **Attachment 2**. Given the current CY 2023 estimate for supply and demand, Metropolitan is anticipating a net increase to its total storage balance of 957 TAF by the end of the year.

Additional increases to the SWP allocation are possible as DWR continues to assess snowpack runoff in future allocation studies. Increases to the SWP allocation may result in more supply available than Metropolitan’s ability to manage. To manage as much water as possible, Metropolitan is coordinating with member agencies to assess delivery capabilities throughout the service area. To that end, and pursuant to the Board’s April 2019 authorization, Metropolitan’s General Manager implemented the Cyclic Cost-Offset Program effective April 15, 2023 to help member agencies offset the additional costs incurred from capturing increased volumes of water into their cyclic accounts. Maximizing the amount of water stored along with continued water-use efficiency from the region will help prepare the region against future dry years and the uncertainties on our imported water supply.

Purpose

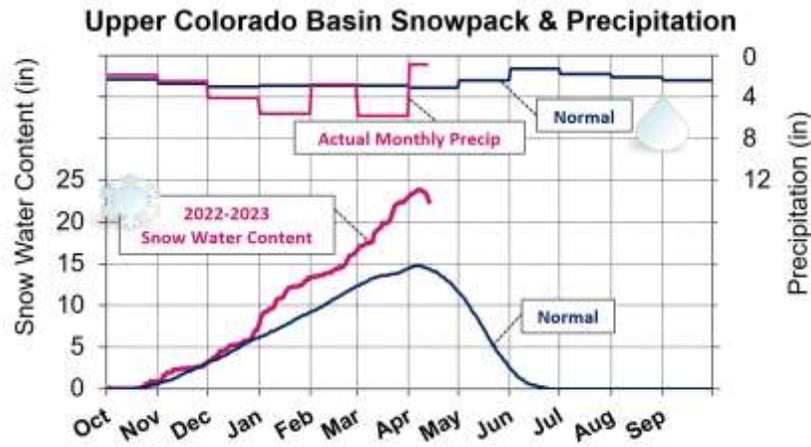
Informational

Attachments

- Attachment 1: Projected 2023 WSDM Storage Detail (75 percent SWP Table A allocation)
- Attachment 2: Future Contributions and Obligations and Cyclic Program
- Attachment 3: Future Supply and Demand Gaps

Detailed Report

This Water Surplus and Drought Management (WSDM) report provides the water supply and demand estimates for CY 2023 and hydrologic conditions for WY 2022-2023.

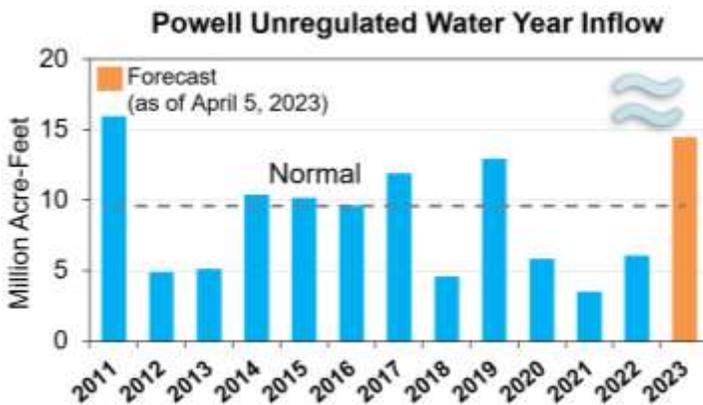


Upper Colorado River Basin

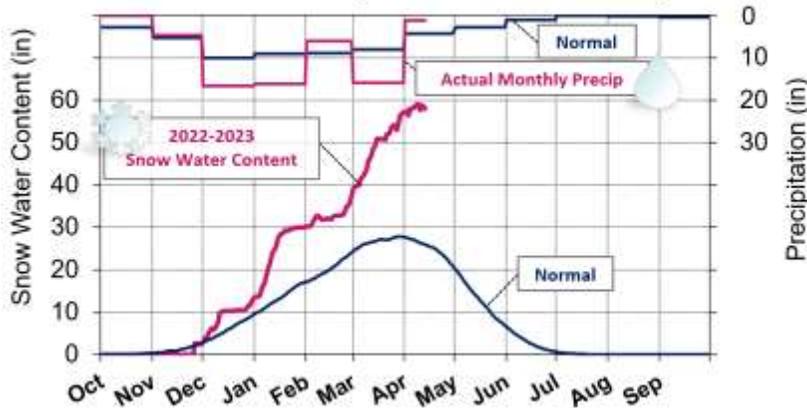
* Peak snowpack water content to date: 23.9 inches or 165% of April 1 normal.

◆ Above normal precipitation to date: 23.6 inches or 131% of normal for this date.

≈ Runoff into Lake Powell for WY 2023 is forecasted at 151% of normal.



Northern Sierra Snowpack & 8 Station Precipitation

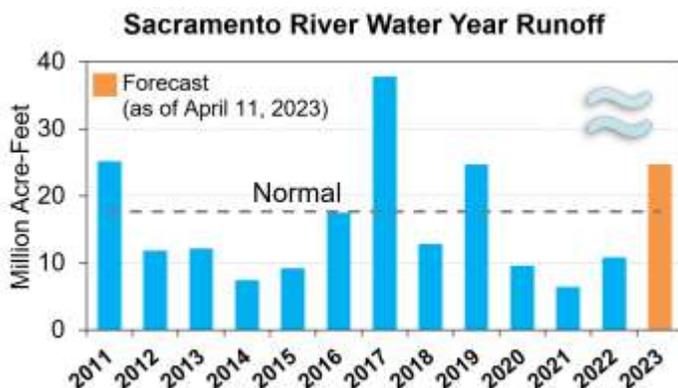


Sacramento River Basin

* Peak snowpack water content to date: 59.1 inches or 199% of April 1 normal.

◆ Above normal precipitation: 60.6 inches 113% of the water year normal.

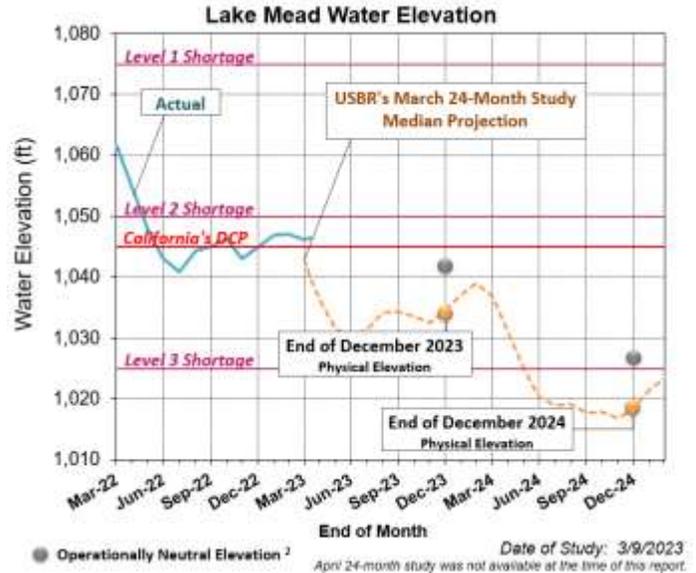
≈ Runoff into the Sacramento River for WY 2023 is forecasted at 140% of normal.



CRA Supplies	Acre-Feet
Basic Apportionment	550,000
IID/ MWD Conservation Program	105,000
CVWD - 2nd Amendment, Exchange of Additional Water	23,000
PVID Fallowing Program	38,000
Exchange w/ SDCWA (IID/Canal Lining)	278,000
Exchange w/ USBR (San Luis Rey Tribe)	16,000
Lower Colorado Water Supply Project	9,000
Bard Seasonal Fallowing Program	6,000
Quechan Diversion Forbearance	0
Quechan Seasonal Fallowing Program	0
Higher Priority Water Use Adjustment	-63,000
Total CRA Supplies ^{1,2}	962,000

¹ Per USBR Forecast (4/10/23).

² Total may not sum due to rounding.



¹ Metropolitan would be required to make DCP contributions in 2024 if the August 2023 24-month Study projects Lake Mead’s operationally neutral elevation is at or below 1,045 feet on 1/1/2024.

² This is the estimated water level had USBR not reduced releases from Lake Powell in WY 2022 to protect from dropping below power pool level. In WY 2022, USBR reduced releases from Lake Powell to Lake Mead by 480 TAF.

