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

Meeting with Board of Directors *

March 14, 2023

9:00 a.m.

Tuesday, March 14, 2023 Meeting Schedule
09:00 a.m. OWS
11:00 a.m. EIA
11:30 a.m. Break
12:00 p.m. BOD
01:00 p.m. EOP Wksp

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: 873 4767 0235. 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.

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. Opportunity for Directors who are not members of the committee to address the committee on matters within the committee's jurisdiction

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

3. CONSENT CALENDAR OTHER ITEMS - ACTION

A. Approval of the Minutes of the One Water and Stewardship Committee for January 9, 2023 (Copies have been submitted to each Director, Any additions, corrections, or omissions) **21-1991**

Attachments: 03142023 OWS 3A (OWS 01092023) Minutes

Meeting Delayed 9:05 a.m. Zoom Online and US2-145

B. Approve creating the Subcommittee on Bay-Delta and establish a two year term **21-2019**

Attachments: 03142023 OWS 3B Presentation

4. CONSENT CALENDAR ITEMS - ACTION

7-8 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 provide Rubidoux Community Services District assistance with water deliveries; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-1969**

Attachments: 03142023 OWS 7-8 B-L
03142023 OWS 7-8 Presentation

7-9 Consider changes to the Water Shortage Emergency Condition and the Emergency Water Conservation Program for the State Water Project dependent area and reaffirm the Regional Drought Emergency for all member agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA **21-1970**

Attachments: 03142023 OWS 7-9 B-L
03142023 OWS 7-9 Presentation

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

5. OTHER BOARD ITEMS - ACTION

NONE

6. BOARD INFORMATION ITEMS

9-2 Information on the High Desert Water Bank Program status, updated costs, and water quality **21-1978**

Attachments: 03142023 OWS 9-2 B-L
03142023 OWS 9-2 Presentation

7. COMMITTEE ITEMS

a. Proposed Grant Opportunity for Webb Tract **21-1995**

Attachments: 03142023 OWS 7a Presentation

b. Update on Watershed Initiatives **21-1996**

Attachments: 03142023 OWS 7b Presentation

c. Update on Water Surplus and Drought Management and Water Shortage Emergency Condition **21-1997**

Attachments: 03142023 OWS 7c Report
03142023 OWS 7c Presentation

d. Update on Conservation **21-2024**

Attachments: 03142023 OWS 7d Presentation

8. MANAGEMENT REPORTS

a. Colorado River Manager's Report **21-1992**

Attachments: 03142023 OWS 8a Report

b. Bay-Delta Manager's Report **21-1993**

Attachments: 03142023 OWS 8b Report
03142023 OWS 8b Presentation

c. Water Resource Management Manager's Report **21-1994**

Attachments: 03142023 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. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. 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 http://www.mwdh2o.com.

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.

Meeting Delayed 9:05 a.m. Zoom Online and US2-145

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MINUTES

ONE WATER AND STEWARDSHIP COMMITTEE

January 9, 2023

Chair Quinn called the hybrid teleconference meeting to order at 12:20 p.m.

Members present: Chair Quinn, Vice Chair Faessel, Directors Ackerman, Armstrong, Chacon, Cordero, De Jesus, Erdman, Fong-Sakai, Goldberg, Kurtz, Lefevre, Miller, Peterson, and Sutley.

Member absent: Director Petersen.

Other Board Members present: Board Chair Ortega, Directors, Atwater, Blois, Dennstedt, Dick, McCoy, Morris, Pressman, Ramos, Smith, and Williams.

Committee staff present: Coffey, Hagekhalil, Hughes, Munguia, and Upadhyay

Chair Quinn made opening remarks regarding the committee's objectives.

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))

    1. Caty Wagner, Sierra Club California, spoke in support of item 6a.

Chair Quinn announced that the two guest presenters would be heard ahead of the Consent Calendar items.

6. COMMITTEE ITEMS

Nina Hawk, Manager, Bay-Delta Initiatives Policy provided background information and introduced Mr. Willie Whittlesey, General Manager, Yuba Water Agency.

a. Subject: North Yuba Forest Partnership Watershed Resilience Project

Presented by: Willie Whittlesey, General Manager, Yuba Water Agency

Mr. Whittlesey gave a presentation on updates regarding Yuba Watershed and Yuba River Accord activity. He explained the need for forest management, and his presentation also included Yuba Water Agency's Watershed Resilience Program, North Yuba Forest Partnership, Forest Resilience Bond, and additional forest health efforts

The following Directors provided comments or asked questions:

1. Miller
2. Feassel
3. Erdman.

Mr. Deven N. Upadhyay, Executive Officer &Assistant General Manager provided additional comments related to a watershed management plan.

b. Subject: The Untapped Potential of California's Urban Water Supply

Presented by: Heather Cooley, Director of Research of the Pacific Institute

Ms. Cooley gave a presentation on the findings of a report by the Pacific Institute, and how it relates to Metropolitan's efforts in water conservation and efficiency, stormwater capture, water reuse, and water resiliency.

The following Directors provided comments or asked questions:

1. Sutley
2. Armstrong
3. Goldberg
4. Repenning
5. Quinn
6. Kurtz

Staff responded to Directors' comments and questions.

Chair Quinn announced we would return to the Consent Calendar.

CONSENT CALENDAR ITEMS – ACTION

General Manager Hagekhalil responded to a question made by Director Goldberg on item 7-11.

Director Smith requested the presentation of item 7-11.

2. CONSENT CALENDAR OTHER ITEM – ACTION

a.. Approve creating the Demand Management and Conservation Programs and Priorities Subcommittee and establish a two year term.

3. CONSENT CALENDAR ITEM – ACTION

7-10 Subject: Authorize an agreement with the Upper San Gabriel Valley Municipal Water District and the City of South Pasadena for a Stormwater for Direct Use Pilot Program; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: None.

Motion: Authorize an agreement with Upper San Gabriel Valley Municipal Water District and the city of South Pasadena for a Stormwater for Direct Use Pilot Program project

7-11 Subject: Authorize the General Manager to: (1) secure one-year water transfers with various water districts for up to $100 million from Water Supply Program and State Water Project Budget for such transers; (2) secure storage and conveyance agreements with the Department of Water Resources and various water districts to facilitate these transfers; (3) grant final decision-making authority to the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA.

Presented by: Kira Alonzo, Manager, Water Acquisition Team

Motion: Authorize the General Manager to:

(1) Secure one-year water transfers with various water districts for up to $100 million
(2) Secure storage and conveyance agreements with the Department of Water Resources and various water districts to facilitate these transfers consistent with Articles 55 and 56 of Metropolitan's State Water Project Supply Contract.

Grant the General Manager final decision-making authority to determine whether or not to move forward with these transfers following completion of any environmental reviews required under CEQA, subject to the terms and conditions set forth in this letter

Brad Coffey, Manager, Water Resource Management gave brief background information and introduced Ms. Alonzo. Ms. Alonzo gave a presentation that explained 2023 water transfers to secure the one-year transfers with various water districts.

Ms. Alonzo described similarities to a previous Board-approved water transfer agreement in 2022, and staff's approach to the proposed agreement.

The following Directors provided comments or asked questions regarding item 7-11:

1. Goldberg
2. Smith
3. Peterson

The following Directors provided comments or asked questions regarding to item 2a:

1. Kurtz
2. Peterson

Marcia Scully, General Counsel, and Adel Hagekhalil, General Manager responded to Director's questions.

Following a group discussion, Director Peterson made a motion, seconded by Director Goldberg to approve items 2a, 7-10, and 7-11.

The vote was:

Ayes:	Directors Ackerman, Armstrong, Chacon, Cordero, De Jesus, Erdman, Faessel Fong-Sakai, Goldberg, Kurtz, Lefevre, Miller, Peterson, Quinn, and Sutley.
Noes:	None.
Abstentions:	None
Absent:	Director Petersen

The motion for items 2a, 7-10, and 7-11 passed by a vote of 15 ayes, 0 noes, 0 abstentions, and 1 absent.

END OF CONSENT CALENDAR ITEMS

4. OTHER BOARD ITEMS – ACTION

None

5. BOARD INFORMATION ITEMS

None

6. COMMITTEE ITEMS

c. Subject: Update on State and Federal Bay-Delta Regulatory Processes

Presented by: George Nishikawa, Resource Specialist, Bay-Delta Initiatives

Mr. Nishikawa gave a presentation that included a high-level overview of regulations governing the Sacramento–San Joaquin River Bay Delta, and water operational conditions.

d. Subject: State Water Project 2023 Statement of Charges and Annual Audit Update

Presented by: Jamie Dalida, Resource Specialist, Resouce Implementation Unit

Mr. Coffey introduced Ms. Dalida who gave a presentation on the annual Department of Water Resources statement of State Water Project charges for 2023. Her report included Metropolitan's independent audit and a summary of the charges and audit findings.

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

Presented by: Noosha Razavian, Associate Resourced Specialist, Resource Analysis Unit

Mr. Coffey provided brief background and introductory comments.

Ms. Razavian provided a presentation that included updates on water supply demand balance, hydrological conditions, and water shortage emergency conditions.

The following Directors provided comments or asked questions:

1. Lefevre
2. Erdman
3. Pressman

Mr. Deven N. Upadhyay, Executive Officer &Assistant General Manager provided additional comments related to a watershed management plan.
Dee Zinke, also provided comments regarding Metropolitan's messaging.

f. Subject: Update on Conservation

Presented by: None

Mr. Coffey offered to have the committee review the presentation that is posted on the website.

7. MANAGEMENT REPORTS

a. Subject: Colorado River Manager's Report

Presented by: Bill Hasencamp, Manager, Colorador River Resources

Mr. Hasencamp provided an update on Colorado River conditions and the Supplemental Environmental Impact Study process.

The following Directors provided comments or asked questions:

1. Smith

b. Subject: Bay-Delta Manager’s Report

Presented by: RandallNeudeck, Manager, Bay-Delta Programs

Mr. Neudeck gave an update on developing activity on Metropolitan’s islands in Northern California.

c. Subject: Water Resource Management Manager's Report

Presented by: Brad Coffey, Manager, Water Resource Management

Mr. Coffey’s report discussed the State Water Contract extension.

8. FOLLOW-UP ITEMS

None

9. FUTURE AGENDA ITEMS

None

Chair Quinn proposed that starting in March, this committee does not vote on any items that are not posted at least seven days in advance.

10. ADJOURNMENT

The next meeting will be held on March 13, 2023

Meeting adjourned at 2:59 p.m.

Tracy Quinn
Chair

One Water and Stewardship Committee

Subcommittee on Bay-Delta

Item 3B

March 14, 2023

Subcommittee on Bay-Delta

Reports to One Water Stewardship Committee

The subcommittee will focus on:

- Water supply from, and mitigation of the impacts of water development related to, the Bay-Delta
- Comprehensive solutions which will benefit water supply reliability, water quality and environmental and other beneficial instream uses of the waters of the Bay-Delta
- The effect of existing and proposed federal, state and local environmental, water supply and water conveyance statutes and regulations on the District's interests in the Bay-Delta
- Policy issues related to lands owned by Metropolitan in the Bay-Delta


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

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

3/14/2023 Board Meeting

7-8

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 provide Rubidoux Community Services District assistance with water deliveries: 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 Western Municipal Water District (Western), Rubidoux Community Services District (Rubidoux), West Valley Water District (West Valley), and San Bernardino Valley Municipal Water District (Valley District) (the "Parties") to assist Rubidoux with water deliveries. Under the proposed agreement, Metropolitan would provide up to 2,000 acre-feet of water per year (AFY) to Rubidoux through Valley District's connection on the San Gabriel Valley Devil Canyon – Azusa Pipeline (Azusa Pipeline), provided there is available capacity. Water delivered under this agreement would only be used by Rubidoux within Western's service area.

Details

Background

Rubidoux is a retail water agency within the service area of Western that serves approximately 40,000 customers and the city of Rubidoux qualifies as a disadvantaged community (DAC). As part of Western's service area, property owners in Rubidoux pay ad valorem property taxes and standby charges to Metropolitan every year. Currently, Rubidoux relies fully on local groundwater and has no connection to imported supplies. Rubidoux's groundwater has high ambient total dissolved solids (TDS) levels, and after customer use, Rubidoux's wastewater exceeds the city of Riverside's National Pollutant Discharge Elimination System permit limits for TDS for effluent that is discharged to the Santa Ana River. As a result, Rubidoux requested delivery of Metropolitan's imported supplies to blend with their local groundwater prior to use for municipal and industrial purposes. The proposed agreement would provide Rubidoux access to imported supplies which they have been supporting through Metropolitan's property tax and standby charges.

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). 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 can accept Metropolitan's SWP supplies through Valley District's connection. Rubidoux's service area is located immediately south of West Valley. West Valley has treatment facilities and infrastructure in place to deliver treated water to Rubidoux. Western does not currently have the infrastructure in place to deliver Metropolitan's imported water to Rubidoux.

In April 2022, the Parties requested a similar agreement for Metropolitan to provide up to 2,000 AFY to Rubidoux to blend with their groundwater supplies for consumption and ensure compliance with water quality standards identified in permits related to discharges to the Santa Ana River. The Santa Ana River is an important groundwater basin recharge facility for downstream agencies in Orange County. Staff recommended that the Board authorize the General Manager to enter into a long-term agreement with the Parties to provide Rubidoux

assistance with water deliveries. However, the Board authorized only a one-year agreement and requested that staff return and report after assessing alternatives for Rubidoux. Metropolitan staff and the Parties assessed alternatives, including desalination and a connection to Western's distribution system. However, the estimated costs far exceed the cost of purchasing water from Metropolitan and would have placed an excessive burden on an already underserved community.

Subsequent to 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 with a one-year agreement. Therefore, the Parties did not enter into a one-year agreement and respectfully request board reconsideration of a long-term agreement.

Proposed Agreement

The Parties are requesting a long-term agreement to provide up to 2,000 AFY to Rubidoux. Metropolitan would provide the requested water to Rubidoux through unused capacity in the Azusa Pipeline. Valley District would deliver Metropolitan's imported supplies on behalf of Metropolitan to West Valley off of Valley District's Lytle Creek connection on the Azusa Pipeline. West Valley would treat and deliver the requested water to Rubidoux. Western would pay Metropolitan's full-service rate in effect at the time of the delivery to Rubidoux, and Rubidoux would reimburse Western. The delivery would be subject to the capacity charge, readiness-to-serve charge, and all volumetric water rates. Metropolitan staff evaluated the capacity of the Azusa Pipeline and determined that the needs of both West Valley and Rubidoux can be met.

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**. These terms also address questions that were raised by the Board when this item was first considered in April 2022. Specifically, the terms include acknowledgment that deliveries are not guaranteed and face reduction requirements in times of drought. 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 will be used solely within Western's service area.
4. Deliveries are not guaranteed and are limited to Metropolitan's unused capacity in the Azusa Pipeline.
5. When the 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 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.

Although it is not a component of this proposed agreement, there is an additional benefit that a new interconnection between West Valley and Rubidoux would provide to Metropolitan's service area. Western owns 6,000 AF of low-TDS groundwater supplies within the boundaries of Valley District. If the interconnection between West Valley and Rubidoux is constructed, Western would be able to deliver 6,000 AF of additional supplies to Rubidoux within Metropolitan's service area.

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 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 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 provide Rubidoux Community Services District assistance with water deliveries.

Fiscal Impact: None. Metropolitan would receive revenue from the full-service sale of water that is delivered water under this agreement.
Business Analysis: Provides water supply reliability to an area of Metropolitan's service area that does not currently receive 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 provide Rubidoux assistance with water deliveries.

Fiscal Impact: None.
Business Analysis: Would not provide water supply reliability to an area of Metropolitan's service area that does not currently receive Metropolitan water supplies.

Staff Recommendation

Option #1

2/24/2023
Brad Coffey *Date*
Manager, Water Resource Management

2/27/2023
Adel Hagekhalil *Date*
General Manager

Attachment 1 – Term Sheet for the Agreement to Provide the Rubidoux Community Services District Assistance with Water Deliveries

Ref# wrm12694179

Term Sheet for the Agreement to Provide the Rubidoux Community Services District Assistance with Water Deliveries

Agreement Overview

- Parties: The Rubidoux Community Services District (Rubidoux), West Valley Water District (West Valley), Western Municipal Water District (Western), San Bernardino Valley Municipal Water District (Valley District), 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

- Metropolitan water deliveries under this Agreement will be used within Western's service area.
- Rubidoux may request water deliveries at any time and will coordinate with Western on monthly water requests.
- Western will request delivery of water from Metropolitan on behalf of Rubidoux.
- Metropolitan will request Valley District to deliver Metropolitan supplies equal to Rubidoux'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.
- West Valley will treat and deliver Rubidoux's requested amount to Rubidoux for use only by Rubidoux within Metropolitan's service area.
- 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.
- Rubidoux will reimburse Western for all payments made by Western to Metropolitan under this agreement.
- 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 by Rubidoux.
- Metropolitan will be responsible for any Department of Water Resources charges for the State Water Project supplies delivered to Rubidoux through Valley District's connection.
- 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.
- During a time when the 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 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.

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 provide Rubidoux Community Services District assistance with water deliveries

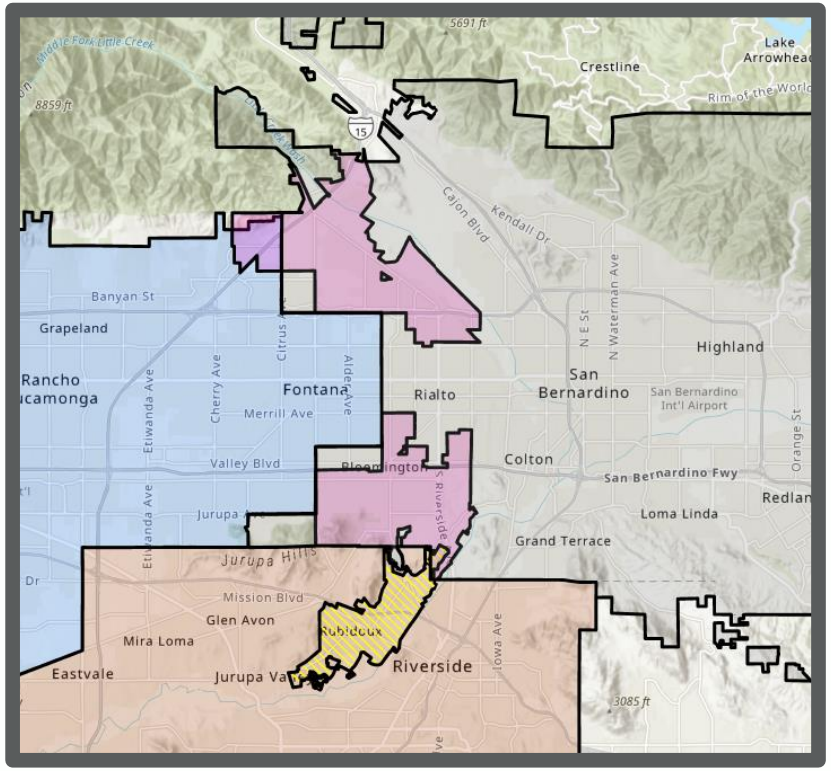
Item 7-8

March 14, 2023

Agreement to provide Rubidoux assistance with water deliveries-

2022 Board Action

April 2022 Board Action



Staff Request

- Long-term agreement
- 2,000 AFY of imported water deliveries
- Blend deliveries with local GW for water quality purposes

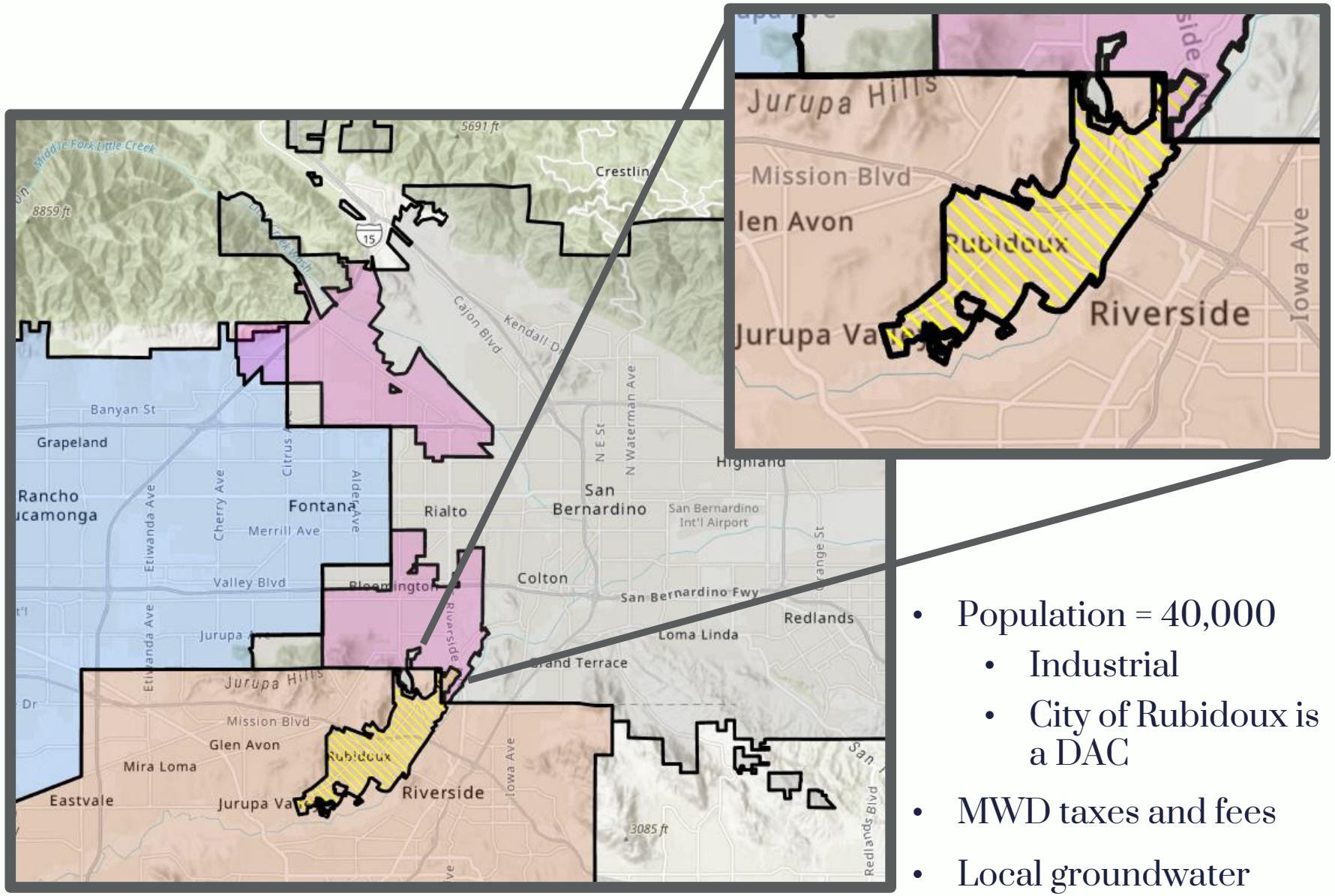
Board Direction

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

Agreement to provide Rubidoux assistance with water deliveries-

Background

Rubidoux is a member of Western Municipal Water District



- Population = 40,000
  - Industrial
  - City of Rubidoux is a DAC
- MWD taxes and fees
- Local groundwater supplies

Challenge

- Raw groundwater supplies have water quality issues
- Need for imported supplies to blend down a contaminant in their raw water supplies
- Total Dissolved Solids (TDS) led to a lawsuit with the wastewater treatment plant
- Improving the water quality of Rubidoux will benefit downstream users of the Santa Ana River

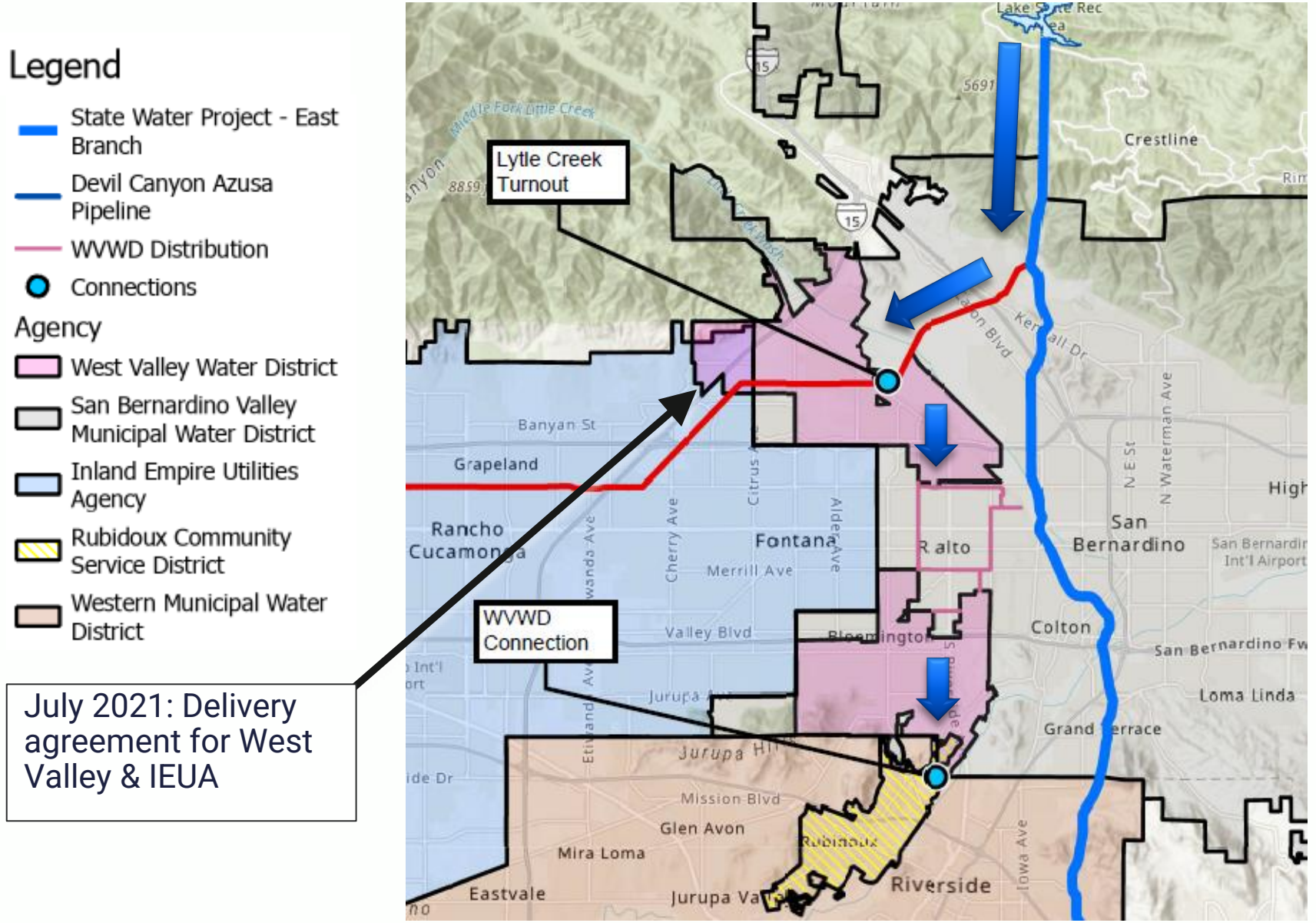
Agreement to provide Rubidoux assistance with water deliveries-