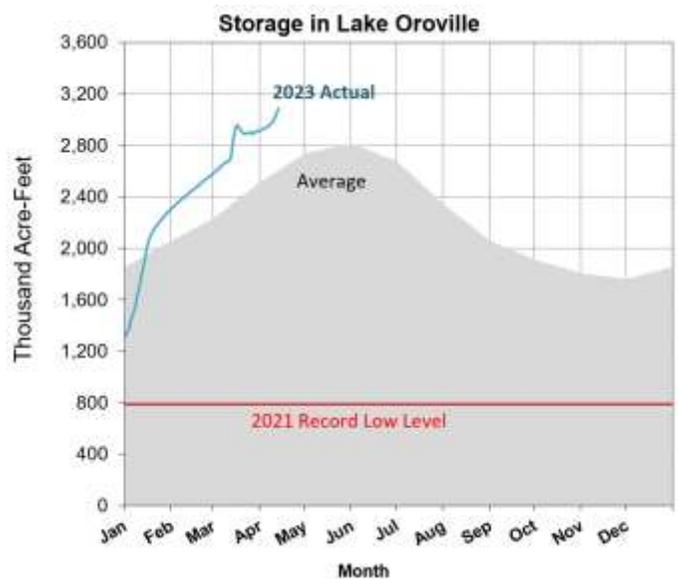
- Lake Mead storage is currently 7.43 MAF or elevation 1,046.5 feet (28 percent of total capacity).
- The Lower Basin is at a Level 2a shortage in CY 2023. Under this level, Metropolitan is not impacted.
- Due to the potential need to modify short-term operations to protect Lake Mead and Lake Powell, USBR initiated a fast-track process to modify the 2007 Interim Guidelines for operations through 2026. USBR released the draft Supplemental Environmental Impact Statement (SEIS) for public comment on April 11, 2023 which considers two action alternatives and a no action alternative for identifying shortages from the Lower Basin water users in 2024, 2025, and 2026. A final SEIS and Record of Decision is expected to be released Summer 2023.
- Metropolitan may use ICS to meet future DCP contributions.

SWP Supplies	Acre-Feet
Table A (75% SWP allocation)	1,434,000
Port Hueneme ¹	1,000
Unbalanced Exchange ²	3,000
Article 21	132,000
Total SWP Supplies ³	1,571,000
Total Supplies (CRA + SWP) (Prior to storage actions) ³	2,532,000

¹ Rounded to the nearest thousand.

² Unbalanced exchange with the Santa Clarita Valley Water Agency.

³ Total may not sum due to rounding.



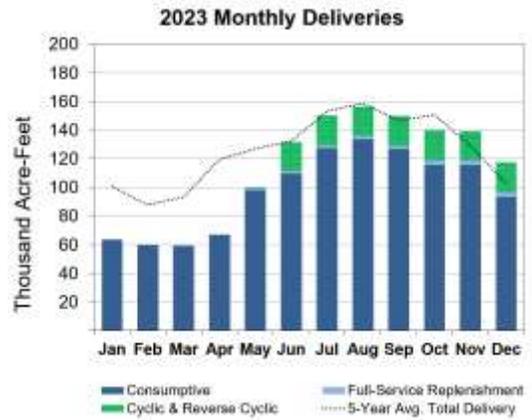
- Additional increases to the SWP Table A allocation are expected as DWR’s subsequent allocation studies continue to incorporate forecasted runoff from the snowpack.
- Lake Oroville is currently at 3.08 MAF (87 percent of total capacity) or 118 percent of historical average as of the date of this report.

Current Demand	Acre-Feet
Member Agency Consumptive ¹	1,184,000
Member Agency Replenishment	20,000
Coachella Valley Water District Agreement	15,000
Imperial Irrigation District Return ²	0
Exchange w/ San Luis Rey Tribe	16,000
System and Storage Losses	60,000
Cyclic Deliveries	122,000
2022 Reverse Cyclic Deliveries	25,000
2022 Human Health & Safety Water Return	134,000
Total Demands ³	1,575,000

¹ Includes exchange w/ SDCWA (IID/Canal Lining) and CUP sales.

² Per USBR Forecast (4/10/23).

³ Total may not sum due to rounding.

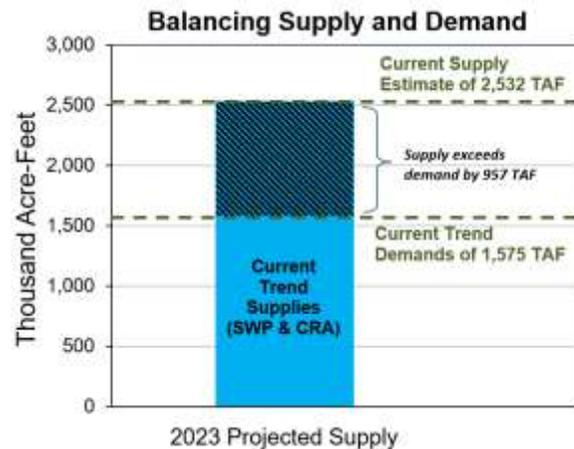


The current trend consumptive and replenishment demand CY 2023 is projected to be below the 5-year average due to ongoing conservation and the improving local supply conditions. Cyclic and Reverse Cyclic deliveries are estimated from June through December.

MANAGING REGIONAL SUPPLY AND DEMAND

Supply/Demand Balance	Acre-Feet
Total Supplies	2,532,000
Total Demands	1,575,000
Current Balance Estimate ¹	957,000

¹ Total may not sum due to rounding.



WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to address the estimated supply/demand balance in 2023, enhance Metropolitan’s capability of delivering supplies to the SWP Dependent Areas, and reduce storage withdrawals in 2023.

- Storing surplus supplies in a manner to achieve equitable reliability across the region.
- Balance use of available imported supplies from both the SWP and Colorado River.
- Continue to utilize and manage storage assets to satisfy current and future year demands, with special emphasis on rebuilding storage for SWP Dependent Area.
- Incorporate new drought actions into existing suite of WSDM actions.
- Maximize deliveries of Article 21 supply.
- Initiate the Cyclic Cost-Offset Program starting April 15, 2023, to help manage surplus supply by offsetting member agency cost associated with taking additional Metropolitan deliveries.

2023 WSDM Storage Detail

	1/1/2023 Estimated Storage Levels ¹	CY 2023 Put Capacity ²	2023 Total Storage Capacity
WSDM Storage			
Colorado River Aqueduct Delivery System	1,139,000	400,000	1,657,000
Lake Mead ICS	1,139,000 ³	400,000	1,657,000
State Water Project System	502,000	720,000	1,897,000
MWD SWP Carryover ⁴	39,000	297,000	350,000
DWCV SWP Carryover ⁴			
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic and Perris DWR Flex Storage	3,000	216,000	219,000
Arvin Edison Storage Program	119,000	0 ⁵	350,000
Semitropic Storage Program	158,000	131,000	350,000
Kern Delta Storage Program	137,000	45,000	250,000
Mojave Storage Program	19,000	10,000	330,000
AVEK Storage Program	27,000	3,000	30,000
AVEK High Desert Water Bank Program	0	18,000 ⁶	18,000 ⁷
In-Region Supplies and WSDM Actions	698,000	404,000	1,246,000
Diamond Valley Lake	494,000	316,000	810,000
Lake Mathews and Lake Skinner	194,000	32,000	226,000
Conjunctive Use Programs (CUP) ⁸	10,000	56,000	210,000
Other Programs	662,000	189,000	1,181,000
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	281,000	189,000	800,000
Total	3,001,000	1,713,000	5,981,000
Emergency	750,000	0	750,000
Total WSDM Storage (AF) ⁹	2,251,000	1,713,000	5,231,000

¹ Preliminary start of year balances, subject to DWR adjustments and USBR final accounting in May 2023.

² Put capacity assumed under a 75 percent SWP Table A Allocation. Storage program losses included where applicable.

³ This amount is net of the water Metropolitan stored for IID in Lake Mead in an ICS sub-account.

⁴ Total storage capacity varies year to year based on prior year remaining balance added to current year contractual limits.

⁵ Puts are limited due to water quality considerations.

⁶ Includes the early recharge in the High Desert Water Bank Program expected to commence in the summer.

⁷ Represents a portion of the total storage capacity. Total storage capacity is 280,000 AF once the program is fully constructed. Anticipated to be fully operational by the end of 2025.

⁸ Total of all CUP programs including IEUA/TVMWD (Chino Basin); Long Beach (Central Basin); Long Beach (Lakewood); Foothill (Raymond and Monk Hill); MWDOC (Orange County Basin); Three Valleys (Live Oak); Three Valleys (Upper Claremont); and Western.

⁹ Total WSDM Storage level subject to change based on accounting adjustments.

Future Contributions and Obligations and Cyclic Programs

Table 1: Future Obligations

	Future Returns ¹
Water Stored for IID under the California ICS Agreement and its Amendment or the 2021 Settlement Agreement with IID	276,000 ²
Storage and Interstate Release Agreement with Southern Nevada Water Authority	330,000 ³
Coachella Valley Water District Agreement	210,000 ⁴
DWR Flex Storage	216,000 ⁵
2022 Reverse Cyclic	25,000 ⁶
2022 Human Health & Safety	134,000 ⁷
Total (AF)	1,191,000

¹ Rounded to the nearest thousand. Subject to change based on accounting adjustments.

² IID can request return in any year, conditional on agreement terms.

³ Up to 30,000 AF per year.

⁴ Obligation to be met by the end of 2026.