Background

Agreement to provide Rubidoux assistance with water deliveries-

Background: Agreement

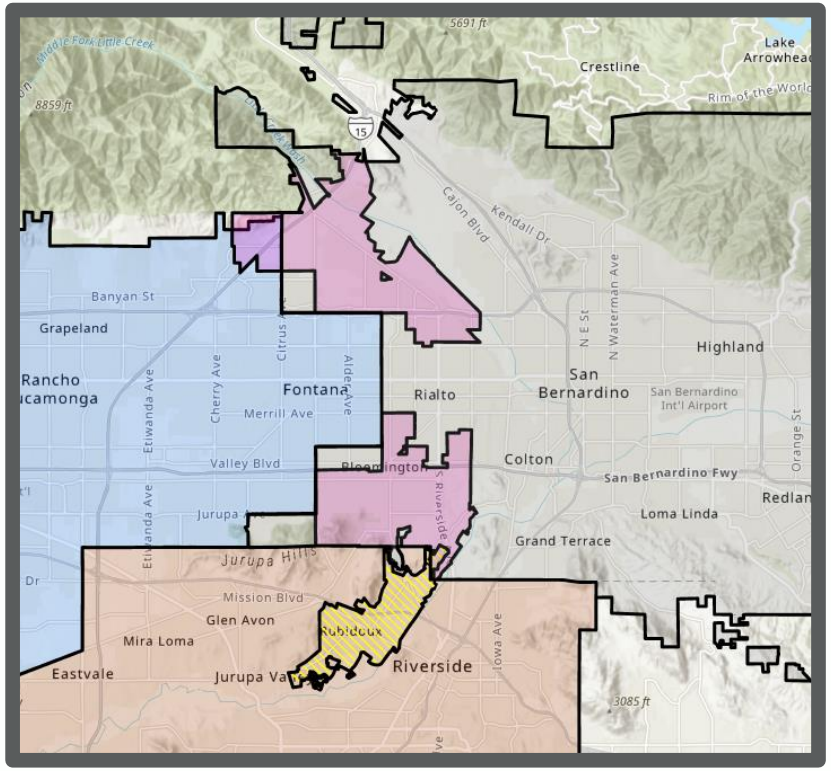
Water conveyance would be through the Azusa Pipeline



Agreement to provide Rubidoux assistance with water deliveries-

2022 Board Action

April 2022 Board Action



Staff Request

- Long-term agreement
- 2,000 AFY of imported water deliveries
- Blend deliveries with local GW for water quality purposes

Board Direction

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

Agreement to provide Rubidoux assistance with water deliveries-

Board Concerns

Proposed agreement to provide water deliveries to Rubidoux Community Services District

Blending Location

- Imported supplies will be blended with Rubidoux's potable supplies prior to customer use

Time Limit

- Long-term agreement needed to justify interconnection costs

Impacts with or without agreement

- Deliveries to Western for Rubidoux subject to same guidelines, procedures, and limitations that MWD applies to its Member Agencies in times of shortages
- Rubidoux would continue to face water quality issues

Agreement to provide Rubidoux assistance with water deliveries-

Alternatives

Proposed agreement to provide water deliveries to Rubidoux Community Services District

Desalination

- Groundwater treatment
  - Recent GAC / IOX treatment upgrades
  - Evaluated but too costly
  - Would require an extension to the IE Brine Line
  - Could be incentivized under LRP if eligible
- Riverside Water Quality Control Plant upgrades
  - Provides tertiary water for Santa Ana River
- Connection to Arlington Desalter
  - Location is about 10 miles away from Rubidoux

Agreement to provide Rubidoux assistance with water deliveries-

Alternatives

Proposed agreement to provide water deliveries to Rubidoux Community Services District

Connect to Western

- Connection to City of Riverside's distribution system
  - New 3-mile pipeline needed
  - Mission Blvd Bridge
  - Generally 100% GW, also high TDS

Agreement to provide Rubidoux assistance with water deliveries-

Alternatives

Proposed agreement to provide water deliveries to Rubidoux Community Services District

Utilize another Groundwater Source

- Bunker Hill Groundwater Basin: SBVMWD
- Western purchased 6,000 AF of replenishment water from MWD
- Low TDS levels
- Provides 3 full years of Rubidoux's request

Agreement to provide Rubidoux assistance with water deliveries-

Proposed Solution

Metropolitan Water Deliveries

- Authorize proposed agreement for 2,000 AFY
- The new interconnection would also allow Western to use Bunker Hill groundwater supplies during times of shortages

Agreement to provide Rubidoux assistance with water deliveries-

Proposed Agreement

Proposed agreement to provide water deliveries to Rubidoux Community Services District

Agreement Terms

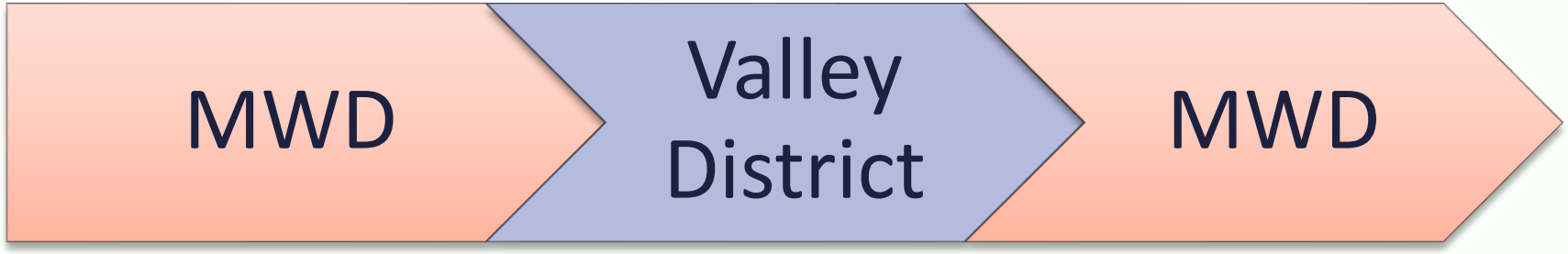
- Maximum Delivery Amount of 2,000 AFY
- Terminates November 4, 2035
- Water deliveries to be used within Western's service area
- The delivery of water by Metropolitan is not guaranteed and is limited to the unused capacity in the Azusa Pipeline
- Deliveries to Western for Rubidoux are subject to the same guidelines, procedures, and limitations that Metropolitan applies to its Member Agencies in times of shortages
- 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 provide Rubidoux assistance with water deliveries-

Board Action

Why is Board Action needed?

- New service connections don't need Board approval
- No cost to Metropolitan



- Deliveries pass outside of Metropolitan's service area
- Outside agency cooperation required through an agreement

Agreement to provide Rubidoux assistance with water deliveries-

Summary

Justification and Benefits

- Rubidoux residents pay Metropolitan property taxes and standby charges
- Customer service to a DAC
- Similar to growth elsewhere in Metropolitan's service area
- Benefits to downstream Santa Ana River users
- Added revenues
- Approved West Valley delivery agreement (2021)
- Would allow construction of interconnection
  - Bunker Hill supplies can be brought into Metropolitan
- Any limitations or guidelines on other Member Agencies would apply to Western for Rubidoux deliveries

Option #1

- Authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to provide Rubidoux assistance with water deliveries.

Option #2

- Do not authorize the General Manager to enter into an agreement with WMWD, Rubidoux, West Valley, and Valley District to provide Rubidoux assistance with water deliveries.

Board Options

Option #1

Agreement to provide Rubidoux assistance with water deliveries-

Staff Recommendations


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

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

3/14/2023 Board Meeting

7-9

Subject

Consider changes to the Water Shortage Emergency Condition and the Emergency Water Conservation Program for the State Water Project Dependent Area and reaffirm the Regional Drought Emergency for all member agencies; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

In April 2022, the Board declared a Water Shortage Emergency Condition in the State Water Project (SWP) Dependent Area because of severe drought conditions and infrastructure constraints that severely limited the delivery of SWP supplies. Associated with the Water Shortage Emergency Condition, the Board also approved an Emergency Water Conservation Program (EWCP) that imposed stringent outdoor watering restrictions or volumetric limits on SWP water supply deliveries to six member agencies.

In January 2023, California experienced one of the wettest three-week periods on record, yielding a snowpack that was at 205 percent of average on February 1, 2023 and adding more than 1.3 million acre-feet to Lake Oroville since December 2022. In response to the improved hydrologic conditions, the California Department of Water Resources (DWR) increased the SWP allocation from five to 30 percent on January 26, 2023 and then again to 35 percent on February 22, 2023. This increased allocation provides adequate water supplies to meet SWP Dependent Area demands. As a result, the conditions necessitating a Water Shortage Emergency Condition and the EWCP no longer exist and staff recommends removing them effective immediately.

In contrast to the short-term improvement in supply from the SWP, the Colorado River watershed remains in a 23-year drought, the most serious in 1,200 years. On average, 25 percent of Southern California's water supply comes from the Colorado River. On-going negotiations with the Basin States and potential changes to the 2007 Interim Guidelines initiated by the U.S. Bureau of Reclamation warrant continuing the Regional Drought Emergency declared by the Board in December 2022. Further, though the most restrictive and mandatory conservation measures of the EWCP can now be lifted, all counties in Metropolitan's service area remain in a statewide drought emergency and must still seek demand response actions outlined in their Water Shortage Contingency Plans for a shortage level of up to 20 percent. As such, the emergency authorities provided to the General Manager and the call to conserve water issued in the December 13, 2022 Board resolution remain.

Details

Regional Drought Emergency and Statewide Drought Declaration Remain in Effect

Staff's recommendation to remove the Water Shortage Emergency Condition and terminate the EWCP would not affect the other drought emergency declarations adopted by the Board during 2021 and 2022. This includes the November 2021 resolution declaring that specified emergency conditions within the Metropolitan service area as well as the Board's December 2022 resolution declaring a Regional Drought Emergency for all member agencies and calling upon all member agencies to voluntarily reduce use of both SWP and Colorado River supplies. Also unaffected would be the Board's October 2022 resolution that strongly recommended cities and water agencies across Southern California pass ordinances permanently prohibiting the installation and irrigation of non-functional turf.

The December 2022 Regional Drought Emergency resolution reaffirmed authorities delegated to the General Manager under the November 2021 resolution to take certain actions, enter agreements, and secure permits and approvals necessary to address the drought emergency conditions. Consistent with the December 2022 Regional Drought Emergency resolution, which remains in effect, the duration of the delegation of authority to the General Manager will continue until further Board action and is not affected by the action to remove the Water Shortage Emergency Condition in the SWP Dependent Area and to terminate the EWCP.

On August 16, 2022, Metropolitan's Board adopted a resolution affirming a Call to Action and a Commitment to Regional Reliability for All Member Agencies. This resolution directed the General Manager to identify a portfolio of projects and programs in coordination with the member agencies to address the need to connect and serve each member agency with more than one supply source. Collaboration and progress on the portfolio of reliability actions will continue and are not affected by the action to remove the Water Shortage Emergency Condition in the SWP Dependent Area and to terminate the EWCP.

Emergency Water Conservation Program Was Implemented to Address an Acute Water Shortage in the SWP Dependent Area

Beginning in the fall of 2019, the SWP watersheds received very low precipitation and runoff. SWP Table A allocations for 2020, 2021, 2022 were only 20, 5, and 5 percent, respectively. Despite substantial precipitation in October and December 2021, precipitation in Northern California from January through March 2022 fell to the driest levels on record. Deteriorating hydrologic conditions led DWR to reduce the SWP Table A allocation for 2022 from 15 to five percent of contract amounts on March 18, 2022. In 2022, the DWR for the first time used a provision of the SWP Contract (Article 18(a)) to allocate water on a basis other than Table A to meet minimum demands of contractors for domestic supply, fire protection, or sanitation during the year. Contractors that received these human health and safety (HH&S) deliveries must pay back to DWR future Table A water within five calendar years.

Despite extraordinary efforts by Metropolitan to maximize available resources through operational drought actions, it became apparent that there would not be sufficient SWP supply available to meet normal demands in the SWP Dependent Area for the remainder of 2022. Following a public hearing held on April 26, 2022, Metropolitan's Board issued a resolution declaring that a Water Shortage Emergency Condition existed in the SWP Dependent Area and adopting a framework for the new EWCP aimed at preserving SWP supplies. These actions were taken pursuant to Water Code section 350 et seq., Water Code section 375 et seq., and other applicable authorities.

The EWCP adaptively preserves supplies by reducing non-essential uses of water delivered to the SWP Dependent Area. The EWCP began implementation on June 1, 2022, and was authorized through June 30, 2023. Six member agencies currently take restricted delivery of SWP water under the program. The impacted agencies include Calleguas Municipal Water District, Inland Empire Utilities Agency, Las Virgenes Municipal Water District, the City of Los Angeles, Three Valleys Municipal Water District, and Upper San Gabriel Valley Municipal Water District. The EWCP allowed two paths for compliance involving either enforced restrictions on outdoor watering or adherence to agency-specific volumetric limits subject to monetary penalties of $2,000 per acre-foot for SWP water use over their limits.

Staff provided the Board with monthly reports on program status and current hydrologic conditions. From June through December 2022, the affected agencies took mandatory water supply cuts from their SWP use by an average of 35 percent from average dry-year usage, with some facing reductions of up to 73 percent. As a result of the exceptional conservation response by the SWP Dependent Area, the program successfully reduced demands to stay within the severely limited SWP supply available for 2022. No penalties were issued in 2022.

On December 1, 2022, DWR announced an initial 2023 allocation for the SWP at only five percent of contract amounts. DWR also provisionally allocated additional HH&S water to ensure that the SWP contractors could meet their HH&S needs during the year. A SWP allocation of less than 15 percent was insufficient to meet normal potable demands in the SWP Dependent Area.

In January 2023, SWP Dependent Area agencies received new volumetric limits for second phase of program from January through June 2023. Unlike the volumetric limits for 2022, the volumetric limits during the first half

of 2023 were subject to fluctuation due to uncertainties in the available water supplies at the beginning of the year. For these reasons, Metropolitan staff regularly revaluated the volumetric limits to incorporate changes.

Improving SWP Supply Conditions Alleviate the SWP Dependent Area Shortage

Metropolitan's supply outlook from the SWP in 2023 has improved significantly with the arrival of nine atmospheric rivers during December 2022 and January 2023. Of the nine atmospheric rivers, five were of strong or greater magnitude. On January 26, 2023, DWR increased the SWP annual Table A allocation from 5 percent to 30 percent based on observed runoff and storage gains in Lake Oroville and San Luis Reservoir. This 30 percent SWP allocation matched the combined previous three years of SWP Table A allocations. On February 22, 2023, DWR increased the SWP allocation yet again to 35 percent. Additional increases to the allocation are expected when DWR's later studies begin to incorporate forecasted runoff from snowpack and updated San Joaquin River flow projections. At the current 35 percent SWP allocation, DWR no longer needs to allocate HH&S supplies, and Metropolitan will not accrue any new HH&S payback obligations for 2023. At the same time, wholesale demands on Metropolitan's imported supply are trending lower than earlier projections due to a synergistic combination of conservation drought response by the member agencies and a boost to local supplies from the recent wet weather. Both of these factors allow Metropolitan to put water in storage to help protect the SWP Dependent Area against future dry years.

In summary, there is no longer an acute water shortage for the SWP Dependent Area. With a 35 percent SWP allocation, available supplies exceed the estimated demands for the SWP Dependent Area. As shown in **Attachment 1**, water use under the EWCP is tracking well below the volumetric limits under the current 35 percent SWP allocation. To date, cumulative SWP use during 2023 is trending 83 percent under the total January-June 2023 volumetric limit. This trend, combined with the expectation of further increases in SWP supply, indicates that the critical shortage has abated and that Metropolitan can resume its role of providing reliable water service to the member agencies in the SWP Dependent Area.

Recommended Action: Remove the Water Shortage Emergency Condition in the SWP Dependent Area and Terminate the EWCP

The April 26, 2022, board letter stated that "the Emergency Water Conservation Program shall continue through June 30, 2023, unless the Board of Directors lifts the action before that date." Due to the improved SWP water supply conditions that alleviate the acute water supply shortage in the SWP Dependent Area, staff recommends that the Board take action at this time to remove the Water Shortage Emergency Condition and terminate the EWCP, given that Metropolitan is now able to meet the needs of the SWP dependent member agencies. Terminating the EWCP would end restrictions on the use of SWP water by the SWP Dependent Area, effective immediately, and waive any penalties related to EWCP volumetric limits accrued to date (no penalties had been assessed through December 2022). Terminating the EWCP would also lift any mandatory requirements from Metropoltian concerning enforced outdoor watering restrictions. Monthly reporting and tracking on EWCP performance and compliance would be discontinued.

Under the action that authorized the EWCP, Member Agency Administered Program (MAAP) funding was made fully available to affected member agencies for enforcement activities beginning on July 1, 2022. Consistent with the April 26, 2022, board letter, upon termination of the EWCP, the MAAP funding and procedures will revert to previously established guidelines. Funding for existing approved tasks would be honored, but no new applications for this temporary funding mechanism would be accepted.

Removing the Water Shortage Emergency Condition for the SWP Dependent Area and terminating the EWCP removes the most stringent and mandatory requirements that were needed to deal with the acute emergency. But, it in no way lessens the importance of continued conservation and local supply investment by agencies in the SWP Dependent Area or in any other part of the region. California is still under a statewide drought emergency, and the expectation is that Metropolitan's service area and its member agencies will continue to comply with the Governor's executive order on the statewide drought emergency.

Alternatives Considered

In developing the recommendation to remove the Water Shortage Emergency Condition and terminate the EWCP, staff considered several alternatives. First, staff considered delaying the action until more information was known about SWP hydrologic conditions. DWR's latest Table A allocation is still highly conservative at 35 percent.

However, staff's assessment is that sufficient snowpack and projected runoff exists to expect future increases in the allocation even if dry conditions return.

Second, staff considered whether the current hydrologic conditions warranted a suspension of the Regional Drought Emergency declared in December 2022. Although the improved SWP supplies in 2023 allow for an easing of the immediate emergency this year, there are still ongoing water supply challenges. With the current experience of extreme year-to-year variation of SWP supply, Metropolitan must replenish storage reserves, as well as anticipate possible constraints on Colorado River diversions. The ongoing decades-long drought in the Southwest has plunged the Colorado River system's reservoirs to record low elevations. The federal government has called for significant cutbacks in water diversions from the Colorado River as soon as 2023. Metropolitan intends to minimize the delivery of water from Intentionally Created Surplus to support Lake Mead's elevation and mitigate deeper shortages that could require additional contributions under the 2019 Drought Contingency Plan. As a result, Metropolitan is not planning to have a full Colorado River Aqueduct during 2023 or in subsequent years through 2026. For these reasons, staff believes it is prudent to maintain the current Regional Drought Emergency declaration.

Consistent with staff's recommendation to reaffirm the Regional Drought Emergency, Governor Newsom has taken similar action. On February 13, 2023, Governor Newsom signed Executive Order N-3-23 that maintains almost all of the drought-response actions of his prior drought-related proclamations and executive orders. Executive Order N-3-23 ordered state agencies to submit their views on whether any existing provisions in the Governor's drought proclamations and executive orders are no longer needed. The state agencies will submit their recommendations to the Governor no later than April 28, 2023. Metropolitan staff will monitor the statewide discussions on easing any drought orders and emergency regulations now in effect.

Finally, staff considered the need to move the region beyond the Regional Drought Emergency and to adopt a regional Water Supply Allocation Plan (WSAP) for fiscal year 2023-2024. The December 13, 2022, Board resolution declaring the Regional Drought Emergency had resolved that, should drought conditions persist or worsen in the coming months, the Board would consider implementing a regionwide supply allocation in March 2023. Drought conditions overall have not worsened in 2023 and are significantly improved in the SWP watershed. Based on hydrologic conditions to date, SWP water supply conditions are projected to improve even more in the coming months. These changed conditions are further enhanced by increases in local agency supplies, and demand-response effectiveness of the actions already taken by the member agencies in response to the Governor's call for conservation. Due to these improved conditions, staff does not anticipate a need for a regionwide supply allocation during fiscal year 2023-24. Staff continues to evaluate supply and demand conditions as they develop.

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 4512: Sales Subject to System and Water Availability

Metropolitan Water District Administrative Code Section 6410: Powers and Duties

By Minute Item 43514, dated April 13, 1999, the Board adopted the Water Surplus and Drought Management Plan.

By Minute Item 47393, dated February 12, 2008, the Board adopted the Water Supply Allocation Plan.

By Minute Item 52481, dated August 17, 2021, the Board adopted a "Condition 2 – Water Supply Alert" resolution.

By Minute Item 52581, dated November 9, 2021, the Board adopted a resolution as modified recognizing a statewide drought emergency, declaring specified emergency conditions within the Metropolitan service area, and directing specified actions.

By Minute Item 52802, dated April 26, 2022, the Board declared a Water Shortage Emergency Condition, authorized the Emergency Water Conservation Program, and expressed support for the Governor's Executive Order N-7-22.

By Minute Item 52946, dated August 16, 2022, the Board adopted a resolution committing to regional reliability for all member agencies.

By Minute Item 53015, dated October 11, 2022, the Board adopted a resolution encouraging action to eliminate irrigation of non-functional turf with potable water.

By Minute Item 53061, dated December 13, 2022, the Board adopted a resolution declaring a Regional Drought Emergency.

California Environmental Quality Act (CEQA)

CEQA Determination for Options #1 & 2:

The proposed actions are not defined as a project under CEQA (Public Resources Code Section 21065, State CEQA Guidelines Section 15378) because they involve continuing administrative or maintenance activities and/or general policy and procedure making that will not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment (Section 15378(b)(2) 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).

Board Options

Option #1

Remove the Water Shortage Emergency Condition declared on April 26, 2022, for the SWP Dependent Area, terminate the Emergency Water Conservation Program and application of any penalties accrued, and reaffirm the Regional Drought Emergency declared on December 13, 2022.

Fiscal Impact: No negative fiscal impact. Upon terminating the Emergency Water Conservation Program, revenues from water transactions may increase if member agencies increase purchases of Metropolitan water. Expenditures for Emergency Water Conservation Program enforcement activities under Member Agency Administered Program may decrease as funding and procedures revert to the previously established guidelines.

Business Analysis: Making sufficient SWP supplies available to address the reliability needs of the SWP Dependent Area member agencies in 2023 is consistent with the Board's intent for Metropolitan to provide equitable reliability across the service area.

Option #2

Continue the Water Shortage Emergency Condition declared on April 26, 2022, for the SWP Dependent Area, continue the Emergency Water Conservation Program, and reaffirm the Regional Drought Emergency declared on December 13, 2022.

Fiscal Impact: By continuing the Emergency Water Conservation Program, revenues from water transactions will likely decrease as member agencies reduce water demands. At the March 22, 2022, budget workshop, staff presented a scenario with 100,000 acre-feet fewer transactions each year. This scenario—realistic in the magnitude of the needed demand management activity—could reduce revenues by approximately $100 million in fiscal year 2022/23.

Business Analysis: The Emergency Water Conservation Program would continue until June 30, 2023. Restricting SWP supplies available to agencies within the SWP Dependent Area may not be consistent with the Board's intent for equitable reliability across Metropolitan's service area.

Staff Recommendation

Option #1

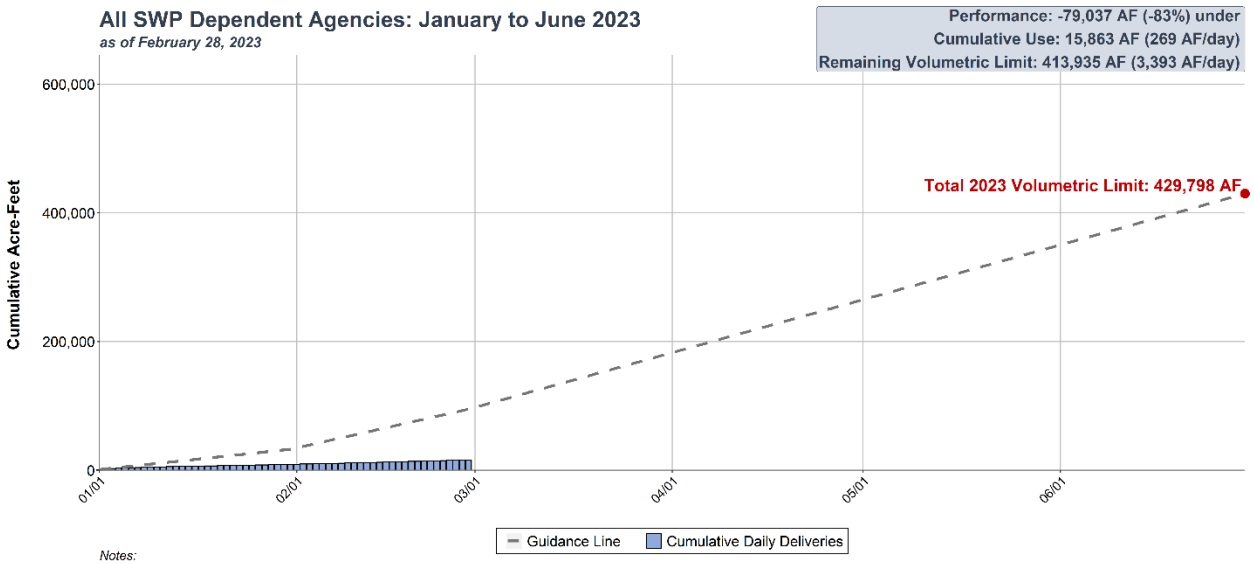
2/22/2023
Brad Coffey *Date*
Manager, Water Resource Management

2/27/2023
Adel Hagekhalil *Date*
General Manager

Attachment 1 – Emergency Water Conservation Program Performance

Ref# wrm12689889

Emergency Water Conservation Program Performance



Notes:
1. Guidance line is a representation of the total volumetric limit on a cumulative daily basis. It assumes a linear path, unless a monthly pattern is provided by a member agency.
2. Performance is the acre-foot and corresponding percent deviation from the guidance line, per as of date.
3. Tracking of cumulative daily deliveries only include those agencies planning to receive SWP supplies January - June 2023.

Disclaimer: Data presented is preliminary and subject to change based on monthly reconciled billing data.

One Water and Stewardship Committee

Consider Changes to the Water Shortage Emergency Condition for the SWP Dependent Area and Reaffirm the Regional Drought Emergency for all Member Agencies

Item 7-9

March 14, 2023

Current Status of Drought & Shortage Emergency Actions

Entire Service Area:

- Subject to Governor's Statewide Drought Emergency Declaration & Executive Order N-7-22
- Regional Drought Emergency declared Dec. 2022

SWP Dependent Area:

- Water Shortage Emergency Condition declared April 2022
- Emergency Water Conservation Program (EWCP) began June 2022

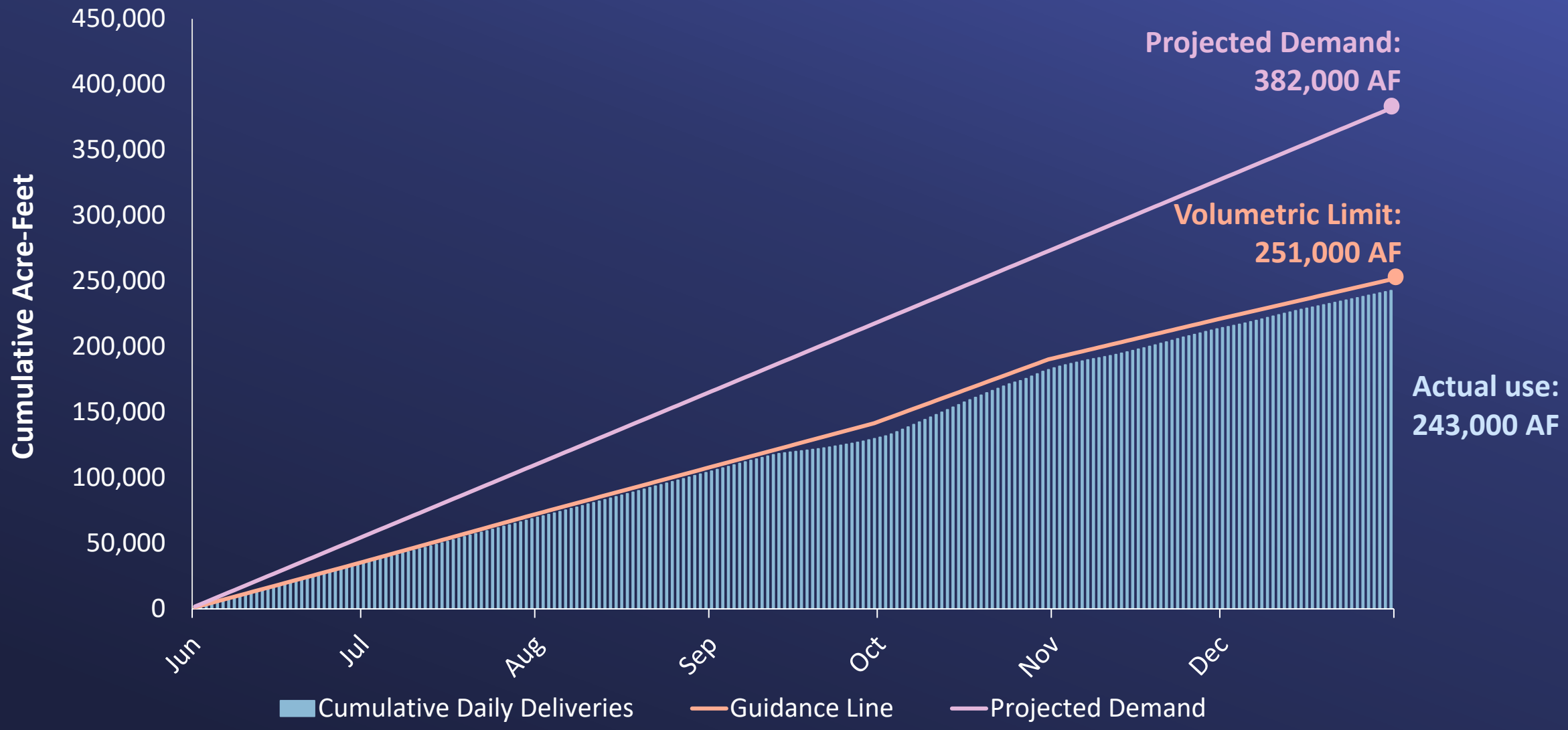
Agencies Responded to the Need

2022 EWCP (June – December)

- SWP Dependent Area agencies faced severe mandatory requirements to reduce water use
  - Targeted 35% (on average) and up to 73% reduction from projected demands on MWD
  - Required complying with volumetric limits or strict one-day-per week watering limits
  - $2,000/AF volumetric penalty if not in compliance
- SWP Dependent Area agencies collectively exceeded reductions required by EWCP objective
  - SWP water use reduced by 36% despite a record heat wave
  - No penalties assessed

All SWP Dependent Agencies Water Use Tracking: Jun. to Dec. 2022

As of 12/31/2022



Improved Conditions for SWP Dependent Area

Acute Shortage Conditions are Alleviated

- SWP allocation increased from initial 5% to 35%
  - Hydrology improved beginning in late December
  - Allocation exceeds unmet Human Health & Safety need
  - Storage of SWP supplies now planned
- Member Agency demands on Metropolitan lower than earlier projections
  - Conservation increase from drought actions and wet weather
  - Local supply boosted by current hydrologic conditions
- Acute water shortage for the SWP Dependent Area is alleviated at a 35% SWP allocation

Board Consideration to End Most Severe Restrictions

Measured Response to Improved 2023 Conditions

- Remove Water Shortage Emergency Condition currently declared for the SWP Dependent Area
- Remove Emergency Water Conservation Program (EWCP) for the SWP Dependent Area
  - Mandatory outdoor restrictions and enforcement
  - Penalty-enforced volumetric limits on supply
  - MAAP funding and procedures will revert to established guidelines
- Reaffirm the Regional Drought Emergency for all member agencies
  - Colorado River watershed remains in a 23-year drought
  - Future year SWP supplies remains uncertain
  - All counties in Metropolitan's service area remain under the Governor's statewide drought emergency declaration

Regionwide Actions Remain in Place

Regional Drought Emergency Resolution (December 13, 2022)

- Reduce use of imported water supplies and immediately enhance and intensify conservation actions
- Implement demand response actions outlined in State-mandated Water Shortage Contingency Plans for a shortage level of up to 20 percent
- Emergency authorities delegated to the General Manager to address ongoing drought conditions

Alternatives Considered to Recommended Action

- Delay the action to remove the Water Shortage Emergency Condition and terminate the EWCP until future SWP allocation increases
- Suspend the Regional Drought Emergency declared in December 2022
- Move beyond the current requirements and actions specified in the Regional Drought Emergency and implement a regionwide supply allocation for FY 2023-24 (Water Supply Allocation Plan)

Water Supply Allocation Plan (WSAP)

Update & Outlook

- Ongoing coordination with Member Agencies to discuss WSAP updates and potential implementation
- Considerations for implementation include
  - Hydrologic conditions
  - Imported supply outlook
  - Projected demands on Metropolitan
  - Projected end-of-year storage levels
- Under current and projected supply and demand conditions, staff does not anticipate a need for a regionwide WSAP supply allocation during fiscal year 2023-24

Keeping the Public Engaged

Continuing Drought & the Need to Conserve

- Messages
  - California vulnerable to extreme, variable weather
  - Need to adapt how we manage, invest in our water systems
  - Need to continue to use water wisely, Metropolitan and local water agencies are here to help with rebates and water saving tips
- Strategies
  - Multi-lingual messaging on current water conditions through earned media, community outreach, member agency support
  - Promote rebates, landscape transformations, and other water-saving actions for businesses, homes
  - Expand community partnerships and collaborations with Save Our Water, ACWA, other agencies

Board Options

Option #1

- Remove the Water Shortage Emergency Condition declared on April 26, 2022, for the SWP Dependent Area, terminate the Emergency Water Conservation Program and application of any penalties accrued, and reaffirm the Regional Drought Emergency declared on December 13, 2022.

Option #2

- Continue the Water Shortage Condition declared on April 26, 2022, for the SWP Dependent Area, continue the Emergency Water Conservation Program, and reaffirm the Regional Drought Emergency declared on December 13, 2022.

Staff Recommendation

Option #1


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

INFORMATION

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

3/14/2023 Board Meeting

9-2

Subject

Information on the High Desert Water Bank Program status, updated costs, and water quality

Executive Summary

This letter provides an update on the status, costs, and water quality of the High Desert Water Bank (HDWB) Program with Antelope Valley – East Kern Water Agency (AVEK). The estimated costs of the HDWB have increased since the 2019 Board authorization of $131 million to a current estimate of $210 million. Over the past four years, inflation has significantly increased, the off-site power distribution design was finalized, modeling based on four-pilot recovery wells revealed the need for additional wells to achieve the recovery target, and water quality testing of the pilot recovery wells revealed naturally occurring arsenic levels above the California Maximum Contaminant Level (MCL), potentially requiring treatment before pumping into the California Aqueduct. Based on the current construction schedule, the HDWB Program can begin recharging in Summer 2023 with full recharge and recovery operation in 2025. The current HDWB agreement provides: (1) Metropolitan and AVEK will agree in writing to the final design, construction schedule, and estimated budget; (2) if the capital costs will exceed the budget, Metropolitan may either scale down the project to stay within the original budget of $131 million or pay the additional costs; (3) Metropolitan will pay the actual energy costs; and (4) if Metropolitan determines that water quality treatment is required before water is returned to Metropolitan, and if AVEK or a third party is not responsible for impairing water quality, Metropolitan can decide on the type of treatment to implement and would be required to pay actual treatment costs. Staff will return to the Board to request authorization for additional project costs, design changes, any necessary amendments to the HDWB agreement, and to provide regular updates.

Details

Background

In April 2019, the Board authorized the General Manager to enter into the HDWB Agreement with AVEK (HDWB Agreement) and provide up to $131 million for the construction of monitoring and production wells, turnouts from the California Aqueduct, underground and aboveground pipelines, recharge basins, and water storage and booster pump facilities. Metropolitan and AVEK executed the HDWB Agreement in December 2019. Once operational, Metropolitan is required to pay for the actual operation and maintenance (O&M) and power costs for the facilities when used for Metropolitan's benefit and, potentially, any required treatment costs. Under the program, Metropolitan may store up to 280,000 AF of its State Water Project (SWP) supplies in the Antelope Valley Groundwater Basin. In addition, Metropolitan has first priority to 70,000 AF per year of put and take capacity. AVEK has a secondary priority right to access the groundwater bank. At this point in time, there are no other participants in the groundwater bank. However, AVEK plans to develop additional capacity to bring new participants into future phases of the bank over time. Under the HDWB Agreement, Metropolitan can recover a portion of its costs should future participants utilize unused capacity that was developed by Metropolitan's investment in the program.

When completed, the HDWB will provide the region with valuable supply benefits. The HDWB, like Metropolitan's other SWP groundwater storage programs, will help manage surplus supplies and improve dry-year regional reliability. The HDWB will provide an increased emergency benefit with a direct pump back of stored water into the California Aqueduct when needed. The HDWB is downstream of the Edmonston Pumping

Plant and provides an additional factor of reliability. If the Edmonston Pumping Plant or facilities upstream are damaged by an earthquake or shut down due to another type of failure, stored water would be returned from the HDWB to help maintain deliveries. In addition to earthquake-related failures, the aging California Aqueduct is experiencing increased occurrences of failures, particularly in portions of the San Joaquin Valley upstream of the AVEK connection. Staff is also evaluating opportunities to deliver supplies to the West Branch and increase supply reliability of SWP-dependent areas.

High Desert Water Bank (HDWB) Program

Construction of the HDWB is on schedule and anticipated to be fully operational by the end of 2025. As of March 2023, AVEK has completed the construction of ten recovery wells. Current construction activities include work on turnout to the California Aqueduct and staged work of recharge basins allowing Metropolitan the ability to begin recharging in Summer 2023. To date, Metropolitan has paid approximately $50 million primarily for land acquisition, design, and construction of the HDWB facilities. Metropolitan's anticipated expenditure for the remainder of this fiscal year is approximately $12 million.

As construction of the HDWB progresses, staff regularly meets with AVEK to get updates on project status, milestone achievements, and challenges. Staff is in discussions with AVEK regarding unforeseen issues impacting the project and estimated project costs, including project design, the power distribution system, hydraulic variability, water quality, and inflation.

Power Distribution System

In 2018 when the original cost estimate was prepared, it did not include electrical distribution system costs to bring power to the project site. At that time, AVEK had not received the Method of Service (MOS) study and associated cost estimate from Southern California Edison (SCE). SCE recently completed a MOS study including the conceptual design and estimated distribution system costs. Based on the conceptual design, SCE will be taking power from the nearest substation at Neenach via a new 66 kV transmission line to a new substation adjacent to the project. AVEK will install three-12 kV power lines within the project site to power the project facilities. SCE will own all the off-site facilities, and AVEK will own facilities within the project site. The estimated cost for the power facilities is about $75 million; however, the majority of the capital will be covered by SCE. Metropolitan's capital cost responsibility for power for the project is approximately $11 million. Metropolitan is also responsible for the facilities' O&M costs (which are estimated to be 3 percent of capital costs) once operational.

Hydraulic Variability

In 2017, in accordance with the original project design, AVEK completed its initial field investigation and drilled five monitoring wells to a depth of approximately 500 feet below ground surface. Shortly after completion, the monitoring wells were tested and sampled. In 2020, AVEK completed an initial groundwater model based on the information collected from the monitoring wells. The model was refined and calibrated to calculate the estimated recharge and recovery capacity. Based on the modeling results, the recovery capacity objective of 70,000 AF-per year could not be met with the original proposed well design of 23 shallow wells. In 2021, AVEK installed and tested four deep pilot recovery wells drilled to approximately 1000 feet. These pilot wells were drilled with the intention of being permanent recovery wells but are referred to as "pilot" since they were the first wells and were used for extensive testing and modeling of the basin. Testing included step and constant rate pumping tests and zonal testing. AVEK also installed a deep piezometer and monitoring well. Based on the depth-specific data collected, AVEK was able to estimate, among other things, the recovery capacity of the wells. Modeling revealed that the annual recovery objectives could be met by drilling deeper wells and increasing the total number of wells by four. The new recovery facilities would include a total of 27 deep aquifer wells. The impacts of increasing the depth and number of recovery wells, including drilling, pumps, motors, instrumentation and SCADA, piping, and well site electrical, results in an increase in costs of about $29 million. It should be noted that this is a conservative approach in design to ensure production of at least 70,000 acre-feet of direct pump-back capacity in a given year. It is possible that this infrastructure may allow for a higher amount of annual pumping or for the full 70,000 acre-feet to be produced in a shorter time window within the year.

Groundwater Quality and Treatment

The initial field investigation in 2017 included Title 22 water quality sampling for the five monitoring wells. In 2018, the monitoring wells were resampled per Metropolitan's request. All water quality samples collected from the monitoring wells met California's Title 22 Drinking Water Standards. The monitoring wells were shallow, based on the initial well design. However, after completing the groundwater modeling described above, water quality testing of the first four deeper recovery wells (pilot recovery wells) revealed that arsenic levels in all four wells were above the MCL of 10 micrograms per liter (µg/L),[1] ranging from 11 to 19 µg/L. Metropolitan's Board adopted policy governing the introduction of new water sources into treated and untreated conveyance facilities requires new water pump-in programs to meet all MCLs in effect at the time and to be modified, if necessary, to meet subsequent, more stringent MCLs. AVEK conducted additional testing and monitoring, including zonal testing and depth-specific sampling, to refine the groundwater model and further study the basin. The groundwater basin is comprised of a shallow and a deep aquifer. Arsenic is naturally occurring and widespread throughout the basin but is more concentrated in the deeper aquifer. AVEK has completed and tested ten of the 27 planned wells. Arsenic levels in nine wells range from 8 to 20 µg/L. Based on the current water quality data, recovered water from the HDWB may require arsenic treatment prior to delivery to the California Aqueduct. Based on performance requirements, project constraints, and cost-effectiveness for large flow rates, AVEK's recommended treatment process is coagulation and sedimentation. The estimated capital cost for the construction of a treatment facility designed to treat the full program's capacity of 70,000 acre-feet per year is $29 million and $4.2 million per year for O&M costs. Metropolitan staff are reviewing this recommendation. A hybrid operation of treating some wells while blending with other untreated wells could be considered.

Additionally, nitrate was detected in both the monitoring wells and recovery wells, although concentrations were below the MCL of 10 milligrams per liter as Nitrogen (mg/L-N). The nitrate concentrations ranged from 6.3 to 7.8 mg/L-N in the shallower monitoring wells and 2.7 to 5.9 mg/L-N in nine deeper recovery wells. Before AVEK introduces its water into the California Aqueduct, the DWR's Facilitation Group (of which Metropolitan is a member) will review AVEK's proposal to evaluate the program's impact on water quality and provide the program's approval recommendations to DWR. Nitrate cannot be removed through the conventional water treatment process at most treatment plants. However, nitrate treatment is not anticipated at this time. As such, the treatment costs for nitrate are not included in the estimated treatment costs discussed above. Staff will continue to monitor if and how nitrate levels change over time in order to determine whether additional treatment for nitrate is warranted in the future.

Inflation

In 2018, AVEK's consultant prepared the original cost estimate for the project. Since then, the unprecedented pandemic resulted in unforeseen challenges to project development, including supply chain issues affecting the ability to acquire materials/equipment coupled with increased material and construction costs. The original estimate assumed an inflation rate of three percent per year. The Construction Cost Index (CCI) between 2018 and 2022 shows a cost increase of about 30 percent over this period. Recent construction bids received are higher than the estimates, consistent with the CCI. The estimated cost increase due to higher-than-anticipated inflation is about $37 million.

Changes to Design and Costs

Metropolitan continues to work with AVEK to search for cost-saving opportunities without compromising project performance. As an example, AVEK's consultant redesigned the recharge facilities based on additional modeling completed in 2021 to maximize the gravity-fed recharge areas and remove pumped recharge facilities. Absent this design change, the recharge facilities' costs would have been about $27 million higher. Furthermore, staff is working with AVEK to potentially extend the term of the agreement by 20 years beyond the end of the original SWP contract (*i.e.*, to 2077) to distribute the costs over a more extended period, thus reducing the project's unit

[1] The California State Water Resources Control Board, Division of Drinking Water (DDW) is currently investigating the technological and economic feasibility of lowering the arsenic MCL below the current California and federal MCL and closer to the Public Health Goal of 0.004 µg/L.

cost. Staff revised the estimated O&M costs of the program to reflect common industry practice of three percent of capital costs and added the estimated annual O&M costs of $4.2 million for the arsenic treatment facility. All O&M costs are assumed to be escalated annually based on the Consumer Price Index. Based on the discussed increases in cost, modification to estimated O&M costs, and assuming AVEK and Metropolitan agree to extend the term of the HDWB Agreement, the estimated unit cost of the program is $565/AF. The table below provides a summary of the capital cost impacts to the program.

Program Component	**Cost Increase**
Power	$11 million
Hydraulic Variability	$29 million
Recharge Basins	($27 million)
Groundwater Quality	$29 million
Inflation	$37 million
Total	**$79 million**

With the changes shown above, the total capital cost of the program has increased to $210 million. The HDWB Agreement includes an option for Metropolitan to downsize the program facilities to meet the authorized amount of $131 million should the capital costs increase. However, if Metropolitan chose to exercise this option and if AVEK constructed additional facilities that Metropolitan did not pay for, the parties may need to negotiate for Metropolitan to access a proportionate share of all program facilities, including recharge, recovery, and storage.

Considerations

Although the changes described above have resulted in increases in the overall costs for the project, there may be opportunities to recover some costs in the future. For example, the turnout to the California Aqueduct and the off-site power distribution system have additional capacity available that can be used in a future expanded phase of the program. These facilities could be used for Metropolitan's benefit or instead, Metropolitan can negotiate reimbursement for those costs, if other participants benefit from the facilities. In addition, the redesign of the recharge basins reduced the amount of land required for the first phase. Because Metropolitan paid for the initial land purchase, Metropolitan can benefit from that land if the program is expanded, or Metropolitan can negotiate with AVEK to be credited for use of facilities and purchased land if Metropolitan chooses not to participate in a future phase. Additionally, the planned facilities are designed to allow at least 70,000 acre-feet of capture and pump-back capacity. It is possible that program performance may exceed these amounts. Metropolitan and AVEK may consider revising the agreement to reflect the potential for higher program performance.

Timeline and Next Steps

Staff will incorporate committee feedback and return to the Board to request authorization for the additional project costs, approval of the final project design including treatment options, and necessary contract amendments, as may be required. In addition, staff will continue to monitor the construction and schedule of the project and provide regular updates to the committee.

Policy

By Minute Item 44357, dated February 13, 2001, the Board authorized adopting a water quality policy governing the introduction of new water sources into treated and untreated conveyance facilities, and authorized the General Manager to implement the policy, as set forth in the letter signed by the General Manager on January 29, 2001.

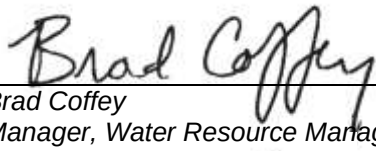
By Minute Item 50302, dated November 10, 2015, the Board authorized entering into an agreement for Storage and Exchange Programs with AVEK.

By Minute Item 51564, dated April 9, 2019, the Board authorized to enter into an agreement for the High Desert Water Bank Program with AVEK.

Metropolitan Water District Administrative Code Section 4203: Water Transfer Policy

Fiscal Impact

Based on the delineated increases in costs attributed to power, hydraulic variability, groundwater quality, and inflation, the capital costs for the construction of the HDWB Program are estimated to increase by $79 million. Total capital costs are projected to be $210 million with an estimated unit cost of about $565/AF. In the Adopted Biennium Budget for Fiscal Years 2022/23 and 2023/24 (the "Adopted Budget"), the Board approved bond financing for the HDWB Program, which reduces O&M expenditures for this supply program by converting short-term construction cash expenditures to debt service payments over the term of bonds. Staff will propose the issuance of additional bonds to fund the $79 million in increased capital costs. The net fiscal impact of the delayed financing and increased capital costs is negligible (approximately $30,000) during the term of the Adopted Budget. The additional debt financing costs, however, are estimated to increase supply program costs by $112.2 million over the fifteen-year term of the bonds, averaging about $6.5 million per year over prior annual projections.