⁵ Flexible storage withdrawals from Castaic Lake and Lake Perris must be returned within five calendar years. Metropolitan is required to return 170,000 AF by 2026 for withdrawals in 2021. Metropolitan is required to return 46,000 AF by 2027 for withdrawals in 2022. Metropolitan is planning to return the entire obligation in 2023.

⁶ Deferred delivery from Calleguas Municipal Water District, Upper San Gabriel Valley Municipal Water District, and Three Valleys Municipal Water District. Metropolitan will deliver water to the member agencies by 2027. Future Return is projected to be reduced by the full amount in CY 2023 as shown on page 4.

⁷ Metropolitan's CY 2022 Human Health & Safety deliveries. This water must be returned by 2027. If the SWP allocation reaches 40 percent or greater, a minimum obligation of 96,000 acre-feet is required. Future Return is projected to be reduced by the full amount in CY 2023 as shown on page 4.

Table 2: Potential Magnitude of California's Drought Contingency Plan Contribution

	2023	2024	2025	2026
Likelihood of Required California Drought Contingency Plan Contribution ¹	0%	47%	60%	56%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	219,000	273,000	273,000

¹ Results from USBR's March 2023 Colorado River Mid-Term Modeling System (CRMMS) model run. April study not available at the time of this report.

Table 3: Cyclic Program Activity

CY	Starting Balance (AF)	CY Actions (AF)				Ending Balance (AF)
		Cyclic Pre-Delivery	Cyclic Cost-Offset Pre-Delivery	Total Pre-Delivery	Sale Out of Cyclic	
2019	51,000	147,000	19,000	166,000	91,000	126,000
2020	126,000	2,000	0	2,000	50,000	79,000
2021	79,000	0	0	0	28,000	51,000
2022	51,000	0	0	0	27,000	24,000
2023 ¹	24,000	0	0	0	24,000	0

¹ This table will be updated with actual 2023 Cyclic Program activity on a monthly basis.

Future Supply and Demand Gaps (Estimate as of December 2022 – Revised)

Metropolitan’s Water Surplus and Drought Management Plan provides a framework for managing Metropolitan’s resources in periods of surplus and shortage. To guide the WSDM actions, Metropolitan constructs plausible scenarios with different supply and demand assumptions. The table below shows the projected range of plausible end-of-year supply and demand balances for CY 2024. These ranges provide a bookend for the wide range of supply and demand balances that may unfold.

To reflect a reasonable range of future outcomes, the low supply projection is coupled with high demand projection as one bookend and the high supply projection is coupled with the low demand projection for the other bookend. The resulting ranges are shown in the table below. For 2024, the supply and demand balances may range from a shortage of ~920 TAF to a surplus of ~865 TAF. Regardless of the conditions that may materialize next year, Metropolitan will continue to adhere to the WSDM Plan to capture surplus amount of water in normal to wet conditions and use stored water and drought actions in drought conditions.

Item	2024 (TAF)	
	Low Supply/High Demand	High Supply/Low Demand
SWP ¹	+300	+1,340
Colorado River ²	+660	+985
Demand on Metropolitan ³	-1,800	-1,200
Additional Obligations ⁴	-80	-260
Supply/Demand Balance ⁵	(-920)	865

¹ SWP supplies are based on a low of 5% Table A allocation + HH&S to a high of 70% Table A allocation.

² Colorado River supplies are based on estimated transfers, exchanges, higher priority water use, and DCP contributions.

³ Demand on Metropolitan reflect the total of replenishment and consumptive demand.

⁴ Additional obligations include system losses, repayment of HH&S, etc.

⁵ The supply demand balances should not be interpreted as an absolute range as they were determined by explicit assumptions to represent reasonable outcomes. The actual supply and demand balance, shown in the WSDM report, may fall outside of this range as information becomes available for specific components throughout the year.



One Water and Stewardship Committee

Update on WSDM

Item 7d
May 8, 2023

Spring Ushers in Superbloom, Snowmelt, & Runoff

Diamond Valley Lake (April 2023)



Diamond Valley Lake (April 2023)



Spring Ushers in Superbloom, Snowmelt, & Runoff

Yosemite National Park
(March 1, 2023)



Credit: Yosemite Fire & Aviation

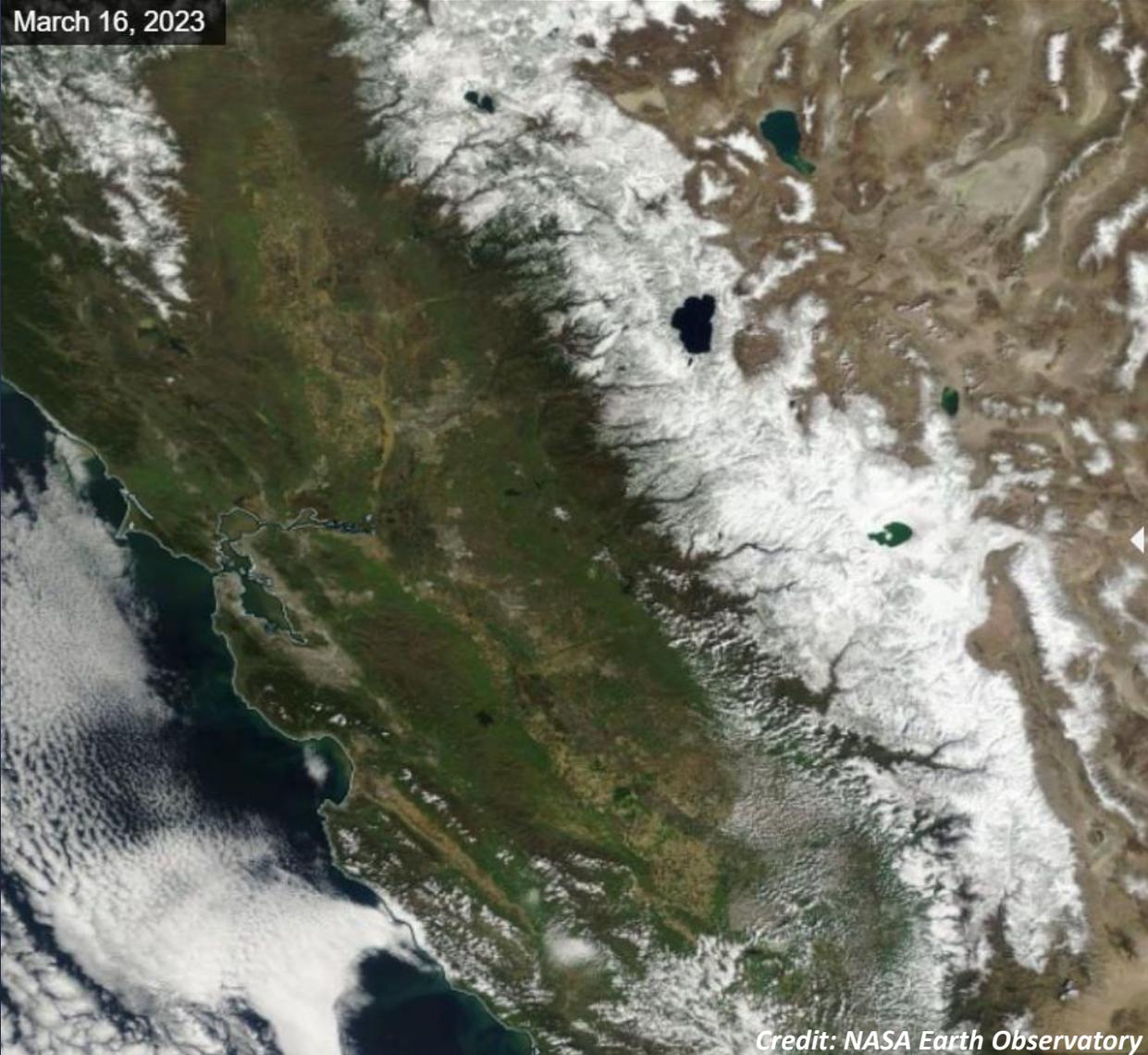
Yosemite National Park
(April 29, 2023)



Credit: N. Razavian

Sierra Snowpack (March vs. April 2023)