3/4/2023

Brad Coffey *Date*
Manager, Water Resource Management

3/4/2023

Adel Hagekhalil *Date*
General Manager

Ref# wrm12688221

One Water and Stewardship Committee

Information on the High Desert Water Bank Program status, updated costs, and water quality

Item 9-2

March 14, 2023

Program Parameters

Board authorized in April 2019

Capital costs up to $131 million

- Estimated project unit cost: $320/AF

Program size:

- Storage capacity of 280,000 AF
- Put/take capability of 70,000 AFY
- Would more than double existing direct pump-back

Agreement term: 2019 - 2037

- 20-year no cost option to extend

Initial Project Design

- Pumped and gravity-fed recharge basins
- 23 recovery wells
- Two turnouts
- Off-site power needed to operate not included

Where We Are Today

- Provided about $50 million to date
- Completed construction of 10 recovery wells
- Turnout and stage 1 recharge basins under construction
- Could begin recharging in Summer 2023
- Project is on schedule to commence full operation in 2025

HDWB – Phase II

- AVEK plans for future phase of HDWB
  - Storage capacity of up to 440 TAF
  - Put/Take capability of up to 110 TAFY
  - Connection to West Branch
- Several interested parties
- AVEK may prioritize Metropolitan's participation, if interested

Updated Design & Costs

- Power distribution costs are defined

- Design evolved to meet program parameters
  - Increased depth and number of wells
  - Optimized recharge basin design

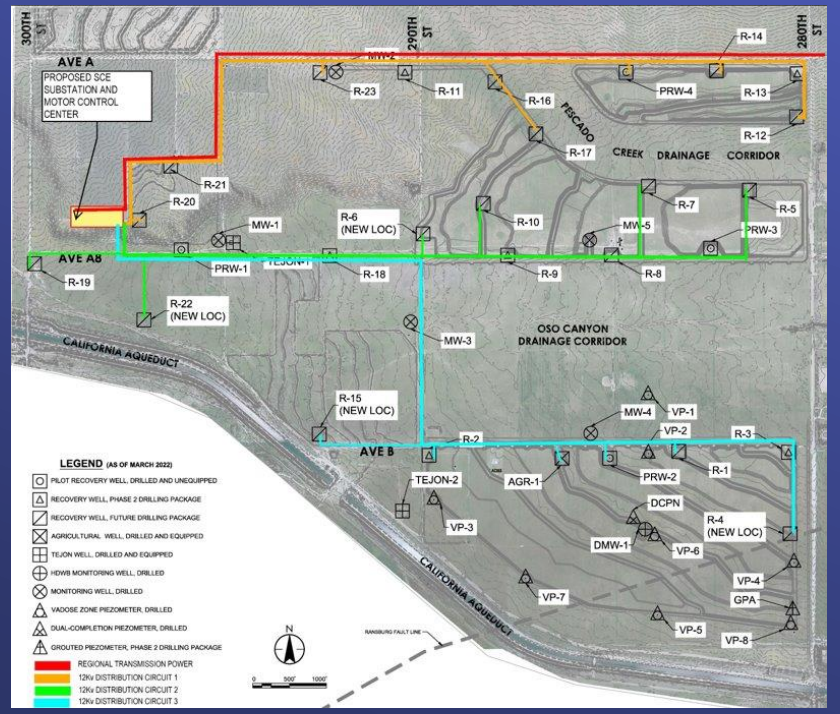
- Changes in water quality
  - Arsenic (naturally occurring)
  - Nitrate

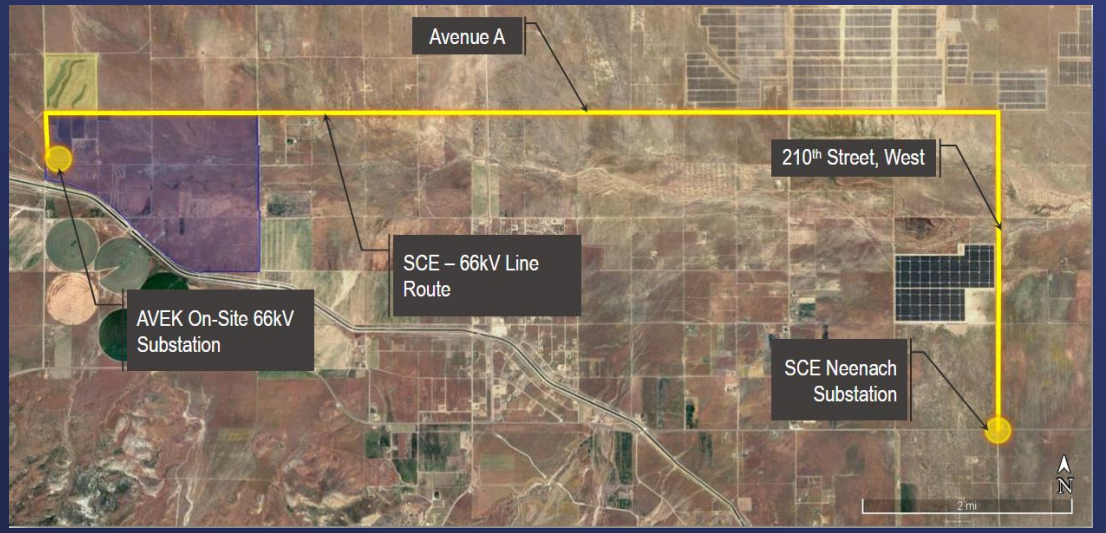
- Inflation has driven up costs

- Cost increases of $79 million
  - Total cost of $210 million

Power Distribution Costs Are Now Defined

- Off-site power costs not included in 2018 construction estimate
  - Unknown power needs
- SCE completed Method of Service study in 2022
  - Off-site
    - Transmission Line
    - Substation
  - On-site
    - Power lines
- Capital cost estimate: $11M

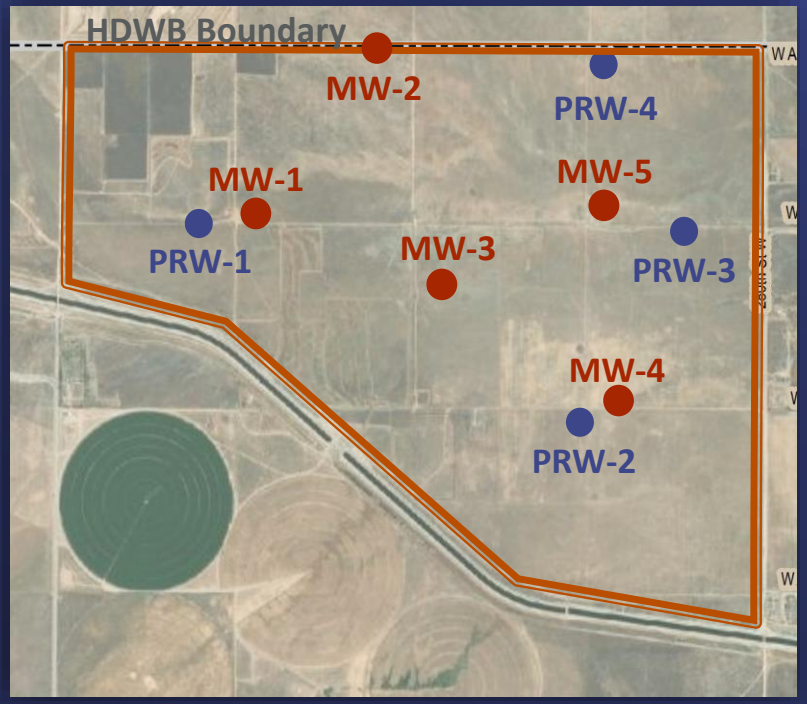




Design Evolved to Meet Program Parameters

Wells

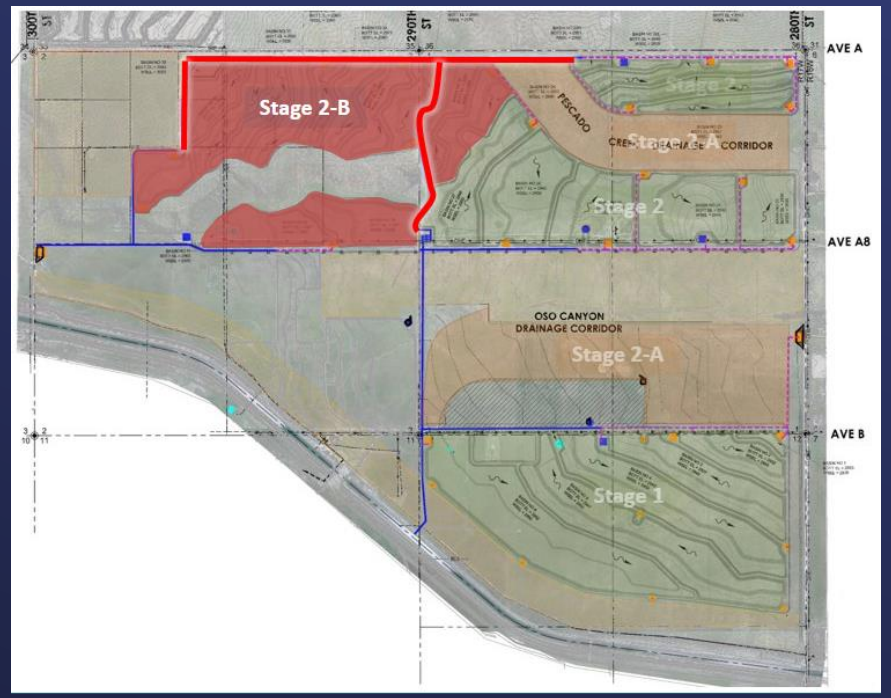
- AVEK drilled and tested five monitoring wells
  - Depth of approximately 500 ft
  - Testing indicated that water quality met all drinking water standards
- Updated monitoring well data and groundwater modeling showed need for deeper well design
- Updated recovery well data and modeling showed potential need for additional four wells
  - Total number of wells increases from 23 to 27
- Increased capital cost estimate: $29 M

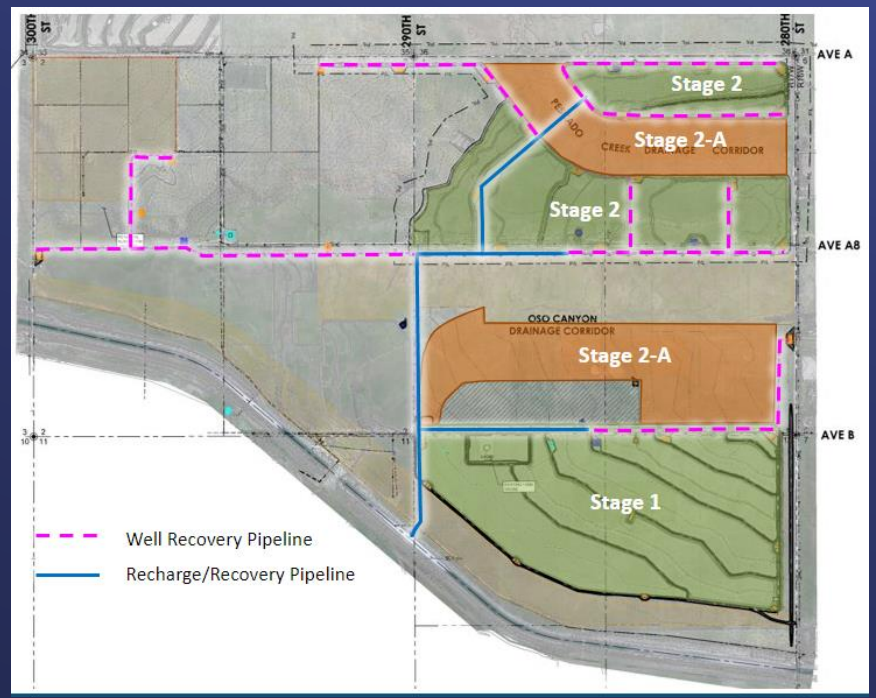


Design Evolved to Meet Program Parameters

Recharge Basins

- Removed pumped basins and pumping
  - Gravity recharge basins only
  - Increased berms
- Avoided an additional cost of about $27 M





Changes in Water Quality

Arsenic

- Initial field investigation and testing
  - All water quality samples met Title 22 Drinking Water Standards
- Water quality sampling from recovery wells shows levels of arsenic from 8 – 20 µg/L (MCL is 10 µg/L)
  - Naturally occurring
  - Modeling shows arsenic is widespread throughout the basin, more concentrated in the deeper aquifer
  - Treatment is required
- Recommended treatment process is coagulation and sedimentation
- Capital cost estimate: $29 M

Changes in Water Quality

Nitrate

- Nitrate levels in recovery wells from 2.7 – 5.9 mg/L-N (MCL is 10 mg/L-N)
  - Higher than ambient levels in CA Aqueduct
  - Looking into impacts to our source water and treated water
- Nitrate concentrations for remaining recovery wells are unknown
- AVEK's consultant working on model to evaluate trends in nitrate concentrations as water cycled through basin

SWP Banking Program Considerations

Banking Program	Constituents of Concern	Termination Date
Arvin-Edison	1,2,3 TCP	2035
Semitropic	Arsenic	2035
Kern-Delta		2029

- Agreements require renegotiation soon
- Some programs impacted by water quality regulations
- More treatment likely to be required in the future

Inflation Has Driven Costs Up

- Unprecedented challenges
  - Increased material and construction costs
  - Supply chain issues affecting ability to acquire materials/equipment
- 2018 Capital Cost Calculation
  - Assumed an annual 3% cost increase
- 2022 Consumer Cost Index
  - Cost increase between 2018 and 2022 of 30%
- Estimated additional cost: $37 M

Changes in Cost

Factors Contributing to Changes in Cost		Estimated Capital Cost
Off-site Power		$11 M
Design Changes		$2 M
Wells	$29 M	
Recharge Basins	($27 M)	
Inflation		$37 M
Water Quality (Arsenic Treatment)		$29 M
Total:		**$79 M**

- Updated O&M cost estimate to be 3% of capital and included $4.2M/yr for treatment facility

Future Cost Recovery Opportunities

- Oversized facilities
  - Turnout
  - Power distribution
  - Conveyance pipelines
- Acquired land
  - Originally planned for pumped recharge
- Number of wells
  - Remain within 70 TAF recovery target

Feedback on Options

- Build project with revised design and cost for $210 M
  - Negotiate extension of term by 20 years through 2077
    - Estimated project unit cost: $565/AF
- Limit participation in project and stay within approved budget of $131 M
  - Negotiate project participation of 60-70% of all program facilities
- Limit participation in project to stay within approved budget plus additional cost for treatment for $160 M
  - Consistent with agreement terms
  - Negotiate project participation of 70-80% of all program facilities

Cost Competitive to Other Storage Investments

- Metropolitan groundwater storage program full cycle costs (not including capital costs)
  - Arvin-Edison – $441/AF
  - Kern-Delta – $323/AF
  - Semitropic – $493/AF
- Evaluating additional project costs within and outside of Metropolitan
  - Diamond Valley Lake
  - Sites Reservoir
  - Los Vaqueros Expansion
- Will provide cost information for action item

Consideration

- Move forward with revised design including additional wells and treatment
- Amend agreement
  - Additional project costs
  - Add element of treatment
  - Extend term
  - Allow yield above 70 TAF
  - Ability to recover costs
    - Land
    - Oversized facilities
    - Treatment

Next Steps

- Incorporate Committee feedback
- Return to the Board for action in a future month
- Continue to meet with AVEK and monitor progress and potential changes
  - Cost
  - Schedule
  - Water quality


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

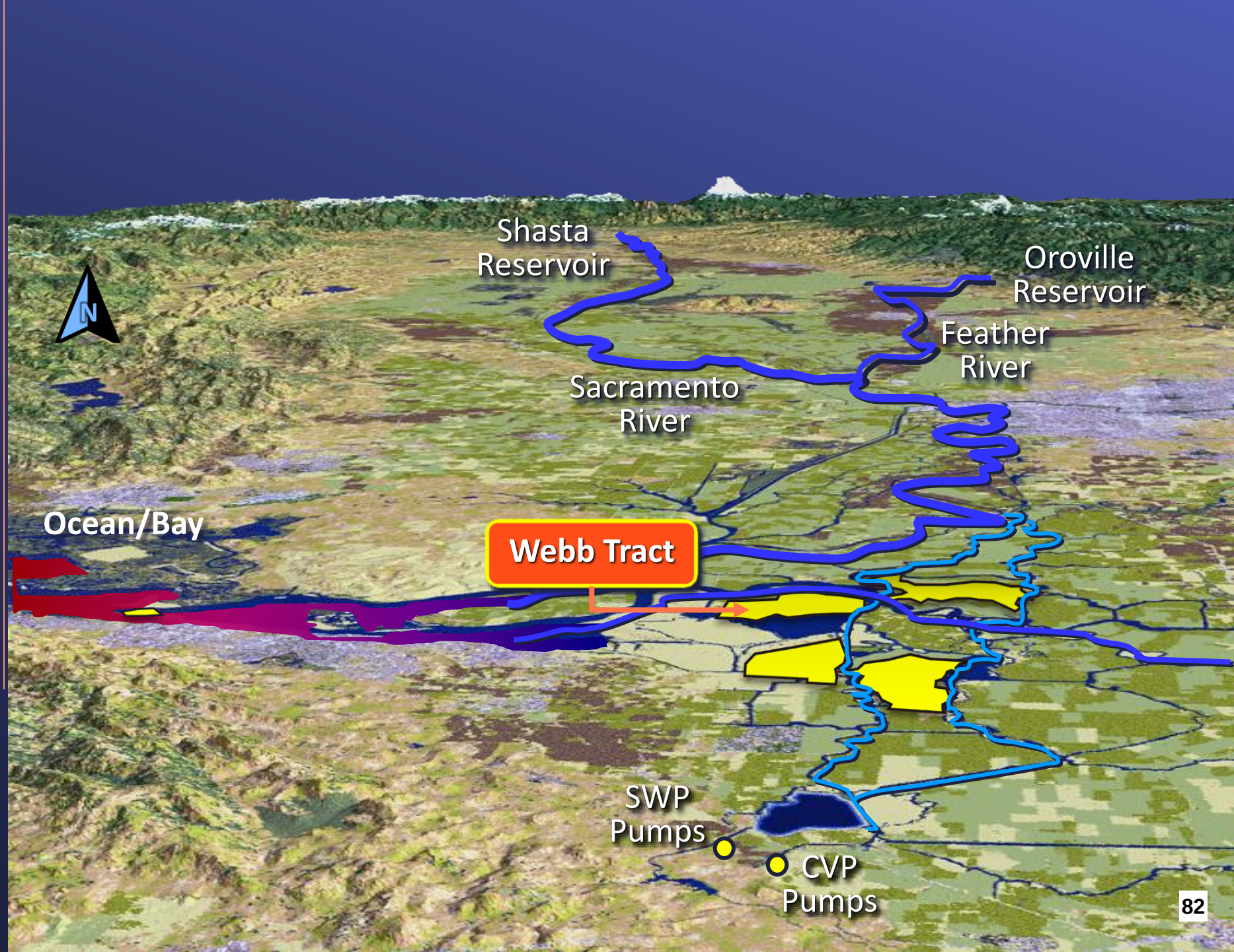
One Water and Stewardship Committee

Proposed Grant Opportunity for Webb Tract

Item 7a

March 14, 2023

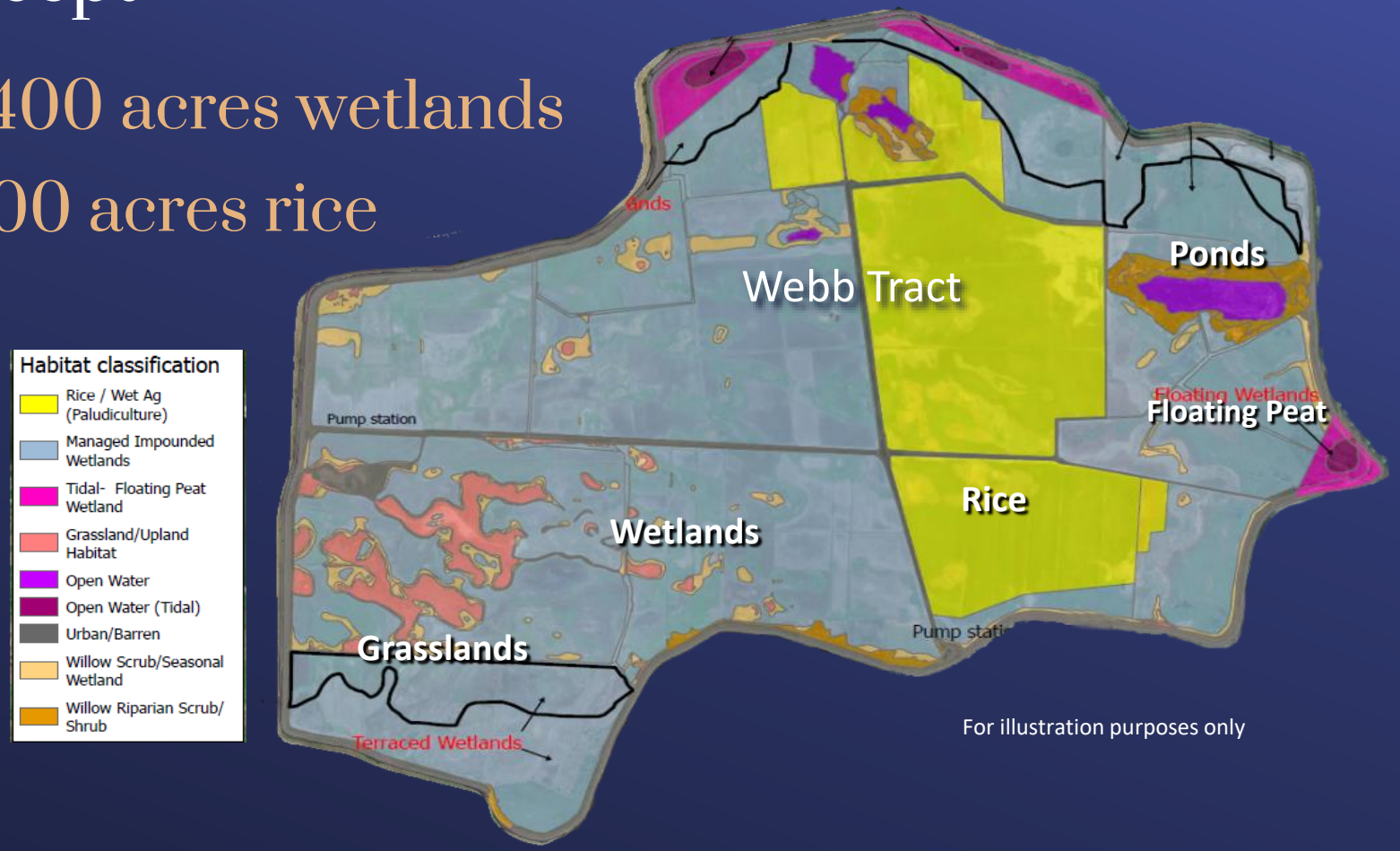
Webb Tract Location Map



March 14, 2023

Webb Tract Grant Application

- $20M grant proposal to Delta Conservancy
- Concept
  - 3,400 acres wetlands
  - 1,100 acres rice



Webb Tract Grant Goals

- Stop and/or reverse subsidence
- Reduce GHG emissions
- Augment the Delta pelagic food web
- Generate carbon offsets
  - Metropolitan's Climate Action Plan
  - Income from carbon credits
- Generate lease income from rice fields

Grant Details

- Grant will fund
  - Design
  - Environmental documentation
  - Permitting
  - Construction
  - Quantification of GHG reductions

Photo: Courtesy Department of Food and Ag

Bay-Delta Grant Highlights

- Grants approved (~ $56.4 million)
  - $ 25.3 million - Levee improvements (2019, 2022)
  - $ 0.5 million - Levee maintenance (2016-present)
  - $ 1.5 million - Emergency response supplies (2022)
  - $ 1.1 million - Collaborative landscape planning (2022)
  - $ 11.4 million - Riverine restoration levee setback (2022-23)
- Grant applications in process
  - $ 20 million - Webb Tract landscape mosaic
  - $ 3.7 million – Bouldin Island wetland/carbon sequestration
  - $ 360,000 - Delta smelt propagation research
  - $ TBD - Levee improvements (in process)

Next Steps

- Refine proposal with Delta Conservancy
- Consideration by Delta Conservancy Board & Metropolitan Board – Summer/Fall 2023

Photo: Courtesy of Audubon Society


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

One Water and Stewardship Committee

Update on Watershed Activities

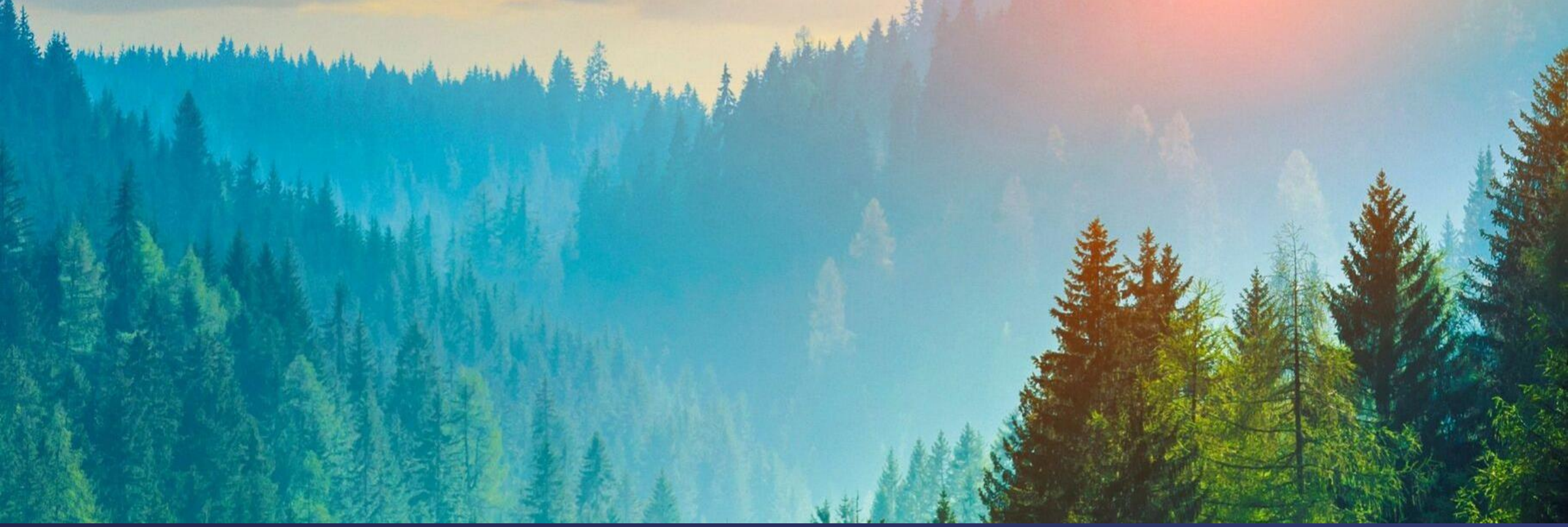
Item 7b

March 14, 2023

Update on Watershed Activities

Overview

- Background
- Current Activities
  - Watershed Framework
  - Plumas Watershed Forum
- Developing Opportunities
  - Northern California Pilot Investigations
  - Southern California Risk Reduction
- Next Steps



Background

Revised Bay-Delta Policies – October 2022

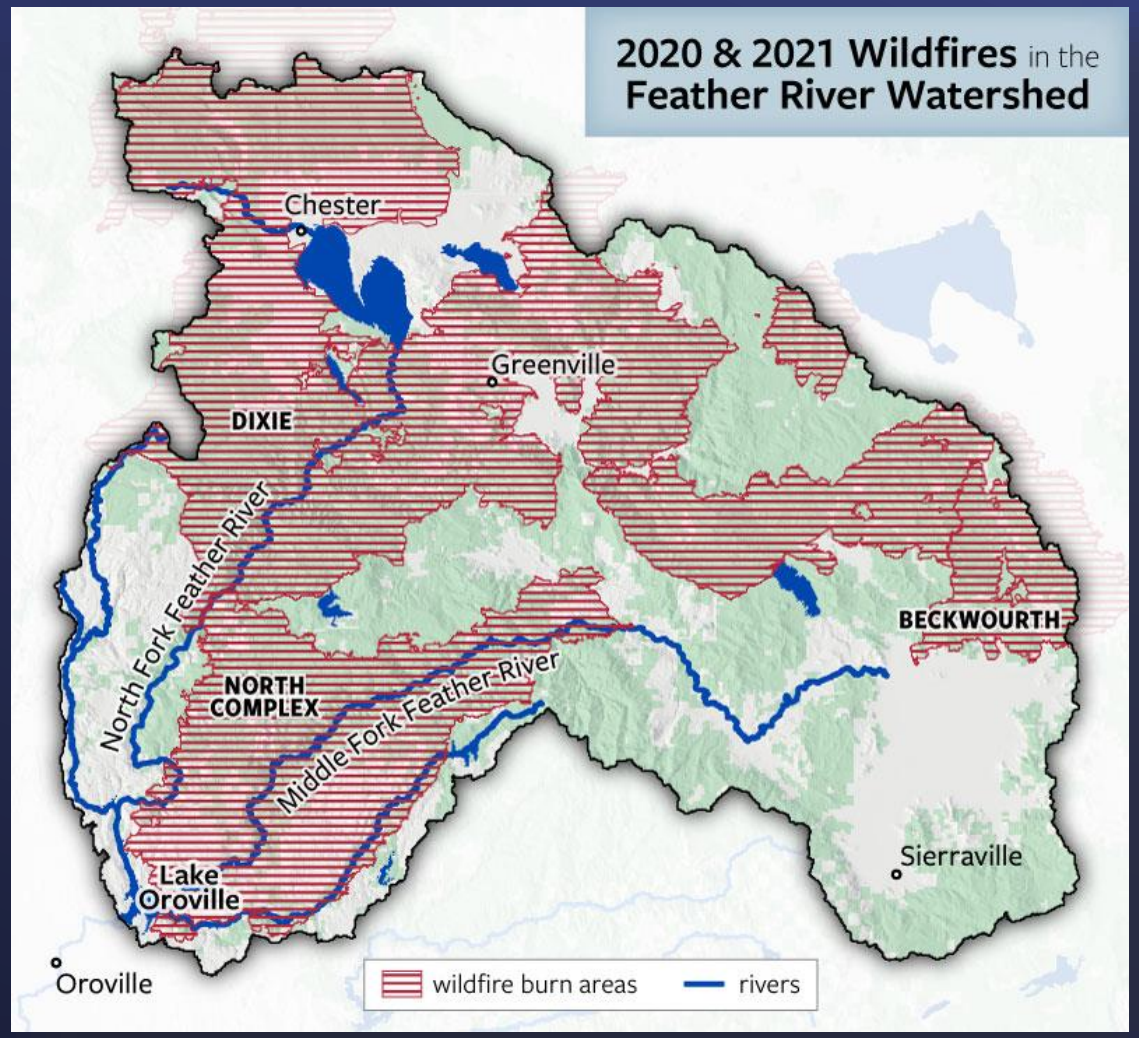
Bay-Delta Policy Objectives

- Promote a Sustainable Bay-Delta within Metropolitan's One Water Approach
- Support Statewide and Regional Actions that Further the Coequal Goals Established in the Delta Reform Act
- Address the Risks Associated with Climate Change