March 16, 2023



Credit: NASA Earth Observatory

April 16, 2023

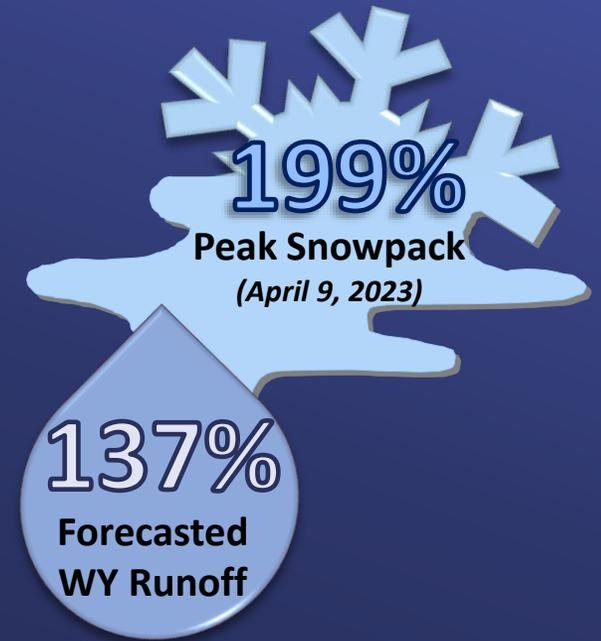
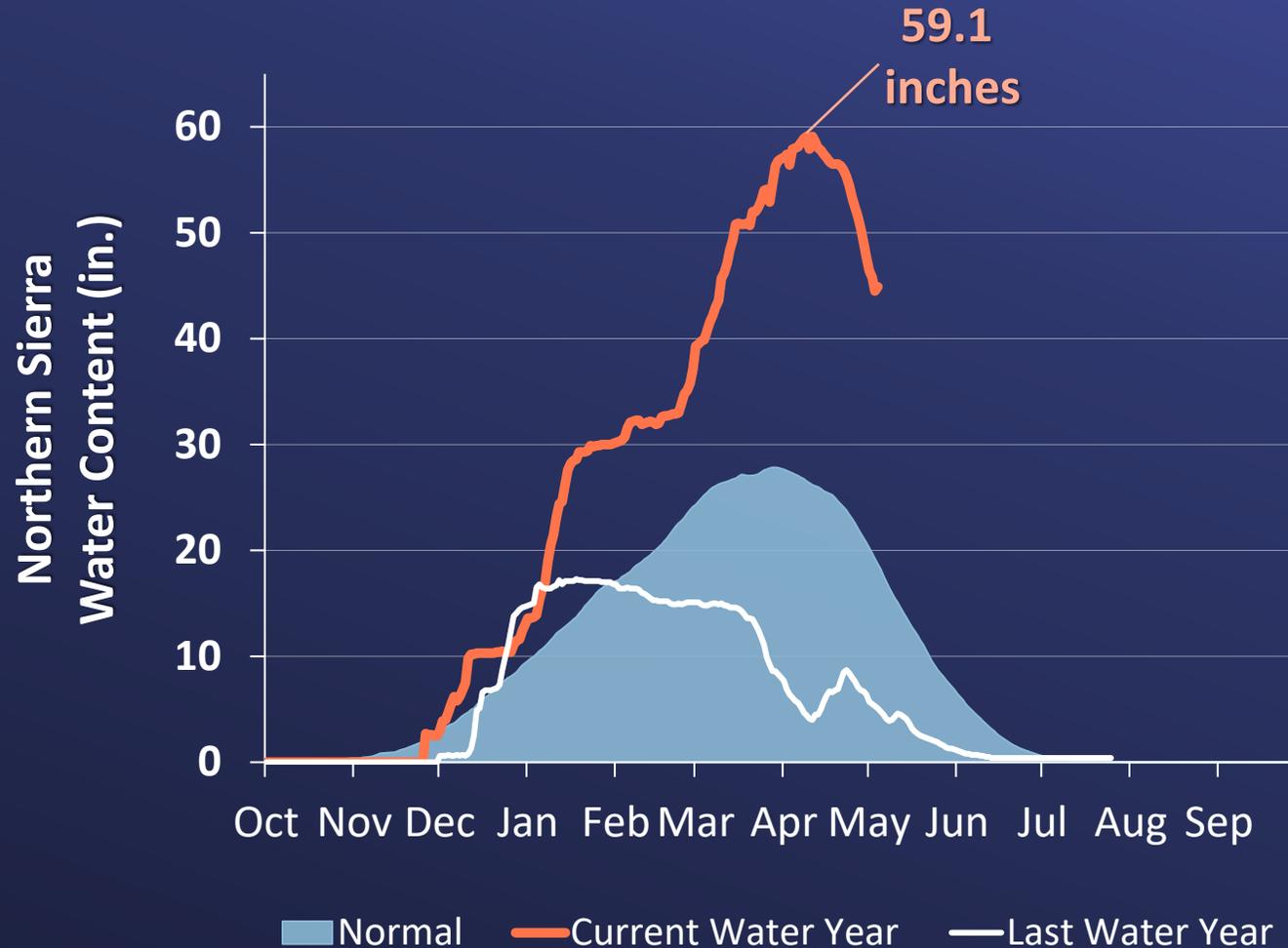


Credit: NASA Earth Observatory

State Water Project (SWP) Conditions

Near-Record Northern Sierra Snowpack Snowmelt Underway

As of 05/04/2023



SWP Table A Allocation Increases to 100%



* 2023 SWP Table A Allocation increased to 100% on April 20, 2023.

SWP Conditions

SWP Allocation & Article 21

- SWP Allocation increased from 75% to 100%
 - Near record-breaking snowpack throughout Sierra Nevada
 - Spring runoff helping reservoirs reach capacity
 - Lake Oroville Reservoir expected to fill by end of May
- SWP share of San Luis Reservoir currently full
 - Metropolitan share of Article 21 deliveries: ~134 TAF