Bay-Delta Policy Framework

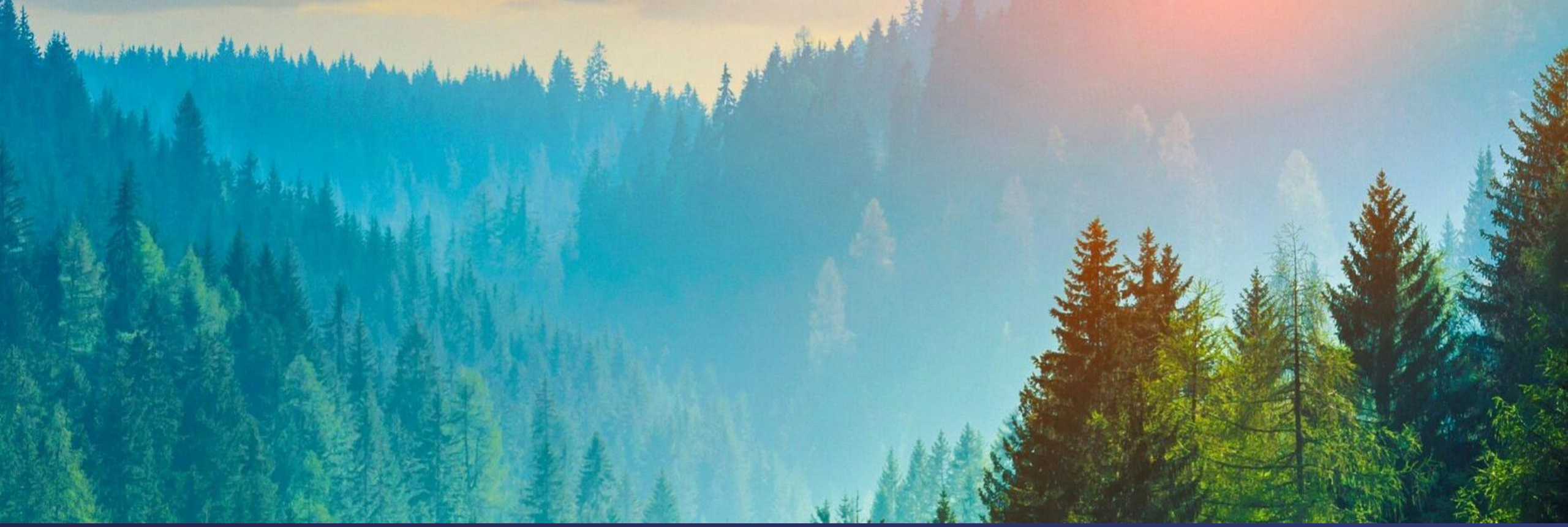
Science and Watershed Management	Water Supply Reliability and Resilience	Partnerships and Cost-Effective Investments
Protect and restore aquatic species and habitats based on best available science	Protect water supply reliability and quality while reducing reliance consistent with the Delta Reform Act	Maintain and pursue cost-effective financial investments
Partner in watershed-wide approaches to develop comprehensive solutions	Invest in actions that provide seismic and climate resiliency	Foster broad and inclusive engagement of Delta interests and beneficiaries
Advance responsible stewardship of Metropolitan's Delta islands	Seek flexible operations, water management actions, and infrastructure solutions	Promote innovative and multi-benefit initiatives

Feather River Watershed Overview



Sierra Nevada Conservancy

- Climate change is increasing the frequency, size, and severity of wildfires in California
  - Fire and debris flows can impact infrastructure and operations
  - Sedimentation is a risk to water quality and aquatic habitats
  - Burned areas contribute to flashier runoff



Current Activities

Watershed Framework

- Framework vision is to build relationships and develop the capacity for systems thinking and action at watershed scales
  - Spur broad-scale coordination and collaboration across jurisdictions and sectors
  - Develop a common understanding of the watershed system, including vulnerabilities and vulnerable communities
- Metropolitan executive management provided input during the development process
- Upcoming staff involvement in Feather River Watershed test drive

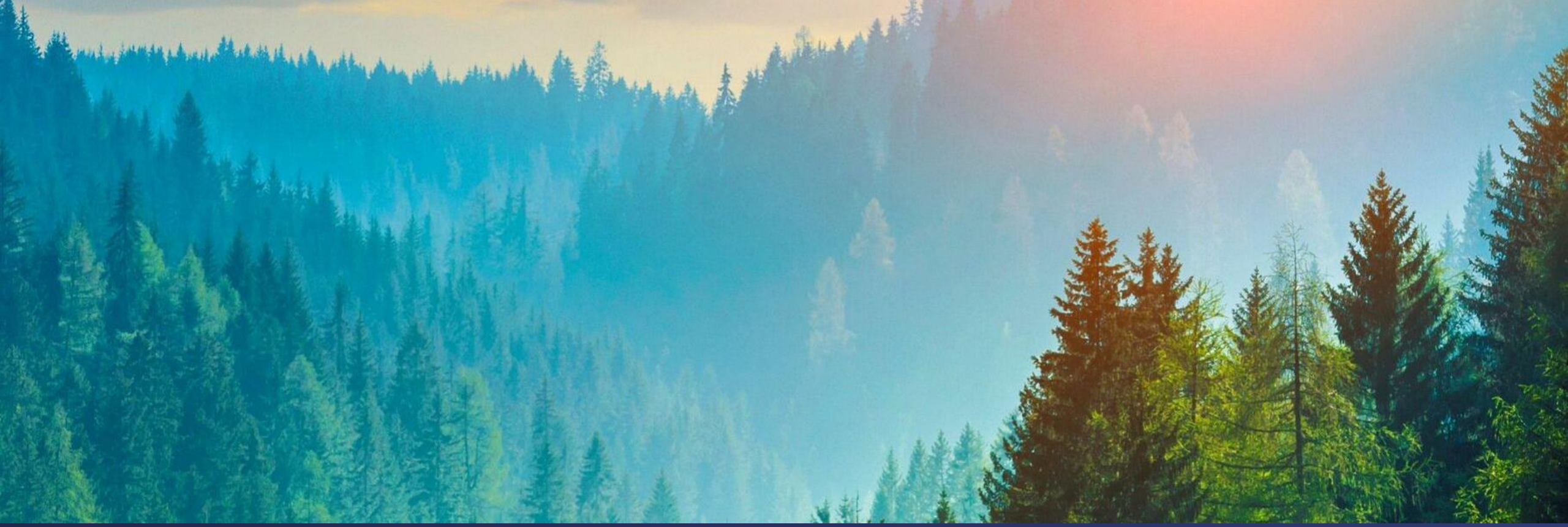
Water Solutions Network

Plumas Watershed Forum

PLUMAS COUNTY CALIFORNIA

Monterey Settlement Agreement Funding

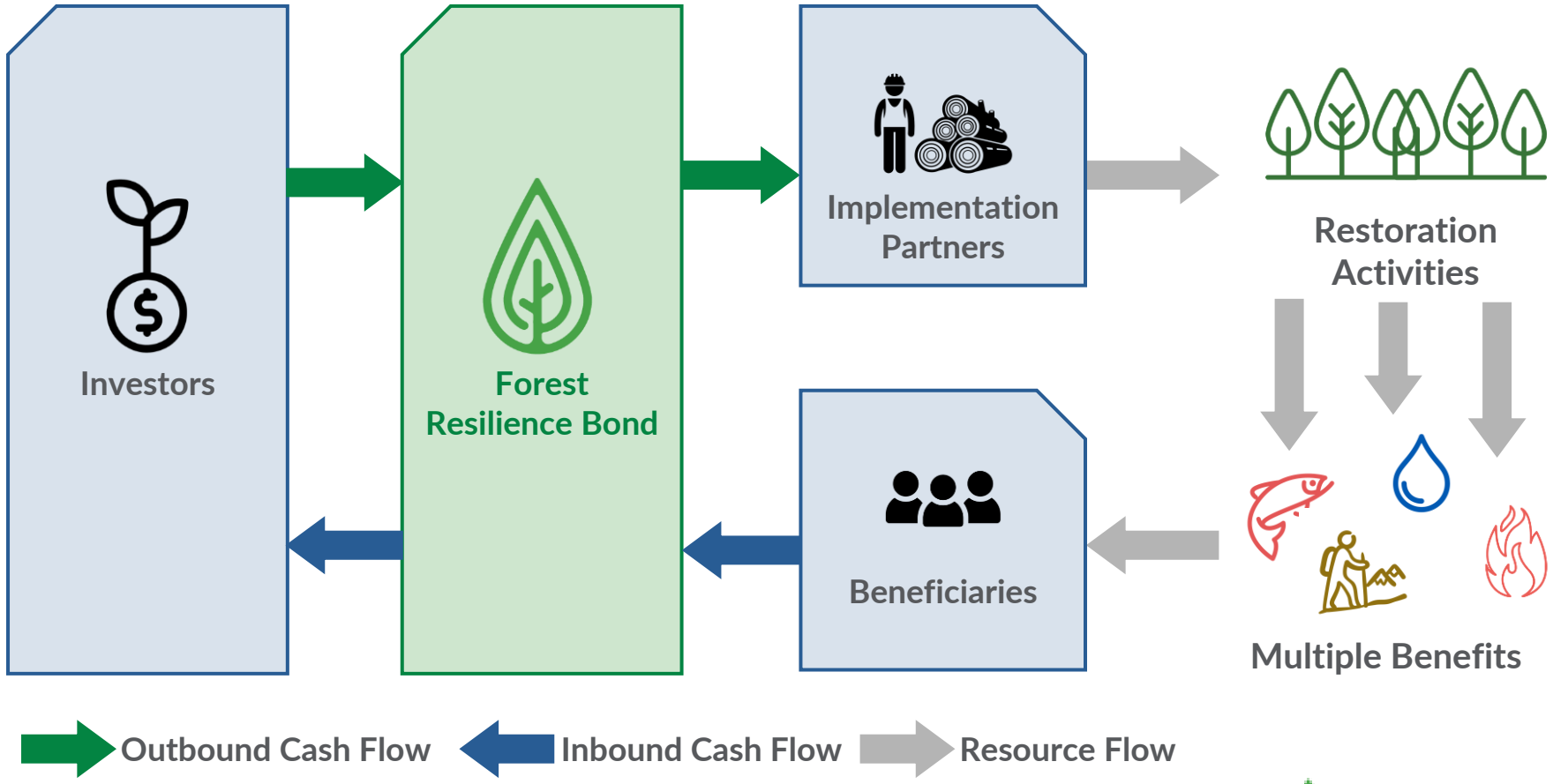
- DWR providing $4 million over FYs 2021-2024
- Forum participants are Plumas County FCWCD, DWR, and SWC
- Watershed Forum goals are to improve:
  - Water retention for baseflow in streams
  - Water quality and streambank protection
  - Upland vegetation management
  - Groundwater retention and storage in major aquifers
- RFP issued in January, closed March 10, 2023
  - Projects will begin construction spring 2024



Developing Opportunities

Blue Forest Conservation

Forest Resilience Bond



FOREST RESILIENCE BOND

Blue Forest Conservation

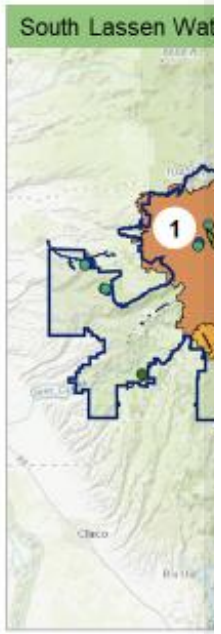
Northern California Pilot Investigations

- Currently evaluating three Northern California forest resiliency proposals to identify potential benefits
- Objectives are to advance science, evaluate proof of concept, and develop watershed partnerships
- Initial funding would come from existing Bay-Delta science budget

Northern California Pilot Investigations

Blue Forest Conservation

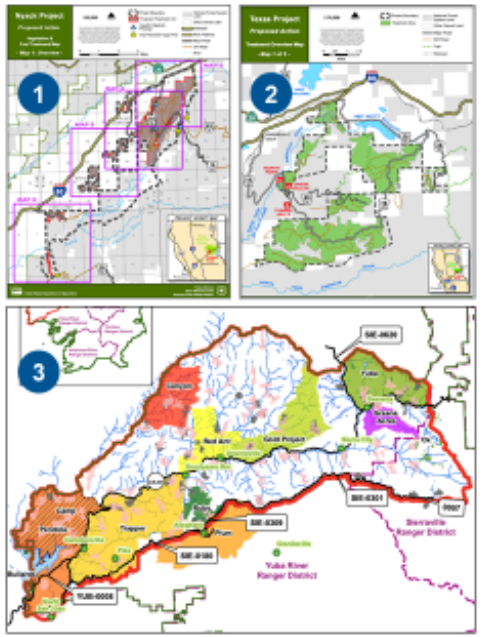
Lassen National Forest
South Lassen



Plumas National Forest
Community P

Tahoe National Forest

Nyack, Texas Veg, Yuba Projects



Projects Overview

(1) Nyack: 3,500 acres of fire risk reduction and fuels, WUI, proximity to infrastructure and community, support from and work with SNC

(2) Texas Vegetation Management: 8,400 acres of fuels reduction and vegetation restoration,, NEPA permitting will be completely Feb of 2023, candidate for expedited work.

(3) Yuba FRBs: 210k acre planning area, phasing through multiple seasons with various partners, including Yuba Water Agency

Potential Project Benefits

Community Protection: a high-visibility area with a lot of public attention and major community resilience component to all three projects

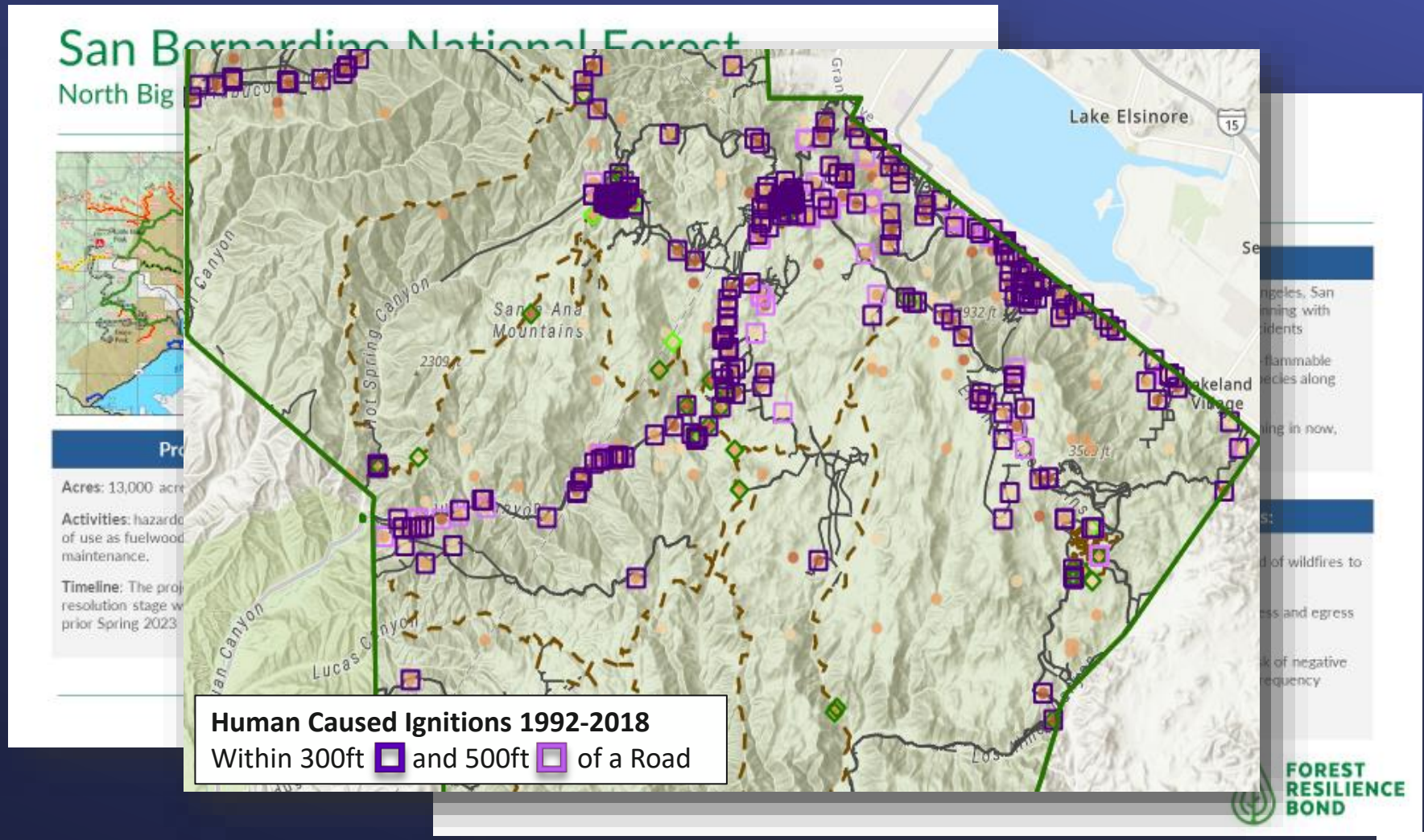
Water Benefit: Tahoe National Forest encompasses the Yuba Watershed which supplies water discussed in the Yuba Accord

Biodiversity Protection: reduced risk of high-severity wildfires impacting downstream fish habitat, treatment of invasives, restoration of meadows and aspen habitat

FOREST RESILIENCE BOND

Potential Southern California Opportunities

Blue Forest Conservation



Next Steps

- Committee input
- Future updates on watershed activities
  - Watershed Framework Test Drive
  - Northern California Pilot Investigations
- Facilitation of potential Southern California partnerships

Update on Watershed Activities


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

- **Water Surplus and Drought Management Update** ***Conditions as of 2/15/2023***

Summary

This report provides an accounting for water supply, demand, and storage conditions for calendar year (CY) 2023 as of February 15, 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 March.

The California Department of Water Resources (DWR) increased the State Water Project (SWP) allocation to 30 percent on January 26, 2023. Subsequently, Metropolitan's SWP supply is 574 thousand acre-feet (TAF). This supply now exceeds Metropolitan's estimated unmet Human Health and Safety (HH&S) needs, and DWR is no longer allocating HH&S supplies for Metropolitan in CY 2023.

Metropolitan's Colorado River supply is currently estimated to be 884 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 State Water Project and Colorado River supplies are estimated to be 1.46 million acre-feet (MAF) for CY 2023 at the current allocation.

The CY 2023 current trend demand on Metropolitan is estimated to be 1.52 MAF. This is a 146 TAF decrease from last month's estimate. The reduction in the current trend demand reflects the ongoing conservation efforts and the improving local supply conditions from the substantial precipitation received in Metropolitan's service area and member agencies' watersheds. The current supply/demand gap is estimated to be 60 TAF. Metropolitan has sufficient storage resources and system capacity to satisfy this gap.

The acute water shortage underlying the Water Shortage Emergency Condition declared in April 2022 has been alleviated with the current SWP allocation and storage resources available to SWP Dependent Area. The SWP Dependent Area has been under the Emergency Water Conservation Program (EWCP) that mandated strict outdoor watering restrictions and imposed penalty-enforced volumetric limits on water use. Because of improved SWP supply conditions, staff will recommend to the Board at the March board meeting to remove the EWCP effective immediately.

In contrast to the last several years, the hydrologic conditions this water year to date have improved greatly. The northern Sierra snowpack is already at 113 percent of the April 1 normal. This means that there is more than a full season's snowpack already on the ground. The February 1 median forecasted runoff for WY 2023 is 20 MAF which is more than the observed runoff of the last two water years combined. The current hydrologic conditions will lead to additional increases to the SWP allocation even if dry conditions return for the remainder of the water year. Further, there is a potential for demands on Metropolitan to continue to decrease given the improved local supply conditions. If that occurs, Metropolitan will shift to a surplus condition per the Water Surplus and Drought Management (WSDM) Plan and will put water into storage.

Despite the short-term improvement in supply from the SWP, the Colorado River watershed remains in a 23-year drought. On-going negotiations with the Basin States and potential changes to the 2007 Interim Guidelines initiated by USBR introduce great uncertainty in future supplies. Future SWP supplies are also uncertain and can quickly return to dry conditions. This warrants continuing the Regional Drought Emergency declared by the Board in December 2022 for all member agencies. Under the drought emergency, all member agencies are expected to continue to take actions to reduce their use of SWP and Colorado River supplies and continue to implement the demand response actions outlined in their State-mandated Water Shortage Contingency Plans for a shortage level of up to 20 percent.

Purpose

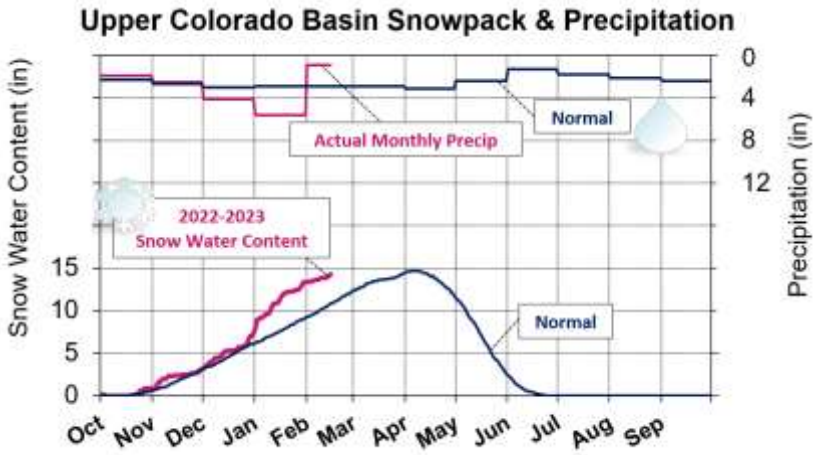
Informational

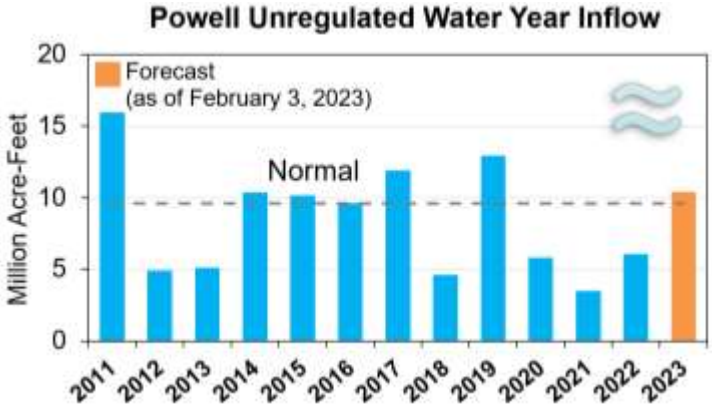
Attachments

Attachment 1: Projected 2023 WSDM Storage Detail (30 percent SWP Table A allocation)
Attachment 2: Future Contributions and Obligations and Cyclic Program
Attachment 3: Emergency Water Conservation Program Performance
Attachment 4: Future Supply and Demand Gaps

Detailed Report

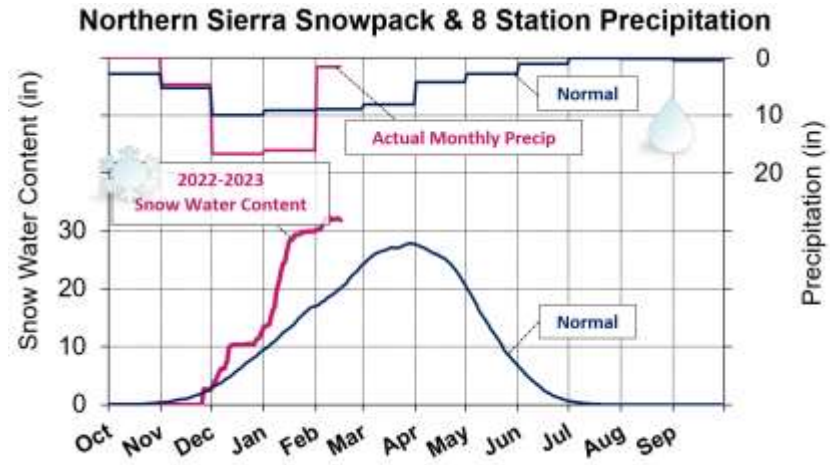
This Water Surplus and Drought Management (WSDM) report provides the water supply and demand estimates for CY 2023 and developing hydrologic conditions for WY 2022-2023.

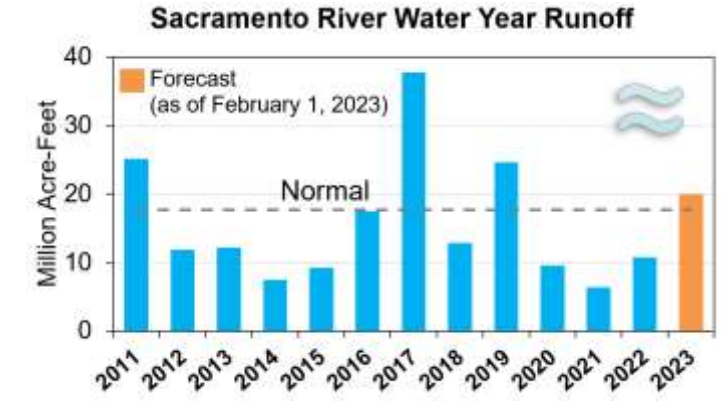




Upper Colorado River Basin

- ❄ Above normal snowpack water content for this date (14.3 inches or 132% of normal for this date).
- 💧 Above normal precipitation to date (15.0 inches or 120% of normal for this date).
- ≈ Runoff into Lake Powell for WY 2023 is forecasted at 109% of normal.