Credit: California Department of Water Resources

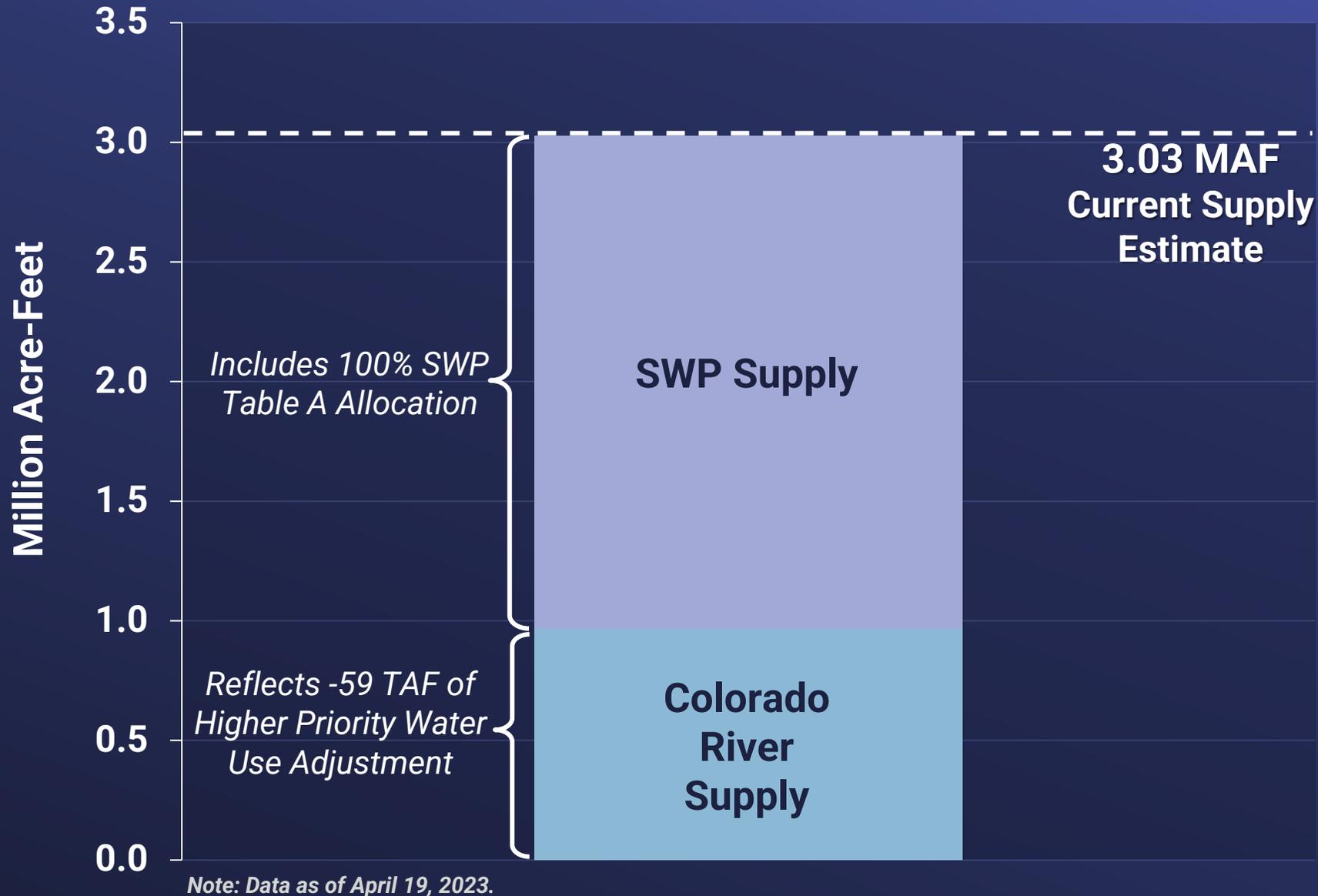
One Water & Stewardship Committee



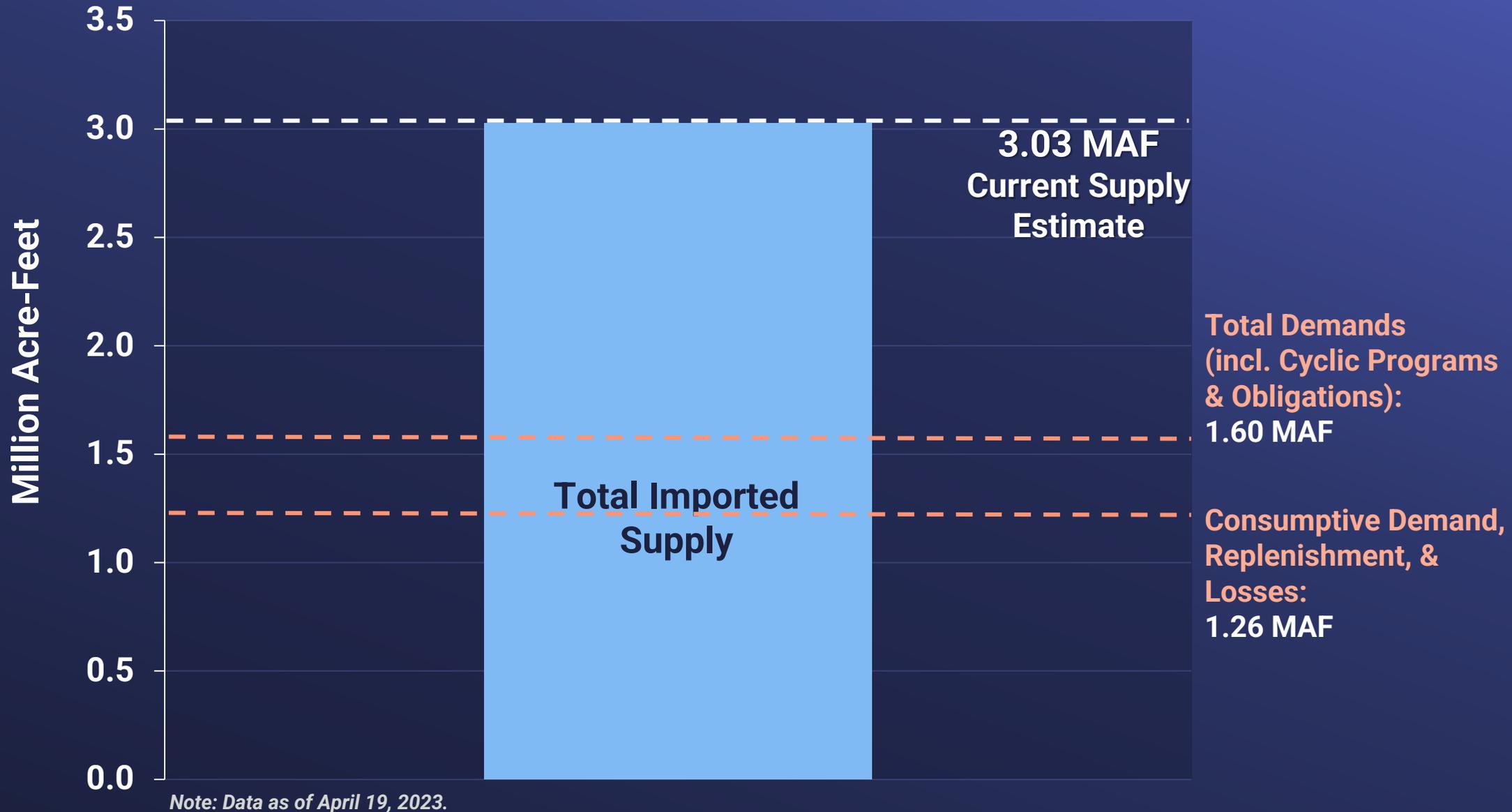
Credit: California Department of Water Resources

Water Supply/Demand Balance

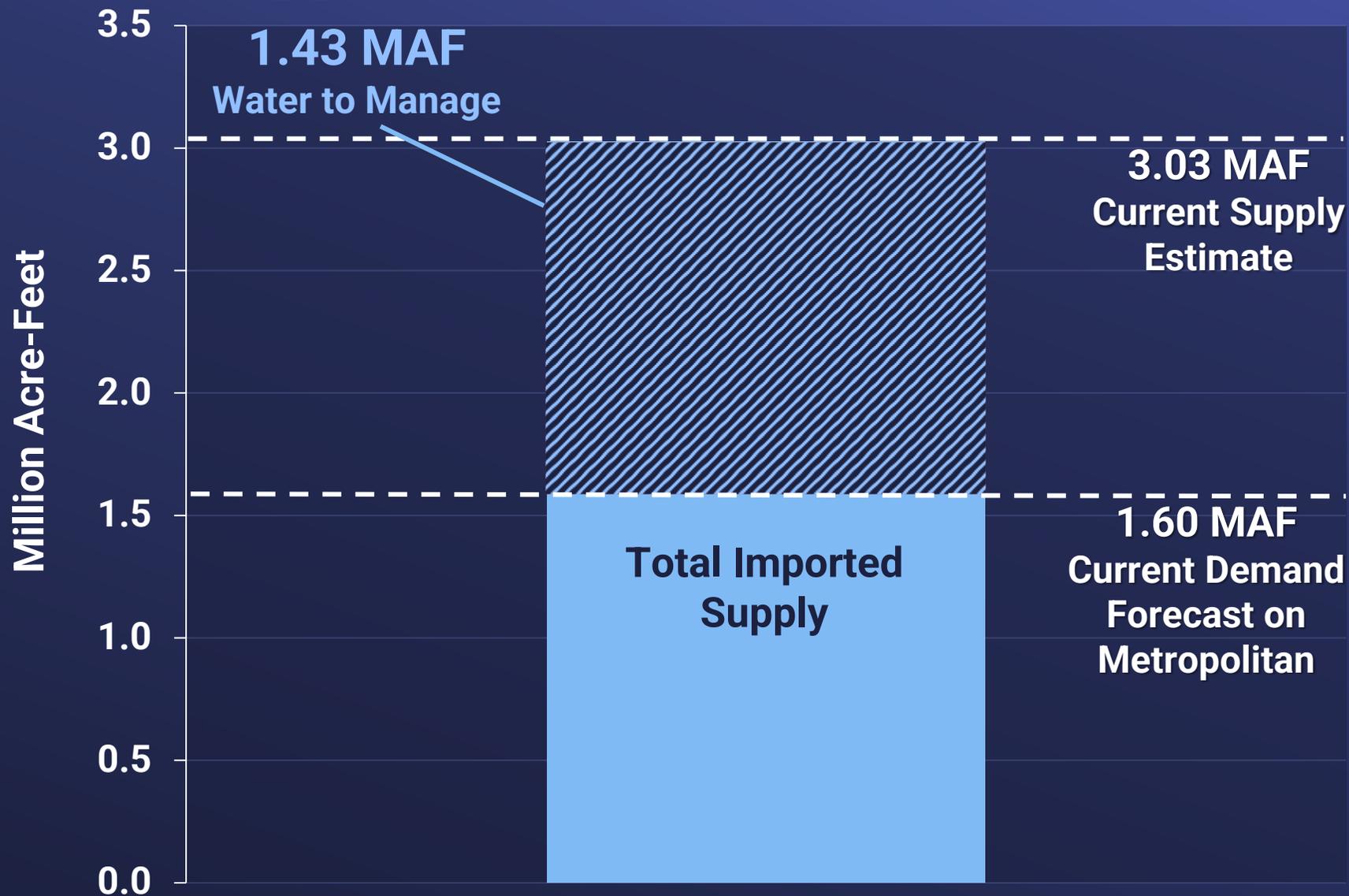
2023 Water Supply/Demand Balance: *Regional View*



2023 Water Supply/Demand Balance: Regional View



2023 Water Supply/Demand Balance: *Regional View*



Note: Data as of April 19, 2023.

Metropolitan's Storage Actions



- Notes:**
- 1) Dashed lines indicate 2023 starting storage balances.
 - 2) Ending storage balances are projections (as of April 19, 2023) and will vary based on actual conditions.
 - 3) In-region storage includes emergency storage.
 - 4) Storage buckets not drawn to scale.