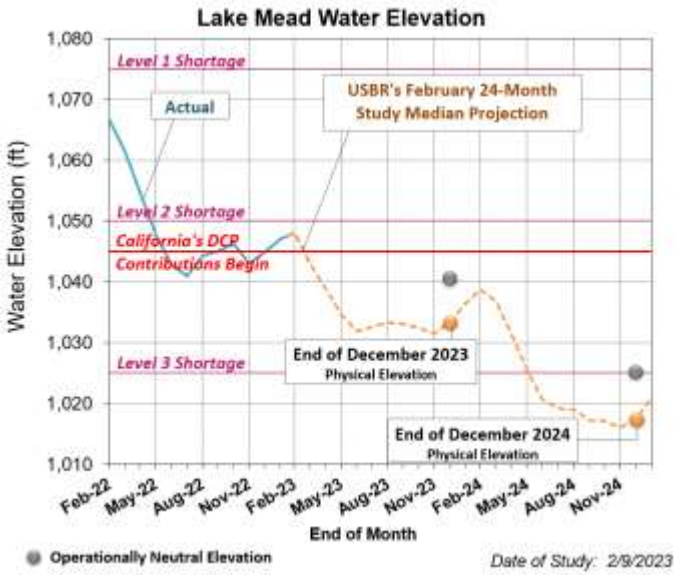


Sacramento River Basin

- ❄ Above normal snowpack water content for this date (31.9 inches or 156% of normal for this date). Snowpack well above the April 1 normal (113% of April 1 normal).
- 💧 Above normal precipitation to date (39.1 inches or 122% of normal for this date).
- ≈ Runoff into the Sacramento River for WY 2023 is forecasted at 113% of normal.

CRA Supplies	Acre-Feet
Basic Apportionment	*550,000*
IID/ MWD Conservation Program	*105,000*
CVWD - 2nd Amendment, Exchange of Additional Water	*7,000*
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	*-124,000*
Total CRA Supplies [1,2]	**884,000**

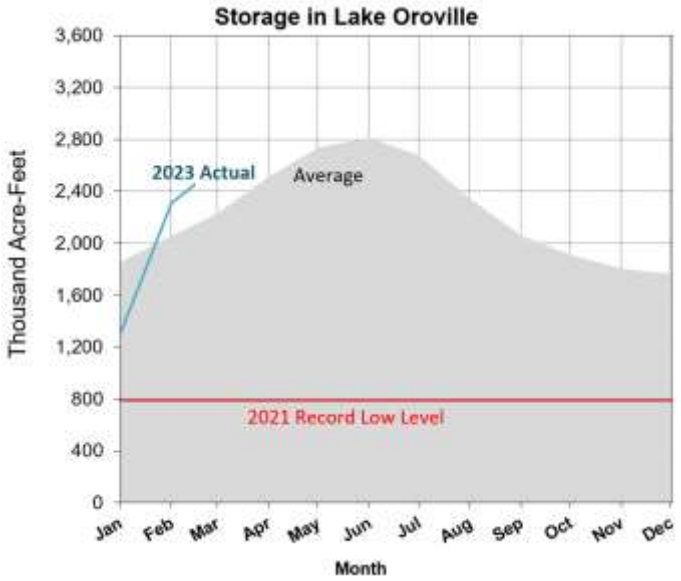
[1] Per USBR Forecast (2/15/23).
[2] Total may not sum due to rounding.



- Lake Mead storage is currently 7.51 MAF or elevation 1,047.6 feet (29 percent of total capacity).
- The Lower Basin is at a Level 2a shortage in CY 2023. Under this level, Metropolitan is not impacted.
- However, due to the critical conditions on the Colorado River, USBR initiated a fast-track process to modify the 2007 Interim Guidelines for operations in 2023, 2024, and possibly through 2026. USBR plans to issue a draft Supplemental Environmental Impact Statement (SEIS) for public comment in the Spring and a final SEIS and Record of Decision in Summer 2023.
- Metropolitan may use ICS to meet future DCP contributions; additional use of ICS to meet service area demand remains uncertain.

SWP Supplies	Acre-Feet
Table A (30% SWP allocation)	*573,000*
Port Hueneme [1]	*1,000*
Human Health & Safety Supply	*0*
Total SWP Supplies [2]	**574,000**
Total Supplies (CRA + SWP) (Prior to storage actions)	**1,458,000**

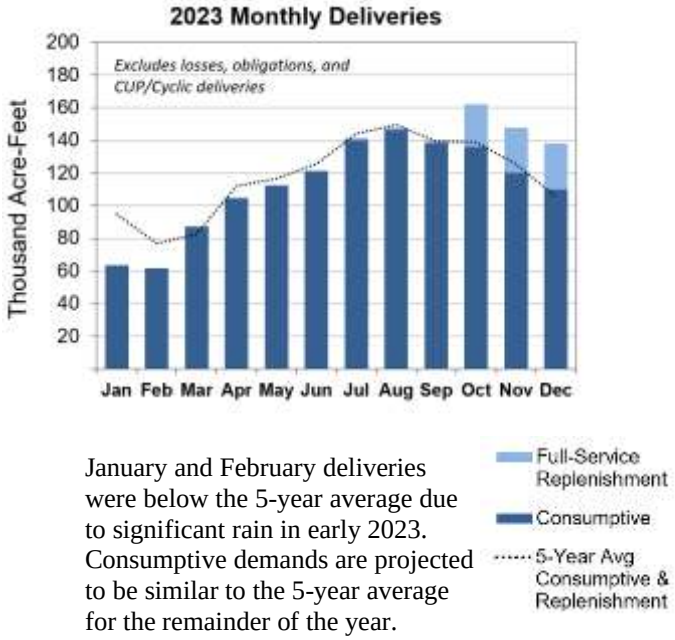
[1] Rounded to the nearest thousand.
[2] Total may not sum due to rounding.



- With a 30 percent SWP Table A allocation, DWR is no longer delivering human health and safety supply and Metropolitan will not incur any HH&S obligations for calendar year 2023. Additional increases to the SWP Table A allocation are expected as DWR's subsequent allocation studies continue to incorporate forecasted runoff from the developing snowpack
- Lake Oroville is currently at 2.45 MAF (69 percent of total capacity) or 114 percent of historical average as of the date of this report.

Current Demand	Acre-Feet
Member Agency Consumptive [1]	*1,349,000*
Member Agency Replenishment	*88,000*
Coachella Valley Water District Agreement	*15,000*
Return to Imperial Irrigation District [2]	*0*
Exchange w/ San Luis Rey Tribe	*16,000*
System and Storage Losses	*50,000*
Cyclic Deliveries	*0*
Total Demands [3]	**1,518,000**

[1] Includes exchange w/ SDCWA (IID/Canal Lining) and CUP sales.
[2] Per USBR Forecast (2/15/23).
[3] Total may not sum due to rounding.

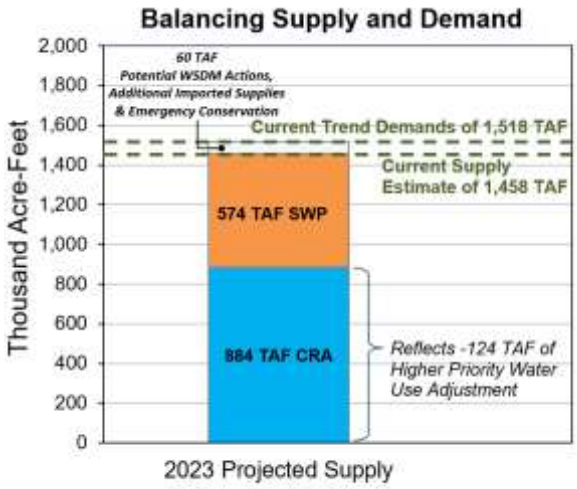


January and February deliveries were below the 5-year average due to significant rain in early 2023. Consumptive demands are projected to be similar to the 5-year average for the remainder of the year.

MANAGING REGIONAL SUPPLY AND DEMAND

Supply/Demand Balance	Acre-Feet
Total Supplies	*1,458,000*
Total Demands	*1,518,000*
Current Balance Estimate [1]	**-60,000**

[1] Total may not sum due to rounding.



Dry-Year WSDM Strategies/Actions

The following WSDM actions are being pursued or are underway to satisfy the estimated supply/demand gap in 2023, enhance Metropolitan's capability of delivering supplies to the SWP Dependent Areas, and reduce storage withdrawals in 2023. Should conditions warrant, surplus supplies will be stored in a manner to achieve equitable reliability across the region.

- Evaluating transfer supply opportunities and ability to move any north-of-Delta transfers.
- Balance use of available imported supplies from both the SWP and Colorado River.
- Continue coordination with our partners to maximize supply development.
- Continue to allocate available SWP supplies for EWCP until Board ends program.
- 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.
- Staff does not anticipate a need for a regionwide WSAP supply allocation during fiscal year 2023-24 due to improved conditions. Staff continues to evaluate supply and demand conditions as they develop.

2023 WSDM Storage Detail

WSDM Storage	1/1/2023 Estimated Storage Levels [1]	CY 2023 Take Capacity [2]	2023 Total Storage Capacity
Colorado River Aqueduct Delivery System	**1,139,000**	**TBD**	**1,657,000**
Lake Mead ICS	1,139,000 [3]	TBD [4]	1,657,000
State Water Project System	**492,000**	**158,000**	**1,879,000**
MWD SWP Carryover [5]	28,000	28,000	350,000
DWCV SWP Carryover [5]			
MWD Articles 14(b) and 12(e)	0	0	N/A
Castaic and Perris DWR Flex Storage	3,000	3,000	219,000
Arvin Edison Storage Program	120,000	8,000 [6]	350,000
Semitropic Storage Program	158,000	57,000	350,000
Kern Delta Storage Program	137,000	39,000	250,000
Mojave Storage Program	19,000	9,000	330,000
AVEK Storage Program	27,000	14,000	30,000
In-Region Supplies and WSDM Actions	**698,000**	**329,000**	**1,246,000**
Diamond Valley Lake	494,000	237,000	810,000
Lake Mathews and Lake Skinner	194,000	82,000	226,000
Conjunctive Use Programs (CUP) [7]	10,000	10,000	210,000
Other Programs	**662,000**	**40,000**	**1,181,000**
Other Emergency Storage	381,000	0	381,000
DWCV Advanced Delivery Account	281,000	40,000	800,000
Total	**2,991,000**	**527,000**	**5,963,000**
Emergency	750,000	0	750,000
Total WSDM Storage (AF) [8]	**2,241,000**	**527,000**	**5,213,000**

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

[2] Take capacity assumed under a 30 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] Take capacity will be based on planned maintenance activities, current CRA supply estimate, and operational decisions to protect Metropolitan's future CRA diversions. Although capacity is currently available, Metropolitan is planning to limit its take of ICS in 2023.

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

[6] Began receiving surface water supplies in-lieu of groundwater in February using the Friant Kern Canal. Take amounts dependent on the capacity of the Friant Kern Canal.

[7] 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.

[8] 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.

[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.

[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.

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%	60%	63%	56%
Average Metropolitan DCP Contribution When Contributions Are Required (AF)	0	205,000	265,000	278,000

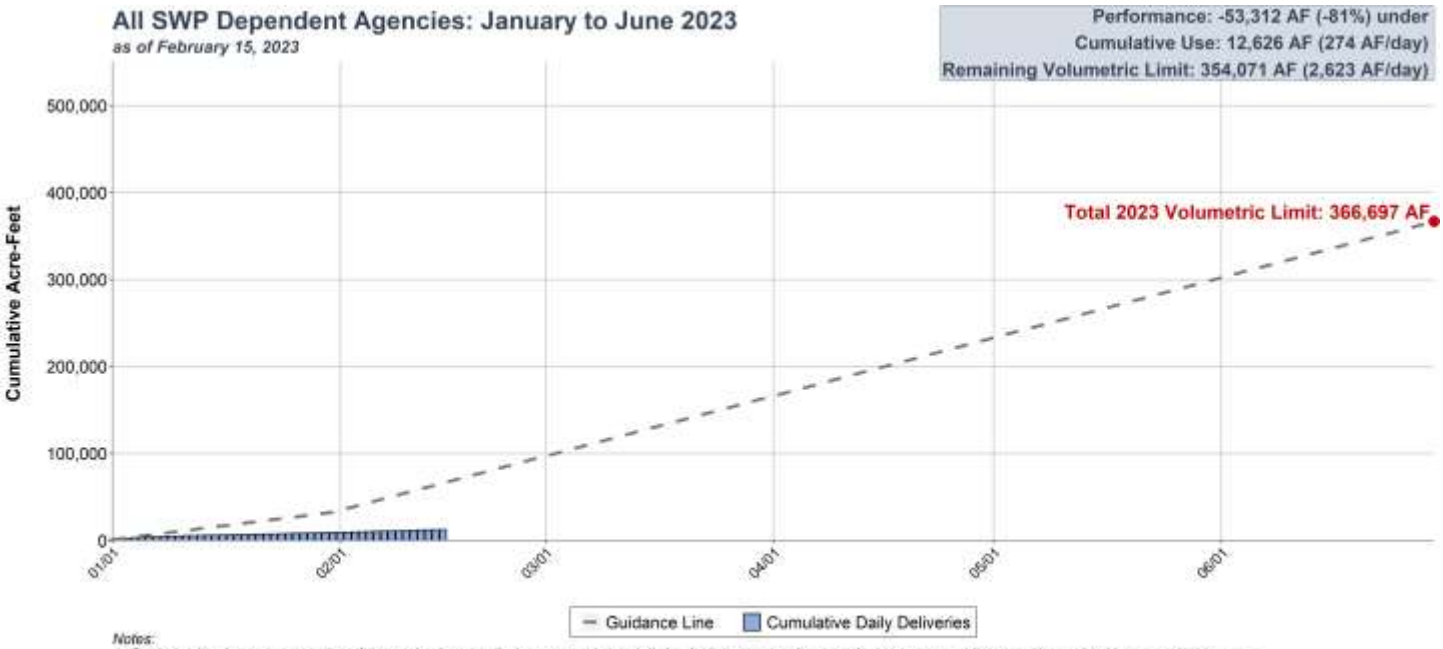
[1] Results from USBR's February 2023 Colorado River Mid-Term Modeling System (CRMMS) model run.

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] Projected Cyclic program activity for the year. Subject to change.

Emergency Water Conservation Program Performance



Notes:
1. Guidance line is a representation of the total volumetric limit on a cumulative daily basis. It assumes a linear path, unless a monthly pattern is provided by a member agency.
2. Performance is the acre-foot and corresponding percent deviation from the guidance line, per as of date.
3. Tracking of cumulative daily deliveries only include those agencies planning to receive SWP supplies January - June 2023.

Disclaimer: Data presented is preliminary and subject to change based on monthly reconciled billing data.

Future Supply and Demand Gaps

(Estimate as of December 2022)

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 2023 and 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. In 2023, the shortage projection for the service area is shown as ~520 TAF with a five percent SWP Table A allocation and Human Health and Safety (HH&S) supply, low Colorado River supply, and high demands. A surplus of ~725 TAF is shown with a 70 percent SWP Table A allocation, high Colorado River supply, and low demands. 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 in the next two years, 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.

	2023 (TAF)		2024 (TAF)	
Item	**Low Supply/High Demand**	**High Supply/Low Demand**	**Low Supply/High Demand**	**High Supply/Low Demand**
SWP [1]	+300	+1,340	+300	+1,340
Colorado River [2]	+960	+1,005	+660	+985
Demand on Metropolitan [3]	-1,700	-1,400	-1,800	-1,200
Additional Obligations [4]	-80	-220	-80	-260
Supply/Demand Balance [5]	**(-520)**	**725**	**(-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

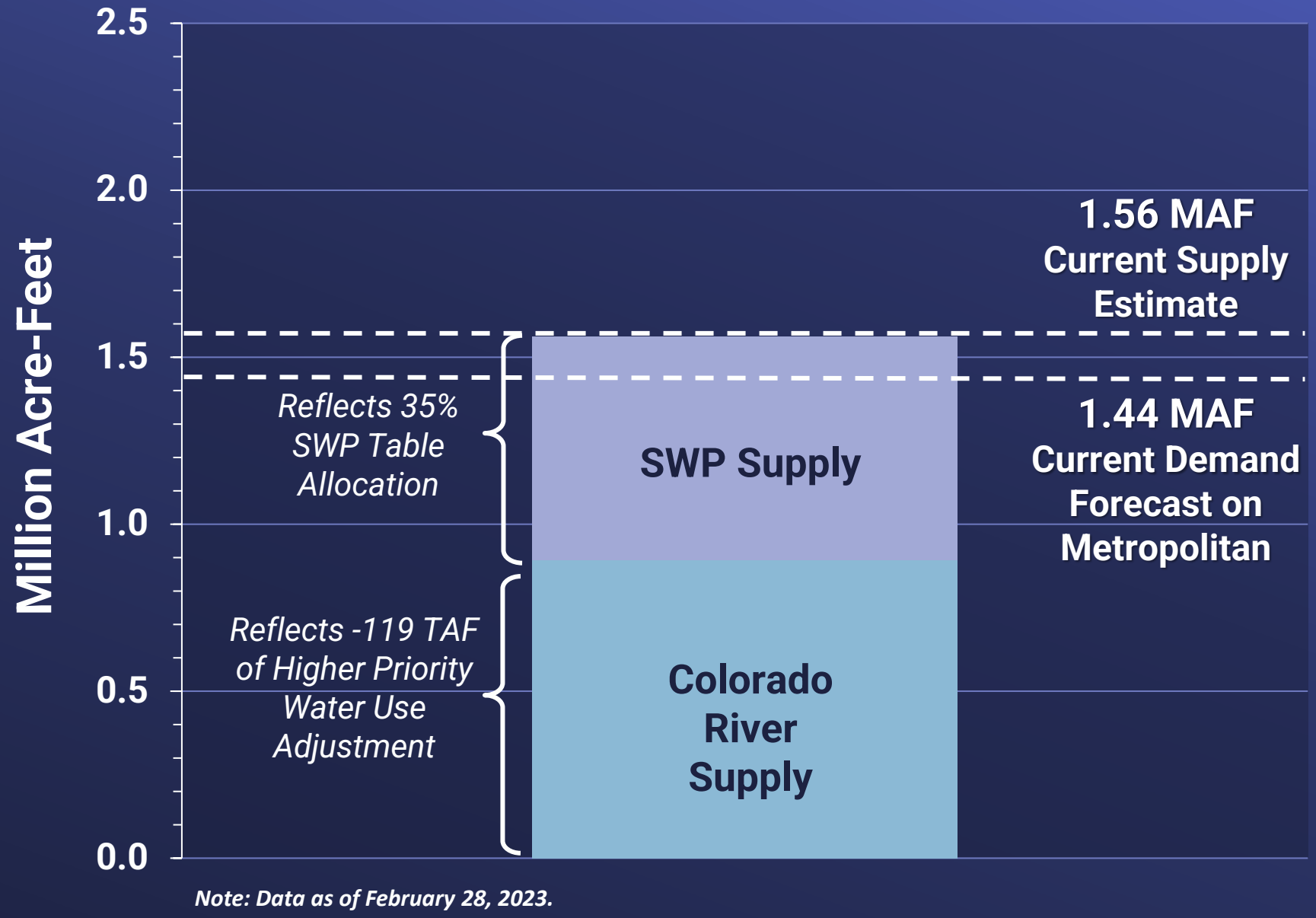
Update on WSDM and Water Shortage Emergency Condition

Item 7c
March 14, 2023

Water Supply Demand Balance

2023 Water Supply Demand Balance

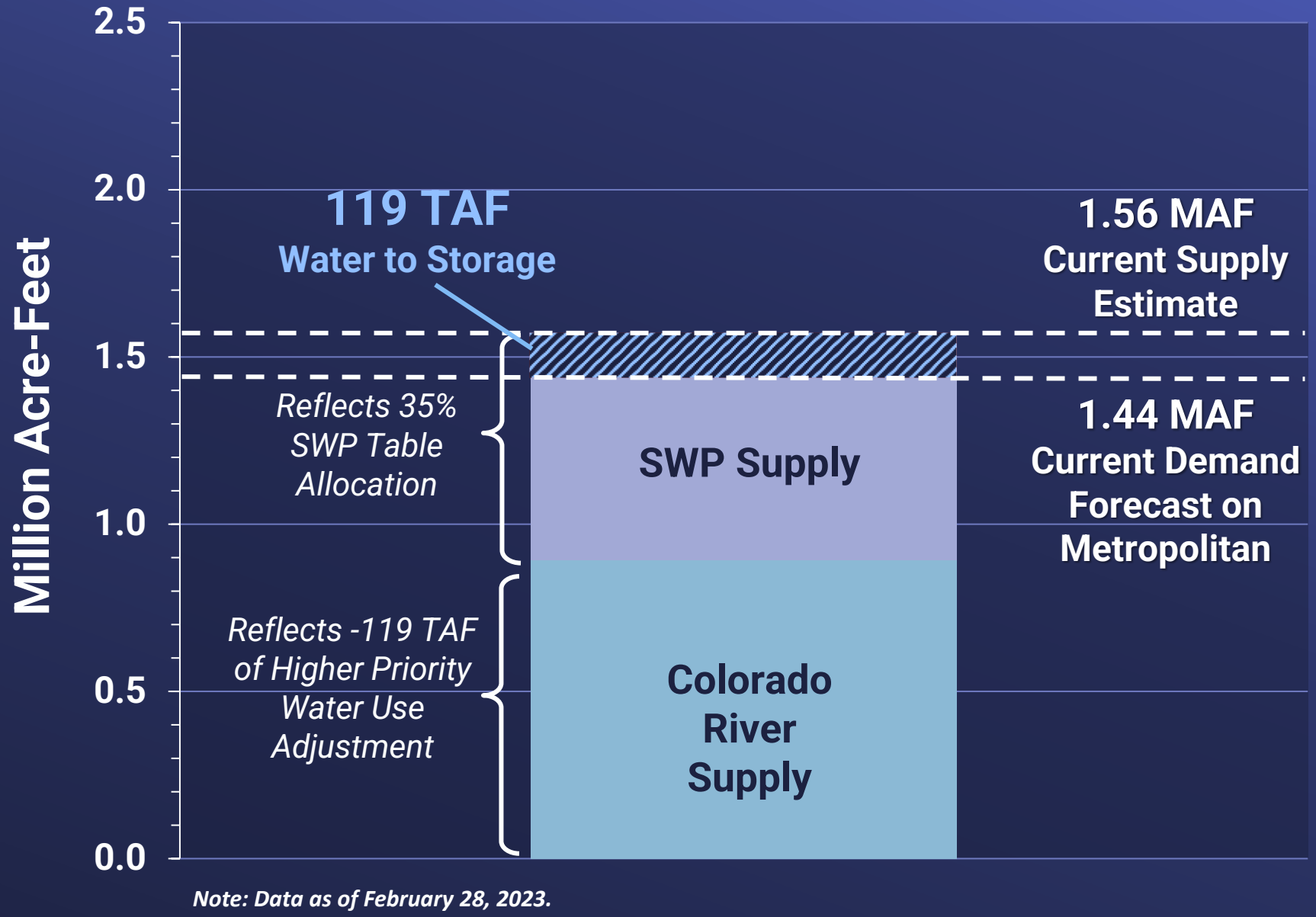
Improved Conditions Will Allow for Puts into Storage



Note: Data as of February 28, 2023.

2023 Water Supply Demand Balance

Improved Conditions Will Allow for Puts into Storage



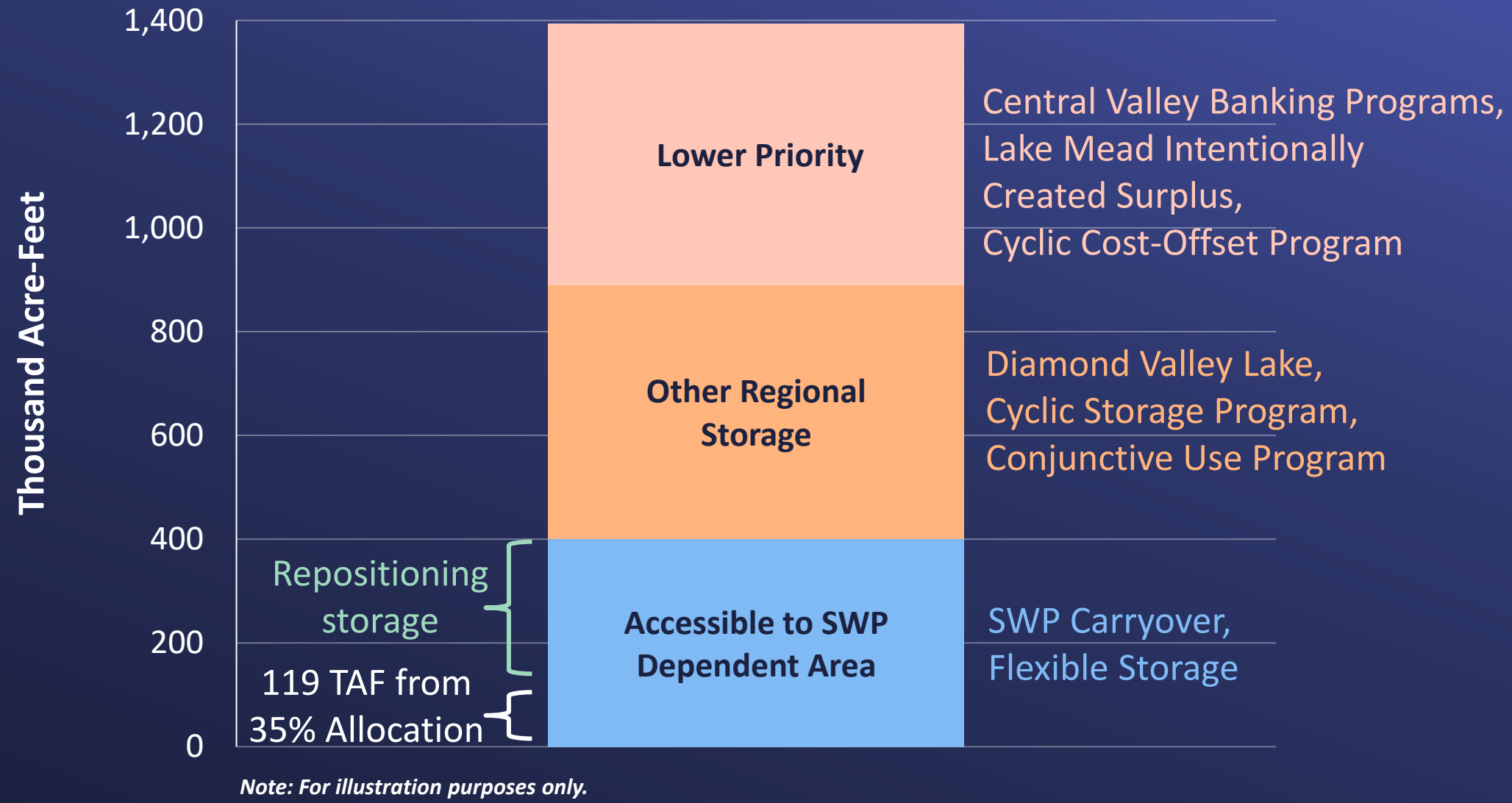
Note: Data as of February 28, 2023.