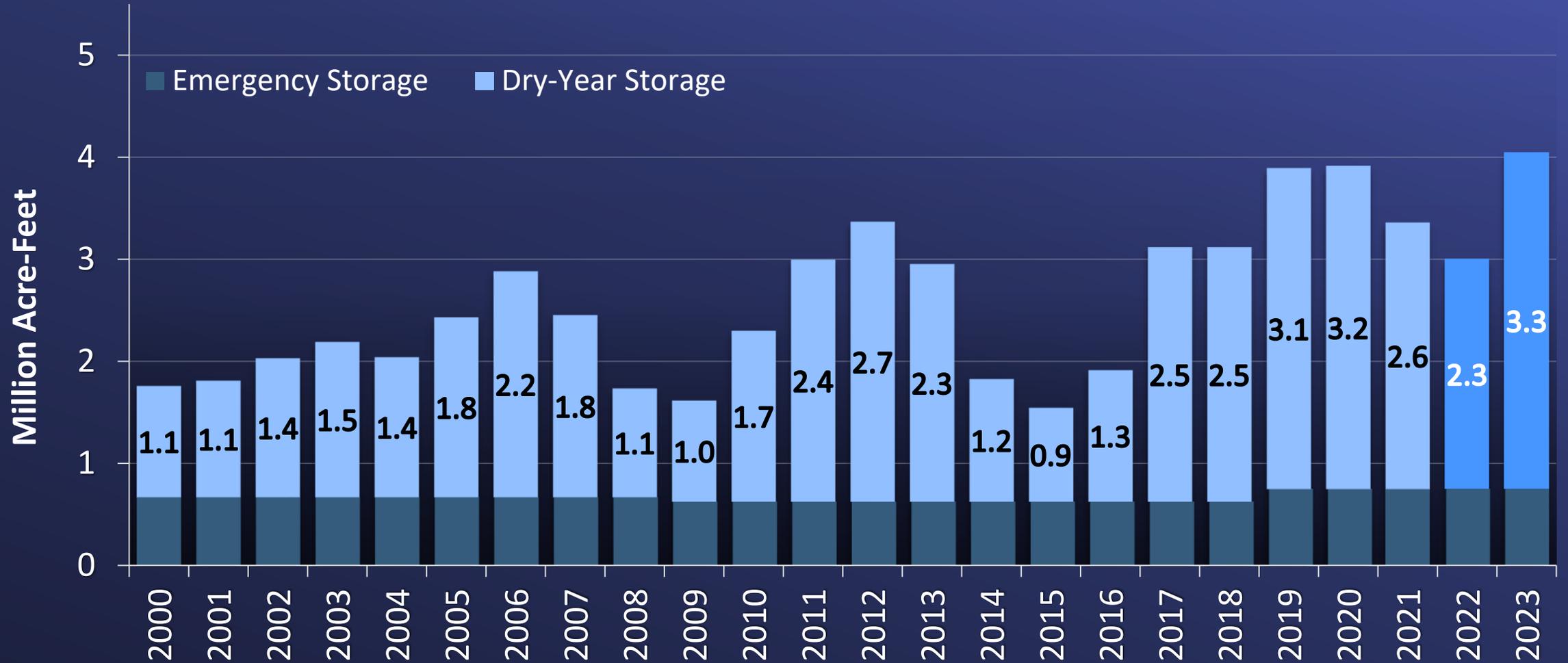
Metropolitan's Storage Actions



- Notes:**
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 - 2) Ending storage balances are projections (as of April 19, 2023) and will vary based on actual conditions.
 - 3) In-region storage includes emergency storage.
 - 4) Storage buckets not drawn to scale.

Metropolitan Projecting to Refill Storage Accounts

End-of-Year Balances



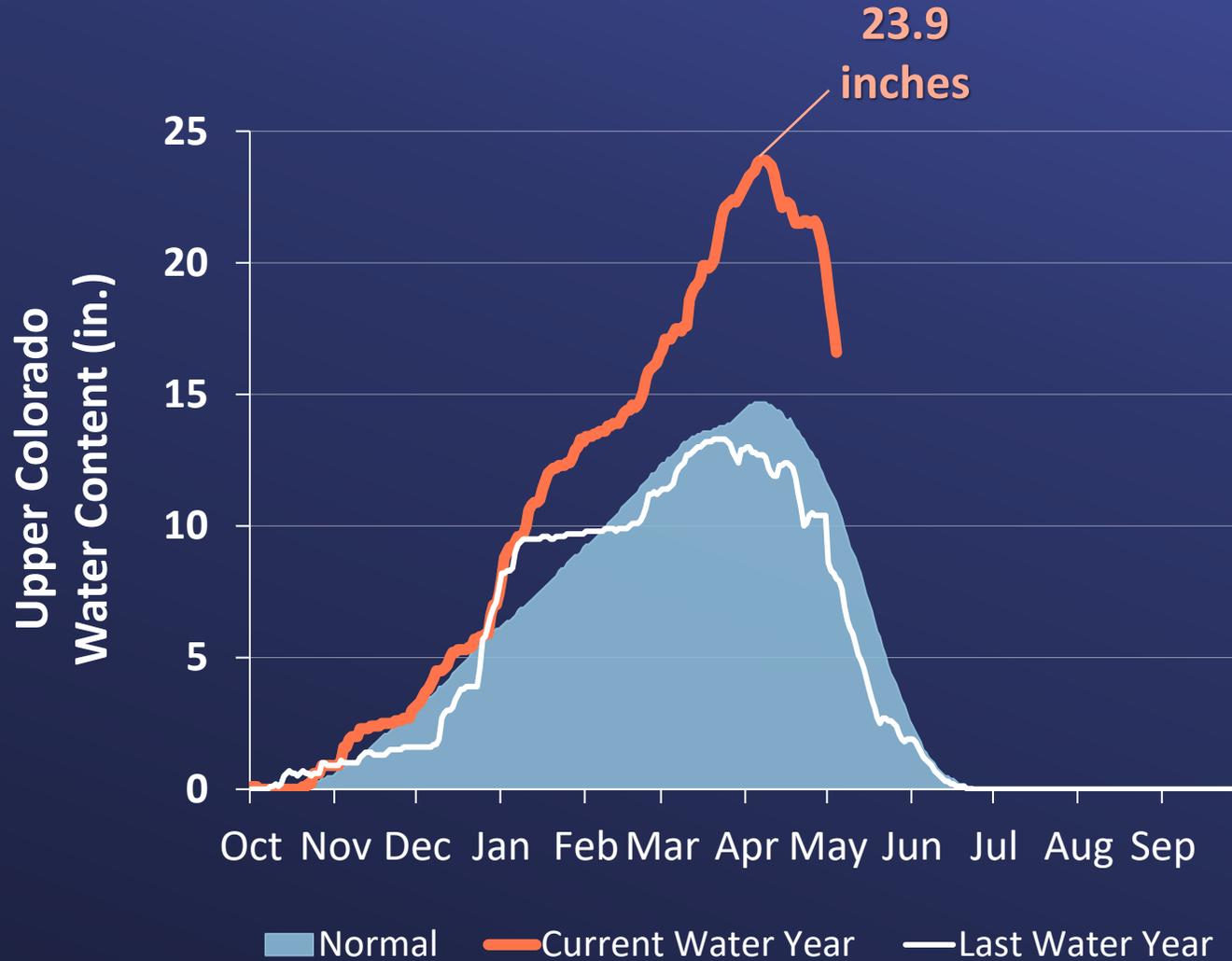
Note:

2022 and 2023 end-of-year balances are preliminary as they are subject to DWR adjustments and USBR final accounting.

Colorado River Outlook

Upper Colorado River Basin Snowmelt Underway

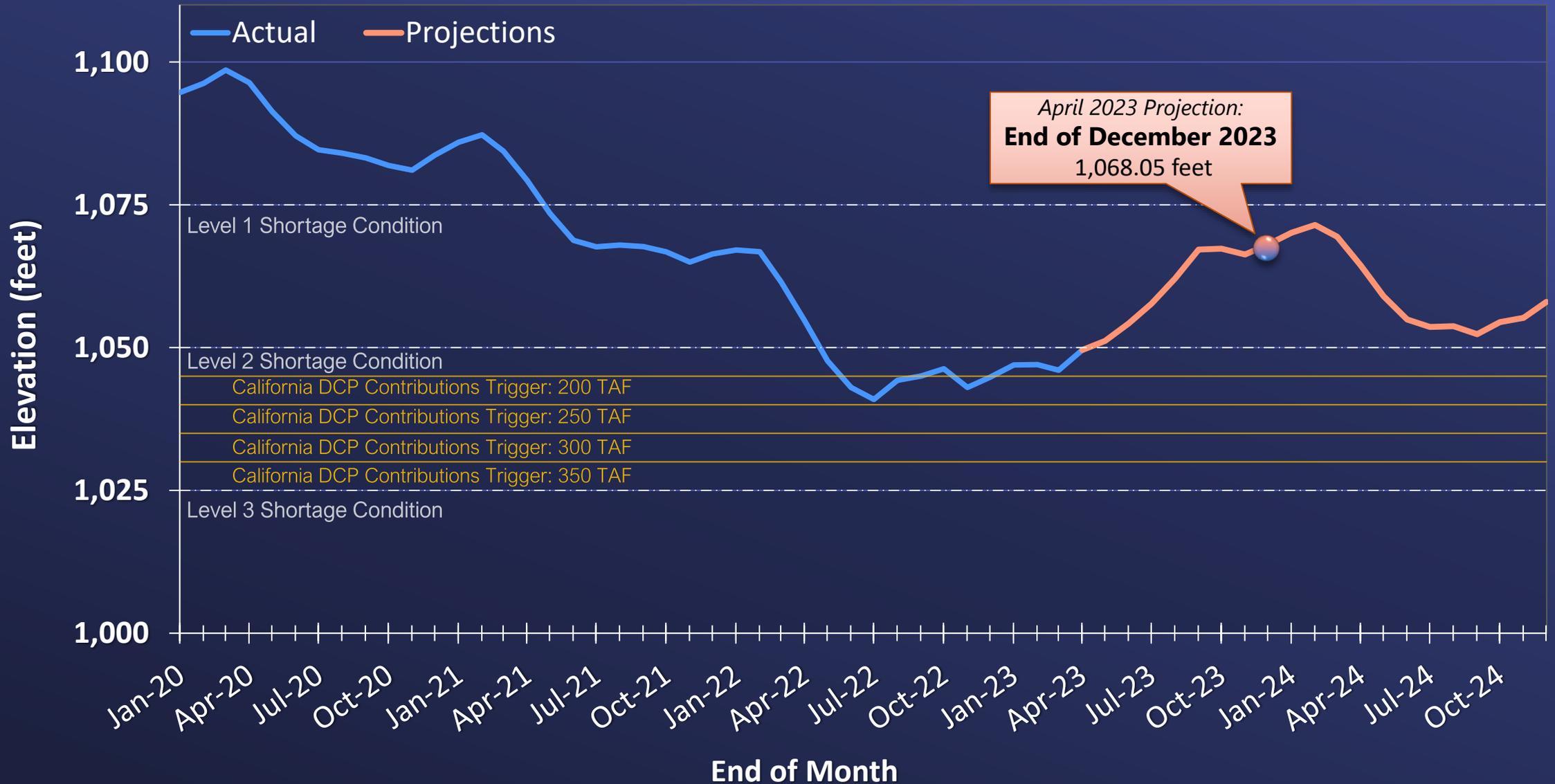
As of 05/04/2023



163%
Peak Snowpack
(April 7, 2023)

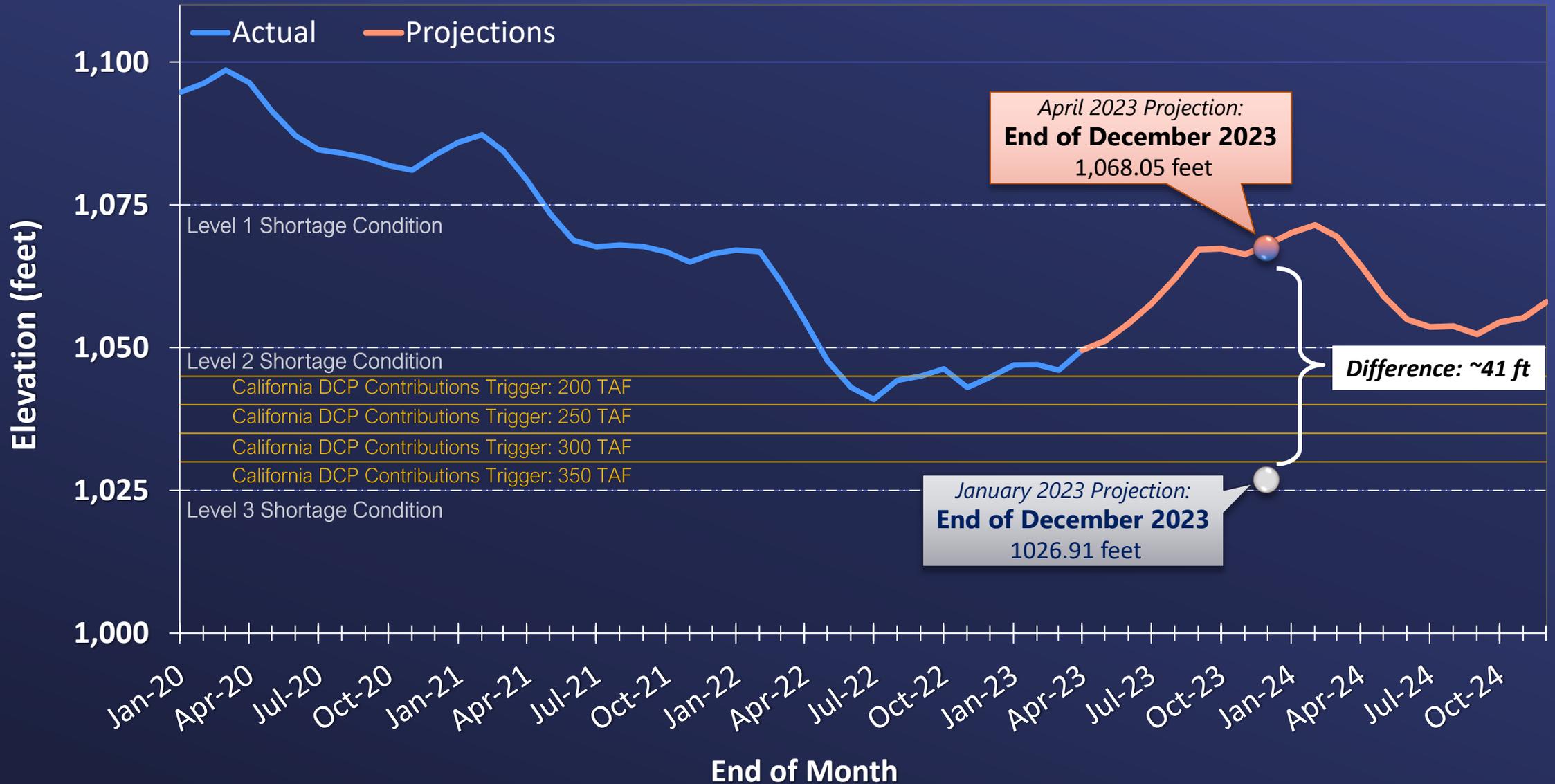
149%
Forecasted
WY Runoff

Improved Outlook in Lake Mead Conditions



Source: USBR's April 2023 24-Month study.

Improved Outlook in Lake Mead Conditions



Source: USBR's April 2023 24-Month study.





● Colorado River Management Report

Summary

This report provides a summary of activities related to management of Metropolitan's Colorado River resources for the month of April 2023.

Purpose

Informational

Detailed Report

2007 Interim Guidelines Draft Supplemental Environmental Impact Statement (SEIS) Published

The U.S. Bureau of Reclamation (Reclamation) published the draft SEIS in the Federal Register on April 15, with the 45-day public comment period ending on Tuesday, May 30, 2023. The draft SEIS considers two action alternatives and a no action alternative. Alternatives 1 and 2 include reduced releases from Glen Canyon Dam and new shortages in the Lower Basin that total up to 2.083 million acre-feet (maf) in 2024 and increase in 2025-26. Alternative 1 models new Lower Basin shortages assessed by priority. Alternative 2 includes assumptions for reduced releases that are distributed in the same percentage across all Lower Basin contractors. Reclamation will hold four virtual public meetings to provide information on the draft SEIS, answer questions, and receive oral comments. Additional information about the SEIS may be found at: <https://www.usbr.gov/ColoradoRiverBasin/SEIS.html>. Staff will provide an overview of the draft SEIS at the May One Water Committee.

Reclamation's April 24-Month Study Released

Colorado River Basin snowpack peaked on April 7 at 161 percent of the 30-year average, which is well above the projected conditions in the 2022 August 24-Month Study, which was used to plan operations of the Colorado River System reservoirs in 2023. Water Year (WY) 2023 unregulated inflow into Lake Powell is forecasted to be 151 percent of the 30-year average. Lake Powell operations for WY 2023 are in the Lower Elevation Balancing Tier, which seeks to balance the storage in Lake Powell and Lake Mead. Based on the April 24-Month Study, balancing releases of 9.5 maf will be made from Lake Powell to Lake Mead. This is the highest release amount in more than 10 years. Reclamation announced that it will resume use of actual reservoir elevations in tier determination and will no longer use operational neutrality, and that modeling will assume the 480 thousand acre-feet retained in Lake Powell under the May 2022 action was released as part of the WY 2023 balancing release. The 2022 Drought Response Operations Agreement (DROA) releases were suspended on March 7. Reclamation will pursue recovery of the DROA releases in Flaming Gorge during the remainder of the water year. Lower Basin intervening flows are forecasted to be much higher than average. The most probable end-of-year elevation at Lake Powell is 3,573 feet, which would put it in the Mid-Elevation Release Tier in WY 2024. According to the April 24-Month Study most probable forecast, Lake Mead will rise by more than 20 feet this year, reaching an elevation of 1,068 feet at the end-of-year, which would trigger tier 1 shortages and Drought Contingency Plan Contributions from Arizona, Nevada, and Mexico, but not California in WY 2024.



● Bay-Delta Management Report

Summary

This report provides a summary of activities related to the Bay-Delta for April 2023.

Purpose

Informational

Detailed Report

Long-Term Delta Actions

Delta Conveyance Project Planning Activities

The California Department of Water Resources (DWR) is continuing efforts to organize and develop responses to the comments received on the Delta Conveyance Project (DCP) draft Environmental Impact Report (EIR), as required under the California Environmental Quality Act (CEQA). DWR received more than 700 unique comment letters with over 6,000 individual comments. The Final EIR is expected at the end of 2023, which will include responses to all substantive comments on the Draft EIR, and, where appropriate, include edits to the Draft EIR responsive to comments received.