WSDM Update

SWP Table A Allocation Increases to 35%

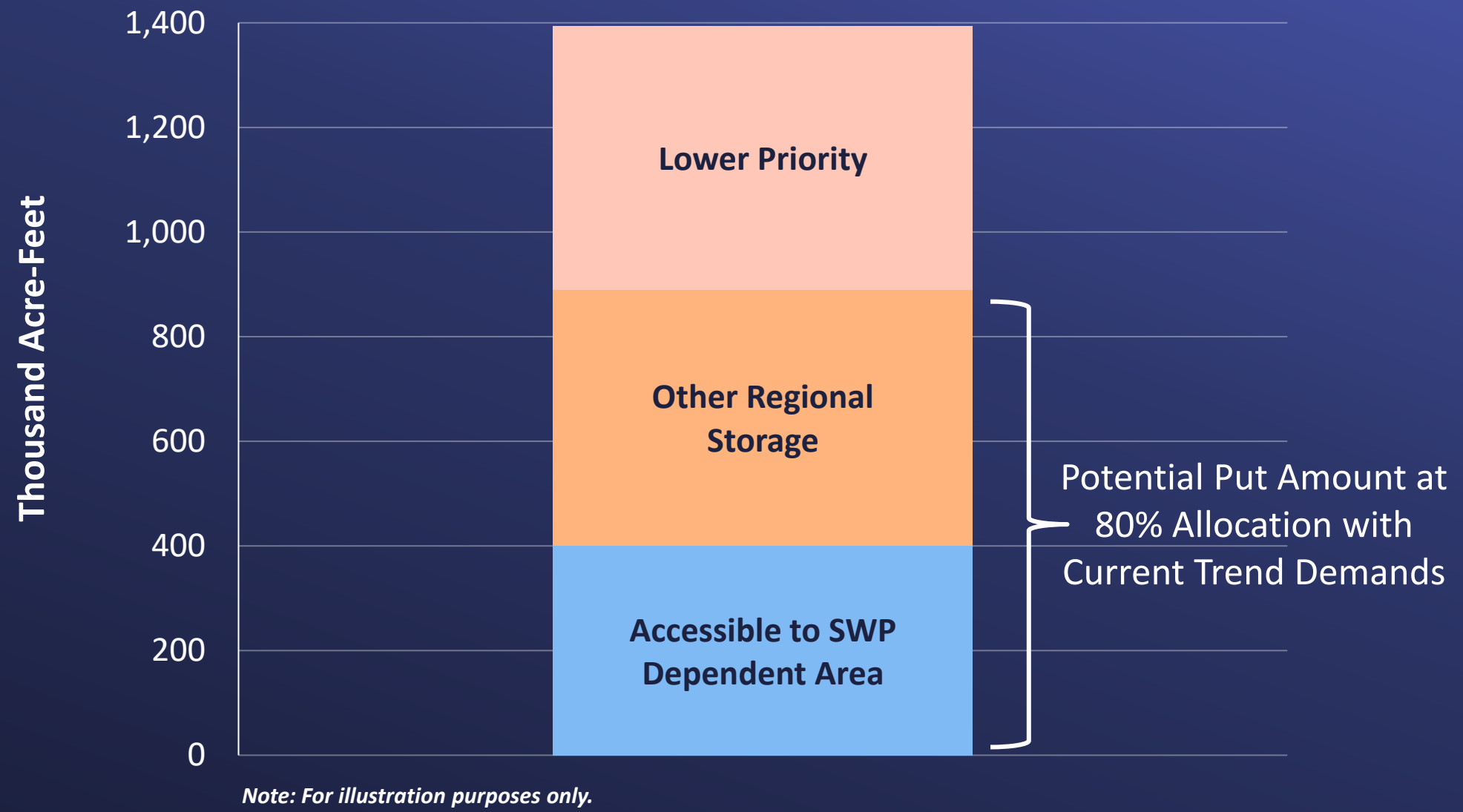
- SWP Allocation increased from initial 5% to 35%
  - Improved hydrologic conditions from late December and January storm events
  - Metropolitan now able to put water into storage
- Metropolitan no longer in shortage condition for SWP Dependent Area
  - Metropolitan has sufficient supplies to meet the needs of the SWP Dependent Area
  - Improved local supply conditions and ongoing water use efficiency efforts, including those initiated prior to the EWCP, are decreasing demands on Metropolitan
- Additional increases to the SWP Table A Allocation expected
  - DWR will continue to reflect the forecasted runoff from the existing and developing snowpack in the coming months

Prioritizing State Water Project Storage Puts



Note: For illustration purposes only.

Prioritizing State Water Project Storage Puts



Note: For illustration purposes only.

Hydrologic Conditions

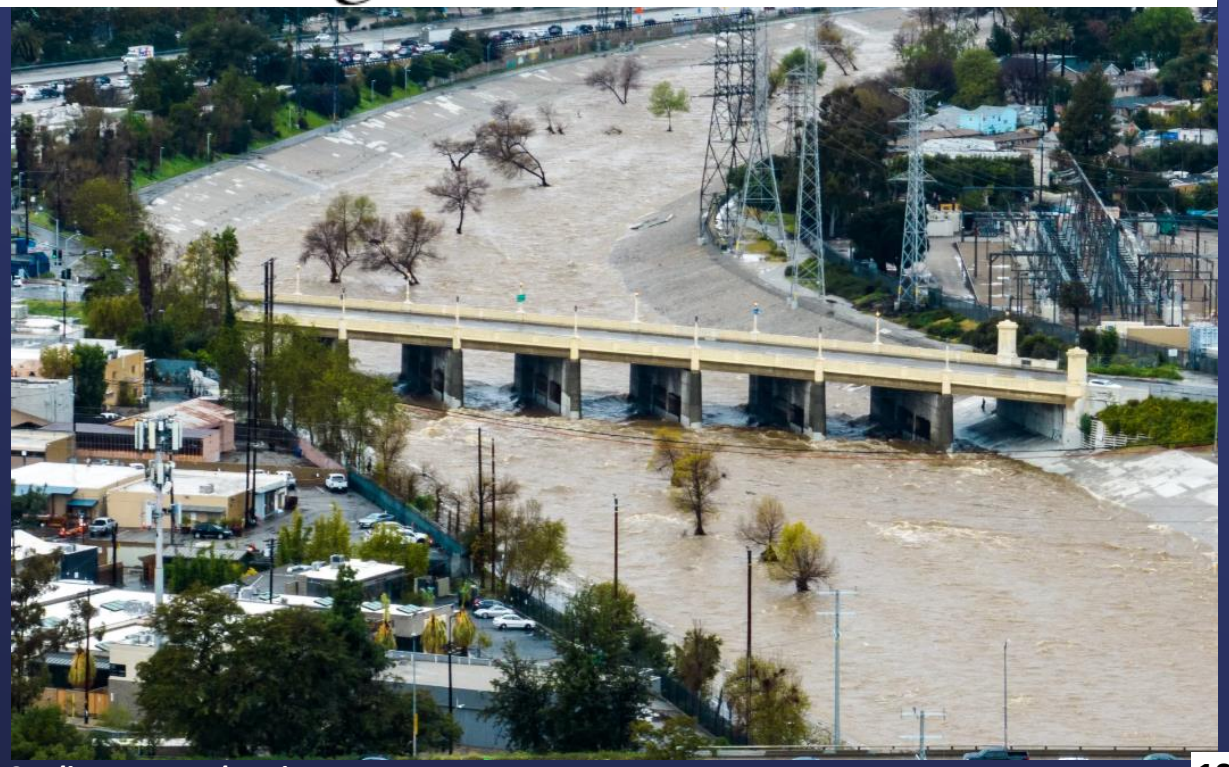
Winter Storms Continuing to Hit California

Frigid storm to slam California: Blizzard warning for local mountains, snow at low elevations

Credit: Los Angeles Times

Credit: CNN

Rain, snow, high winds batter SoCal



Credit: Los Angeles Times

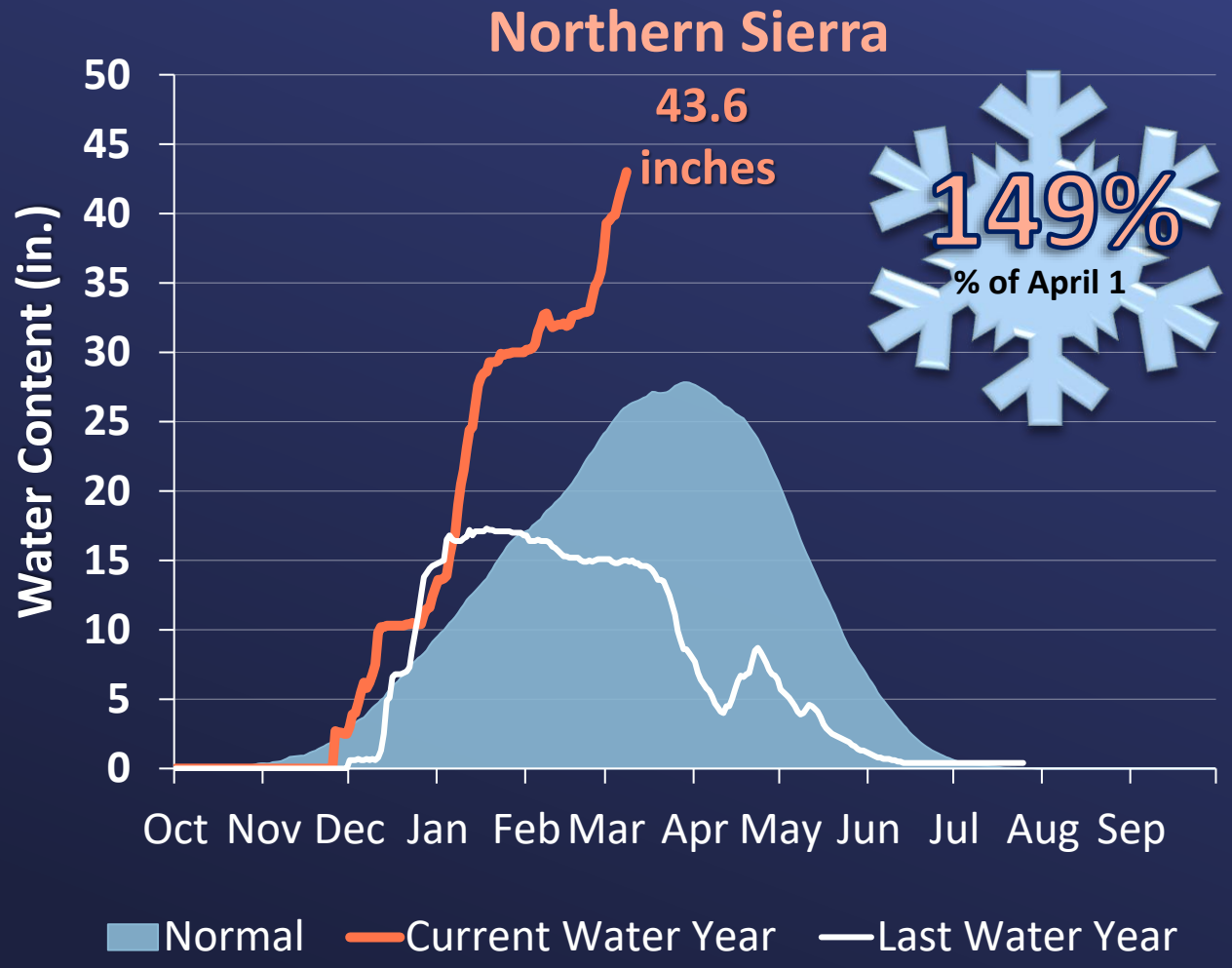
Winter Storms Continuing to Hit California

Credit: Yosemite Fire & Aviation

Credit: Getty Images

Above Normal Snowpack for Northern Sierra

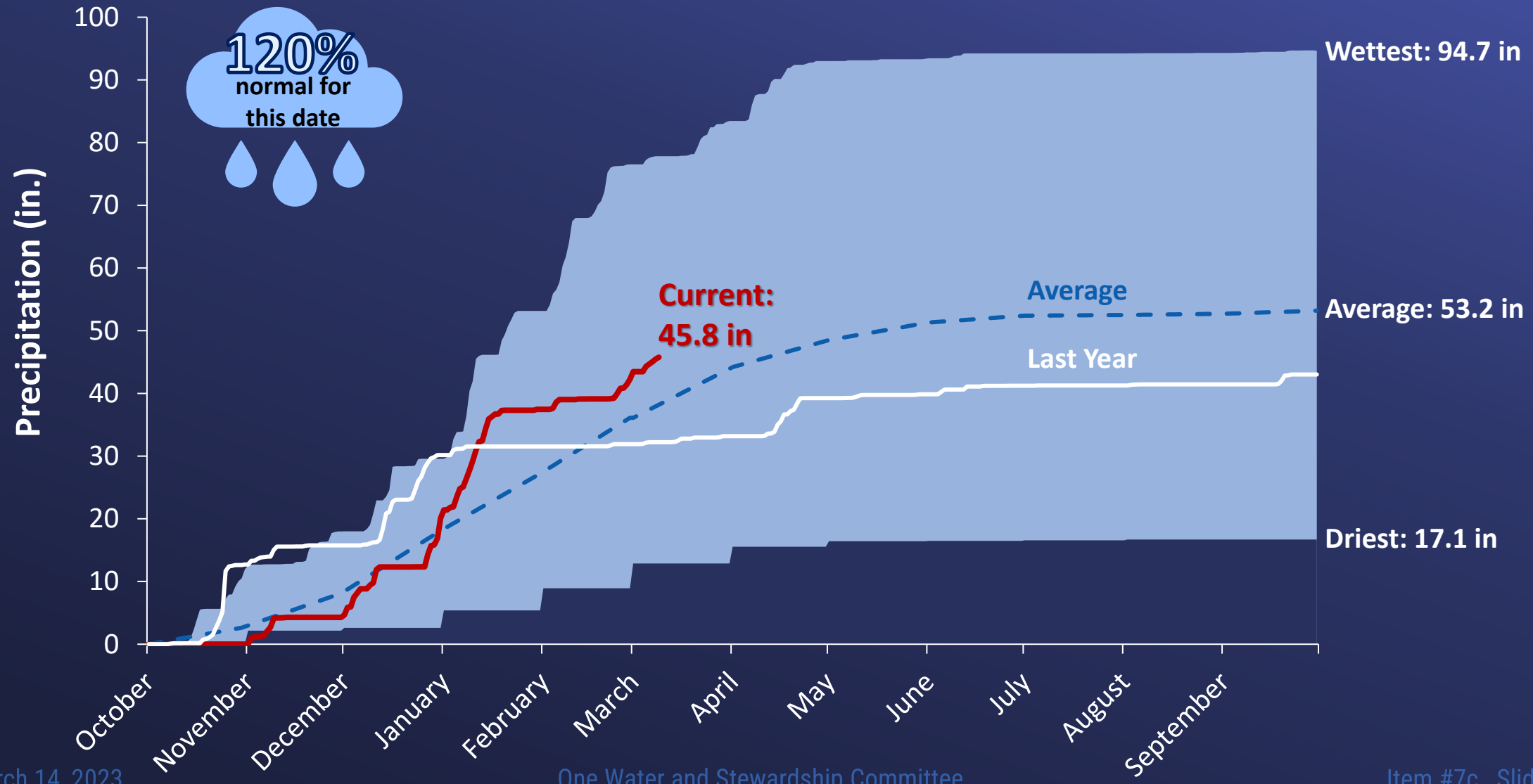
As of 03/09/2023



Credit: California Department of Water Resources

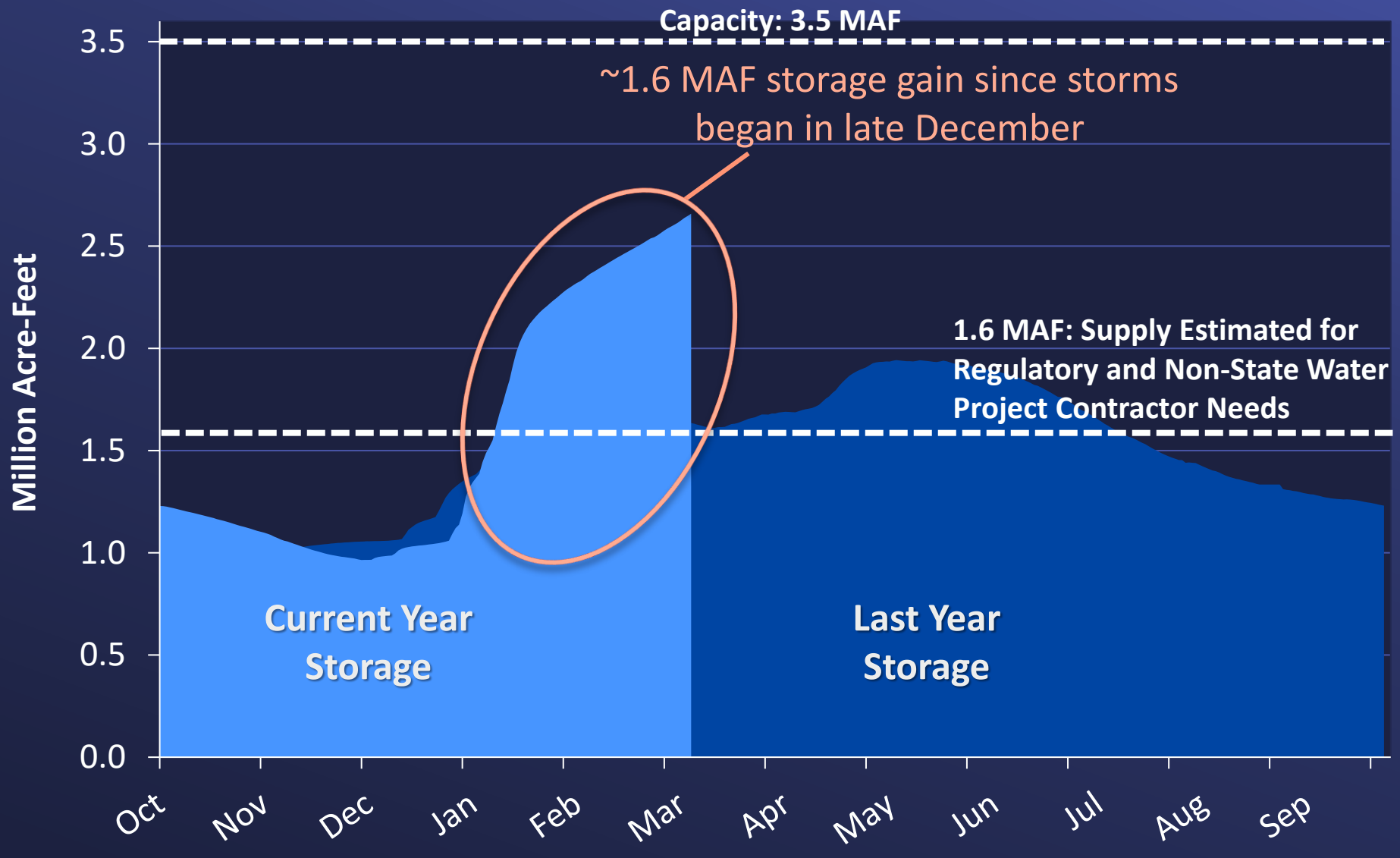
Northern Sierra Precipitation: 8-Station Index

As of 03/09/2023



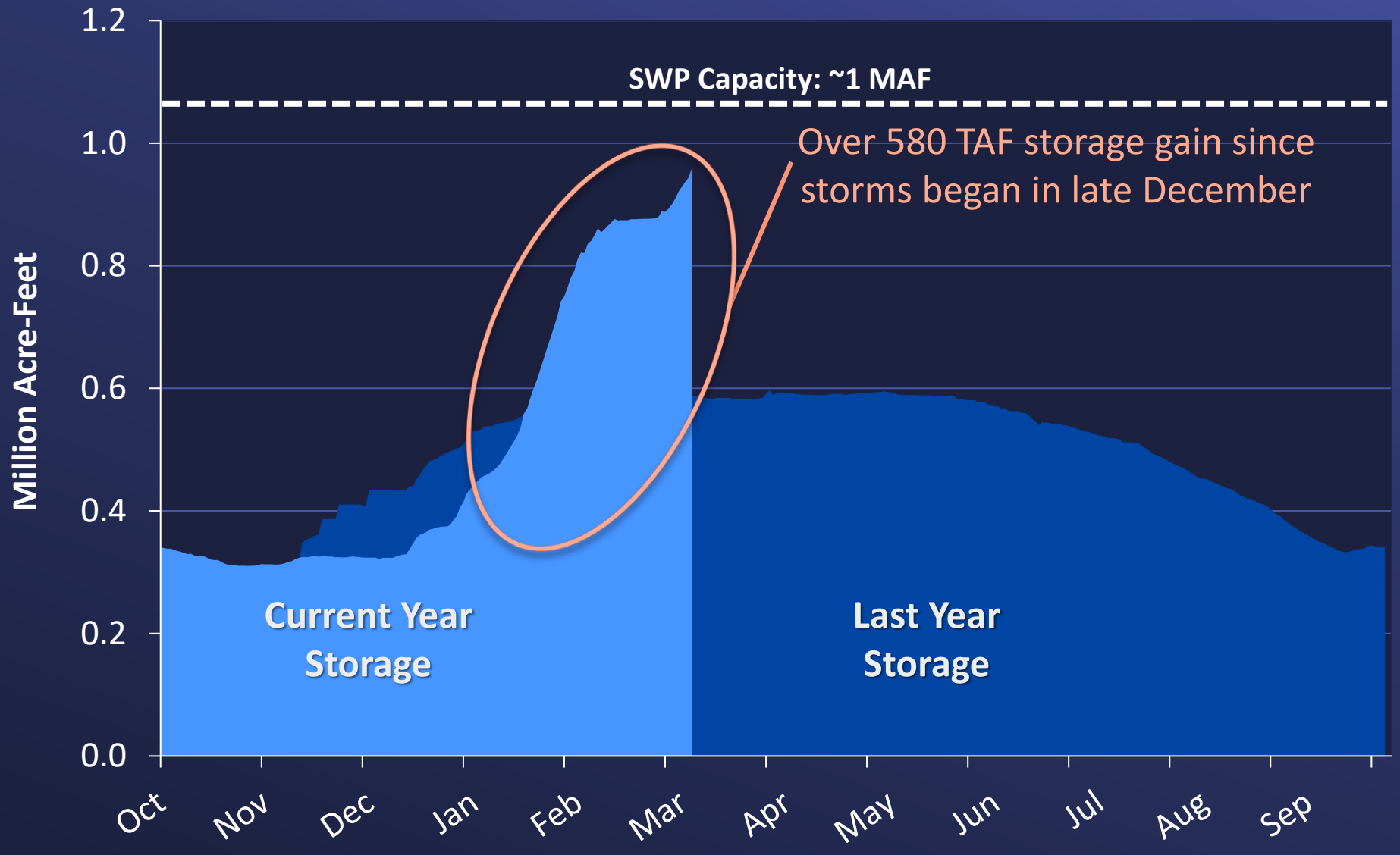
Significant Gains in Lake Oroville Storage

As of 03/08/2023



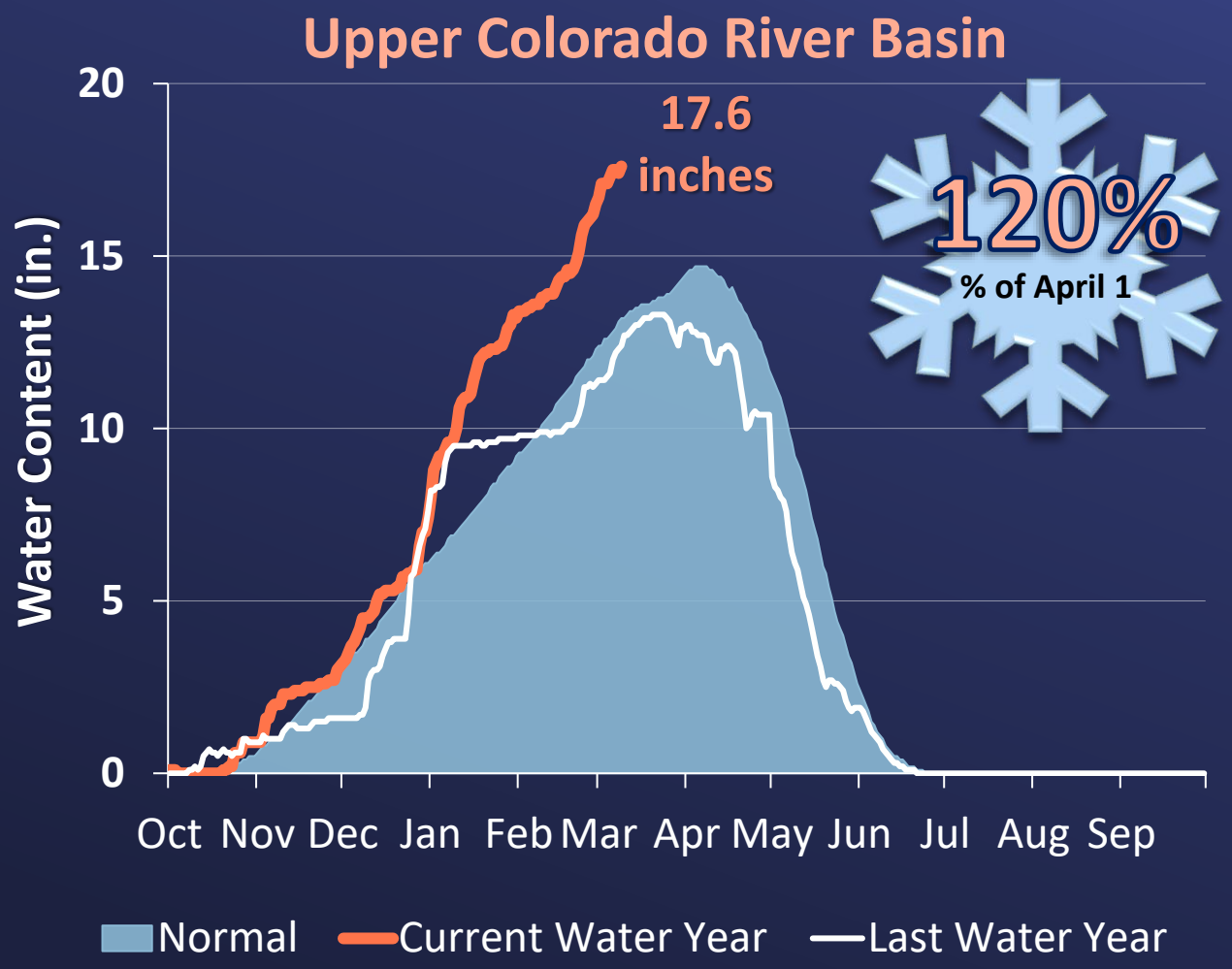
Delta Exports Help to Increase San Luis Reservoir Levels

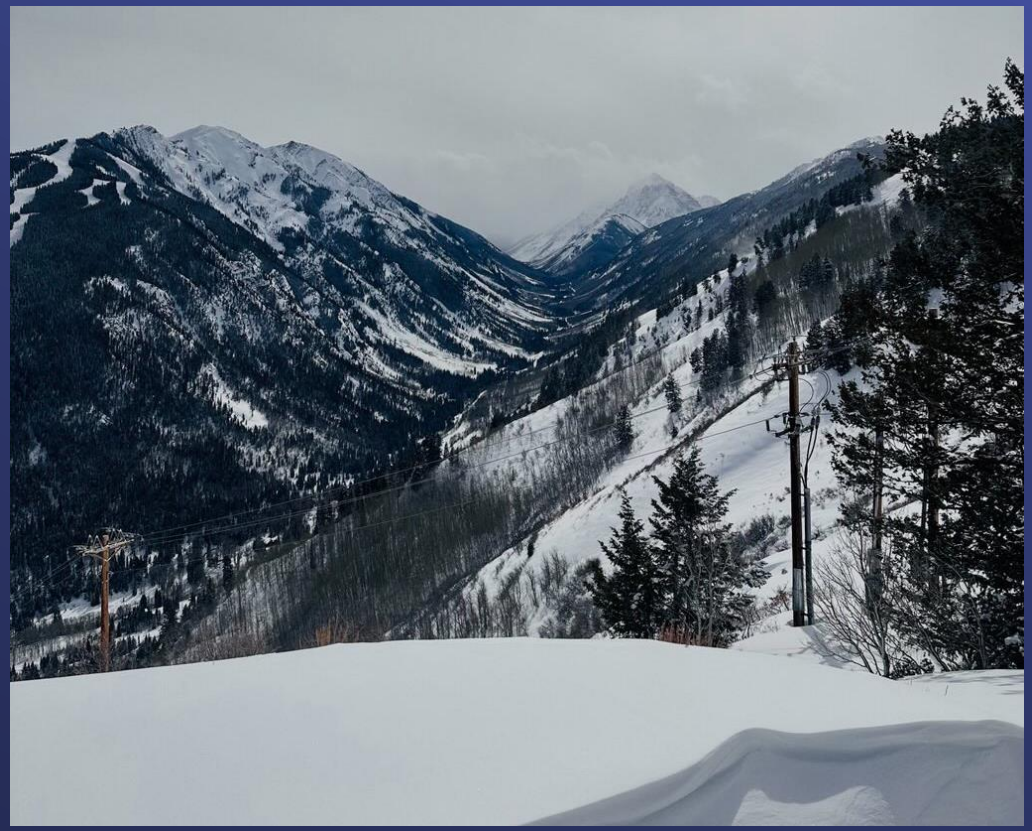
As of 03/08/2023



Above Normal Snowpack for Upper Colorado River Basin

As of 03/09/2023





Colorado River Watershed

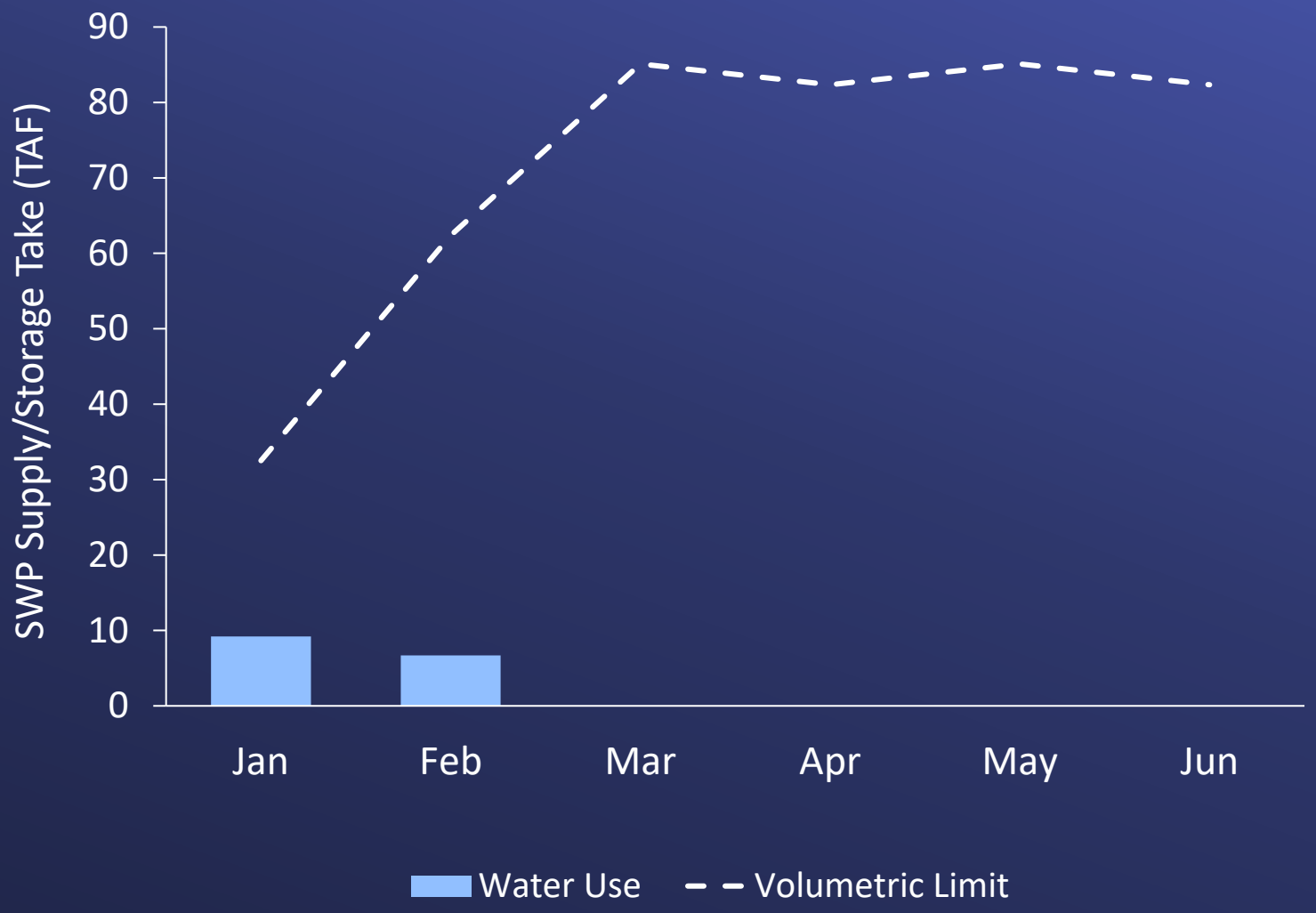
Ongoing Challenges

- Recent disparity between snowpack and resulting runoff is exacerbating ongoing drought
- Colorado River Basin States are proposing ways to reduce Colorado River water use
  - Six-State Proposal: Disadvantages California and bypasses existing water rights
  - California Proposal: Builds on the Law of the River and maintains a cooperative environment for developing long-term solutions
- Metropolitan is committed to actions that are achievable to protect Lakes Mead and Powell
  - Continuing to engage with the other Basin states to reach consensus on reducing water use
  - Metropolitan is not planning for a full Colorado River Aqueduct in the next few years

Emergency Water Conservation Program (EWCP) Update

EWCP Update

2023 SWP Dependent Area Monthly Demands on Metropolitan



All SWP Dependent Agencies Water Use Tracking: Jan. to Jun. 2023

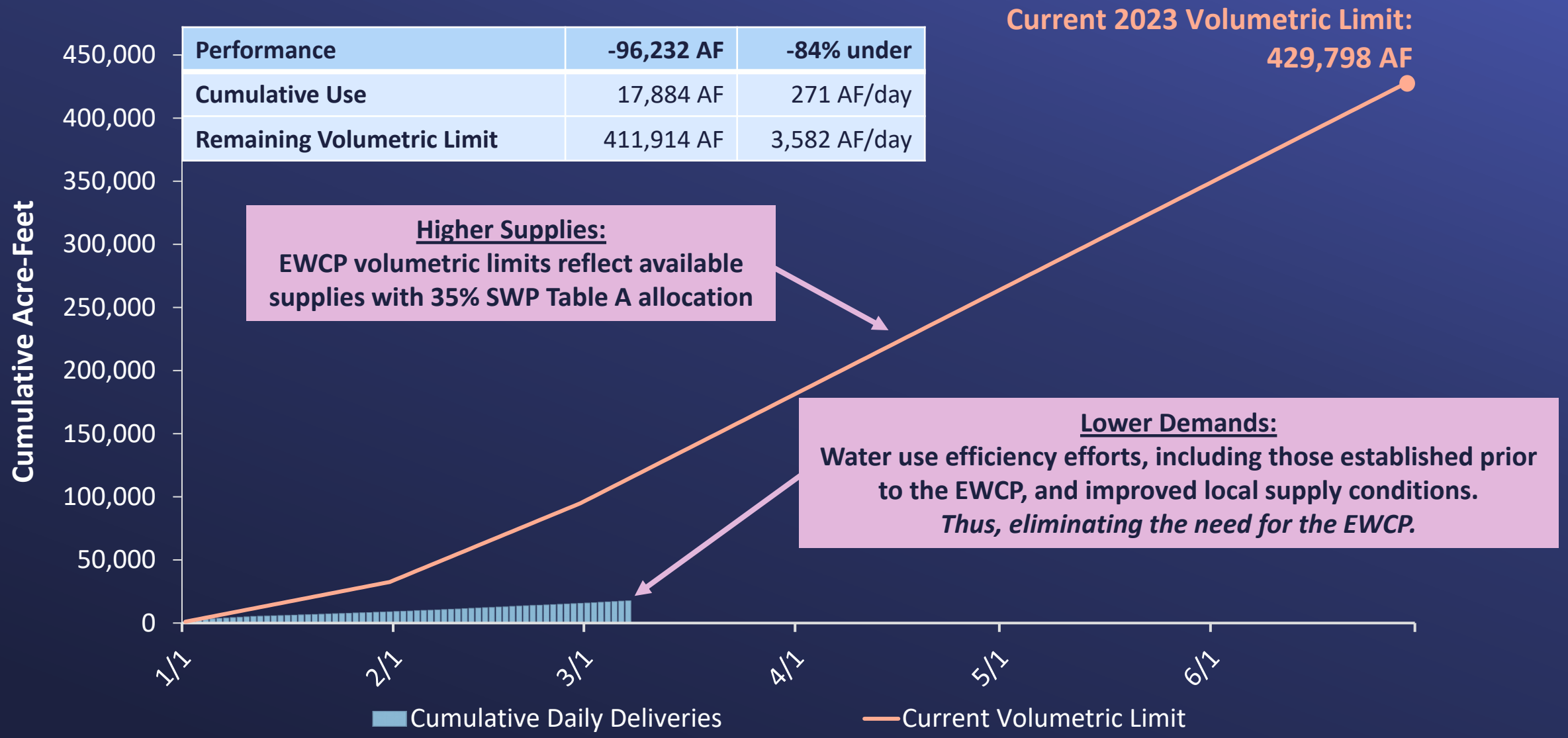
As of 03/07/2023

Performance	**-96,232 AF**	**-84% under**
Cumulative Use	17,884 AF	271 AF/day
Remaining Volumetric Limit	411,914 AF	3,582 AF/day

Current 2023 Volumetric Limit: 429,798 AF

Higher Supplies:
EWCP volumetric limits reflect available supplies with 35% SWP Table A allocation

Lower Demands:
Water use efficiency efforts, including those established prior to the EWCP, and improved local supply conditions.
Thus, eliminating the need for the EWCP.



Summary

- SWP Allocation increased from initial 5% to 35%
- Additional increases to the SWP Allocation expected based on snowpack and runoff projections
- Demands on Metropolitan are expected to decrease further
- Staff preparing to put water into storage
- SWP Dependent Area no longer in Emergency Shortage Condition
- Challenges on the Colorado River ongoing
- Metropolitan's service area remains in Regional Drought Emergency


THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
1928

One Water and Stewardship Committee

Conservation Update

Item 7d

March 14, 2023

Current Conservation Program Expenditures FYs 2022/23 & 2023/24 (1)

	Paid(2)	Committed(3)
Regional Devices	$5.3M	$4.1M
Member Agency Administered	$5.9M	$6.7M
Turf Replacement	$9.9M	$36.9M
Advertising	$4.6M	$2.4M
Other	$1.2M	$1.3M
TOTAL	**$26.9M**	**$51.4M**

(1) The Conservation Program biennial expenditure authorization is $86M.

(2) As of 7/1/2022 –1/31/2023. Financial reporting has changed from modified accrual to cash basis. This resulted in $9.2M of expenditures that were accrued last year but paid in cash this fiscal year.

(3) Committed dollars as of February 10, 2023.

Current Conservation Program Activity

FYs 2022/23 & 2023/24 [1]

Turf Replacement Rebates:

January: 943,343 ft^2 removed

FY2022/23-FY2023/24: 4,689,189 ft^2 removed

Clothes Washers:

January: 570 units rebated

FY2022/23-FY2023/24: 6,181 units rebated

Smart Controllers:

January: 963 units rebated

FY2022/23-FY2023/24: 5,865 units rebated

Lifetime Water Savings to be achieved by all rebates in January 2023: 5,427 AF

FY2022/23-FY2023/24: 29,221 AF lifetime water savings

Innovative Conservation Program (ICP)

- Offering water efficiency innovation grants for 20+ years
- Funds studies of innovative technologies, and strategies
- Open solicitation for up to $50,000/proposal
- $275,000 offered every two years

2022 ICP: Recipients Selected

- Proposals selected by panel of internal staff & external partners
  - Alliance for Water Efficiency - Commercial turf replacement water savings
  - City of Fullerton - Large meter health analytics
  - Mimir - Simplifying cooling tower management for commercial properties
  - NOWi Sensors - Leak detection & localization for multi-family properties
  - Shower Stream - Smart shower system with data analytics for hotels
  - UC Riverside - Water use for 18 common non-turf urban landscape species


THE METROPOLITAN WATER DISTRICT OF
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• 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 February 2023.

Purpose

Informational

Detailed Report

Metropolitan Advocates for Colorado River Solutions in Washington, D.C.

Between February 27 and March 1, Metropolitan board and staff members met with members of Congress and congressional aides, along with leadership in the Department of the Interior, to assist in providing funding and tools to help water users permanently reduce their diversions from the Colorado River. They highlighted the investments Metropolitan, San Diego County Water Authority, and the state of California have made to reduce California's water demands from the Colorado River, and how those investments could be impacted by the proposal submitted to the Bureau of Reclamation (Reclamation) by the other six Colorado River Basin States. They also discussed the benefits to the Colorado River of providing funding for Pure Water Southern California and various projects in Northern California that can increase water supply reliability to our region. California showed its solidarity by crafting Colorado River solutions through the letter from the Colorado River Board agencies, including Metropolitan, to Secretary of the Department of Human Health Services Xavier Becerra, highlighting the potential impacts of water supply cuts to disadvantaged communities throughout Southern California. The agencies have asked for a meeting with the Secretary during a future visit to Washington, D.C.

Salinity Control Forum Updates

The Colorado River Basin Salinity Control Forum Work Group meeting in February included updates on the status of the Paradox Valley Unit (PVU), the largest single salinity control project in the Colorado River Basin. Reclamation recently completed a six-month test of PVU at two-thirds of its full injection capacity, approximately 65,000 tons of salt control per year. Post-test analysis showed normal pressure levels in the well and no evidence of abnormal seismicity during the test. Based on the test results and analysis, Reclamation has decided to operate the well at two-thirds capacity in consecutive six-month tests until a seismic risk analysis is completed in late 2023. Reclamation continues to work with the Colorado River Basin States to develop a long-term alternative to replace PVU once it is no longer operable. Reclamation's short-term model projections show a slight decrease in Lower Colorado River salinity over the next year or two. The Forum Work Group also received updates regarding modeling assumptions and text for the 2023 Review of Water Quality Standards for Salinity in the Colorado River System. Metropolitan staff participated in this meeting.

Four Tribes Request for Development of Supplemental Environmental Impact Statement Alternative

The Chemehuevi Indian Tribe, Colorado River Indian Tribes, Quechan Tribe, and the Cocopah Tribe submitted a joint letter requesting that Reclamation develop an alternative for the 2007 Interim Guidelines Supplemental Environmental Impact Statement (SEIS) based on principles and modeling assumptions described in the letter. Principles included that reduction to tribal water allocations and use must be voluntary and compensated, and that Lower Basin system losses must be assessed according to existing contract provisions and new regulations, if adopted after public review and comment. The letter identified several assumptions to be evaluated in Lower Basin modeling including the impact of converting compensated conservation that Reclamation is funding into Intentionally Created Surplus to be used as a Protection Volume and maintaining flow below Hoover Dam for the Colorado to be a living river through all reaches.

Date of Report: 3/14/2023

- **Bay-Delta Management Report**

Summary

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

Purpose

Informational

Detailed Report

Long-Term Delta Actions

Delta Conveyance

The public comment period for the Delta Conveyance Project (DCP) Draft Environmental Impact Report (EIR) closed on December 16, 2022. The Department of Water Resources (DWR) received more than 700 unique comment letters with over 6,000 individual comments. DWR is currently working to organize the comments and develop responses. The Final EIR is expected at the end of 2023. It will include responses to all substantive comments on the Draft EIR and edits to the Draft EIR, as appropriate, to respond to the comments.

The U.S. Army Corps of Engineers released the public Draft Environmental Impact Statement (EIS) for DCP in December 2022, and comments are due on March 16, 2023. The Draft EIS has some similarities to DWR's Draft EIR but also some key differences. DWR prepared a summary of the similarities and differences that is available on the DWR website (https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Environmental-Planning/DWR_DCP_DRAFT-EIS_FS_Final_Dec-2022.pdf).

Joint Powers Authorities

During the regularly scheduled Board of Directors meeting on February 16, the Delta Conveyance Design and Construction Authority (DCA) Board of Directors adopted a resolution commending and thanking Director Richard Atwater for his service on the DCA Board. Director Atwater was instrumental to the creation of the DCA, its success to date, and its expected continued development. Director Miguel Luna is the new Metropolitan representative on the DCA Board. The DCA Board also approved a resolution extending the authorization for virtual board and committee meetings and received the monthly board report information item.

The February 16 regularly scheduled Delta Conveyance Finance Authority meeting was cancelled.

Sites Reservoir

In their February joint meetings, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) conducted the 2023 election of officers. The current committee and workgroup designations and participation was confirmed. The Reservoir Committee and Authority Board also approved the 2023 federal and state legislative priorities for the project.

Near-Term Delta Actions

Regulatory Activities

On February 13, in response to Governor Newsom's Executive Order (EO) N-3-23 to build water resilience amid climate-driven weather extremes, both DWR and the U.S. Bureau of Reclamation (USBR) submitted a Temporary Urgency Change Petition (TUCP) to the State Water Resources Control Board (State Board). This TUCP requested approval to temporarily modify the most-westerly X2 (2 parts per thousand isohaline at Port Chicago) compliance location specified in their water right permits for February and March to the next upstream compliance location at Chipps Island. Without the TUCP, DWR and USBR would be required to cut Delta exports and/or release stored water from upstream reservoirs to provide an estimated 700,000 acre-feet of Delta

outflow required to maintain the X2 at Port Chicago. On February 14, the California Department of Fish and Wildlife (CDFW) submitted a letter to the State Board identifying no unreasonable impacts to fish and wildlife resulting from the TUCP. On February 22, the State Board conditionally approved the changes within the TUCP through March 31, 2023.

Staff coordinated with the State Water Contractors to develop and implement a special environmental DNA monitoring program, from January 20 to February 3, to determine if Delta smelt were present in the South Delta turbidity field, and to evaluate the effects of the 2019/20 Biological Opinion (BiOp) and Incidental Take Permit (ITP) Early Winter Pulse Protection Action. The monitoring did not detect Delta smelt in the south Delta, suggesting that the action may not always be needed during high turbid conditions. The monitoring results may inform management of turbidity to reduce the entrainment of Delta smelt.

Staff continued to participate in the collaborative science groups to inform implementation of the 2019/20 BiOp and ITP. In February, staff conducted the second Contaminant Expert Elicitation with DWR to inform the North Delta Foodweb Subsidy Action. The action includes diverting either agricultural return water or Sacramento River water into the Yolo Bypass floodplain to produce food for Delta smelt. The expert elicitation concluded that implementing the action using Sacramento River water is likely more beneficial than agricultural return water.

Science Activities

Staff worked with researchers from UC Davis to initiate the second deployment of the Delta Smelt Pilot Propagation Study on Bouldin Island. The purpose of the study is to evaluate whether the impoundments on Metropolitan islands can be leveraged to conduct Delta Smelt Supplementation Research. The first deployment from November 21, 2022, to January 5, 2023, successfully demonstrated that it is possible. The second deployment is to repeat and verify the results and test conditions during the warmer period of March 2023.

Staff continued participating in the Collaborative Science and Adaptive Management Program, including participation on the Collaborative Adaptive Management Team (CAMT). The CAMT Salmon Technical Working Group is conducting a review of recent science concerning the application of life cycle and decision support models for salmon management in the Delta. Staff is coordinating with the working group to draft a report summarizing the findings of this effort.

Phase 3 of the Reorienting to Salmonid Recovery project started this month and includes developing an agreed-upon suite of priorities for salmonid recovery. This phase will use an iterative approach with participants and modelers to review and refine recovery scenarios. Staff is organizing intensive workshops for participants to work in groups using web applications developed to evaluate model output sensitivity to different salmonid management scenarios and understand the trade-offs associated with different suites of recovery actions. Workshops will be held March to December 2023.

Staff participated in a decision analysis tools training through the U.S. Fish and Wildlife Service National Conservation Training Center to develop analytical skills by gaining a greater practical understanding of the most common quantitative methods. These skills help support evaluation of the consequences and tradeoffs among alternatives of any decision problem.

Delta Island Activities

Staff submitted a $20 million concept proposal to the Delta Conservancy's Nature Based Solutions: Wetland Restoration Grant Program. The concept proposal is for a three-year project that will convert approximately 4,500 acres on Webb Tract to a mosaic of managed flooded wetlands and rice fields to stop and/or reverse ongoing organic soil subsidence, reduce greenhouse gas emissions, provide environmental benefits by contributing to augmentation of the Delta pelagic food web, and generate an income from carbon credits generated from the proposed flooded wetlands and lease income from the proposed rice fields. The proposed project has been selected to move forward in the grant process. Staff will introduce the project at Metropolitan's March One Water and Stewardship Committee meeting. The Delta Conservancy Board will consider the Webb Tract grant application at an upcoming Board meeting anticipated in summer or fall 2023.

One Water and Stewardship Committee

Bay-Delta Manager's Report

Item 8b

March 14, 2023

2023 Executive Order

Signed by Governor on
March 10, 2023
February 13, 2023

Executive Order N-4-23

- Accelerates groundwater recharge and reduces flooding
- Suspends regulations and restrictions on permitting and use to enable diversions of flood stage water

Executive Order N-3-23

- Ensure adequate water supplies for health, safety, the environment, cold water pools and drought resilient water supplies
- Call on State Board to consider modifying reservoir release and diversion requirements

Weather Whiplash Under the 2023 TUCP

Decision 1641
Water Quality Control Plan

Meeting X2 in the Delta

- Salinity or Outflow standards
- Station(s) and # of days to meet X2 is based on previous month's hydrology

TUCP Timeline

- January - Nine atmospheric rivers followed by dry period
- February - TUCO approved
- March - Return to wet hydrology prompted lifting of X2 modifications


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One Water and Stewardship Committee

Water Resource Manager Update

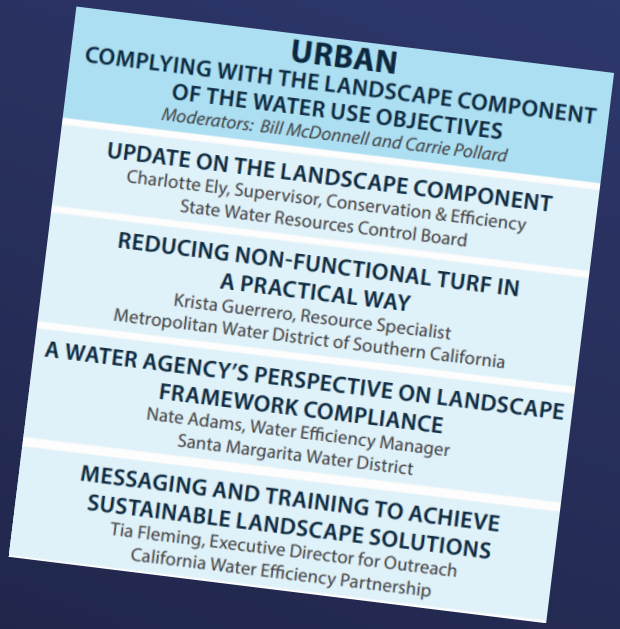
Item 8c

March 14, 2023

Partnering with Agriculture

California Irrigation Institute

- Conference sponsor
- Moderated session on urban landscapes



Publication coming soon

Authored by
Sr. Resource Specialist
Gary Tilkian

Journal AWWA publication on "stacked" conservation incentives

- Regionally managed conservation program
- Member and retail agencies add funding to base incentives
- Grants and partnerships with energy utilities expand reach
- Stacking incentives magnifies effectiveness of the programs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