The U.S. Army Corps of Engineers (USACE) draft Environmental Impact Statement (EIS) comment period closed on March 16, 2023. The DCP draft EIS is required under National Environmental Protection Act. The USACE is also starting the initial organization of the comments received on the DCP draft EIS.

DWR's field activities under the Initial Study/Mitigated Negative Declaration for Soil Investigations in the Delta are planned to resume in early May 2023. These activities include data collection, soil samples and surveys to better understand the region's geology to support the evaluation of potential activities, including the proposed DCP. DWR will update its public information website to provide information on the soil investigations to interested members of the public (<https://water.ca.gov/Programs/State-Water-Project/Delta-Conveyance/Environmental-Planning>).

Delta Conveyance related Joint Powers Authorities

The Delta Conveyance Design and Construction Authority (DCA) Board of Directors took no public action at its April 20 regularly scheduled board meeting. It did, however, request a moment of silence in memoriam for Piraborooban "Praba" Shanmugam, DWR's Delta Conveyance Office principal engineer who served with distinction until his recent passing. The DCA Board also received the Monthly Board Report information item and the Treasurer's Monthly Report for February and March 2023. The April 20 regularly scheduled Delta Conveyance Finance Authority (DCFA) meeting was cancelled.

Sites Reservoir

At the Sites Reservoir Authority Joint Authority Board and Reservoir Committee meeting on April 21, an update on the Final EIR/EIS schedule was presented. It is anticipated that certification of the Final EIR will be an action item for consideration at the July or August Authority Board Meeting. At that time, the Authority Board will also need to adopt CEQA findings and a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program. Following these actions, the Authority Board will consider to approve or deny the Sites Reservoir Project.

Sites Reservoir Authority staff also presented information on the Principles for the Storage, Delivery and Sale of Sites Reservoir Project Water (Storage Principles). The Storage Principles describe a framework for procedures related to Sites Reservoir Project water that includes system losses, available storage, and allocation. The

Board Report (Bay-Delta Management Report)

available storage in Sites Reservoir is calculated to be 1.41 million acre-feet, which includes recent refinements and includes a 60 thousand acre-foot dead pool that is unavailable stored water.

Near-Term Delta Actions

Regulatory Activities

In April, staff presented an update on the Voluntary Agreements to Metropolitan's One Water and Stewardship Committee. The presentation included information on the schedule and the Draft Scientific Basis Report Supplement in Support of Proposed Voluntary Agreements for the Sacramento River, Delta, and Tributaries Update to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The State Water Resources Control Board (SWRCB) will continue its public and peer review process for the Draft Scientific Basis Report Supplement through early 2024, and SWRCB consideration for adoption of a Bay-Delta Plan update and implementation plan is tentatively scheduled for the end of 2024.

Science Activities

Staff continued participating in collaborative science activities addressing native fish species in the Delta, their habitats, and the effects of stressors. In April, staff worked with university researchers to conduct field sampling work for an assessment of contaminant occurrence in the Sacramento Deep Water Ship Channel. Delta smelt use the ship channel as habitat, and the study will inform contaminant risk in the ship channel.

Staff is also continuing to work on Phase 3 of the Reorienting to Salmonid Recovery project. In this phase, participants will develop an agreed-upon suite of priority actions for salmonid recovery. In late March 2023, staff facilitated the first structured decision-making workshop for the Reorienting to Salmonid Recovery project. The workshop participants included state and federal resource agencies, public water agencies, non-governmental organizations, commercial and recreational fishing interests and tribes. At the workshop the participants discussed potential management options and recovery scenarios to benefit salmon and provided input on bookend scenarios to evaluate.

Ecosystem Restoration

Staff attended the Delta Plan Interagency Implementation Committee Restoration Subcommittee meeting where the California Department of Fish and Wildlife (CDFW) gave a presentation on the Cutting the Green Tape Initiative designed to increase the pace and scale of environmental restoration projects and discussed the potential implications for Delta projects. Staff also attended a Southern Yolo Bypass tour with representatives from Yolo County that included a visit to the Lookout Slough Project, which is a multi-benefit project to restore 3,400 acres of tidal wetland.

Delta Island Activities

Staff prepared and submitted a \$19.7 million grant application to the Delta Conservancy's Nature Based Solutions: Wetland Restoration Grant Program. If awarded, the grant will fund development of a multi-benefit mosaic of wetlands, rice, and other habitat projects on Webb Tract that are designed to stop and/or reverse subsidence, generate carbon credits from carbon sequestration opportunities, and create habitat. Staff provided an oral presentation on the proposed project to the April 25 Metropolitan Subcommittee on Bay-Delta. Staff is also developing outreach materials and met with Contra Costa County representatives and CDFW representatives to discuss the project. Contra Costa County's Board of Supervisors will consider a resolution of support for the project at its May 2023 meeting.

Board Report (Bay-Delta Management Report)

Metropolitan Bay Delta Conservation Plan/California WaterFix and EcoRestore/Delta Conveyance Project (BDCP/CWF-CER/DCP) Expenditures

The following is a summary of Metropolitan’s cumulative BDCP/CWF-CER/DCP expenditures updated for the quarter ending March 2023. This report includes the total internal costs related to the BDCP, the CWF-CER alternatives, and the subsequent DCP efforts with the state administration.

Staff will continue to provide this report on a quarterly basis in the Bay Delta Management Report.

Total (July 2005 – March 2023)

BDCP/CWF-CER/DCP Internal MWD	Total Costs (17.75 yrs.)
Labor & Benefits ⁽¹⁾	\$ 37.44M
Professional Services	\$ 7.13M
Travel	\$ 1.80M
Other ⁽²⁾	\$ 0.18M
SUBTOTAL	\$ 46.55M
Administrative Overhead	\$ 13.53M
TOTAL	\$ 60.08M

⁽¹⁾ Labor costs include salary, leave and non-leave benefits

⁽²⁾ Other includes charges for materials and supplies, trainings & seminars, conferences & meetings, reprographics, and other incidental expenses

Quarterly Summary (April 2022 – March 2023)

	FY21-22 Q4	FY22-23 Q1	FY22-23 Q2	FY22-23 Q3
	Apr-Jun 2022	Jul-Sep 2022	Oct-Dec 2022*	Jan-Mar 2023
Labor	0.272M	0.283M	0.273M	0.205M
Professional Services	0.001M	0.000M	0.001M	0.004M
Travel	0.000M	0.002M	0.000M	0.004M
Other	0.000M	0.000M	0.000M	0.000M
SUB-TOTAL	0.273M	0.285M	0.274M	0.213M
Admin. Overhead	0.091M	0.062M	0.064M	0.044M
TOTAL	0.364M	0.347M	0.338M	0.257M

The following is a summary of the Delta Conveyance Finance Authority costs for member’s share of administrative expenses:

Quarterly Summary (April 2022 – March 2023)

	FY21-22 Q4	FY22-23 Q1	FY22-23 Q2	FY22-23 Q3
	Apr-Jun 2022	Jul-Sep 2022	Oct-Dec 2022*	Jan-Mar 2023
TOTAL	0.002M	0.002M	0.002M	0.001M

* Includes slight adjustment due to transition from accrual to cash basis reporting



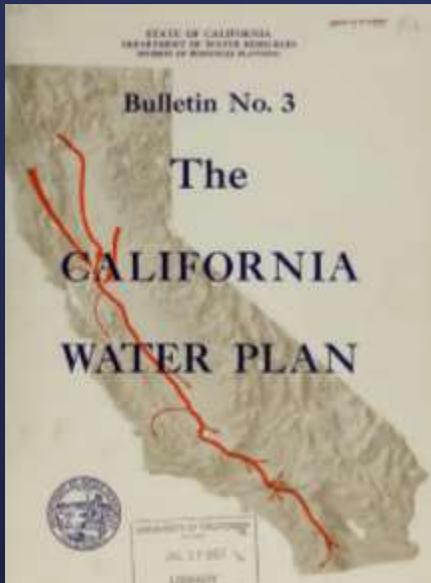
One Water and Stewardship Committee

Water Resource Manager Update

Item 8c

May 8, 2023

California Water Plan



Guides long-term strategies for managing and developing water resources

- Required by California Water Code
- Updated every 5 years
- Focus of 2023 Update
 - Promote climate change adaptation
 - Support watershed resilience
 - Strengthen water equity
- Metropolitan participating on Policy Advisory Committee

Annual Water Supply & Demand Assessment



Assessments provide DWR proactive look into possible shortages & response actions

- Authorized by Conservation as a California Way of Life legislation (2018)
- Annual estimate of possible shortages and response actions during a “Next Dry Year”
 - Staff coordinates with Member Agencies
 - No Metropolitan restrictions to Member Agencies
- Report findings to Board in July

Future Supply Actions

Future Supply Action program promotes technical advances to adapt to future water supply uncertainties

- Las Virgenes artificial intelligence study
 - Used historical wastewater data to reduce energy consumption while meeting effluent ammonia standards
 - Used demonstration plant data to project membrane fouling and chemical cost
- 350 participants



